

METAL ENCLOSURES AND CONTROL DESKS

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Metal enclosures and control desks

natural robustness and resistance



CRSX and CRXH enclosures are particularly suitable for corrosive environments or those which require strict hygiene, the pharmaceutical and food industries, etc.



The main feature of OLN enclosures is that it is possible to couple them to form larger units.








Among the usual installation systems for which the OLN enclosures are suitable, the PC application stands out.



		WALL MOUNTING			FLOOR S...	
		CRN-CRNG	CM	CMO	OLN	PK
Enclosure features	Degree of protection	IP66/IK10	IP54/IK10	IP55/IK10	IP55/IK10	IP55/IK10
	No. of sizes/models	56/90	8/8	48/122	59/277	4/4
	Dimensions (mm) From Up to	200 × 200 × 150 1400 × 1000 × 300	300 × 300 × 200 800 × 600 × 300	1000 × 1000 × 300 2000 × 1600 × 600	1200 × 600 × 400 2200 × 1200 × 800	1024 × 600 × 466 1024 × 1200 × 466
Installation systems	Mounting plates					
	Metal	■		■	■	■
	Insulated	■				
	Universal	■				■
	Perforators	■				
	Universal chassis			■	■	
	Distribution chassis					
	18 mm modules	up to 236		up to 352	up to 432	
	Metal cover plates	■		■	■	
	Insulted cover plates	■			■	
	19" electronic rack					
	No. of U units	5 to 25		from 6 to 47	from 6 to 47	
	Fixed	■		■	■	
Pivoting	■					
Centred full rack			■	■		
Off-centre full rack			■	■		
Partial			■	■		
Internal doors	■		■	■		
Accessories	Canopies	■		■	■	
	Plinths	■		■	■	
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External dimensions (mm)			IP66		Mounting plates				
			Door		Metal	Insulated	Perforated	Universal	
Height	Width	Depth	Plain	Transparent					
200	200	150	CRN-22/150	-	MM-22	-	-	-	
200	300	150	CRN-23/150	-	MM-23	-	-	-	
250	200	150	CRN-2520/150	-	MM-2520	MB-2520	-	-	
300	250	150	CRN-3025/150	...KT	MM-3025	MB-3025	-	MR-3025	
300	250	200	CRN-3025/200	...KT	MM-3025	MB-3025	-	MR-3025	
300	300	150	CRN-33/150	...KT	MM-33	MB-33	MF-33	MR-33	
300	300	200	CRN-33/200	...KT	MM-33	MB-33	MF-33	MR-33	
300	400	200	CRN-34/200	...KT	MM-34	MB-34	MF-34	MR-34	
300	450	150	CRN-3045/150	-	MM-3045	-	-	-	
400	300	150	CRN-43/150	...KT	MM-43	MB-43	MF-43	MR-43	
400	300	200	CRN-43/200	...KT	MM-43	MB-43	MF-43	MR-43	
400	400	200	CRN-44/200	...KT	MM-44	MB-44	MF-44	MR-44	
400	600	250	CRN-46/250	...KT	MM-46	MB-46	MF-64	MR-46	
400	600	300	CRN-46/300	...KT	MM-46	MB-46	MF-64	MR-46	
500	400	150	CRN-54/150	...KT	MM-54	MB-54	MF-54	MR-54	
500	400	200	CRN-54/200	...KT	MM-54	MB-54	MF-54	MR-54	
500	400	250	CRN-54/250	...KT	MM-54	MB-54	MF-54	MR-54	
500	500	250	CRN-55/250	...KT	MM-55	MB-55	MF-55	MR-55	
600	400	150	CRN-64/150	...KT	MM-64	MB-64	MF-64	MR-64	
600	400	200	CRN-64/200	...KT	MM-64	MB-64	MF-64	MR-64	
600	400	250	CRN-64/250	...KT	MM-64	MB-64	MF-64	MR-64	
600	500	150	CRN-65/150	...KT	MM-65	MB-65	-	MR-65	
600	500	200	CRN-65/200	...KT	MM-65	MB-65	-	MR-65	
600	500	250	CRN-65/250	...KT	MM-65	MB-65	-	MR-65	
600	600	200	CRN-66/200	...KT	MM-66	MB-66	MF-66	MR-66	
600	600	250	CRN-66/250	...KT	MM-66	MB-66	MF-66	MR-66	
600	600	300	CRN-66/300	...KT	MM-66	MB-66	MF-66	MR-66	
600	800	300	CRN-68/300	...KT	MM-68	MB-68	MF-86	MR-68	
700	500	200	CRN-75/200	...KT	MM-75	MB-75	MF-75	MR-75	
700	500	250	CRN-75/250	...KT	MM-75	MB-75	MF-75	MR-75	
800	600	200	CRN-86/200	...KT	MM-86	MB-86	MF-86	MR-86	
800	600	250	CRN-86/250	...KT	MM-86	MB-86	MF-86	MR-86	
800	600	300	CRN-86/300	...KT	MM-86	MB-86	MF-86	MR-86	
800	600	400	CRNG-86/400	...KT	MM-86	MB-86	MF-86	MR-86	
800	800	200	CRN-88/200	...KT	MM-88	MB-88	MF-88	MR-88	
800	800	300	CRN-88/300	...KT	MM-88	MB-88	MF-88	MR-88	
800	1000	300	CRNG-810/300	-	MM-810	MB-810	MF-108	MR-810	
800	1200	300	CRNG-812/300	-	MM-128	-	MF-128	MR-812	
1000	600	250	CRN-106/250	...KT	MM-106	MB-106	MF-106	MR-106	
1000	600	300	CRN-106/300	...KT	MM-106	MB-106	MF-106	MR-106	
1000	600	400	CRNG-106/400	...KT	MM-106	MB-106	MF-106	MR-106	
1000	800	250	CRN-108/250	...KT	MM-108	MB-108	MF-108	MR-108	
1000	800	300	CRN-108/300	...KT	MM-108	MB-108	MF-108	MR-108	
1000	800	400	CRNG-108/400	...KT	MM-108	MB-108	MF-108	MR-108	
1000	1000	300	CRNG-1010/300	...KT	MM-1010	MB-1010	MF-1010	MR-1010	
1000	1200	300	CRNG-1012/300	-	MM-1210	MB-1012	MF-1210	MR-1012	
1000	1200	400	CRNG-1012/400	-	MM-1210	MB-1012	MF-1210	MR-1012	
1200	600	300	CRNG-126/300	...KT	MM-126	-	MF-126	MR-126	
1200	600	400	CRNG-126/400	...KT	MM-126	-	MF-126	MR-126	
1200	800	300	CRNG-128/300	...KT	MM-128	MB-128	MF-128	MR-128	
1200	800	400	CRNG-128/400	...KT	MM-128	MB-128	MF-128	MR-128	
1200	1000	300	CRNG-1210/300	-	MM-1210	MB-1210	MF-1210	MR-1210	
1200	1000	400	CRNG-1210/400	-	MM-1210	MB-1210	MF-1210	MR-1210	
1200	1200	300	CRNG-1212/300	-	MM-1212	-	-	MR-1212	
1200	1200	400	CRNG-1212/400	-	MM-1212	-	-	MR-1212	
1400	1000	300	CRNG-1410/300	-	MM-1410	-	-	MR-1410	

	Adjustable supports 	Dinimel DLM Chassis 			Internal doors 	Fixed and pivoting 19" racks 		Canopies 	
		Reference	No. of modules 18 mm	No. of rows / plates		Reference	No. units		
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	TJ-2015	
-	-	-	-	-	-	-	-	TJ-2515	
SDCR-200	-	-	-	-	-	-	-	TJ-2520	
-	-	-	-	-	-	-	-	TJ-3015	
SDCR-200	-	-	-	-	-	-	-	TJ-3020	
SDCR-200	-	-	-	-	-	-	-	TJ-4020	
-	-	-	-	-	-	-	-	-	
-	DLM-24	24	2/-	PIN 43	-	-	-	TJ-3015	
SDCR-200	DLM-24	24	2/-	PIN 43	-	-	-	TJ-3020	
SDCR-200	-	-	-	-	-	-	-	TJ-4020	
SDCR-250	-	-	-	-	BRF8/CRN	BRP7/CRN	7/8	TJ-6025	
SDCR-300	-	-	-	-	BRF8/CRN	BRP7/CRN	7/8	TJ-6030	
-	DLM-48	48	3/-	-	-	-	-	TJ-4015	
SDCR-200	DLM-48	48	3/-	PIN 54	-	-	-	TJ-4020	
SDCR-250	DLM-48	48	3/-	-	-	-	-	TJ-4025	
SDCR-250	-	-	-	-	-	-	-	TJ-5025	
-	DLM-48P	48	3/-	PIN 64	-	-	-	TJ-4015	
SDCR-200	DLM-48P	48	3/-	PIN 64	-	-	-	TJ-4020	
SDCR-250	DLM-48P	48	3/-	PIN 64	-	-	-	TJ-4025	
-	-	-	-	-	-	-	-	TJ-5015	
SDCR-200	-	-	-	-	-	-	-	TJ-5020	
SDCR-200	-	84	3/-	-	-	-	-	TJ-6025	
SDCR-200	DLM-84P	84	3/-	-	BRF12/CRN	BRP11/CRN	11/12	TJ-6020	
SDCR-250	DLM-84P	84	3/-	-	BRF12/CRN	BRP11/CRN	11/12	TJ-6025	
SDCR-300	DLM-84P	84	3/-	-	BRF12/CRN	BRP11/CRN	11/12	TJ-6030	
SDCR-300	-	-	-	-	-	-	-	TJ-8030	
SDCR-200	DLM-66	DLM-88	66 88	3/1 4/-	PIN 75	-	-	TJ-5020	
SDCR-250	DLM-66	DLM-88	66 88	3/1 4/-	PIN 75	-	-	TJ-5025	
SDCR-200	DLM-84	DLM-112	84 112	3/1 4/-	PIN 86	-	-	TJ-6020	
SDCR-250	DLM-84	DLM-112	84 112	3/1 4/-	PIN 86	BRF17/CRN	BRP16/CRN	16/17	TJ-6025
SDCR-300	DLM-84	DLM-112	84 112	3/1 4/-	PIN 86	BRF17/CRN	BRP16/CRN	16/17	TJ-6030
SDCR-400	DLM-84	DLM-112	84 112	3/1 4/-	PIN 86	BRF17/CRN	BRP16/CRN	16/17	TJ-6040
SDCR-200	-	-	-	-	-	-	-	TJ-8020	
SDCR-300	-	-	-	-	-	-	-	TJ-8030	
SDCR-360	-	-	-	-	-	-	-	TJ-10030	
SDCR-300	-	-	-	-	-	-	-	TJ-12030	
SDCR-250	-	-	-	PIN 106	BRF21/CRN	BRP20/CRN	20/21	TJ-6025	
SDCR-300	DLM-168	168	6/-	PIN 106	BRF21/CRN	BRP20/CRN	20/21	TJ-6030	
SDCR-400	DLM-168	168	6/-	PIN 106	BRF21/CRN	BRP20/CRN	20/21	TJ-6040	
SDCR-250	DLM-240	234	6/-	PIN 108	BRP20/CRN 800		20	TJ-8025	
SDCR-300	DLM-240	234	6/-	PIN 108	BRP20/CRN 800		20	TJ-8030	
SDCR-400	DLM-240	234	6/-	PIN 108	BRP20/CRN 800		20	TJ-8040	
SDCR-300	-	-	-	-	-	-	-	TJ-10030	
SDCR-300	-	-	-	-	-	-	-	TJ-12030	
SDCR-400	-	-	-	-	-	-	-	TJ-12040	
SDCR-300	-	-	-	-	-	-	-	TJ-6030	
SDCR-400	-	-	-	-	-	-	-	TJ-6040	
SDCR-300	-	-	-	PIN 128	BRP25/CRN 800		25	TJ-8030	
SDCR-400	-	-	-	PIN 128	BRP25/CRN 800		25	TJ-8040	
SDCR-300	-	-	-	-	-	-	-	TJ-10030	
SDCR-400	-	-	-	-	-	-	-	TJ-10040	
SDCR-300	-	-	-	-	-	-	-	TJ-12030	
SDCR-400	-	-	-	-	-	-	-	TJ-12040	
SDCR-300	-	-	-	-	-	-	-	TJ-10030	

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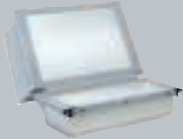


External dimensions (mm)										
Height	Width	Depth			50 80	50 80	50 80			
300	300	200	HHH CM3030/200	-	HHH CM/UMR50	-	HHH CM/UMA50	-	HHH CM/UMC50	-
300	400	200	HHH CM3040/200	-	HHH CM/UMR50	-	HHH CM/UMA50	-	HHH CM/UMC50	-
400	400	200	HHH CM4040/200	-	HHH CM/UMR50	-	HHH CM/UMA50	-	HHH CM/UMC50	-
400	600	250	HHH CM4060/250	HHH CMT2560/110	HHH CM/UMR50	-	HHH CM/UMA50	-	HHH CM/UMC50	-
500	500	250	HHH CM5050/250	-	HHH CM/UMR50	-	HHH CM/UMA50	-	HHH CM/UMC50	-
600	600	200	HHH CM6060/200	HHH CMT2560/110	HHH CM/UMR50	-	HHH CM/UMA50	-	HHH CM/UMC50	-
600	800	300	HHH CM6080/300	HHH CMT2560/110	-	HHH CM/UMR80	-	HHH CM/UMA80	-	HHH CM/UMC80
800	600	300	HHH CM8060/300	HHH CMT2560/110	-	HHH CM/UMR80	-	HHH CM/UMA80	-	HHH CM/UMC80
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Length (m)	□ 50	□ 80
0.5	HHH CMT5005	HHH CMT8005
1.00	HHH CMT5010	HHH CMT8010
1.50	HHH CMT5015	HHH CMT8015
2.00	HHH CMT5020	HHH CMT8020
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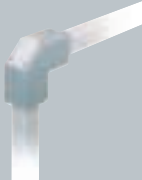




					
50 80	50 80	50 80	50 80	50 80	50 80
HHH CM/UIA50 -	HHH CM/UTC50 -	HHH CM/UCR50 -	HHH CM/UCC50 -	HHH CM/UCP50 -	HHH CM/ACS50 -
HHH CM/UIA50 -	HHH CM/UTC50 -	HHH CM/UCR50 -	HHH CM/UCC50 -	HHH CM/UCP50 -	HHH CM/ACS50 -
HHH CM/UIA50 -	HHH CM/UTC50 -	HHH CM/UCR50 -	HHH CM/UCC50 -	HHH CM/UCP50 -	HHH CM/ACS50 -
HHH CM/UIA50 -	HHH CM/UTC50 -	HHH CM/UCR50 -	HHH CM/UCC50 -	HHH CM/UCP50 -	HHH CM/ACS50 -
HHH CM/UIA50 -	HHH CM/UTC50 -	HHH CM/UCR50 -	HHH CM/UCC50 -	HHH CM/UCP50 -	HHH CM/ACS50 -
- HHH CM/UIA80	- HHH CM/UTC80	- HHH CM/UCR80	- HHH CM/UCC80	- HHH CM/UCP80	- HHH CM/ACS80
- HHH CM/UIA80	- HHH CM/UTC80	- HHH CM/UCR80	- HHH CM/UCC80	- HHH CM/UCP80	- HHH CM/ACS80
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External dimensions (mm)				Enclosure			Mounting plates	Plinths
								
Height	Width	Depth	No. of doors	With mounting plate	Without mounting plate	With transparent door	Height 100 mm*	
1000	1000	300	2	CMO 1010/30 PM	CMO 1010/30	-	PMOL 1010	ZUN 103/100
1200	800	300	1	CMO 128/30 PM	CMO 128/30	CMO 128/30 KT	PMOL 128	ZUN 83/100
1200	1000	300	2	CMO 1210/30 PM	CMO 1210/30	-	PMOL 1210	ZUN 103/100
1200	1200	400	2	CMO 1212/40 PM	CMO 1212/40	-	PMOL 1212	ZUN 124/100
1400	600	300	1	CMO 146/30 PM	CMO 146/30	CMO 146/30 KT	PMOL 146	ZUN 63/100
1400	600	400	1	CMO 146/40 PM	CMO 146/40	CMO 146/40 KT	PMOL 146	ZUN 64/100
1400	800	300	1	CMO 148/30 PM	CMO 148/30	CMO 148/30 KT	PMOL 148	ZUN 83/100
1400	800	400	1	CMO 148/40 PM	CMO 148/40	CMO 148/40 KT	PMOL 148	ZUN 84/100
1400	1000	400	2	CMO 1410/40 PM	CMO 1410/40	-	PMOL 1410	ZUN 104/100
1400	1200	400	2	CMO 1412/40 PM	CMO 1412/40	-	PMOL 1412	ZUN 124/100
1600	600	300	1	CMO 166/30 PM	CMO 166/30	CMO 166/30 KT	PMOL 166	ZUN 63/100
1600	600	400	1	CMO 166/40 PM	CMO 166/40	CMO 166/40 KT	PMOL 166	ZUN 64/100
1600	800	300	1	CMO 168/30 PM	CMO 168/30	CMO 168/30 KT	PMOL 168	ZUN 83/100
1600	800	400	1	CMO 168/40 PM	CMO 168/40	CMO 168/40 KT	PMOL 168	ZUN 84/100
1600	1000	300	2	CMO 1610/30 PM	CMO 1610/30	-	PMOL 1610	ZUN 103/100
1600	1000	400	2	CMO 1610/40 PM	CMO 1610/40	-	PMOL 1610	ZUN 104/100
1600	1200	300	2	CMO 1612/30 PM	CMO 1612/30	-	PMOL 1612	ZUN 123/100
1600	1200	400	2	CMO 1612/40 PM	CMO 1612/40	-	PMOL 1612	ZUN 124/100
1800	600	300	1	CMO 186/30 PM	CMO 186/30	CMO 186/30 KT	PMOL 186	ZUN 63/100
1800	600	400	1	CMO 186/40 PM	CMO 186/40	CMO 186/40 KT	PMOL 186	ZUN 64/100
1800	600	500	1	-	-	CMO 186/50 KT	PMOL 186	ZUN 65/100
1800	600	600	1	-	-	CMO 186/60 KT	PMOL 186	ZUN 66/100
1800	800	300	1	CMO 188/30 PM	CMO 188/30	CMO 188/30 KT	PMOL 188	ZUN 83/100
1800	800	400	1	CMO 188/40 PM	CMO 188/40	CMO 188/40 KT	PMOL 188	ZUN 84/100
1800	800	500	1	CMO 188/50 PM	CMO 188/50	CMO 188/50 KT	PMOL 188	ZUN 85/100
1800	800	600	1	CMO 188/60 PM	CMO 188/60	CMO 188/60 KT	PMOL 188	ZUN 86/100
1800	1000	400	2	CMO 1810/40 PM	CMO 1810/40	-	PMOL 1810	ZUN 104/100
1800	1000	500	2	CMO 1810/50 PM	CMO 1810/50	-	PMOL 1810	ZUN 105/100
1800	1200	400	2	CMO 1812/40 PM	CMO 1812/40	-	PMOL 1812	ZUN 124/100
1800	1200	500	2	CMO 1812/50 PM	CMO 1812/50	-	PMOL 1812	ZUN 125/100
1800	1600	400	2	CMO 1816/40 PM	CMO 1816/40	-	PMOL 1816	ZUN 164/100
1800	1600	500	2	CMO 1816/50 PM	CMO 1816/50	-	PMOL 1816	ZUN 165/100
2000	600	300	1	CMO 206/30 PM	CMO 206/30	CMO 206/30 KT	PMOL 206	ZUN 63/100
2000	600	400	1	CMO 206/40 PM	CMO 206/40	CMO 206/40 KT	PMOL 206	ZUN 64/100
2000	600	500	1	-	-	CMO 206/50 KT	PMOL 206	ZUN 65/100
2000	600	600	1	-	-	CMO 206/60 KT	PMOL 206	ZUN 66/100
2000	800	300	1	CMO 208/30 PM	CMO 208/30	CMO 208/30 KT	PMOL 208	ZUN 83/100
2000	800	400	1	CMO 208/40 PM	CMO 208/40	CMO 208/40 KT	PMOL 208	ZUN 84/100
2000	800	500	1	CMO 208/50 PM	CMO 208/50	CMO 208/50 KT	PMOL 208	ZUN 85/100
2000	800	600	1	CMO 208/60 PM	CMO 208/60	CMO 208/60 KT	PMOL 208	ZUN 86/100
2000	1000	400	2	CMO 2010/40 PM	CMO 2010/40	-	PMOL 2010	ZUN 104/100
2000	1000	500	2	CMO 2010/50 PM	CMO 2010/50	-	PMOL 2010	ZUN 105/100
2000	1200	400	2	CMO 2012/40 PM	CMO 2012/40	-	PMOL 2012	ZUN 124/100
2000	1200	500	2	CMO 2012/50 PM	CMO 2012/50	-	PMOL 2012	ZUN 125/100
2000	1200	600	2	CMO 2012/60 PM	CMO 2012/60	-	PMOL 2012	ZUN 126/100
2000	1600	400	2	CMO 2016/40 PM	CMO 2016/40	-	PMOL 2016	ZUN 164/100
2000	1600	500	2	CMO 2016/50 PM	CMO 2016/50	-	PMOL 2016	ZUN 165/100
2000	1600	600	2	CMO 2016/60 PM	CMO 2016/60	-	PMOL 2016	ZUN 166/100

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*For 200 mm high plinths, ask for reference ZUN.../200.

Universal chassis 	Coupling kit for UNIDIS chassis 		Internal door 	19" rack 					No. of units 1 = 44.5 mm
	Set of 2 profiles	Reference		Reference	Fixed	Off-centre pivoting	Centred pivoting	Off-centre pivoting 180°	
MOL 100	-	-	-	-	-	-	-	-	
MOL 120	AF/COL 128	-	-	-	-	-	-	-	
MOL 120	-	-	-	-	-	-	-	-	
MOL 120	-	-	-	-	-	-	-	-	
MOL 140	AF/COL 146	-	-	BRF 29/OL	-	-	-	29	
MOL 140	AF/COL 146	-	-	BRF 29/OL	-	-	-	29	
MOL 140	AF/COL 148	-	-	-	BRP 27/OL	BRPC 27/OL	BRP 27/OL 180	27	
MOL 140	AF/COL 148	-	-	-	BRP 27/OL	BRPC 27/OL	BRP 27/OL 180	27	
MOL 140	AF/COL 1464	-	-	-	-	-	-	-	
MOL 140	AF/COL 1484	AF/COL 1466 + DCOL 40	-	-	-	-	-	-	
MOL 160	AF/COL 166	-	PIL 166	BRF 33/OL	-	-	-	33	
MOL 160	AF/COL 166	-	PIL 166	BRF 33/OL	-	-	-	33	
MOL 160	AF/COL 168	-	PIL 168	-	BRP 31/OL	BRPC 31/OL	BRP 31/OL 180	31	
MOL 160	AF/COL 168	-	PIL 168	-	BRP 31/OL	BRPC 31/OL	BRP 31/OL 180	31	
MOL 160	AF/COL 1664	-	-	-	-	-	-	-	
MOL 160	AF/COL 1664	-	-	-	-	-	-	-	
MOL 160	AF/COL 1684	AF/COL 1666 + DCOL 30	-	-	-	-	-	-	
MOL 160	AF/COL 1684	AF/COL 1666 + DCOL 40	-	-	-	-	-	-	
MOL 180	AF/COL 186	-	PIL 186	BRF 38/OL	-	-	-	38	
MOL 180	AF/COL 186	-	PIL 186	BRF 38/OL	-	-	-	38	
MOL 180	AF/COL 186	-	PIL 186	BRF 38/OL	-	-	-	38	
MOL 180	AF/COL 186	-	PIL 186	BRF 38/OL	-	-	-	38	
MOL 180	AF/COL 188	-	PIL 188	-	BRP 36/OL	BRPC 36/OL	BRP 36/OL 180	36	
MOL 180	AF/COL 188	-	PIL 188	-	BRP 36/OL	BRPC 36/OL	BRP 36/OL 180	36	
MOL 180	AF/COL 188	-	PIL 188	-	BRP 36/OL	BRPC 36/OL	BRP 36/OL 180	36	
MOL 180	AF/COL 188	-	PIL 188	-	BRP 36/OL	BRPC 36/OL	BRP 36/OL 180	36	
MOL 180	AF/COL 1864	-	PIL 1810	-	-	-	-	-	
MOL 180	AF/COL 1864	-	PIL 1810	-	-	-	-	-	
MOL 180	AF/COL 1884	AF/COL 1866 + DCOL 40	-	-	-	-	-	-	
MOL 180	AF/COL 1884	AF/COL 1866 + DCOL 50	-	-	-	-	-	-	
MOL 180	AF/COL 1888	-	-	-	-	-	-	-	
MOL 180	AF/COL 1888	-	-	-	-	-	-	-	
MOL 200	AF/COL 206	-	PIL 206	BRF 42/OL	-	-	-	42	
MOL 200	AF/COL 206	-	PIL 206	BRF 42/OL	-	-	-	42	
MOL 200	AF/COL 206	-	PIL 206	BRF 42/OL	-	-	-	42	
MOL 200	AF/COL 206	-	PIL 206	BRF 42/OL	-	-	-	42	
MOL 200	AF/COL 208	-	PIL 208	-	BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	
MOL 200	AF/COL 208	-	PIL 208	-	BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	
MOL 200	AF/COL 208	-	PIL 208	-	BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	
MOL 200	AF/COL 208	-	PIL 208	-	BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	
MOL 200	AF/COL 2064	-	PIL 2010	-	-	-	-	-	
MOL 200	AF/COL 2064	-	PIL 2010	-	-	-	-	-	
MOL 200	AF/COL 2084	AF/COL 2066 + DCOL 40	-	-	-	-	-	-	
MOL 200	AF/COL 2084	AF/COL 2066 + DCOL 50	-	-	-	-	-	-	
MOL 200	AF/COL 2084	AF/COL 2066 + DCOL 60	-	-	-	-	-	-	
MOL 200	AF/COL 2088	-	-	-	-	-	-	-	
MOL 200	AF/COL 2088	-	-	-	-	-	-	-	
MOL 200	AF/COL 2088	-	-	-	-	-	-	-	

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TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions (mm)				Enclosure			Panels				Mounting plate	Plinth	Universal chassis
				Without mounting plate	With mounting plate	With transparent door	Exterior fixing	Interior fixing	Quick locking exterior fixing	Interior fixing			
Height	Width	Depth	No. of doors				Sides		Rear				
										Height 100 mm*	Set of 2 profiles		
1200	600	400	1	OLN 126/40	OLN 126/40 PM	OLN 126/40 KT	2 PLOL 124	2 PLIOL 124	-	PPION 126	PMOL 126	ZUN 64/100	-
1200	600	600	1	OLN 126/60	OLN 126/60 PM	OLN 126/60 KT	2 PLOL 126	2 PLIOL 126	2 PLROL 126	PPION 126	PMOL 126	ZUN 66/100	-
1200	600	800	1	OLN 126/80	OLN 126/80 PM	OLN 126/80 KT	2 PLOL 128	2 PLIOL 128	2 PLROL 128	PPION 126	PMOL 126	ZUN 68/100	-
1200	800	400	1	OLN 128/40	OLN 128/40 PM	OLN 128/40 KT	2 PLOL 124	2 PLIOL 124	-	PPION 128	PMOL 128	ZUN 84/100	-
1200	800	600	1	OLN 128/60	OLN 128/60 PM	OLN 128/60 KT	2 PLOL 126	2 PLIOL 126	2 PLROL 126	PPION 128	PMOL 128	ZUN 86/100	-
1200	800	800	1	OLN 128/80	OLN 128/80 PM	OLN 128/80 KT	2 PLOL 128	2 PLIOL 128	2 PLROL 128	PPION 128	PMOL 128	ZUN 88/100	-
1400	600	400	1	OLN 146/40	OLN 146/40 PM	OLN 146/40 KT	2 PLOL 144	2 PLIOL 144	-	PPION 146	PMOL 146	ZUN 64/100	-
1400	600	600	1	OLN 146/60	OLN 146/60 PM	OLN 146/60 KT	2 PLOL 146	2 PLIOL 146	2 PLROL 146	PPION 146	PMOL 146	ZUN 66/100	-
1400	600	800	1	OLN 146/80	OLN 146/80 PM	OLN 146/80 KT	2 PLOL 148	2 PLIOL 148	2 PLROL 148	PPION 146	PMOL 146	ZUN 68/100	-
1400	800	400	1	OLN 148/40	OLN 148/40 PM	OLN 148/40 KT	2 PLOL 144	2 PLIOL 144	-	PPION 148	PMOL 148	ZUN 84/100	-
1400	800	600	1	OLN 148/60	OLN 148/60 PM	OLN 148/60 KT	2 PLOL 146	2 PLIOL 146	2 PLROL 146	PPION 148	PMOL 148	ZUN 86/100	-
1400	800	800	1	OLN 148/80	OLN 148/80 PM	OLN 148/80 KT	2 PLOL 148	2 PLIOL 148	2 PLROL 148	PPION 148	PMOL 148	ZUN 88/100	-
1600	600	600	1	OLN 166/60	OLN 166/60 PM	OLN 166/60 KT	2 PLOL 166	2 PLIOL 166	2 PLROL 166	PPION 166	PMOL 166	ZUN 66/100	MOL 160
1600	600	800	1	OLN 166/80	OLN 166/80 PM	OLN 166/80 KT	2 PLOL 168	2 PLIOL 168	2 PLROL 168	PPION 166	PMOL 166	ZUN 68/100	MOL 160
1600	800	600	1	OLN 168/60	OLN 168/60 PM	OLN 168/60 KT	2 PLOL 166	2 PLIOL 166	2 PLROL 166	PPION 168	PMOL 168	ZUN 86/100	MOL 160
1600	800	800	1	OLN 168/80	OLN 168/80 PM	OLN 168/80 KT	2 PLOL 168	2 PLIOL 168	2 PLROL 168	PPION 168	PMOL 168	ZUN 88/100	MOL 160
1800	600	400	1	OLN 186/40	OLN 186/40 PM	OLN 186/40 KT	2 PLOL 184	2 PLIOL 184	-	PPION 186	PMOL 186	ZUN 64/100	MOL 180
1800	600	500	1	OLN 186/50	OLN 186/50 PM	OLN 186/50 KT	2 PLOL 185	2 PLIOL 185	-	PPION 186	PMOL 186	ZUN 65/100	MOL 180
1800	600	600	1	OLN 186/60	OLN 186/60 PM	OLN 186/60 KT	2 PLOL 186	2 PLIOL 186	2 PLROL 186	PPION 186	PMOL 186	ZUN 66/100	MOL 180
1800	600	800	1	OLN 186/80	OLN 186/80 PM	OLN 186/80 KT	2 PLOL 188	2 PLIOL 188	2 PLROL 188	PPION 186	PMOL 186	ZUN 68/100	MOL 180
1800	800	400	1	OLN 188/40	OLN 188/40 PM	OLN 188/40 KT	2 PLOL 184	2 PLIOL 184	-	PPION 188	PMOL 188	ZUN 84/100	MOL 180
1800	800	500	1	OLN 188/50	OLN 188/50 PM	OLN 188/50 KT	2 PLOL 185	2 PLIOL 185	-	PPION 188	PMOL 188	ZUN 85/100	MOL 180
1800	800	600	1	OLN 188/60	OLN 188/60 PM	OLN 188/60 KT	2 PLOL 186	2 PLIOL 186	2 PLROL 186	PPION 188	PMOL 188	ZUN 86/100	MOL 180
1800	1000	400	1	OLN 1810/40	OLN 1810/40 PM	OLN 1810/40 KT	2 PLOL 184	2 PLIOL 184	-	PPION 1810	PMOL 1810	ZUN 104/100	MOL 180
1800	1000	400	2	OLN 1810/40/2P	OLN 1810/40/2P PM	-	2 PLOL 184	2 PLIOL 184	-	PPION 1810	PMOL 1810	ZUN 104/100	MOL 180
1800	1000	500	1	OLN 1810/50	OLN 1810/50 PM	OLN 1810/50 KT	2 PLOL 185	2 PLIOL 185	-	PPION 1810	PMOL 1810	ZUN 105/100	MOL 180
1800	1000	500	2	OLN 1810/50/2P	OLN 1810/50/2P PM	-	2 PLOL 185	2 PLIOL 185	-	PPION 1810	PMOL 1810	ZUN 105/100	MOL 180
1800	1000	600	1	OLN 1810/60	OLN 1810/60 PM	OLN 1810/60 KT	2 PLOL 186	2 PLIOL 186	2 PLROL 186	PPION 1810	PMOL 1810	ZUN 106/100	MOL 180
1800	1000	600	2	OLN 1810/60/2P	OLN 1810/60/2P PM	-	2 PLOL 186	2 PLIOL 186	2 PLROL 186	PPION 1810	PMOL 1810	ZUN 106/100	MOL 180
1800	1200	400	2	OLN 1812/40/2P	OLN 1812/40/2P PM	-	2 PLOL 184	2 PLIOL 184	-	PPION 1812	PMOL 1812	ZUN 124/100	MOL 180
1800	1200	500	2	OLN 1812/50/2P	OLN 1812/50/2P PM	-	2 PLOL 185	2 PLIOL 185	-	PPION 1812	PMOL 1812	ZUN 125/100	MOL 180
1800	1200	600	2	OLN 1812/60/2P	OLN 1812/60/2P PM	-	2 PLOL 186	2 PLIOL 186	2 PLROL 186	PPION 1812	PMOL 1812	ZUN 126/100	MOL 180
2000	300	500	1	-	OLN 203/50 PM	-	2 PLOL 205	2 PLIOL 205	-	-	-	ZUN 35/100	-
2000	300	600	1	-	OLN 203/60 PM	-	2 PLOL 206	2 PLIOL 206	2 PLROL 206	-	-	ZUN 36/100	-
2000	300	800	1	-	OLN 203/80 PM	-	2 PLOL 208	2 PLIOL 208	2 PLROL 208	-	-	ZUN 38/100	-
2000	400	500	1	-	OLN 204/50 PM	-	2 PLOL 205	2 PLIOL 205	-	PPION 204	PMOL 204	ZUN 45/100	-
2000	400	600	1	-	OLN 204/60 PM	-	2 PLOL 206	2 PLIOL 206	2 PLROL 206	PPION 204	PMOL 204	ZUN 46/100	-
2000	600	400	1	OLN 206/40	OLN 206/40 PM	OLN 206/40 KT	2 PLOL 204	2 PLIOL 204	-	PPION 206	PMOL 206	ZUN 64/100	MOL 200
2000	600	500	1	OLN 206/50	OLN 206/50 PM	OLN 206/50 KT	2 PLOL 205	2 PLIOL 205	-	PPION 206	PMOL 206	ZUN 65/100	MOL 200
2000	600	600	1	OLN 206/60	OLN 206/60 PM	OLN 206/60 KT	2 PLOL 206	2 PLIOL 206	2 PLROL 206	PPION 206	PMOL 206	ZUN 66/100	MOL 200
2000	600	800	1	OLN 206/80	OLN 206/80 PM	OLN 206/80 KT	2 PLOL 208	2 PLIOL 208	2 PLROL 208	PPION 206	PMOL 206	ZUN 68/100	MOL 200
2000	800	400	1	OLN 208/40	OLN 208/40 PM	OLN 208/40 KT	2 PLOL 204	2 PLIOL 204	-	PPION 208	PMOL 208	ZUN 84/100	MOL 200
2000	800	500	1	OLN 208/50	OLN 208/50 PM	OLN 208/50 KT	2 PLOL 205	2 PLIOL 205	-	PPION 208	PMOL 208	ZUN 85/100	MOL 200
2000	800	600	1	OLN 208/60	OLN 208/60 PM	OLN 208/60 KT	2 PLOL 206	2 PLIOL 206	2 PLROL 206	PPION 208	PMOL 208	ZUN 86/100	MOL 200
2000	800	800	1	OLN 208/80	OLN 208/80 PM	OLN 208/80 KT	2 PLOL 208	2 PLIOL 208	2 PLROL 208	PPION 208	PMOL 208	ZUN 88/100V	MOL 200
2000	1000	400	1	OLN 2010/40	OLN 2010/40 PM	OLN 2010/40 KT	2 PLOL 204	2 PLIOL 204	-	PPION 2010	PMOL 2010	ZUN 104/100	MOL 200

*For 200 mm high plinths, ask for reference ZUN.../200.

Coupling kit for Unidis chassis		Coupling kit for Dinimel 2000 chassis	19" rack					No. of units 1 = 44.45 mm	Cable entry plates			Internal door
1 column	2 columns		Fixed	Off-centred pivoting	Centred pivoting	Pivoting 180°	Plain		With 1 entry	With 2 entries		
AF/COL 126	-	-	BRF 24/OL	-	-	-	24	ECON 64/0	ECON 64/1	-	-	
AF/COL 126	-	-	BRF 24/OL	-	-	-	24	ECON 66/0	ECON 66/1	ECON 66/2	-	
AF/COL 126	-	-	BRF 24/OL	-	-	-	24	ECON 68/0	ECON 68/1	ECON 68/2	-	
AF/COL 128	-	-	-	-	-	-	-	ECON 84/0	ECON 84/1	-	-	
AF/COL 128	-	-	-	-	-	-	-	ECON 86/0	ECON 86/1	ECON 86/2	-	
AF/COL 128	-	-	-	-	-	-	-	ECON 88/0	ECON 88/1	ECON 88/2	-	
AF/COL 146	-	-	BRF 29/OL	-	-	-	29	ECON 64/0	ECON 64/1	-	-	
AF/COL 146	-	-	BRF 29/OL	-	-	-	29	ECON 66/0	ECON 66/1	ECON 66/2	-	
AF/COL 146	-	-	BRF 29/OL	-	-	-	29	ECON 68/0	ECON 68/1	ECON 68/2	-	
AF/COL 148	-	-	-	BRP 27/OL	BRPC 27/OL	BRP 27/OL 180	27	ECON 84/0	ECON 84/1	-	-	
AF/COL 148	-	-	-	BRP 27/OL	BRPC 27/OL	BRP 27/OL 180	27	ECON 86/0	ECON 86/1	ECON 86/2	-	
AF/COL 148	-	-	-	BRP 27/OL	BRPC 27/OL	BRP 27/OL 180	27	ECON 88/0	ECON 88/1	ECON 88/2	-	
AF/COL 166	-	DM/OL 166	BRF 33/OL	-	-	-	33	ECON 66/0	ECON 66/1	ECON 66/2	PIL 166	
AF/COL 166	-	DM/OL 166	BRF 33/OL	-	-	-	33	ECON 68/0	ECON 68/1	ECON 68/2	PIL 166	
AF/COL 168	-	-	-	BRP 31/OL	BRPC 31/OL	BRP 31/OL 180	31	ECON 86/0	ECON 86/1	ECON 86/2	PIL 168	
AF/COL 168	-	-	-	BRP 31/OL	BRPC 31/OL	BRP 31/OL 180	31	ECON 88/0	ECON 88/1	ECON 88/2	PIL 168	
AF/COL 186	-	DM/OL 186	BRF 38/OL	-	-	-	38	ECON 64/0	ECON 64/1	-	PIL 186	
AF/COL 186	-	DM/OL 186	BRF 38/OL	-	-	-	38	ECON 65/0	ECON 65/1	-	PIL 186	
AF/COL 186	-	DM/OL 186	BRF 38/OL	-	-	-	38	ECON 66/0	ECON 66/1	ECON 66/2	PIL 186	
AF/COL 186	-	DM/OL 186	BRF 38/OL	-	-	-	38	ECON 68/0	ECON 68/1	ECON 68/2	PIL 186	
AF/COL 188	-	-	-	BRP 36/OL	BRPC 36/OL	BRP 36/OL 180	36	ECON 84/0	ECON 84/1	-	PIL 188	
AF/COL 188	-	-	-	BRP 36/OL	BRPC 36/OL	BRP 36/OL 180	36	ECON 85/0	ECON 85/1	-	PIL 188	
AF/COL 188	-	-	-	BRP 36/OL	BRPC 36/OL	BRP 36/OL 180	36	ECON 86/0	ECON 86/1	ECON 86/2	PIL 188	
AF/COL 1864	-	DM/OL 1810	-	-	-	-	-	ECON 104/0	ECON 104/1	-	PIL 1810	
AF/COL 1864	-	DM/OL 1810	-	-	-	-	-	ECON 104/0	ECON 104/1	-	PIL 1810 2P	
AF/COL 1864	-	DM/OL 1810	-	-	-	-	-	ECON 105/0	ECON 105/1	-	PIL 1810	
AF/COL 1864	-	DM/OL 1810	-	-	-	-	-	ECON 105/0	ECON 105/1	-	PIL 1810 2P	
AF/COL 1864	-	DM/OL 1810	-	-	-	-	-	ECON 106/0	ECON 106/1	ECON 106/2	PIL 1810	
AF/COL 1864	-	DM/OL 1810	-	-	-	-	-	ECON 106/0	ECON 106/1	ECON 106/2	PIL 1810 2P	
AF/COL 1884	AF/COL 1866	-	-	-	-	-	-	ECON 124/0	ECON 124/1	-	-	
AF/COL 1884	AF/COL 1866	-	-	-	-	-	-	ECON 125/0	ECON 125/1	-	-	
AF/COL 1884	AF/COL 1866	-	-	-	-	-	-	ECON 126/0	ECON 126/1	ECON 126/2	-	
-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	ECON 45/0	ECON 45/1	-	-	
-	-	-	-	-	-	-	-	ECON 46/0	ECON 46/1	ECON 46/2	-	
-	-	DM/OL 206	BRF 42/OL	-	-	-	42	ECON 46/0	ECON 46/1	-	PIL 206	
AF/COL 206	-	DM/OL 206	BRF 42/OL	-	-	-	42	ECON 65/0	ECON 65/1	-	PIL 206	
AF/COL 206	-	DM/OL 206	BRF 42/OL	-	-	-	42	ECON 66/0	ECON 66/1	ECON 66/2	PIL 206	
AF/COL 206	-	DM/OL 206	BRF 42/OL	-	-	-	42	ECON 68/0	ECON 68/1	ECON 68/2	PIL 206	
AF/COL 208	-	-	-	BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	ECON 84/0	ECON 84/1	-	PIL 208	
AF/COL 208	-	-	-	BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	ECON 85/0	ECON 85/1	-	PIL 208	
AF/COL 208	-	-	-	BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	ECON 86/0	ECON 86/1	ECON 86/2	PIL 208	
AF/COL 208	-	-	-	BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	ECON 88/0	ECON 88/1	ECON 88/2	PIL 208	
AF/COL 2064	-	DM/OL 2010	-	-	-	-	-	ECON 104/0	ECON 104/1	-	PIL 2010	
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TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions (mm)				Enclosure			Panels				Plinth	Mounting plate	Universal chassis
								Sides		Rear			
Height	Width	Depth	No. of doors	Without mounting plate	With mounting plate	With transparent door		Exterior fixing	Interior fixing	Quick locking exterior fixing	Interior fixing	Height 100 mm*	Set of 2 profiles
2000	1000	400	2	OLN 2010/40/2P	OLN 2010/40/2P PM	-	2 PLOL 204	2 PLIOL 204	-	PPION 2010	ZUN 104/100	PMOL 2010	MOL 200
2000	1000	500	1	OLN 2010/50	OLN 2010/50 PM	OLN 2010/50 KT	2 PLOL 205	2 PLIOL 205	-	PPION 2010	ZUN 105/100	PMOL 2010	MOL 200
2000	1000	500	2	OLN 2010/50/2P	OLN 2010/50/2P PM	-	2 PLOL 205	2 PLIOL 205	-	PPION 2010	ZUN 105/100	PMOL 2010	MOL 200
2000	1000	600	1	OLN 2010/60	OLN 2010/60 PM	OLN 2010/60 KT	2 PLOL 206	2 PLIOL 206	2 PLROL 206	PPION 2010	ZUN 106/100	PMOL 2010	MOL 200
2000	1000	600	2	OLN 2010/60/2P	OLN 2010/60/2P PM	-	2 PLOL 206	2 PLIOL 206	2 PLROL 206	PPION 2010	ZUN 106/100	PMOL 2010	MOL 200
2000	1000	800	1	OLN 2010/80	OLN 2010/80 PM	OLN 2010/80 KT	2 PLOL 208	2 PLIOL 208	2 PLROL 208	PPION 2010	ZUN 108/100	PMOL 2010	MOL 200
2000	1000	800	2	OLN 2010/80/2P	OLN 2010/80/2P PM	-	2 PLOL 208	2 PLIOL 208	2 PLROL 208	PPION 2010	ZUN 108/100	PMOL 2010	MOL 200
2000	1200	400	2	OLN 2012/40/2P	OLN 2012/40/2P PM	-	2 PLOL 204	2 PLIOL 204	-	PPION 2012	ZUN 124/100	PMOL 2012	MOL 200
2000	1200	500	2	OLN 2012/50/2P	OLN 2012/50/2P PM	-	2 PLOL 205	2 PLIOL 205	-	PPION 2012	ZUN 125/100	PMOL 2012	MOL 200
2000	1200	600	2	OLN 2012/60/2P	OLN 2012/60/2P PM	-	2 PLOL 206	2 PLIOL 206	2 PLROL 206	PPION 2012	ZUN 126/100	PMOL 2012	MOL 200
2000	1200	800	2	OLN 2012/80/2P	OLN 2012/80/2P PM	-	2 PLOL 208	2 PLIOL 208	2 PLROL 208	PPION 2012	ZUN 128/100	PMOL 2012	MOL 200
2200	600	600	1	OLN 226/60	OLN 226/60 PM	-	2 PLOL 226	2 PLIOL 226	2 PLROL 226	PPION 226	ZUN 66/100	PMOL 226	MOL 220
2200	600	800	1	OLN 226/80	OLN 226/80 PM	-	2 PLOL 228	2 PLIOL 228	2 PLROL 228	PPION 226	ZUN 68/100	PMOL 226	MOL 220
2200	800	600	1	OLN 228/60	OLN 228/60 PM	OLN 228/60 KT	2 PLOL 226	2 PLIOL 226	2 PLROL 226	PPION 228	ZUN 86/100	PMOL 228	MOL 220
2200	800	800	1	OLN 228/80	OLN 228/80 PM	OLN 228/80 KT	2 PLOL 228	2 PLIOL 228	2 PLROL 228	PPION 228	ZUN 88/100	PMOL 228	MOL 220
2200	1000	600	1	OLN 2210/60	OLN 2210/60 PM	OLN 2210/60 KT	2 PLOL 226	2 PLIOL 226	2 PLROL 226	PPION 2210	ZUN 106/100	PMOL 2210	MOL 220
2200	1000	800	1	OLN 2210/80	OLN 2210/80 PM	OLN 2210/80 KT	2 PLOL 228	2 PLIOL 228	2 PLROL 228	PPION 2210	ZUN 108/100	PMOL 2210	MOL 220
2200	1000	800	2	OLN 2210/80/2P	OLN 2210/80/2P PM	-	2 PLOL 228	2 PLIOL 228	2 PLROL 228	PPION 2210	ZUN 108/100	PMOL 2210	MOL 220
2200	1200	600	2	OLN 2212/60/2P	OLN 2212/60/2P PM	-	2 PLOL 226	2 PLIOL 226	2 PLROL 226	PPION 2212	ZUN 126/100	PMOL 2212	MOL 220
2200	1200	800	2	OLN 2212/80/2P	OLN 2212/80/2P PM	-	2 PLOL 228	2 PLIOL 228	2 PLROL 228	PPION 2212	ZUN 128/100	PMOL 2212	MOL 220

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*For 200 mm high plinths, ask for reference ZUN.../200.











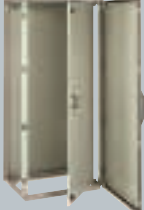


Coupling kit for Unidis chassis		Coupling kit for Dinimel 2000 chassis	19" rack						Cable entry plates			Internal door
							No. of units 1 = 44,45 mm					
1 column	2 columns		Fixed	Off-centre pivoting	Centred pivoting	Pivoting 180°		Plain	With 1 entry	With 2 entries		
AF/COL 2064	-	DM/OL 2010	-	-	-	-	-	ECON 104/0	ECON 104/1	-	PIL 2010 2P	
AF/COL 2064	-	DM/OL 2010	-	-	-	-	-	ECON 105/0	ECON 105/1	-	PIL 2010	
AF/COL 2064	-	DM/OL 2010	-	-	-	-	-	ECON 105/0	ECON 105/1	-	PIL 2010 2P	
AF/COL 2064	-	DM/OL 2010	-	-	-	-	-	ECON 106/0	ECON 106/1	ECON 106/2	PIL 2010	
AF/COL 2064	-	DM/OL 2010	-	-	-	-	-	ECON 106/0	ECON 106/1	ECON 106/2	PIL 2010 2P	
AF/COL 2064	-	DM/OL 2010	-	-	-	-	-	ECON 108/0	ECON 108/1	ECON 108/2	PIL 2010	
AF/COL 2064	-	DM/OL 2010	-	-	-	-	-	ECON 108/0	ECON 108/1	ECON 108/2	PIL 2010 2P	
AF/COL 2084	AF/COL 2066	-	-	-	-	-	-	ECON 124/0	ECON 124/1	-	-	
AF/COL 2084	AF/COL 2066	-	-	-	-	-	-	ECON 125/0	ECON 125/1	-	-	
AF/COL 2084	AF/COL 2066	-	-	-	-	-	-	ECON 126/0	ECON 126/1	ECON 126/2	-	
AF/COL 2084	AF/COL 2066	-	-	-	-	-	-	ECON 128/0	ECON 128/1	ECON 128/2	-	
-	-	-	BRF 47/OL	-	-	-	47	ECON 66/0	ECON 66/1	ECON 66/2	PIL 226	
-	-	-	BRF 47/OL	-	-	-	47	ECON 68/0	ECON 68/1	ECON 68/2	PIL 226	
-	-	-	-	BRP 45/OL	BRPC 45/OL	BRP 45/OL 180	45	ECON 86/0	ECON 86/1	ECON 86/2	PIL 228	
-	-	-	-	BRP 45/OL	BRPC 45/OL	BRP 45/OL 180	45	ECON 88/0	ECON 88/2	PIL 228	-	
-	-	-	-	-	-	-	-	ECON 106/0	ECON 106/1	ECON 106/2	PIL 2210	
-	-	-	-	-	-	-	-	ECON 108/0	ECON 108/1	ECON 108/2	PIL 2210	
-	-	-	-	-	-	-	-	ECON 108/0	ECON 108/1	ECON 108/2	PIL 2210 2P	
-	-	-	-	-	-	-	-	ECON 126/0	ECON 126/1	ECON 126/2	-	
-	-	-	-	-	-	-	-	ECON 128/0	ECON 128/1	ECON 128/2	-	
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TABLE OF MODELS, DIMENSIONS AND REFERENCES



External dimensions (mm)			PK metal monobloc control desks with fixed rear panel		PKP metal monobloc control desks with removable rear panel		PKP.../F metal monobloc control desks with front panel and rear door	
			Without mounting plate	With mounting plate	Without mounting plate	With mounting plate	Without mounting plate	With mounting plate
1024	600	466	PK 60	PK 60 PM	-	-	-	-
1024	800	466	PK 80	PK 80 PM	-	-	-	-
1024	1000	466	PK 100	PK 100 PM	-	-	-	-
1024	1200	466	PK 120	PK 120 PM	-	-	-	-
1024	600	597	-	-	PKP 60	PKP 60 PM	-	-
1024	800	597	-	-	PKP 80	PKP 80 PM	-	-
1024	1000	597	-	-	PKP 100	PKP 100 PM	-	-
1024	1200	597	-	-	PKP 120	PKP 120 PM	-	-
1400	800	814	-	-	-	-	PKP 80 / F30	PKP 80 / F30 PM
1400	1000	814	-	-	-	-	PKP 100 / F30	PKP 100 / F30 PM
1400	1200	814	-	-	-	-	PKP 120 / F30	PKP 120 / F30 PM
1400	1600	814	-	-	-	-	PKP 160 / F30	PKP 160 / F30 PM
1400	800	1014	-	-	-	-	PKP 80 / F50	PKP 80 / F50 PM
1400	1000	1014	-	-	-	-	PKP 100 / F50	PKP 100 / F50 PM
1400	1200	1014	-	-	-	-	PKP 120 / F50	PKP 120 / F50 PM
1400	1600	1014	-	-	-	-	PKP 160 / F50	PKP 160 / F50 PM
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*For 200 mm high plinths, ask for reference **ZUN.../200**.

Mounting plates							Plinths
							
Lower		Front covers		Complete	Console	Height* 100 mm	
Metal	Universal	Metal	Universal				
PMPK-8560	PMR-6760	-	-	-	-	ZUN 64/100	
PMPK-8580	PMR-6780	-	-	-	-	ZUN 84/100	
PMPK-85100	PMR-67100	-	-	-	-	ZUN 104/100	
PMPK-85120	PMR-67120	-	-	-	-	ZUN 124/100	
PMPK-8560	PMR-6760	-	-	-	-	ZUN 65/100	
PMPK-8580	PMR-6780	-	-	-	-	ZUN 85/100	
PMPK-85100	PMR-67100	-	-	-	-	ZUN 105/100	
PMPK-85120	PMR-67120	-	-	-	-	ZUN 125/100	
PMP-7080	PMR-6780	PMP-4580	PMR-4280	PMOL-148	PMP-4080	ZUN 84/100	
PMP-70100	PMR-67100	PMP-45100	PMR-42100	PMOL-1410	PMP-40100	ZUN 104/100	
PMP-70120	PMR-67120	PMP-45120	PMR-42120	PMOL-1412	PMP-40120	ZUN 124/100	
PMP-70160	-	PMP-45160	-	-	PMP-40160	ZUN 164/100	
PMP-7080	PMR-6780	PMP-4580	PMR-4280	PMOL-148	PMP-4080	ZUN 86/100	
PMP-70100	PMR-67100	PMP-45100	PMR-42100	PMOL-1410	PMP-40100	ZUN 106/100	
PMP-70120	PMR-67120	PMP-45120	PMR-42120	PMOL-1412	PMP-40120	ZUN 126/100	
PMP-70160	-	PMP-45160	-	-	PMP-40160	ZUN 166/100	
1/292	1/292	1/292	1/292	1/292	1/292	1/288	

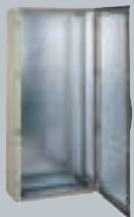


CRN-CEM

TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions (mm)				Mounting plates		Adjustable plate supports
Height	Width	Depth		Metal	Perforated	
400	300	200	CRAF 43/200 PM	MM-43	MF-43	SDCR-200
400	600	200	CRAF 46/200 PM	MM-64	MF-64	SDCR-200
500	400	200	CRAF 54/200 PM	MM-54	MF-54	SDCR-200
600	400	200	CRAF 64/200 PM	MM-64	MF-64	SDCR-200
600	600	200	CRAF 66/250 PM	MM-66	MF-66	SDCR-200
700	500	250	CRAF 75/250 PM	MM-75	MF-75	SDCR-200
800	600	300	CRAF 86/300 PM	MM-86	MF-86	SDCR-300
1000	800	300	CRAF 108/300 PM	MM-108	MF-108	SDCR-300
1200	800	300	CRAF 128/300 PM	MM-128	MF-128	SDCR-300
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CMO-CEM

TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions (mm)					Mounting plates	Universal chassis	Coupling kit for UNIDIS chassis	
Height	Width	Depth	No. of doors				Column width	Reference
1600	800	400	1	COAF 168/40 PM	PMOL 168	MOL 160	800	AF/COL 168
1800	800	400	1	COAF 188/40 PM	PMOL 188	MOL 180	800	AF/COL 188
2000	800	400	1	COAF 208/40 PM	PMOL 208	MOL 200	800	AF/COL 208
Page				1/305	1/305	1/113	1/133	

OLN-CEM

TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions (mm)					Side panels	Mounting plates	Universal chassis	Coupling kit for UNIDIS chassis	
Height	Width	Depth	No. of doors					Column width	Reference
1800	800	400	1	OLAF 188/40 PM	2 PLAF 184	PMOL 188	MOL 180	800	AF/COL 188
1800	800	600	1	OLAF 188/60 PM	2 PLAF 186	PMOL 188	MOL 180	800	AF/COL 188
2000	800	500	1	OLAF 208/50 PM	2 PLAF 205	PMOL 208	MOL 200	800	AF/COL 208
2000	800	600	1	OLAF 208/60 PM	2 PLAF 206	PMOL 208	MOL 200	800	AF/COL 208
Page				1/307	1/307	1/307	1/201	1/233	

Dinimel-DLM			Internal doors	Fixed and pivoting 19" racks		Canopies
Reference	No. of 18 mm modules	No. of rows / plates		Reference	No. of units	
DLM-24	24	2/-	PIN-43/200	-	-	TJ-3020
DLM-84P	48	3/3	-	BR.../CRN	7/8	TJ-6025
DLM-48	48	3/-	PIN-54/200	-	-	TJ-4020
DLM-48P	48	3/-	PIN-64/200	-	-	TJ-4020
-	-	-	-	-	-	TJ-6025
DLM-66	66	3/1	-	-	-	TJ-5025
DLM-88	88	4/-	-	-	-	-
DLM-84	84	3/1	-	BR.../CRN	16	TJ-6030
DLM-112	112	4/-	-	-	-	-
DLM-240	234	6/-	-	-	-	TJ-8030
-	-	-	-	-	-	TJ-8030
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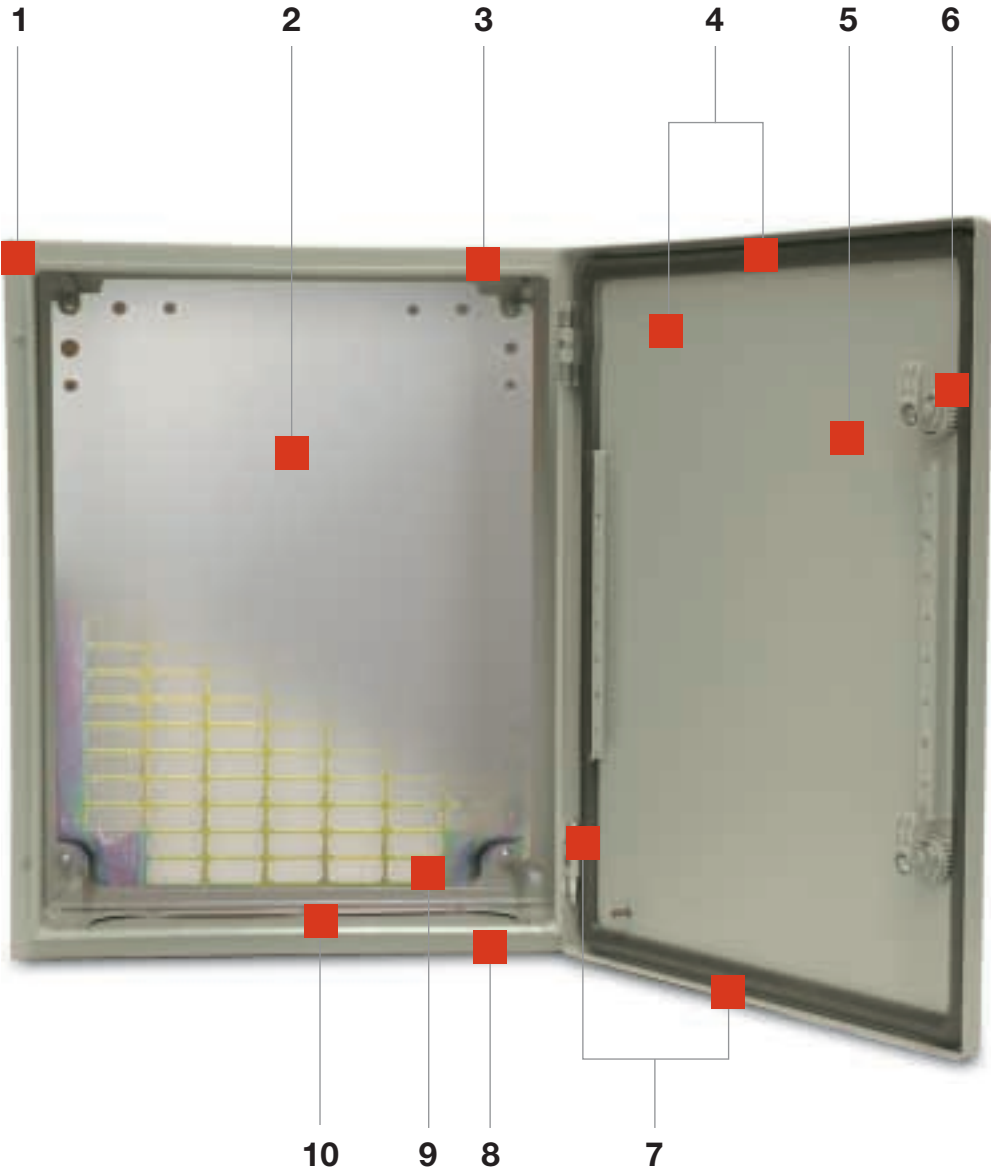
Internal doors	19" rack				Canopies	Plinths	
	Pivoting	Centred pivoting	Pivoting 180°	No. of units 1 = 44.45 mm		Height 100 mm	Height 200 mm
PIL 168	BRP 31/OL	BRPC 31/OL	BRP 31/OL 180	31	TJ 8040 CMO	ZUN 84/100	ZUN 84/200
PIL 188	BRP 36/OL	BRPC 36/OL	BRP 36/OL 180	36	TJ 8040 CMO	ZUN 84/100	ZUN 84/200
PIL 208	BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	TJ 8040 CMO	ZUN 84/100	ZUN 84/200
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19" rack				Internal door	Plinths	
Pivotante	Centred pivoting	Pivoting 180°	No. of units 1 = 44.45 mm		Height 100 mm	Height 200 mm
BRP 36/OL	BRPC 36/OL	BRP 36/OL 180	36	PIL 188	ZUN 84/100	ZUN 84/200
BRP 36/OL	BRPC 36/OL	BRP 36/OL 180	36	PIL 188	ZUN 86/100	ZUN 86/200
BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	PIL 208	ZUN 85/100	ZUN 85/200
BRP 40/OL	BRPC 40/OL	BRP 40/OL 180	40	PIL 208	ZUN 86/100	ZUN 86/200
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Wall-mounting steel enclosures suitable for any CRN and CRNG application



1 Front rain gutter prevents the entry of water, oil or liquids, ensuring IP66 protection.





2 A complete range of mounting plates for a wide variety of installations.



3 Fixing brackets, fastened with screws from the outside, can be placed horizontally or vertically. Not included in the standard supply.



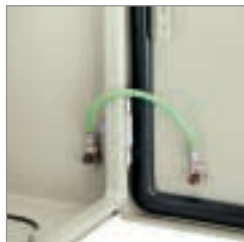
4 Foamed-in polyurethane gasket guarantees watertightness for years. Door reinforcement profile allowing the fixing of equipment in models up to 400 mm high.



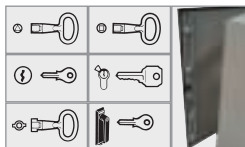
5 Transparent tempered-glass door and fully watertight, maintaining IP66 protection.



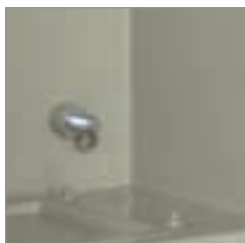
6 3 mm standard double bar lock on CRN models. 5 mm three-point double bar lock on CRNG models. Wide variety of lock transformations available.



7 Two welded M6 × 15 earth studs welded to the back and one M6 × 15 stud on the door. Easily reversible door, fixed with two or three invisible hinges allowing the door to open 120°.



8 Support to adjust the depth of the mounting plate, with positions every 12.5 mm.



9 Back of enclosure with 4 welded M8 × 15 studs with built-in spacers for fixing mounting plates, adjustable plate support and modular chassis. Wall fixing drillings sealed with plastic plugs to ensure the degree of protection.



10 Embedded cable entry plate with a neoprene seal, flush with the back of the enclosure. Pre-punched insulated cable entries available as an accessory.



CRN 54/200



CRN 54/200 KT

Metal monobloc construction suite of enclosures with sides made from a single folded section. Back piece joined to the sides using a special profile forming a protected sealed area. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin.

- **CRN...KT** series with transparent tempered glass door.
- Depth adjustable mounting plate supports.
- Reinforcement on plain doors with perforations for equipment fixing from models **CRN-54/150**.
- Reversible door opening to more than 120° in every case.
- Possibility of mounting on 100 and 200 mm high **ZUN** plinths for models with width 600, 800, 1000 and 1200 mm and depth 300 and 400 mm.
- IP66 for one-door enclosures.
- IK10.



CRNG 1210/300





CRNG 128/300

Metal construction suite of enclosures made from a single cross-shaped folded section. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin. All CRNG models include a three-point locking system.






- IP66 (EN 60529) for one-door enclosures, IP55 for two-door enclosures.
- Adjustable support plate.
- Built-in cable entry plate, flush with the back of the enclosure (without foamed-in gasket to facilitate machining).
- Three-point locking system for one and two doors. Standard 5 mm double bar lock.
- Door centring piece on two door enclosures to ensure proper door alignment.
- Foamed-in polyurethane gasket on the doors to guarantee the watertightness for many years.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions (mm)			IP66 					Mounting plates 			
Height	Width	Depth	Door		Fig.	Cable entry	Weight* kg	Metal	Insulated	Perforated	Universal
			Plain	Transparent							
200	200	150	CRN-22/150	-	1	0	2.5	MM-22	-	-	-
200	300	150	CRN-23/150	-	1	B	3.9	MM-23	-	-	-
250	200	150	CRN-2520/150	-	1	0	3.2	MM-2520	MB-2520	-	-
300	250	150	CRN-3025/150	CRN-3025/150 KT	1	A	4.2	MM-3025	MB-3025	-	MR-3025
300	250	200	CRN-3025/200	CRN-3025/200 KT	1	A	4.9	MM-3025	MB-3025	-	MR-3025
300	300	150	CRN-33/150	CRN-33/150 KT	1	B	5	MM-33	MB-33	MF-33	MR-33
300	300	200	CRN-33/200	CRN-33/200 KT	1	B	6	MM-33	MB-33	MF-33	MR-33
300	400	200	CRN-34/200	CRN-34/200 KT	1	C	6.4	MM-34	MB-34	MF-34	MR-34
300	450	150	CRN-3045/150	-	1	B	6.7	MM-3045	-	-	-
400	300	150	CRN-43/150	CRN-43/150 KT	1	B	6	MM-43	MB-43	MF-43	MR-43
400	300	200	CRN-43/200	CRN-43/200 KT	1	B	6.8	MM-43	MB-43	MF-43	MR-43
400	400	200	CRN-44/200	CRN-44/200 KT	1	C	8	MM-44	MB-44	MF-44	MR-44
400	600	250	CRN-46/250	CRN-46/250 KT	1	D	10	MM-46	MB-46	MF-64	MR-46
400	600	300	CRN-46/300	CRN-46/300 KT	1	D	11.2	MM-46	MB-46	MF-64	MR-46
500	400	150	CRN-54/150	CRN-54/150 KT	2	B	8.7	MM-54	MB-54	MF-54	MR-54
500	400	200	CRN-54/200	CRN-54/200 KT	2	C	9.8	MM-54	MB-54	MF-54	MR-54
500	400	250	CRN-54/250	CRN-54/250 KT	2	C	11	MM-54	MB-54	MF-54	MR-54
500	500	250	CRN-55/250	CRN-55/250 KT	2	D	12.8	MM-55	MB-55	MF-55	MR-55
600	400	150	CRN-64/150	CRN-64/150 KT	2	B	9.3	MM-64	MB-64	MF-64	MR-64
600	400	200	CRN-64/200	CRN-64/200 KT	2	C	10.8	MM-64	MB-64	MF-64	MR-64
600	400	250	CRN-64/250	CRN-64/250 KT	2	C	12.3	MM-64	MB-64	MF-64	MR-64
600	500	150	CRN-65/150	CRN-65/150 KT	2	B	11.3	MM-65	MB-65	-	MR-65
600	500	200	CRN-65/200	CRN-65/200 KT	2	D	14.3	MM-65	MB-65	-	MR-65
600	500	250	CRN-65/250	CRN-65/250 KT	2	D	16.2	MM-65	MB-65	-	MR-65
600	600	200	CRN-66/200	CRN-66/200 KT	2	D	16.3	MM-66	MB-66	MF-66	MR-66
600	600	250	CRN-66/250	CRN-66/250 KT	2	D	18.2	MM-66	MB-66	MF-66	MR-66
600	600	300	CRN-66/300	CRN-66/300 KT	2	D	19.8	MM-66	MB-66	MF-66	MR-66
600	800	300	CRN-68/300	CRN-68/300 KT	2	E	26	MM-68	MB-68	MF-86	MR-68
700	500	200	CRN-75/200	CRN-75/200 KT	2	D	17.3	MM-75	MB-75	MF-75	MR-75
700	500	250	CRN-75/250	CRN-75/250 KT	2	D	19.3	MM-75	MB-75	MF-75	MR-75
800	600	200	CRN-86/200	CRN-86/200 KT	2	D	21.8	MM-86	MB-86	MF-86	MR-86
800	600	250	CRN-86/250	CRN-86/250 KT	2	D	24.8	MM-86	MB-86	MF-86	MR-86
800	600	300	CRN-86/300	CRN-86/300 KT	2	D	26.3	MM-86	MB-86	MF-86	MR-86
800	600	400	CRNG-86/400	CRNG-86/400 KT	3	F	30	MM-86	MB-86	MF-86	MR-86
800	800	200	CRN-88/200	CRN-88/200 KT	2	E	29.5	MM-88	MB-88	MF-88	MR-88
800	800	300	CRN-88/300	CRN-88/300 KT	2	E	32.5	MM-88	MB-88	MF-88	MR-88
800	1000	300	CRNG-810/300	-	4	G	40	MM-810	MB-810	MF-108	MR-810
800	1200	300	CRNG-812/300	-	4	G	46	MM-128	-	MF-128	MR-812
1000	600	250	CRN-106/250	CRN-106/250 KT	2	D	28.4	MM-106	MB-106	MF-106	MR-106
1000	600	300	CRN-106/300	CRN-106/300 KT	2	D	30.6	MM-106	MB-106	MF-106	MR-106
1000	600	400	CRNG-106/400	CRNG-106/400 KT	3	F	36	MM-106	MB-106	MF-106	MR-106
1000	800	250	CRN-108/250	CRN-108/250 KT	2	E	34.5	MM-108	MB-108	MF-108	MR-108
1000	800	300	CRN-108/300	CRN-108/300 KT	2	E	37.4	MM-108	MB-108	MF-108	MR-108
1000	800	400	CRNG-108/400	CRNG-108/400 KT	3	G	43	MM-108	MB-108	MF-108	MR-108
1000	1000	300	CRNG-1010/300	CRNG-1010/300 KT	4	G	47	MM-1010	MB-1010	MF-1010	MR-1010
1000	1200	300	CRNG-1012/300	-	4	G	55	MM-1210	MB-1012	MF-1210	MR-1012
1000	1200	400	CRNG-1012/400	-	4	G	60	MM-1210	MB-1012	MF-1210	MR-1012
1200	600	300	CRNG-126/300	CRNG-126/300 KT	3	F	37	MM-126	-	MF-126	MR-126
1200	600	400	CRNG-126/400	CRNG-126/400 KT	3	F	42	MM-126	-	MF-126	MR-126
1200	800	300	CRNG-128/300	CRNG-128/300 KT	3	G	45	MM-128	MB-128	MF-128	MR-128
1200	800	400	CRNG-128/400	CRNG-128/400 KT	3	G	50	MM-128	MB-128	MF-128	MR-128
1200	1000	300	CRNG-1210/300	-	4	G	56	MM-1210	MB-1210	MF-1210	MR-1210
1200	1000	400	CRNG-1210/400	-	4	G	61	MM-1210	MB-1210	MF-1210	MR-1210
1200	1200	300	CRNG-1212/300	-	4	G	64	MM-1212	-	-	MR-1212
1200	1200	400	CRNG-1212/400	-	4	G	90	MM-1212	-	-	MR-1212
1400	1000	300	CRNG-1410/300	-	4	G	80	MM-1410	-	-	MR-1410

CRNG enclosures with a three-point lock.

* Weight of the enclosures with plain door.

	Adjustable supports 	Dinimel DLM Chassis 			Internal doors 	Fixed and pivoting 19" racks 		Canopies 
		Reference	No. of modules 18 mm	No. of rows / plates		Reference	No. units	
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	TJ-2015
-	-	-	-	-	-	-	-	TJ-2515
SDCR-200	-	-	-	-	-	-	-	TJ-2520
-	-	-	-	-	-	-	-	TJ-3015
SDCR-200	-	-	-	-	-	-	-	TJ-3020
SDCR-200	-	-	-	-	-	-	-	TJ-4020
-	-	-	-	-	-	-	-	-
-	DLM-24	24	2/-	PIN 43	-	-	-	TJ-3015
SDCR-200	DLM-24	24	2/-	PIN 43	-	-	-	TJ-3020
SDCR-200	-	-	-	-	-	-	-	TJ-4020
SDCR-250	-	-	-	-	BRF8/CRN	BRP7/CRN	7/8	TJ-6025
SDCR-300	-	-	-	-	BRF8/CRN	BRP7/CRN	7/8	TJ-6030
-	DLM-48	48	3/-	-	-	-	-	TJ-4015
SDCR-200	DLM-48	48	3/-	PIN 54	-	-	-	TJ-4020
SDCR-250	DLM-48	48	3/-	-	-	-	-	TJ-4025
SDCR-250	-	-	-	-	-	-	-	TJ-5025
-	DLM-48P	48	3/-	PIN 64	-	-	-	TJ-4015
SDCR-200	DLM-48P	48	3/-	PIN 64	-	-	-	TJ-4020
SDCR-250	DLM-48P	48	3/-	PIN 64	-	-	-	TJ-4025
-	-	-	-	-	-	-	-	TJ-5015
SDCR-200	-	-	-	-	-	-	-	TJ-5020
SDCR-200	-	84	3/-	-	-	-	-	TJ-6025
SDCR-200	DLM-84P	84	3/-	-	BRF12/CRN	BRP11/CRN	11/12	TJ-6020
SDCR-250	DLM-84P	84	3/-	-	BRF12/CRN	BRP11/CRN	11/12	TJ-6025
SDCR-300	DLM-84P	84	3/-	-	BRF12/CRN	BRP11/CRN	11/12	TJ-6030
SDCR-300	-	-	-	-	-	-	-	TJ-8030
SDCR-200	DLM-66 DLM-88	66 / 88	3/1 4/-	PIN 75	-	-	-	TJ-5020
SDCR-250	DLM-66 DLM-88	66 / 88	3/1 4/-	PIN 75	-	-	-	TJ-5025
SDCR-200	DLM-84 DLM-112	84 / 112	3/1 4/-	PIN 86	-	-	-	TJ-6020
SDCR-250	DLM-84 DLM-112	84 / 112	3/1 4/-	PIN 86	BRF17/CRN	BRP16/CRN	16/17	TJ-6025
SDCR-300	DLM-84 DLM-112	84 / 112	3/1 4/-	PIN 86	BRF17/CRN	BRP16/CRN	16/17	TJ-6030
SDCR-400	DLM-84 DLM-112	84 / 112	3/1 4/-	PIN 86	BRF17/CRN	BRP16/CRN	16/17	TJ-6040
SDCR-200	-	-	-	-	-	-	-	TJ-8020
SDCR-300	-	-	-	-	-	-	-	TJ-8030
SDCR-360	-	-	-	-	-	-	-	TJ-10030
SDCR-300	-	-	-	-	-	-	-	TJ-12030
SDCR-250	-	-	-	PIN 106	BRF21/CRN	BRP20/CRN	20/21	TJ-6025
SDCR-300	DLM-168	168	6/-	PIN 106	BRF21/CRN	BRP20/CRN	20/21	TJ-6030
SDCR-400	DLM-168	168	6/-	PIN 106	BRF21/CRN	BRP20/CRN	20/21	TJ-6040
SDCR-250	DLM-240	234	6/-	PIN 108	BRP20/CRN 800	-	20	TJ-8025
SDCR-300	DLM-240	234	6/-	PIN 108	BRP20/CRN 800	-	20	TJ-8030
SDCR-400	DLM-240	234	6/-	PIN 108	BRP20/CRN 800	-	20	TJ-8040
SDCR-300	-	-	-	-	-	-	-	TJ-10030
SDCR-300	-	-	-	-	-	-	-	TJ-12030
SDCR-400	-	-	-	-	-	-	-	TJ-12040
SDCR-300	-	-	-	-	-	-	-	TJ-6030
SDCR-400	-	-	-	-	-	-	-	TJ-6040
SDCR-300	-	-	-	PIN 128	BRP25/CRN 800	-	25	TJ-8030
SDCR-400	-	-	-	PIN 128	BRP25/CRN 800	-	25	TJ-8040
SDCR-300	-	-	-	-	-	-	-	TJ-10030
SDCR-400	-	-	-	-	-	-	-	TJ-10040
SDCR-300	-	-	-	-	-	-	-	TJ-12030
SDCR-400	-	-	-	-	-	-	-	TJ-12040
SDCR-300	-	-	-	-	-	-	-	TJ-10030

Dimensions (mm)

FIG. 1

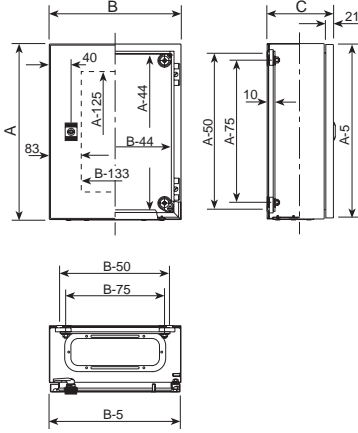
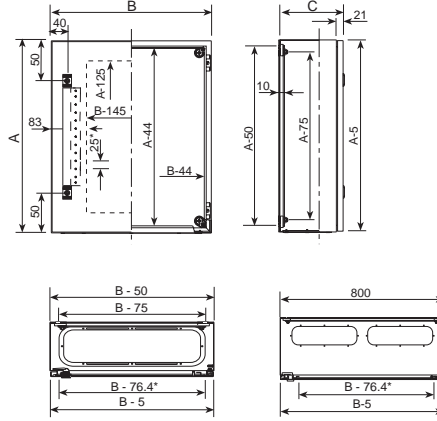
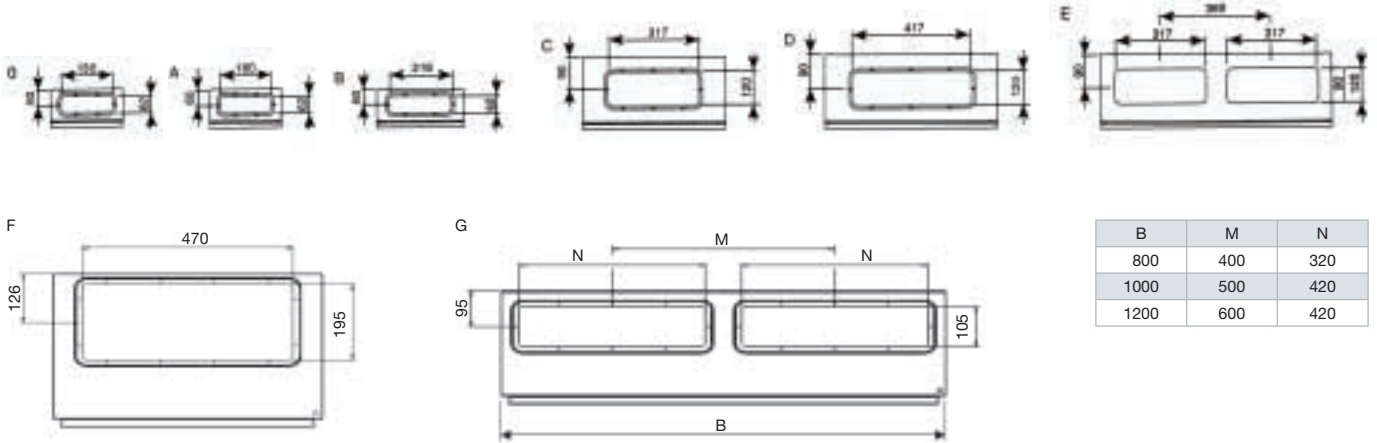


FIG. 2



* All KT-type transparent door enclosures do not have door reinforcement profiles.



B	M	N
800	400	320
1000	500	420
1200	600	420

Dimensions (mm)

FIG. 3

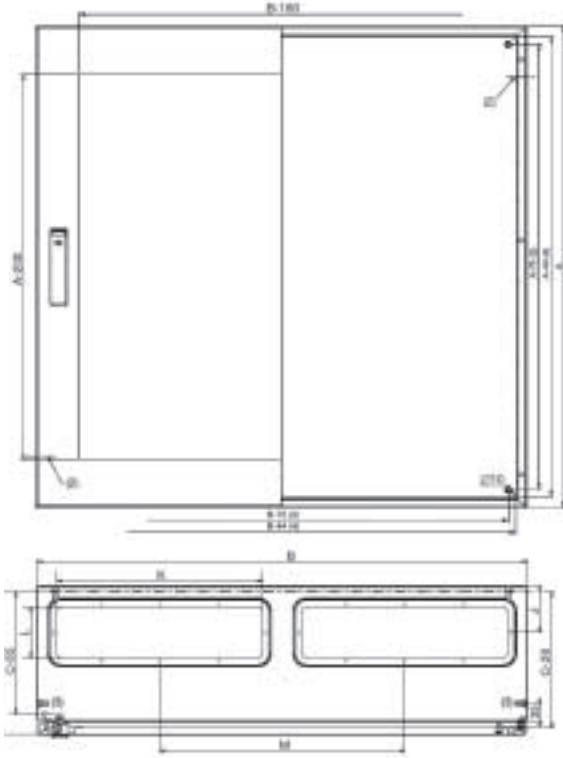
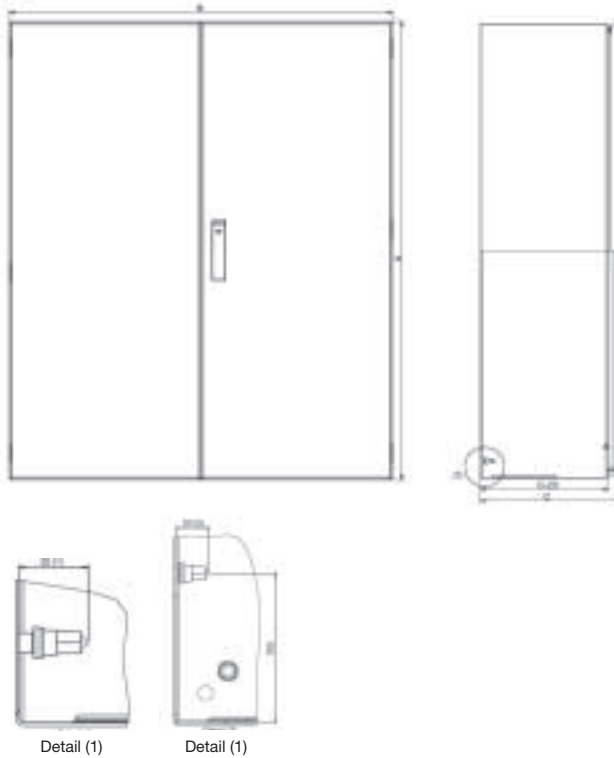


FIG. 4



- (1) Four M8 × 25 bottom studs.
- (2) Two M6 × 17.5 earth studs.
- (3) Spacing between the studs.
- (4) Spacing between the perforations for direct fixing.
- (5) Only models 1400 × 1000 × 300.

Enclosure		J	K	L	M
Width (B)	Depth (C)				
600	300-400	126	470	195	
800	300-400	95	320	105	400
1000 ⁽⁵⁾	300	125	420	105	500
1000	300-400	95	420	105	500
1200	300	95	420	105	500
1200	400	125	420	105	600

FIG. 5 DIMENSIONS OF THE DOOR REINFORCEMENT PROFILES (1).



1-door enclosure		Reinforcement profile	
Height (A)	Width (B)	F	D
800	600	620	487
1000	600	820	487
1000	800	820	687
1200	600	1020	480
1200	800	1020	687

2-door enclosure		Reinforcement profile			
Height (A)	Width (B)	Rt. Door		Lft. Door	
		F	D	F	D
800	1000	620	387	620	437
800	1200	620	487	620	537
1000	1000	820	387	820	437
1000	1200	820	487	820	537
1200	1000	1020	387	1020	437
1200	1200	1020	487	1020	537
1400	1000	1020	387	1020	437

- (1) The KT doors only include vertical profiles.
- (2) 25 mm passage.
- (3) 1 M6 × 17.5 earth stud.

Wall fixing kit for CRN enclosures



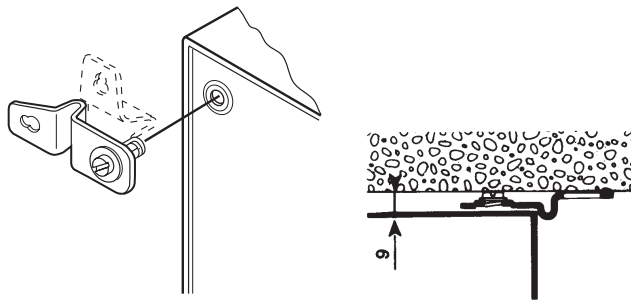
Made of passivated zinc-coated steel.

They are fixed from the outside and can be positioned vertically or horizontally indistinctly.

Maximum load: horizontally 180 kg.
vertically 350 kg.

Not included in the standard supply.

Reference	Description
PF-CR	Standard fixing kit



Wall fixing kit for CRNG enclosures



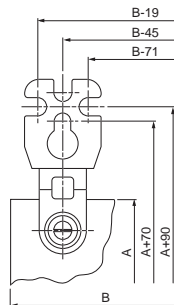
Made of passivated zinc-coated steel.

They are fixed from the outside and can be positioned vertically or horizontally indistinctly.

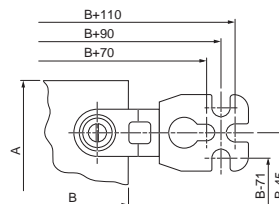
Maximum load: horizontally 180 kg.
vertically 350 kg.

Not included in the standard supply.

Reference	Description
PFCRG	Wall mounting kit



Vertical position



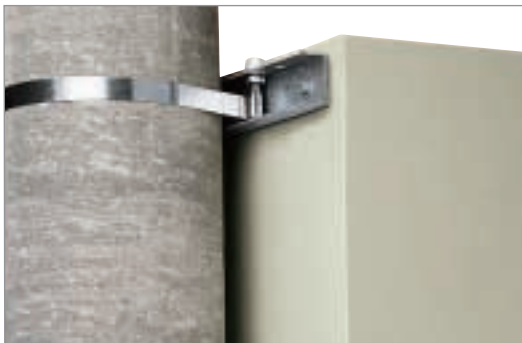
Horizontal position

Heavy load fixing brackets for CRN and CRNG enclosures

Set of 2 rails and 2 wall fixing brackets, standard in zinc-coated steel.
 Allow for fixing the enclosure with a maximum load of 400 kg and prevent it from being elevated.
 Fixed from the exterior.

Reference	Enclosure width (mm)
PFCRG 600	600
PFCRG 800	800
PFCRG 1000	1000
PFCRG 1200	1200

Post fixing for CRN and CRNG enclosures



For installation on posts with a diameter between 150 and 215 mm.
 Galvanised steel profile. It allows the mounting of canopies.
 Maximum load 100 kg.

Reference	Enclosure width (mm)
SFPCRN 300	300
SFPCRN 400	400
SFPCRN 500	500
SFPCRN 600	600
SFPCRN 800	800

Accessories and coupling for CRN and CRNG enclosures



BU/CRN...

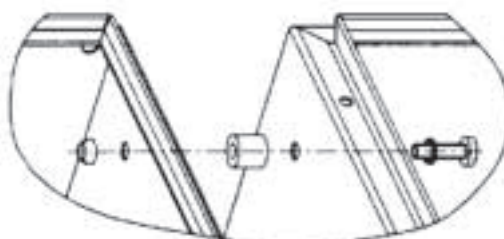
2 versions available:
 ■ Coupling kit for 2-enclosure cubicle suite without cable passage: comprised of 4 tube entries with fixing hardware, reference **BU/CRN**.
 ■ Coupling frame that allows cable passage: permits lateral coupling of 2 enclosures with a separation of 17 mm. Comprised of a self-extinguishing, fibreglass-reinforced polyester frame and a sealing gasket that guarantees the IP66 degree of protection. Includes the necessary hardware. Allows a maximum door opening of 120°.

Reference **BU/CRN....**



BU/CRN...

Reference	Description	For enclosures with dimensions (mm)	
		A	C
BU/CRN	Coupling kit without cable passage	All	
BU/CRN 4318	Coupling frame 435 x 185	≥600	≥300
BU/CRN 6318	Coupling frame 635 x 185	≥800	≥300



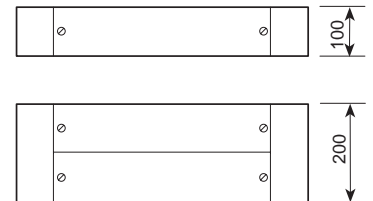
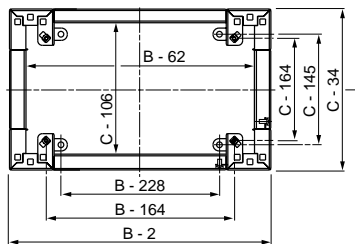
Individual plinths



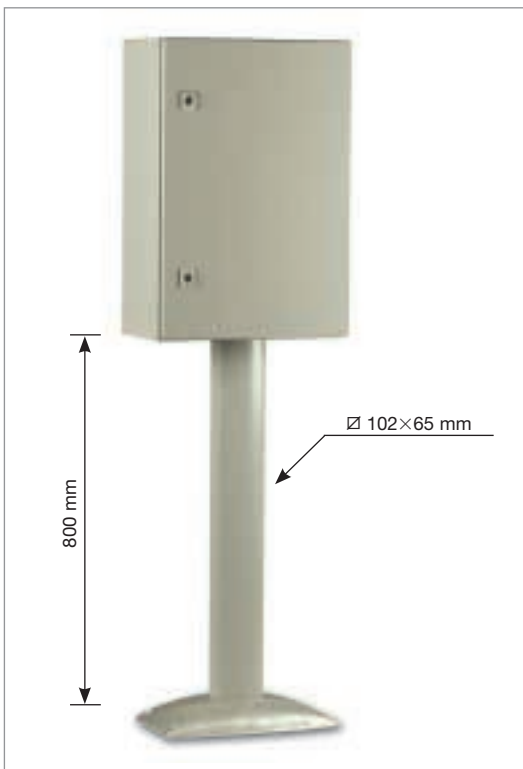
To be coupled to enclosures using the floor fixing holes, after previous machining of the enclosure.

- 100 and 200 mm high.
- Accessible from the front and back.
- Anthracite grey RAL-7022.

Enclosure dimension		Plinth height = 100 mm Reference	Plinth height = 200 mm Reference
Width (B)	Depth (C)		
600	300	ZUN 63/100	ZUN 63/200
600	400	ZUN 64/100	ZUN 64/200
800	300	ZUN 83/100	ZUN 83/200
800	400	ZUN 84/100	ZUN 84/200
1000	300	ZUN 103/100	ZUN 103/200
1000	400	ZUN 104/100	ZUN 104/200
1200	300	ZUN 123/100	ZUN 123/200
1200	400	ZUN 124/100	ZUN 124/200



Support column



To be installed directly on the cable entries of the enclosures using **CHCO** coupling pieces.

Made of aluminium and painted with textured light grey RAL-7032 polyester epoxy resin.

The coupling plates cannot be mounted on **CRNG** models.

COLUMN

Reference	Specifications
COCN-80	To be coupled to all models except CRN-22/150 and CRN-2520/150

COUPLING PLATES

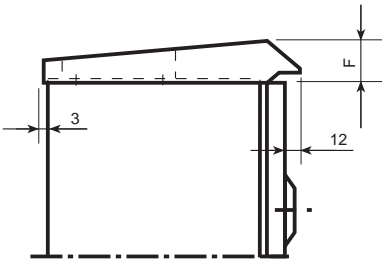
Reference	To be coupled to cable entry* (1)
CHCO/A	A
CHCO/B	B
CHCO/C	C-E*
CHCO/D	D

* Use two coupling plates and two columns.
(1) See page 1/24.

Canopies



Metal canopies protected inside and out with texturised RAL-7032 grey polyester epoxy resin.



Reference	For attachment to enclosures		F
	Width (B)	Depth (C)	
TJ-2015	200	150	36
TJ-2515	250	150	36
TJ-2520	250	200	36
TJ-3015	300	150	36
TJ-3020	300	200	36
TJ-4015	400	150	36
TJ-4020	400	200	36
TJ-4025	400	250	42
TJ-5015	500	150	36
TJ-5020	500	200	36
TJ-5025	500	250	42
TJ-6020	600	200	36
TJ-6025	600	250	42
TJ-6030	600	300	42
TJ-6040	600	400	42
TJ-8020	800	200	36
TJ-8025	800	250	42
TJ-8030	800	300	42
TJ-8040	800	400	42
TJ-10030	1000	300	42
TJ-10040	1000	400	42
TJ-12030	1200	300	42
TJ-12040	1200	400	42

Lifting eyebolts



Set of two M8 lifting eyebolts in zinc-covered steel.

Fixed directly onto the body of the enclosure. Maximum load 210 kg per eyebolt with a sling of 60°.

It is not possible to mount them with the canopy in place.

Reference: **TCRG/8**.

Insulated cable entries for CRN enclosures



Made of self-extinguishing ABS with 30% fibreglass.
Colour RAL-7035.

- Knock-outs of Pg diameter for coupling of cable glands, membrane glands, tubes, etc.
- With a polyurethane sealing gasket.
- Excellent thermal resistance.
- Insulated cable entries cannot be mounted on **CRNG** models.



Reference	Figure	To be coupled to the cable entry*
TSA-CRN/A	1	A
TSA-CRN/B	2	B
TSA-CRN/C	3	C, E**
TSA-CRN/D	4	D

* See cable entry on page 1/24.

** For type E cable entry, use two **TSA-CRN/C**.

Fig. 1

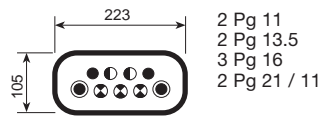


Fig. 4

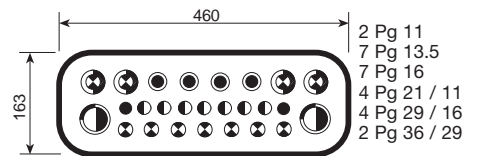


Fig. 2

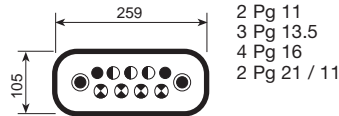
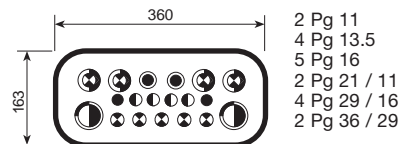


Fig. 3



- Pg 11 (18.6 mm)
- Pg 13,5 (20.4 mm)
- ⊗ Pg 16 (22.5 mm)
- ⊙ Pg 21 / 11 (28.3 / 18.6 mm)
- ⊗ Pg 29 / 16 (37 / 22.5 mm)
- ⊙ Pg 36 / 29 (47 / 37 mm)

Cable entry selection guide for CRNG enclosures



TLCRNG1



TLCRNG1 ST



TLCRNG1 M

Enclosure dimensions (mm)		Cable entry		Type of entry*
Width (B)	Depth (C)	Dimensions	No. of entries	
600	400	395 × 220	1	F
800	300-400	345 × 130	2	G
1000	300-400	445 × 130	2	G
1200	300-400	445 × 130	2	G

* See cable entry on page 1/24.

Standard cable entries for CRNG enclosures

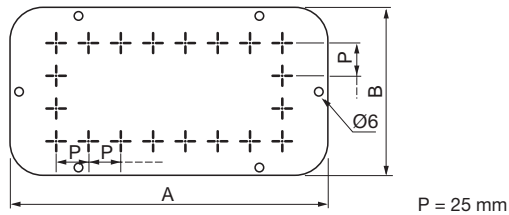


Made of steel painted with textured RAL-7032 polyester epoxy resin. Standard supply with the **CRNG** enclosure.

Surface with a grid pattern in 25 mm intervals to facilitate perforation. Fixing with screws.

Reference	A	B
TLCRNG1	345	130
TLCRNG2	445	130
TLCRNG3	495	220

See the table on page 1/30.



Cable entries with membrane glands for CRNG enclosures



Made of steel painted with textured RAL-7032 polyester epoxy resin. They include watertight cable entries in insulated material (flame classification V0), which guarantees the IP65.

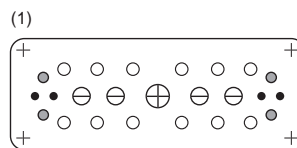
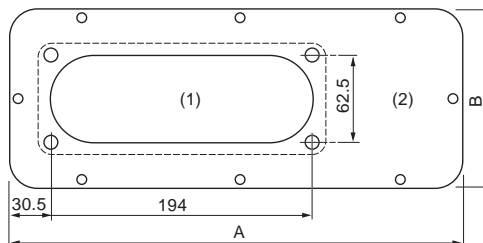
Space available for other cable entries. Fixing with screws.

Reference	A	B
TLCRNG1 M	345	130
TLCRNG2 M	445	130
TLCRNG3 M	495	220

See the table on page 1/30.

Membrane symbol	For cable Ø (mm)	Number	IP	Other possible Ø (mm)
●	5-7	4	65	-
●	8-12	4	65	-
○	10-14	12	65	-
⊖	14-20	4	65	8-12*
⊕	20-26	1	65	8-12*

(*) IP54 in this case.



(2) Space available for machining (cable glands).

Cable entries with knock-outs for CRNG enclosures



Made of steel painted with textured RAL-7032 polyester epoxy resin.

Surface with a grid pattern in 25 mm intervals to facilitate perforation. Fixing with screws.

Reference	A	B	No. of Ø 6 perforations	Figure
TLCRNG1 ST	345	130	8	1
TLCRNG2 ST	445	130	8	2
TLCRNG3 ST	495	220	12	3

See the table on page 1/30.

Symbol	Ø (mm)	M	TLCRNG1 ST	TLCRNG2 ST	TLCRNG3 ST
⊙	12.5	12	6	-	-
⊕	16.5	16	-	4	6
⊗	20.5	20	6	4	2
⊗	25.5	25	-	4	12
⊗	32.5	32	-	4	4
⊗	40.5	40	2	2	4

Fig. 1

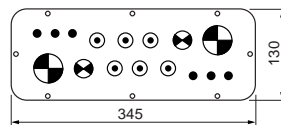


Fig. 2

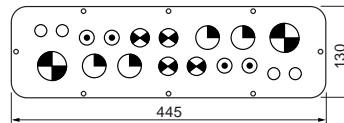
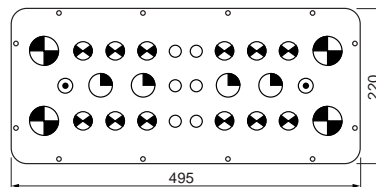
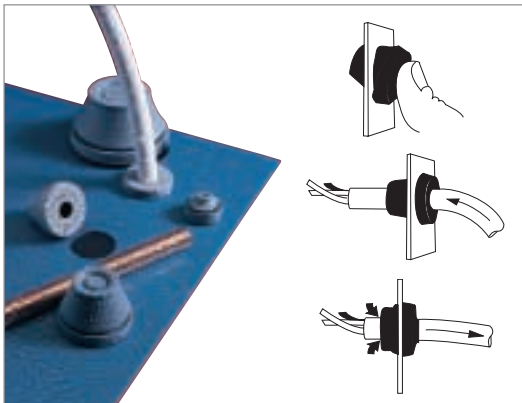


Fig. 3



ISO membrane glands



- IP67.
- Conforming to standard EN 50262.
- Material: EPDM.
- Adaptable to boxes 1 to 4 mm thick (0.5 to 2 mm for Ref. **ECIB-M12**).
- Fast installation without tools.

Reference	ISO	Cable Ø (mm)	Perforation Ø (mm)
ECIB M12	M12	3-5	13
ECIB M16	M16	5-7	16
ECIB M20	M20	7-10	20
ECIB M25	M25	10-14	24
ECIB M32	M32	14-20	30
ECIB M40	M40	20-26	38
ECIB M50	M50	26-35	48

Cable glands



Cable glands.

- IP68, 5 bar.
- Conforming to standard EN 50262.
- Grey RAL-7035.
- Material: PA6, neoprene gasket.
- Operating temperature: -30...+80 °C up to +150 °C for short periods.
- The cable glands are supplied with nuts.
- It is possible to pass various cables through a single cable gland using a multi-cable gasket.



Multi-cable gasket.



Transport plug
(for temporary protection
of box contents).



Blanking plug.

Ø	1-cable cable gland		Multi-cable gasket		Gasket reference	Blanking plug reference	Transport cap Ref.
	Reference	Ø min./max. (mm)	Reference	No. / Ø (mm)			
M12	PE M12	3/6.5	-	-	JPE M12	TPE M12	-
M16	PE M16	4/8	JM24 M16	2×4	JPE M16	TPE M16	TTPE M16
M20	PE M20	6/12	JM34 M20	3×4	JPE M20	TPE M20	TTPE M20
M25	PE M25	11/17	JM45 M25	4×5	JPE M25	TPE M25	TTPE M25
M32	PE M32	15/21	JM65 M32	6×5	JPE M32	TPE M32	TTPE M32
M40	PE M40	19/28	-	-	JPE M40	TPE M40	TTPE M40

Cable entry plates for connectors

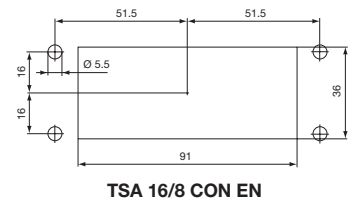
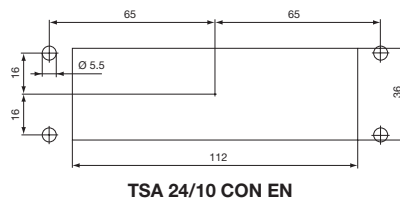


Two part system for introducing cables and hoses into the enclosures. Various ribbed gaskets adapted to the diameter of the cable.

IP54 watertightness.

Identical indentations for 16 and 24 point connectors. Fixing with screws up to dimension 700 × 500 × 250 mm. From this dimension it is also possible to mount them using clips. For better fixing, we recommend that you use screws.

Reference	No. of entries
TSA 16/8 CON EN	8
TSA 24/10 CON EN	10



Cable entries for connectors



Ribbed gaskets adapted to the diameter of the cable to be mounted on the cable entry plates for **TSA** connectors (not included).

Set of 10.

Reference	For cable Ø (mm)
ECTSA 0	-
ECTSA 3/4	3 - 4
ECTSA 5/6	5 - 6
ECTSA 7/8	7 - 8
ECTSA 9/10	9 - 10
ECTSA 12	12
ECTSA 14	14

Cable entry plates without connectors



Compact system that permits cable and hose introduction into electronic enclosures or into junction boxes, for example.

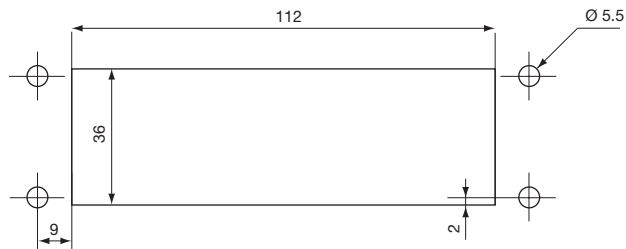
External dimensions: 146 × 14 × 58 mm.

Indentation dimensions: 112 × 36 mm.

IP65 watertightness.

Identical indentations for 24 point connectors. Fixing with screws up to dimension 700 × 500 × 250 mm. From this dimension it is also possible to mount them using clips. For better fixing, we recommend that you use screws.

Reference	No. of entries	For cable Ø (mm)				
		3 to 6.5	4.3 to 8.1	5 to 9.2	8 to 12.5	9.6 to 14
TSA24/14 SIN EN	14	6	-	4	-	4
TSA24/17 SIN EN	17	-	-	17	-	-
TSA24/22 SIN EN	22	16	-	4	2	-
TSA24/23 SIN EN	23	-	23	-	-	-
TSA24/29 SIN EN	29	29	-	-	-	-



Round cable entries without connectors



Compact system that permits cable and hose introduction into electronic enclosures or into junction boxes, for example.

Indentation dimensions: Ø 50 and 63 mm.

IP65 watertightness.

Fixing with nuts up to dimension 700 × 500 × 250 mm. From this dimension it is also possible to mount them using clips. For better fixing, we recommend that you use screws.

Reference	No. of entries	Ø cable entry	For cable Ø (mm)					
			3 to 5.5	3 to 6.5	3.5 to 6.5	5 to 9.2	6 to 10	9.6 to 14
TSAM50 4 SIN EN	4	50	-	-	-	-	3	1
TSAM50 8 SIN EN	8	50	-	-	7	-	1	-
TSAM63 8 SIN EN	8	63	-	2	-	4	-	2
TSAM63 13 SIN EN	13	63	6	-	6	-	1	-



Diameter of M50 perforation

Diameter of M63 perforation

Locks for CRN enclosures



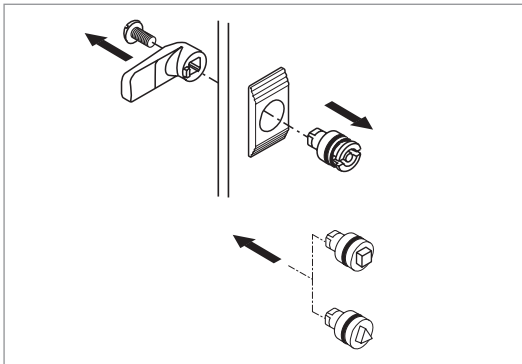
CDB/CRN 3 mm Ø standard double bar lock. By fixing the wing nut to the lock, the double bar lock becomes a handle lock.

■ Operation using:









□ Wing key Ref.: **DBP** 

□ Key **LDB 5**
(according to DIN 43668) 





CDB/CRN



Insert change

Type of insert	Insert reference	Key reference*
3 mm double bar 	TDB/CRN	 LDB 5
With one □ 6 mm square lock	TC 6/CRN	 LC-7
With one □ 7 mm square lock	TC 7/CRN	 LC-7
With one □ 8 mm square lock	TC 8/CRN	 LC-8
Triangle lock with △ 6.5 mm side	TT 6/CRN	 LT-8
Triangle lock with △ 7 mm side	TT 7/CRN	 LT-8
Triangle lock with △ 8 mm side	TT 8/CRN	 LT-8

*Order the key separately.

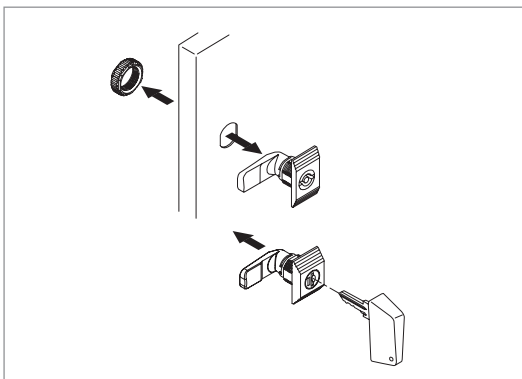
Complete manual handle lock, operated with key 405	CL/CRN	
Complete manual handle lock, operated with key 220	CL220CRN	
Complete metal lock, operated with key 405	CLL/CR-CRS-CRN	
Stainless steel padlock	KPLM	
Padlock	CBC/CRN	



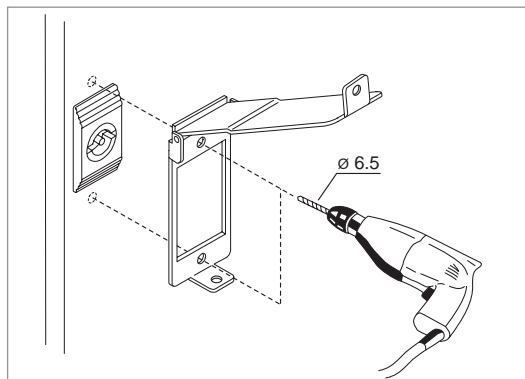
CBC/CRN



KPLM



Lock change



KPLM padlock assembly

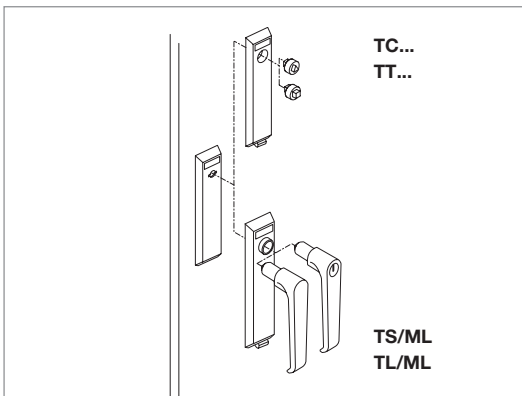
Three-point locks for CRNG enclosures










Standard 5 mm double bar lock for CRNG models.

■ Operation using:

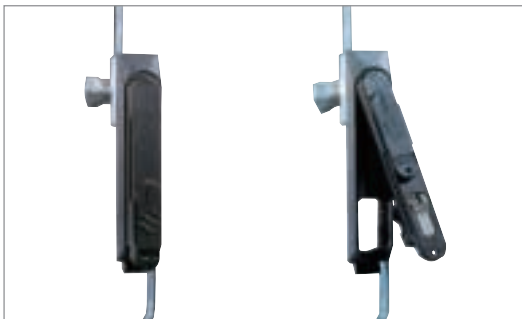
□ Key **LDB 5**
(according to DIN 43668) 











TRANSFORMATION OF THE STANDARD LOCK TO STANDARDISED VARIATIONS IN ENCLOSURES WITH THREE-POINT LOCKS

Type of insert*	Lock reference	Type of key Reference
□ 6 mm square lock	TC 6/ML	 LC-7
□ 7 mm square lock	TC 7/ML	 LC-7
□ 8 mm square lock	TC 8/ML	 LC-8
△ 7 mm side triangle lock	TT 7/ML	 LT-8
△ 8 mm side triangle lock	TT 8/ML	 LT-8
Handle lock	TS/ML	
Handle lock, operated using key 405 (included)	TL/ML	

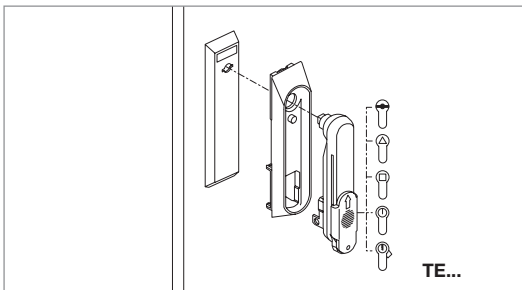
*Insert without key (unless indicated).



TRANSFORMATION OF THE STANDARD LOCK TO A RETRACTABLE THREE-POINT LOCK WITH VARIOUS TYPES OF LOCKS

Type of insert*	Lock reference	Type of key Reference
Key operated bar lock	TEDB/ML	 LDB 5
□ 6 mm square lock	TEC 6/ML	 LC-7
□ 7 mm square lock	TEC 7/ML	 LC-7
□ 8 mm square lock	TEC 8/ML	 LC-8
△ 7 mm side triangle lock	TT 7/ML	 LT-8
△ 8 mm side triangle lock	TT 8/ML	 LT-8
Lock operated with key type 405	TEL/ML	 TEL/ML
Lock operated with reinforced key	TEL/ML	 TEL/ML

*Insert without key (unless indicated).



Internal doors



CRN 54/200 + PIN 54

Internal door designed to be coupled directly to the enclosure or to the adjustable **SDCR** supports (see page 1/44).

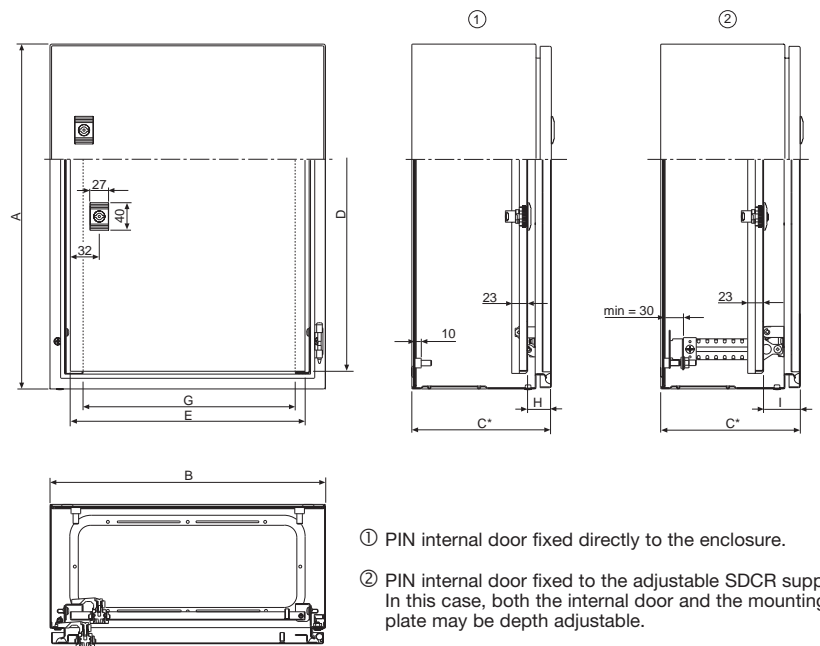
Allows for placement of a mounting plate, making it depth adjustable.

Finished with texturised epoxy-polyester paint, colour RAL-7032.

From 800 mm, the vertical reinforcement profiles are included.

For attachment to enclosures		Reference	D	E	G	H	I min
Height (A)	Width (B)						
400	300	PIN 43	349	241	208	32	51
500	400	PIN 54	449	341	308	32	51
600	400	PIN 64	549	341	308	32	51
700	500	PIN 75	649	441	408	32	51
800	600	PIN 86	749	541	508	32	51
1000	600	PIN 106	949	541	508	32	51
1000	800	PIN 108	949	741	708	32	51
1200	600	PIN 126	1149	541	509	38.3	59
1200	800	PIN 128	1149	741	708	32	52

For enclosures with a transparent door, dimension H is reduced 4 mm.



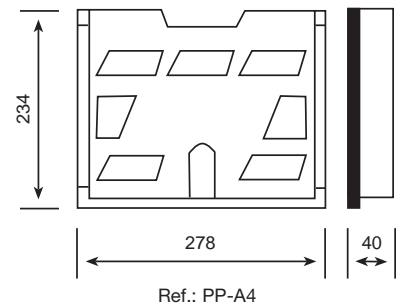
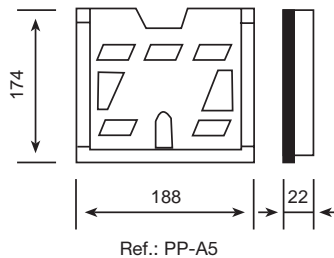
Document pocket



PP-A models made of PVC in grey RAL-7035. The dimensions of the door must be larger than the document pocket.

- Fixed with adhesive tape or screws.
- For holding DIN A4 or A5-sized plans.
- The document pocket cannot be installed if there is an internal door, a modular chassis or a fixed or pivoting 19" rack installed on the front of the enclosure.
- The document pocket cannot be installed on the inside of a transparent door.

Plan size	Reference
A4	PP-A4
A5	PP-A5



Door retainer



Permits locking the door in the open position.

Installed in enclosures from 500 mm height: at the lower part of the door for CRN models and at the top for CRNG models.

Enclosure earthing connections via the reinforcement frame.

It is incompatible with the 19" pivoting rack profile and the internal door.

Reference: **RET/CRN**.

Door switch



Switch/commutator device with a support and hardware for direct fixing to the enclosure.

Permits control of the lighting, cooling elements, etc.

It is incompatible with the 19" pivoting rack profile and the internal door.

Reference: **INL/CRN**.

Door profiles for CRN enclosures



Set of 10 door profiles that facilitate interior fixing of equipment. Installed in single-door enclosures from 500 mm height.

Fixed to the door reinforcement profile with self-tapping screws.

Reference	For enclosures with width (mm)
TFP/CRN 4	400
TFP/CRN 5	500
TFP/CRN 6	600
TFP/CRN 8	800

Door fixing support



Fixing support in zinc-coated steel for fixing Ø 22 mm accessories on the interior of the door.

Reference: **SPCP**.

Groove support foot



Made of black polyamide (flame classification V0) for cable duct support.

Fixing by clip to the perforated plate or the 35 mm rail.

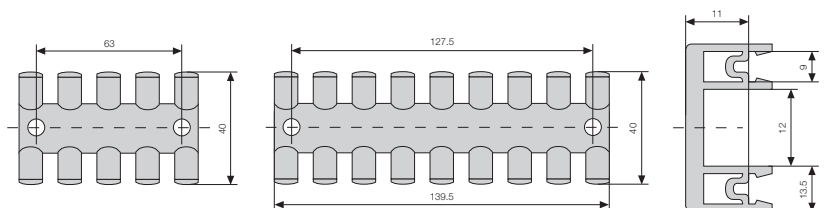
Reference: **SPC**.

Plastic cable support



Fixed by clicking or screwing onto symmetrical 35 mm rails or to a C-shaped rail. Simple and quick fixing of cables with adjustable ties. Set of 10.

Reference	Length (mm)	Maximum number of cables
SCCDIN LG75	75	5
SCCDIN LG140	140	9



Aluminium doors



PACRN-75

Transparent doors with a polycarbonate window, formed by a very lightweight, very strong, anodised aluminium profile. Colour black RAL-9005.

- Maximum area of interior visibility.
- High quality finish.
- Opening to 120°.
- IP40.
- Aluminium doors cannot be mounted on **CRNG** models.

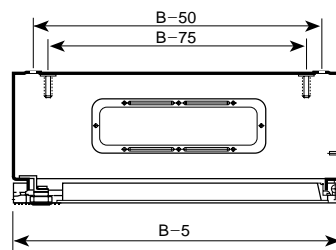
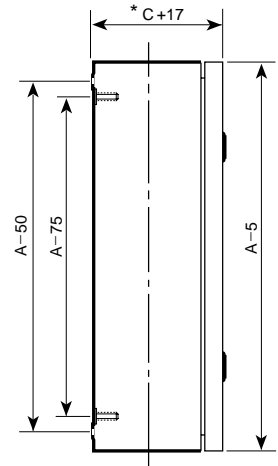
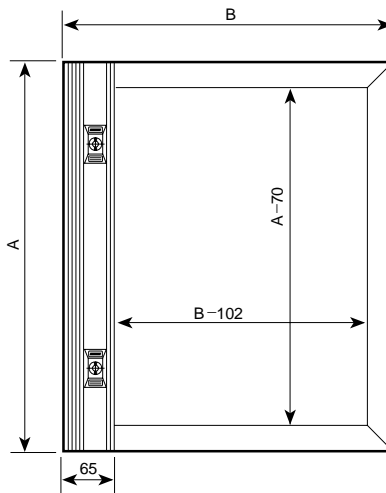
Reference	For attachment to enclosures		Weight kg
	Height (A)	Width (B)	
PACRN-3025	300	250	0.8
PACRN-33	300	300	1
PACRN-43	400	300	1.2
PACRN-44	400	400	1.6
PACRN-46	400	600	2.3
PACRN-54	500	400	2
PACRN-55	500	500	2.4
PACRN-64	600	400	2.3
PACRN-65	600	500	2.8
PACRN-66	600	600	3.2
PACRN-75	700	500	3.1
PACRN-86	800	600	4.1
PACRN-88	800	800	5.4
PACRN-106	1000	600	5
PACRN-108	1000	800	6.3



Standard double bar lock built right into the profile.



Detail of the earthing between the door profile and the enclosure.



* Dimension C according to general table on page 1/22.

Windows for automatic switches



Fig. 1



Fig. 2

Allow access to the interior of the enclosure, maintaining the IP65 degree of protection.

Made of transparent polycarbonate.

Reference		No. of modules	Fig. No.	A	B	C	
Low cover	High cover					Low cover	High cover
VA 27/2M	VA 27/2MA	2	1	78	60	15	25
VA 27/4M	VA 27/4MA	4	1	78	95	15	25
VA 27/6M	VA 27/6MA	6	1	78	130	15	25
VA 27/8M	VA 27/8MA	8	1	78	165	15	25
VA 27/10M	VA 27/10MA	10	1	78	200	15	25
VA 27/12M	VA 27/12MA	12	1	78	235	15	25
VA 27/16M	-	16	2	195	165	13	-
VA 27/24M	-	24*	2	196	235	13	-
VA 27/36M	-	36*	2	248	235	13	-
VA 27/51M	-	51**	2	248	325	13	-

* In rows of 12 modules mounted vertically.

** In rows of 17 modules mounted horizontally.

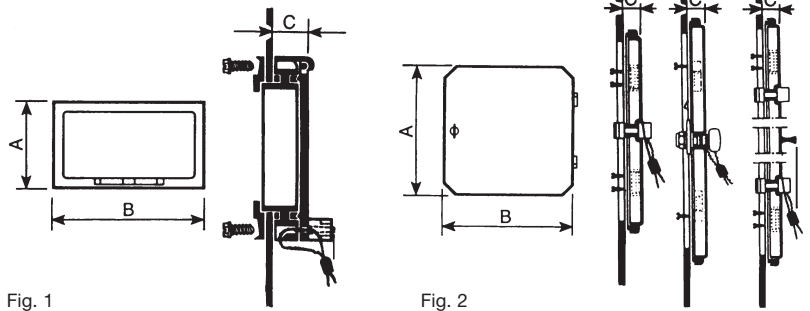
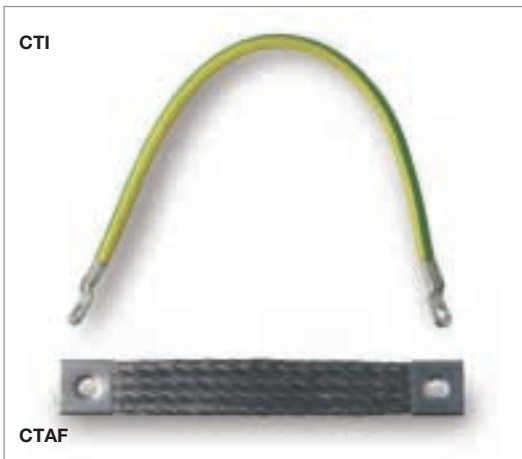


Fig. 1

Fig. 2

Earthing connections



CTI

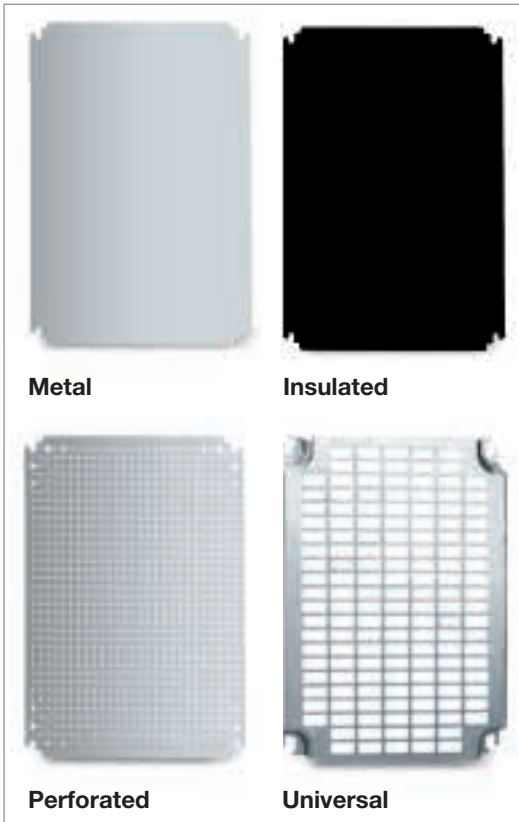
CTAF

Generally used for fixing the door to the body of the enclosure or between the body and the mounting plate. The fastening hardware is included.

CTAF... references, rectangular section, guarantee the correct earthing connection for high frequencies, avoiding the interference currents that are produced at high frequencies.

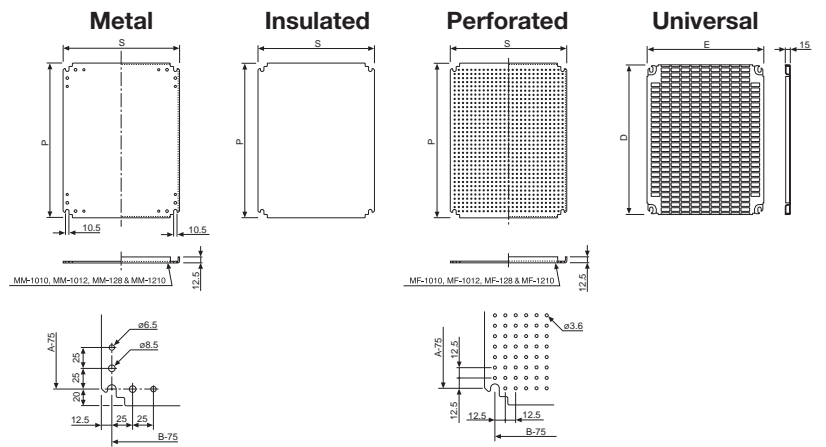
Reference	Length mm	Width mm	Section mm ²	Material
CTI 17/6	170		6	Copper wires with tinned copper terminal
CTI 17/10	170		10	Copper wires with tinned copper terminal
CTI 22/6	220		6	Copper wires with tinned copper terminal
CTI 22/10	220		10	Copper wires with tinned copper terminal
CTI 22/25	220		25	Copper wires with tinned copper terminal
CTI 41/10	410		10	Copper wires with tinned copper terminal
CTI 41/25	410		25	Copper wires with tinned copper terminal
CTAF 15/16	155	20	16	Tinned copper wires and terminal
CTAF 20/25	200	21	25	Tinned copper wires and terminal
CTAF 25/25	200	26	25	Tinned copper wires and terminal
CTAF 20/50	200	40	50	Tinned copper wires and terminal

Mounting plates



A complete range of mounting plates comprised of four versions able to provide all the mountings required for this installation system.

- Plates of galvanised sheet steel with perforations for fixing accessories and earthing.
- Bakelite insulated plates.
- Perforated plates made of galvanised sheet steel with 3.6 mm Ø holes, 12.5 mm apart. Ø 4.2 sheet threaded or M4 trilobular thread screws can be used.
- Universal plates for fast fixing of equipment, made of zinc-coated steel. The location of the perforations (11 x 26 mm), combined with the position of the nuts, covers all the fixing centres.



For attachment to enclosures		Metal			Insulated			Perforated			P	S	Universal		
Height (A)	Width (B)	Reference	Thickness mm	Weight kg	Reference	Thickness mm	Weight kg	Reference	Thickness mm	Weight kg			Reference	D	E
200	200	MM-22	2	0.3	-	-	-	-	-	-	165	150	-	-	-
200	300	MM-32	2	0.5	MB-32	-	-	MF-32	2	0.25	150	265	-	-	-
250	200	MM-2520	2	0.4	MB-2520	4	0.13	-	2	0.3	215	150	-	-	-
300	250	MM-3025	2	0.6	MB-3025	4	0.2	-	2	0.5	265	200	MR-3025	253	228
300	300	MM-33	2	1.2	MB-33	4	0.3	MF-33	2	1.1	265	250	MR-33	255	251
300	400	MM-34	2	1.6	MB-34	4	0.5	MF-34	2	1.5	265	350	MR-34	255	351
300	450	MM-3045	2	1.8	-	-	-	-	-	-	265	400	-	-	-
400	300	MM-43	2	1.6	MB-43	4	0.5	MF-43	2	1.5	365	250	MR-43	348	251
400	400	MM-44	2	2.2	MB-44	4	0.7	MF-44	2	2.1	365	350	MR-44	345	351
400	600	MM-46	2	3.1	MB-46	4	1.1	MF-64 (1)	2	3	365	550	MR-46	345	551
500	400	MM-54	2	2.5	MB-54	4	0.9	MF-54	2	2.4	465	350	MR-54	450	351
500	500	MM-55	2	3.7	MB-55	4	1.2	MF-55	2	3.5	465	450	MR-55	450	451
600	400	MM-64	2	3.1	MB-64	4	1.1	MF-64	2	3	565	350	MR-64	555	351
600	500	MM-65	2	4	MB-65	4	1.4	-	2	3.8	565	450	MR-65	555	451
600	600	MM-66	2	5.5	MB-66	4	1.7	MF-66	2	5.2	565	550	MR-66	555	551
600	800	MM-68	2.5	9.9	MB-68	4	2.3	MF-86 (1)	2.5	9.3	565	750	MR-68	555	751
700	500	MM-75	2	4.6	MB-75	4	1.7	MF-75	2	4.3	665	450	MR-75	645	451
800	600	MM-86	2.5	9.9	MB-86	4	2.3	MF-86	2.5	9	765	550	MR-86	750	551
800	800	MM-88	2.5	13.6	MB-88	5	4.5	MF-88	2.5	12	765	750	MR-88	750	751
800	1000	MM-810	2.5	16.9	MB-810	5	5.7	MF-108 (1)	2.5	16	765	950	MR-810	750	951
800	1200	MM-128	2.5	17.8	-	-	-	MF-128	2.5	17	765	1150	MR-812	750	1151
1000	600	MM-106	2.5	12.6	MB-106	5	4.2	MF-106	2.5	12	965	550	MR-106	945	551
1000	800	MM-108	2.5	16.9	MB-108	5	5.7	MF-108	2.5	16	965	750	MR-108	945	751
1000	1000	MM-1010	2.5	18.6	MB-1010	5	7.1	MF-1010	2.5	17	950	950	MR-1010 (2)	945	951
1000	1200	MM-1210	2.5	21.7	MB-1012	5	8.3	MF-1210	2.5	20	950	1150	MR-1012 (2)	945	1151
1200	600	MM-126	2.5	13.4	-	-	-	MF-126	2.5	12.8	1150	550	MR-126	1145	551
1200	800	MM-128	2.5	17.8	MB-128	5	6.8	MF-128	2.5	17	1150	750	MR-128	1145	751
1200	1000	MM-1210	2.5	21.7	MB-1210	5	8.3	MF-1210	2.5	20	1150	950	MR-1210 (2)	1145	951
1200	1200	MM-1212	2.5	26.8	-	-	-	-	2.5	25.5	1150	1150	MR-1212 (3)	1145	1151
1400	1000	MM-1410	2.5	26.1	-	-	-	-	2.5	24.8	1350	950	MR-1410 (2)	1345	951

(1) Mounting only on the back of the enclosure. (2) Also order the CRNG SPR set of fixing supports. (3) In two parts.

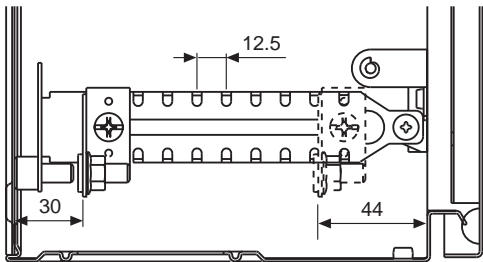
Adjustable plate supports



Set of four supports designed to fit 200, 250, 300 and 400 mm depth enclosures. The rail permits adjusting the depth of the plate and other accessories every 12.5 mm.

On 1200 width CRNG enclosures, it is possible to mount 2 plates directly on the 6 bottom studs, one right next to the other, using the set of 2 **CRNG SDR** fixing supports (diagram 1).

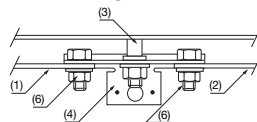
To install the plates at different heights, you must use the **SDR-SDCR...** set, which includes the necessary adjustable supports and fixing supports (diagram 2).



Reference	To couple to enclosures with depths (mm)
SDCR 200	200
SDCR 250	250
SDCR 300	300
SDCR 400	400
SDR-SDCR 300	300
SDR-SDCR 400	400

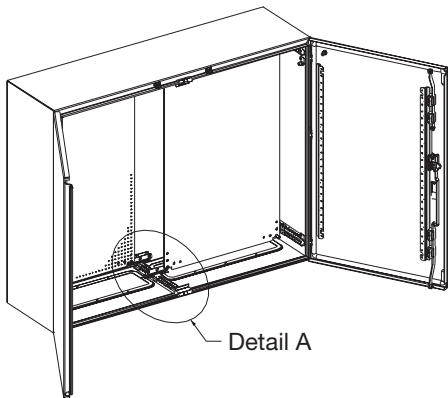
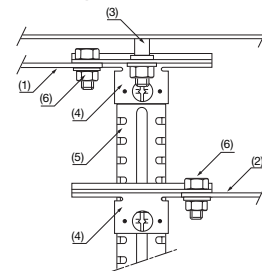
Mounting 2 plates in 1200 mm width enclosures

1. Mounting on the 6 bottom studs



- (1) Left plate.
- (2) Right plate.
- (3) Central bottom stud.
- (4) CRNG SDR fixing support (includes hardware).
- (5) SDR-SDCR adjustable rail.
- (6) M8 x 20 mm screw.

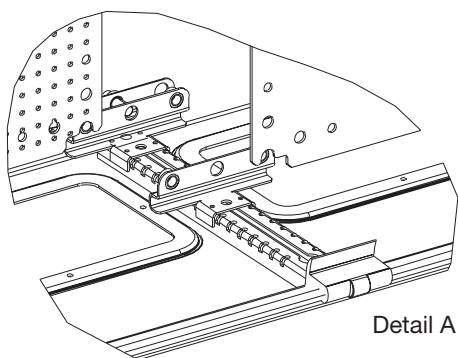
2. Two plates at different depths



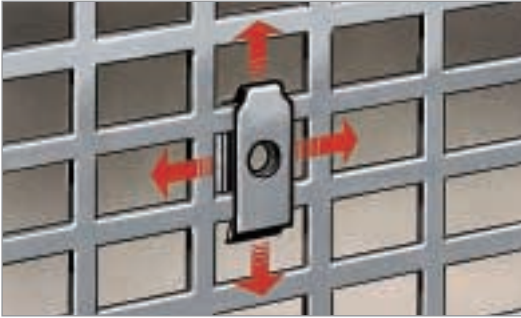
Enclosure dimensions				Mounting plates		
				Metal		Other solutions
Height (A)	Width (B)	Depth (C)	Enclosure reference	Total	Combined	Mixed
800	1200	300	CRNG812300	MM128	2 x MM86	1 x MM86 + 1 x MR86
1000	1200	300	CRNG1012300	MM1210	2 x MM106	1 x MM106 + 1 x MR106
1000	1200	400	CRNG1012400	MM1210	2 x MM106	1 x MM106 + 1 x MR106



Other combinations by means of depth adjustable supports **SDCR**:

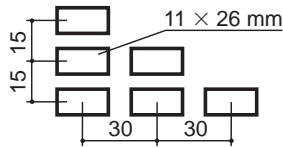
Enclosure dimensions				Mixed combinations		
				DLM	DLM + metal mounting plate	19" fixed rack + metal mounting plate
Height (A)	Width (B)	Depth (C)	Enclosure reference	DLM	DLM + metal mounting plate	19" fixed rack + metal mounting plate
800	1200	300	CRNG812300	2 x DLM84	1 x DLM84 + 1 x MM86	1 x BRF17/CRN + MM86
1000	1200	300	CRNG1012300	2 x DLM168	1 x DLM168 + 1 x MM106	1 x BRF21/CRN + MM106
1000	1200	400	CRNG1012400	2 x DLM168	1 x DLM168 + 1 x MM106	1 x BRF21/CRN + MM106



Screws and accessories for universal plates



Thread type	Fixing nut		Fixing screw with washer		
		Units per package		Length (mm)	Units per package
M3	TFP 3	100	-	-	-
M4	TFP 4	100	TOR 10/4 A	10	100
			TOR 16/4 A	16	100
M5	TFP 5	100	TOR 12/5 A	12	100
			TOR 18/5 A	18	100
M6	TFP 6	100	TOR 12/6 A	12	100
			TOR 18/6 A	18	100



GCR ties



Clip in fasteners to be installed directly on 19" racks and on slotted MR mounting plates.

Ref.: **GCR**.

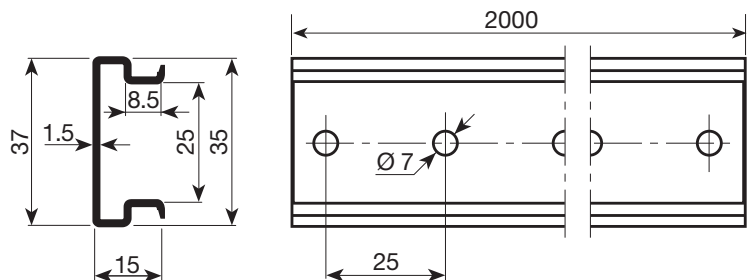
Double profile rail



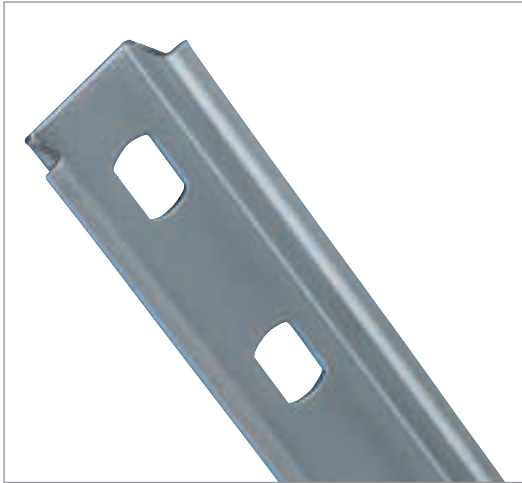
- Combines the advantages of symmetrical and asymmetrical DIN rails.
- Direct fixing to the structure.
- Continuity of level guaranteed in case of coupling the enclosures.
- Galvanised sheet.
- Sheet thickness: 1.5 mm.

Reference	Enclosure width (mm)	Units per package
CDP60	600	10
CDP80	800	10
CDP100	1000	10
CDP120	1200	10
CDP200*	2000	10

* Without perforations.

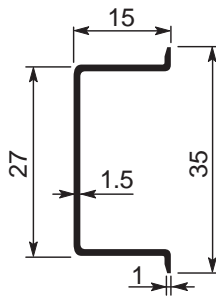


Symmetrical DIN rail

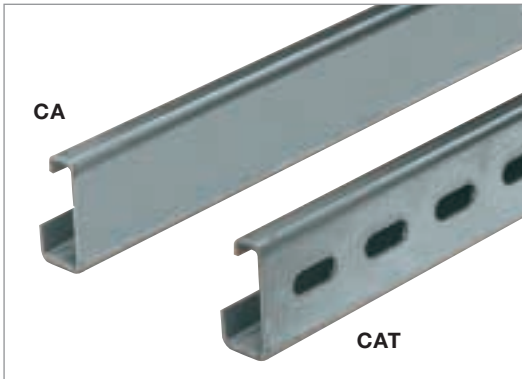


- Direct fixing on the structure.
- Continuity of level guaranteed in case of coupling the enclosures.
- Galvanised sheet.
- Sheet thickness: 1.5 mm.

Reference	Enclosure width (mm)	Units per package
CSO60	600	10
CSO80	800	10
CSO100	1000	10
CSO120	1200	10



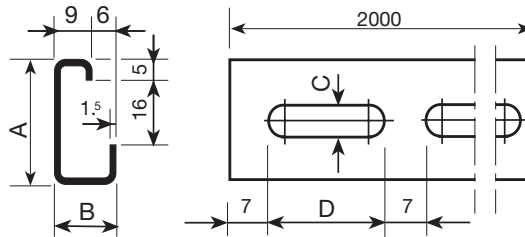
Asymmetrical rails



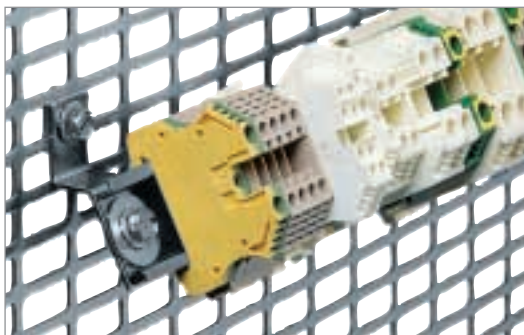
Asymmetrical metal rails for mounting electronic equipment in frames using special nuts. Quick mounting of connection terminals, according to DIN 46277/1.

- Length 2 m.

Reference	A	B	C	D
CA-32	32	15	-	-
CAT-32	32	15	7.2	25



Terminal fixing support



Fixing support made of zinc-coated steel. At a 45° angle.

Reference: **EDCO**.

Fixing brackets for earthing strip



Set of 2 brackets for mounting a DIN rail or an earthing strip in the lower part of the enclosure.

In the lower or upper position for fixing cables or earthings at the opening of the enclosure.

Fixing on the perforations for the hinges.

Reference: **EDCOS**.

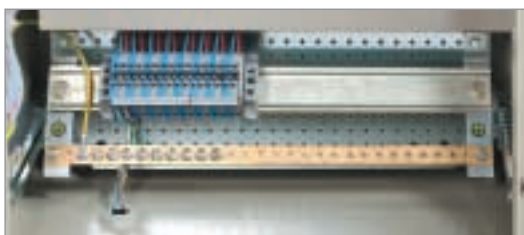
Combined fixing brackets for the earthing collector



Permit mounting of an earthing strip and a DIN rail on the lower part of the enclosure.

Reference: **EDCOC**.

Earth terminal block



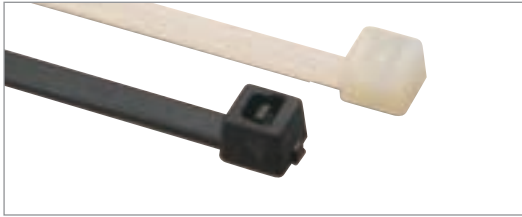
Perforated copper strip, 10 x 5 mm.

Number of connection points: 87.

Length: 1 m.

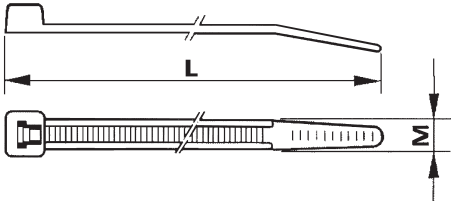
Reference: **BTC CRN**.

Adjustable ties



Made of 6.6 nylon in natural colour or black for outdoor conditions.

Reference		L	M	Use	
White	Black			∅ minimum	∅ maximum
LZ25100	LN25100	100	2.5	1.6	22
LZ25200	LN25200	200	2.5	1.6	49
LZ35150	LN35150	150	3.5	1.6	35
LZ35200	LN35200	200	3.5	1.6	49
LZ35300	LN35300	300	3.5	1.6	75
LZ46150	LN46150	150	4.6	1.6	36
LZ46200	LN46200	200	4.6	1.6	49
LZ48270	LN48270	270	4.8	1.6	73
LZ46390	LN46390	390	4.6	1.6	109
LZ76390	LN76390	390	7.6	4.7	108



Tightening tools



To tighten and cut to size the adjustable ties. They facilitate wiring and save time, preventing the packets of cables from loosening.

Tool adjustable according to the thickness of the tie. Can be used with the following models: LZ25100 up to LZ46390. Ref.: **MARK3**.

A very light and ergonomic tool, the cut on the tie is done by twisting the tool. Can be used on the following models of ties: LZ25100 up to LZ46390. Ref.: **MARK20, 21**.



Reference	Admissible width ties
MARK3	2.5 ÷ 4.8

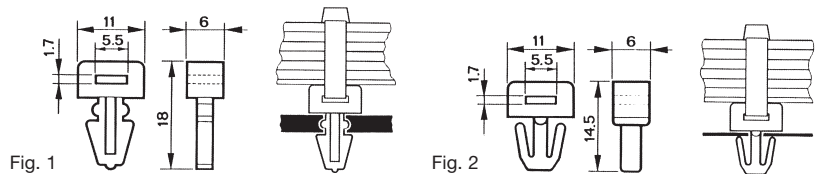
Reference	Admissible width ties
MARK20	2.5 ÷ 4.8
MARK21	4.6 ÷ 7.6

Locking clips



Allows fixing ties from the series LZ25100 up to LZ46390 on panels up to 3.2 mm thick. Material: 6.6 nylon.

Reference	∅ perforation mm	Maximum width panel mm	Figure
SFC1	6	3.2	1
SFC2	6	1	2

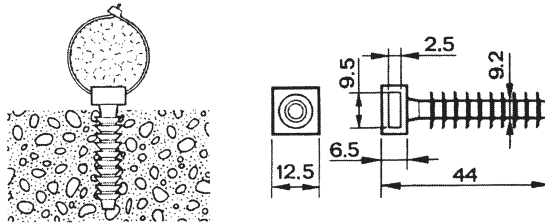


Stud



To use with soft materials: Ø 7 mm, or hard materials: Ø 8 mm. For ties up to 9 mm width. Material: black 6.6 nylon.

Ref.: **LOK01**.

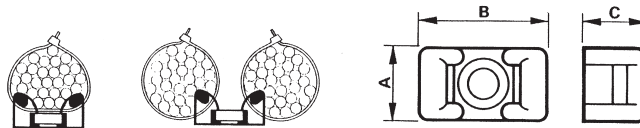


Tie fixing support



To attach one or two ties, mounted with a single screw. Material: 6.6 nylon. Allows for attaching ties from the entire range.

Reference	A	B	C	Fixing screw	Admissible width ties
KR6	12	18	9	M4	2.5 ÷ 4.8
KR8	14.5	25	12	M6	2.5 ÷ 7.6

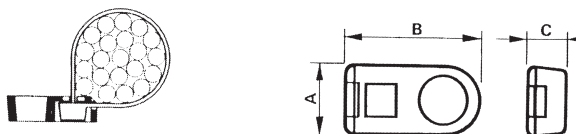


Support heads



To transform normal ties into ties with fixing heads, introduce a tie into this head before closing it on the cable bundle. Material: 6.6 nylon.

Reference	A	B	C	Fixing screw	Admissible width ties
FH18	7.1	13.3	4	M4	2.5
FH30	9.5	17.9	4.7	M5	3.5
FH50	11.3	22.2	6.2	M6	4.7

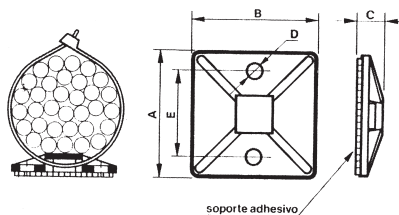


Self-adhesive support base



Permits insertion of 1 tie from 4 points at a 90° angle. Attaches ties from the series LZ25100 up to LZ46390. Material: 6.6 nylon.

Reference	A	B	C	D	E	Admissible width ties
MB3A	19.1	19.1	4.8	3.2	13.2	2.5 ÷ 3.5
MB4A	28.5	28.5	5.5	4	20.2	2.5 ÷ 4.8

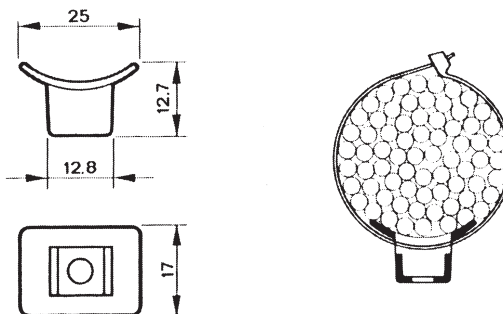


Tie fixing support



To attach ties from any series. Material: 6.6 nylon.

Reference	Admissible width ties mm	Fixing screw
LKC	2.5 ÷ 7.6	M5

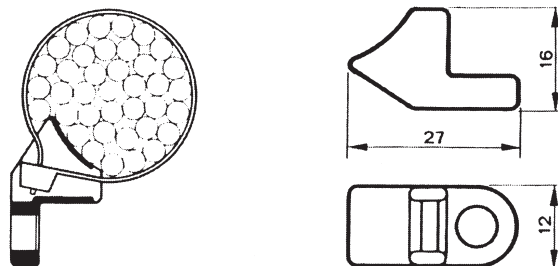


Lateral tie fixing support



Covers the head of the tie in its end, thus obtaining neater cabling. Material: 6.6 nylon.

Reference	Admissible width ties mm	Fixing screw
LKM/HE	2.5 ÷ 7.6	M5



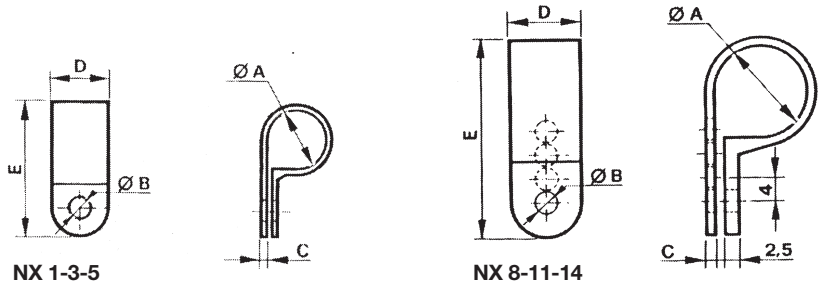
Fixing loop for tubes, hoses, etc.



2 versions, fixed and graduated, Ø from 5 to 25.4 mm. Material: black 6.6 nylon.

Reference	Ø A min. - max.	B	C	D	E
NX1	5	3.5	1	6.2	13.7
NX3	8	3.9	1	9.4	20.5
NX5	12	3.9	1	9.4	24
NX8*	14.3 ÷ 15.8	4	1.3	12.6	32
NX11	17.4 ÷ 20	4	1.3	12.6	37
NX14	22.2 ÷ 25.4	4.3	1.5	16	45

* The NX8 model only has 3 adjustment holes.



Cable management spiral



Spiral wrap for grouping cables into bundles.

Length: 50 m.

Reference	Colour	Margin (mm)	Interior (mm)	Exterior (mm)
TC12/100	colourless	12 - 100	9	12

Corrugated tube



Flexible tube with longitudinal indentations for cable passage.

Length: 25 m.

Reference	Colour	Ø interior A (mm)	Ø exterior B (mm)
TC24	Grey	24.1	34.5
TC29	Grey	29.7	42.1
TC38	Grey	38	54.1

Fixing brackets for earthing strip



Set of 2 brackets for mounting a DIN rail or an earthing strip in the lower part of the enclosure.

In the lower or upper position for fixing cables or earthings at the opening of the enclosure.

Fixing on the perforations for the hinges.

Reference: **EDCOS**.

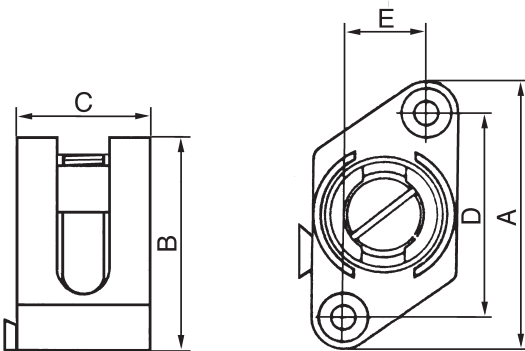
Sigma safety terminals



Safety terminals: base made of black matte self-extinguishing polyamide-6, terminal of **MS-58** (DIN17660) brass ring of tempered steel zinc dichromate, and cap of orange self-extinguishing polypropylene.

- **Anti-cut.** The connection is made using a tightening mechanism that spreads the pressure out throughout the entire contact surface, avoiding the occasional rubs and stresses that damage the conductors.
- **Loosening proof.** The ring that surrounds the brass body ensures that the pressure exerted by the conductors cannot open the terminal and loosen the connection.
- **Total insulation.** All the SIGMA "S" terminals are supplied with a terminal cap, avoiding any accidental contact with live parts.

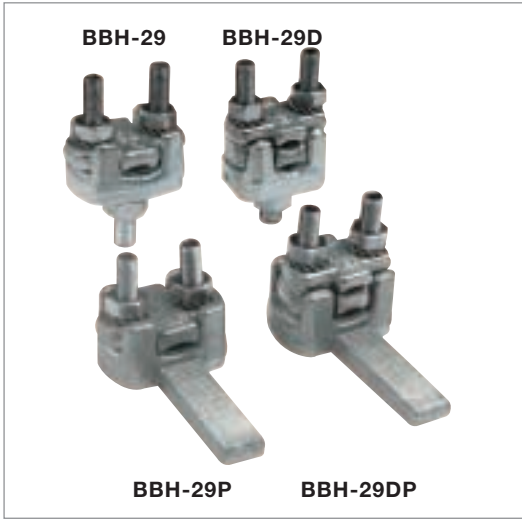
All the calibres may be coupled one to the other, allowing the formation of strips of any length. Service voltage: 500 V.



Reference	Section m/m ²	A	B	C	D	E
S.04	1 × 4	30	20	13	21	4
S.06	1 × 6	33	25	16	24	7
S.10	1 × 10	38	28	16	28	6
S.16	1 × 16	42	32	19	32	9
S.25/35	1 × 35	46	38	23	34	11
S.50	1 × 50	52	45	27	40	15
S.70	1 × 70	55	50	30	40	15
S.95/100	1 × 100	58	54	33	40	20

NOTE: each terminal accepts up to 2 conductors of the section indicated.

Bimetal BBH terminals



Terminals especially designed for branching cables on plates; their main application is busbar connection.

The **BBH** terminals are made of a tinned, hot cast copper alloy and are suitable for connecting to a conductor of copper or aluminium indistinctly (bimetal).

Reference	Main section mm ²	Bypass section mm ²
BBH-29	6-50	-
BBH-29C*	6-50	-
BBH-30	10-95	-
BBH-31	16-150	-
BBH-32	50-240	-
BBH-29D	6-50	6-50
BBH-29DC*	6-50	6-50
BBH-30D	10-95	10-95
BBH-31D	25-150	16-150
BBH-32D	95-240	5-240

Reference	Main section mm ²	Bypass section mm ²
BBH-29P	6-50	-
BBH-29PC*	6-50	-
BBH-29DP	6-50	6-50
BBH-29DPC*	6-50	6-50

* Include terminal cover **CBBH-29**.

Plate/cable terminals

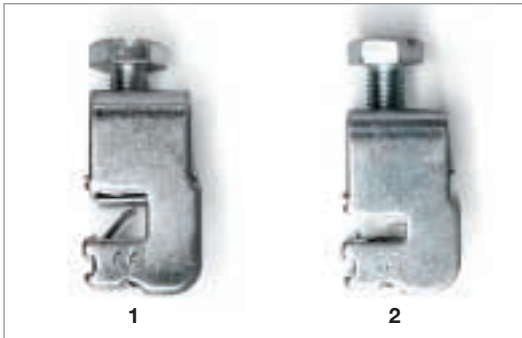


Plate entry and bypass by cable, plate or terminal.

Reference	Cable bypass section (mm ²)	Plate thickness (mm)	Figure
BPCH 516	1.5 to 16	5	2
BPCH 550	1.5 to 50	5	2
BPCH 5120	16 to 120	5	2
BPCH 1016	1.5 to 16	10	1
BPCH 1050	1.5 to 50	10	1
BPCH 10120	16 to 120	10	1

Three-phase bypass terminals

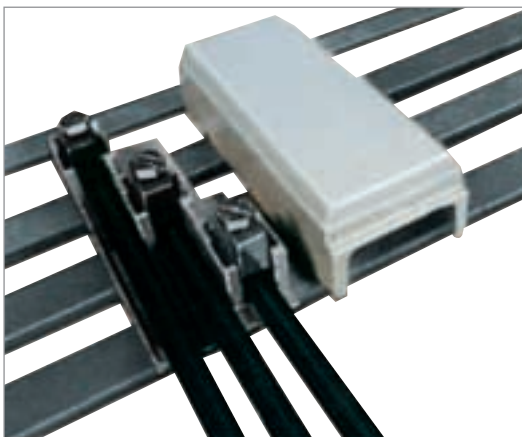
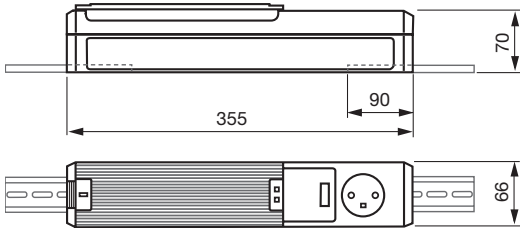


Plate entry and cable bypass (for **EMH-630** and **EMV-630** busbars).

Reference	Entry plate width mm	Entry plate thickness mm	Cable bypass section mm ²
BTE 630 TBT	12/15/20/25/30	5 to 10	35 to 120

Compact lamp

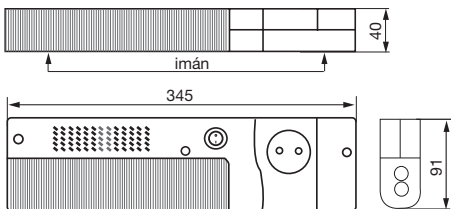


Compact fluorescent lamps, designed especially for use in electronic enclosures. May be fixed with a magnet.

- Connection voltage 220 V/50 Hz.
- Consumption 11 W.
- Connection/disconnection switch.
- 200 V/16 A socket with earthing.
- Maximum ambient temperature 60 °C.
- Lighting output = 75 W bulb.

Specifications	Reference	Plug	Tension
Lamp fixed with a magnet or on 35 mm symmetrical DIN rail	LAM-75	220 V/16 A	220 V/50 Hz
Lamp fixed on a 35 mm symmetrical DIN rail	LAC-75	220 V/16 A	220 V/50 Hz
Lamp fixed with a magnet or on 35 mm asymmetrical DIN rail	LAM-75/120	120 V/15 A	120 V/60 Hz
Lamp fixed on a 35 mm symmetrical DIN rail	LAC-75/120	120 V/15 A	120 V/60 Hz

Slimline lamp

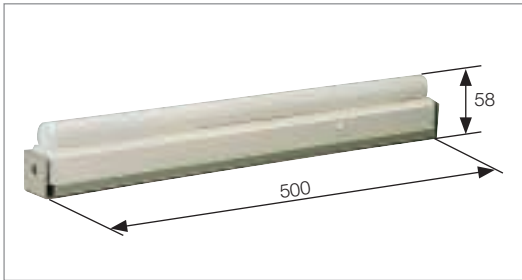


Magnetic-fixing flat lamps equipped with energy efficient light bulbs, with or without a plug.

- Electronic ballast.
- Power: 11 W.
- Luminosity: 900 lm.
- Lifespan: 10000 h.
- Plastic casing UL94 V0.
- IP20.
- Class I.

Reference	Plug	Socket	Approval
LAMS75	AC 230 V/16 A	SCHUKO	VDE
LAMX75	AC 230 V/-	-	VDE
LAMU75	AC 120 V/15 A	USA	UL

Incandescent lamp



Incandescent lamp designed especially for use in electronic enclosures.

- Connection voltage 220 V/50-60 Hz.
- Consumption 60 W.
- Connection/disconnection switch.
- Terminal connection entry.

Reference
LAI/OL 68

Dual lamp

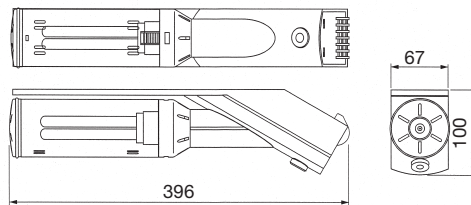


Light fixtures designed especially for use in electronic enclosures with various possibilities for fixing and operating.

- Energy efficient electronic lamp E27, 20 W, 220-240 V/50-60 Hz or 120 V/60 Hz.
- Lighting output = 100 W bulb.
- Fixed models connection via 2.5 mm² terminal strip and the mobile model via cable.
- Degree of protection IP20.
- Insulation class II.
- Conforming to EN 55014 and EN 50082-1.

Specifications	Support fixing	Figure	Reference	Tension
Motion-activated	Magnetic, using screws and/or (1) 35 DIN rail	1	LAMDP LAMDP 120	220 V/56 Hz 120 V/60 Hz
On/off switch with the possibility of connecting door switch	Magnetic, using screws and/or (1) 35 DIN rail	2	LAMIN LAMIN 120	220 V/50 Hz 120 V/60 H
Mobile lamp, connection via cable	Adhesive or screws	3	LAMPO LAMPO 120	220 V/50 Hz 120 V/60 Hz
Support for LAMDP , LAMIN , LAMPO lamp	Adhesive or screws	4	SOLAM	

(1) DIN rail not provided.



Door switch



Switch/commutator device with a support and hardware for direct fixing to the enclosure.

Permits control of the lighting, cooling elements, etc.

It is incompatible with the 19" pivoting rack profile and the internal door.

Reference: **INL/CRN**.

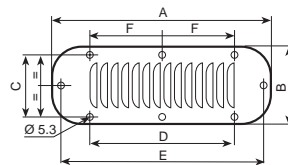
Louvre plates



For installation in any enclosure surface in order to provide interior ventilation. Texturised RAL-7032 colour.

May not be mounted on the cable entries on **CRNG** models.

Ref.	A	B	C	D	E	F
TR-1	144	62	36	110	-	-
TR-2	208	90	72	94	190	-
TR-3	244	90	72	130	226	-
TR-4	345	118	100	231	237	115.5
TR-5	345	148	130	231	327	115.5
TR-6	445	148	130	297	427	148.5



Fixing accessories



Allow for fixing small mechanisms (resistance, temperature regulators, etc.). Fixing with adhesive (Ref. **MB**), also by DIN rail and screws (Ref. **MBCO35**). Set of 5.

Reference	Fixing
MB	Adhesive
MBCO35	Adhesive or DIN rail

For more information about thermal solutions, consult the thermal management section



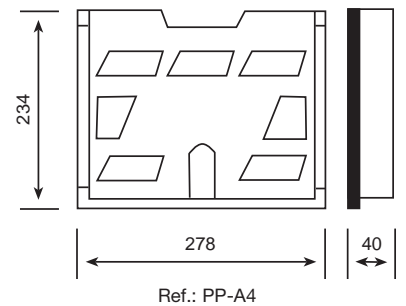
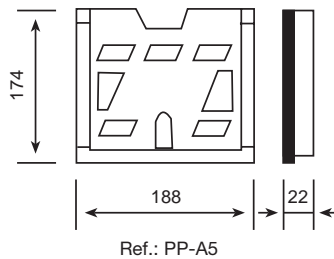
Document pocket



Made of PVC in grey RAL-7035. The dimensions of the door must be larger than the document pocket.

- Fixed with adhesive tape or screws.
- For holding DIN A4 or A5-sized plans.
- The document pocket cannot be installed if there is an internal door, a modular chassis or a fixed or pivoting 19" rack installed on the front of the enclosure.
- The document pocket cannot be installed on the inside of a transparent door.

Plan size	Reference
A4	PP-A4
A5	PP-A5



RAL-7032 aerosol can



Paint for air-dry touch-ups, RAL-7032, 150 g.

Ref.: **BPA-7032**.

Touch-up paint



Air-dry touch-up paint.

Available in 2 colours.

Reference	Colour
TUP7032	RAL-7032
TUP7035	RAL-7035

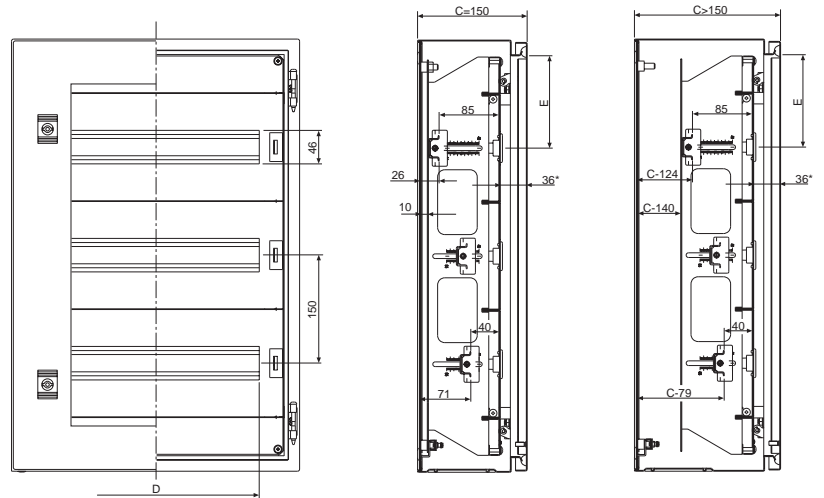
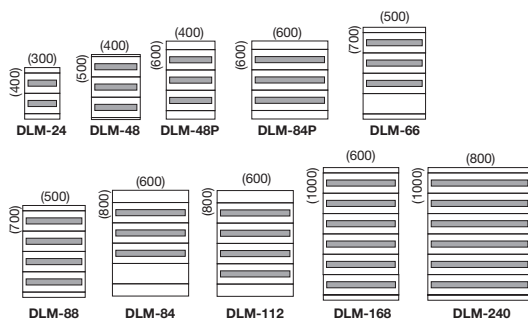
Dinimel DLM distribution chassis



CRN 43/150 + DLM-24P




Distribution chassis set for modular equipment, Ref.: **DLM-...** with a distance between the 35 mm symmetrical profile and the cover, adjustable as needed by the customer from 40 to 85 mm.

- Rigid structure made of galvanised steel.
- Metal cover and frame, colour RAL-7032. Quick mounting, without the need for screws.
- System for identifying circuits included in the standard supply.
- Earth and neutral bypass terminal block Ref.: **RBLZ/21656** (Included in standard supply).



* In enclosures with KT door, subtract 4 mm.

Note: For 150 mm enclosures, the DLM chassis may be fixed at the back of the enclosure or at the opening. For deeper enclosures, the mounting plate can be installed at the back. In this case, the depth of the chassis may be adjusted using the SDCR adjustable supports (sold separately).

To be coupled to CRN-CRS enclosures		Reference	Distribution of rows				D	E	Plain covers	Mounting plates	Blanking plates
Plain door	Transparent door		Automatic rail								
			No. of rows	Quantity	No. of modules 18 mm	No. of plain plates					
..43	..43/KT	DLM-24	2	2	24	-	216	103	CTL300DLM	PMP300DLM	ATP/72G (72 mm) 4 modules
..54	..54/KT	DLM-48	3	3	48	-	288	78	CTL400DLM	PMP400DLM	
..64	..64/KT	DLM-48P	3	3	48	-	288	128	CTL600DLM	PMP600DLM	
..66	..66/KT	DLM-84P	3	3	84	-	504	128	CTL600DLM	PMP600DLM	
..75	..75/KT	DLM-66	4	3	66	1	395	103	CTL500DLM	PMP500DLM	ATP/UND (1100 mm)
..75	..75/KT	DLM-88	4	4	88	-	395	103	CTL500DLM	PMP500DLM	
..86	..86/KT	DLM-84	4	3	84	1	504	153	CTL600DLM	PMP600DLM	
..86	..86/KT	DLM-112	4	4	112	-	504	153	CTL600DLM	PMP600DLM	
..106	..106/KT	DLM-168	6	6	168	-	504	103	CTL800DLM	PMP800DLM	
..108	..108/KT	DLM-240	6	6	234	-	704	103	CTL800DLM	PMP800DLM	

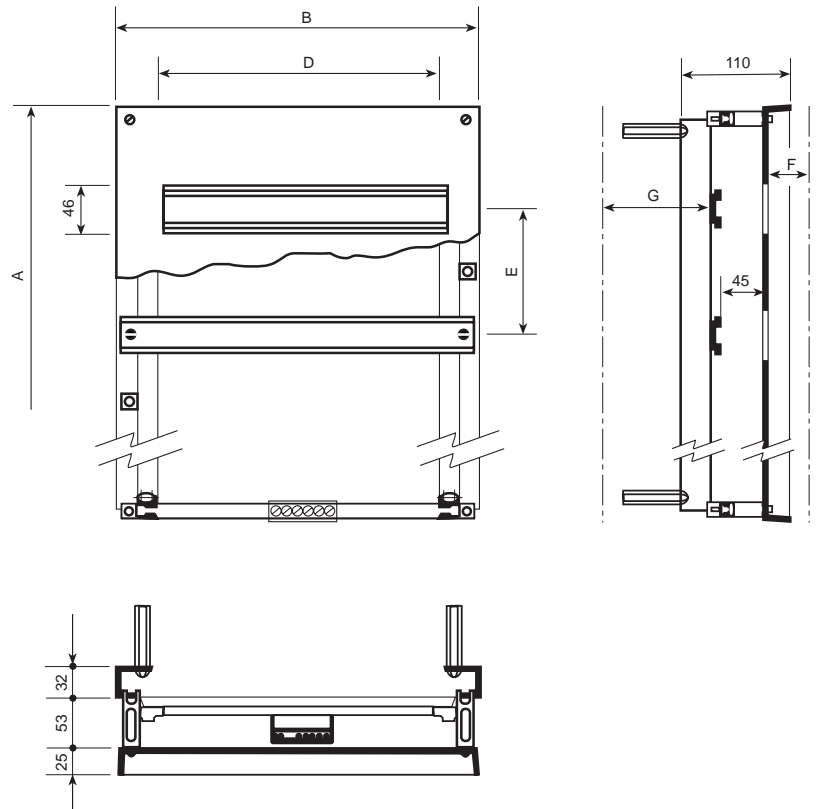
Dinimel DL distribution chassis



CRN 64/150 + DL-CR/64

Dinimel chassis designed for 53 and 68 mm height equipment, to be coupled directly to the plate support studs of the enclosures. Made of sheet steel. Protective metal cover in RAL-7032.

- Distance of 45 mm between the equipment profile and the protective cover.

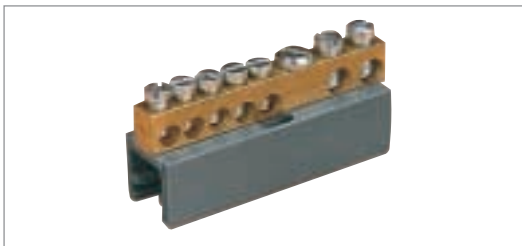
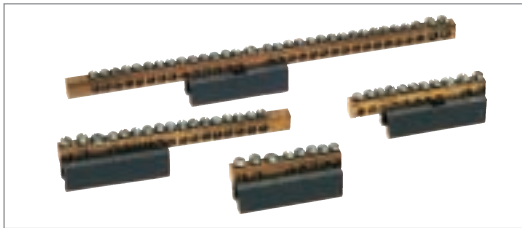


Dimension F: Distance of the protective cover to the interior of the door.
 Dimension G: Distance of the support rail, equipment to the back of the enclosure.

Reference	No. of modules 18 mm	No. of rows	Approx. weight (kg)	To couple to enclosures with plain or transparent door			Dimensions (mm)					
				Height	Width	Depth	A	B	D	E	F**	G
DL-CR/18	18	2	1.2	300	250	150*	255	205	162	120	41	51
DL-CR/24	24	2	1.7	400	300	150*	355	255	216	160	41	51
DL-CR/36	36	3	1.7	400	300	150*	355	255	216	110	41	51
DL-CR/48	48	3	2.4	500	400	150*	455	355	288	130	41	51
DL-CR/64	64	4	3.3	600	400	150/200	555	355	288	130	41	51/101
DL-CR/88	88	4	4.5	600	500	150/200	555	455	396	130	41	51/101
DL-CR/110	110	5	5.1	700	500	200	655	455	396	125	41	101
DL-CR/135	135	5	7.5	800	600	200	755	555	486	140	41	101

* To couple to 200 mm depth enclosures, the lifting brackets, Ref. EX-60/8, must be ordered separately (4 per chassis).
 ** For enclosures with a transparent door, dimension F is reduced 4 mm.

Bypass terminal blocks



Earth and neutral bypass terminal blocks with insulated plinth.

Direct fixing by pressure on the profile supplied by the chassis itself.

Reference	Number of terminals 3 section in mm ²
RBLZ/21656*	2×16 mm ² + 5×6 mm ²
RBLZ/21686	2×16 mm ² + 8×6 mm ²
RBLZ/216146	2×16 mm ² + 14×6 mm ²
RBLZ/216296	2×16 mm ² + 29×6 mm ²

* Included in standard supply.

Blanking plate



Blanking plate of self-extinguishing insulated material for total or partial coverage of the windows for automatic switches. Easily cut to the desired size.

Reference	Length (mm)	No. of modules
ATP6/DTM	108	6
ATP24/DTM	432	24
ATP UND	1100	-

Terminal enclosure



Terminal enclosure with plain door for equipment. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin. Monobloc construction with sides formed from a single folded section. Back piece joined to the sides using a special profile forming a protected sealed area.

- IP66 (EN 60529).
- IK10.
- Easily removable and reversible door, with a border of 20 mm double-thick sheet, which gives it excellent rigidity. Equipped with two 120° hinges.
- 3 mm double bar lock.
- Polyurethane gasket.
- M6 x 16 earth stud for the connection between the door and the sides of the enclosure.
- Wall fixing using brackets (ordered separately).
- Accessories common to the entire CRN range.
- Equipped with 2 rails for mounting on the 4 M8 x 25 bottom studs and a symmetrical rail for mounting on the rails.



External dimensions (mm)			Reference	Fig.
Height (A)	Width (B)	Depth (C)		
250	300	150	CRN-253/150 BO	1
250	400	150	CRN-254/150 BO	1
250	500	150	CRN-255/150 BO	2
300	300	150	CRN-33/150 BO	3
300	400	150	CRN-34/150 BO	1
300	500	150	CRN-35/150 BO	2
300	600	150	CRN-36/150 BO	2
400	300	150	CRN-43/150 BO	3
400	800	150	CRN-48/150 BO	2
500	400	150	CRN-54/150 BO	4
600	400	150	CRN-64/150 BO	4

Dimensions (mm)

FIG. 1

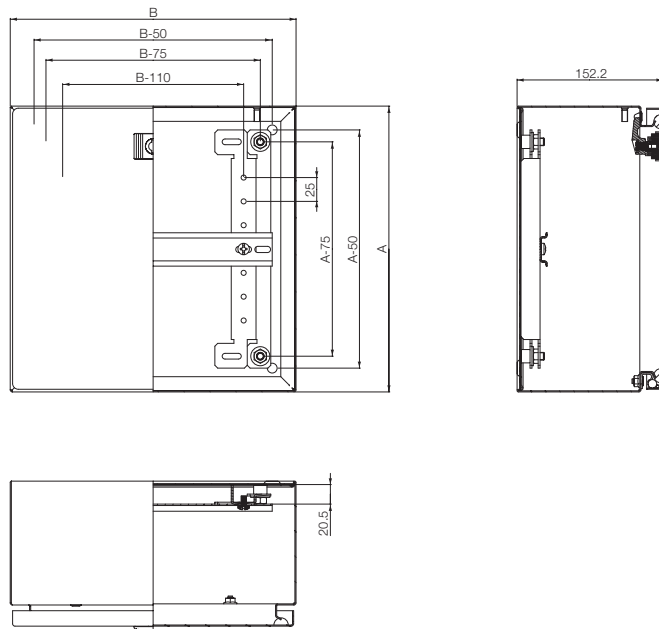
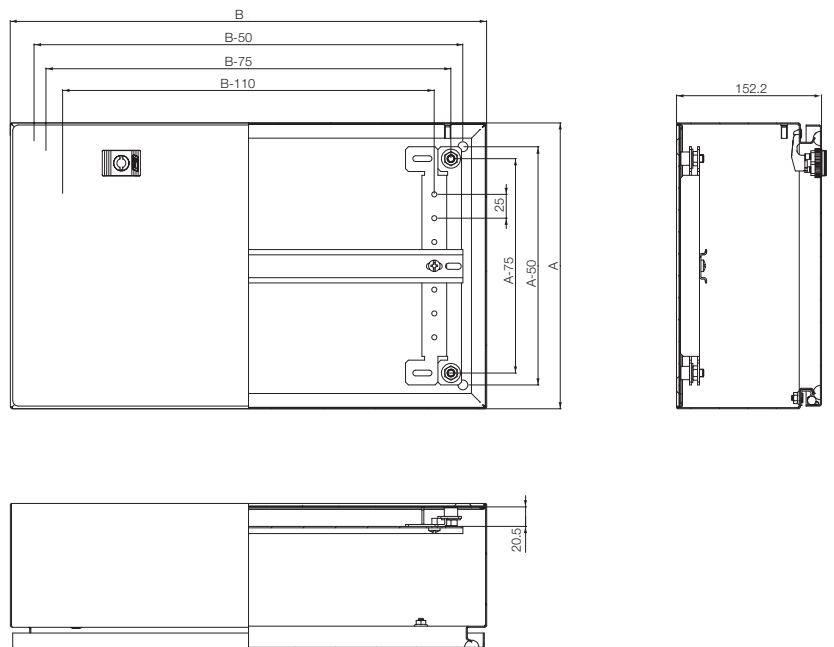


FIG. 2



Dimensions (mm)

FIG. 3

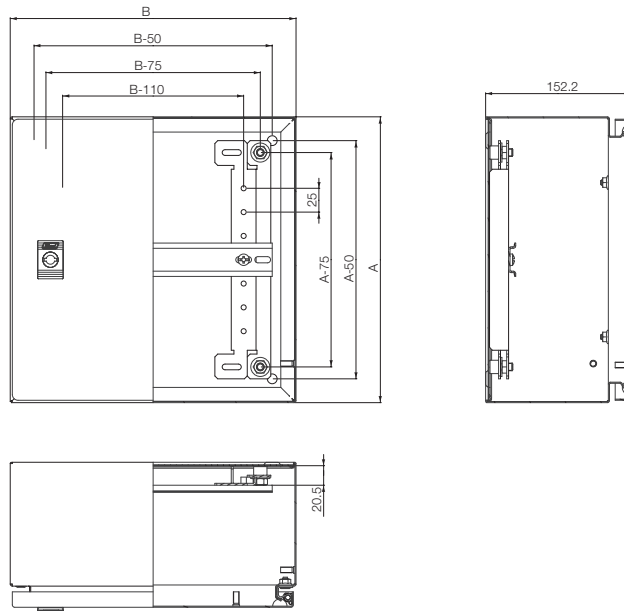
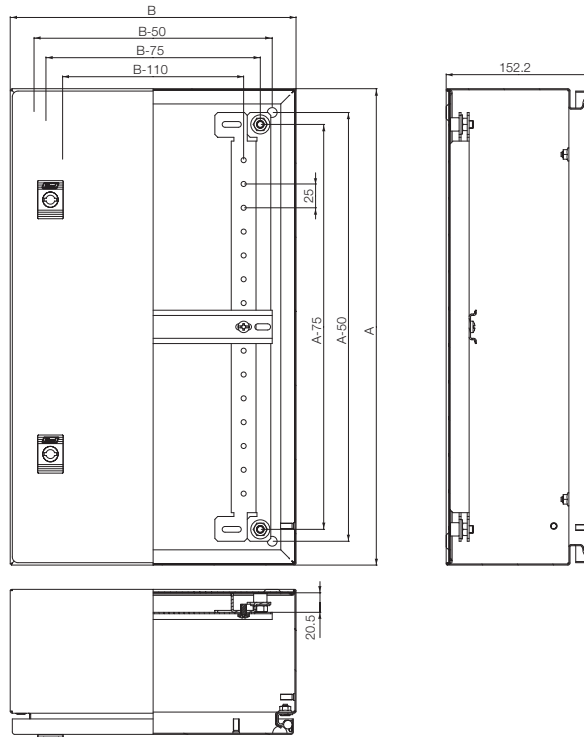


FIG. 4



Wall fixing kit for CRN enclosures

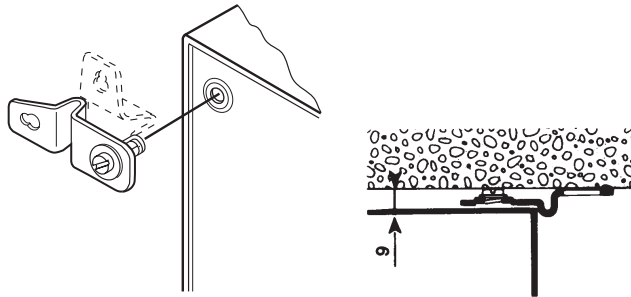


Made of passivated zinc-coated steel.

They are fixed from the outside and can be positioned vertically or horizontally indistinctly.

Not included in the standard supply.

Reference	Description
PF-CR	Standard fixing kit



Metal mounting plate



Plates of galvanised sheet steel with perforations for fixing accessories and earthing.

For attachment to enclosures		Reference
Height (A)	Width (B)	
250	300	MM-3025
250	400	MM-2540
250	500	MM-2550
300	300	MM-33
300	400	MM-43
300	500	MM-35
300	600	MM-36
400	300	MM-43
400	800	MM-48
500	400	MM-54
600	400	MM-64

Earthing connections



Generally used for fixing the door to the body of the enclosure or between the body and the mounting plate. The fastening hardware is included.

CTAF... references, rectangular section, guarantee the correct earthing connection for high frequencies, avoiding the interference currents that are produced at high frequencies.

Reference	Length mm	Width mm	Section mm ²	Material
CTI 17/6	170		6	Copper wires with tinned copper terminal
CTI 17/10	170		10	Copper wires with tinned copper terminal
CTI 22/6	220		6	Copper wires with tinned copper terminal
CTI 22/10	220		10	Copper wires with tinned copper terminal
CTI 22/25	220		25	Copper wires with tinned copper terminal
CTI 41/10	410		10	Copper wires with tinned copper terminal
CTI 41/25	410		25	Copper wires with tinned copper terminal
CTAF 15/16	155	20	16	Tinned copper wires and terminal
CTAF 20/25	200	21	25	Tinned copper wires and terminal
CTAF 25/25	200	26	25	Tinned copper wires and terminal
CTAF 20/50	200	40	50	Tinned copper wires and terminal

Fixing brackets for earthing collector



Permit mounting of an earthing strip and a DIN rail on the lower part of the enclosure.

Reference: **EDCOC**.

Round cable entries without connectors



Compact system that permits cable and hose introduction into electronic enclosures or into junction boxes, for example.

Indentation dimensions: Ø 50 and 63 mm.

IP65 watertightness.

Fixing with nuts up to dimension 700 × 500 × 250 mm. From this dimension it is also possible to mount them using clips. For better fixing, we recommend that you use screws.

Reference	No. of entries	Ø cable entry	For cable Ø (mm)					
			3 to 5.5	3 to 6.5	3.5 to 6.5	5 to 9.2	6 to 10	9.6 to 14
TSAM50 4 SIN EN	4	50	-	-	-	-	3	1
TSAM50 8 SIN EN	8	50	-	-	7	-	1	-
TSAM63 8 SIN EN	8	63	-	2	-	4	-	2
TSAM63 13 SIN EN	13	63	6	-	6	-	1	-



Diameter of M50 perforation

Diameter of M63 perforation

Windows for automatic switches



Fig. 1



Fig. 2

Allow access to the interior of the enclosure, maintaining the IP65 degree of protection.

Made of transparent polycarbonate.

Reference		No. of modules	Fig. No.	A	B	C	
Low cover	High cover					Low cover	High cover
VA 27/2M	VA 27/2MA	2	1	78	60	15	25
VA 27/4M	VA 27/4MA	4	1	78	95	15	25
VA 27/6M	VA 27/6MA	6	1	78	130	15	25
VA 27/8M	VA 27/8MA	8	1	78	165	15	25
VA 27/10M	VA 27/10MA	10	1	78	200	15	25
VA 27/12M	VA 27/12MA	12	1	78	235	15	25
VA 27/16M	-	16	2	195	165	13	-
VA 27/24M	-	24*	2	196	235	13	-
VA 27/36M	-	36*	2	248	235	13	-
VA 27/51M	-	51**	2	248	325	13	-

* In rows of 12 modules mounted vertically.

** In rows of 17 modules mounted horizontally.

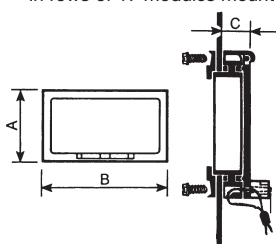


Fig. 1

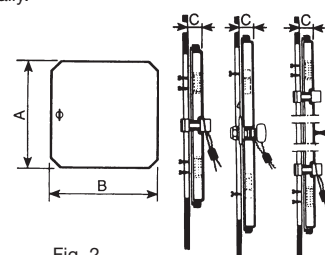


Fig. 2

Screw fixed cover enclosure



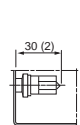
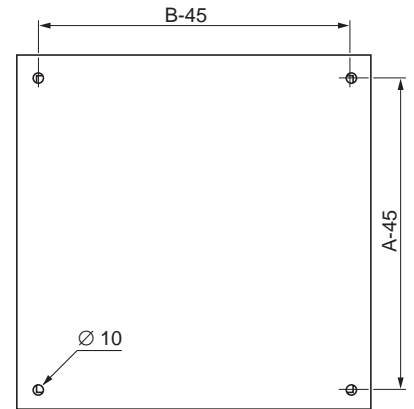
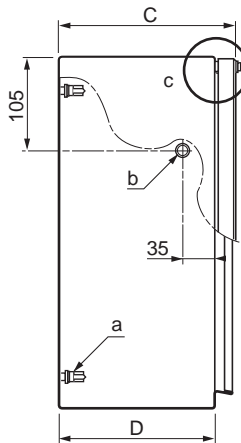
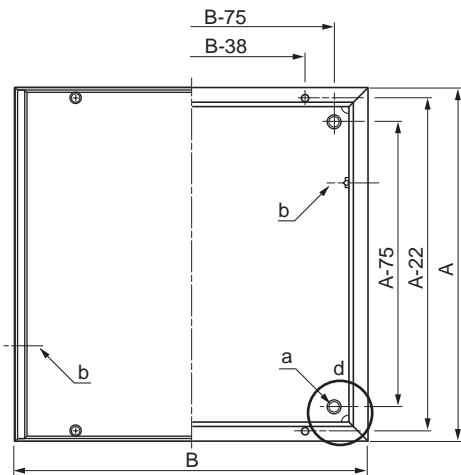
One-piece sheet steel enclosure with screw fixed cover. For use in environments where there is a risk of exposure to dust and or liquids. Painted internally and externally with textured polyester powder in grey colour RAL-7032.

- IP66 (EN 60529).
- IK10.
- Cover fixed by 4 captive stainless steel screws.
- 4 back-studs for mounting plate fixing.
- Polyurethane seal on the cover.
- Earthing screw on body and cover for earth continuity.
- Wall fixing by means of 4 lugs (to be ordered separately).

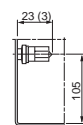
External dimensions (mm)				Reference	Metal mounting
Height (A)	Width (B)	Depth (C)	D		
200	300	150	127	CR-23150 BO	MM-32
300	300	150	127	CR-33150 BO	MM-33
300	400	150	127	CR-34150 BO	MM-34
300	500	200	177	CR-35200 BO	MM-35

Dimensions (mm)

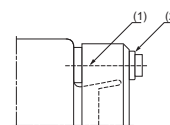
FIG. 1



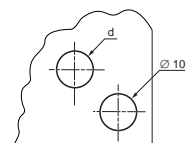
Detail A



Detail B



Detail C



Detail D
Fixing hole

- (1) Screw.
- (2) Sealing washer.

Wall fixing kit for CRNG enclosures



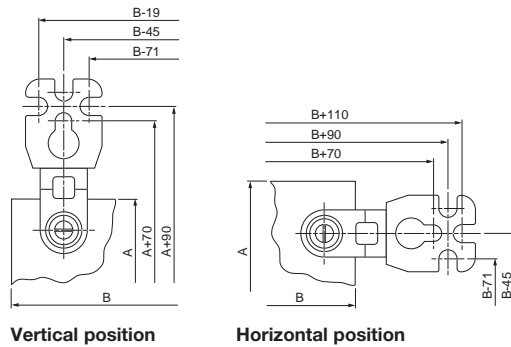
Made of passivated zinc-coated steel.

They are fixed from the outside and can be positioned vertically or horizontally indistinctly.

Maximum load: horizontally 180 kg.
vertically 350 kg.

Not included in the standard supply.

Reference	Description
PFCRG	Standard fixing kit



Vertical position

Horizontal position

Earthing connections



Generally used for fixing the door to the body of the enclosure or between the body and the mounting plate. The fastening hardware is included.

CTAF... references, rectangular section, guarantee the correct earthing connection for high frequencies, avoiding the interference currents that are produced at high frequencies.

Reference	Length mm	Width mm	Section mm ²	Material
CTI 17/6	170		6	Copper wires with tinned copper terminal
CTI 17/10	170		10	Copper wires with tinned copper terminal
CTI 22/6	220		6	Copper wires with tinned copper terminal
CTI 22/10	220		10	Copper wires with tinned copper terminal
CTI 22/25	220		25	Copper wires with tinned copper terminal
CTI 41/10	410		10	Copper wires with tinned copper terminal
CTI 41/25	410		25	Copper wires with tinned copper terminal
CTAF 15/16	155	20	16	Tinned copper wires and terminal
CTAF 20/25	200	21	25	Tinned copper wires and terminal
CTAF 25/25	200	26	25	Tinned copper wires and terminal
CTAF 20/50	200	40	50	Tinned copper wires and terminal

Round cable entries without connectors



Compact system that permits cable and hose introduction into electronic enclosures or into junction boxes, for example.

Indentation dimensions: Ø 50 and 63 mm.

IP65 watertightness.

Fixing with nuts up to dimension 700 × 500 × 250 mm. From this dimension it is also possible to mount them using clips. For better fixing, we recommend that you use screws.

Reference	No. of entries	Ø cable entry	For cable Ø (mm)					
			3 to 5.5	3 to 6.5	3.5 to 6.5	5 to 9.2	6 to 10	9.6 to 14
TSAM50 4 SIN EN	4	50	-	-	-	-	3	1
TSAM50 8 SIN EN	8	50	-	-	7	-	1	-
TSAM63 8 SIN EN	8	63	-	2	-	4	-	2
TSAM63 13 SIN EN	13	63	6	-	6	-	1	-



Diameter of M50 perforation

Diameter of M63 perforation

Windows for automatic switches

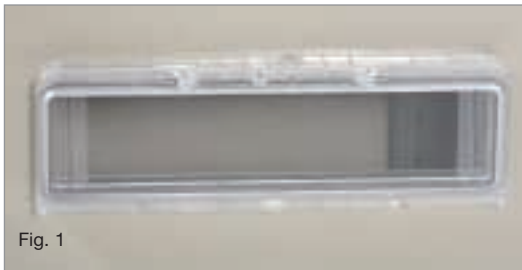


Fig. 1



Fig. 2

Allow access to the interior of the enclosure, maintaining the IP65 degree of protection.

Made of transparent polycarbonate.

Reference		No. of modules	Fig. No.	A	B	C	
Low cover	High cover					Low cover	High cover
VA 27/2M	VA 27/2MA	2	1	78	60	15	25
VA 27/4M	VA 27/4MA	4	1	78	95	15	25
VA 27/6M	VA 27/6MA	6	1	78	130	15	25
VA 27/8M	VA 27/8MA	8	1	78	165	15	25
VA 27/10M	VA 27/10MA	10	1	78	200	15	25
VA 27/12M	VA 27/12MA	12	1	78	235	15	25
VA 27/16M	-	16	2	195	165	13	-
VA 27/24M	-	24*	2	196	235	13	-
VA 27/36M	-	36*	2	248	235	13	-
VA 27/51M	-	51**	2	248	325	13	-

* In rows of 12 modules mounted vertically.

** In rows of 17 modules mounted horizontally.

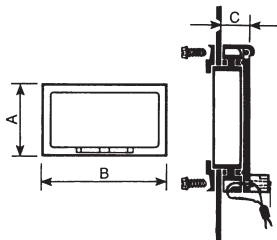


Fig. 1

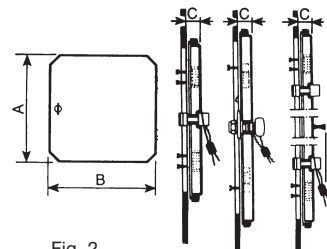


Fig. 2

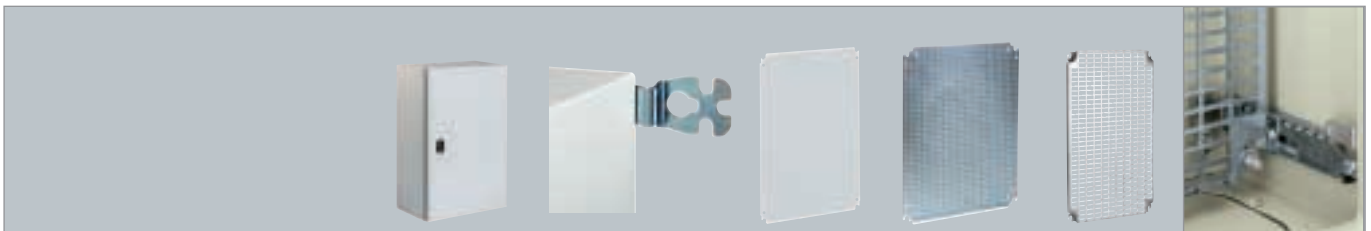
ATEX enclosure



Enclosure complying with ATEX European Directive No. 94/9/CE.

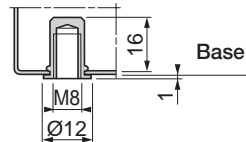
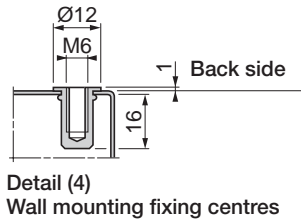
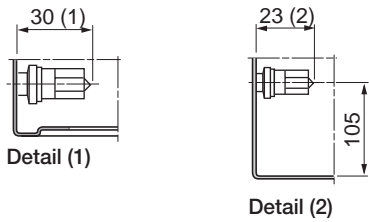
One-piece sheet steel enclosure. Painted internally and externally with textured polyester powder in grey colour RAL-7032.

- IP66 (EN 60529).
- IK10.
- Ambient temperature range: -25 to 40 °C.
- 4 back-studs for mounting plate fixing.
- 4 fixing holes fitted with 4 crimped blind nuts for wall fixing brackets **PFCRG** (to be ordered separately).
- 1 crimped blind nut for external earth connection.
- Polyurethane seal on the door.
- Standard 5 mm double-bar lock.
- Earthing screw on body and door for earth continuity.
- Wall fixing by means of 4 lugs (to be ordered separately).

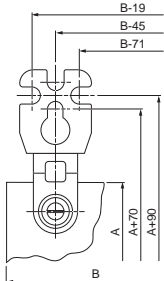


External enclosures (mm)			Enclosure reference	Fixing brackets	Mounting plates			Adjustable plate supports
Height (A)	Width (B)	Depth (C)			Metal	Perforated	Universal	
300	200	150	CRATX-32/150	PFCRG	-	-	-	-
300	300	200	CRATX-33/200	PFCRG	MM-33	MF-33	MR-33	SDCR-200
400	300	200	CRATX-43/200	PFCRG	MM-43	MF-43	MR-43	SDCR-200
400	400	200	CRATX-44/200	PFCRG	MM-44	MF-44	MR-44	SDCR-200
500	400	200	CRATX-54/200	PFCRG	MM-54	MF-54	MR-54	SDCR-200
600	400	250	CRATX-64/250	PFCRG	MM-64	MF-64	MR-64	SDCR-200
600	600	250	CRATX-66/250	PFCRG	MM-66	MF-66	MR-66	SDCR-200
700	500	250	CRATX-75/250	PFCRG	MM-75	MF-75	MR-75	SDCR-200
800	600	300	CRATX-86/300	PFCRG	MM-86	MF-86	MR-86	SDCR-200
1000	800	300	CRATX-108/300	PFCRG	MM-108	MF-108	MR-108	SDCR-200

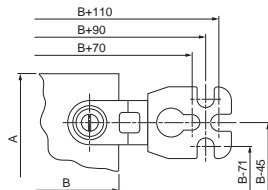
Dimensions (mm)



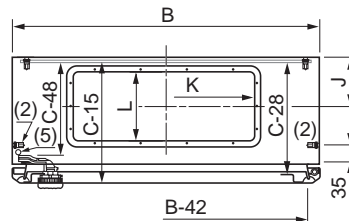
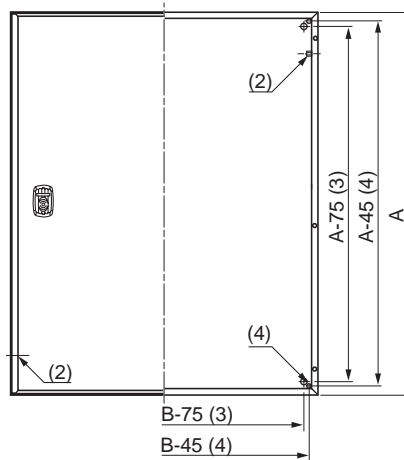
Detail (5)
Crimped blind nut for external earth connection



Vertical position



Horizontal position

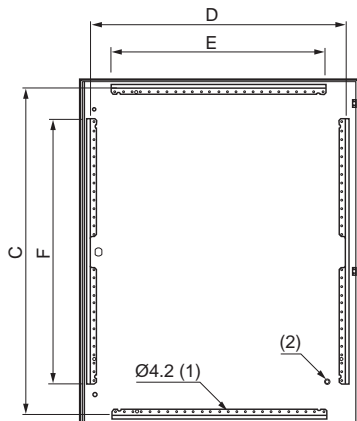


Enclosure dimensions (mm)		Cable gland plates					
Width (B)	Depth (C)	Dimensions (mm)	No.	J	K	L	Base
200	150	140 × 80	1	57	115	55	-
300	200	245 × 130	1	80	220	105	-
400	200-250	345 × 130	1	80	320	105	-
500	250	445 × 130	1	80	420	105	-
600	250	545 × 130	1	80	520	105	-
600	300	495 × 220	1	126	470	195	-
800	300	345 × 130	2	80	320	105	400

- (1) 4 back-studs M8 × 25 mm.
- (2) 2 earthing studs M6 × 17,5 mm.
- (3) Stud centres.
- (4) Wall mounting fixing centres.
- (5) Crimped blind nut for external connection.

A: enclosure height
B: enclosure width
C: enclosure depth

Dimensions of the door reinforcement profiles



Enclosure dimensions (3) (mm)		Door perforated profiles (mm)			
Height (A)	Width (B)	Vertical		Horizontal	
		F	D	E	C
400	300	320	237	-	-
400	400	320	337	-	-
500	400	370	337	-	-
600	400	370	337	-	-
600	600	370	537	-	-
700	500	470	437	-	-
800	600	570	537	-	-
1000	800	770	737	620	949

- (1) 25 mm pitch.
- (2) 1 earthing stud M6 × 17,5 mm.
- (3) The doors of the enclosures with dimensions less than 600 × 800 mm are not fitted with reinforcement profiles.

Fixed and pivoting 19" racks



CRN 46/300 KT + BRP 7/CRN

Racks to be directly installed in 600 and 800 mm width CRN enclosures.

- Perforated 19" rack with □ 8.5 holes every 44.45 mm.
- Double bar lock with opening to left or right indistinctly.
- Fixed rack in galvanised sheet steel and pivoting rack finished with grey RAL-7032 polyester epoxy paint.
- Possibility of depth adjustment of the fixed rack via the **SDCR** support (see pages 1/44).

Fixed rack

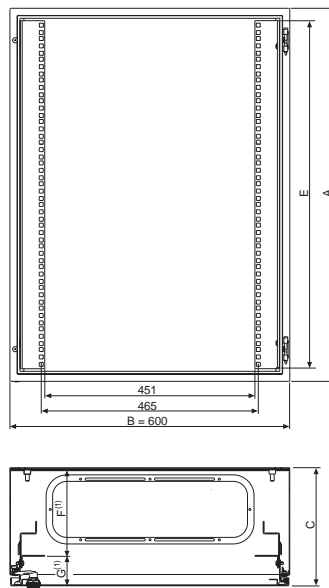


fig. 1

Pivoting rack

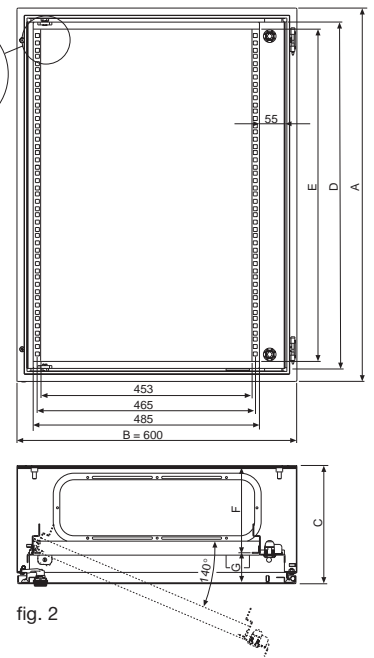


fig. 2

NOTES: F and G will vary when rack BRP is mounted on SDCR supports.
 For enclosures with aluminium PACRN door, dimension G is increased 15 mm.
 For enclosures with a KT transparent door, dimension G is reduced 4 mm.

For attachment to enclosures			Fixed rack reference	Pivoting rack reference	No. of units (1 U = 44.45 mm)	D	E	F	G
Height (A)	Width (B)	Depth (C)							
300	600	400	BRF5/CRN		5	-	226	188/238	61
400	600	250/300	BRF8/CRN		8	-	359	188/238	61
500	600	400	BRF10/CRN		10	-	448	188/238	61
600	600	250/300	BRF12/CRN		12	-	537	188/238	61
700	600	400	BRF14/CRN		14	-	626	188/238	61
800	600	250/300/400	BRF17/CRN		17	-	759	188/238/338	61
1000	600	250/300	BRF21/CRN		21	-	937	188/238	61
400	600	250/300		BRP7/CRN	7	342	311	188/238	59
600	600	250/300		BRP11/CRN	11	542	489	188/238	59
800	600	250/300/400		BRP16/CRN	16	742	711	188/238/338	59
1000	600	250/300		BRP20/CRN	20	942	889	188/238	59
1000	800	250/300/400		BRP20/CRN 800	20	942	889	188/238	59
1200	800	300/400		BRP25/CRN 800	25	1142	1111	188/238	59

Electronic enclosures constructed of a single-piece body

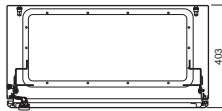
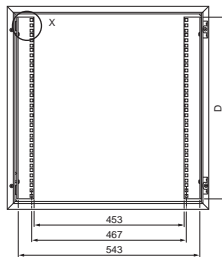


CRN 86/400 EP KT

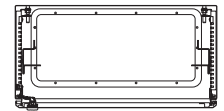
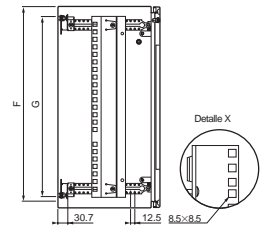
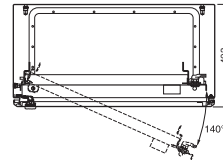
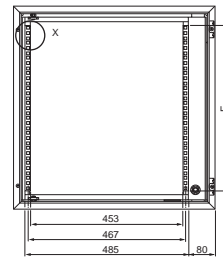
System of 19" electronic enclosures comprised of a back and **KT** transparent door, equipped with 19" pivoting or fixed racks with □ 8.5 perforations at an interval of 44.45 mm.

- 5 heights for 4, 7, 9, 13 and 16 U with a pivoting chassis and for 5, 8, 10, 14 and 17 U with a fixed chassis.
- 400 mm depth.
- Made of sheet steel, painted grey RAL-7032.
- **KT** transparent door with tempered glass and removable hinges, which allow for easy reversal of the door opening direction.
- Three-point double bar lock from 700 mm height.
- Fixed rack depth-adjustable using **SDCR** supports (order separately; see page 1/44).
- Cable entry.
- Welded earthing stud.

Fixed rack



Pivoting rack



External dimensions (mm)			With pivoting 19" rack		With fixed 19" rack		D	E	F	G
Height (A)	Width (B)	Depth (C)	Reference	No. of units	Reference	No. of units				
300	600	400	CRN-36/400EP KT	4	CRN-36/400EF KT	5	258	200	275	225
400	600	400	CRN-46/400EP KT	7	CRN-46/400EF KT	8	358	300	375	325
500	600	400	CRN-56/400EP KT	9	CRN-56/400EF KT	10	458	400	475	425
700	600	400	CRN-76/400EP KT	13	CRN-76/400EF KT	14	658	600	675	625
800	600	400	CRN-86/400EP KT	16	CRN-86/400EF KT	17	758	700	775	725

Two-bodied electronic enclosures



CRN 86/500E 17U KT

System of pivoting electronic enclosures comprised of three modules: back, body and **KT** transparent door, equipped with 19" pivoting or fixed racks with □ 8.5 perforations at an interval of 44.45 mm.

- 5 heights, for 5, 8, 10, 14 and 17 U.
- 2 depths: 400 and 500 mm.
- Made of sheet steel, painted grey RAL-7032.
- Fixing bracket: reference **PFCRG** (see page 1/26).

BACK

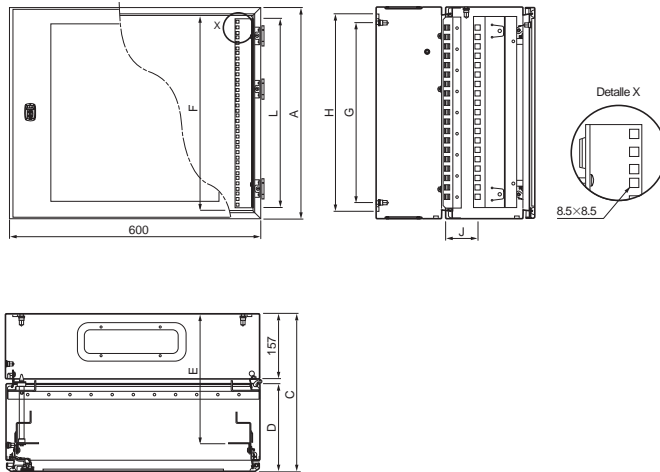
- Depth 150 mm.
- Fixing point for mounting various supports.
- Hinges and locking system with the body.
- Cable entry above and below.

BODY

- Useable depth of 200 or 300 mm.
- 2 Two 19" galvanised steel profiles, mounted 100 mm from the opening of the enclosure.
- Intermediate body mounted on the back using 180° hinges.

DOOR

- Tempered glass transparent door.
- Opening to 120°, with 2 or 3 invisible hinges.
- Three-point double bar lock from 700 mm height.



Dimensions (mm)			Reference	No. of units (1 U = 44.45 mm)	D	E	F	L	G	H	J
Height (A)	Width (B)	Depth (C)									
300	600	400	CRN-36/400E 5U KT	5	210	306	259	258	225	275	71
400	600	400	CRN-46/400E 8U KT	8	210	306	359	358	325	375	71
500	600	400	CRN-56/400E 10U KT	10	210	306	459	458	425	475	71
700	600	400	CRN-76/400E 14U KT	14	210	306	659	658	625	675	71
800	600	400	CRN-86/400E 17U KT	17	210	306	759	758	725	775	71
300	600	500	CRN-36/500E 5U KT	5	310	406	259	258	225	275	171
400	600	500	CRN-46/500E 8U KT	8	310	406	359	358	325	375	171
500	600	500	CRN-56/500E 10U KT	10	310	406	459	458	425	475	171
700	600	500	CRN-76/500E 14U KT	14	310	406	659	658	625	675	171
800	600	500	CRN-86/500E 17U KT	17	310	406	759	758	725	775	171

Plain covers



CRTM 6U



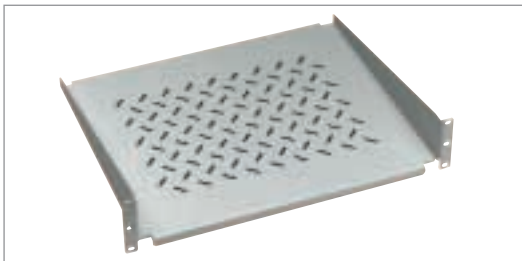
CRTA 6U

Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel in finely texturised grey RAL-7035 **CRTM** or of 3 mm aluminium **CRTA**.

No. of units	Reference	
	Metal	Aluminium
1	CRTM 1U	CRTA 1U
2	CRTM 2U	CRTA 2U
3	CRTM 3U	CRTA 3U
6	CRTM 6U	CRTA 6U
9	CRTM 9U	CRTA 9U
10	CRTM 10U	CRTA 10U
12	CRTM 12U	CRTA 12U

2 U fixed perforated tray



Directly fixed to the front 19" rack using screws, Ref. **GFR95**.

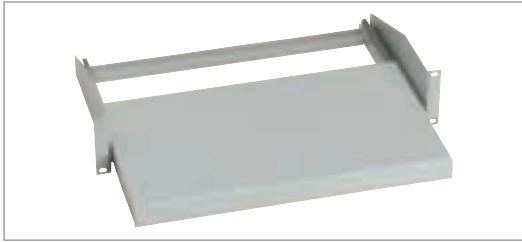
Made of 1.5 mm perforated sheet steel, painted finely texturised RAL-7035.

Maximum load 20 kg.

Tray dimensions			Reference
Height	Width	Depth	
2 U	450	250	BF 2U25P
2 U	450	380	BF 2U40P



2 U telescopic tray



Directly fixed to the front 19" rack using screws, Ref. **GFR95**.
 Made of 1.2 mm sheet steel painted finely texturised RAL-7035, with telescopic guides with an anchoring device. Maximum load 5 kg.

Tray dimensions			Reference
Height	Width	Depth	
2 U	450	250	BT 2U25



Cable entry covers

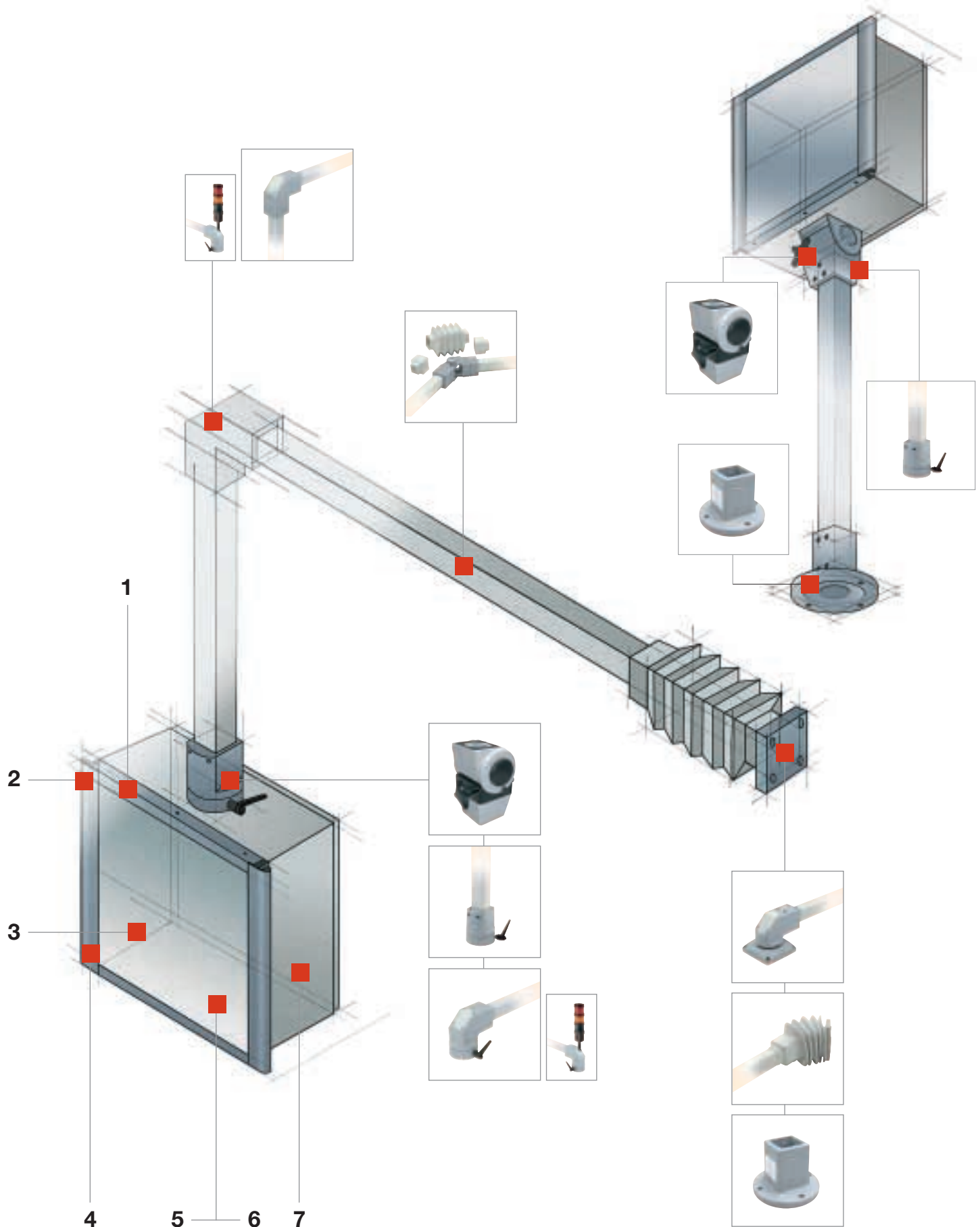


Directly fixed to the 19" rack using screws, Ref. **GFR95**.
 Made of 1.2 mm sheet steel in finely texturised grey RAL-7035, with cut-out cable entries with protection.

No. of units	No. of cut-outs	Reference
1	2	CRTM 1U2



CM control box systems designed to be coupled to human-machine dialogue components





1 Rear door that permits access to the interior of the control box. Double bar lock.



2 Trim frame in extruded aluminium with ergonomic design that permits handling of the box.



3 Set of profiles for mounting elements in the interior.



4 Plastic trim plug that protects the aluminium profile.



5 Reinforcement designed to prevent deformation of the box when suspended.



6 Front cover in anodised aluminium, for mounting the dialogue components.



7 Accessories easily mounted on the aluminium profile, using screws.



GENERAL DESCRIPTION



WIDE RANGE

Seven dimensions of control boxes, plus a keyboard box.

CONTROL BOX BASED ON THE STANDARD BOX

The new control box is based on our **CRN** box.

REAR DOOR

The rear door, with an opening to 120°, provides easy access to the interior of the box.



INTERIOR PROFILES

Two profiles can be mounted on the interior of the box using the studs welded to the sides.

TRIM FRAME

The ergonomic design of the trim frame makes handling easier.

The trim frame is ready to mount accessories at the time of installation, or later.



ACCESSORIES

Wide range of easily mounted accessories: lamp, document pocket, keyboard tray and PC tray.

ARMS

A wide range of accessories for mounting the suspension arm, available in two sizes that cover a large number of applications.

DESIGN

The neutral design of the control boxes makes it possible to combine them with a large number of applications.

ADAPTABILITY

The boxes can be painted other colours on request. The aluminium front cover can be machined to facilitate mounting dialogue components.



MAXIMUM LOAD

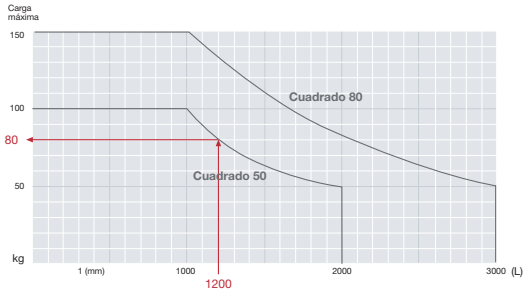


FIG. 1

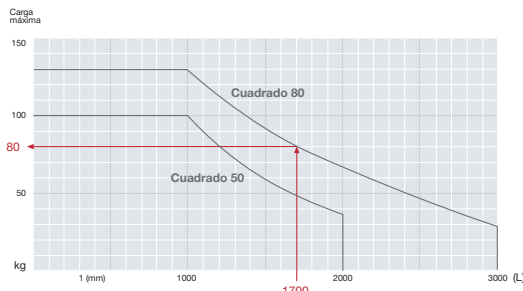
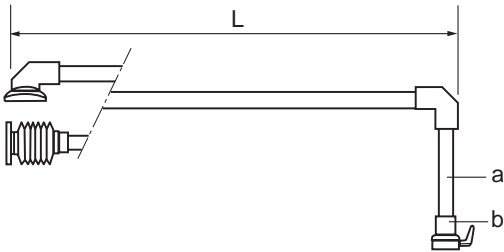
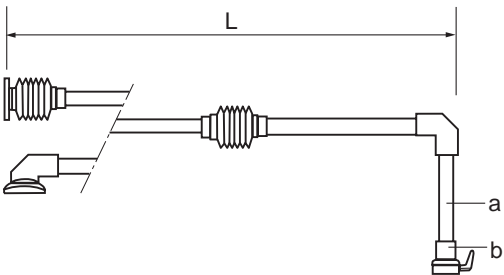


FIG. 1



SUSPENSION SYSTEM WITHOUT JOINTED INTERMEDIATE COUPLING

- The load (a + b + control box + material installed in the box) must be less than the maximum load permissible.
- Ex.: a 50 square suspension system is used without a jointed intermediate coupling and with a 1200 mm lever arm, the maximum load permissible

Length mm	50 square Maximum load kg	80 square Maximum load kg
500	100	150
1000	100	150
1500	60	110
2000	50	80
2500	-	60

SUSPENSION SYSTEM WITH JOINTED INTERMEDIATE COUPLING

- The load (a + b + control box + material installed in the box) must be less than the maximum load permissible.
- Ex.: an 80 square suspension system is used with a jointed intermediate coupling and with a 1700 mm lever arm, the maximum load permissible that it will be able to support is 80 kg.

Length mm	50 square Maximum load kg	80 square Maximum load kg
500	100	130
1000	100	130
1500	55	90
2000	35	60
2500	-	40



System of control boxes designed to couple components for human-machine dialogue, reinforced on the upper part and perforated for mounting the joints. The 600 mm width boxes are prepared for mounting a keyboard.

- Front cover in anodised aluminium, for mounting the human-machine dialogue components.
- Trim frame in extruded aluminium with ergonomic design that facilitates handling the box.
- Four M5 x 15 welded studs on each side of the box for mounting profiles for equipment fixing.
- Rear door opening to 120°.
- IP54.
- Box painted with finely texturised RAL-7035 polyester epoxy resin. Trim frame for fixing the front cover in flat paint colour RAL-7040.
- For changing the lock insert, see the **CRN** section.

Basic composition

- Steel box.
- Steel reinforcement.
- Trim frame in aluminium.
- Front plate in aluminium.
- 2 profiles for fixing interior equipment.
- Double bar lock.

BOX DIMENSIONS

Dimensions in mm																			
Height	Width	Depth	Reference		50	80	50	80	50	80	50	80	50	80	50	80	50	80	
300	300	200	HHHCM3030/200		•		•		•		•		•		•		•		•
300	400	200	HHHCM3040/200		•		•		•		•		•		•		•		•
400	400	200	HHHCM4040/200		•		•		•		•		•		•		•		•
400	600	250	HHHCM4060/250	•	•		•		•		•		•		•		•		•
500	500	250	HHHCM5050/250		•		•		•		•		•		•		•		•
600	600	200	HHHCM6060/200	•	•		•		•		•		•		•		•		•
600	800	300	HHHCM6080/300			•		•		•		•		•		•		•	
800	600	300	HHHCM8060/300	•		•		•		•		•		•		•		•	

REFERENCES AND DETAILS OF THE BOXES

Reference	A	B	C	D	F	G	H	J	Figure	Weight kg
HHHCM3030/200	300	300	180	162	260	260	100	45	2	8.6
HHHCM3040/200	300	400	180	162	360	260	100	45	2	9.5
HHHCM4040/200	400	400	180	262	360	360	100	45	2	11.4
HHHCM4060/250*	400	600	250	262	560	360	125	100	2	17.9
HHHCM5050/250	500	500	250	362	560	460	125	100	2	20.2
HHHCM6060/200*	600	600	200	462	560	560	150	100	2	26.5
HHHCM6080/300	600	800	280	462	760	560	150	100	3	34.9
HHHCM8060/300	800	600	280	662	560	760	150	100	1	33.6

* With cable entry plate.

Dimensions (mm)

FIG. 1

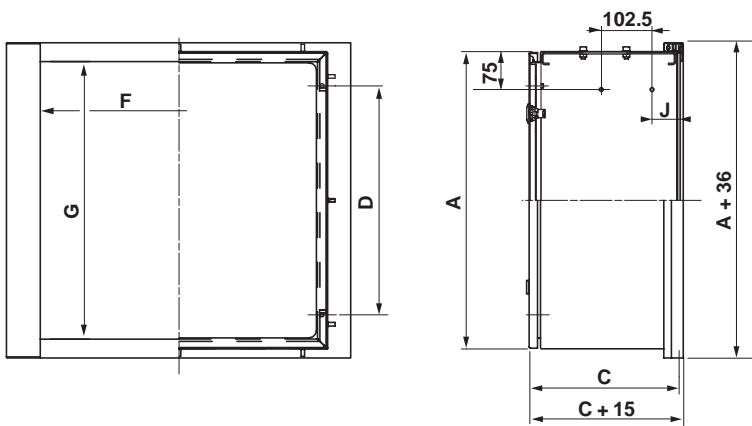


FIG. 2

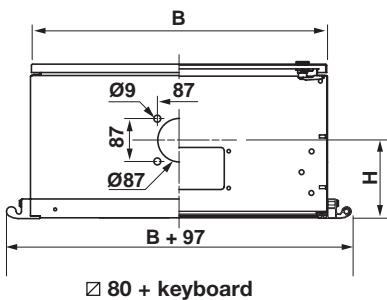
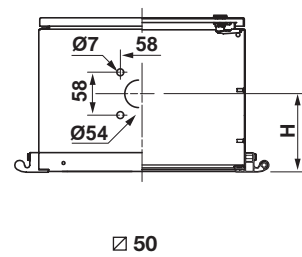
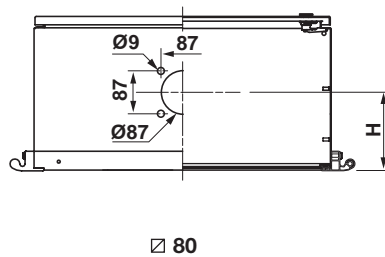
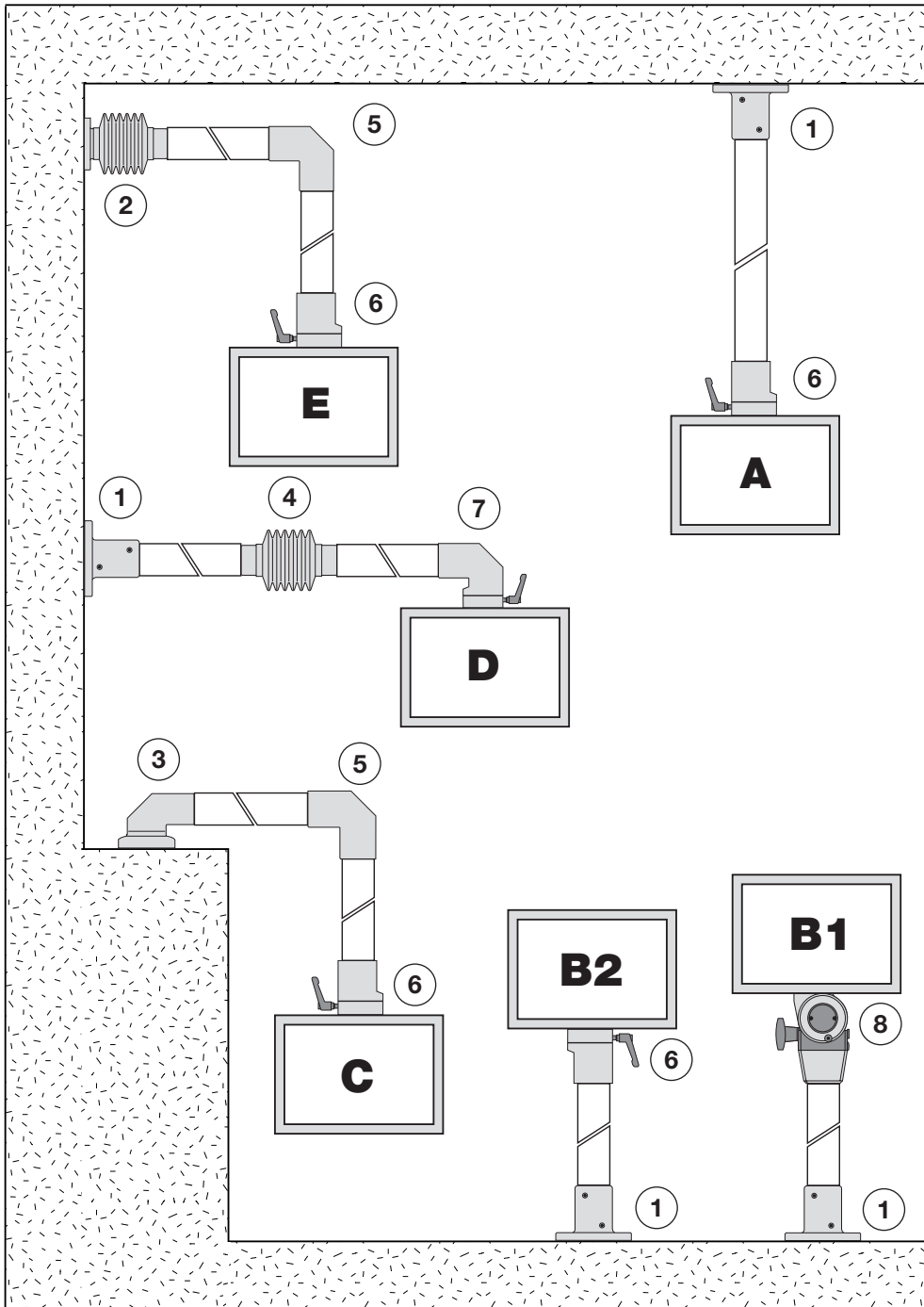










FIG. 3





Fixing to support			Coupling pieces			Coupling to box		
	1	Foot		4	Horizontal joint between tubes		6	Rotating fixing to box
	2	Jointed wall fixing		5	Set bend		7	Rotating fixing to box at 90°
	3	Right angle rotating joint					8	Fixing to rotating pivoting box

Tubes



- For mounting the suspension systems.
- Closed profile that increases the rigidity of the system.
- Made of: iron.
- Colour: RAL-7035.

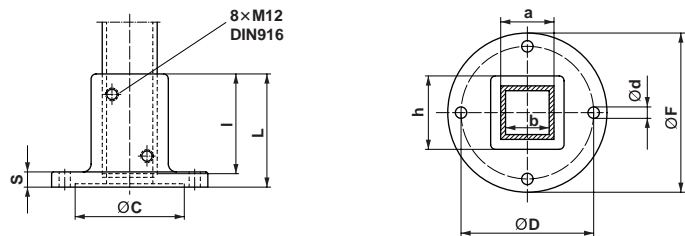
Weight	
50 x 50	6.5 kg/m
80 x 80	10.5 kg/m

Reference		
50 square	80 square	Length in m
HHHCM T5005	HHHCM T8005	0.50
HHHCM T5010	HHHCM T8010	1.00
HHHCM T5015	HHHCM T8015	1.50
HHHCM T5020	HHHCM T8020	2.00

Foot ①



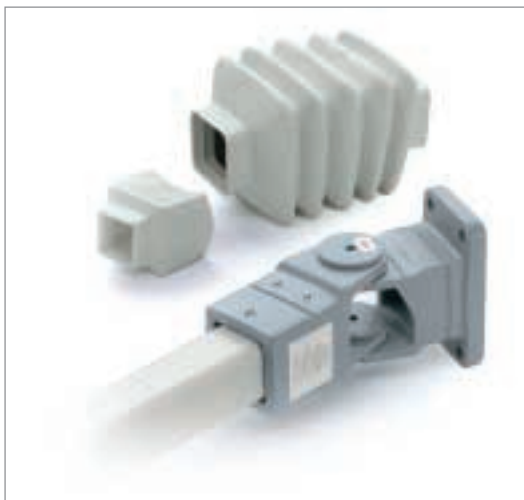
- For coupling the suspension system to a vertical or horizontal surface.
- Made of: cast iron.
- Colour: RAL-7040.



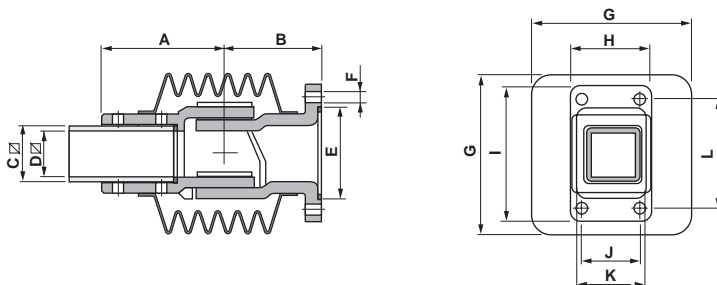
REFERENCES AND DETAILS

Reference	Dimensions in mm										Weight kg
	a	b	c	d	D	F	h	I	L	S	
HHHCM/UMR50	50	42	105	11	125	152	72	97	110	15	3.25
HHHCM/UMR80	80	72	134	11	173	201	111	126	140	16	7.00

Jointed wall fixing ②



- For jointed coupling of the suspension system to a vertical surface.
- Joint protected by a rubber bellows.
- Approximate maximum opening angle 170°.
- Made of: cast iron.
- Colour: RAL-7040.
- Colour of bellows: RAL-7035.



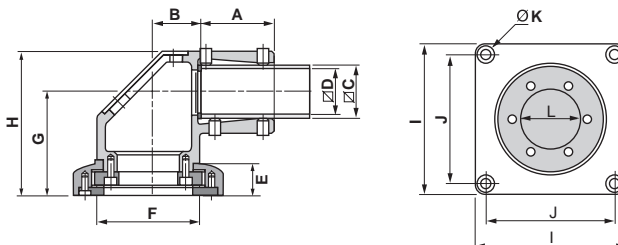
REFERENCES AND DETAILS

Reference	Dimensions in mm												Weight kg
	A	B	C	D	E	F	G	H	I	J	K	L	
HHHCM/UMA50	118	92	50	42	85	11	148	80	130	55	68	105	4.35
HHHCM/UMA80	160	115	80	72	130	11	190	115	175	90	103	150	9.45

Right angle rotating joint ③



- For coupling the suspension system to a horizontal surface.
- Rotation limited mechanically to approximately 295°.
- Made of: cast iron.
- Colour: RAL-7040.
- Colour of the inspection cover: RAL-7035.



REFERENCES AND DETAILS

Reference	Dimensions in mm												Weight kg
	A	B	C	D	E	F	G	H	I	J	K	L	
HHHCM/UMC50	68	50	50	42	30	96	96	134	140	120	9	55	5.40
HHHCM/UMC80	98	74	80	72	45	144	141.5	195.5	210	180	13	84	15.70

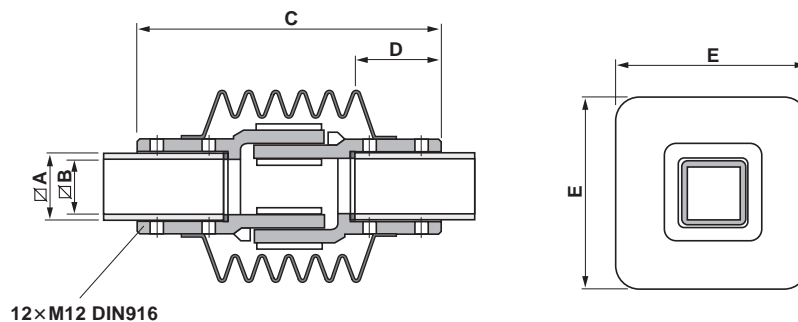
Horizontal joint between tubes ④



- For a jointed horizontal coupling between tubes.
- Joint protected by a rubber bellows.
- Approximate maximum opening angle 170°.
- Made of: cast iron.
- Colour: RAL-7040.
- Colour of bellows: RAL-7035.

REFERENCES AND DETAILS

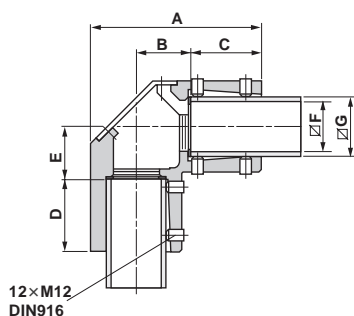
Reference	Dimensions in mm					Weight kg
	A	B	C	D	E	
HHHCM/UIA50	50	42	236	67	148	4.25
HHHCM/UIA80	80	72	320	94	190	10.00



Set bend ⑤



- For coupling two tubes at a 90°.
- Made of: aluminium.
- Colour: RAL-7040.
- Colour of the inspection cover: RAL-7035.



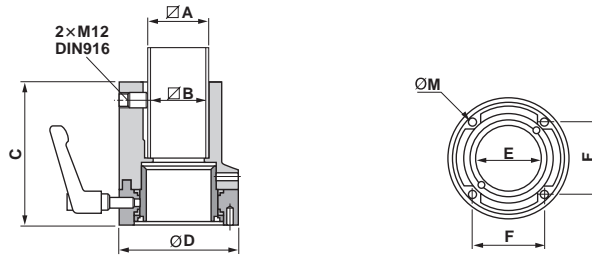
REFERENCES AND DETAILS

Reference	Dimensions in mm							Weight kg
	A	B	C	D	E	F	G	
HHHCM/UTC50	144	46	60	60	46	42	50	1.350
HHHCM/UTC80	193	56	83	83	56	70	80	2.400

Rotating fixing to box ⑥



- For vertical coupling of the box to a tube.
- The box is suspended.
- Rotation limited mechanically to approximately 310°.
- Made of: aluminium.
- Colour: RAL-7040.



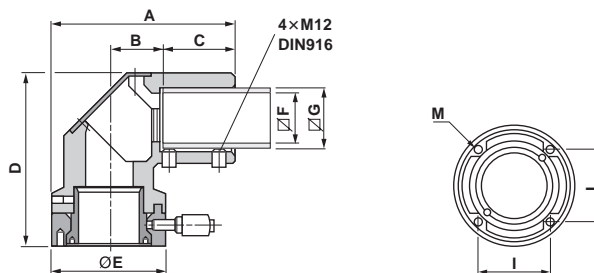
REFERENCES AND DETAILS OF THE BOXES

Reference	Dimensiones en mm							
	A	B	C	D	E	F	M	Weight kg
HHHCM/UCR50	50	42	115	96	52.3	58	M6	1.25
HHHCM/UCR80	80	72	145	139	85	87	M8	3.10

Rotating fixing to box at 90° ⑦



- For horizontal coupling of the box to a tube.
- The box is suspended.
- Rotation limited mechanically to approximately 310°.
- Made of: aluminium.
- Colour: RAL-7040.
- Colour of the inspection cover: RAL-7035.



REFERENCES AND DETAILS

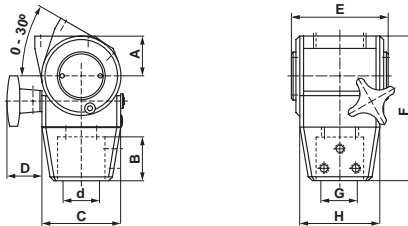
Reference	Dimensiones en mm									
	A	B	C	D	E	F	G	I	M	Weight kg
HHHCM/UCC50	154	46	60	147	96	42	50	58	M6	2.00
HHHCM/UCC80	208.5	56	83	190	139	72	80	87	M8	6.55

Fixing to rotating pivoting box

8



- For vertical coupling of the box to a tube.
- Position of the box suspended or supported.
- Assisted mechanical rotating 30°.
- Mounting on 200 and 250 mm depth enclosures.
- Made of: cast iron.
- Colour: RAL-7040.



REFERENCES AND DETAILS

Reference	Dimensions in mm										
	Ø tube (mm)	A	B	C	D	d	E	F	G	H	Weight kg
HHHCM/UCP50	50	50	55	100	44	50	121	182	50	100	2.98
HHHCM/UCP80	80	50	55	100	44	80	121	182	50	100	3.10

Adaptor piece for Ø 80 mm enclosure



- Reference: HHH**CMUCPAD87**.

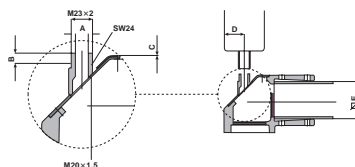
Adaptor for signalling column



- For mounting the signalling column.
- Made of: aluminium.
- Colour: RAL-7035.

REFERENCES AND DETAILS

Reference	Dimensions in mm					Weight kg
	A	B	C	D	E	
HHHCM/ACS50	14	11	8.7	31.5	50	0.025
HHHCM/ACS80	14	11	2.5	43	80	0.080



Keyboard for control boxes



Keyboard ready to be mounted on 600 mm width control boxes. The joint at 120° is made using 2 metal fixing supports and aluminium trim.

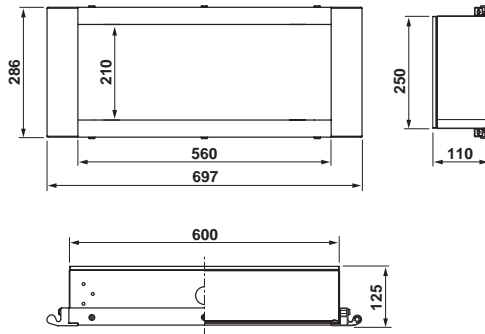
- Front plate of anodised aluminium for mounting the keyboard. Side hole for cable passage.
- Rear cover fastened with screws; completely removable, to facilitate access to the interior.
- Trim frame in extruded aluminium with ergonomic design.
- IP55.
- Box painted with finely texturised RAL-7035 polyester epoxy resin. Plate-fixing trim frame and profile in aluminium, in flat RAL-7040.



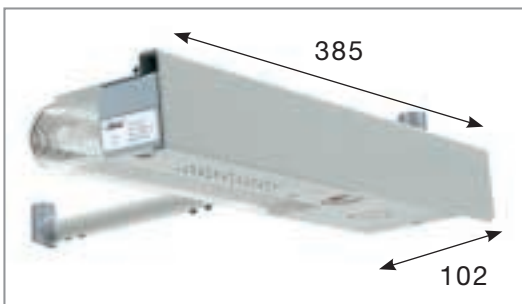
Basic composition

- Steel box.
- Trim frame in aluminium.
- Front plate in aluminium.
- 2 fixing supports for coupling to the control box.
- Trim profile for the joint between the keyboard and the control box.
- Cable entry tube.

Keyboard dimensions in mm				
Height	Width	Depth	Reference	Weight kg
250	600	110	HHHCMT 2560/110	8



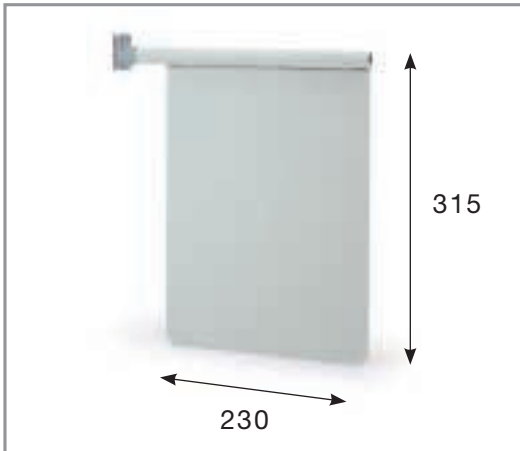
Energy efficient lamp (11 W)



- Provides the workspace with lighting and a 16 A socket.
- Colour of the support: RAL-7035.
- Colour of the joints: RAL-7040.

Reference	HHHCM/LAG	1.5 kg
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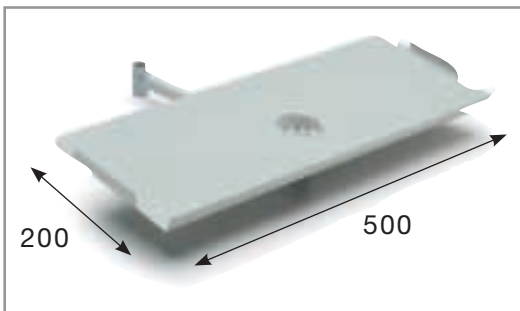
Document pocket support



- Makes it possible to have plans or other documents readily at hand.
- Colour: RAL-7035.
- Colour of the joints: RAL-7040.

Reference	HHHCM/SPP	1.15 kg
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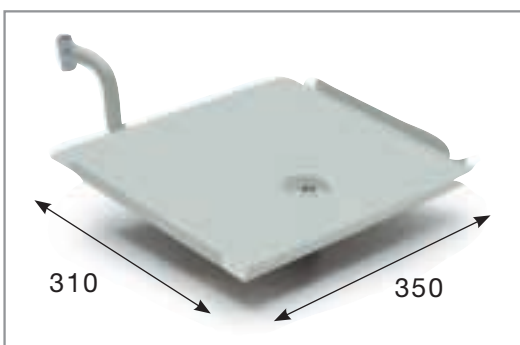
Keyboard tray



- Tray for PC keyboard.
- Colour: RAL-7035.
- Colour: joints: RAL-7040.

Reference	HHHCM/BPT	2.16 kg
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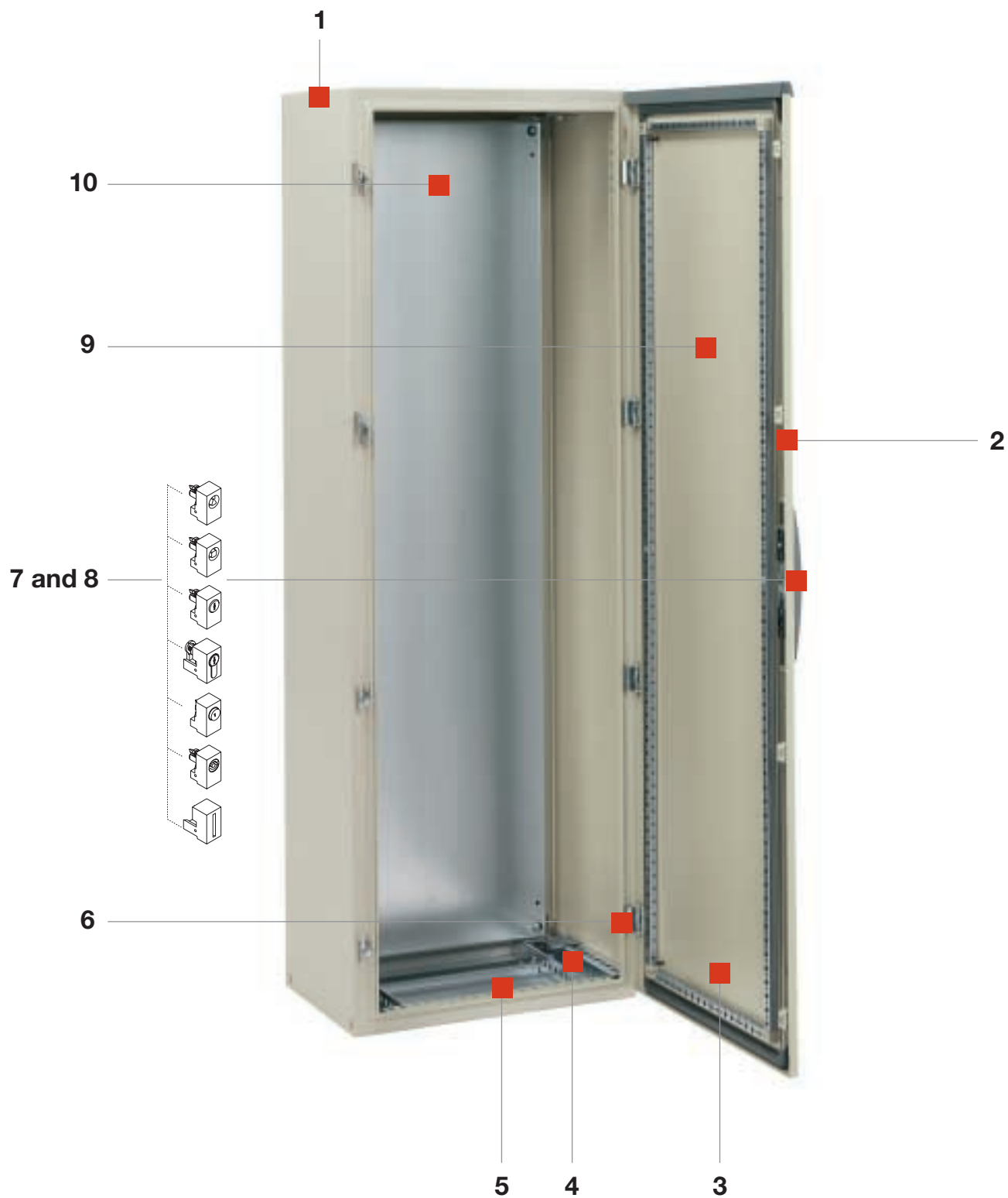
PC tray



- Tray for notebook computers.
- Colour: RAL-7035.
- Colour of the joints: RAL-7040.

Reference	HHHCM/BPC	2.04 kg
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CMO metal floor standing monobloc enclosures

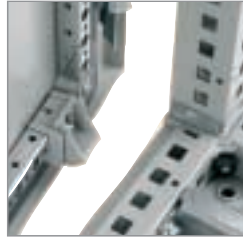




1 Lifting eyebolts for mounting directly on the top of the enclosure.



2 Reinforcement frame section 15 x 20 mm, with Ø 5 mm perforations every 25 mm and Ø 10 mm every 25 mm.



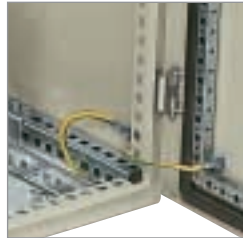
3 Door centring piece.



4 Guides with perforations every 25 mm to facilitate depth adjustment of the plate.



5 Front frame perforated every 25 mm for fixing of accessories, modular distribution chassis, 19" racks, etc.



6 A complete system for the earthing connection of the enclosure and the equipment installed.



7 Standard flat lock, located outside the sealed area, making it possible to change the lock insert to a handle with a large number of locks.



8 Double-door enclosures with interior handle lock on the left door to ensure watertightness.



9 Detail of tempered glass fixing.



10 An extensive range of mounting plates, full and partial, suitable for the majority of applications.





CMO 186/40 PM



CMO 186/40

Metal monobloc construction enclosures with sides made from a single folded section. Front part with a perforated frame on the entire perimeter of the enclosure opening. Back piece joined to the sides using a special profile forming a protected sealed area. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin.

Easy installation:

- Front frame has 11×13 mm perforations every 25 mm for fitting accessories, modular distribution chassis, 19" racks, etc.
- Profiles with perforations every 25 mm to enable depth adjustment of the mounting plate and other accessories.
- Front door, opening to 120° to the right or left, with a perforated reinforcement frame for accessory mounting.

Rigidity and watertightness:

- Reinforced fixing of enclosure back and double folding front profile.
- Self-centring door by means of play-correcting guides built into the locking pieces of the espagnolette.
- Locking mechanism outside of the sealed zone.
- Internal handle on the left door of double-door models from 1400 mm height.
- Four-point lock on 1600 to 2000 mm height enclosures.
- Two-point lock on 1000 to 1400 mm height enclosures.
- Watertightness due to foamed-in polyurethane gasket.

Composition:

- The **CMO...PM** is supplied with the mounting plate on the exterior of the enclosure.
- 4 mounting plate supports.
- Plain front door with reinforcement frame.
- 5 mm double bar lock.
- Cable entry plate in two pieces with sealing gasket.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

Nominal dimensions in mm			No. of doors	Reference	
Height (A)	Width (B)	Depth (C)		Enclosure with mounting plate	Enclosure without mounting plate
1000	1000	300	2	CMO 1010/30 PM	CMO 1010/30
1200	800	300	1	CMO 128/30 PM	CMO 128/30
1200	1000	300	2	CMO 1210/30 PM	CMO 1210/30
1200	1200	400	2	CMO 1212/40 PM	CMO 1212/40
1400	600	300	1	CMO 146/30 PM	CMO 146/30
1400	600	400	1	CMO 146/40 PM	CMO 146/40
1400	800	300	1	CMO 148/30 PM	CMO 148/30
1400	800	400	1	CMO 148/40 PM	CMO 148/40
1400	1000	400	2	CMO 1410/40 PM	CMO 1410/40
1400	1200	400	2	CMO 1412/40 PM	CMO 1412/40
1600	600	300	1	CMO 166/30 PM	CMO 166/30
1600	600	400	1	CMO 166/40 PM	CMO 166/40
1600	800	300	1	CMO 168/30 PM	CMO 168/30
1600	800	400	1	CMO 168/40 PM	CMO 168/40
1600	1000	300	2	CMO 1610/30 PM	CMO 1610/30
1600	1000	400	2	CMO 1610/40 PM	CMO 1610/40
1600	1000	400	2	CMO 1610/40 PM SB*	-
1600	1200	300	2	CMO 1612/30 PM	CMO 1612/30
1600	1200	400	2	CMO 1612/40 PM	CMO 1612/40
1800	600	300	1	CMO 186/30 PM	CMO 186/30
1800	600	400	1	CMO 186/40 PM	CMO 186/40
1800	800	300	1	CMO 188/30 PM	CMO 188/30
1800	800	400	1	CMO 188/40 PM	CMO 188/40
1800	800	500	1	CMO 188/50 PM	CMO 188/50
1800	800	600	1	CMO 188/60 PM	CMO 188/60
1800	1000	400	2	CMO 1810/40 PM	CMO 1810/40
1800	1000	500	2	CMO 1810/50 PM	CMO 1810/50
1800	1200	400	2	CMO 1812/40 PM	CMO 1812/40
1800	1200	400	2	CMO 1812/40 PM SB*	-
1800	1200	500	2	CMO 1812/50 PM	CMO 1812/50
1800	1600	400	2	CMO 1816/40 PM	CMO 1816/40
1800	1600	500	2	CMO 1816/50 PM	CMO 1816/50
2000	600	300	1	CMO 206/30 PM	CMO 206/30
2000	600	400	1	CMO 206/40 PM	CMO 206/40
2000	800	300	1	CMO 208/30 PM	CMO 208/30
2000	800	400	1	CMO 208/40 PM	CMO 208/40
2000	800	500	1	CMO 208/50 PM	CMO 208/50
2000	800	600	1	CMO 208/60 PM	CMO 208/60
2000	1000	400	2	CMO 2010/40 PM	CMO 2010/40
2000	1000	500	2	CMO 2010/50 PM	CMO 2010/50
2000	1200	400	2	CMO 2012/40 PM	CMO 2012/40
2000	1200	500	2	CMO 2012/50 PM	CMO 2012/50
2000	1200	600	2	CMO 2012/60 PM	CMO 2012/60
2000	1600	400	2	CMO 2016/40 PM	CMO 2016/40
2000	1600	500	2	CMO 2016/50 PM	CMO 2016/50
2000	1600	600	2	CMO 2016/60 PM	CMO 2016/60

* SB: CMO with upper panel.



CMO 186/40 KT

Metal monobloc construction enclosures with sides made from a single folded section.

- Securit glass transparent front door, IK08 resistance to external mechanical impacts, conforming to IEC 62262 or EN 62262, opening to 120° on the left or the right.
- The rest of the specifications are the same as the standard CMO enclosure.

Composition:

- Transparent front door.
- 5 mm double bar lock.
- 4 mounting plate supports.
- Cable entry plate in two pieces with sealing gasket.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

Nominal dimensions in mm			No. of doors	Reference
Height (A)	Width (B)	Depth (C)		
1200	800	300	1	CMO 128/30 KT
1400	600	300	1	CMO 146/30 KT
1400	600	400	1	CMO 146/40 KT
1400	800	300	1	CMO 148/30 KT
1400	800	400	1	CMO 148/40 KT
1600	600	300	1	CMO 166/30 KT
1600	600	400	1	CMO 166/40 KT
1600	800	300	1	CMO 168/30 KT
1600	800	400	1	CMO 168/40 KT
1800	600	300	1	CMO 186/30 KT
1800	600	400	1	CMO 186/40 KT
1800	600	500	1	CMO 186/50 KT
1800	600	600	1	CMO 186/60 KT
1800	800	300	1	CMO 188/30 KT
1800	800	400	1	CMO 188/40 KT
1800	800	500	1	CMO 188/50 KT
1800	800	600	1	CMO 188/60 KT
2000	600	300	1	CMO 206/30 KT
2000	600	400	1	CMO 206/40 KT
2000	600	500	1	CMO 206/50 KT
2000	600	600	1	CMO 206/60 KT
2000	800	300	1	CMO 208/30 KT
2000	800	400	1	CMO 208/40 KT
2000	800	500	1	CMO 208/50 KT
2000	800	600	1	CMO 208/60 KT



CMO 188/60 PUP

Metal monobloc construction enclosures with sides made from a single folded section. Front and rear parts with perforated frames on the entire perimeter of the enclosure openings.

- Front and rear doors, opening to 120° to the right or left, one of the doors with a perforated reinforcement frame for accessory mounting.
- The rest of the specifications are the same as the standard CMO enclosure.

Composition:

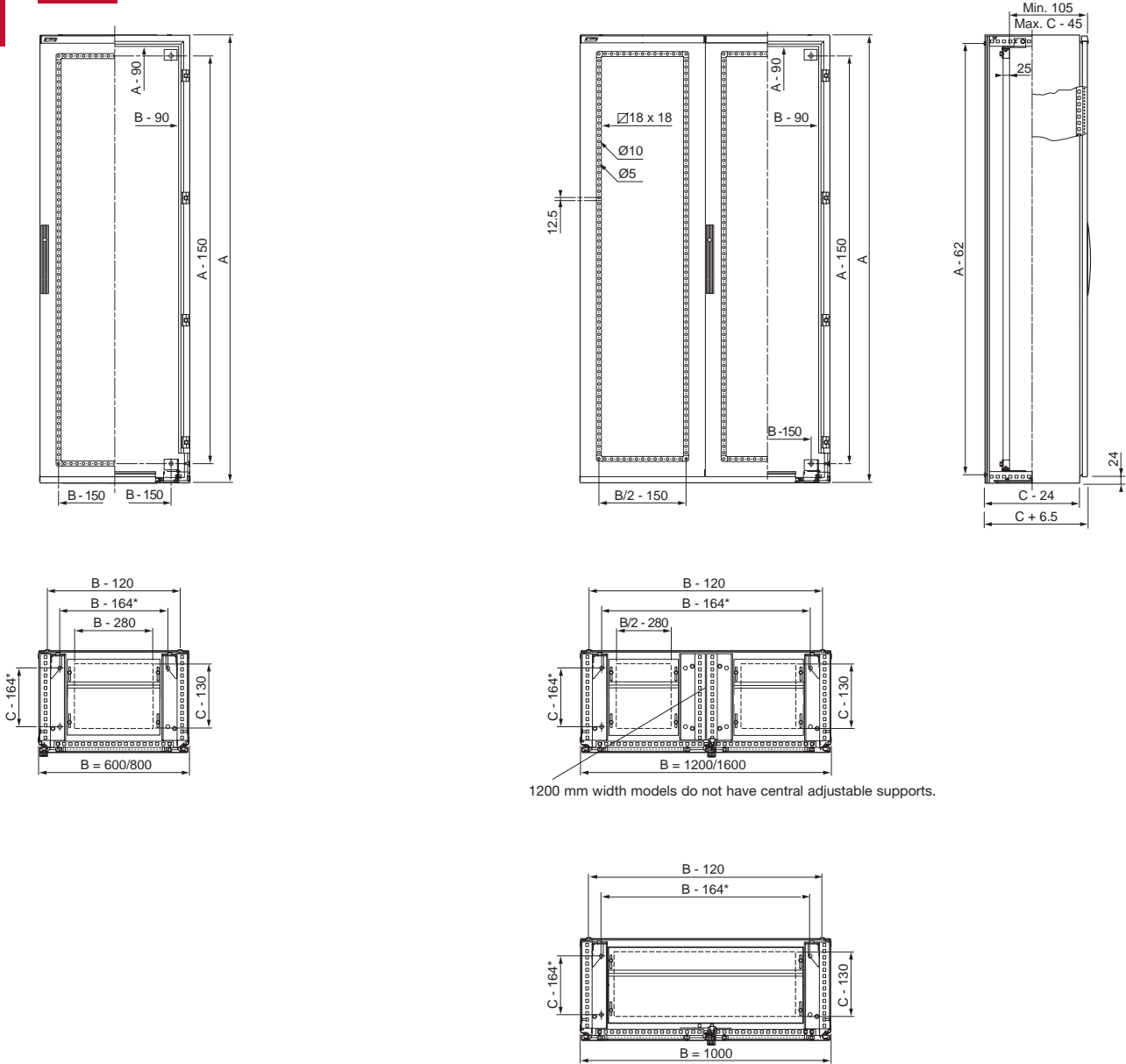
- Plain front and rear doors, one of the doors with a reinforcement frame.
- 5 mm double bar lock.
- 4 mounting plate supports.
- Cable entry plate in two pieces with sealing gasket.
- Double-door model with internal handle lock on the left door.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

Nominal dimensions in mm			No. of doors	Reference
Height (A)	Width (B)	Depth (C)		
1800	800	600	1+1	CMO 188/60 PUP
2000	800	600	1+1	CMO 208/60 PUP
2000	1200	600	2+2	CMO 2012/60 PUP

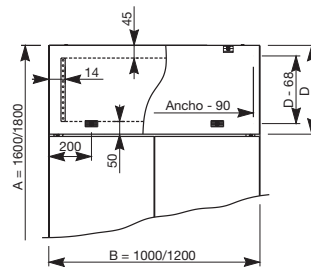
Dimensions (mm)

FIG. 1



1200 mm width models do not have central adjustable supports.

CMO.../SB



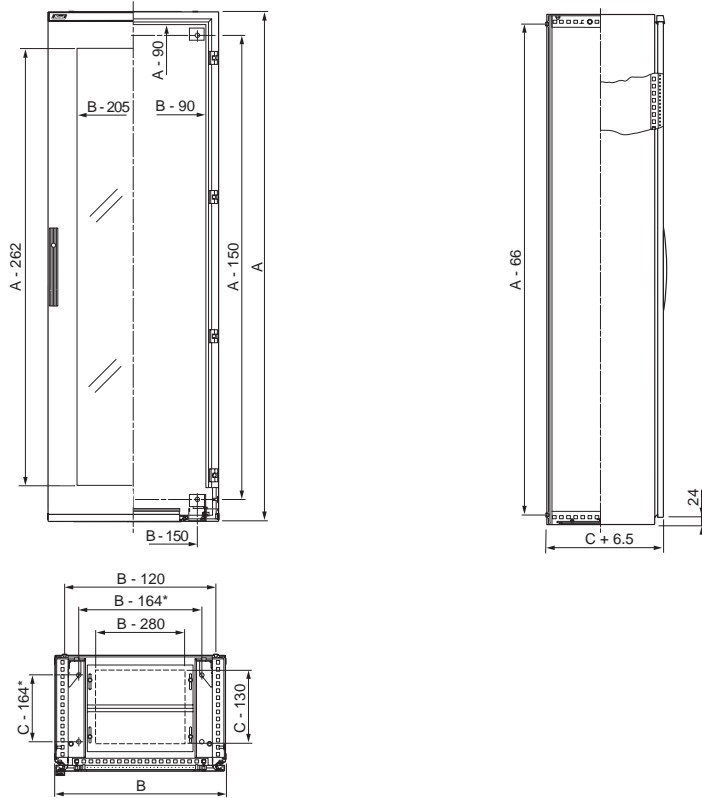
* Dimensions for fixing to the floor or a plinth.

Enclosure reference number	D
CMO 1610/40SB PM	400
CMO 1812/40SB PM	400

Dimensions (mm)

FIG. 2

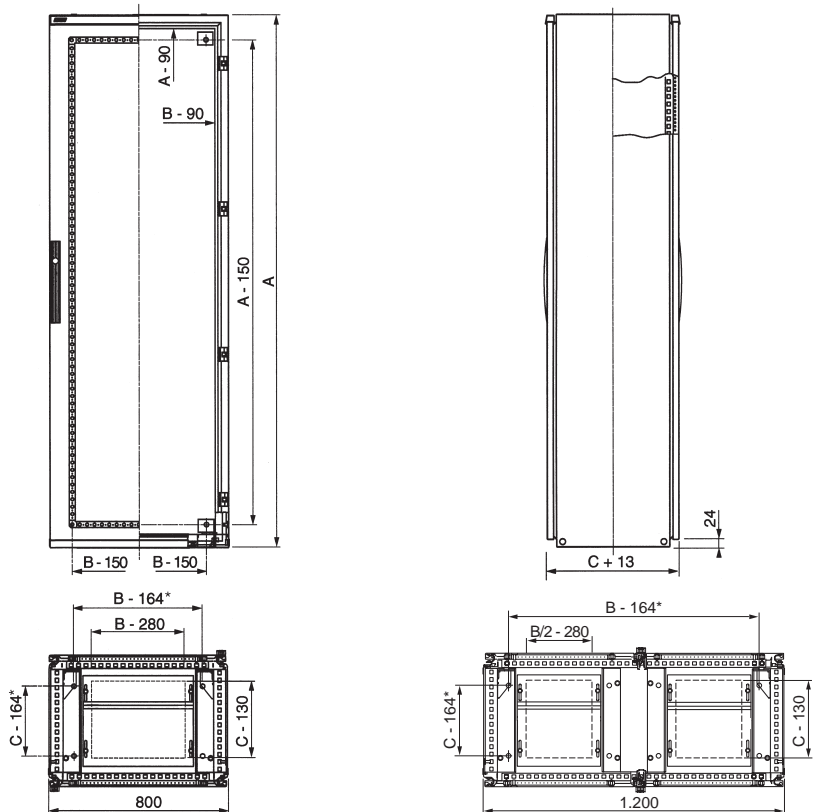
CMO...KT enclosures



* Dimensions for fixing to the floor or a plinth.

FIG. 3

CMO...PUP enclosures



* Dimensions for fixing to the floor or a plinth.

CUBICLE SUITE OF COUPLED ENCLOSURES



CMO 20 888/50

Suite formed by coupling 2000 mm standard CMO enclosures with their corresponding coupling kit, mounted on a 100 mm high plinth. On the shared sides an opening has been made, leaving a 45 mm frame around the entire perimeter.

- Plain doors with reinforcement frames.
- 4 mounting plate supports per enclosure.
- Cable entry plate in two pieces with sealing gasket per enclosure.
- 5 mm double bar lock.
- Possibility of incorporating an intermediate mounting plate.



Standard flat lock, located outside the sealed area with the possibility of changing the lock insert to a handle with a large number of locks.



Interior view of the coupling kit for enclosures equipped with mounting plates.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

Dimensions			No. of doors	Fig.	Suite formed by enclosures with widths	Reference
Height (1) (A)	Width (B)	Depth (C)				
2000	2000	500	4	1	2 × 1000	CMO 201010/50
2000	2000	500	3	2	1200 + 800	CMO 20128/50
2000	2400	500	3	3	3 × 800	CMO 20888/50
2000	2400	500	4	4	2 × 1200	CMO 201212/50

(1) Total height including plinth 2100 mm.

Dimensions (mm)

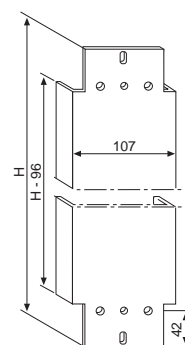


Intermediate mounting plate

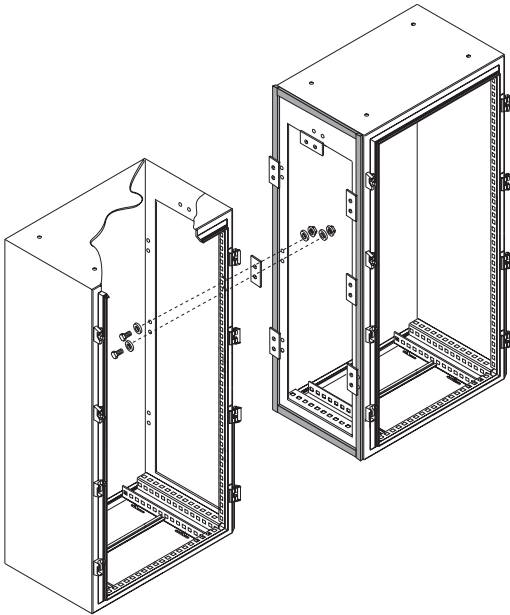


Intermediate plate to obtain a continuous surface of the mounting plate in enclosure coupling.

Enclosure height (A)	Plate height (H)	Reference
2000	1884	PMI 20



Enclosure coupling kit



Kit for joining **CMO** enclosures comprised of a sealing gasket and metal plates; includes the necessary hardware.

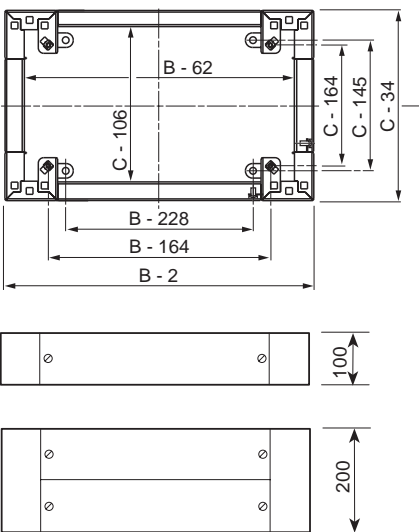
Reference: **CUCMO**.

Individual plinths



For direct coupling to enclosures using the floor fixing holes.

- 100 and 200 mm high.
- Accessible from the front and back.
- Anthracite grey RAL-7022.



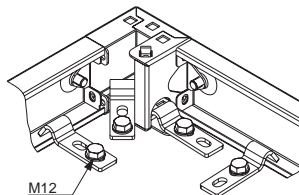
Enclosure dimensions		Plinth height = 100 mm Reference	Plinth height = 200 mm Reference
Width (B)	Depth (C)		
600	300	ZUN 63/100	ZUN 63/200
600	400	ZUN 64/100	ZUN 64/200
600	500	ZUN 65/100	ZUN 65/200
600	600	ZUN 66/100	ZUN 66/200
800	300	ZUN 83/100	ZUN 83/200
800	400	ZUN 84/100	ZUN 84/200
800	500	ZUN 85/100	ZUN 85/200
800	600	ZUN 86/100	ZUN 86/200
1000	300	ZUN 103/100	ZUN 103/200
1000	400	ZUN 104/100	ZUN 104/200
1000	500	ZUN 105/100	ZUN 105/200
1200	300	ZUN 123/100	ZUN 123/200
1200	400	ZUN 124/100	ZUN 124/200
1200	500	ZUN 125/100	ZUN 125/200
1200	600	ZUN 126/100	ZUN 126/200
1600	400	ZUN 164/100	ZUN 164/200
1600	500	ZUN 165/100	ZUN 165/200
1600	600	ZUN 166/100	ZUN 166/200

Plinth fixing



Set of 4 floor-fixing pieces for the **ZUN** plinth, made of 5 mm thick zinc-coated sheet steel. Especially suited for when the perforations incorporated on the plinth cannot be used, as well as to reinforce the floor fixing. Designed for use with M12 screws (not supplied).

Reference: **PFZUN**.



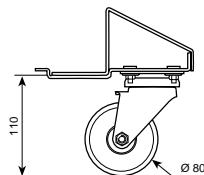
Wheels for transport



Set of 4 wheels quickly mounted on the plinth, two of which are self-locking.

Reference: **RUT/ZUN**.

Max. weight per wheel = 75 kg.



Adjustable legs

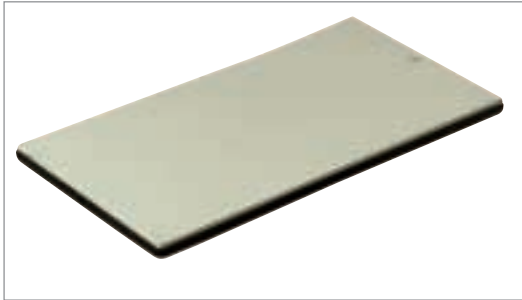


Set of four adjustable legs.

Maximum load per leg: 100 kg.

Reference: **PRMA**.

Plain cable entry plate



They come with all the hardware and elements necessary for direct fixing to the enclosure on both the upper and lower parts. Made of sheet steel protected with polyester epoxy paint in light grey RAL-7032.

Enclosure measurements (mm)		Reference
Width (A)	Depth (B)	
600	300	ECMO 63/0
600	400	ECMO 64/0
600	500	ECMO 65/0
600	600	ECMO 66/0
800	300	ECMO 83/0
800	400	ECMO 84/0
800	500	ECMO 85/0
800	600	ECMO 86/0
1000	300	ECMO 103/0
1000	400	ECMO 104/0
1000	500	ECMO 105/0
1200	300	ECMO 123/0
1200	400	ECMO 124/0
1200	500	ECMO 125/0
1200	600	ECMO 126/0
1600	400	ECMO 164/0
1600	500	ECMO 165/0
1600	600	ECMO 166/0

Brush cable entry



Set of two brush gaskets to be installed on cable entry plates on **CMO** enclosures.

- Frame made of aluminium.
- Fixed with clips.
- Brushes made of 34 mm wide black plastic fibre.

Width enclosure/control desk	Reference
600	JPCM 6
800	JPCM 8
1000	JPCM 10
1200	JPCM 6 (1)
1600	JPCM 8 (1)

(1) Use two sets for enclosures with width B = 1200/1600.

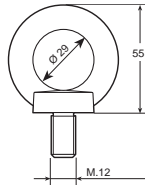
Eyebolts



M12 lifting eyebolts bolted directly to the enclosure structure.

Reference: CMO: **TMO/12.**

Set of 2 eyebolts.



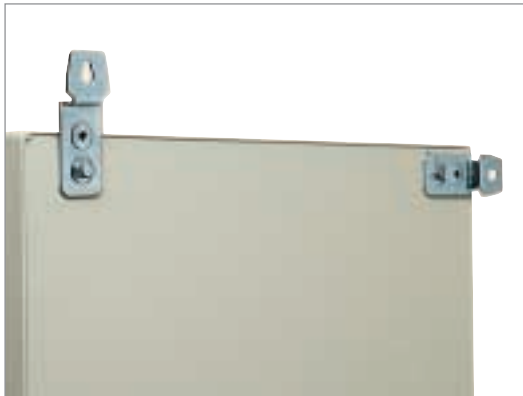
Canopies



For direct coupling to CMO enclosures using the holes for the eyebolts. Protected both externally and internally by texturised RAL-7032 grey polyester epoxy resin.

Enclosure dimensions		Reference
Width (B)	Depth (C)	
600	300	TJ 6030 CMO
600	400	TJ 6040 CMO
600	500	TJ 6050 CMO
600	600	TJ 6060 CMO
800	300	TJ 8030 CMO
800	400	TJ 8040 CMO
800	500	TJ 8050 CMO
800	600	TJ 8060 CMO
1000	300	TJ 10030 CMO
1000	400	TJ 10040 CMO
1000	500	TJ 10050 CMO
1200	300	TJ 12030 CMO
1200	400	TJ 12040 CMO
1200	500	TJ 12050 CMO
1200	600	TJ 12060 CMO
1600	400	TJ 16040 CMO
1600	500	TJ 16050 CMO
1600	600	TJ 16060 CMO
1800	500	TJ 18050 CMO
1800	600	TJ 18060 CMO
2000	500	TJ 20050 CMO
2000	600	TJ 20060 CMO
2400	500	TJ 24050 CMO
2400	600	TJ 24060 CMO

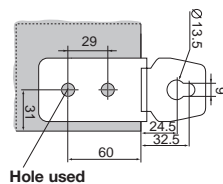
Wall-fixing parts



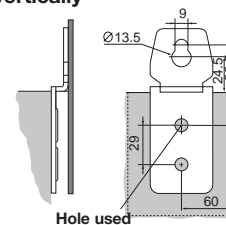
Made of zinc-coated steel. Direct fixing on the outside of the enclosure using the corresponding hardware. Set of 2.

Reference: **FMCO**.

Horizontally



Vertically



Internal door



To be directly incorporated into **CMO** enclosures, made of sheet steel, painted with texturised RAL-7032 grey polyester epoxy resin.

- Depth adjustable in 25 mm intervals.
- Door opens to the left or the right indistinctly.
- Reinforcement profiles on the back part with cut-outs every 25 mm for the door equipment.
- Standard double bar locks. By fixing the wing nut to the lock, the double bar lock becomes a handle lock. Easily changeable to triangle, square lock or key-operated lock. See **CRN** lock section.

Enclosure measurements (mm)		D	Reference
Height (A)	Width (B)		
1600	600	350	PIL 166
1600	800	550	PIL 168
1800	600	350	PIL 186
1800	800	550	PIL 188
1800	1000	700	PIL 1810
1800	1000	700	PIL 18102P*
2000	600	350	PIL 206
2000	800	550	PIL 208
2000	1000	700	PIL 2010
2000	1000	700	PIL 20102P*

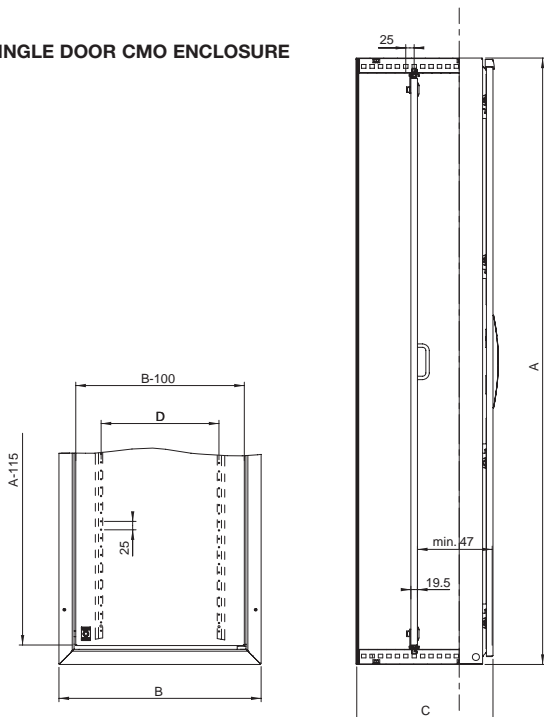
* For double door enclosures.

C = nominal depth of enclosure

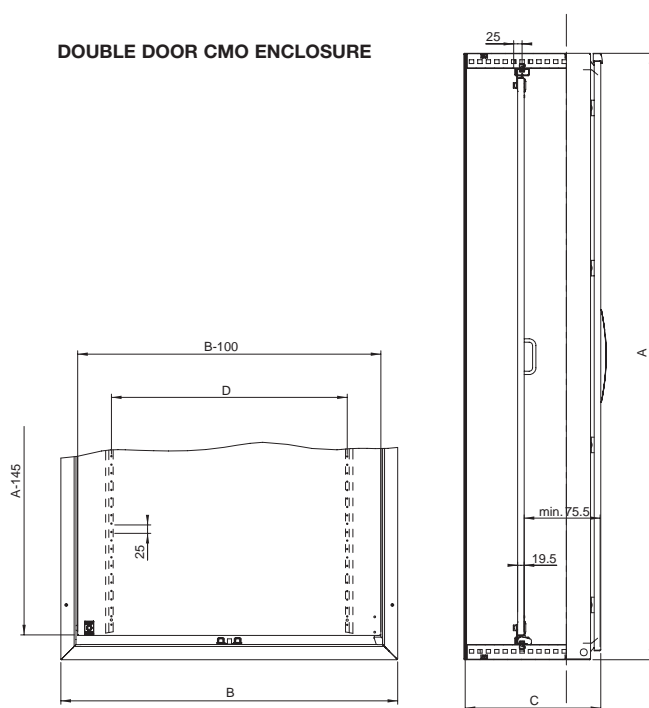


Side view of installed internal door, with detail of lock position.

SINGLE DOOR CMO ENCLOSURE



DOUBLE DOOR CMO ENCLOSURE

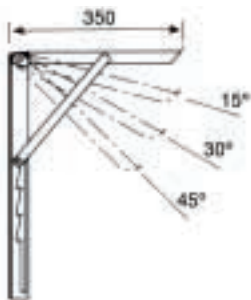


Folding support tray



Made of sheet steel in grey RAL-7032. To be fixed directly to the door reinforcement frame, height-adjustable every 25 mm and with the possibility of placing the tray in 4 different positions.

Enclosure dimensions	Reference
Width (B)	
600	BSP/OL 6
800	BSP/OL 8

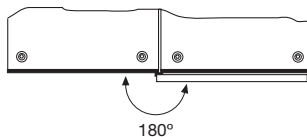


180° hinges



Made of black anodised aluminium. Ready to be attached to both plain and transparent doors.

Reference: **BEM 180**.



Door retainer



Mechanical or pneumatic door retainers for direct incorporation into the structure of the enclosure.

- Easy installation.
- Opening from 90° to 120°, depending on model.

Specifications	Reference
2 position mechanical retainers (90° and 120°) for doors with hinges on the right	RET/OL
Ideal for doors with hinges on the left	RET I/OL
Pneumatic retainer for 90°/120° opening	RETN/OL

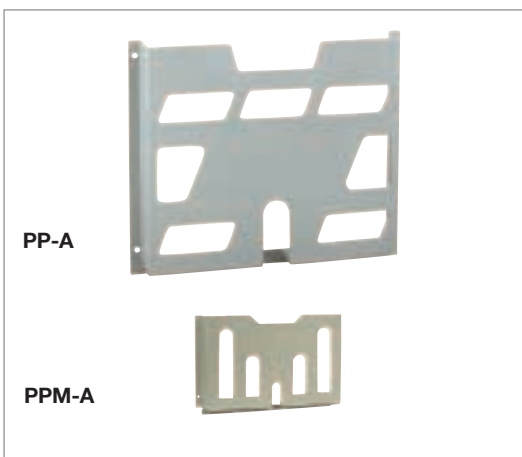
Door centring piece



The door centring piece levels the door when laden with heavy equipment. Max. door load: 60 kg.

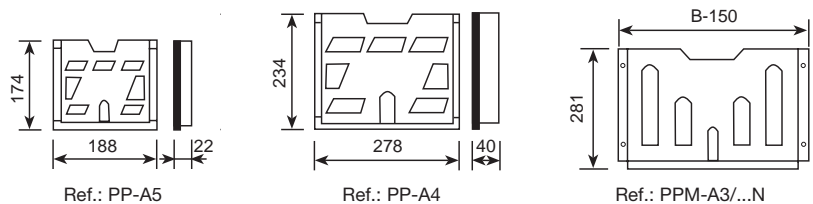
Reference: **CP/CMOL**.

Document pocket



- **PP-A** models made of PS in grey RAL-7035.
 - Fixed with adhesive tape or screws.
 For holding DIN A3, A4 or A5-sized plans.
- **PPM-A** models made of sheet steel and painted grey RAL-7032.
 - Fixed to the reinforcement frame of the door with screws.

INSULATED		METAL	
Plan size	Reference	Enclosure width dimensions (B)	Reference
A4	PP-A4	600	PPM-A3/6N
A5	PP-A5	800	PPM-A3/8N



Flat lock



EMP/OLN

Standard **CMO** lock.

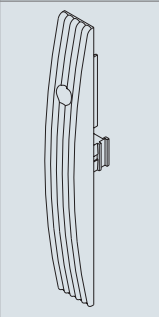

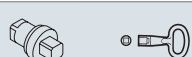


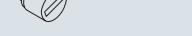
Standard double bar mechanism (standard supply).

■ Operation using:

□ **LDB 5** key  (according to DIN 43668).

■ For changing the lock inserts corresponding to **PIL** internal doors, consult the **CRN** enclosure lock section.

TRANSFORMATION OF THE STANDARD LOCK TO STANDARDISED VARIATIONS

Key operation Ref.	Reference	Specifications
		TPT7/OLN Triangle lock with de 7 mm side
		TPT8/OLN Triangle lock with de 8 mm side
		TPC6/OLN Square lock with □ 6 mm side
		TPC7/OLN Square lock with □ 7 mm side
		TPC8/OLN Square lock with □ 8 mm side
		TPDB5/OLN Ø5 mm double bar
	TPDES/OLN Slotted-head screwdriver	

Handle locks



MCS/OLN



Padlock Ref. BC/OLN.















MCS/OLN

Handle lock with standard double bar mechanism (supplied without insert). The insert must be ordered separately.

■ Operation with **LDB/OLN**  key (according to DIN 43668).

TRANSFORMATION OF THE STANDARD LOCK TO STANDARDISED VARIATIONS

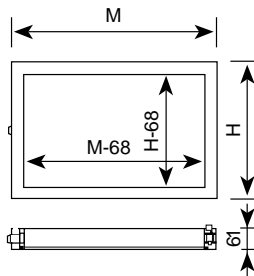
Key operation Ref.	Reference	Specifications
	TT 7/OLN	Triangle lock with 7 mm side
	TT 8/OLN	Triangle lock with 8 mm side
	TT 9/OLN	Triangle lock with 9 mm side
	TT 10/OLN	Triangle lock with 10 mm side
	TCNOMO/OLN	CNOMO triangle lock with 6.5 mm side
	TCNOMO/OLN-2P	CNOMO triangle lock 6.5 mm side for two door enclosures
	TC 6/OLN	□ 6 mm square lock
	TC 7/OLN	□ 7 mm square lock
	TC 8/OLN	□ 8 mm square lock
	TC 6H/OLN	□ 6 square lock female
	TC 8H/OLN	□ 8 square lock female
	TDB3/OLN	3 mm double bar lock
	TDB5/OLN	5 mm double bar lock
	TEX10/OLN	○ 10 mm hexagonal lock
	TS/OLN	Lock using pushbutton
	TFI/OLN	FIAT lock
	TM24/OLN	2 x 4 coin lock
	TCOR/OLN	Crown lock (tube)
	TAUSA/OLN	Channelled
	TBENZ/OLN	Daimler Benz lock
	TLR/OLN	Locking catch with reinforced key
	TJIS/OLN	JIS
	TFAC/OLN	FAC-type lock
	TL/OLN	405-type key lock
	TLB/OLN	Top lock with 405 key
	TLE1/OLN	E1 lock
	TL421E/OLN	421 E key operated lock
	TL455/OLN	455 key-operated lock
	TL1242E/OLN	1242 E key operated lock
	TL1332E/OLN	1332 E key operated lock
	TL2131A/OLN	2131 A key operated lock
	TL2132A/OLN	2132 A key operated lock
	TL2331A/OLN	2331 A key operated lock
	TL2433A/OLN	2433 A key operated lock
	TL2452E/OLN	2452 E key operated lock
	TL3113A/OLN	3113 A key operated lock
	TL3122E/OLN	3122 E key operated lock
	TL3123A/OLN	3123 A key operated lock
	TL3133A/OLN	3133 A key operated lock
	TL3422E/OLN	3422 E key operated lock
TL3432E/OLN	3432 E key operated lock	
TL1300/OLN	EDF 1300 key operated lock	
TL1400/OLN	EDF 1400 key operated lock	
	ABDIN/OLN	Adap. DIN insert
	ABKABA/OLN	Adap. KABA insert
	ABASSA/OLN	Adap. ASSA insert
	MCS/MICH8376	Michelin-type handle-operated lock
	MCS/MICH8079	Michelin-type handle-operated lock
	MCS/MICH8133	Michelin-type handle-operated lock

Control protection frames



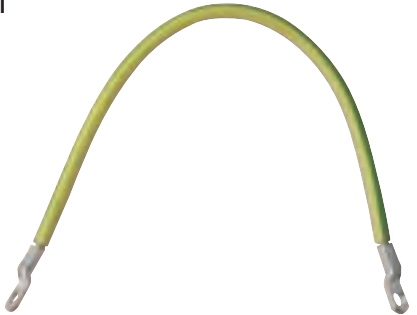
Made of natural colour anodised extruded aluminium, with a neoprene gasket, hinges that fix directly to the door and a key operated lock.

Height (H)	Width (M)	Reference
400	400	MA-44
400	500	MA-45
400	600	MA-46
500	500	MA-55
600	600	MA-66



Earthing connections and braids

CTI



CTAF

Earthing connection **CTI**: terminal of brass and copper alloy with PVC cover.

Earthing braid **CTAF**: guarantees the earthing connection for high frequencies, avoiding the interference currents that are produced at high frequencies. Made of tinned copper.

Length mm	Width mm	Section mm ²	Terminal Ø mm	Reference
170	-	6	6.4	CTI 17/6
170	-	10	6.4	CTI 17/10
220	-	6	6.4	CTI 22/6
220	-	10	6.4	CTI 22/10
220	-	25	8.3	CTI 22/25
410	-	10	8.3	CTI 41/10
410	-	25	8.3	CTI 41/25
155	20	16	8.5	CTAF 15/16
200	21	25	8.5	CTAF 20/25
200	26	25	8.5	CTAF 25/25
200	40	50	8.5	CTAF 20/50

Mounting plate



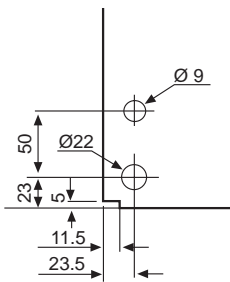
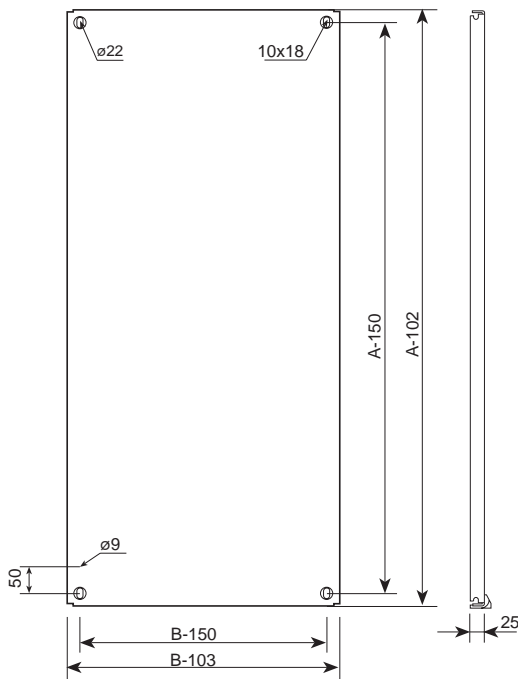
Made of galvanised sheet steel, with a perimeter reinforcement rib. The vertical edges are reinforced with a double edge.

Depth adjustable in 25 mm intervals.

On suites of two or more enclosures with mounting plates, it is possible to obtain a continuous plate surface using **PMI** intermediate plates (see page 1/93).

■ Maximum load 600 kg if located at the back and 500 kg in intermediate position.

Enclosure dimensions		Reference
Height (A)	Width (B)	
1000	1000	PMOL 1010
1200	800	PMOL 128
1200	1000	PMOL 1210
1200	1200	PMOL 1212
1400	600	PMOL 146
1400	800	PMOL 148
1400	1000	PMOL 1410
1400	1200	PMOL 1412
1600	600	PMOL 166
1600	800	PMOL 168
1600	1000	PMOL 1610
1600	1200	PMOL 1612
1800	600	PMOL 186
1800	800	PMOL 188
1800	1000	PMOL 1810
1800	1200	PMOL 1812
1800	1600	PMOL 1816
2000	600	PMOL 206
2000	800	PMOL 208
2000	1000	PMOL 2010
2000	1200	PMOL 2012
2000	1600	PMOL 2016



Lateral mounting plate

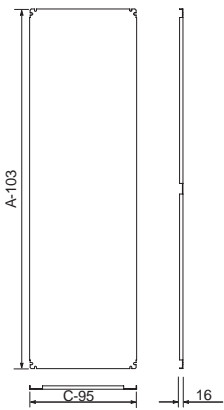


Made of galvanised sheet steel, with perimeter reinforcement ribs on all four sides.

Prepared to be mounted on the sides of the enclosure.

For enclosure height 1800 order TML40180 and STCMO.

For enclosure height 2000 order TML40200 and STCMO.



Enclosure dimensions		Reference
Height (A)	Depth (C)	
1800	600	PMLOL186
1800	800	PMLOL188
2000	600	PMLOL206
2000	800	PMLOL208

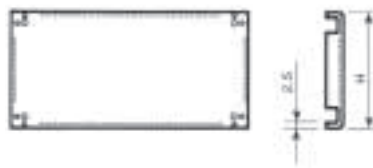
Partial mounting plate



Made of galvanised sheet steel, with perimeter reinforcement ribs on all four sides.

Fixed directly to the universal chassis profiles or to the enclosure using **TML..**mounting profiles.

Enclosure width (B)	Plate height (H)	Reference
600	247	PMP 2560
	397	PMP 4060
	597	PMP 6060
800	247	PMP 2580
	397	PMP 4080
	597	PMP 6080
1000	247	PMP 25100
	397	PMP 40100
	597	PMP 60100
1200	247	PMP 25120
	397	PMP 40120
	597	PMP 60120
1600	397	PMP 40160



Universal chassis system



CMO 168/30 + MOL 160 + PMP 6080 + PMR 6080 + CDP 80

Universal chassis designed to be coupled directly to **CMO** enclosures. When fixed to the supports, it is possible to adjust the depth of the mounting plates every 25 mm. This permits mounting any type of equipment on the plate and/or a DIN rail.

- Set of vertical profiles.
- Partial, plain and slotted mounting plates.

Set of profiles for universal chassis



Set of vertical profiles for fixing plates and rails.

Enclosure dimensions Height (A)	Reference
1000	MOL 100
1200	MOL 120
1400	MOL 140
1600	MOL 160
1800	MOL 180
2000	MOL 200



Slotted mounting plate

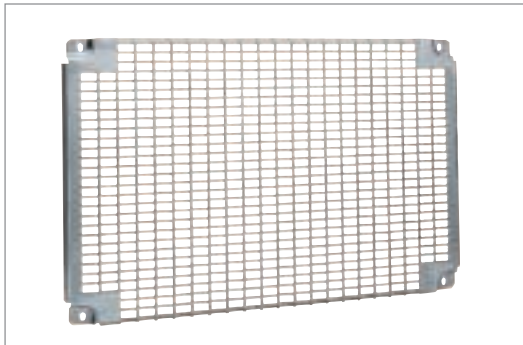


Plate specially designed for quick mounting of equipment using the **TFP** locking nuts. Made of zinc-coated steel.

To be directly coupled to the bottom of the enclosure itself or to the adjustable support plates.

- Maximum load 150 kg/m².

Enclosure dimensions		Reference
Width (B)	Plate height (H)	
600	225	PMR 2260
	450	PMR 4560
	600	PMR 6060
800	825	PMR 8260
	225	PMR 2280
	450	PMR 4580
1000	600	PMR 6080
	825	PMR 8280
	225	PMR 22100
1200	450	PMR 45100
	600	PMR 60100
	825	PMR 82100
	225	PMR 22120
	450	PMR 45120
	600	PMR 60120
	825	PMR 82120

Set of fixing supports for plate



Set of 4 fixing supports for plate to mount directly on the structure of the enclosure.

Reference: **EDCOL**.

Upper/lower adjustment rails

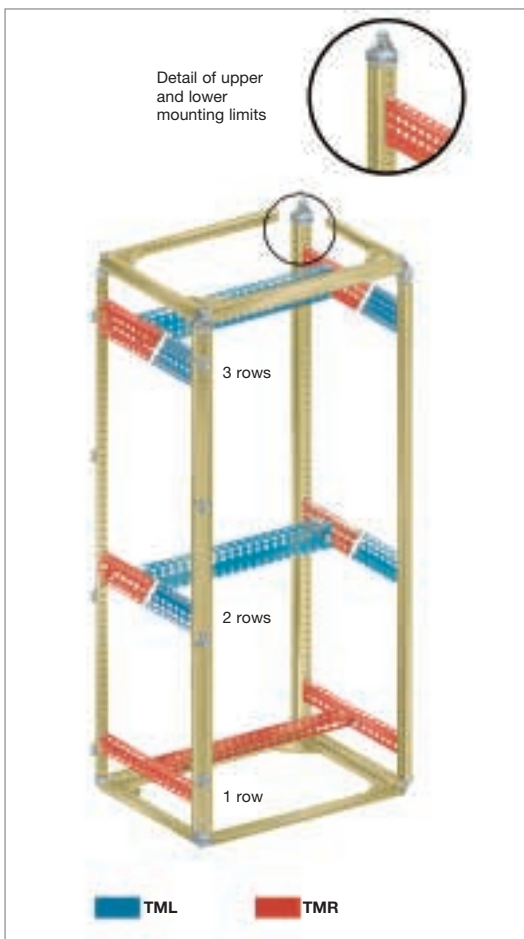


Made of galvanised sheet steel, folded and welded.

- For fixing vertical profiles in the centre part of 1200 mm width enclosures.
- Fixing using screws on the upper and lower part of the enclosure.
- Set of 4 pieces.

Enclosure dimensions Depth	Reference
300	DCOL 30
400	DCOL 40
500	DCOL 50
600	DCOL 60

Mounting profiles



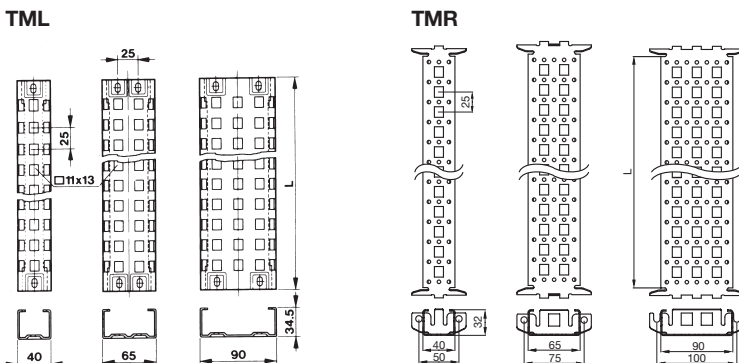
Nominal length L	40 mm width		65 mm width		90 mm width	
	TML	TMR	TML	TMR	TML	TMR
400 310	TML 40/40	TMR 40/40	TML 65/40	TMR 65/40	TML 90/40	TMR 90/40
500 410	TML 40/50	TMR 40/50	TML 65/50	TMR 65/50	TML 90/50	TMR 90/50
600 510	TML 40/60	TMR 40/60	TML 65/60	TMR 65/60	TML 90/60	TMR 90/60
800 710	TML 40/80	TMR 40/80	TML 65/80	TMR 65/80	TML 90/80	TMR 90/80
1000 910	TML 40/100	TMR 40/100	TML 65/100	TMR 65/100	TML 90/100	TMR 90/100
1200 1110	TML 40/120	TMR 40/120	TML 65/120	TMR 65/120	TML 90/120	TMR 90/120
1400 1310	TML 40/140	-	TML 65/140	-	TML 90/140	-
1600 1510	TML 40/160	-	TML 65/160	-	TML 90/160	-
1800 1710	TML 40/180	-	TML 65/180	-	TML 90/180	-
2000 1910	TML 40/200	-	TML 65/200	-	TML 90/200	-

Two ranges of 40 mm (1 row), 65 mm (2 rows) and 90 mm (3 rows) profiles, perforated every 25 mm for forming structures in the interior of the enclosure. They allow for depth adjustment in different installation systems (partial plates, 19" racks, etc.). The profiles with height 1000 to 2000 can be fixed to the back of the enclosure, screwed directly to the upper and lower support plate rails. Their placement is necessary in order to install horizontal profiles at various depths inside the enclosure.

- **TMR**: access to the 4 fixing screws from the exterior.
- **TML**: permits any type of installation.

Fixing to the structure using fixing supports, Ref. **STON**.

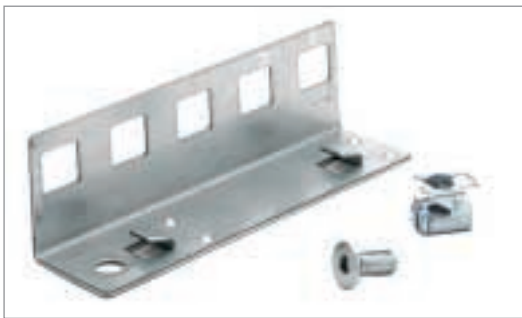
Delivered in sets of 2 units, along with the hardware for mounting them.



Set of 4 fixing supports for profiles



- Used to support the profiles at various depths in **CMO** enclosures.
- Fixed directly to the front part of the enclosure to support the **TML** profiles at varying depths.
- Made of galvanised steel.
Ref.: **STCMO**.



Door profile

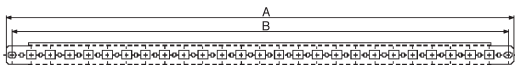


Profile designed to be fixed to the structure and to the interior doorframe of the indicated enclosures.

Equipped with 5 mm diameter perforations and rectangles measuring 13 x 11 every 25 mm, enabling fixing with self-tapping screws or **TNS...** nuts.

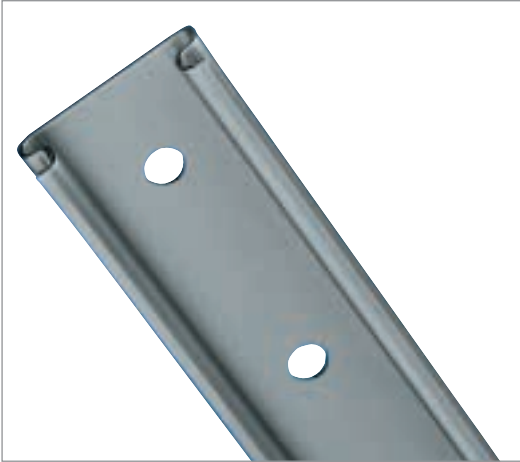
Profile made with 1.5 mm thick galvanised steel sheet.

Supply includes the necessary fasteners inside the plastic bag, self-tapping screws and washers. Cage nuts and M6 screws are also included for references that are mounted only on the structure (**TEP60/70, TEP80/90, TEP100/110** and **TEP120/130**).



Reference	Width or depth of the structure (mm)	Door width (mm)	A	B
TEP30/40	300	400	266	250
TEP40/50	400	500	366	350
TEP50/60	500	600	466	450
TEP70/80	-	800	666	650
TEP90/100	-	1000	866	850
TEP60/70	600	-	566	550
TEP80/90	800	-	766	750
TEP100/110	1000	-	966	950
TEP120/130	1200	-	1166	1150

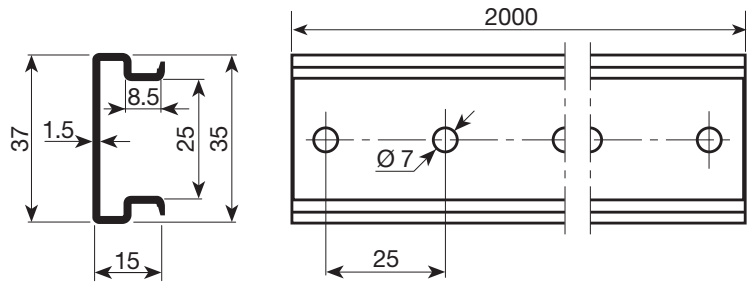
Double profile rail



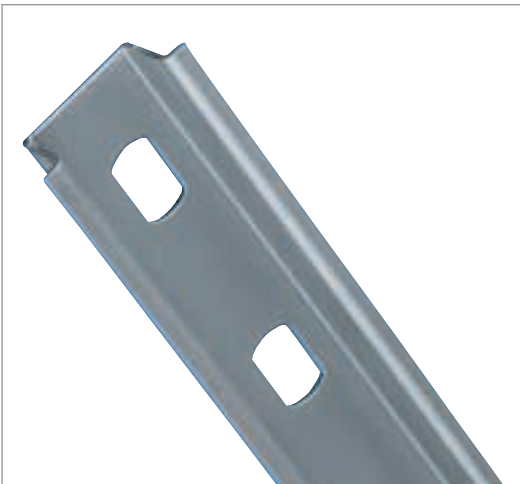
- Combines the advantages of symmetrical and asymmetrical DIN rails.
- Direct fixing to the structure.
- Continuity of level guaranteed in case of coupling the enclosures.
- Galvanised sheet.
- Sheet thickness: 1.5 mm.

Reference	Enclosure width (mm)	Units per package
CDP60	600	10
CDP80	800	10
CDP100	1000	10
CDP120	1200	10
CDP200*	2000	10

* Without perforations.

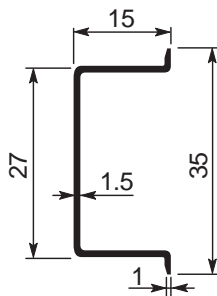


Symmetrical DIN rail

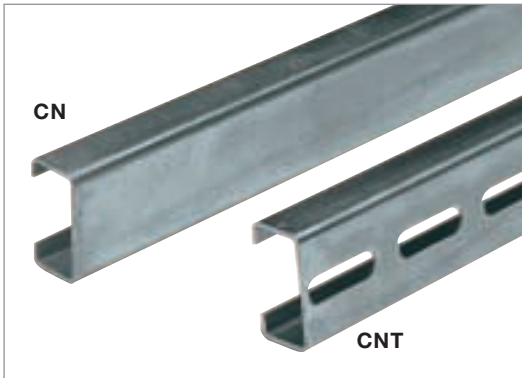


- Direct fixing on the structure.
- Continuity of level guaranteed in case of coupling the enclosures.
- Galvanised sheet.

Reference	Enclosure width (mm)	Units per package
CSO60	600	10
CSO80	800	10
CSO100	1000	10
CSO120	1200	10



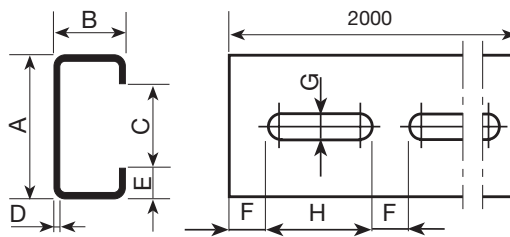
Symmetrical rails



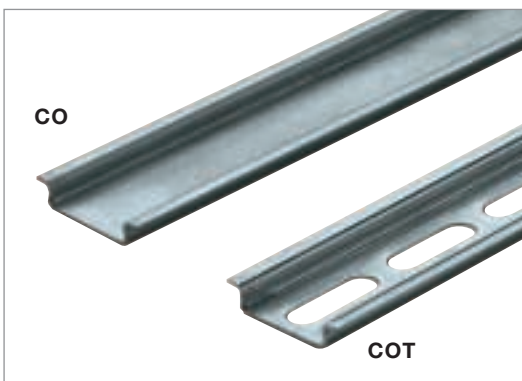
Metal rails made of galvanised sheet.

- For supporting and fixing equipment in frames and enclosures.
- Forming chassis and racks, combining them with their corresponding joints and sliding and caged nuts.
- Panel reinforcements.
- Tube guides, grooves and continuous lighting strips.
- Length 2 m.

Reference	A	B	C	D	E	F	G	H
CN-20	21	11	10	1.5	5.5	-	-	-
CN-40	40	20	24	1.5	8	-	-	-
CN-60	60	30	36	2	12	-	-	-
CNT-20	21	11	10	1.5	5.5	5	6.2	15
CNT-40	40	20	24	1.5	8	10	8.5	30
CNT-60	60	30	36	2	12	10	10.5	30



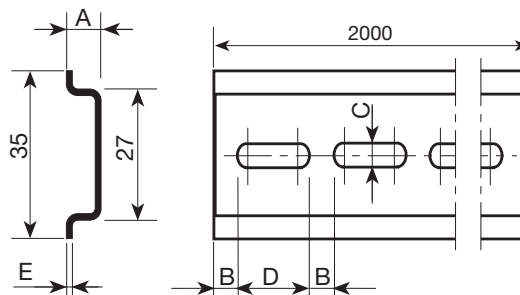
35 DIN rails



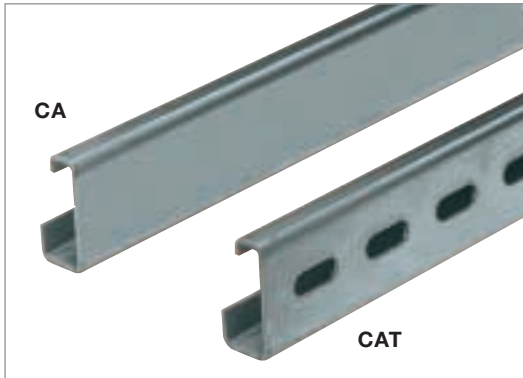
Metal rails made of galvanised sheet.

- For direct support of all types of equipment prepared for this type of fixing to 35 DIN rail.
- Length 2 m.

Reference	A	B	C	D	E
CO-35	7.3	-	-	-	1
CO-35/15	15	-	-	-	1.5
COT-35	7.3	7	7.2	25	1
COT-35/15	15	7	7.2	25	1.5



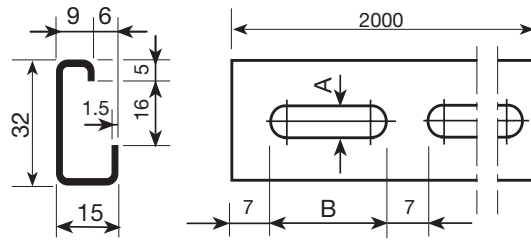
Asymmetrical rails



Asymmetrical metal rails for mounting electronic equipment in frames using special nuts. Quick mounting of connection terminals, according to DIN 46277/1.

- Length 2 m.

Reference	A	B
CA-32	-	-
CAT-32	7.2	25

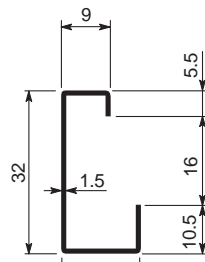


Asymmetrical DIN rail

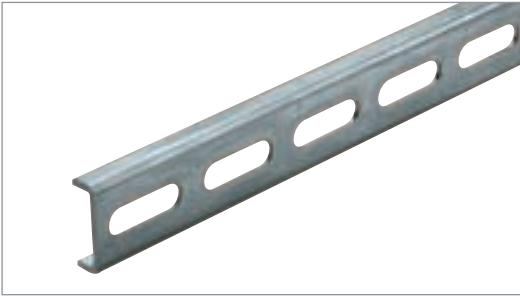


- Direct fixing to the structure.
- Continuity of level guaranteed in case of coupling the enclosures.
- Galvanised sheet.
- Sheet thickness: 1.5 mm.

Reference	Enclosure width (mm)	Units per package
CAON60	600	10
CAON80	800	10
CAON100	1000	10
CAON120	1200	10

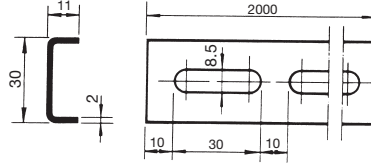


U rails

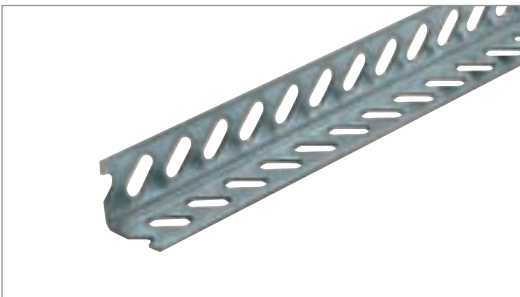


Universal rails made of galvanised sheet. Standard length 2 m. All the 8.5 mm oval perforations allow housing M4, M5 and M6 caged nuts in their interior.

Ref.: **CUT-30**.

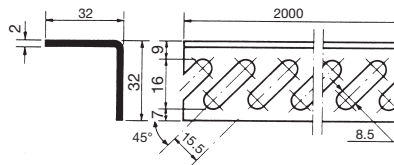


L rails



Universal rails made of galvanised sheet. Standard length 2 m. All the 8.5 mm oval perforations allow housing M4, M5 and M6 caged nuts in their interior.

Ref.: **AT-32**.



Nuts and screws



Type of thread	To be coupled to			To couple to enclosure structure profile		
	PMR plates and MOL profiles	CDP double rails		MOL profiles	Simple nut	Double nut
M3	TFP 3	-	-	-	-	-
M4	TFP 4	-	TDE 4	-	-	-
M5	TFP 5	TDC 56	TDE 5	-	-	-
M6	TFP 6	TDC 56	TDE 6	TDM 6	TNS 6	TLD 6
M8	-	-	-	TDM 8	TNS 8	TLD 8

FIXING SCREW WITH WASHER

Thread type	Length (mm)	Reference
M4	10	TOR 10/4 A
M4	16	TOR 16/4 A
M5	12	TOR 12/5 A
M5	18	TOR 18/5 A
M6	12	TOR 12/6 A
M6	16	TOR 16/6 A
M6	18	TOR 18/6 A
M8	16	TOR 16/8 A
M8	20	TOR 20/8 A
self-tapping	16	TOR 16/5 AT*

* Metal self-tapping screw with contact washer.

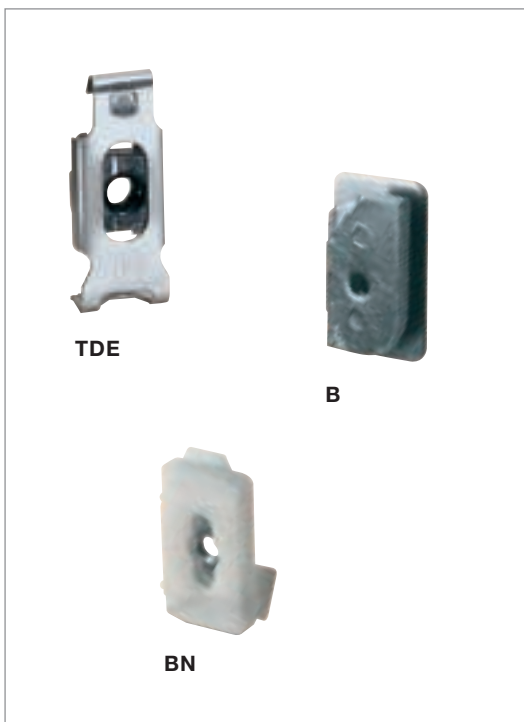
Caged nuts



Coupled in 8.5 mm openings, such as those corresponding to **CUT-30** and **CNT-40** rails and, in general, to any 8.5 mm opening with a material thickness between 0.5 and 3.5 mm.

Reference	Thread	Sheet thickness
TM-415	M4	0.5-1.5
TM-425	M4	1.6-2.5
TM-435	M4	2.6-3.5
TM-515	M5	0.5-1.5
TM-525	M5	1.6-2.5
TM-535	M5	2.6-3.5
TM-615	M6	0.5-1.5
TM-625	M6	1.6-2.5
TM-635	M6	2.6-3.5

Sliding nuts



The various types of sliding nuts, metal and combiplas, can be used at any point as well as on the front of the rail without needing to introduce them from the ends of the rail. They remain pressure-fixed to a fixing point, but can slide along the rail in order to obtain the desired position.

Metal

Made of galvanised sheet steel.

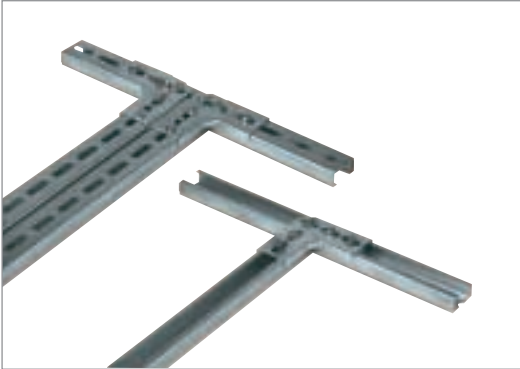
Reference	Thread	To be coupled to rails
TDE 4	M4	CO... and CDP...
TDE 5	M5	CO... and CDP...
TDE 6	M6	CO... and CDP...
B-204	M4	CN and CNT-20
B-404	M4	CN and CNT-40
B-406	M6	CN and CNT-40

Combiplas

The series is made up of four basic types made of nylon that include adapted threaded steel plates.

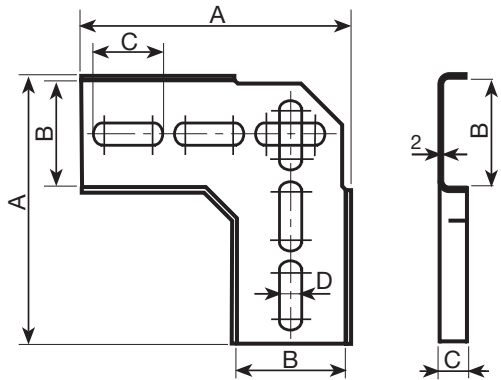
Reference	Thread	To be coupled to rails
BC-303	M3	CA and CAT-32
BC-304	M4	CA and CAT-32
BC-306	M6	CA and CAT-32
BN-203	M3	CN and CNT-20
BN-204	M4	CN and CNT-20
BN-206	M6	CN and CNT-20
BN-404	M4	CN and CNT-40
BN-406	M6	CN and CNT-40
BN-408	M8	CN and CNT-40
BN-4046	M4 and M6	CN and CNT-40
BN-606	M6	CN and CNT-60
BN-608	M8	CN and CNT-60
BN-610	M10	CN and CNT-60
BN-6068	M6 and M8	CN and CNT-60
BN-60610	M6 and M10	CN and CNT-60
BN-60810	M8 and M10	CN and CNT-60

EMA brackets



EMA brackets can be used to join two rails (**CN** and **CNT**, 20-40 mm) at right angles. A T joint can also be obtained. They are especially suitable for chassis or frame formation, as well as the corresponding cross bars. Single for light material, or double for heavier material.

Reference	A	B	C	D	E
EMA-20	60	21.1	6	6.2	15
EMA-40	100	40.1	10	8.5	25

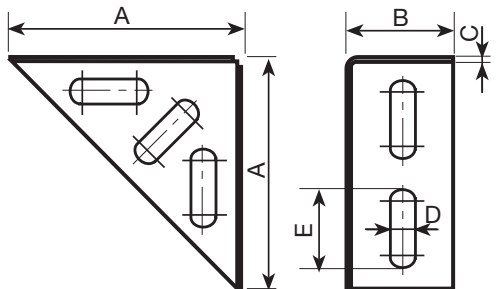


EVA brackets



EVA brackets can be used to join two or three rails (**CN** and **CNT**, 20-40 mm), forming an overlapping structure on a different plane or at a right angle for forming spacers or supports at different levels.

Reference	A	B	C	D	E
EVA-20	42	19	1.5	6.2	15
EVA-40	78	36	2.5	8.5	25

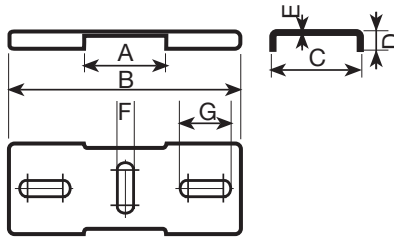


UCA brackets



UCA brackets can be used for cross joints of three rails on the same plane, within a frame, for example.

Reference	A	B	C	D	E	F	G
UCA-22	21.2	60	21.1	6	2	6.2	15
UCA-44	40.2	116	40.2	10	2.5	8.5	25

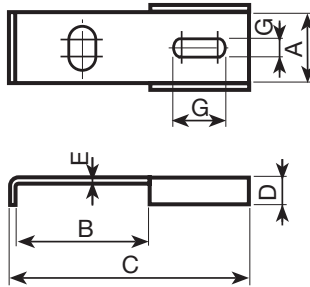


UTA brackets

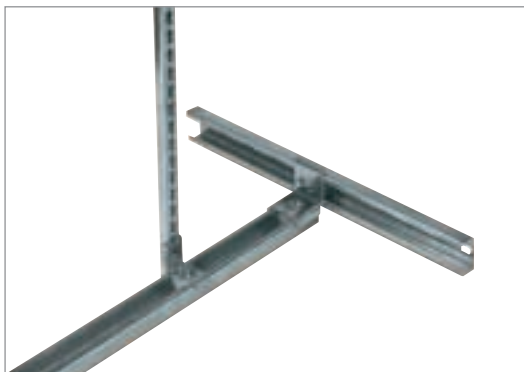


UTA brackets can be used for forming T joints from two rails, such as **CN** and **CNT**, or a 20 rail with a 40 rail. They are especially suited to form cross bars in chassis and frames.

Reference	A	B	C	D	E	F	G
UTA-22	21.2	21.5	53.5	8	2	15	6.2
UTA-42	21.2	40.5	72.5	8	2	15	6.2
UTA-44	40.2	40.5	81	10	2.5	25	8.5

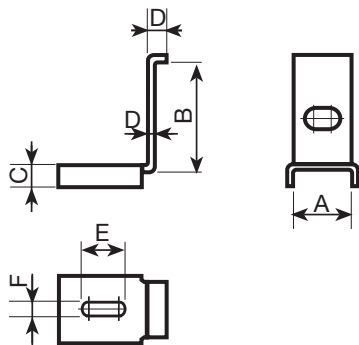


ECA brackets



ECA brackets can be used for cross joints of two rails placed perpendicularly on different planes.

Reference	A	B	C	D	E	F
ECA-22	21.2	21.5	8	2	15	6.2
ECA-42	21.2	40.5	8	2	15	6.2
ECA-44	40.2	40.5	10	2.5	25	8.5

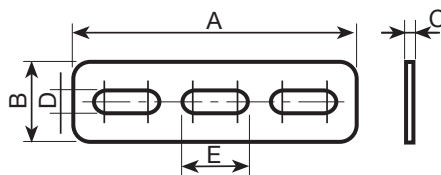


UR brackets

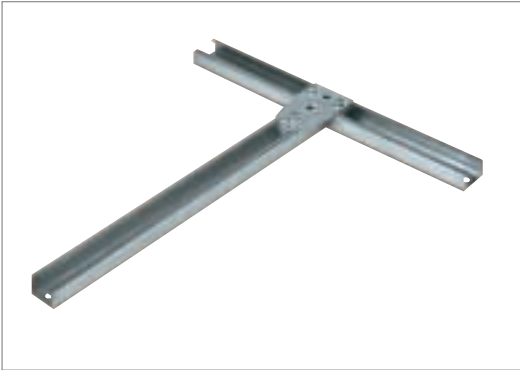


UR brackets can be used for linear joints of 20, 40 and 60 mm **CN** and **CNT** rails. Such as when the standard length is not enough or to use fragments.

Reference	A	B	C	D	E
UR-20	60	18	2	5	15
UR-40	130	36	3	10	30
UR-60	130	55	3	10	30

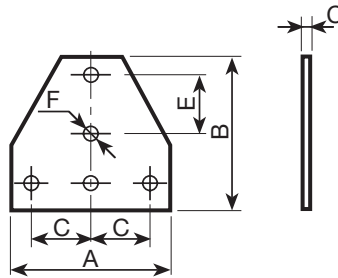


UT brackets



UT brackets can be used to form T joints of 20, 40 and 60 mm **CN** and **CNT** rails. They are used to form cross bars in frames and chassis.

Reference	A	B	C	D	E	F
UT-20	54	54	20	2	20	5
UT-40	60	80	20	2	25	8
UT-60	80	110	25	3	29	10

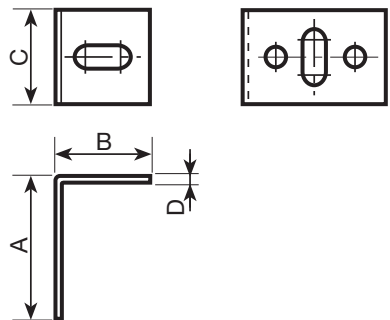


EN brackets



EN brackets are universal fixing supports that allow all kinds of joints with change of plane between 20, 40 and 60 mm **CN** and **CNT** rails or between any other profile.

Reference	A	B	C	D
EN-20	35	21	21	2
EN-40	60	40	40	2.5
EN-60	60	60	60	3

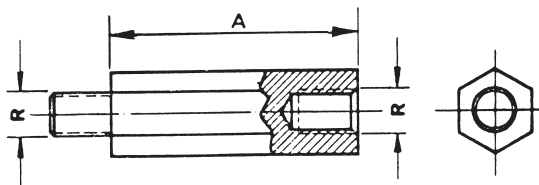


Hexagonal spacers



Metal hexagonal spacers for the elevation of equipment, mounting plates, etc.

By combining them, a variable height can be obtained with a progressive elevation of 2 by 2 mm with **EX** models and of 5 by 5 mm with **E** models.



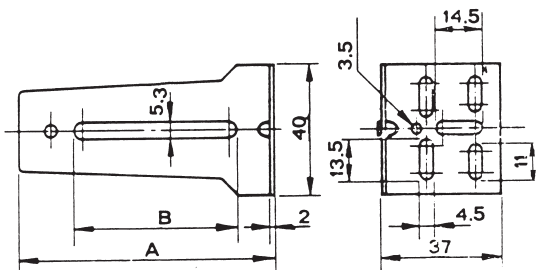
Reference	Height A	Thread R
EX-10/6	10	M6
EX-12/6	12	M6
EX-14/6	14	M6
EX-16/6	16	M6
EX-18/6	18	M6
EX-20/6	20	M6
EX-30/6	30	M6
EX-40/6	40	M6
EX-50/6	50	M6
EX-100/6	100	M6
EX-15/8	15	M8
EX-20/8	20	M8
EX-30/8	30	M8
EX-40/8	40	M8
EX-50/8	50	M8
EX-60/8	60	M8
EX-100/8	100	M8
E 10-25	10	M5
E 15-25	15	M5
E 20-25	20	M5

ETU modular lifting brackets



This series of lifting brackets has a large variety of uses and applications, mainly for mounting push buttons or signal lamps, with the mechanism or lamp holder attached and connected to the back of the enclosure and the actuator or window on the door. Also for mounting switches or equipment attached and connected to the back of the enclosure and the clutch control on the door. In general, they serve for any instance when it is necessary to mount equipment or rails at a different level from that of the mounting plate or basic chassis.

Made of cold-laminated sheet steel zinc dichromate.



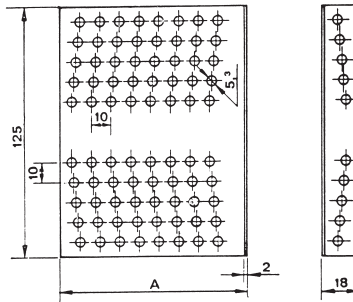
Reference	A	B	Combination of lifting brackets	Minimum height	Maximum height
ETU-48	48	25	ETU-48 + ETU-48	53	64
			ETU-48 + ETU-58	63	74
			ETU-48 + ETU-79	85	95
ETU-58	58	25	ETU-48 + ETU-118	124	134
			ETU-58 + ETU-58	73	84
			ETU-58 + ETU-79	94	104
ETU-79	79	55	ETU-58 + ETU-118	134	144
			ETU-79 + ETU-79	84	125
			ETU-79 + ETU-118	124	164
ETU-118	118	55	ETU-118 + ETU-118	164	204

EMM modular plates



Metal progressive modular plates. Every 2 mm combining 2 plates, **EMM-95**, an elevation distance between 108 and 178 mm can be obtained.

Reference	A
EMM-95	95



Fixed tray



With the possibility of directly fixing onto the structure if the tray has the same dimensions as the enclosure and on profiles is it is smaller (depth adjustable in this case).

With perforations for better interior air circulation.

Material: steel sheet painted with RAL7032.

Fitted with the necessary fixing system.

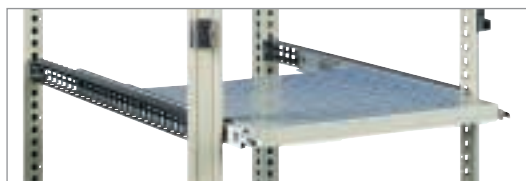
Maximum load: 50 kg.



Enclosure		Tray	
Width	Depth	Reference	A × P
600	400	BFMA64	482 × 290
600	500	BFMA65	482 × 390
600	600	BFMA66	482 × 490
800	400	BFMA84	682 × 290
800	500	BFMA85	682 × 390
800	600	BFMA86	682 × 490

Enclosure depth	2 profiles reference
500	TML40/40
600	TML40/50
800	TML40/60

Telescopic guides

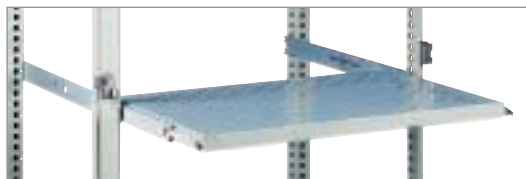


Set of 2 telescopic guides, mounted directly onto the structure.

The assembly of a telescopic tray consists of:

- 1 fixed tray.
- 2 telescopic guides.

Maximum load: 50 kg, evenly distributed.



Enclosure depth	Guides reference
400	GTMA40
500	GTMA50
600	GTMA60

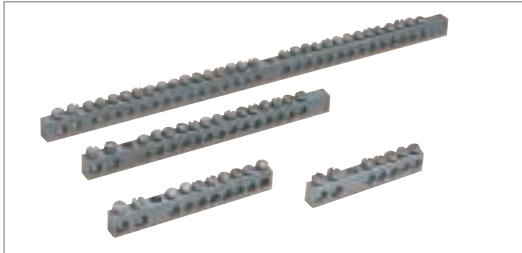
Fixing accessories



Supports to be incorporated directly onto 11 x 13 mm perforations of the enclosures and **TML** profiles.

Reference: **STON**.

Earth terminal blocks

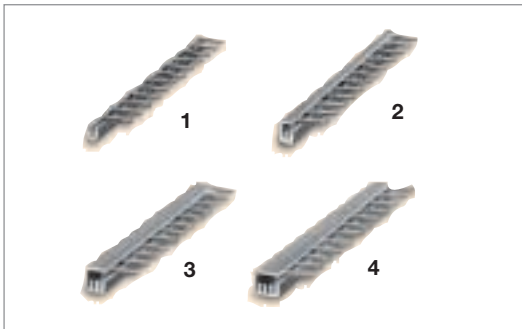


For neutral and earth bypass.

- **RBL** models be incorporated into COMBINORM - DSU - DTU boxes with insulated backs, in the housings provided for their fixing.
- **RBLZ** models with insulated plinth for pressure fixing on the 12 x 2 mm profiles on models DSU - DTM - CRD / CMD, provided with this fixing system for the terminal blocks.
- **RBL/416286 K** model consisting of two **RBL/216146 M** terminal blocks fixed onto a bakelite bar. This makes it possible to centre the standard supply **RBL/21656 M** terminal, thus achieving a total of six 16 mm² and thirty-three 6 mm² terminals to be incorporated into 15 and 30 module boxes with insulated DSU back.

Reference	Number of terminals x mm ² section	To couple to boxes / enclosures
RBL/21656 M	2 x 16 mm ² + 5 x 6 mm ²	COMBINORM - DSU - DTU
RBL/21686 M	2 x 16 mm ² + 8 x 6 mm ²	COMBINORM - DSU - DTU
RBL/216146 M	2 x 16 mm ² + 14 x 6 mm ²	COMBINORM - DSU - DTU
RBL/216296 M	2 x 16 mm ² + 29 x 6 mm ²	COMBINORM - DSU - DTU
RBLZ/21656	2 x 16 mm ² + 5 x 6 mm ²	DSU - DTM - CRD/CMD
RBLZ/21686	2 x 16 mm ² + 8 x 6 mm ²	DSU - DTM - CRD/CMD
RBLZ/216146	2 x 16 mm ² + 14 x 6 mm ²	DSU - DTM - CRD/CMD
RBLZ/216296	2 x 16 mm ² + 29 x 6 mm ²	DSU - DTM - CRD/CMD
RBLZ/416286 K	2 x 16 mm ² + 14 x 6 mm ²	DSU

Distribution terminals



For the distribution in a single row of automatic switches with a total of 12 modules.

Reference	No. of bars	No. of poles per bar	Fig. No.
BDS 1/12	1	12	1
BDS 2/6	2	6	2
BDS 3/4	3	4	3
BDS 4/3	4	3	4

UNIDIS modular distribution system



CMO 186/40 KT + AFCOL 186 + CP 2060/1 + CPH 4060/2 + CP 4060/2 + CPH 2060/1 + CPH 4060/0

UNIDIS chassis coupling kit for **CMO** enclosures prepared for incorporation of all the necessary components for forming electrical control panels with a large capacity for distribution.

A trim frame, coupled to the front frame of the enclosure, allows for mounting:

- 600 or 800 mm width covers, plain or slotted, fixed or hinged version, with heights in multiples of 150 or 200 mm (up to 600 mm).
- Material supporting rails, fixed or depth adjustable.
- Mounting plate supports, plain or slotted, for coupling non-modular equipment.

To make double modular chassis or with busbars, Himel provides kits comprised of trim frames for supporting material, covers and trim supports.

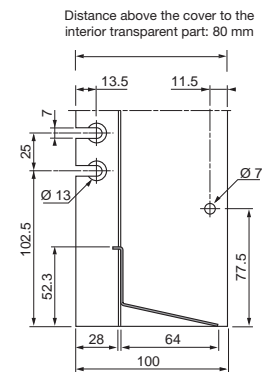
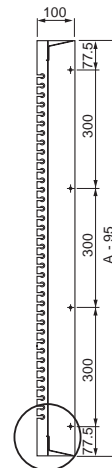
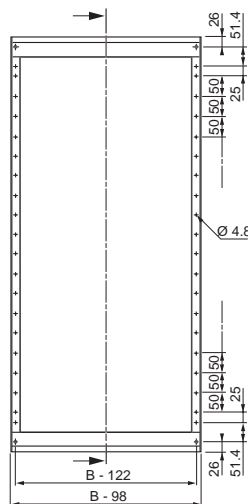
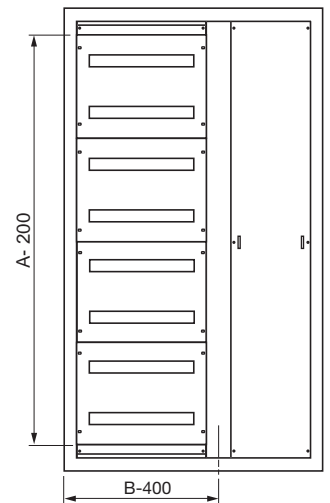
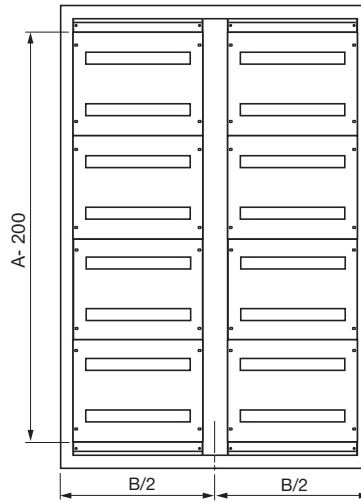
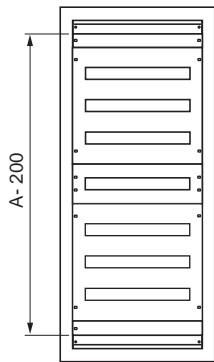
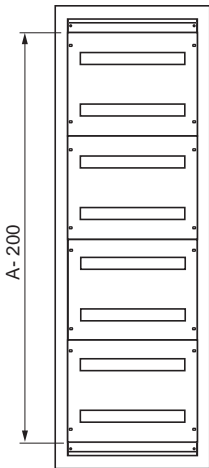
- Double chassis are mounted on 1200 to 1600 mm width enclosures.
- The vertical busbar cover kits are mounted on 1000 or 1200 mm width enclosures.
- All the accessories, covers, rails and plate supports are combined in the kits just as for a simple chassis.

Coupling kit for UNIDIS chassis

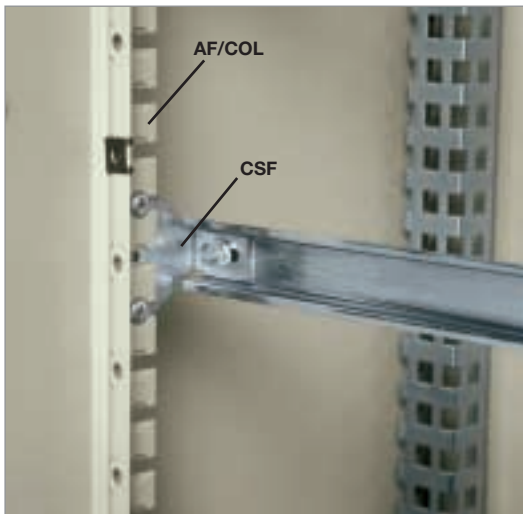
Set of vertical and horizontal profiles for fixing covers and supports.



Enclosure dimensions		Maximum No. of 18 mm modules	Made up of columns with width	Reference	Fig. No.
Height (A)	Width (B)				
1200	600	126	600	AF/COL 126	1
1200	800	192	800	AF/COL 128	1
1400	600	168	600	AF/COL 146	1
1400	800	256	800	AF/COL 148	1
1600	600	183	600	AF/COL 166	1
1600	800	288	800	AF/COL 168	1
1800	600	210	600	AF/COL 186	1
1800	800	320	800	AF/COL 188	1
1800	1000	210	600+400	AF/COL 1864	3
1800	1200	320	800+400	AF/COL 1884	3
1800	1200	420	600+600	AF/COL 1866	2
2000	600	252	600	AF/COL 206	1
2000	800	384	800	AF/COL 208	1
2000	1000	252	600+400	AF/COL 2064	3
2000	1200	384	800+400	AF/COL 2084	3
2000	1200	504	600+600	AF/COL 2066	2



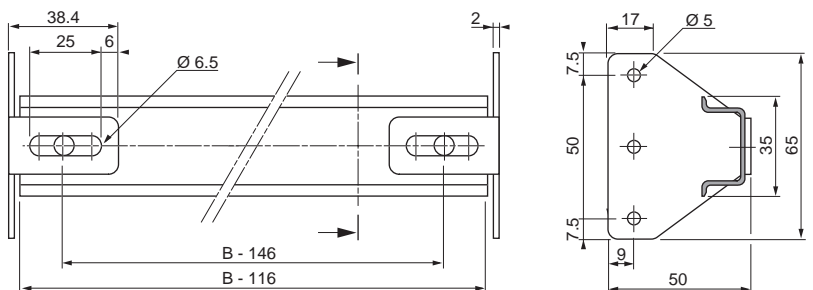
Set for fixed rail with supports



35 x 15 mm symmetrical rail, galvanised with mounting supports included.

- Easy installation. Screwed directly to the vertical profiles of the **AF/COL** coupling kit.
- For the installation of modular equipment.
- Set of 2 supports (without rail), Ref. **CSF**.

Enclosure dimensions		Reference
Width (B)		
600		CSCF 60
800		CSCF 80



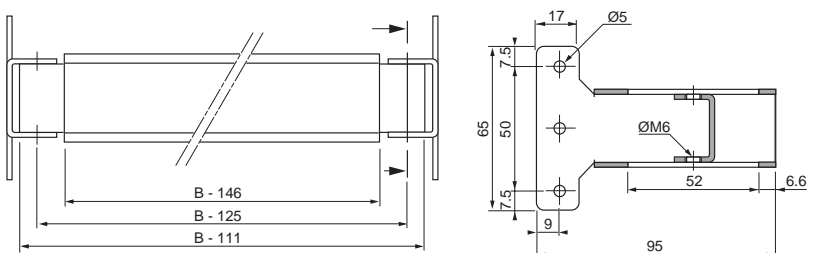
Set for depth adjustable rail with supports



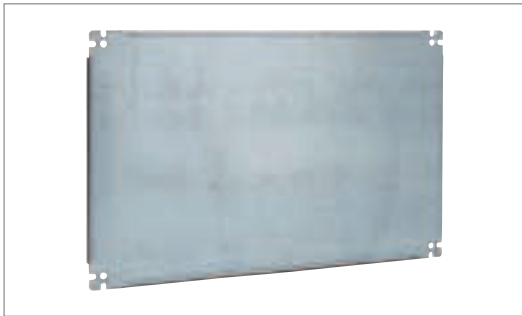
35 x 15 mm symmetrical rail, galvanised with mounting support included.

- Easy installation. Screwed directly to the vertical profiles of the **AF/COL** coupling kit.
- For the installation of modular equipment.
- Rail is depth adjustable.
- Set of 2 supports (without rail), Ref. **CSA**.

Enclosure dimensions		Reference
Width (B)		
600		CSCA 60
800		CSCA 80



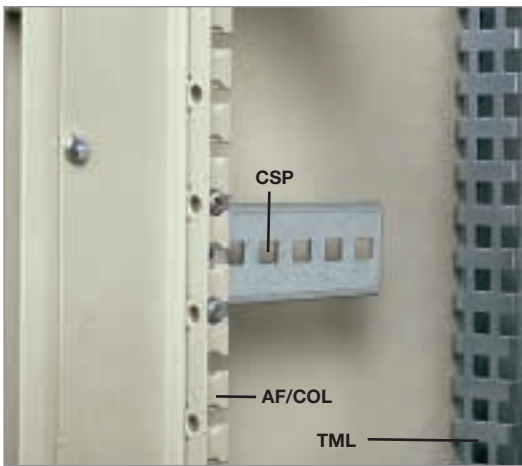
Partial metal mounting plate



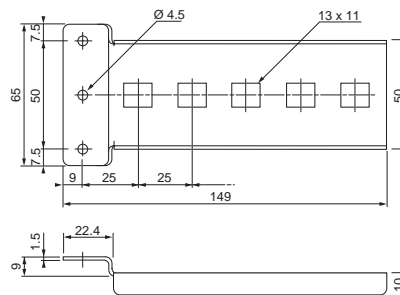
For installation of non-modular equipment.

Enclosure dimensions		Reference
Plate height	Width (B)	
247	600	PMP 2560
397	600	PMP 4060
597	600	PMP 6060
247	800	PMP 2580
397	800	PMP 4080
597	800	PMP 6080

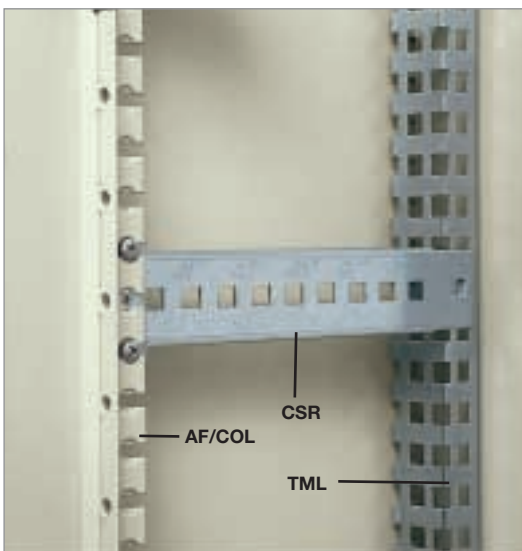
Set of 2 short supports for mounting plates



- Allows fixing of the material-supporting plate for small equipment.
- Made of galvanised sheet steel, folded and welded.
- Easy installation. Screwed directly to the vertical profiles of the **AF/COL** coupling kit. Ref.: **CSP**.

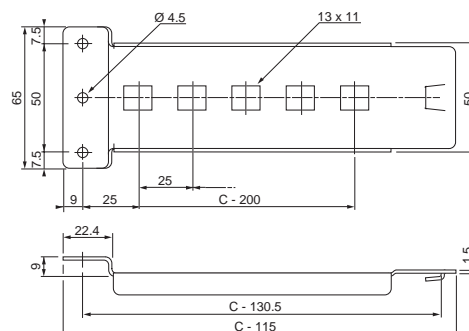


Set of 2 reinforced plate supports



- Allows fixing of the material-supporting plate or profiles for heavy equipment.
- Fixing on the front, screwed to the vertical profiles of the **AF/COL** coupling kit, and in the back on vertical **TML** profiles on the back of the enclosure.
- Made of galvanised sheet steel, folded and welded.

Enclosure depth (C)	Reference
300	CSR-30
400	CSR-40
500	CSR-50
600	CSR-60



Metal protective covers



- Plain and with knock-outs in fixed and hinged versions.
- Made of sheet steel, painted with polyester epoxy in grey RAL-7032.
- Combinable in modules of 150 or 200 mm on the same profile.
- On plain covers or covers with knock-outs done by the client to protect control equipment or for non-modular protection.
- Covers with knock-outs suitable for modular equipment, with the possibility of incorporating blanking plates, Ref.: **ATP UND**.
- Hinged covers.
- Adjustable covers designed to fill the front depending on the space combinations, in multiples of 150 to 200 mm.

Dimensions		Snap-on covers	Plain covers		No. of 18 mm modules	Covers with knock-outs					
Cover height (A)	Enclosure width (B)		Screwed-on reference	Hinged reference		Screwed-on reference	(D)	(E)	Hinged reference	(D)	(E)
50	600	CSC 560	-	-	-	-	-	-	-	-	-
50	800	CSC 580	-	-	-	-	-	-	-	-	-
150	600	-	CP 1560/0	CPH 1560/0	21	CP 1560/1	-	-	CPH 1560/1	-	-
150	800	-	CP 1580/0	CPH 1580/0	32	CP 1580/1	-	-	CPH 1580/1	-	-
200	600	-	CP 2060/0	CPH 2060/0	21	CP 2060/1	-	-	CPH 2060/1	-	-
200	800	-	CP 2080/0	CPH 2080/0	32	CP 2080/1	-	-	CPH 2080/1	-	-
300	600	-	CP 3060/0	CPH 3060/0	42	CP 3060/2	52	150	CPH 3060/2	52	150
300	800	-	CP 3080/0	CPH 3080/0	64	CP 3080/2	52	150	CPH 3080/2	52	150
400	600	-	CP 4060/0	CPH 4060/0	42	CP 4060/2	77	200	CPH 4060/2	77	200
400	800	-	CP 4080/0	CPH 4080/0	64	CP 4080/2	77	200	CPH 4080/2	77	200
450	600	-	CP 4560/0	CPH 4560/0	63	CP 4560/3	52	300	CPH 4560/3	52	300
450	800	-	CP 4580/0	CPH 4580/0	96	CP 4580/3	52	300	CPH 4580/3	52	300
600	600	-	CP 6060/0	CPH 6060/0	63	CP 6060/3	77	400	CPH 6060/3	77	400
600	800	-	CP 6080/0	CPH 6080/0	96	CP 6080/3	77	400	CPH 6080/3	77	400

Upper/lower adjustment rails

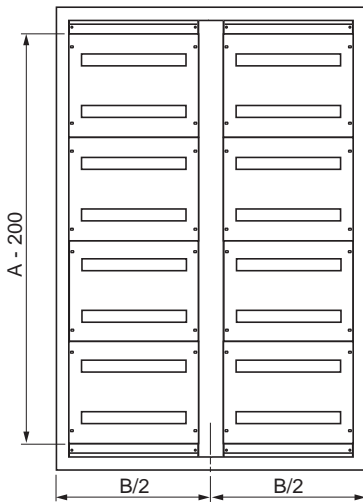


Made of galvanised sheet steel, folded and welded.

- For fixing vertical profiles in the centre part of 1200 mm width enclosures.
- Fixing using screws on the upper and lower part of the enclosure.
- Set of 4 pieces.

Enclosure dimensions Depth	Reference
300	DCOL 30
400	DCOL 40
500	DCOL 50
600	DCOL 60

Coupling kit for double chassis



For 1200 and 1600 mm width enclosures.

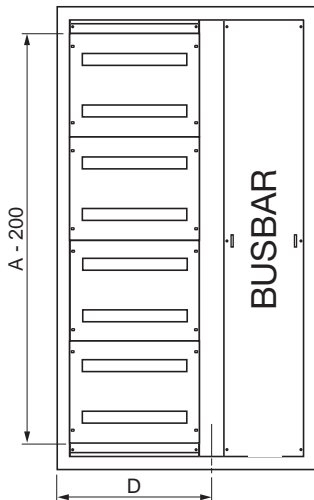
The kit includes:

- 2 modular chassis.
- 1 intermediate centre profile.
- Hardware required for installation.

Enclosure dimensions		Max. No. 18 mm modules	Reference
Height (A)	Width (B)		
1400	1200	336	AF/COL 1466*
1600	1200	378	AF/COL 1666*
1800	1200	420	AF/COL 1866*
2000	1200	504	AF/COL 2066*
1800	1600	640	AF/COL 1888
2000	1600	768	AF/COL 2088

* For CMO enclosures, the upper/lower adjustment rails (Ref.: DCOL...) for depth adjustment must be ordered separately.

Coupling kit for chassis with busbar area



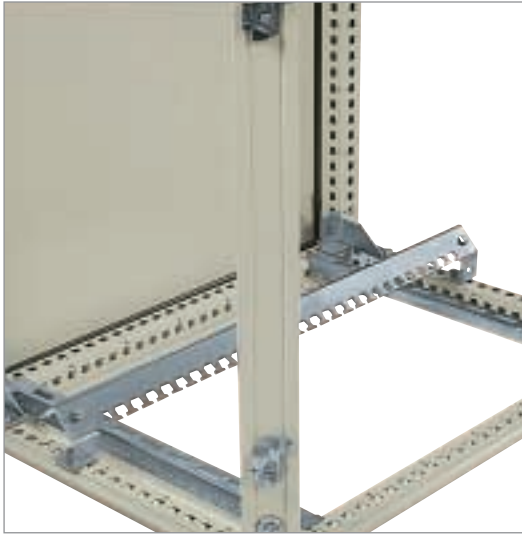
For 1000 and 1200 mm width enclosures.

The kit includes:

- 1 modular chassis.
- 1 intermediate centre profile.
- 1 busbar blanking cover (300 mm width).
- The hardware and supports required for installation.

Enclosure dimensions		D	Reference
Height (A)	Width (B)		
1400	1000	600	AF/COL 1464
1600	1000	600	AF/COL 1664
1800	1000	600	AF/COL 1864
2000	1000	600	AF/COL 2064
1400	1200	800	AF/COL 1484
1600	1200	800	AF/COL 1684
1800	1200	800	AF/COL 1884
2000	1200	800	AF/COL 2084

Cable guide profile



Allows quick fixing of the enclosure's entry-exit cables. Depth adjustable in 25 mm intervals.

Enclosure width dimensions (B)	Reference
600	TFC/OL 6
800	TFC/OL 8
1000	TFC/OL 10

Cable guide profile in door



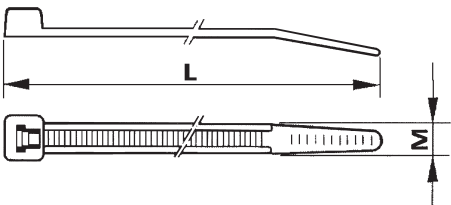
Indicated for fixing cables to the interior equipment of the door. Fixed directly to the reinforcement frame. Height adjustable in 25 mm intervals.

Enclosure width dimensions (B)	Reference
600	TFP/OL 6
800	TFP/OL 8
1000	TFP/OL 10

Adjustable ties



Made of 6.6 nylon in natural colour or black for outdoor conditions.



Reference		L	M	Use	
White	Black			∅ minimum	∅ maximum
LZ25100	LN25100	100	2.5	1.6	22
LZ25200	LN25200	200	2.5	1.6	49
LZ35150	LN35150	150	3.5	1.6	35
LZ35200	LN35200	200	3.5	1.6	49
LZ35300	LN35300	300	3.5	1.6	75
LZ46150	LN46150	150	4.6	1.6	36
LZ46200	LN46200	200	4.6	1.6	49
LZ48270	LN48270	270	4.8	1.6	73
LZ46390	LN46390	390	4.6	1.6	109
LZ76390	LN76390	390	7.6	4.7	108

Tightening tools



To tighten and cut to size the adjustable ties. They facilitate wiring and save time, preventing the packets of cables from loosening.

Tool adjustable according to the thickness of the tie. Can be used with the following models: LZ25100 up to LZ46390. Ref.: **MARK3**.

A very light and ergonomic tool, the cut on the tie is done by twisting the tool. Can be used on the following models of ties: LZ25100 up to LZ46390. Ref.: **MARK20, 21**.



Reference	Admissible width ties
MARK3	2.5 ÷ 4.8

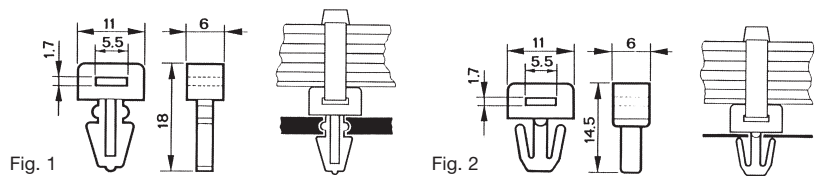
Reference	Admissible width ties
MARK20	2.5 ÷ 4.8
MARK21	4.6 ÷ 7.6

Locking clips



Allows fixing ties from the series LZ25100 up to LZ46390 on panels up to 3.2 mm thick. Material: 6.6 nylon.

Reference	Ø perforation mm	Maximum width panel mm	Figure
SFC1	6	3.2	1
SFC2	6	1	2



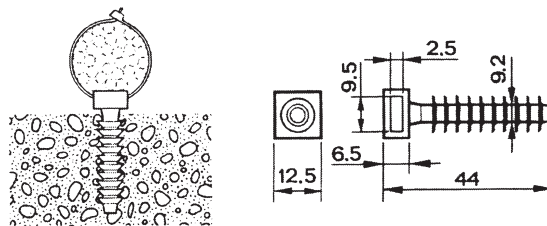
Plug



To use with soft materials: Ø 7 mm, or hard materials: Ø 8 mm. For ties up to 9 mm width.

Material: black 6.6 nylon.

Ref.: **LOK01**.

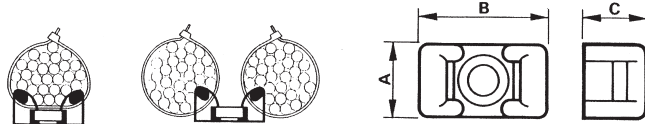


Tie fixing support



To attach one or two ties, mounted with a single screw. Material: 6.6 nylon. Allows for attaching ties from the entire range.

Reference	A	B	C	Fixing screw	Admissible width ties
KR6	12	18	9	M4	2.5 ÷ 4.8
KR8	14.5	25	12	M6	2.5 ÷ 7.6

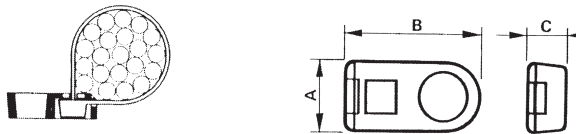


Support heads



To transform normal ties into ties with fixing heads, introduce a tie into this head before closing it on the cable bundle. Material: 6.6 nylon.

Reference	A	B	C	Fixing screw	Admissible width ties
FH18	7.1	13.3	4	M4	2.5
FH30	9.5	17.9	4.7	M5	3.5
FH50	11.3	22.2	6.2	M6	4.7

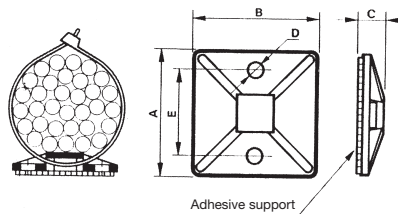


Self-adhesive support base



Permits insertion of 1 tie from 4 points at a 90° angle. Attaches ties from the series LZ25100 up to LZ46390. Material: 6.6 nylon.

Reference	A	B	C	D	E	Admissible width ties
MB3A	19.1	19.1	4.8	3.2	13.2	2.5 ÷ 3.5
MB4A	28.5	28.5	5.5	4	20.2	2.5 ÷ 4.8

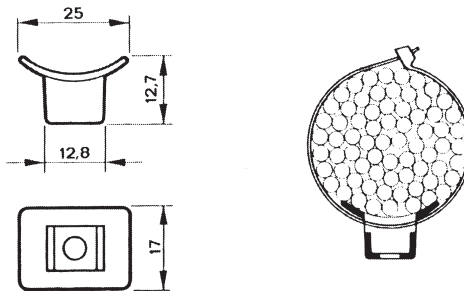


Tie fixing support



To attach ties from any series. Material: 6.6 nylon.

Reference	Admissible width ties mm	Fixing screw
LKC	2.5 ÷ 7.6	M5

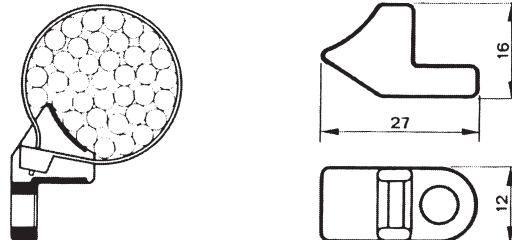


Lateral tie fixing support



Covers the head of the tie in its end, thus obtaining neater cabling. Material: 6.6 nylon.

Reference	Admissible width ties mm	Fixing screw
LKM/HE	2.5 ÷ 7.6	M5



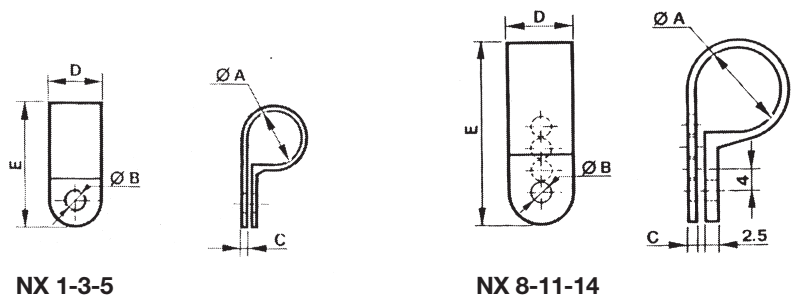
Fixing loop for tubes, hoses, etc.



2 versions, fixed and graduated, Ø from 5 to 25.4 mm. Material: black 6.6

Reference	Ø A min. - max.	B	C	D	E
NX1	5	3.5	1	6.2	13.7
NX3	8	3.9	1	9.4	20.5
NX5	12	3.9	1	9.4	24
NX8*	14.3 ÷ 15.8	4	1.3	12.6	32
NX11	17.4 ÷ 20	4	1.3	12.6	37
NX14	22.2 ÷ 25.4	4.3	1.5	16	45

* The NX8 model only has 3 adjustment holes.



Adjustable membrane glands



Insulated membrane glands made of PVC with entry that can be adjusted for cables.

To couple to **DP** and **DPC** insulated junction boxes, **CGPH** general protection boxes and in general to thicknesses adapted to dimension E.

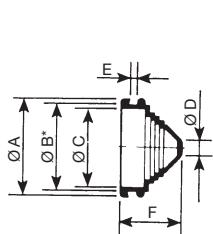


Fig. 1

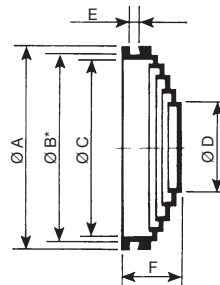


Fig. 2

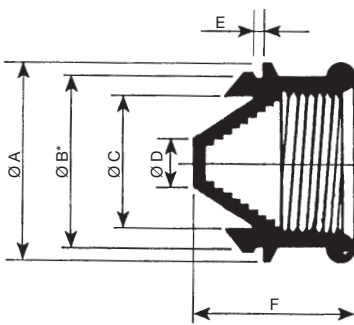
Reference	Fig.	Ø A	Ø B*	Ø C	Ø D	E	F	Capacity	
								Ø cable	Tube
ECPC-3	1	25	21.5	18	5	3.2	13	5 to 18	Pg 9 to 11
ECPC-5	1	33	29.5	26	5	3.2	20	5 to 26	Pg 9 to 16
ECPC-6	1	43	38.5	36	5	3.2	22	5 to 36	Pg 9 to 21
ECPC-9	2	70	63	60	28	3	20	28 to 60	Pg 21 to 48
ECPC-15	2	98	90	87	28	3	23	28 to 87	Pg 21 to 48

* Mounting perforation.

Adjustable membrane glands



Insulated membrane glands made of PVC with entry threaded to the diameter and spacing of Pg tubes and with knock-out entry for cables on the back. These characteristics also permit entries for any class of cable and normal and flexible tubes with diameter between B dimensions and the core of the thread (Ø maximum). To be coupled to **DB** and **DA** metal junction enclosures, to **DBX** and **DAX** metal boxes with doors, and in general to thicknesses adapted to dimension E.



Reference	Ø A	Ø B*	Ø C	Ø D	E	F	Capacity	
							Ø cable	Tube
EC-1	25	19.5	16	3	1.2	21	3 to 16	Pg 9
EC-2	25	19.5	16	6	1.2	21	6 to 16	Pg 11
EC-3	27	21.5	18	7	1.2	23	7 to 18	Pg 13.5
EC-4	29.5	23.5	20	8	1.2	26	8 to 20	Pg 16
EC-5	35	29.5	26	10	1.2	27	10 to 26	Pg 21
EC-6	42	38.5	35	12	1.5	30	12 to 35	Pg 29
EC-7	52	48.5	44	13	1.5	30	13 to 44	Pg 36

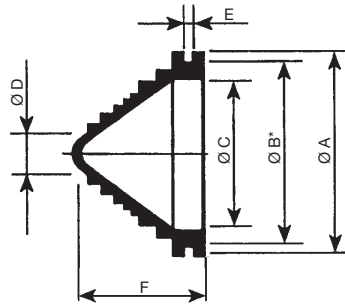
* Mounting perforation.

Adjustable membrane glands



Insulated membrane glands made of neoprene. This material has extraordinary mechanical, di-electrical and thermal characteristics, as well as resistance to corrosive environments.

To be coupled to **DB** and **DA** metal junction enclosures, to **DBX** and **DAX** metal boxes with doors, and in general to thicknesses adapted to dimension E.



Reference	Ø A	Ø B*	Ø C	Ø D	E	F	Capacity	
							Ø cable	Tube
ECN-1	24	19.5	14	8.6	1.75	20	8.6 to 14	-
ECN-5	34	29.5	26	9	1.75	22	9 to 26	Pg 9 to 16
ECN-6	43	38.5	32	9	1.75	28	9 to 32	Pg 9 to 21
ECN-7	53	48.5	36	9	1.75	32	9 to 36	Pg 9 to 29
ECN-10	71	65	60	9.2	1.75	40	9.2 to 60	Pg 9 to 48

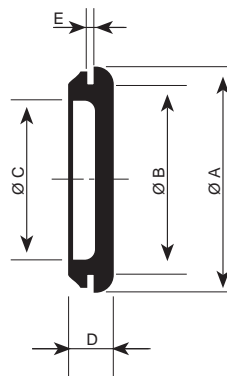
* Mounting perforation.

Plain plugs



Made of black PVC, they cover all the existing diameters of the knock-outs of the enclosures.

Reference	Ø A	Ø B	Ø C	D	E
TC-1	25.5	20	16.5	7	1.2
TC-2	27.5	22	19	7	1.2
TC-3	29.5	24	21	7	1.2
TC-4	36.5	29.5	27	7	1.5
TC-5	46.5	39	35	7.5	1.5
TC-6	56.5	49	45	7.5	1.5

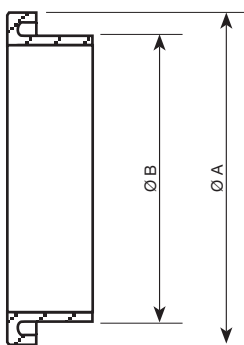


Protective sleeves



Small protective sleeves for cables coming out of tubes, as indicated in the instructions for MI BT 019. Made of flexible and durable PVC, in light grey colour.

Reference	A	Ø B	Tube
PC-1	15.2	12.7	Pg 9
PC-2	18.6	16	Pg 11
PC-3	20.4	17.8	Pg 13.5
PC-4	22.5	19.8	Pg 16
PC-5	28.3	25.3	Pg 21
PC-6	37	33.6	Pg 29
PC-7	47	43	Pg 36



Useful information about Pg tubes and HIMEL accessories to be coupled

MODELS, DIMENSIONS AND REFERENCES

Designation	Ø exterior	Steel	Tubes				Cables inserted*				Ø perforations to		HIMEL accessories to be coupled						
			Ø interior			No. of conductors							To the tubes		To the perforations				
			Flexible steel	PVC	Flexible steel with PVC		1	2	3	4	Insert	Thread	Adjustable membrane glands	Protective sleeves	Adjustable membrane glands	Plain plugs			
Pg 9	15.2	12.7	12.4	12	11.1	4													
						6	2.5	-	-	16	14	EC-1 to EC-7							
												ECPC-3 to ECPC-6	PC-1	-	-				
Pg 11	18.6	16	15.5	14.5	14.2	10													
						4	2.5					EC-2 to EC-7			EC-1				
						16	6	4	2.5	19	17.5	ECPC-5; ECPC-6	PC-2	EC-2	TC-1				
Pg 13.5	20.4	17.8	17.5	16.3	16	25													
												ECN-5 to ECN-10			ECN-1				
												EC-3 to EC-7			EC-3				
Pg 16	22.5	19.8	18.7	18.5	17.6	35	10	6	4	21	19.5	ECPC-5; ECPC-6	PC-3	ECPC-3	TC-2				
												ECN-5 to ECN-10							
												EC-4 to EC-7							
Pg 21	28.3	25.3	24.7	23	23	50	16	10	6	23	21.5	ECPC-5; ECPC-6	PC-4	EC-4	TC-3				
												ECN-5 to ECN-10							
												EC-5 to EC-7			EC-5				
Pg 29	37	33.6	33.5	31	31	70	25	16	10	29	27	ECPC-6 to ECPC-15	PC-5	ECPC-5	TC-4				
												ECN-6 to ECN-10			ECN-5				
												EC-6; EC-7			EC-6	TC-5			
Pg 29	37	33.6	33.5	31	31	95	35	25	16			ECPC-9; ECPC-15	PC-6	ECPC-6	TCP-5				
						120	50	35	25	38	35.5	ECN-7; ECN-10			ECN-6				
						150						EC-7			EC-7				
Pg 36	47	43	41.5	41	40.3	185			35			ECPC-9; ECPC-15	PC-7	ECN-7	TC-6				
						240	70	50	50	48	45.5	ECN-10							
						300						ECPC-9; ECPC-15							
Pg 42	54	50	48	48	47	-	95	70				ECN-10							
												ECPC-9; ECPC-15							
Pg 48	60	56	54.2	52.5	51.4	-	150	150	120	61	58	ECN-10							

* Number and section in mm² of the conductors that may be housed inside each tube (orientative).

For more information, consult the electrotechnical rules for low voltage (MI BT 019).

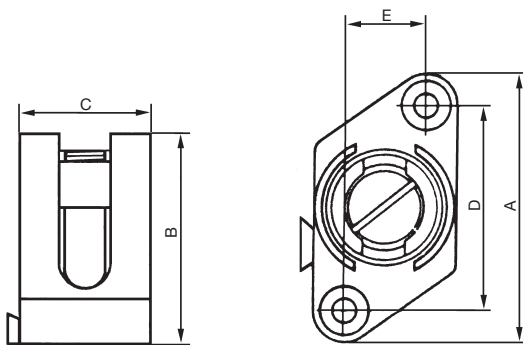
Sigma safety terminals



Safety terminals: base made of black matte self-extinguishing polyamide-6, terminal of **MS-58** (DIN17660) brass ring of tempered steel zinc dichromate, and cap of orange self-extinguishing polypropylene.

- **Anti-cut.** The connection is made using a tightening mechanism that spreads the pressure out throughout the entire contact surface, avoiding the occasional rubs and stresses that damage the conductors.
- **Loosening proof.** The ring that surrounds the brass body ensures that the pressure exerted by the conductors cannot open the terminal and loosen the connection.
- **Total insulation.** All the SIGMA "S" terminals are supplied with a terminal cap, avoiding any accidental contact with live parts.

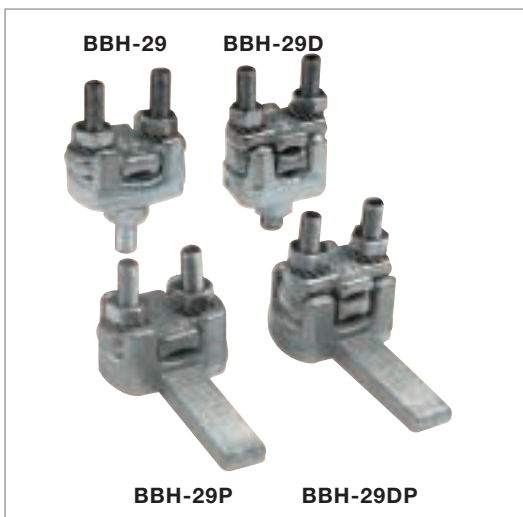
All the calibres may be coupled one to the other, allowing the formation of strips of any length. Service voltage: 500 V.



Reference	Section m/m ²	A	B	C	D	E
S.04	1 × 4	30	20	13	21	4
S.06	1 × 6	33	25	16	24	7
S.10	1 × 10	38	28	16	28	6
S.16	1 × 16	42	32	19	32	9
S.25/35	1 × 35	46	38	23	34	11
S.50	1 × 50	52	45	27	40	15
S.70	1 × 70	55	50	30	40	15
S.95/100	1 × 100	58	54	33	40	20

NOTE: each terminal accepts up to 2 conductors of the section indicated.

Bimetal BBH terminals



Terminals especially designed for branching cables on plates; their main application is busbar connection.

The **BBH** terminals are made of a tinned, hot cast copper alloy and are suitable for connecting to a conductor of copper or aluminium indistinctly (bimetal).

Reference	Main section mm ²	Bypass section mm ²
BBH-29	6-50	-
BBH-29C*	6-50	-
BBH-30	10-95	-
BBH-31	16-150	-
BBH-32	50-240	-
BBH-29D	6-50	6-50
BBH-29DC*	6-50	6-50
BBH-30D	10-95	10-95
BBH-31D	25-150	16-150
BBH-32D	95-240	5-240

Reference	Main section mm ²	Bypass section mm ²
BBH-29P	6-50	-
BBH-29PC*	6-50	-
BBH-29DP	6-50	6-50
BBH-29DPC*	6-50	6-50

* Include terminal cover **CBBH-29**.

Plate/cable terminals

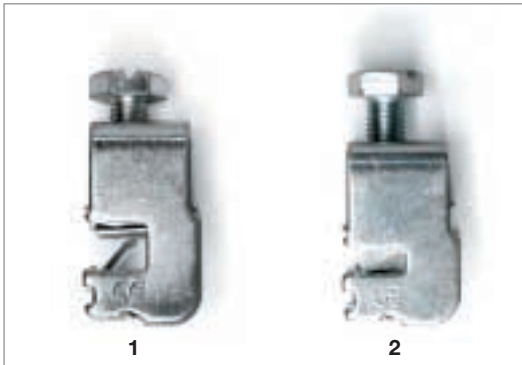


Plate entry and bypass by cable, plate or terminal.

Reference	Cable bypass section (mm ²)	Plate thickness (mm)	Figure
BPCH 516	1.5 to 16	5	2
BPCH 550	1.5 to 50	5	2
BPCH 5120	16 to 120	5	2
BPCH 1016	1.5 to 16	10	1
BPCH 1050	1.5 to 50	10	1
BPCH 10120	16 to 120	10	1

Three-phase bypass terminals

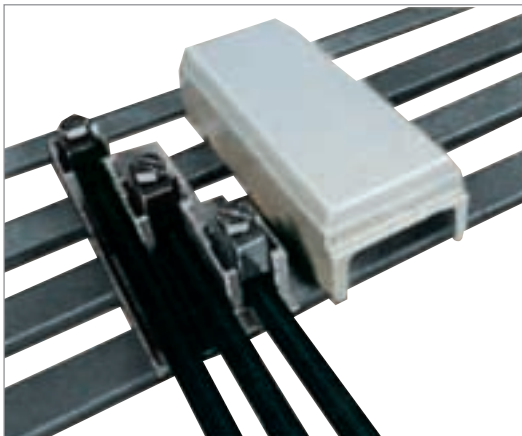


Plate entry and cable bypass (for **EMH-630** and **EMV-630** busbars).

Reference	Entry plate width mm	Entry plate thickness mm	Sect. Cable bypass mm ²
BTE 630 TBT	12/15/20/25/30	5 to 10	35 to 120

Compact lamp

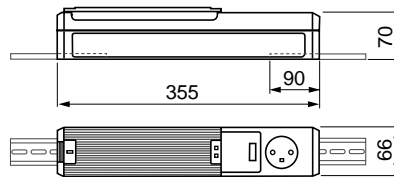


Compact fluorescent lamps, designed especially for use in electronic enclosures. May be fixed with a magnet.

- Connection voltage 220 V/50 Hz.
- Consumption 11 W.
- Connection/disconnection switch.
- 200 V/16 A socket with earthing.
- Maximum ambient temperature 60 °C.
- Lighting output = 75 W bulb.



Specifications	Reference	Plug	Tension
Lamp fixed with a magnet or on 35 mm symmetrical DIN rail	LAM-75	220 V/16 A	220 V/50 Hz
Lamp fixed on a 35 mm symmetrical DIN rail	LAC-75	220 V/16 A	220 V/50 Hz
Lamp fixed with a magnet or on 35 mm symmetrical DIN rail	LAM-75/120	120 V/15 A	120 V/60 Hz
Lamp fixed on a 35 mm symmetrical DIN rail	LAC-75/120	120 V/15 A	120 V/60 Hz



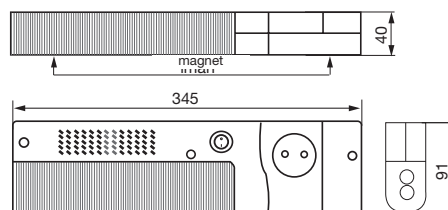
Slimline lamp



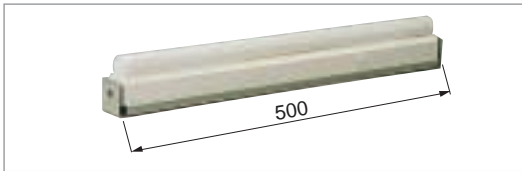
Magnetic-fixing flat lamps equipped with energy efficient light bulbs, with or without a plug.

- Electronic ballast.
- Power: 11 W.
- Luminosity: 900 Lm.
- Lifespan: 10000 h.
- Plastic casing UL94 V0.
- IP20.
- Class I.

Reference	Plug	Socket	Approval
LAMS75	AC 230 V/16 A	SCHUKO	VDE
LAMX75	AC 230 V/-	-	VDE
LAMU75	AC 120 V/15 A	USA	UL



Incandescent lamp



Incandescent lamp designed especially for use in electronic enclosures.

- Connection voltage 220 V/50-60 Hz.
- Consumo 60 W.
- Connection/disconnection switch.
- Terminal connection entry.

Ref.: **LAI/OL 68**.

Dual lamp

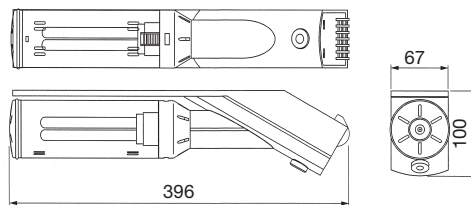


Light fixtures designed especially for use in electronic enclosures with various possibilities for fixing and operating.

- Energy efficient electronic lamp E27, 20 W, 220-240 V/50-60 Hz or 120 V/60 Hz.
- Lighting output = 100 W bulb.
- Fixed models connection via 2.5 mm² terminal strip and the mobile model via cable.
- Degree of protection IP20.
- Insulation class II.
- Conforming to EN 55014 and EN 50082-1.

Specifications	Support fixing	Figure	Reference	Tension
Motion-activated	Magnetic, using screws and/or (1) 35 DIN rail	1	LAMDP LAMDP 120	220 V/56 Hz 120 V/60 Hz
On/off switch with the possibility of connecting door switch	Magnetic, using screws and/or (1) 35 DIN rail	2	LAMIN LAMIN 120	220 V/50 Hz 120 V/60 H
Mobile lamp, connection via cable	Adhesive or screws	3	LAMPO LAMPO 120	220 V/50 Hz 120 V/60 Hz
Support for LAMDP , LAMIN , LAMPO lamp	Adhesive or screws	4	SOLAM	

(1) DIN rail not provided.



Door switch

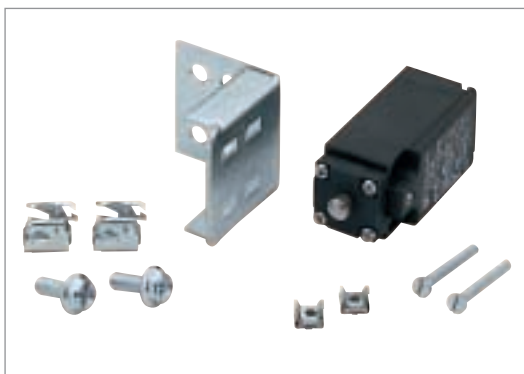


INL:

Switch/commutator device with a special support and hardware for direct incorporation into the structure of the enclosure.

- Possibility of connecting a lamp at the opening of the door, stopping the cooling elements, etc.
- Door switch/commutator $I_n = 10\text{ A}$.

Ref.: **INL/CMO**.



INL/BRP:

Switch/commutator device with a special support and hardware for direct incorporation into the structure of the enclosure.

- Possibility of connecting a lamp at the opening of the pivoting rack, for both 120° and 180°, stopping the cooling elements, etc.

DOOR SWITCH FOR RACK

Specifications	Reference
Door switch/commutator $I_n = 10\text{ A}$	INL/BRP

Aerosol



Specifications	Reference
Colour RAL-7032 contained 150 g	BPA-7032

Touch-up paint



Air-dry touch-up paint.

Available in 2 colours.

Reference	Colour
TUP7032	RAL-7032
TUP7035	RAL-7035

System of 19" racks



**CMO 186/40 +
BRF 38/OL**



**CMO 188/40 +
BRP 9/OL**



**CMO 188/40 +
BRPC 36/OL**

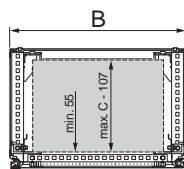
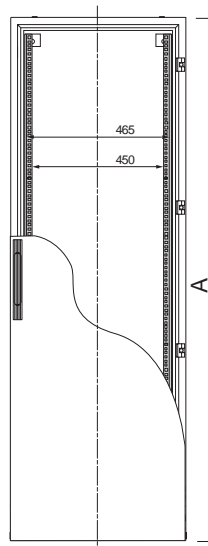


**CMO 188/40 +
BRP 36/OL**

System of very robust 19" metal racks, ready to be coupled directly to CMO enclosures, available in fixed and pivoting versions.

- Fixed rack, RAL-7032, comprised of 2 profiles with hardware.
- Pivoting racks, RAL-7032, opening to 125° and 180°. Key-operated 5 mm double bar espagnolette lock. Supports loads up to 140 kg.
- Partial pivoting rack, RAL-7032. 5 mm double bar key-operated lock with locking kit in enclosures with widths greater than 800 mm.
- Centred pivoting rack, RAL-7032. Key-operated 5 mm double bar espagnolette lock.

19" fixed rack



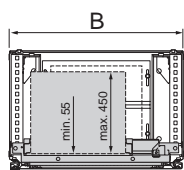
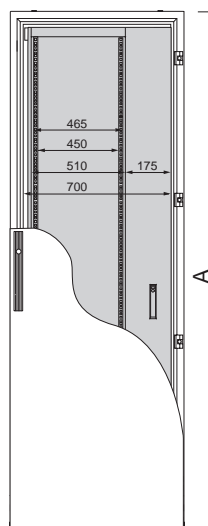
Ready to be coupled to 600 mm width enclosures.

Permits direct fixing on the standard perforations of any model of 19" modular chassis. Colour RAL-7032.

Enclosure dimensions		No. of units	Reference
Height (A)	Width (B)		
1200	600	24	BRF 24/OL
1400	600	29	BRF 29/OL
1600	600	33	BRF 33/OL
1800	600	38	BRF 38/OL
2000	600	42	BRF 42/OL

C = nominal depth of enclosure.

Off-centre 19" pivoting rack



Permits direct fixing on the standard perforations of any model of 19" modular chassis.

Ready to be coupled to 800 mm width enclosures.

Color RAL-7032.

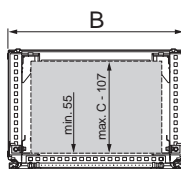
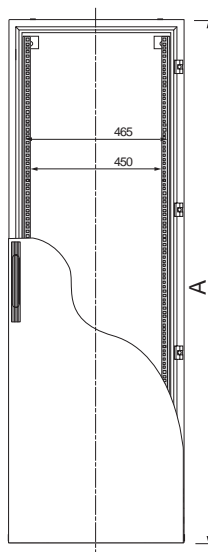
Maximum opening: 140°.

PARTIAL			
Rack height (D)	Enclosure width (B)	No. of units	Reference
354	800	6	BRP 6/OL
621	800	12	BRP 12/OL
887	800	18	BRP 18/OL
1021	800	21	BRP 21/OL

Enclosure dimensions		No. of unit	Reference
Height (A)	Width (B)		
1400	800	27	BRP 27/OL
1600	800	31	BRP 31/OL
1800	800	36	BRP 36/OL
2000	800	40	BRP 40/OL

C = nominal depth of enclosure.

Centred 19" pivoting rack



Permits direct fixing on the standard perforations of any model of 19" modular chassis.

Ready to be coupled to 800 mm width enclosures.

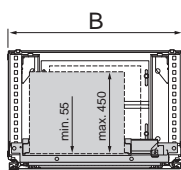
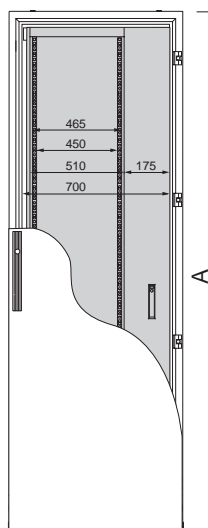
Rack centred in the enclosure.

Colour RAL-7032.

Maximum opening: 140°. Colour RAL-7032.

Enclosure dimensions		No. of units	Reference
Height (A)	Width (B)		
1400	800	27	BRPC 27/OL
1600	800	31	BRPC 31/OL
1800	800	36	BRPC 36/OL
2000	800	40	BRPC 40/OL

19" 180° pivoting rack



Permits direct fixing on the standard perforations of any model of 19" modular chassis.

Ready to be coupled to 800 mm width enclosures.

Door opening to 180°. Colour RAL-7032.

Enclosure dimensions		No. of units	Reference
Height (A)	Width (B)		
1400	800	27	BRP 27/OL 180
1600	800	31	BRP 31/OL 180
1800	800	36	BRP 36/OL 180
2000	800	40	BRP 40/OL 180

KT transparent doors for off-centre racks



Transparent doors to be coupled to **BRP./OL** and **BRP./OL 180** racks.

Enclosure dimensions		Reference
Height (A)	Width (B)	
1200	800	PPKT 128 BRP
1400	800	PPKT 148 BRP
1600	800	PPKT 168 BRP
1800	800	PPKT 188 BRP
2000	800	PPKT 208 BRP

KT transparent doors for centred racks



Transparent doors to be coupled to **BRPC./OL** and **BRF./OL** racks.

Enclosure dimensions		Reference
Height (A)	Width (B)	
1200	800	PPKT 128 BRPC
1400	800	PPKT 148 BRPC
1600	800	PPKT 168 BRPC
1800	800	PPKT 188 BRPC
2000	800	PPKT 208 BRPC

Set of 2 side covers for centred fixed rack



Set of 2 covers to be adapted to **BRF./OL** racks on 800 mm width enclosures.

Enclosure dimensions		Depth	Reference
Height (A)	Width (B)		
1200	800	600	TBRF 24/OL 60
1400	800	600	TBRF 29/OL 60
1600	800	600	TBRF 33/OL 60
1800	800	600	TBRF 38/OL 60
2000	800	600	TBRF 42/OL 60
2200	800	600	TBRF 47/OL 60
1200	800	800	TBRF 24/OL 80
1400	800	800	TBRF 29/OL 80
1600	800	800	TBRF 33/OL 80
1800	800	800	TBRF 38/OL 80
2000	800	800	TBRF 42/OL 80

Plain cover



CRTM 6U



CRTA 6U

Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel in finely texturised grey RAL-7035 **CRTM** or of 3 mm aluminium **CRTA**.

No. of units	Reference	
	Metal	Aluminium
1	CRTM 1U	CRTA 1U
2	CRTM 2U	CRTA 2U
3	CRTM 3U	CRTA 3U
6	CRTM 6U	CRTA 6U
9	CRTM 9U	CRTA 9U
10	CRTM 10U	CRTA 10U
12	CRTM 12U	CRTA 12U

Cable entry cover



Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With perforations for cable entry with protection.

No. of units	No. of cut-outs	Reference
1	2	CRTM 1U2

Cable entry cover with housing



Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With perforated cable entries with protection and support groove.

No. of units	No. of cut-outs	Reference
1	2	CRTM 1UA2

Cable entry cover with brush

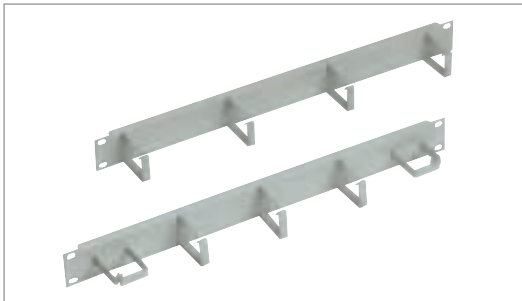


Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With a perforated cable entry and anti-dust protection.

No. of units	No. of cut-outs	Reference
1	2	CRTM 1U1P

Cover with metal flanges



Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With welded cable guide flanges.

No. of units	No. of flanges/position	Reference
1	4 vert.	CRTM 1U40B
1	3 vert./2 hor.	CRTM 1U32B

Cover with insulated flanges



Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With 5 insulated cable guide flanges, able to be positioned horizontally, vertically and diagonally.

No. of units	Reference
1	CRTM 1U5GCA

Cover with protection and ventilation controls

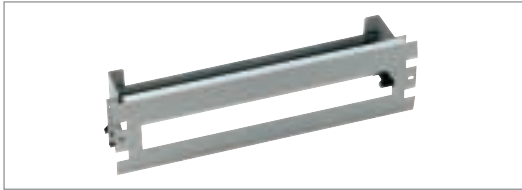


Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel. With a light switch and **TS-141** thermostat for activating and controlling the fans.

No. of units	Reference
1	CRTM 1UVT

DIN rail cover



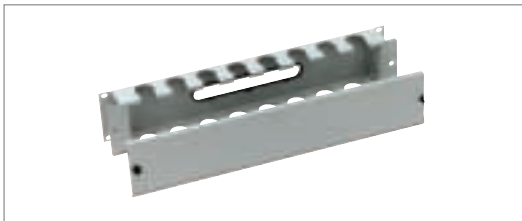
Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1 mm sheet steel, DIN rail cover module with a capacity for 22 modules. With an easily-removable front cover in finely texturised grey RAL-7035.



No. of units	No. of modules (18 mm)	Reference
3	22	CRTM 3UD

Cover with groove



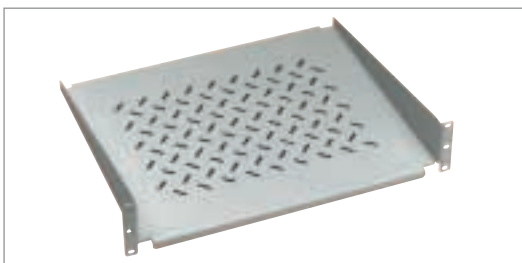
Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Cover with wire-guide groove, made of 1.2 mm sheet steel, with easily removable cover and cables not visible. Painted finely texturised grey RAL-7035.



No. of units	Reference
2	CRTM 2UC

2 U fixed perforated tray



Directly fixed to the front 19" rack using screws, Ref. **GFR95**.

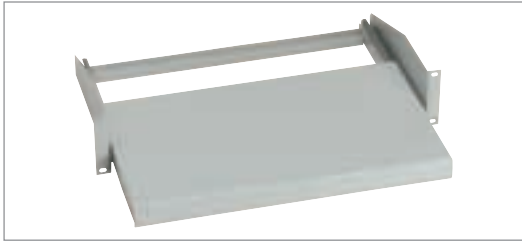
Made of 1.5 mm perforated sheet steel. Painted in finely texturised grey RAL-7035.

Maximum load 20 kg.



Tray dimensions			Reference
Height	Width	Depth	
2 U	450	250	BF 2U25P
2 U	450	380	BF 2U40P

2 U telescopic tray

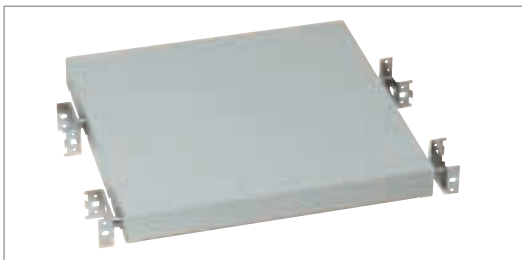


Directly fixed to the front 19" rack using screws, Ref. **GFR95**.
 Made of 1.2 mm sheet steel, painted finely texturised RAL-7035.
 With telescopic guides and a locking device. Maximum load 5 kg.

Tray dimensions			Reference
Height	Width	Depth	
2 U	450	250	BT 2U25



1 U plain fixed tray



Fixed directly to the 19" front and rear racks (two 19" rack sets must be ordered). Made of 1.5 mm sheet steel, painted finely texturised RAL-7035.
 Maximum load 25 kg.

Tray dimensions			For enclosures with depths	Distance front-rear racks	Reference
Height	Width	Depth			
1 U	450	400	600/800	258	BBF 1U40
1 U	450	600	800	458	BBF 1U60



1 U fixed perforated tray

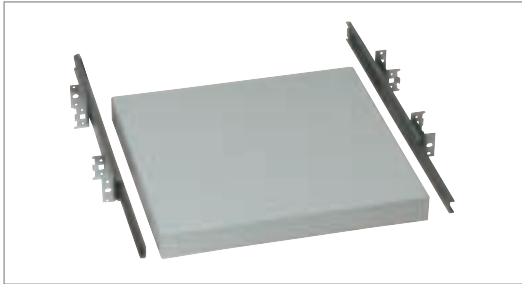


Fixed directly to the 19" front and rear racks (two 19" rack sets must be ordered). Made of 1.5 mm perforated sheet steel. Painted in finely texturised grey RAL-7035. Maximum load 25 kg.

Tray dimensions			For enclosures with depths	Distance front-rear racks	Reference
Height	Width	Depth			
1 U	450	400	600/800	258	BBF 1U40P
1 U	450	600	800	458	BBF 1U60P



1 U plain telescopic tray

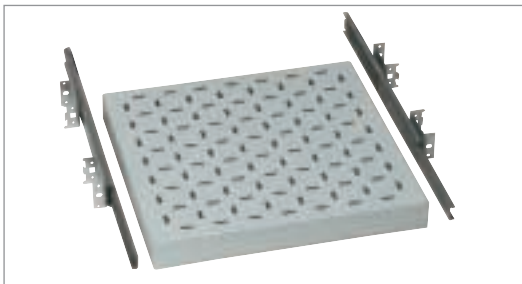


Fixed directly to the 19" front and rear racks (two 19" rack sets must be ordered). Made of 1.5 mm sheet steel, painted finely texturised RAL-7035. With telescopic guides and a locking device. Maximum load 25 kg.

Tray dimensions			For enclosures with depth	Distance front-rear racks	Reference
Height	Width	Depth			
1 U	450	400	600/800	258	BBT 1U40
1 U	450	600	800	458	BBT 1U60



1 U perforated telescopic tray

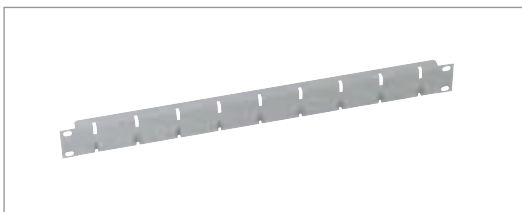


Fixed directly to the 19" front and rear racks (two 19" rack sets must be ordered). Made of 1.5 mm perforated sheet steel, painted finely texturised RAL-7035. With telescopic guides and a locking device. Maximum load 25 kg.

Tray dimensions			For enclosures with depth	Distance front-rear racks	Reference
Height	Width	Depth			
1 U	450	400	600/800	258	BBT 1U40P
1 U	450	600	800	458	BBT 1U60P



Full width cable support crossbar



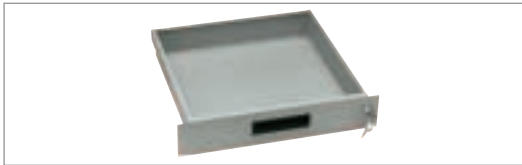
For use as a cable support using adjustable ties (**LZ**).

Made of 1.2 mm galvanised sheet steel. Fixing on the 19" rack, width-wise, using **GFR95** screws.

No. units	No. of housings	Reference
1	9	TVA



19" service drawer

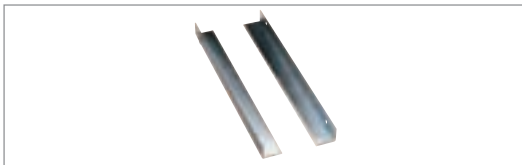


To be installed on **2U** height fixed racks. Installed using **GT...** telescopic guides (not included in the standard supply). RAL-7035.

Reference: **CS2U400**.



19" fixed rack guide

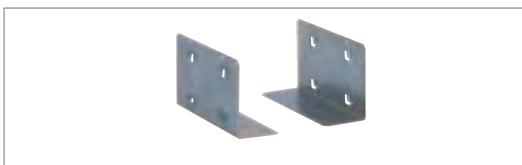


Set of 2 guides to be coupled directly to **BRF** fixed racks. For their fixing, 2 racks must be installed (total of 4 profiles).

Enclosure dimensions			Reference
Length mm	Dist. front-rear racks	Depth (C)	
256	250	400	GF 256
356	350	500	GF 356
456	450	600	GF 456
556	550	800	GF 556



19" rack guide



Set of two guides to be coupled to fixed or pivoting racks.

Reference: **GB/140**.



19" telescopic guide

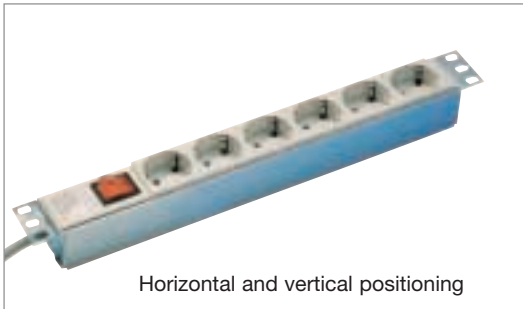


Set of 2 guides. For their fixing, 2 fixed racks must be installed.

Enclosure dimensions Depth (C)	Reference
600	GT 40
800	GT 60



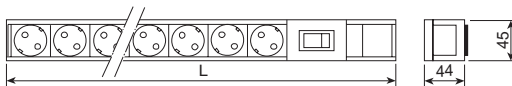
Distribution base plinth with sockets and switch



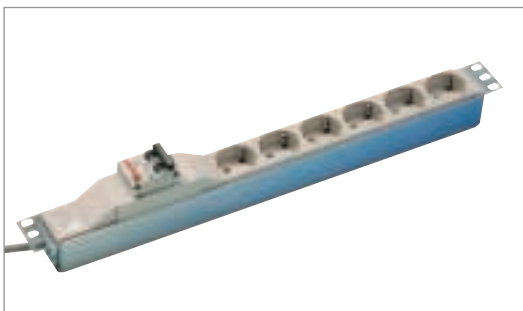
Schuko distribution bases power strip.

Bipolar distribution power strip with switch 16 A. Nominal voltage 250 V. 2 metre supply cable (3 x 1.5 mm²) with pin 2F+T 10/16 A 250 V. Include 2 flat-mounting supports with hardware.

No. of bases	Length (L) mm	Reference
6	440 (19')	ZDBE 6I
8	440 (19')	ZDBE 8IN
12	704	ZDBE 12I



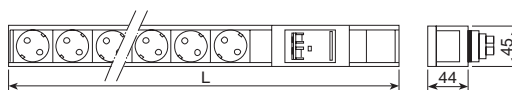
Distribution base plinth with sockets and circuit breaker



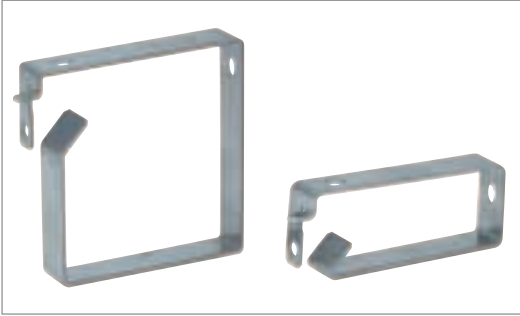
Schuko distribution bases power strip.

Bipolar distribution power strip with circuit breaker. Nominal voltage 250 V. 2 metre supply cable (3 x 1.5 mm²) with pin 2F+T 10/16 A 250 V. Include 2 flat-mounting supports with hardware.

No. of bases	Length (L) mm	Reference
6	440 (19')	ZDBE 6P
12	704	ZDBE 12P



Metal cable guide flange

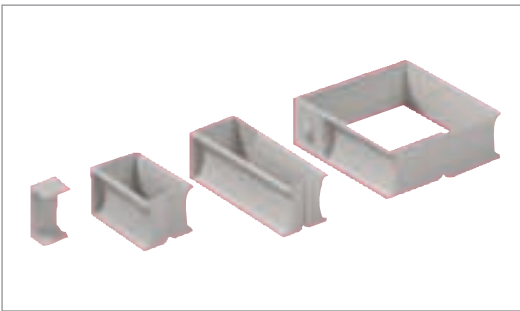


Vertical cable guide flange for fixing on 19" rack. Made of 2 mm sheet steel.

Dimensions (mm)	To be coupled to enclosures with widths	Reference
40×100	600/800	GC 4
100×100	800	GC 10



Insulated cable guide flange



Insulated cable guide flange, for fixing to the 8.5 mm perforated rectangular racks (19").

Adaptor for fixing the cable guide flanges on 6 x 5.4 mm perforations.

Reference: **AD/GCA**.

Dimensions (mm)	Reference
40×60	GCA 46
40×100	GCA 410
100×100	GCA 1010

19" cover fixing screws



Kit comprised of:

1 screw.

1 washer.

1 nut.

Packaging: 50 units.

Reference	Thread type
GFR95M5	M5
GFR95	M6

19" rack retainer



To be coupled to **BRP./OL** racks.

Opening to 120°.

Reference: **RET/BON**.

Pneumatic retainer for 180° 19" rack



To be coupled to the **BRP../OL 180** rack.

Reference: **RETN/BON 180**.

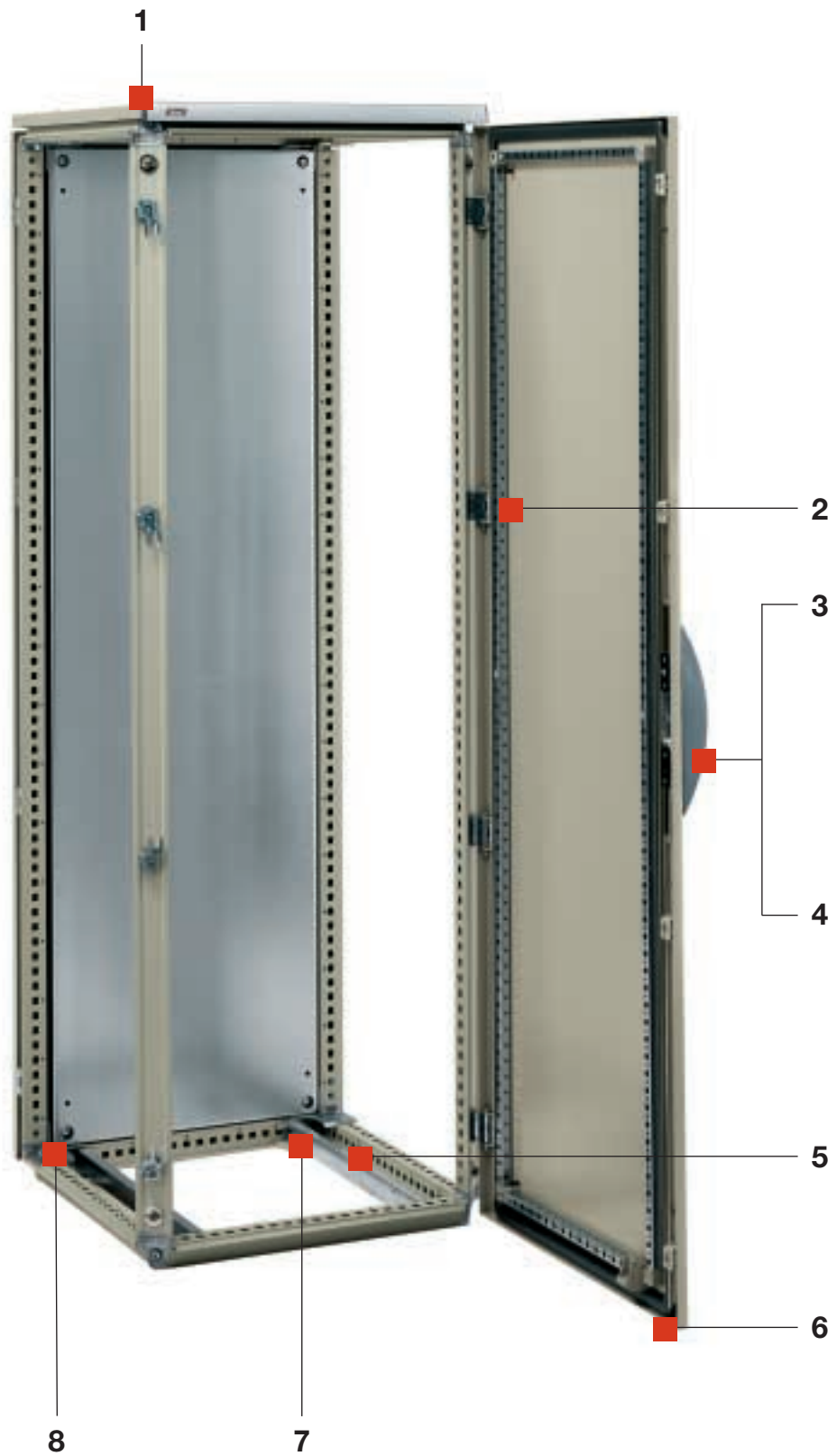
Handles for 19" cover



For use with covers.

Height	Reference
99	ASR 3U
156	ASR 6U

OLN industrial cubicle system





1 Lifting eyebolts joined directly to the enclosure structure.



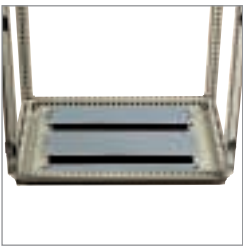
2 Steel hinge that allows the door to be reversed and to open 120°. Four-point locking system to ensure watertightness. Foamed-in polyurethane gasket.



3 With an interior handle lock on the left door to ensure watertightness in double-door enclosures.



4 Standard 5 mm double bar handle lock with the possibility of different lock inserts, outside of the sealed area.



5 Cable entry plates on the lower part of the enclosure, with a neoprene gasket for cable adjustment. Available with one, two or more entries.



6 Door centring piece.



7 Enclosure coupling system.

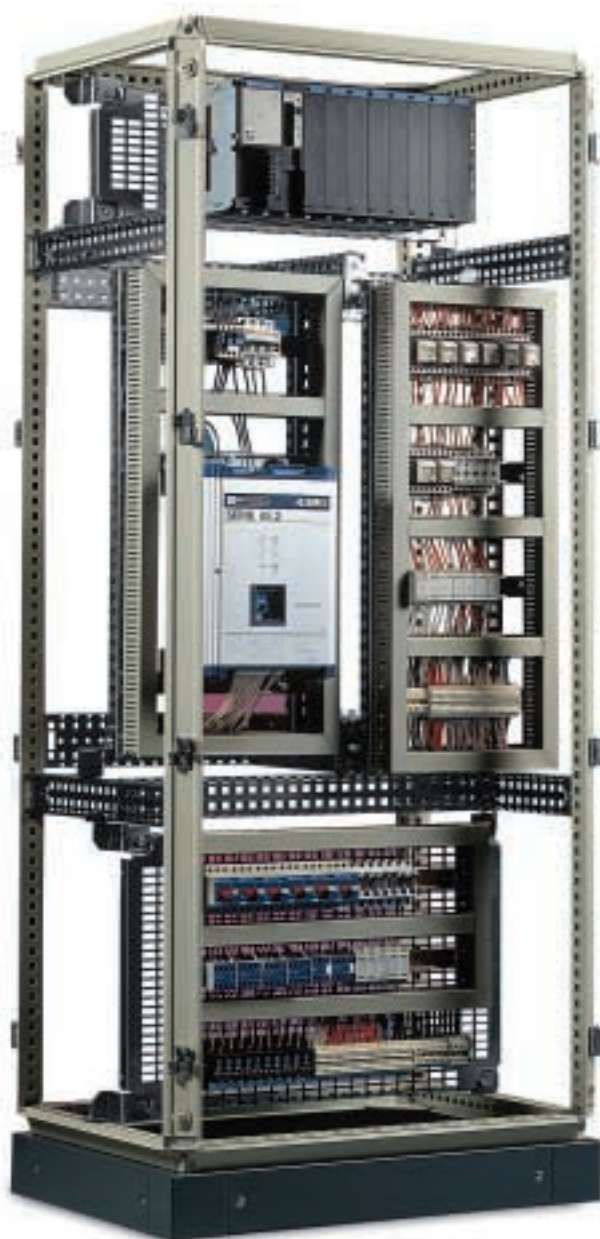


8 Mounting plate adjustment using adjustable guide.



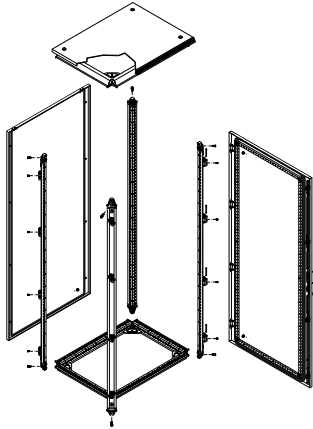
INSTALLATION SYSTEMS FOR INDUSTRIAL APPLICATIONS

- Great strength, reliability and rigidity.
- Ergonomic design and easy to install.
- New dimensions and versions available in the standard supply.
- Wide range of accessories.
- Flexibility with the supply kit.





GENERAL FEATURES OF METAL CUBICLE SUITE ENCLOSURES



A system of combinable modular metal enclosures consisting of a galvanised steel structure with a triangular closed profile with welded top and base and removable bolted profiles, giving the suite optimum versatility and robustness. Back and sides formed by 1.5 mm metal panels, with 2 mm reinforced doors (with and without glass) and a complete range of accessories.

Coupling the various parts is simple and quick with the help of all the accessories created specifically to simplify these operations.

The base enclosure is comprised of the following elements:

- 4 vertical triangle profiles upon which are incorporated the hinges, etc., including a reference perforation every 100 mm that is a positioning guide for the installer.
- Welded top and bottom frames, to which the vertical profiles are fixed.
- Plain or transparent front door except on the **OLNE.../...SP**.
- Standard double bar locking system with handle.
- Top with a personalisation band, HIMEL label and a transparent label protector.
- Rear panel (**OLNE** enclosures have two).
- Fixing supports for the mounting plate except on **OLNP, OLNM, OLNE**.
- Guide for the mounting plate except on **OLNP, OLNM, OLNE**.

Rigidity:

The top and bottom frames are welded. The sheet thickness for the profiles is 1.50 mm. The hinges are made of steel. All of this increases rigidity and decreases the risk of breaking.

Universal locking system with the possibility of 2-point locking and many different possibilities of keys and inserts available.

Treating and finishing:

The treatment applied to the components before the final finishing ensures that the sheet is clean and ensures perfect adherence of the paint, which results in higher protection in less-than-ideal environments, as well as when the customer makes cut-outs.

Description of the treatment:

The phases are as follows: degreasing, phosphatising, rinsing, washing, passivating, final wash with demineralised water, drying, application of paint with polyester-epoxy resin and polymerising.

The final finish will be:

- Mounting plates (**PMOL, PMP, PMI**): made of galvanised sheet steel.
- Plinths (**ZUN, ZUN/T, ZUN/C**): anthracite grey RAL-7022.
- Rest of the enclosure and components: texturised RAL-7032.
- Hinges, panel fixing support, locking guide supports, etc., zinc electrolytic bath, in an ecological passivation.

LIFTING AND TRANSPORT OF METAL CUBICLE SUITES



The **CPUT** coupling kit, the **TLN/12** brackets and the **PUN** coupling pieces are necessary when coupling and elevating enclosures.

The maximum loads are indicated on the attached graphic in compliance with EN 50298. For more information, see the installation instruction included in each enclosure.

FIG. 1

Directly to the TLN/12 brackets

a = 45°	P < 1160 kg
a = 60°	P < 830 kg
a = 90°	P < 480 kg

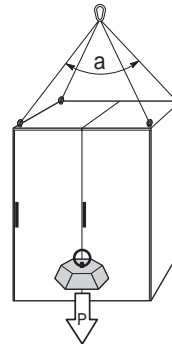


FIG. 2

Using an intermediate lifting support and TLN/12 brackets

a = 90°	P < 1360 kg
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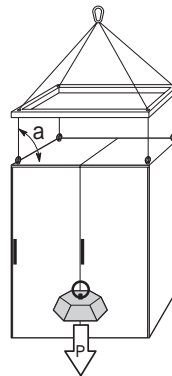


FIG. 3

Lifting using PUN pieces

a = 45°	P < 2800 kg
a = 60°	P < 2000 kg
a = 90°	P < 1100 kg

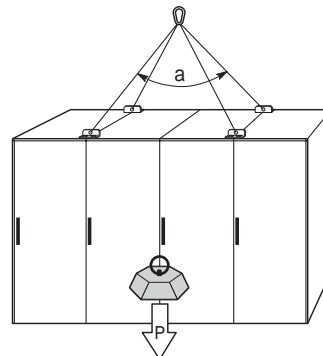
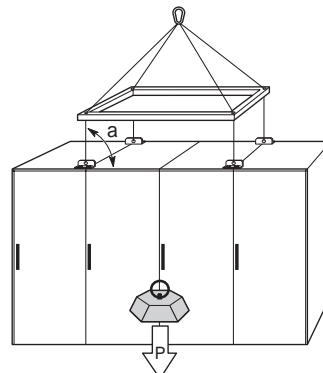


FIG. 4

Using an intermediate support and PUN pieces

a = 90°	P < 3000 kg
---------	-------------






OLN 186/60 PM



OLN 186/60

Metal enclosure consisting of a galvanised steel structure with a triangular closed profile with welded top and base and vertical, removable bolted profiles, giving the suite optimum versatility and robustness. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin. Mounting plate made of galvanised sheet steel (in models OLN...PM).

- Easy interior access.
- Maximum versatility for all kind of installations.
- Doors opening to 120°.
- Lock located outside of the sealed area with 4-point locking system for 1600 mm height enclosures or larger. Standard 5 mm  double bar lock with handle, possibility of different types of operation and latches.

Basic composition:

- Welded upper frame.
- Welded lower frame.
- Vertical profiles.
- Removable top.
- Removable rear panel
- Plain front door with lock
- Mounting plate fixing support.
- The **OLN...PM** version is supplied with the mounting plate on the exterior of the enclosure.
- Plate slide rail.
- Door centring piece on enclosures with a height of 1400 mm or more.
- Fixing system inside the internal door on double door models.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

Exterior structure dimensions in mm				Reference	
Height (A)	Width (B)	Depth (C)	No. of doors	Enclosure with mounting plate	Enclosure without mounting plate
1200	600	400	1	OLN 126/40 PM	OLN 126/40
1200	600	600	1	OLN 126/60 PM	OLN 126/60
1200	600	800	1	OLN 126/80 PM	OLN 126/80
1200	800	400	1	OLN 128/40 PM	OLN 128/40
1200	800	600	1	OLN 128/60 PM	OLN 128/60
1200	800	800	1	OLN 128/80 PM	OLN 128/80
1400	600	400	1	OLN 146/40 PM	OLN 146/40
1400	600	600	1	OLN 146/60 PM	OLN 146/60
1400	600	800	1	OLN 146/80 PM	OLN 146/80
1400	800	400	1	OLN 148/40 PM	OLN 148/40
1400	800	600	1	OLN 148/60 PM	OLN 148/60
1400	800	800	1	OLN 148/80 PM	OLN 148/80
1600	600	600	1	OLN 166/60 PM	OLN 166/60
1600	600	800	1	OLN 166/80 PM	OLN 166/80
1600	800	600	1	OLN 168/60 PM	OLN 168/60
1600	800	800	1	OLN 168/80 PM	OLN 168/80
1800	600	400	1	OLN 186/40 PM	OLN 186/40
1800	600	500	1	OLN 186/50 PM	OLN 186/50
1800	600	600	1	OLN 186/60 PM	OLN 186/60
1800	600	800	1	OLN 186/80 PM	OLN 186/80
1800	800	400	1	OLN 188/40 PM	OLN 188/40
1800	800	500	1	OLN 188/50 PM	OLN 188/50
1800	800	600	1	OLN 188/60 PM	OLN 188/60
1800	1000	400	1	OLN 1810/40 PM	OLN 1810/40
1800	1000	400	2	OLN 1810/40/2P-PM	OLN 1810/40/2P
1800	1000	500	1	OLN 1810/50 PM	OLN 1810/50
1800	1000	500	2	OLN 1810/50/2P-PM	OLN 1810/50/2P
1800	1000	600	1	OLN 1810/60 PM	OLN 1810/60
1800	1000	600	2	OLN 1810/60/2P-PM	OLN 1810/60/2P
1800	1200	400	2	OLN 1812/40/2P-PM	OLN 1812/40/2P
1800	1200	500	2	OLN 1812/50/2P-PM	OLN 1812/50/2P
1800	1200	600	2	OLN 1812/60/2P-PM	OLN 1812/60/2P
2000	300	500	1	-	OLN 203/50* (1)
2000	300	600	1	-	OLN 203/60*
2000	300	800	1	-	OLN 203/80*
2000	400	500	1	-	OLN 204/50*
2000	400	600	1	-	OLN 204/60*
2000	600	400	1	OLN 206/40 PM	OLN 206/40
2000	600	500	1	OLN 206/50 PM	OLN 206/50
2000	600	600	1	OLN 206/60 PM	OLN 206/60
2000	600	800	1	OLN 206/80 PM	OLN 206/80
2000	800	400	1	OLN 208/40 PM	OLN 208/40
2000	800	500	1	OLN 208/50 PM	OLN 208/50
2000	800	600	1	OLN 208/60 PM	OLN 208/60
2000	800	800	1	OLN 208/80 PM	OLN 208/80
2000	1000	400	1	OLN 2010/40 PM	OLN 2010/40
2000	1000	400	2	OLN 2010/40/2P-PM	OLN 2010/40/2P
2000	1000	500	1	OLN 2010/50 PM	OLN 2010/50
2000	1000	500	2	OLN 2010/50/2P-PM	OLN 2010/50/2P
2000	1000	600	1	OLN 2010/60 PM	OLN 2010/60
2000	1000	600	2	OLN 2010/60/2P-PM	OLN 2010/60/2P
2000	1000	800	1	OLN 2010/80 PM	OLN 2010/80
2000	1000	800	2	OLN 2010/80/2P-PM	OLN 2010/80/2P
2000	1200	400	2	OLN 2012/40/2P-PM	OLN 2012/40/2P
2000	1200	500	2	OLN 2012/50/2P-PM	OLN 2012/50/2P
2000	1200	600	2	OLN 2012/60/2P-PM	OLN 2012/60/2P
2000	1200	800	2	OLN 2012/80/2P-PM	OLN 2012/80/2P
2200	600	600	1	OLN 226/60 PM	OLN 226/60
2200	600	800	1	OLN 226/80 PM	OLN 226/80
2200	800	600	1	OLN 228/60 PM	OLN 228/60
2200	800	800	1	OLN 228/80 PM	OLN 228/80
2200	1000	600	1	OLN 2210/60 PM	OLN 2210/60
2200	1000	800	1	OLN 2210/80 PM	OLN 2210/80
2200	1000	800	2	OLN 2210/80/2P-PM	OLN 2210/80/2P
2200	1200	600	2	OLN 2212/60/2P-PM	OLN 2212/60/2P
2200	1200	800	2	OLN 2212/80/2P-PM	OLN 2212/80/2P

* Enclosures for busbars. (1) CE chamber + SEP busbar supports cannot be used.



OLN 186/60 KT

Metal cubicle consisting of a structure with a triangular closed profile with welded top and bottom frames and vertical removable bolted uprights, giving the set optimum stability and versatility. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin.


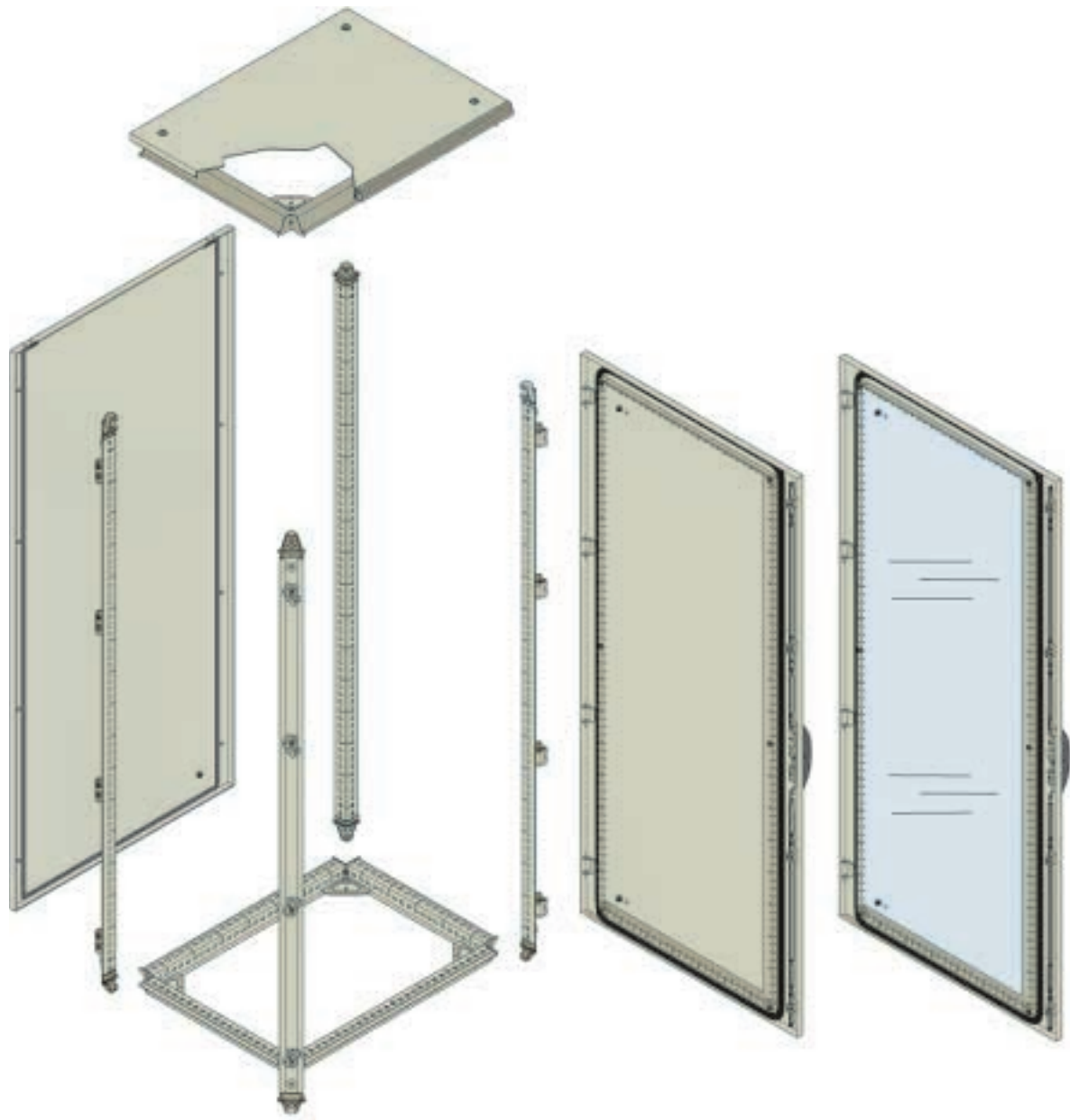

- Easy interior access.
- Maximum versatility for all kind of installations.
- Doors opening to 120°.
- Lock located outside of the sealed area with 4-point locking system for 1600 mm height enclosures or larger. Standard 5 mm  double bar lock with the possibility of different types of operation and latches.
- Tempered glass transparent door.
- Basic composition.
- Welded upper frame.
- Welded lower frame.
- Vertical profiles.
- Removable top.
- Removable rear panel.
- Transparent front door with lock.
- Mounting plate fixing support.
- Plate slide rail.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

Exterior dimensions in mm			No. of doors	Glass door enclosure
Height (A)	Width (B)	Depth (C)		
1200	600	400	1	OLN 126/40 KT
1200	600	600	1	OLN 126/60 KT
1200	600	800	1	OLN 126/80 KT
1200	800	400	1	OLN 128/40 KT
1200	800	600	1	OLN 128/60 KT
1200	800	800	1	OLN 128/80 KT
1400	600	400	1	OLN 146/40 KT
1400	600	600	1	OLN 146/60 KT
1400	600	800	1	OLN 146/80 KT
1400	800	400	1	OLN 148/40 KT
1400	800	600	1	OLN 148/60 KT
1400	800	800	1	OLN 148/80 KT
1600	600	600	1	OLN 166/60 KT
1600	600	800	1	OLN 166/80 KT
1600	800	600	1	OLN 168/60 KT
1600	800	800	1	OLN 168/80 KT
1800	600	400	1	OLN 186/40 KT
1800	600	500	1	OLN 186/50 KT
1800	600	600	1	OLN 186/60 KT
1800	600	800	1	OLN 186/80 KT
1800	800	400	1	OLN 188/40 KT
1800	800	500	1	OLN 188/50 KT
1800	800	600	1	OLN 188/60 KT
1800	1000	400	1	OLN 1810/40 KT
1800	1000	500	1	OLN 1810/50 KT
1800	1000	600	1	OLN 1810/60 KT
2000	600	400	1	OLN 206/40 KT
2000	600	500	1	OLN 206/50 KT
2000	600	600	1	OLN 206/60 KT
2000	600	800	1	OLN 206/80 KT
2000	800	400	1	OLN 208/40 KT
2000	800	500	1	OLN 208/50 KT
2000	800	600	1	OLN 208/60 KT
2000	800	800	1	OLN 208/80 KT
2000	1000	400	1	OLN 2010/40 KT
2000	1000	500	1	OLN 2010/50 KT
2000	1000	600	1	OLN 2010/60 KT
2000	1000	800	1	OLN 2010/80 KT
2200	600	600	1	OLN 226/60 KT
2200	600	800	1	OLN 226/80 KT
2200	800	600	1	OLN 228/60 KT
2200	800	800	1	OLN 228/80 KT
2200	1000	600	1	OLN 2210/60 KT
2200	1000	800	1	OLN 2210/80 KT



Metal cubicle consisting of a structure with a triangular closed profile with welded top and base and vertical removable bolted uprights, giving the set optimum stability and versatility. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin.

- Easy interior access.
- Maximum versatility for all kind of installations.
- Doors opening to 120°.
- Lock located outside of the sealed area with 4-point locking system for 1600 mm height enclosures or larger. Standard 5 mm  double bar lock with handle with the possibility of different types of operation and latches.
- Fixing system inside the internal door on double door models.
- The supply kit contains the elements necessary for installation according to the basic configuration. These items are distributed with individual references.
- The supply kit permits final mounting of the enclosure in very little time. Likewise, it allows for great space saving during transport and stocking and freedom of configuration.

Basic composition:**OLMV:**

- Vertical profiles with hinges and fixing support for panels and mounted locking mechanisms.

OLSI:

- Upper frame welded to top.
- Welded bottom frame.
- Plate slide rail.
- Mounting plate fixing support.

OLPP:

- Plain door with lock.
- Plain rear panel.

OLPU:

- Plain door with lock and interior handle on double door models.

OLPUKT:

- Transparent door with lock.

OLPO:

- Plain rear panel.

ADPUPOL:

- Rear door adaptation accessory.

AD2PUPOL:

- Double rear door adaptation accessory.

EMBT:

- Top trim.

INSTALLATION INSTRUCTIONS



Positioning and screwing the 4 vertical profiles to the corner chutes of the upper and lower frames.



Mounting the door using hinge pins.



Suspend the rear panel using self-centring hooks and screw in.



Detail of self-centring hooks on rear panels.

Top trim




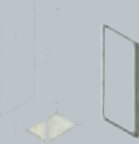


- To be used for the covering of the enclosure with rear door.
- RAL-7022.
- Mounting clips supplied.

Reference	Enclosure width (mm)
EMBT40	400
EMBT60	600
EMBT80	800
EMBT100	1000

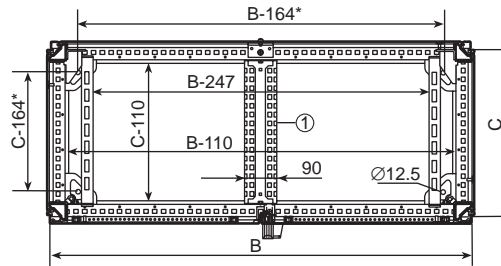
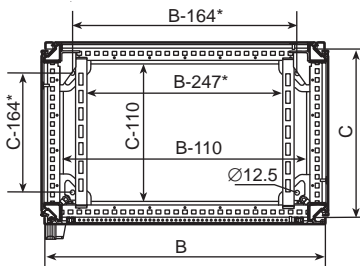
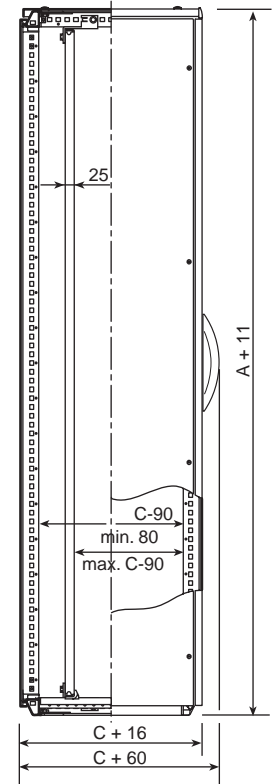
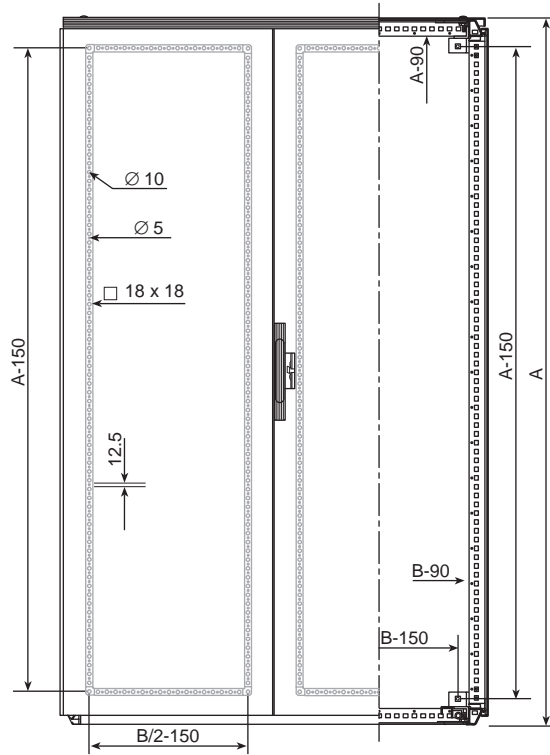
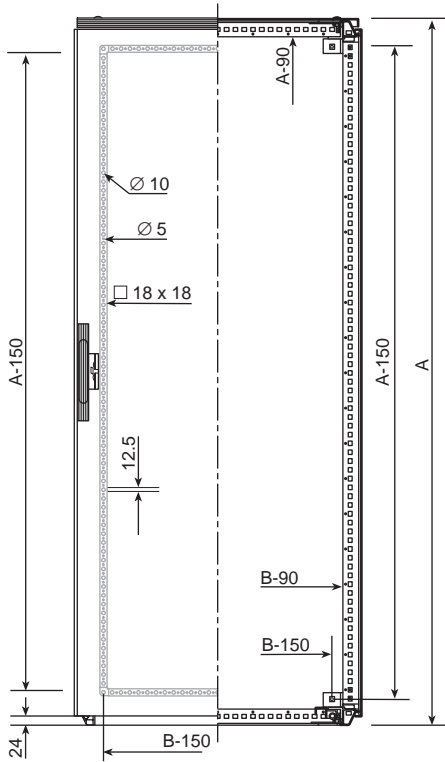
TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions in mm				Vertical profiles	Upper and lower
Height (A)	Width (B)	Depth (C)	No. of doors		
1200	600	400	1	OLMV 12	OLSI 64
1200	600	600	1	OLMV 12	OLSI 66
1200	600	800	1	OLMV 12	OLSI 68
1200	800	400	1	OLMV 12	OLSI 84
1200	800	600	1	OLMV 12	OLSI 86
1200	800	800	1	OLMV 12	OLSI 88
1400	600	400	1	OLMV 14	OLSI 64
1400	600	600	1	OLMV 14	OLSI 66
1400	600	800	1	OLMV 14	OLSI 68
1400	800	400	1	OLMV 14	OLSI 84
1400	800	600	1	OLMV 14	OLSI 86
1400	800	800	1	OLMV 14	OLSI 88
1600	600	600	1	OLMV 16	OLSI 66
1600	600	800	1	OLMV 16	OLSI 68
1600	800	600	1	OLMV 16	OLSI 86
1600	800	800	1	OLMV 16	OLSI 88
1800	600	400	1	OLMV 18	OLSI 64
1800	600	500	1	OLMV 18	OLSI 65
1800	600	600	1	OLMV 18	OLSI 66
1800	600	800	1	OLMV 18	OLSI 68
1800	800	400	1	OLMV 18	OLSI 84
1800	800	500	1	OLMV 18	OLSI 85
1800	800	600	1	OLMV 18	OLSI 86
1800	1000	400	1	OLMV 18	OLSI 104
1800	1000	400	2	OLMV 18/2P	OLSI 104
1800	1000	500	1	OLMV 18	OLSI 105
1800	1000	500	2	OLMV 18/2P	OLSI 105
1800	1000	600	1	OLMV 18	OLSI 106
1800	1000	600	2	OLMV 18/2P	OLSI 106
1800	1200	400	2	OLMV 18/2P	OLSI 124
1800	1200	500	2	OLMV 18/2P	OLSI 125
1800	1200	600	2	OLMV 18/2P	OLSI 126
2000	400	500	1	OLMV 20	OLSI 45
2000	400	600	1	OLMV 20	OLSI 46
2000	600	400	1	OLMV 20	OLSI 64
2000	600	500	1	OLMV 20	OLSI 65
2000	600	600	1	OLMV 20	OLSI 66
2000	600	800	1	OLMV 20	OLSI 68
2000	800	400	1	OLMV 20	OLSI 84
2000	800	500	1	OLMV 20	OLSI 85
2000	800	600	1	OLMV 20	OLSI 86
2000	800	800	1	OLMV 20	OLSI 88
2000	1000	400	1	OLMV 20	OLSI 104
2000	1000	400	2	OLMV 20/2P	OLSI 104
2000	1000	500	1	OLMV 20	OLSI 105
2000	1000	500	2	OLMV 20/2P	OLSI 105
2000	1000	600	1	OLMV 20	OLSI 106
2000	1000	600	2	OLMV 20/2P	OLSI 106
2000	1000	800	1	OLMV 20	OLSI 108
2000	1000	800	2	OLMV 20/2P	OLSI 108
2000	1200	400	2	OLMV 20/2P	OLSI 124
2000	1200	500	2	OLMV 20/2P	OLSI 125
2000	1200	600	2	OLMV 20/2P	OLSI 126
2000	1200	800	2	OLMV 20/2P	OLSI 128
2200	600	600	1	OLMV 22	OLSI 66
2200	600	800	1	OLMV 22	OLSI 68
2200	800	600	1	OLMV 22	OLSI 86
2200	800	800	1	OLMV 22	OLSI 88
2200	1000	600	1	OLMV 22	OLSI 106
2200	1000	800	1	OLMV 22	OLSI 108
2200	1000	800	2	OLMV 22/2P	OLSI 108
2200	1200	600	2	OLMV 22/2P	OLSI 126
2200	1200	800	2	OLMV 22/2P	OLSI 128

 Back panel and plain door	 Back panel	 Plain door	 Transparent door
OLPP 126	OLPO 126	OLPU 126	OLPU 126KT
OLPP 126	OLPO 126	OLPU 126	OLPU 126KT
OLPP 126	OLPO 126	OLPU 126	OLPU 126KT
OLPP 128	OLPO 128	OLPU 128	OLPU 128KT
OLPP 128	OLPO 128	OLPU 128	OLPU 128KT
OLPP 128	OLPO 128	OLPU 128	OLPU 128KT
OLPP 146	OLPO 146	OLPU 146	OLPU 146KT
OLPP 146	OLPO 146	OLPU 146	OLPU 146KT
OLPP 146	OLPO 146	OLPU 146	OLPU 146KT
OLPP 148	OLPO 148	OLPU 148	OLPU 148KT
OLPP 148	OLPO 148	OLPU 148	OLPU 148KT
OLPP 148	OLPO 148	OLPU 148	OLPU 148KT
OLPP 166	OLPO 166	OLPU 166	OLPU 166KT
OLPP 166	OLPO 166	OLPU 166	OLPU 166KT
OLPP 168	OLPO 168	OLPU 168	OLPU 168KT
OLPP 168	OLPO 168	OLPU 168	OLPU 168KT
OLPP 186	OLPO 186	OLPU 186	OLPU 186KT
OLPP 186	OLPO 186	OLPU 186	OLPU 186KT
OLPP 186	OLPO 186	OLPU 186	OLPU 186KT
OLPP 186	OLPO 186	OLPU 186	OLPU 186KT
OLPP 188	OLPO 188	OLPU 188	OLPU 188KT
OLPP 188	OLPO 188	OLPU 188	OLPU 188KT
OLPP 188	OLPO 188	OLPU 188	OLPU 188KT
OLPP 1810	OLPO 1810	OLPU 1810	OLPU 1810KT
OLPP 1810/2P	OLPO 1810	OLPU 1810/2	-
OLPP 1810	OLPO 1810	OLPU 1810	OLPU 1810KT
OLPP 1810/2P	OLPO 1810	OLPU 1810/2	-
OLPP 1810	OLPO 1810	OLPU 1810	OLPU 1810KT
OLPP 1810/2P	OLPO 1810	OLPU 1810/2	-
OLPP 1812/2P	OLPO 1812	OLPU 1812/2	-
OLPP 1812/2P	OLPO 1812	OLPU 1812/2	-
OLPP 1812/2P	OLPO 1812	OLPU 1812/2	-
OLPP 204	OLPO 204	OLPU 204	OLPU 204KT
OLPP 204	OLPO 204	OLPU 204	OLPU 204KT
OLPP 206	OLPO 206	OLPU 206	OLPU 206KT
OLPP 206	OLPO 206	OLPU 206	OLPU 206KT
OLPP 206	OLPO 206	OLPU 206	OLPU 206KT
OLPP 206	OLPO 206	OLPU 206	OLPU 206KT
OLPP 208	OLPO 208	OLPU 208	OLPU 208KT
OLPP 208	OLPO 208	OLPU 208	OLPU 208KT
OLPP 208	OLPO 208	OLPU 208	OLPU 208KT
OLPP 208	OLPO 208	OLPU 208	OLPU 208KT
OLPP 2010	OLPO 2010	OLPU 2010	OLPU 2010KT
OLPP 2010/2P	OLPO 2010	OLPU 2010/2	-
OLPP 2010	OLPO 2010	OLPU 2010	OLPU 2010KT
OLPP 2010/2P	OLPO 2010	OLPU 2010/2	-
OLPP 2010	OLPO 2010	OLPU 2010	OLPU 2010KT
OLPP 2010/2P	OLPO 2010	OLPU 2010/2	-
OLPP 2010	OLPO 2010	OLPU 2010	OLPU 2010KT
OLPP 2010/2P	OLPO 2010	OLPU 2010/2	-
OLPP 2012/2P	OLPO 2012	OLPU 2012/2	-
OLPP 2012/2P	OLPO 2012	OLPU 2012/2	-
OLPP 2012/2P	OLPO 2012	OLPU 2012/2	-
OLPP 2012/2P	OLPO 2012	OLPU 2012/2	-
OLPP 226	OLPO 226	OLPU 226	OLPU 226KT
OLPP 226	OLPO 226	OLPU 226	OLPU 226KT
OLPP 228	OLPO 228	OLPU 228	OLPU 228KT
OLPP 228	OLPO 228	OLPU 228	OLPU 228KT
OLPP 2210	OLPO 2210	OLPU 2210	OLPU 2210KT
OLPP 2210	OLPO 2210	OLPU 2210	OLPU 2210KT
OLPP 2210/2P	OLPO 2210	OLPU 2210/2	-
OLPP 2212/2P	OLPO 2212	OLPU 2212/2	-
OLPP 2212/2P	OLPO 2212	OLPU 2212/2	-

Dimensions (mm)

FIG. 1

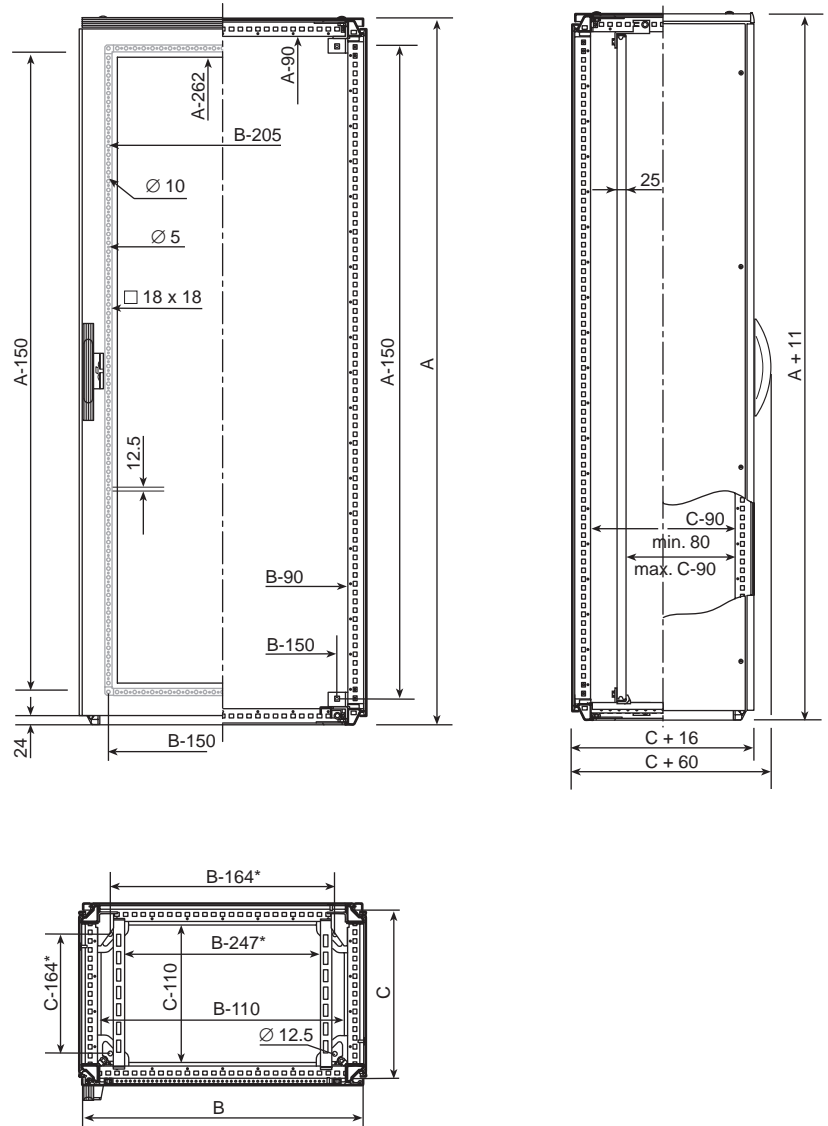


* Dimensions for fixing to the floor or a plinth.

① Central crossbar for 1,200 mm width enclosures.

Dimensions (mm)

FIG. 1



* Dimensions for fixing to the floor or a plinth.

Side panels screwed to exterior or interior



Set of 2 side panels for fixing inside or outside the enclosure.

Made of sheet steel and painted with textured light grey RAL-7032 polyester epoxy resin.

- Includes a sealing gasket and all fixing hardware.

Enclosure measurements (mm)		Reference	
Height	Depth	Interior fixing	Exterior fixing
1200	400	2 PLOL 124	2 PLIOL 124
1200	600	2 PLOL 126	2 PLIOL 126
1200	800	2 PLOL 128	2 PLIOL 128
1400	400	2 PLOL 144	2 PLIOL 144
1400	600	2 PLOL 146	2 PLIOL 146
1400	800	2 PLOL 148	2 PLIOL 148
1600	600	2 PLOL 166	2 PLIOL 166
1600	800	2 PLOL 168	2 PLIOL 168
1800	400	2 PLOL 184	2 PLIOL 184
1800	500	2 PLOL 185	2 PLIOL 185
1800	600	2 PLOL 186	2 PLIOL 186
1800	800	2 PLOL 188	2 PLIOL 188
2000	400	2 PLOL 204	2 PLIOL 204
2000	500	2 PLOL 205	2 PLIOL 205
2000	600	2 PLOL 206	2 PLIOL 206
2000	800	2 PLOL 208	2 PLIOL 208
2200	600	2 PLOL 226	2 PLIOL 226
2200	800	2 PLOL 228	2 PLIOL 228



Side panels with knock-outs for installation of cooling units (see page 6/63)

Enclosure measurements (mm)		Reference
Height	Depth	
1800	600	2 PLOL 186 CLM
1800	800	2 PLOL 188 CLM
2000	600	2 PLOL 206 CLM
2000	800	2 PLOL 208 CLM

Quick closing side panels



Set of 2 side panels fixed to the exterior of the enclosure using clips.

Made of sheet steel and painted with textured light grey RAL-7032 polyester epoxy resin.

- Without sealing gasket.

Enclosure measurements (mm)		Reference
Height	Depth	
1200	600	2 PLROL 126
1200	800	2 PLROL 128
1400	600	2 PLROL 146
1400	800	2 PLROL 148
1600	600	2 PLROL 166
1600	800	2 PLROL 168
1800	600	2 PLROL 186
1800	800	2 PLROL 188
2000	600	2 PLROL 206
2000	800	2 PLROL 208

Simple support for side panel



- Permits mounting side panels on enclosure suites joined at the rear or in the absence of rear panels.
 - Supplied with hardware.
- Reference: **SPON**.

Rear panel with interior screws



Rear panel fixed from the interior of the enclosure. Made of sheet steel and painted with textured light grey RAL-7032 polyester epoxy resin.

- Includes a sealing gasket and fixing hardware.

Enclosure measurements (mm)		Reference
Height	Depth	
1200	600	PPION 126
1200	800	PPION 128
1400	600	PPION 146
1400	800	PPION 148
1600	600	PPION 166
1600	800	PPION 168
1800	600	PPION 186
1800	800	PPION 188
1800	1000	PPION 1810
1800	1200	PPION 1812
2000	400	PPION 204
2000	600	PPION 206
2000	800	PPION 208
2000	1000	PPION 2010
2000	1200	PPION 2012
2200	600	PPION 226
2200	800	PPION 228
2200	1000	PPION 2210
2200	1200	PPION 2212

Bottom blanking plug



- Completes the sealing of the bottom of the enclosure mounted on a plinth or positioned on the floor.
- Reference: **TPOB**.

Cubicle suites



The constructive design of **OLN** enclosures has been made with the formation of cubicle suites in mind. The speed and ease of coupling, for both width and depth, and the components created specifically to facilitate coupling and transport allow us to offer the most suitable solution for each electrical installation.

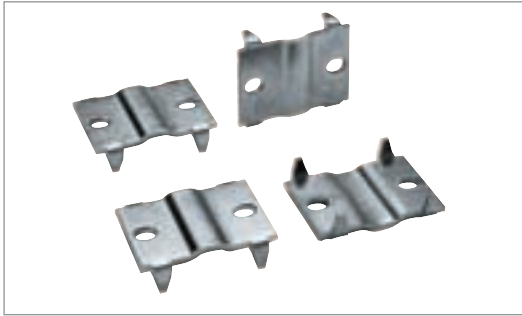
Coupling kit



Permits reinforced coupling of enclosures to form cubicle suites.
Reference: **CPUT**.

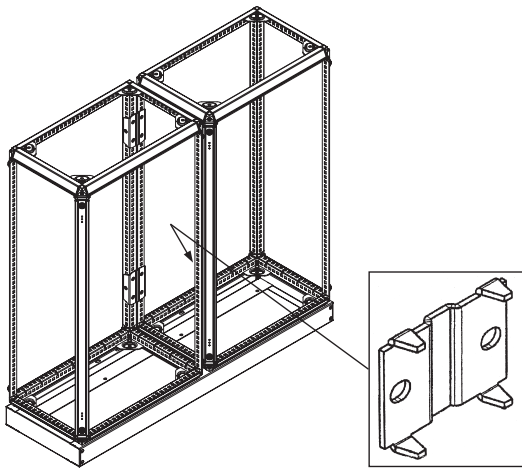


Interior coupling kit



Set of 4 pieces designed to be situated in the front part of the suite of **OLN** enclosures as a complement to the **CPUT** unit when a **UNIDIS** or **DINIMEL** chassis is to be installed, or as a reinforcement of other coupling systems, mainly in large enclosures.

Reference: **CSUT**.



Enclosure separation plate



To create separate compartments in the cubicle suites. Made of sheet steel painted texturised grey RAL-7032.

Enclosure dimensions		Reference
Height (A)	Depth (C)	
1600	600	CHS 166
1600	800	CHS 168
1800	400	CHS 184
1800	500	CHS 185
1800	600	CHS 186
2000	400	CHS 204
2000	500	CHS 205
2000	600	CHS 206
2000	800	CHS 208
2200	600	CHS 226
2200	800	CHS 228

Coupling reinforcement piece



Reinforces the joint between enclosures.

Set of 2 pieces.

Reference: **PUT**.



Exterior enclosure coupling kit



Permits coupling enclosures from the outside (in the case that attaching from the interior is impossible).

Reference: **CUNE**.

Top dust cover



- RAL-7032.
- For coupling enclosures.

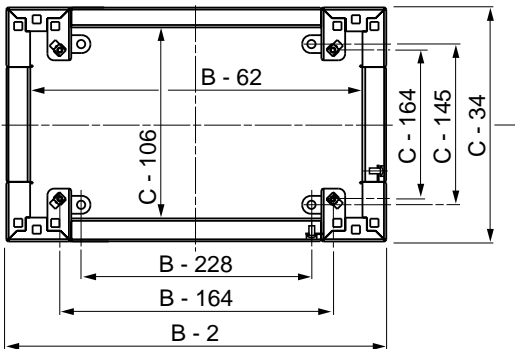
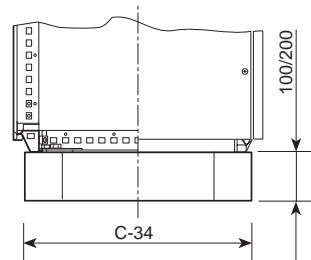
Enclosure depth (mm)	Reference
400	GPON40
500	GPON50
600	GPON60
800	GPON80

Individual plinths



For direct coupling to enclosures using the floor fixing holes.

- 100 and 200 mm high.
- Accessible from the front and back.
- Possibility of lateral coupling in an enclosure suite.
- Anthracite grey RAL-7022.

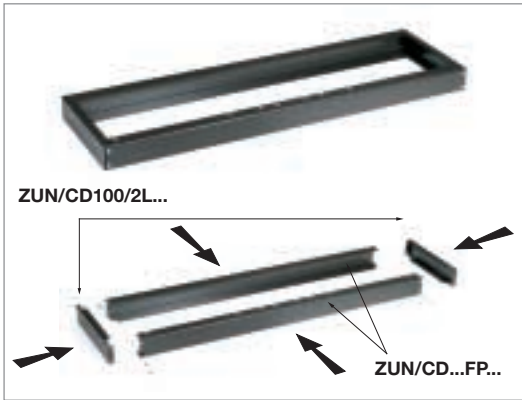


*Dimensions for floor fixing.



Enclosure measurements (mm)		Height	
Width (B)	Width (C)	100 mm	200 mm
300	500	ZUN 35/100	ZUN 35/200
300	600	ZUN 36/100	ZUN 36/200
300	800	ZUN 38/100	ZUN 38/200
400	500	ZUN 45/100	ZUN 45/200
400	600	ZUN 46/100	ZUN 46/200
600	300	ZUN 63/100	ZUN 63/200
600	400	ZUN 64/100	ZUN 64/200
600	500	ZUN 65/100	ZUN 65/200
600	600	ZUN 66/100	ZUN 66/200
600	800	ZUN 68/100	ZUN 68/200
800	300	ZUN 83/100	ZUN 83/200
800	400	ZUN 84/100	ZUN 84/200
800	500	ZUN 85/100	ZUN 85/200
800	600	ZUN 86/100	ZUN 86/200
800	800	ZUN 88/100	ZUN 88/200
1000	300	ZUN 103/100	ZUN 103/200
1000	400	ZUN 104/100	ZUN 104/200
1000	500	ZUN 105/100	ZUN 105/200
1000	600	ZUN 106/100	ZUN 106/200
1000	800	ZUN 108/100	ZUN 108/200
1200	300	ZUN 123/100	ZUN 123/200
1200	400	ZUN 124/100	ZUN 124/200
1200	500	ZUN 125/100	ZUN 125/200
1200	600	ZUN 126/100	ZUN 126/200
1200	800	ZUN 128/100	ZUN 128/200
1600	400	ZUN 164/100	ZUN 164/200
1600	500	ZUN 165/100	ZUN 165/200
1600	600	ZUN 166/100	ZUN 166/200

Modular plinths for suites



Comprised of a **ZUN/CD... FP...** front and rear unit with a 3 mm U-shaped profile and one or two **ZUN/CD... FP...** lateral units (depending on whether the height is 100 or 200 mm), also with a 1.5 mm U-shaped profile. Painted anthracite grey RAL-7022.

Enclosure dimensions		Reference
Total suite depth	Plinth height*	
500	100/200	ZUN/CD100/2L5
600	100/200	ZUN/CD100/2L6
800	100/200	ZUN/CD100/2L8

* For 200 mm high plinths, 2 sets should be ordered.

Enclosure dimensions		Reference
Total set width	Plinth height	
1600	100	ZUN/CD100 FP16
1800	100	ZUN/CD100 FP18
2400	100	ZUN/CD100 FP24
1600	200	ZUN/CD200 FP16
1800	200	ZUN/CD200 FP18
2400	200	ZUN/CD200 FP24

POSSIBLE COMBINATIONS

Total plinth width	Enclosure width
1600	600 + 1000
	800 + 800
	1000 + 600
1800	600 + 600 + 600
	600 + 1200
	800 + 1000
	1000 + 800
2400	1200 + 600
	600 + 600 + 600 + 600
	600 + 600 + 1200
	600 + 800 + 1000
	600 + 1200 + 600
	800 + 600 + 1000
	800 + 800 + 800
	800 + 1000 + 600
	1000 + 600 + 800
	1200 + 600 + 600
1200 + 1200	

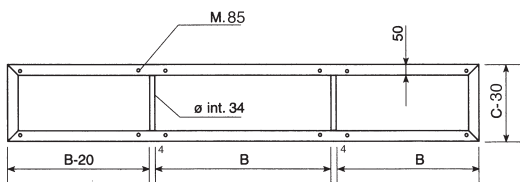
Plinths for suites



Comprised of a 3 mm U-shaped profile for forming cubicle suites up to 3 m width. Painted anthracite grey RAL-7022.

- Possibility of lateral coupling to form wider cubicle suites.
- 100 and 200 mm high.
- Customised manufacture available on request.

Reference: **ZUN/C**.



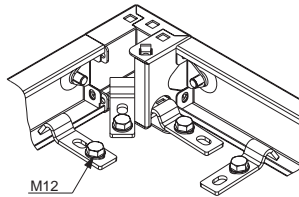
B and C= nominal dimensions

Plinth fixing



Set of 4 floor-fixing pieces for the **ZUN** plinth, made of 5 mm thick zinc-coated sheet steel. Especially suited for when the perforations incorporated on the plinth cannot be used, as well as to reinforce the floor fixing. Designed for use with M12 screws (not supplied).

Reference: **PFZUN**.



Plinths for transportation

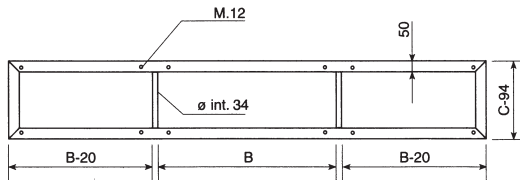


Comprised of a 3 mm thick and 100 mm high U-shaped profile. Supplied without painting, or painted anthracite grey RAL-7022.

- Housing for elevation bar entries.
- Customised manufacture available on request.

Reference: **ZUN/T**.

See the "elevation and transport" note on page 1/167.



B and C = nominal dimensions

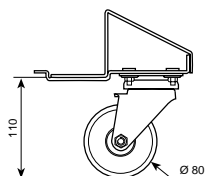
Wheels for transport



Set of 4 wheels quickly mounted on the plinth, two of which are self-locking.

Reference: **RUT/ZUN**.

Max. weight per wheel = 75 kg.



OLN transport wheels



Set of 4 wheels.

Mounted directly on the structure of the enclosure.

Double wheels.

Maximum load per wheel: 160 kg.

Reference: **RUT**.

Adjustable legs



Set of four adjustable legs.

Maximum load per leg: 100 kg.

Reference: **PRMA**.

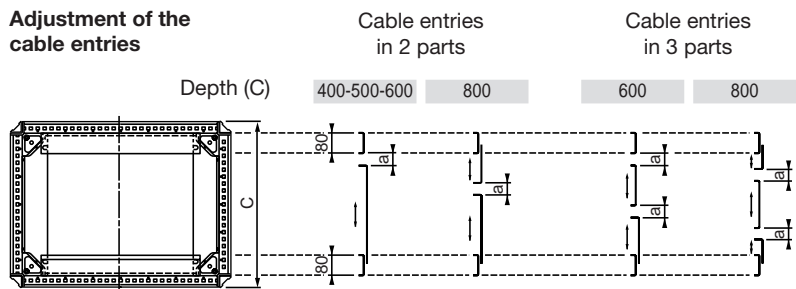
Cable entry plate



Cable entry plates on the lower part of the enclosure, with a neoprene gasket for cable adjustment. Made of galvanised sheet steel.

Enclosure dimensions		Plain	With one entry	With two entries
Width (B)	Depth (C)			
400	500	ECON 45/0	ECON 45/1	
400	600	ECON 46/0	ECON 46/1	ECON 46/2
600	400	ECON 64/0	ECON 64/1	
600	500	ECON 65/0	ECON 65/1	
600	600	ECON 66/0	ECON 66/1	ECON 66/2
600	800	ECON 68/0	ECON 68/1	ECON 68/2
800	400	ECON 84/0	ECON 84/1	
800	500	ECON 85/0	ECON 85/1	
800	600	ECON 86/0	ECON 86/1	ECON 86/2
800	800	ECON 88/0	ECON 88/1	ECON 88/2
1000	400	ECON 104/0	ECON 104/1	
1000	500	ECON 105/0	ECON 105/1	
1000	600	ECON 106/0	ECON 106/1	ECON 106/2
1000	800	ECON 108/0	ECON 108/1	ECON 108/2
1200	400	ECON 124/0	ECON 124/1	
1200	500	ECON 125/0	ECON 125/1	
1200	600	ECON 126/0	ECON 126/1	ECON 126/2
1200	800	ECON 128/0	ECON 128/1	ECON 128/2

Adjustment of the cable entries



a: from 25 to 50 mm.

Brush cable entry



Set of two brush gaskets to be installed on **ECON** cable entries.

- Fixed with clips.
- Brushes made of black plastic fibre.

Enclosure width	Reference
400	JPON 4
600/1200*	JPON 6
800	JPON 8
1000	JPON 10

*For 1200 mm enclosures, use two references.

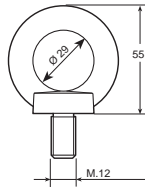
Eyebolts



M12 lifting eyebolts bolted directly to the enclosure structure.

Reference: **TLN/12**.

Set of 2 eyebolts.



Lifting brackets

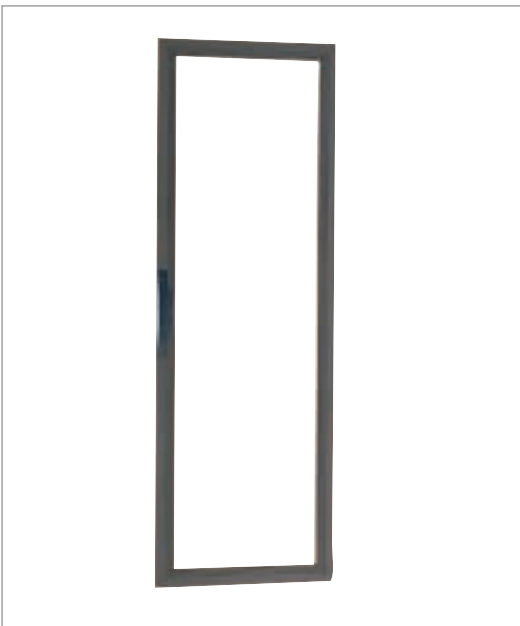


Set of 2 pieces for elevation and transport of the enclosure. Due to their strong resistance, we recommend also using the coupling reinforcement pieces.

See the "elevation and transport" note on page 1/167.

Reference: **PUN**.

Aluminium doors



Transparent doors with a polycarbonate window, formed by a very strong anodised aluminium profile. Colour RAL-7013.

- Maximum area of interior visibility.
- High quality finish.
- Opening to 120°.
- **OLN** standard double bar lock.

For attachment to enclosures		Reference	Weight kg
Height (A)	Width (B)		
1800	600	PAOL 186	11
1800	800	PAOL 188	13
1800	1000	PAOL 1810	15
2000	600	PAOL 206	13
2000	800	PAOL 208	14
2000	1000	PAOL 2010	16

Internal door



OLN 186/60 + PIL 186



OLN 1810602P + PIL 18102P

To be directly incorporated into **OLN** enclosures, made of sheet steel painted with texturised grey RAL-7032 polyester epoxy resin.

- Depth adjustable in 25 mm intervals.
- Door opens to the left or the right indistinctly.
- Reinforcement profiles on the back part with cut-outs every 25 mm for the door equipment.
- Standard double bar locks. By fixing the wing nut to the lock, the double bar lock becomes a handle lock. Easily changeable to triangle, square lock or key-operated lock, see the **CRN** lock section.



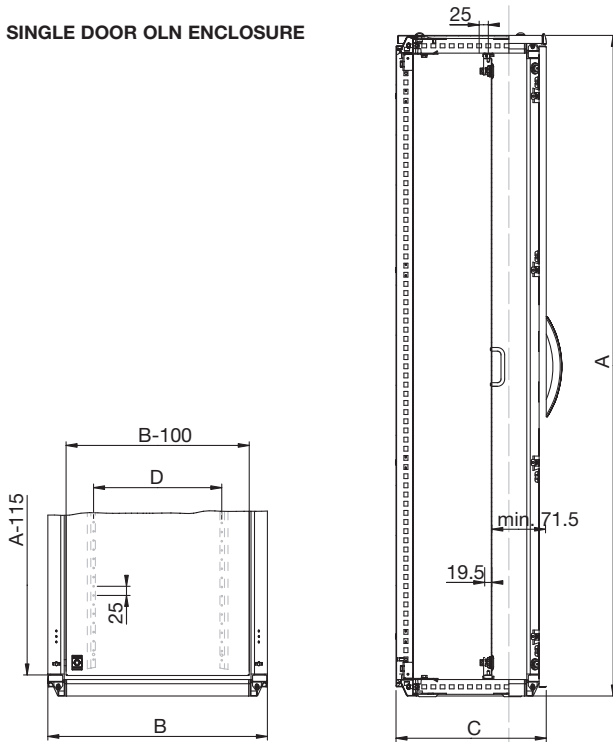
Side view of installed internal door, with detail of lock position.

Enclosure measurements (mm)		D	Reference
Height (A)	Width (B)		
1600	600	350	PIL 166
1600	800	550	PIL 168
1800	600	350	PIL 186
1800	800	550	PIL 188
1800	1000	700	PIL 1810
1800	1000	700	PIL 18102P*
2000	600	350	PIL 206
2000	800	550	PIL 208
2000	1000	700	PIL 2010
2000	1000	700	PIL 20102P*
2200	600	350	PIL 226
2200	800	550	PIL 228
2200	1000	700	PIL 2210
2200	1000	700	PIL 22102P*

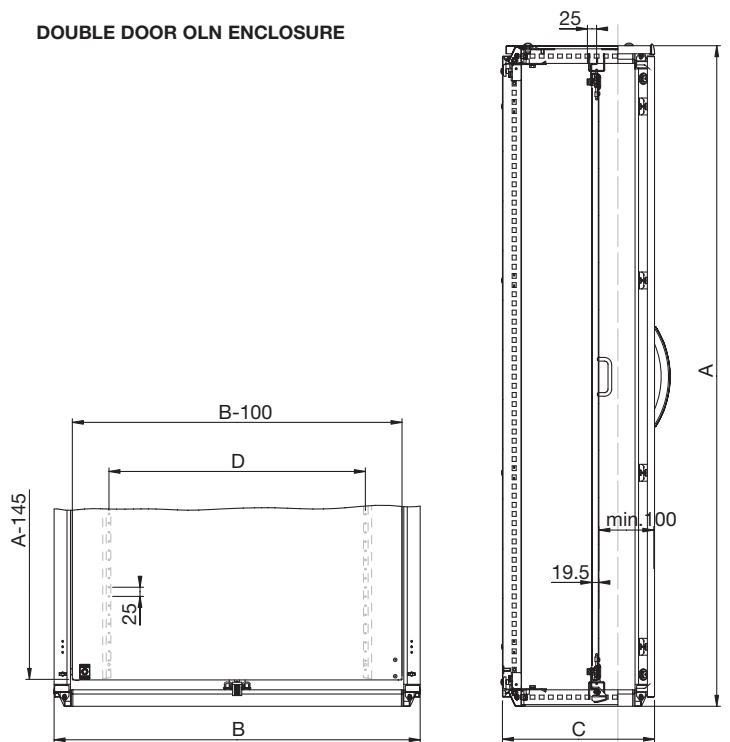
* For double door enclosures.

C = nominal depth of enclosure

SINGLE DOOR OLN ENCLOSURE



DOUBLE DOOR OLN ENCLOSURE

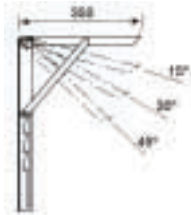


Folding support tray

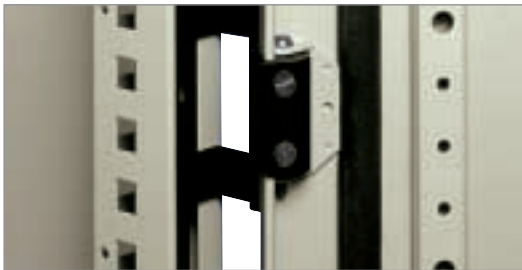


Made of sheet steel in grey RAL-7032. To be fixed directly to the door reinforcement frame, height-adjustable every 25 mm and with the possibility of placing the tray in 4 different positions.

Enclosure dimensions	Reference
Width (B)	
600	BSP/OL 6
800	BSP/OL 8

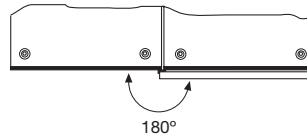


180° hinges



Made of black anodised aluminium, ready to be coupled to both plain and transparent doors.

Reference: **BEN 180**.



Door retainer



Mechanical or pneumatic door retainers for direct incorporation into the structure of the enclosure.

- Easy installation.
- Opening from 90° to 120°, depending on model.



Specifications	Reference
2 position mechanical retainers (90° and 120°) for doors with hinges on the right	RET/OL
Ideal for doors with hinges on the left	RET I/OL
Pneumatic retainer for 90°/120° opening	RETN/OL

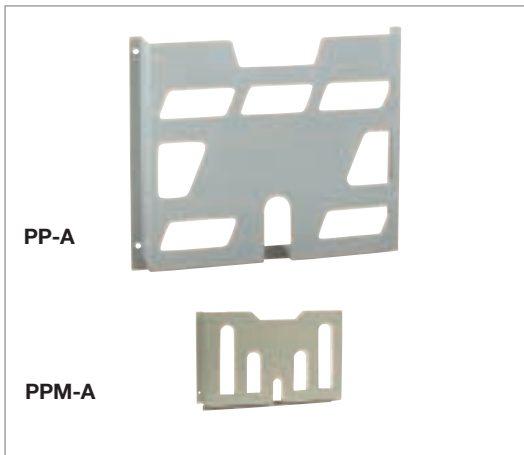
Door centring piece



To lift up the door as it closes. Max. door load: 60 kg.

Reference: **CP/CMOL**.

Document pocket



PP-A models made of **PS** in RAL-7035 grey.

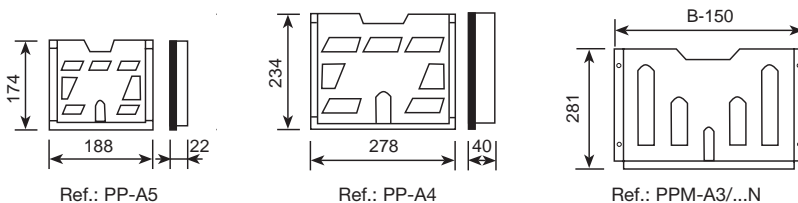
- Fixed with adhesive tape or screws.

For holding DIN A3, A4 or A5-sized plans.

PPM-A models made of sheet steel and painted grey RAL-7032.

- Fixed to the reinforcement frame of the door with screws.

INSULATED		METAL	
Plan size	Reference	Enclosure width dimensions (B)	Reference
A4	PP-A4	600	PPM-A3/6N
A5	PP-A5	800	PPM-A3/8N



Flat lock



EMP/OLN

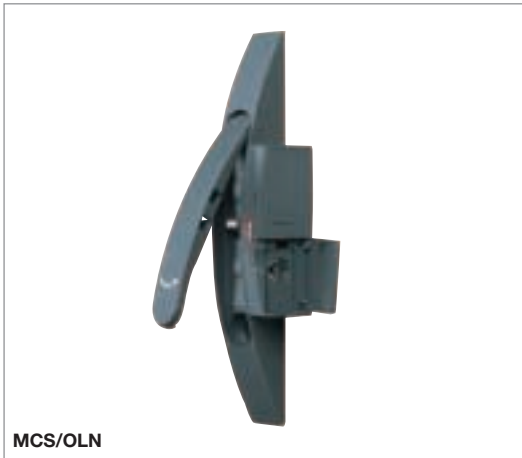
Flat lock optional for **OLN**.

Standard supply 5 mm double bar lock.

- Operation using:
 - **LDB 5** key (according to DIN 43668).
 - For changing the lock inserts corresponding to **PIL** internal doors, consult the **CRN** enclosure lock section.
 - For changing locks corresponding to enclosures for **PC** or Motor Control Centre application, consult the lock section for **PK** panels.

TRANSFORMATION OF THE STANDARD LOCK TO STANDARDISED VARIATIONS		
Key operation Ref.	Reference	Specifications
	TPT7/OLN	Triangle lock with Δ 7 mm side
	TPT8/OLN	Triangle lock with Δ 8 mm side
	TPC6/OLN	Square lock with □ 6 mm side
	TPC7/OLN	Square lock with □ 7 mm side
	TPC8/OLN	Square lock with □ 8 mm side
	TPDB5/OLN	∅ 5 mm double bar lock
	TPDES/OLN	Slotted-head screwdriver

Handle locks



MCS/OLN



Padlock, Ref. BC/OLN.















MCS/OLN

Handle lock with standard double bar mechanism (supplied without insert). The insert must be ordered separately.

■ Operation with **LDB/OLN**  key (according to DIN 43668).

TRANSFORMATION OF THE STANDARD LOCK TO STANDARDISED VARIATIONS

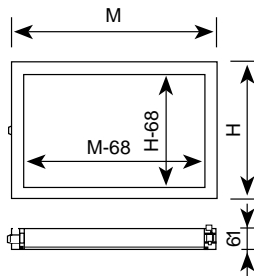
Key operation Ref.	Reference	Specifications
	TT 7/OLN	Triangle lock with Δ 7 mm side
	TT 8/OLN	Triangle lock with Δ 8 mm side
	TT 9/OLN	Triangle lock with Δ 9 mm side
	TT 10/OLN	Triangle lock with Δ 10 mm side
	TCNOMO/OLN	CNOMO triangle lock with Δ 6.5 mm side
	TCNOMO/OLN-2P	CNOMO triangle lock Δ 6.5 mm side for two door enclosures
	TC 6/OLN	□ 6 mm square lock
	TC 7/OLN	□ 7 mm square lock
	TC 8/OLN	□ 8 mm square lock
	TC 6H/OLN	□ 6 square lock female
	TC 8H/OLN	□ 8 square lock female
	TDB3/OLN	3 mm double bar lock
	TDB5/OLN	5 mm double bar lock
	TEX10/OLN	○ 10 mm hexagonal lock
	TS/OLN	Lock using pushbutton
	TFI/OLN	FIAT lock
	TM24/OLN	2 x 4 coin lock
	TCOR/OLN	Crown lock (tube)
	TAUSA/OLN	Channelled
	TBENZ/OLN	Daimler Benz lock
	TLR/OLN	Locking catch with reinforced key
	TJIS/OLN	JIS
	TFAC/OLN	FAC-type lock
	TL/OLN	405-type key lock
	TLB/OLN	Top lock with 405 key
	TLE1/OLN	E1 lock
	TL421E/OLN	421 E key operated lock
	TL455/OLN	455 key-operated lock
	TL1242E/OLN	1242 E key operated lock
	TL1332E/OLN	1332 E key operated lock
	TL2131A/OLN	2131 A key operated lock
	TL2132A/OLN	2132 A key operated lock
	TL2331A/OLN	2331 A key operated lock
	TL2433A/OLN	2433 A key operated lock
	TL2452E/OLN	2452 E key operated lock
	TL3113A/OLN	3113 A key operated lock
	TL3122E/OLN	3122 E key operated lock
	TL3123A/OLN	3123 A key operated lock
	TL3133A/OLN	3133 A key operated lock
	TL3422E/OLN	3422 E key operated lock
	TL3432E/OLN	3432 E key operated lock
	TL1300/OLN	EDF 1300 key operated lock
	TL1400/OLN	EDF 1400 key operated lock
	ABDIN/OLN	Adap. DIN insert
	ABKABA/OLN	Adap. KABA insert
	ABASSA/OLN	Adap. ASSA insert
	MCS/MICH8376	Michelin-type handle-operated lock
	MCS/MICH8079	Michelin-type handle-operated lock
	MCS/MICH8133	Michelin-type handle-operated lock

Control protection frames

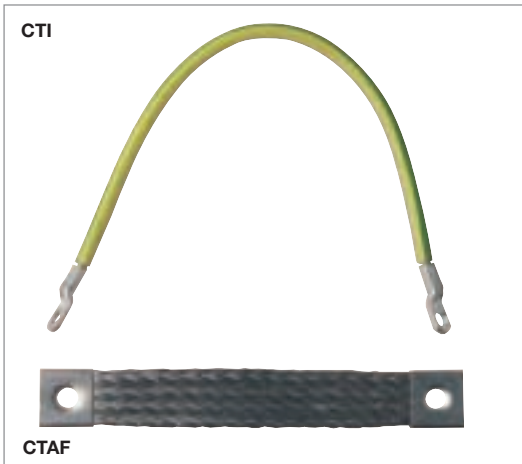


Made of natural colour anodised extruded aluminium, with a neoprene gasket, hinges that fix directly to the door and a key operated lock.

Height (H)	Width (M)	Reference
400	400	MA-44
400	500	MA-45
400	600	MA-46
500	500	MA-55
600	600	MA-66



Earthing connections and braids



Earthing connection **CTI**: terminal of brass and copper alloy with PVC cover.

Earthing braid **CTAF**: guarantees the earthing connection for high frequencies, avoiding the interference currents that are produced at high frequencies. Made of tinned copper.

Length mm	Width mm	Section mm ²	Terminal Ø mm	Reference
170	-	6	6.4	CTI 17/6
170	-	10	6.4	CTI 17/10
220	-	6	6.4	CTI 22/6
220	-	10	6.4	CTI 22/10
220	-	25	8.3	CTI 22/25
410	-	10	8.3	CTI 41/10
410	-	25	8.3	CTI 41/25
155	20	16	8.5	CTAF 15/16
200	21	25	8.5	CTAF 20/25
200	26	25	8.5	CTAF 25/25
200	40	50	8.5	CTAF 20/50

Accessories for forming cubicle suites

Machine connections, automated exits, interconnection between enclosures, etc. need a divider that permits mounting sockets with industrial pins, such as **Harting**.

- This new divider adapts to **OLN** enclosures, attaching to the structure frame.
- The plates available in different dimensions are equipped with a sealing gasket on the edges and have a high number of perforations.
- Blanking plates permit covering the perforations not used.
- 3 models of reducers are available to adapt to the different types of connectors.
- Easy mounting of the sockets.
- Sealing guaranteed.

Connector separating plates



- Galvanised sheet.
- Plates supplied with gaskets and fixing hardware.

CONNECTOR SEPARATING PLATES

Enclosure dimensions (mm)		Plate reference	No. of perforations
Height	Depth		
1800	500	CHSC185	36
1800	600	CHSC186	45
2000	500	CHSC205	40
2000	600	CHSC206	50

Blanking plates



- 15/10 mm zinc-coated sheet steel, with sealing gasket.

BLANKING PLATES

External dimensions (mm)		Blanking plate Ref.
Height	Width	
150	55	OBTC24

Reducers



- 15/10 mm zinc-coated sheet steel, with sealing gasket.

REDUCERS

Model	Reducer reference	External dimensions (mm)	Socket opening
24/6	REDC24/6	150 × 55	52 × 36
24/10	REDC24/10	150 × 55	64 × 36
24/16	REDC24/16	150 × 55	86 × 36

Mounting plate

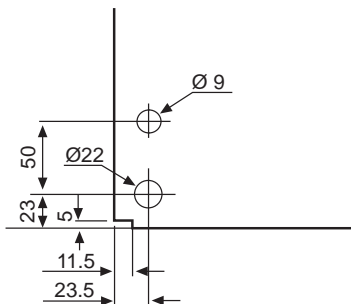
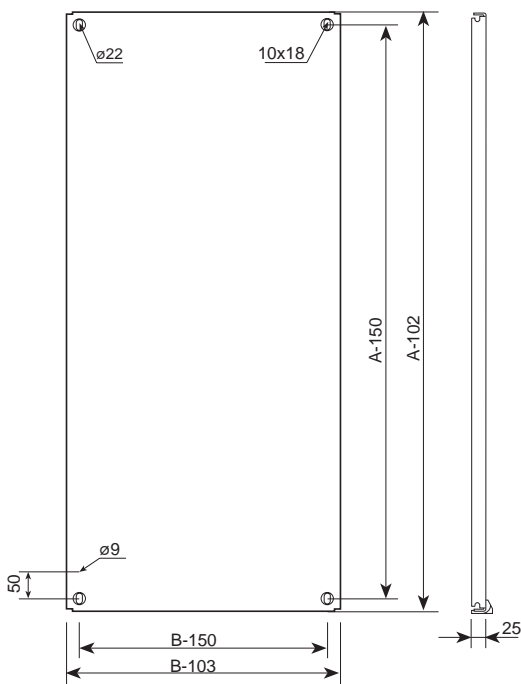


Made of galvanised sheet steel, with a perimeter reinforcement rib. The vertical edges are reinforced with a double edge.

Depth adjustable in 25 mm intervals.

On suites of two or more enclosures with mounting plates, it is possible to obtain a continuous plate surface using **PMI** intermediate plates (see page 1/200).

- Maximum load 600 kg if located at the back and 500 kg in intermediate position.



Enclosure dimensions		Reference
Height (A)	Width (B)	
1000	1000	PMOL 1010
1200	500	PMOL 125*
1200	600	PMOL 126
1200	800	PMOL 128
1200	1000	PMOL 1210
1200	1200	PMOL 1212
1400	500	PMOL 145*
1400	600	PMOL 146
1400	800	PMOL 148
1400	1000	PMOL 1410
1400	1200	PMOL 1412
1600	500	PMOL 165*
1600	600	PMOL 166
1600	800	PMOL 168
1600	1000	PMOL 1610
1600	1200	PMOL 1612
1800	500	PMOL 185*
1800	600	PMOL 186
1800	800	PMOL 188
1800	1000	PMOL 1810
1800	1200	PMOL 1812
1800	1600	PMOL 1816
2000	500	PMOL 205*
2000	600	PMOL 206
2000	800	PMOL 208
2000	1000	PMOL 2010
2000	1200	PMOL 2012
2000	1600	PMOL 2016
2200	500	PMOL 225*
2200	600	PMOL 226
2200	800	PMOL 228
2200	1000	PMOL 2210
2200	1200	PMOL 2212

* Plates designed to be joined depth-wise in the enclosure.

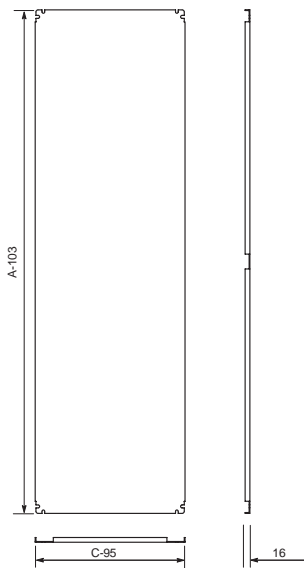
Lateral mounting plate



Made of galvanised sheet steel, with perimeter reinforcement ribs on all four sides.

Prepared to be mounted on the sides of the enclosure.

Enclosure dimensions		Reference
Height (A)	Depth (C)	
1800	600	PMLOL186
1800	800	PMLOL188
2000	600	PMLOL206
2000	800	PMLOL208
2200	600	PMLOL226
2200	800	PMLOL228



Intermediate fixing of mounting plate



Set of 10 fixings.

Intermediate fixings for the mounting plate located at the back of the enclosure.

Reference: **FIPMOL**.

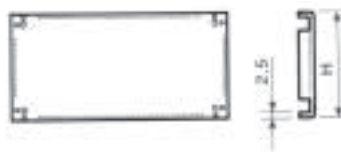
Partial mounting plate



Made of galvanised sheet steel, with perimeter reinforcement ribs on all four sides.

Fixed directly to the universal chassis profiles or to the enclosure using **TML**..mounting profiles.

Enclosure width (B)	Plate height (H)	Reference
600	247	PMP 2560
	397	PMP 4060
	597	PMP 6060
800	247	PMP 2580
	397	PMP 4080
	597	PMP 6080
1000	247	PMP 25100
	397	PMP 40100
	597	PMP 60100
1200	247	PMP 25120
	397	PMP 40120
	597	PMP 60120
1600	397	PMP 40160



Side entry guide for mounting plate



Set created to insert the **PMOL** mounting plates sideways in OLN enclosure combinations.

The set consists of a lower rail with rollers and an upper sliding rail.

The mounting plates must be joined together at the lower part using the **UNPMOL** set (which should be ordered separately).

The set includes the brackets and supports necessary for fixing.

Enclosure width	Reference
1000*	GLPMOL50
600	GLPMOL60
800	GLPMOL80

* For 1000 width enclosures, it will be necessary to mount 2 **GLPMOL50** lateral entry guides plus a profile **TML90...** or **TMR90...**



Example length enclosures	Example combining OLN enclosures Length in width	Example combining PMOL mounting plates Length in width	Total plate length
1200	OLN 1200	PMOL 600 + PMOL 800	1192
1400	OLN 600 + OLN 800	PMOL 600 + PMOL 1000	1392
1600	2 × OLN 800	PMOL 800 + PMOL 1000	1592
1800	3 × OLN 600	PMOL 800 + PMOL 1200	1792
2000	2 × OLN 1000	PMOL 1000 + PMOL 1200	1992
2200	OLN 600 + 2 × OLN 800	PMOL 1200 + PMOL 1200	2192
2400	3 × OLN 800	PMOL 1600 + PMOL 1000	2392
		3 × PMOL 600 + PMOL 1000	2384
2600	2 × OLN 1000 + OLN 600	PMOL 1600 + PMOL 1200	2592
		3 × PMOL 600 + PMOL 1200	2584
2800	2 × OLN 1000 + OLN 800	4 × PMOL 800	2784
3000	3 × OLN 1000	3 × PMOL 800 + PMOL 1000	2984
3200	2 × OLN 1000 + OLN 1200	3 × PMOL 800 + PMOL 1200	3184
3400	3 × OLN 800 + OLN 1000	PMOL 800 + 3 × PMOL 1000	3384
3600	OLN 1200	4 × PMOL 1000	3587
3800	OLN 800 + 3 × OLN 1000	PMOL 600 + 3 × PMOL 1200	3784
4000	4 × OLN 1000	PMOL 800 + 3 × PMOL 1200	3984

Rear joining mounting plate



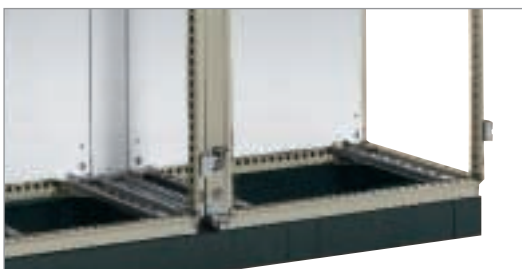
Enables the coupling of the mounting plates in the rear, which is necessary if using the side entry guides for joining mounting plates.

The set consists of two pieces and includes the necessary hardware for its fixing.

Reference: **UNPMOL**.



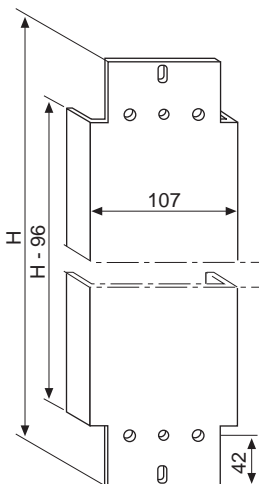
Intermediate mounting plate



Intermediate plate made of galvanised sheet steel, to obtain a continuous surface of the mounting plate in enclosure coupling.

When the **PMOL** mounting plates are located at the back of the enclosure, the vertical profiles of the structure of the enclosure are flush with the plates, serving as an intermediate plate. In this case it would not be possible (or necessary) to install the intermediate plate.

Enclosure height (A)	Plate height (H)	Reference
1200	1084	PMI 12
1400	1284	PMI 14
1600	1484	PMI 16
1800	1684	PMI 18
2000	1884	PMI 20
2200	2084	PMI 22



Universal chassis system



OLN 166/60 + MOL 160 + PMP 4060 + PMR 4560 + CDP 60

Universal chassis designed to be coupled directly to **CMO** and **OLN** enclosures. When fixed to the supports, it is possible to adjust the depth of the mounting plates every 25 mm. This permits mounting any type of equipment on the plate and/or a DIN rail.

- Set of vertical profiles.
- Partial, plain and slotted mounting plates.

Set of profiles for universal chassis



Set of vertical profiles for fixing plates and rails.

Enclosure dimensions Height (A)	Reference
1000	MOL 100
1200	MOL 120
1400	MOL 140
1600	MOL 160
1800	MOL 180
2000	MOL 200



Slotted mounting plate

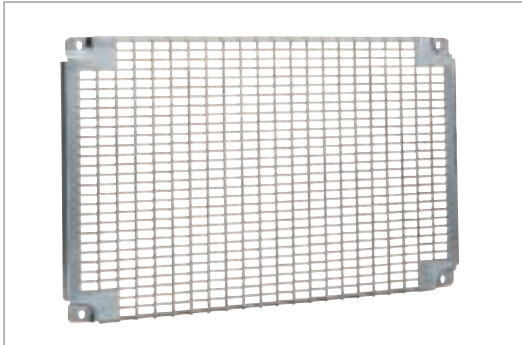


Plate specially designed for quick mounting of equipment using the **TFP** locking nuts. Made of zinc-coated steel.

To be directly coupled to the bottom of the enclosure itself or to the adjustable support plates.

- Maximum load 150 kg/m².

Enclosure dimensions		Reference
Width (B)	Plate height (H)	
600	225	PMR 2260
	450	PMR 4560
	600	PMR 6060
800	825	PMR 8260
	225	PMR 2280
	450	PMR 4580
1000	600	PMR 6080
	825	PMR 8280
	225	PMR 22100
1200	450	PMR 45100
	600	PMR 60100
	825	PMR 82100
1200	225	PMR 22120
	450	PMR 45120
	600	PMR 60120
	825	PMR 82120

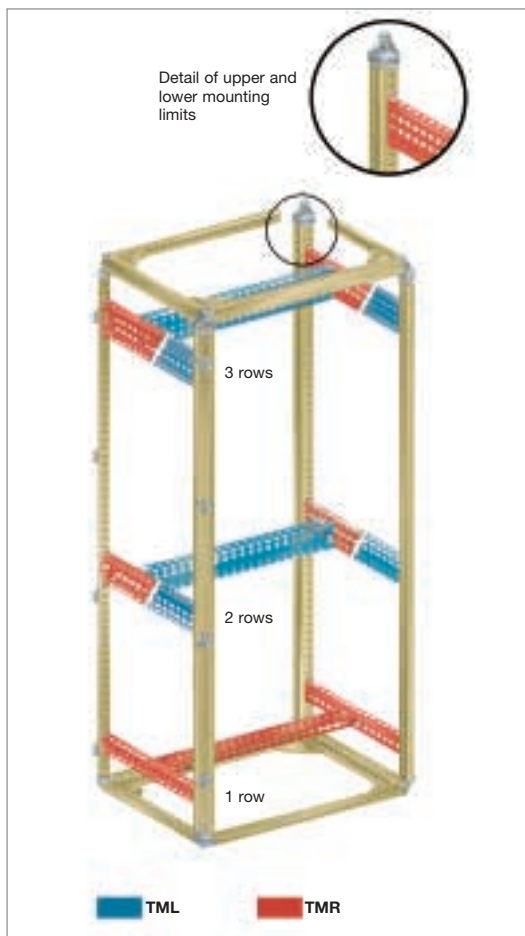
Set of fixing supports for plate



Set of 4 fixing supports for plate to mount directly on the structure of the enclosure.

Reference: **EDCOL**.

Mounting profiles



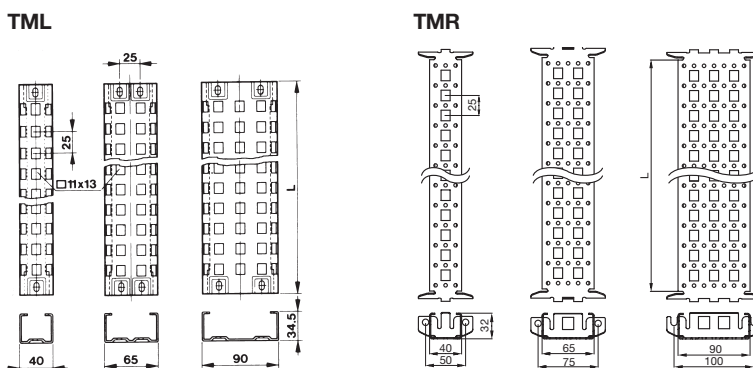
Nominal length	L	40 mm width		65 mm width		90 mm width	
		TML 40/40	TMR 40/40	TML 65/40	TMR 65/40	TML 90/40	TMR 90/40
400	310	TML 40/40	TMR 40/40	TML 65/40	TMR 65/40	TML 90/40	TMR 90/40
500	410	TML 40/50	TMR 40/50	TML 65/50	TMR 65/50	TML 90/50	TMR 90/50
600	510	TML 40/60	TMR 40/60	TML 65/60	TMR 65/60	TML 90/60	TMR 90/60
800	710	TML 40/80	TMR 40/80	TML 65/80	TMR 65/80	TML 90/80	TMR 90/80
1000	910	TML 40/100	TMR 40/100	TML 65/100	TMR 65/100	TML 90/100	TMR 90/100
1200	1110	TML 40/120	TMR 40/120	TML 65/120	TMR 65/120	TML 90/120	TMR 90/120
1400	1310	TML 40/140	-	TML 65/140	-	TML 90/140	-
1600	1510	TML 40/160	-	TML 65/160	-	TML 90/160	-
1800	1710	TML 40/180	-	TML 65/180	-	TML 90/180	-
2000	1910	TML 40/200	-	TML 65/200	-	TML 90/200	-
2200	2110	TML 40/220	-	TML 65/220	-	TML 90/220	-

Two ranges of 40 mm (1 row), 65 mm (2 rows) and 90 mm (3 rows) profiles, perforated every 25 mm for forming structures in the interior of the enclosure. They allow for depth adjustment in different installation systems (partial plates, 19" racks, etc.). The profiles with height 1000 to 2000 can be fixed to the back of the enclosure, screwed directly to the upper and lower support plate rails. Their placement is necessary in order to install horizontal profiles at various depths inside the enclosure.

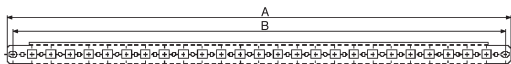
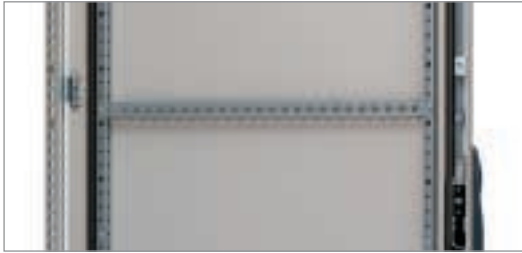
- **TMR:** access to the 4 fixing screws from the exterior.
- **TML:** permits any type of installation.

Fixing to the structure using fixing supports, Ref. **STON**.

Delivered in sets of 2 units, along with the hardware for mounting them.



Door profile



Profile designed to be fixed to the structure and to the interior doorframe of the indicated enclosures.

Equipped with 5 mm diameter perforations and rectangles measuring 13 x 11 every 25 mm, enabling fixing with self-tapping screws or TNS. nuts.

Profile made with 1.5 mm thick galvanised steel sheet.

Supply includes the necessary fasteners inside the plastic bag, self-tapping screws and washers. Cage nuts and M6 screws are also included for references that are mounted only on the structure (**TEP60/70**, **TEP80/90**, **TEP100/110** and **TEP120/130**).

Reference	Width or Depth of the structure (mm)	Door width (mm)	A	B
TEP30/40	300	400	266	250
TEP40/50	400	500	366	350
TEP50/60	500	600	466	450
TEP70/80	-	800	666	650
TEP90/100	-	1,000	866	850
TEP60/70	600	-	566	550
TEP80/90	800	-	766	750
TEP100/110	1000	-	966	950
TEP120/130	1200	-	1166	1150

Profiles for Lütze chassis



Set of 6 fixing and depth adjustment profiles for chassis such as Lütze. Made of 2.5 mm galvanised sheet steel. Supplied with the hardware necessary for mounting.

- For fixing to the back of the enclosure, **SFLTZ** fixing supports must be ordered.

Enclosure measurements Depth (mm)	Reference
400	SDLTZ40
500	SDLTZ50
600	SDLTZ60



Profiles for heavy material



Set of two profiles prepared to be mounted with cable entry or mounting plate previously mounted.

Reference	Enclosure depth	Maximum load kg
TMP40	400	250
TMP50	500	200
TMP60	600	175
TMP80	800	150

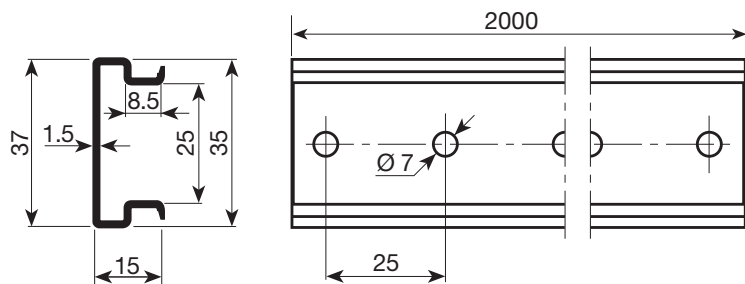
Double profile rail



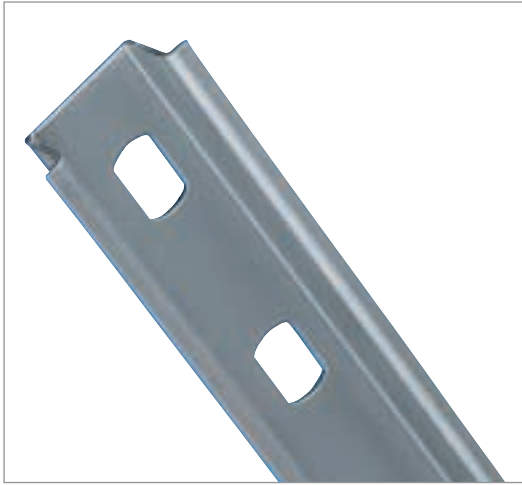
- Combines the advantages of symmetrical and asymmetrical DIN rails.
- Direct fixing to the structure.
- Continuity of level guaranteed in case of coupling the enclosures.
- Galvanised sheet.
- Sheet thickness: 1.5 mm.

Reference	Enclosure width (mm)	Units per package
CDP60	600	10
CDP80	800	10
CDP100	1000	10
CDP120	1200	10
CDP200*	2000	10

* Without perforations.

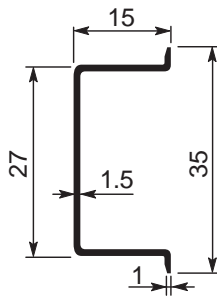


Symmetrical DIN rail

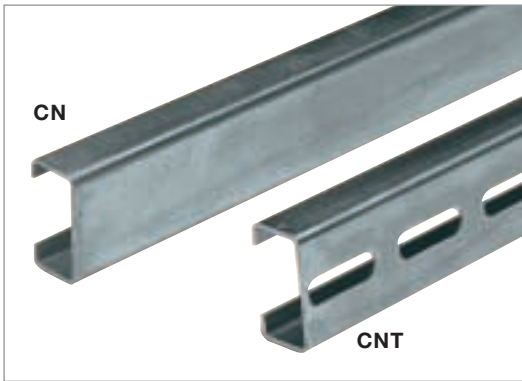


- Direct fixing on the structure.
- Continuity of level guaranteed in case of coupling the enclosures.
- Galvanised sheet.
- Sheet thickness: 1.5 mm.

Reference	Enclosure width (mm)	Units per package
CSO60	600	10
CSO80	800	10
CSO100	1000	10
CSO120	1200	10



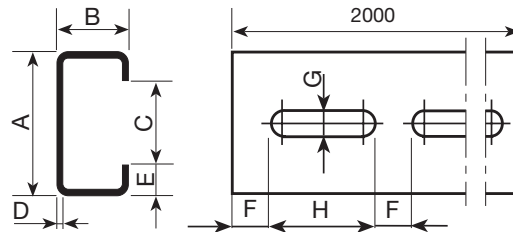
Symmetrical rails



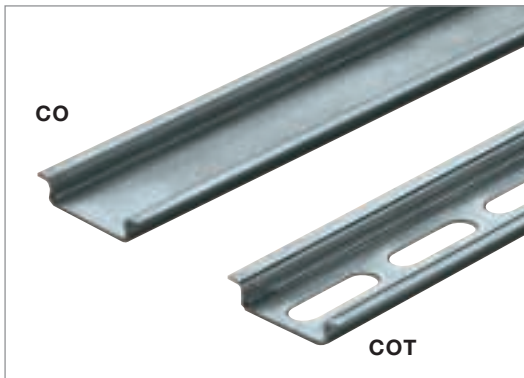
Metal rails made of galvanised sheet.

- For supporting and fixing equipment in frames and enclosures.
- Forming chassis and racks, combining them with their corresponding joints and sliding and caged nuts.
- Panel reinforcements.
- Tube guides, grooves and continuous lighting strips.
- Length 2 m.

Reference	A	B	C	D	E	F	G	H
CN-20	21	11	10	1.5	5.5	-	-	-
CN-40	40	20	24	1.5	8	-	-	-
CN-60	60	30	36	2	12	-	-	-
CNT-20	21	11	10	1.5	5.5	5	6.2	15
CNT-40	40	20	24	1.5	8	10	8.5	30
CNT-60	60	30	36	2	12	10	10.5	30



35 DIN rails

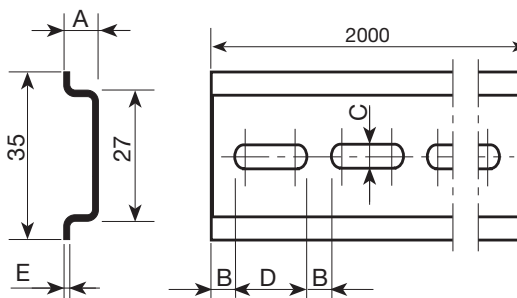


Metal rails made of galvanised sheet.

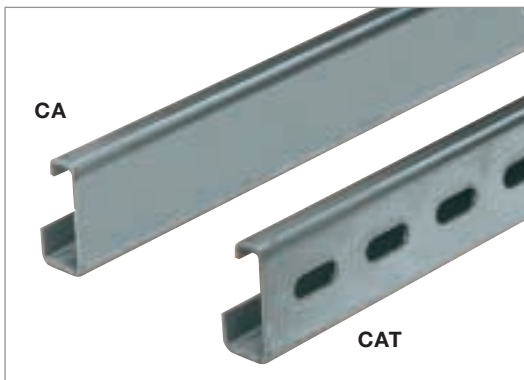
■ For direct support of all types of equipment prepared for this type of fixing to 35 DIN rail.

■ Length 2 m.

Reference	A	B	C	D	E
CO-35	7.3	-	-	-	1
CO-35/15	15	-	-	-	1.5
COT-35	7.3	7	7.2	25	1
COT-35/15	15	7	7.2	25	1.5



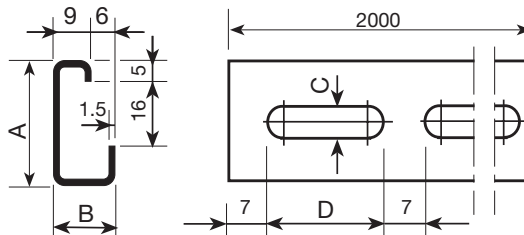
Asymmetrical rails



Asymmetrical metal rails for mounting electronic equipment in frames using special nuts. Quick mounting of connection terminals, according to DIN 46277/1.

■ Length 2 m.

Reference	A	B	C	D
CA-32	32	15	-	-
CAT-32	32	15	7.2	25

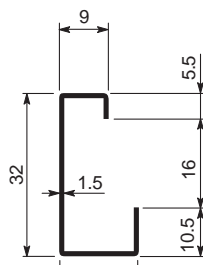


Asymmetrical DIN rail

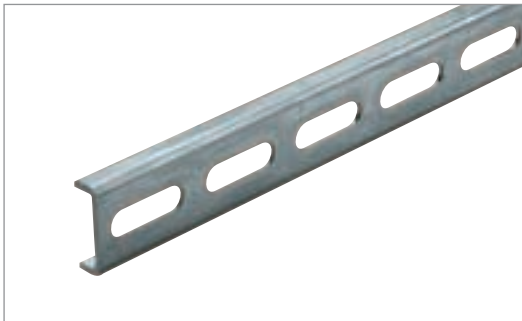


- Direct fixing to the structure.
- Continuity of level guaranteed in case of coupling the enclosures.
- Galvanised sheet.
- Sheet thickness: 1.5 mm.

Reference	Enclosure width (mm)	Units per package
CAON60	600	10
CAON80	800	10
CAON100	1000	10
CAON120	1200	10

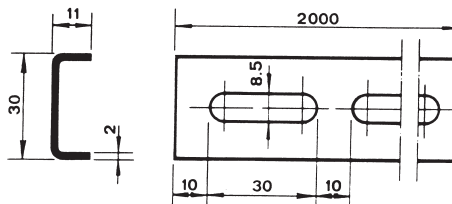


U rails

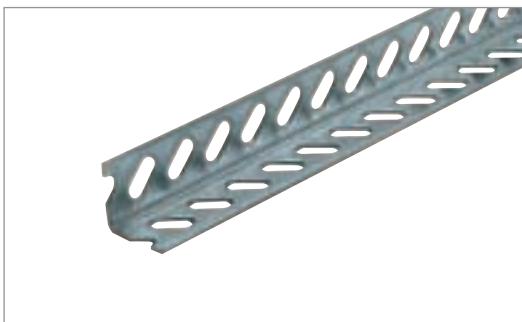


Universal rails made of galvanised sheet. Standard length 2 m. All the 8.5 mm oval perforations allow housing M4, M5 and M6 caged nuts in their interior.

Ref.: **CUT-30.**

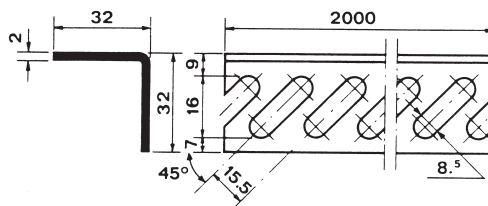


L rails



Universal rails made of galvanised sheet. Standard length 2 m. All the 8.5 mm oval perforations allow housing M4, M5 and M6 caged nuts in their interior.

Ref.: **AT-32.**



Nuts and screws



Thread type	To be coupled to			To couple to enclosure structure profile	
	PMR plates and MOL profiles	CD double rails	MOL profiles	Simple nut	Double nut
M3	TFP 3	- -	-	-	-
M4	TFP 4	- TDE 4	-	-	-
M5	TFP 5	TDC 56 TDE 5	-	-	-
M6	TFP 6	TDC 56 TDE 6	TDM 6	TNS 6	TLD 6
M8	-	- -	TDM 8	TNS 8	TLD 8

FIXING SCREW WITH WASHER

Thread type	Length (mm)	Reference
M4	10	TOR 10/4 A
M4	16	TOR 16/4 A
M5	12	TOR 12/5 A
M5	18	TOR 18/5 A
M6	12	TOR 12/6 A
M6	16	TOR 16/6A
M6	18	TOR 18/6 A
M8	16	TOR 16/8 A
M8	20	TOR 20/8 A
self-tapping	16	TOR 16/5 AT*

* Metal self-tapping screw with contact washer.

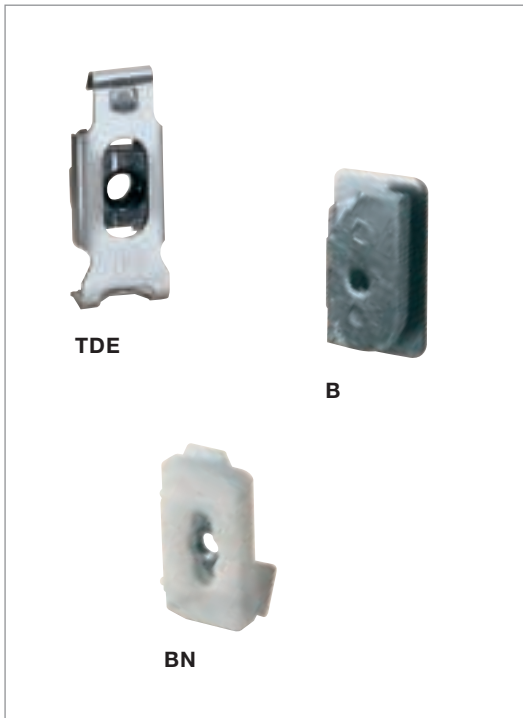
Caged nuts



Coupled in 8.5 mm openings, such as those corresponding to **CUT-30** and **CNT-40** rails and, in general, to any 8.5 mm opening with a material thickness between 0.5 and 3.5 mm.

Reference	Thread	Sheet thickness
TM-415	M4	0.5-1.5
TM-425	M4	1.6-2.5
TM-435	M4	2.6-3.5
TM-515	M5	0.5-1.5
TM-525	M5	1.6-2.5
TM-535	M5	2.6-3.5
TM-615	M6	0.5-1.5
TM-625	M6	1.6-2.5
TM-635	M6	2.6-3.5

Sliding nuts



The various types of sliding nuts, metal and combiplas, can be used at any point as well as on the front of the rail without needing to introduce them from the ends of the rail. They remain pressure-fixed to a fixing point, but can slide along the rail in order to obtain the desired position.

Metal

Made of galvanised sheet steel.

Reference	Thread	To be coupled to rails
TDE 4	M4	CO... and CDP...
TDE 5	M5	CO... and CDP...
TDE 6	M6	CO... and CDP...
B-204	M4	CN and CNT-20
B-404	M4	CN and CNT-40
B-406	M6	CN and CNT-40

Combiplas

The series is made up of four basic types made of nylon that include adapted threaded steel plates.

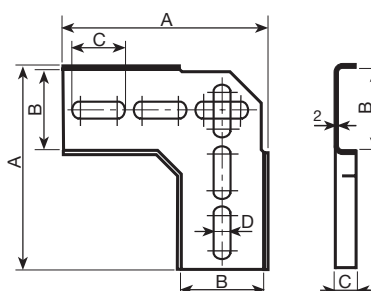
Reference	Thread	To be coupled to rails
BC-303	M3	CA and CAT-32
BC-304	M4	CA and CAT-32
BC-306	M6	CA and CAT-32
BN-203	M3	CN and CNT-20
BN-204	M4	CN and CNT-20
BN-206	M6	CN and CNT-20
BN-404	M4	CN and CNT-40
BN-406	M6	CN and CNT-40
BN-408	M8	CN and CNT-40
BN-4046	M4 and M6	CN and CNT-40
BN-606	M6	CN and CNT-60
BN-608	M8	CN and CNT-60
BN-610	M10	CN and CNT-60
BN-6068	M6 and M8	CN and CNT-60
BN-60610	M6 and M10	CN and CNT-60
BN-60810	M8 and M10	CN and CNT-60

EMA brackets



EMA brackets can be used to join two rails (CN and CNT, 20-40 mm) at right angles. A T joint can also be obtained. They are especially suitable for chassis or frame formation, as well as the corresponding crossbars. Single for light material, or double for heavier material.

Reference	A	B	C	D	E
EMA-20	60	21.1	6	6.2	15
EMA-40	100	40.1	10	8.5	25

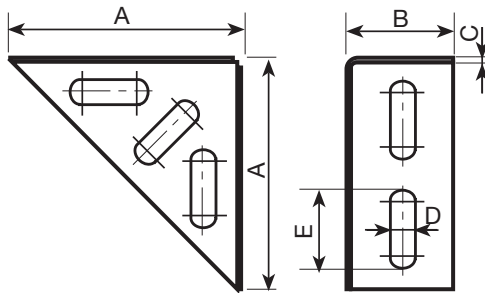


EVA brackets



EVA brackets can be used to join two or three rails (**CN** and **CNT**, 20-40 mm), forming an overlapping structure on a different plane or at a right angle for forming spacers or supports at different levels.

Referencia	A	B	C	D	E
EVA-20	42	19	1.5	6.2	15
EVA-40	78	36	2.5	8.5	25

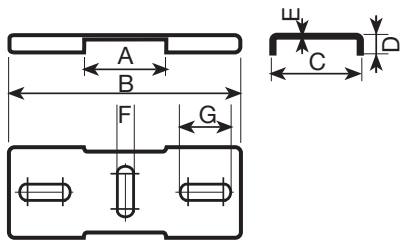


UCA brackets

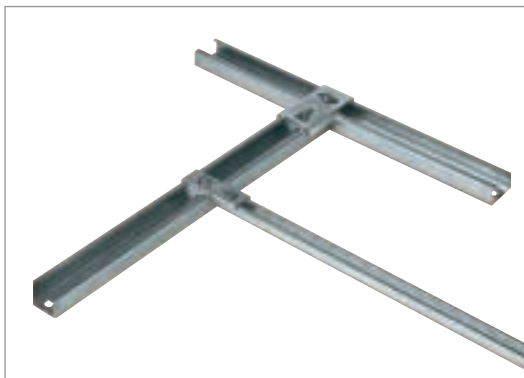


UCA brackets can be used for cross joints of three rails on the same plane, within a frame, for example.

Reference	A	B	C	D	E	F	G
UCA-22	21.2	60	21.1	6	2	6.2	15
UCA-44	40.2	116	40.2	10	2.5	8.5	25

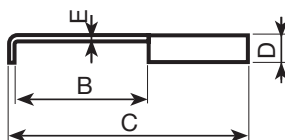
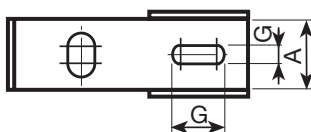


UTA brackets



UTA brackets can be used for forming T joints from two rails, such as **CN** and **CNT**, or a 20 rail with a 40 rail. They are especially suited to form crossbars in chassis and frames.

Reference	A	B	C	D	E	F	G
UTA-22	21.2	21.5	53.5	8	2	15	6.2
UTA-42	21.2	40.5	72.5	8	2	15	6.2
UTA-44	40.2	40.5	81	10	2.5	25	8.5

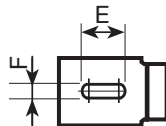
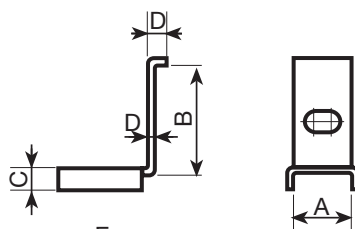


ECA brackets



ECA brackets can be used for cross joints of two rails placed perpendicularly on different planes.

Reference	A	B	C	D	E	F
ECA-22	21.2	21.5	8	2	15	6.2
ECA-42	21.2	40.5	8	2	15	6.2
ECA-44	40.2	40.5	10	2.5	25	8.5

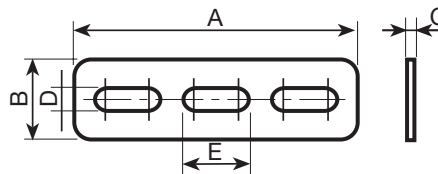


UR brackets



UR brackets can be used for linear joints of 20, 40 and 60 mm **CN** and **CNT** rails. Such as when the standard length is not enough or to use fragments.

Reference	A	B	C	D	E
UR-20	60	18	2	5	15
UR-40	130	36	3	10	30
UR-60	130	55	3	10	30

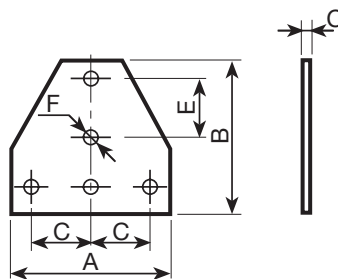


UT brackets

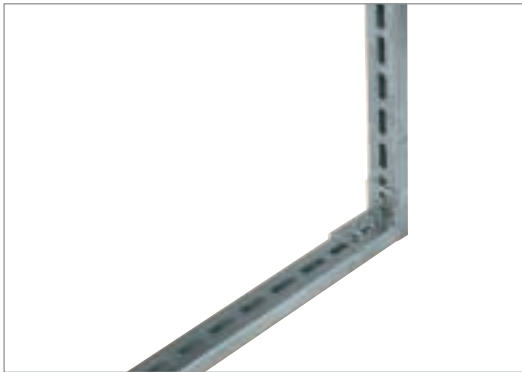


UT brackets can be used to form T joints of 20, 40 and 60 mm **CN** and **CNT** rails. They are used to form crossbars in frames and chassis.

Reference	A	B	C	D	E	F
UT-20	54	54	20	2	20	5
UT-40	60	80	20	2	25	8
UT-60	80	110	25	3	29	10

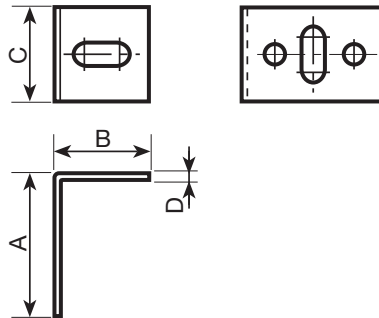


EN brackets



EN brackets are universal fixing supports that allow all kinds of joints with change of plane between 20, 40 and 60 mm **CN** and **CNT** rails or between any other profile.

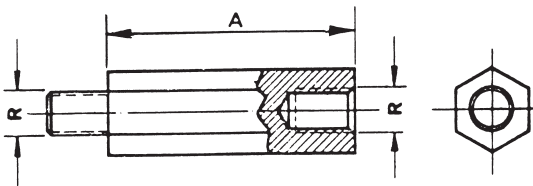
Reference	A	B	C	D
EN-20	35	21	21	2
EN-40	60	40	40	2.5
EN-60	60	60	60	3



Hexagonal spacers



Metal hexagonal spacers for the elevation of equipment, mounting plates, etc. By combining them, a variable height can be obtained with a progressive elevation of 2 by 2 mm with **EX** models and of 5 by 5 mm with **E** models.



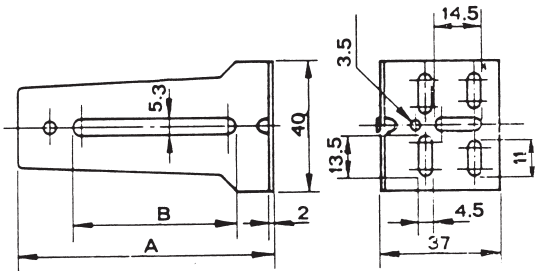
Reference	Height A	Thread R
EX-10/6	10	M6
EX-12/6	12	M6
EX-14/6	14	M6
EX-16/6	16	M6
EX-18/6	18	M6
EX-20/6	20	M6
EX-30/6	30	M6
EX-40/6	40	M6
EX-50/6	50	M6
EX-100/6	100	M6
EX-15/8	15	M8
EX-20/8	20	M8
EX-30/8	30	M8
EX-40/8	40	M8
EX-50/8	50	M8
EX-60/8	60	M8
EX-100/8	100	M8
E 10-25	10	M5
E 15-25	15	M5
E 20-25	20	M5

ETU modular lifting brackets



This series of lifting brackets has a large variety of uses and applications, mainly for mounting push buttons or signal lamps, with the mechanism or lamp holder attached and connected to the back of the enclosure and the actuator or window on the door. Also for mounting switches or equipment attached and connected to the back of the enclosure and the clutch control on the door. In general, they serve for any instance when it is necessary to mount equipment or rails at a different level from that of the mounting plate or basic chassis.

Made of cold-laminated sheet steel zinc dichromate.



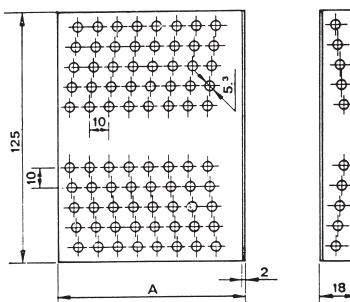
Reference	A	B	Combination of lifting brackets	Minimum height	Maximum height
ETU-48	48	25	ETU-48 + ETU-48	53	64
			ETU-48 + ETU-58	63	74
			ETU-48 + ETU-79	85	95
			ETU-48 + ETU-118	124	134
ETU-58	58	25	ETU-58 + ETU-58	73	84
			ETU-58 + ETU-79	94	104
			ETU-58 + ETU-118	134	144
ETU-79	79	55	ETU-79 + ETU-79	84	125
			ETU-79 + ETU-118	124	164
ETU-118	118	55	ETU-118 + ETU-118	164	204

EMM modular plates

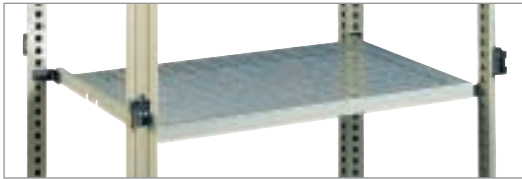


Metal progressive modular plates. Every 2 mm combining 2 plates, **EMM-95**, an elevation distance between 108 and 178 mm can be obtained.

Reference	A
EMM-95	95



Fixed tray



With the possibility of directly fixing onto the structure if the tray has the same dimensions as the enclosure and on profiles is it is smaller (depth adjustable in this case).

With perforations for better interior air circulation.

Material: steel sheet painted with RAL7032.

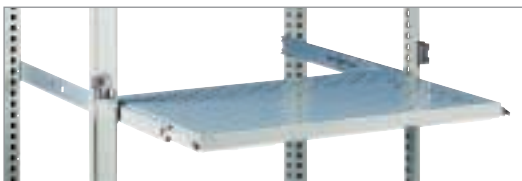
Fitted with the necessary fixing system.

Maximum load: 50 kg.

Enclosure		Tray	
Width	Depth	Reference	A × P
600	400	BFMA64	482 × 290
600	500	BFMA65	482 × 390
600	600	BFMA66	482 × 490
800	400	BFMA84	682 × 290
800	500	BFMA85	682 × 390
800	600	BFMA86	682 × 490

Enclosure depth	2 profiles reference
500	TML40/40
600	TML40/50
800	TML40/60

Telescopic guides



Set of 2 telescopic guides, mounted directly onto the structure.

The assembly of a telescopic tray consists of:

- 1 fixed tray.
- 2 telescopic guides.

Maximum load: 50 kg, evenly distributed.

Enclosure depth	Guides reference
400	GTMA40
500	GTMA50
600	GTMA60

Fixing accessories



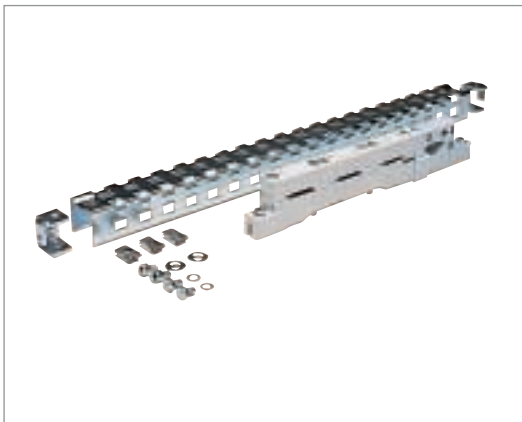
Supports to be incorporated directly onto 11 x 13 mm perforations of the enclosures and **TML** profiles.

Reference: **STON**.

Busbar system



630 A busbar supports



Ready to be coupled directly to the structure of any model **OLN** enclosure.

- Maximum nominal current 630 A.
- Determine according to the table the section of plate and the distance between supports depending on the nominal and short circuit current, respectively.

To be coupled to nominal dimensions Width (B) or Depth (C)	Reference
400	SEM/OL 400
500	SEM/OL 500
600	SEM/OL 600
800	SEM/OL 800



	Nominal current IP55 In (A)	No. of plates per phase	(mm)	Section (mm ²)	Ssc (kA.)	Maximum distance between busbar supports depending on the short circuit current							Neutral (mm)	Earth (mm)
						12	23	30	39	52	66	69		
	200	1	12 × 5	60	mm:	525	525	525	400	250	-	-	12 × 5-10	6 × 3
	250	1	12 × 5	75	mm:	575	575	575	450	325	-	-		
	320	1	20 × 5	100	mm:	600	600	600	475	350	150	-	15 × 5-10	10 × 3
	390	1	25 × 5	125	mm:	600	600	600	475	350	150	-	20 × 5-10	10 × 3
	440	1	30 × 5	150	mm:	650	650	650	650	525	400	350	25 × 5-10	10 × 6
	500	1	20 × 10	200	mm:	675	675	675	675	525	350	150	-	30 × 5-10
	600	1	30 × 10	300	mm:	675	675	675	600	475	325	275		

Final busbar cover



Final busbar protection with direct fixing to the insulator.

To be coupled to busbars	Reference
630 A	TFE 630
1250 A	TFE 1250

Vertical busbar support up to 3,200 A



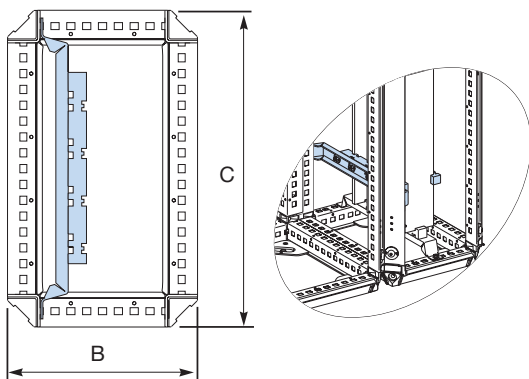
For fixing the bars vertically, support ready to be coupled directly to the structure of the OLN.

Maximum nominal current:

- 1600 A for 5 mm bars.
- 3200 A for 10 mm bars.

The number and distance between supports, depending on the nominal and short circuit current, can be found in the following table, by the height of the enclosure:

To be coupled to nominal dimensions Width (B) or Depth (C)	Reference
400	SEVMA 40
500	SEVMA 50
600	SEVMA 60
800	SEVMA 80



Note: recommended in enclosures with 300 mm width (B).

Nominal current In (A)	Section	No. of bars / phase	Maximum distance between supports (mm) depending on the short circuit current Ssc (kA)											
			15	25	30	40	50	60	65	75	85			
750	60 × 5	1	650	325	325	217								
900	80 × 5	1	650	325	325	217								
1250	60 × 5	2	650	325	325	217	163							
1600	80 × 5	2	650	325	325	217	217							
1080	50 × 10	1	650	650	650	325	217	217						
1250	60 × 10	1	650	650	650	325	325	217						
1600	80 × 10	1	650	650	650	325	325	217						
1850	50 × 10	2	650	650	325	325	325	217	217	217				
2000	60 × 10	2	650	650	650	325	325	325	217	217				
2500	80 × 10	2	650	650	650	325	325	325	325	217	217			
2800	100 × 10	2	650	650	650	650	325	325	325	325	217	163		

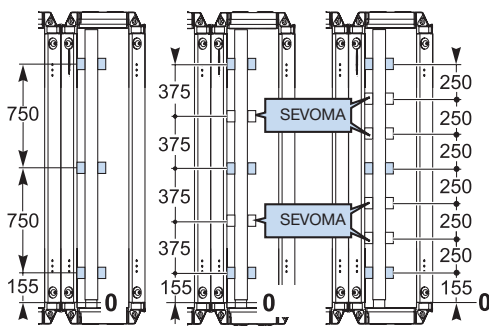
Note: the values for the maximum current in the bars are provided for an ambient temperature of 35 °C around the busbar.

The values for nominal current are indicated for IP55. The maximum values (3,200 A) are obtained with an IP<31 and ambient temperatures less than 35 °C that vary depending on the configuration and position of the busbar.

Annex: table of maximum currents depending on the temperature

Type of bars		Maximum current (A) depending on the ambient temperature around the frame (°C)				
Section	No. of bars / phase	25 °C	30 °C	35 °C	40 °C	45 °C
		60 × 5	1	840	790	750
80 × 5	1	1050	990	900	870	810
60 × 5	2	1420	1350	1250	1180	1090
80 × 5	2	1820	1720	1600	1510	1390
50 × 10	1	1220	1160	1080	1010	940
60 × 10	1	1400	1320	1250	1160	1070
80 × 10	1	1800	1700	1600	1500	1390
50 × 10	2	2090	1980	1850	1740	1610
60 × 10	2	2270	2140	2000	1870	1720
80 × 10	2	2820	2660	2500	2330	2160
100 × 10	2	3200	3100	2800	2720	2510

Note: the current values depending on temperature are orientative, since it depends on the configuration and position of the bars in the enclosure.



Selection of the number of supports:

- Depending on the nominal current, select the number and the section of bars to be used per phase.
- Determine the short circuit current S_{cc} in (KA) and using the table obtain the maximum distance between supports.
- From the maximum distance between supports, obtain the number of supports to be installed according to the following criteria:
 - 3 supports fixed to the structure are obligatory (Ref. **SEVMA...**).
 - The floating supports should be used only if more than 3 supports will be necessary (Ref. **SEVOMA**).

Floating busbar support

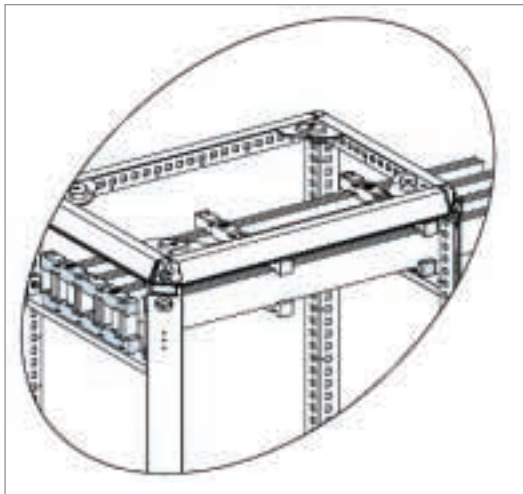


Support not fixed to the enclosure, necessary to ensure the distance between the bars.

To select the number of supports, see the preceding table.

Reference: **SEVOMA**.

3,200 A horizontal busbar support



Support for fixing bars in horizontal position, ready to be coupled directly to the structure of the OLN, on the vertical profiles of the enclosure, at any height.

Maximum nominal current:

- 1600 A for 5 mm bars.
- 3200 A for 10 mm bars.

The number and distance between supports, depending on the nominal and short circuit current, can be found in the following table:

To be coupled to nominal dimensions Width (B) or Depth (C)	Reference
400	SEHMA 40
500	SEHMA 50
600	SEHMA 60
800	SEHMA 80

Nominal current In (A)	JdB verticales		Maximum distance between supports (mm) depending on the short circuit current Ssc (kA)											
	Section	No. of bars / phase												
			15	25	30	40	50	60	65	75	85			
750	60 × 5	1	650	325	325	217								
900	80 × 5	1	650	325	325	217	163							
1250	60 × 5	2	650	325	325	217	163	163	130	108	81			
1600	80 × 5	2	650	325	325	217	217	163	130	108	81			
1080	50 × 10	1	650	650	650	325	217	217	163					
1250	60 × 10	1	650	650	650	325	325	217	163	130	108			
1600	80 × 10	1	650	650	650	325	325	217	163	130	108			
1850	50 × 10	2	650	650	325	325	325	217	217	217	163			
2000	60 × 10	2	650	650	650	325	325	325	217	217	163			
2500	80 × 10	2	650	650	650	325	325	325	325	217	163			
2800	100 × 10	2	650	650	650	650	325	325	325	217	163			

Note: the values for the maximum current in the bars are provided for an ambient temperature of 35 °C around the busbar.

The values for nominal current are indicated for IP55. The maximum values (3200 A) are obtained with an IP<31 and ambient temperatures less than 35 °C that vary depending on the configuration and position of the busbar.

Annex: table of maximum currents depending on the temperature

Type of bars		Maximum current (A) depending on the ambient temperature around the frame (°C)				
Section	No. of bars / phase					
		25 °C	30 °C	35 °C	40 °C	45 °C
60 × 5	1	840	790	750	700	650
80 × 5	1	1050	990	900	870	810
60 × 5	2	1420	1350	1250	1180	1090
80 × 5	2	1820	1720	1600	1510	1390
50 × 10	1	1220	1160	1080	1010	940
60 × 10	1	1400	1320	1250	1160	1070
80 × 10	1	1800	1700	1600	1500	1390
50 × 10	2	2090	1980	1850	1740	1610
60 × 10	2	2270	2140	2000	1870	1720
80 × 10	2	2820	2660	2500	2330	2160
100 × 10	2	3200	3100	2800	2720	2510

Note: the current values depending on temperature are orientative, since it depends on the configuration and position of the bars in the enclosure.

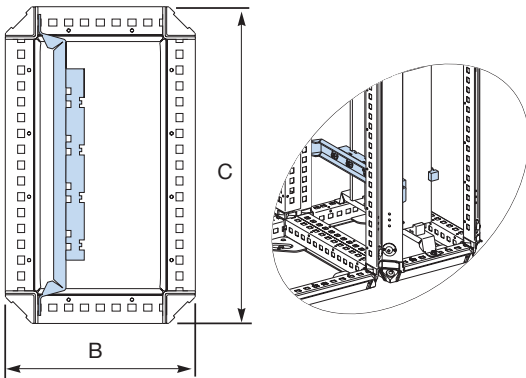
Insert support



Lower support piece, fixed to the lower frame of the enclosure and is necessary to support the bars when mounted vertically.

It is not a bar support.

To be coupled to nominal dimensions Width (B) or Depth (C)	Reference
400	SEVIMA 40
500	SEVIMA 50
600	SEVIMA 60
800	SEVIMA 80



Upper/lower busbar chambers



- Designed to protect and support the horizontal sets of bars.
- The busbar chambers allow for the new bypass sockets and isolate the bars from the rest of the equipment.
- Designed to be mounted in both the upper and lower parts of the enclosure.
- The busbar chambers are supplied without side panels.

External dimensions mm			Reference
Height	Width	Depth	
300	300	500	CE-3050 N
300	300	600	CE-3060 N
300	300	800	CE-3080 N
300	400	500	CE-4050 N
300	400	600	CE-4060 N
300	600	500	CE-6050 N
300	600	600	CE-6060 N
300	600	800	CE-6080 N
300	800	500	CE-8050 N
300	800	600	CE-8060 N
300	800	800	CE-8080 N
300	1000	500	CE-10050 N
300	1000	600	CE-10060 N
300	1200	500	CE-12050 N
300	1200	600	CE-12060 N

Upper/lower busbar chamber panels



Busbar chamber + sides + lifting brackets.

Set of 2 sides to be coupled to the upper/lower busbar chambers.

External dimensions mm		Side panels reference
Height	Depth	
300	500	2LCE50
300	600	2LCE60
300	800	2LCE80

Lateral busbar chambers



- Designed to protect and support the vertical sets of bars.
- The busbar chambers allow for the new forms of bypass current and isolate the bars from the rest of the equipment.
- Designed to be mounted on the enclosure on either of the two sides.

Enclosure measurements (mm)			Reference
Height	No. of units	Width	
2000	300	500	OLN 203/50
2000	300	600	OLN 203/60
2000	300	800	OLN 203/80
2000	400	500	OLN 204/50
2000	400	600	OLN 204/60

Note: for busbar supports, see the previous page.

Side panel screwed to exterior or interior



Set of 2 side panels for fixing inside or outside the enclosure. Made of sheet steel and painted with textured light grey RAL-7032 polyester epoxy resin.

- Includes a sealing gasket and all fixing hardware.

Enclosure measurements (mm)		Reference	
Height	Depth	Exterior fixing	Interior fixing
2000	500	2PLOL205	2PLIOL205
2000	600	2PLOL206	2PLIOL206
2000	800	2PLOL208	2PLIOL208

Note: for busbar supports, see the previous page.

Plate/cable terminals

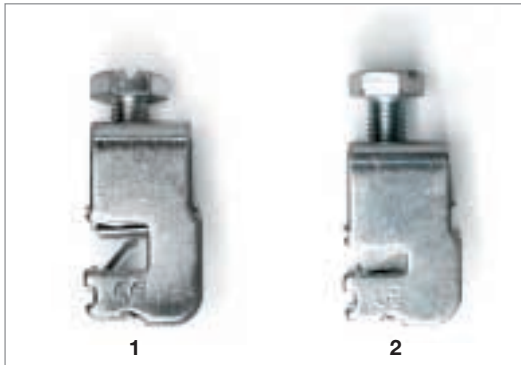


Plate entry and bypass by cable, plate or terminal.

Reference	Cable bypass section (mm ²)	Plate thickness (mm)	Figure
BPCH 516	1.5 to 16	5	2
BPCH 550	1.5 to 50	5	2
BPCH 5120	16 to 120	5	2
BPCH 1016	1.5 to 16	10	1
BPCH 1050	1.5 to 50	10	1
BPCH 10120	16 to 120	10	1

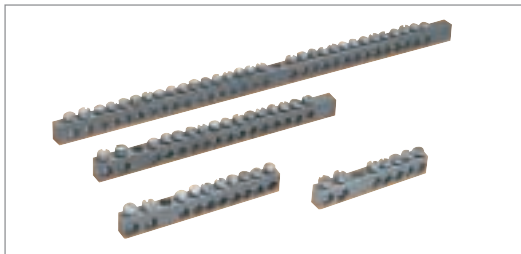
Three-phase bypass terminals



Plate entry and cable bypass (for **EMH-630** and **EMV-630** busbars).

Reference	Entry plate width mm	Cable bypass section mm ²
BTE 630	12×30	35×120
TBT 630	BTE 630 terminal cap	

Earth terminal blocks

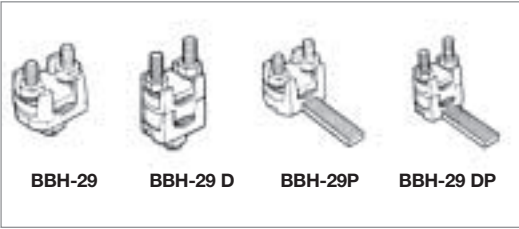


For neutral and earth bypass.

- **RBL** models be incorporated into COMBINORM - DSU - DTU boxes with insulated backs, in the housings provided for their fixing.
- **RBLZ** models with insulated plinth for pressure fixing on the 12 x 2 mm profiles on models DSU - DTM - CRD/CMD, provided with this fixing system for the terminal blocks.
- **RBL/416286 K** model consisting of two RBL/216146 M terminal blocks fixed onto a bakelite bar. This makes it possible to centre the standard supply RBL/21656 M terminal, thus achieving a total of six 16 mm² and thirty-three 6 mm² terminals to be incorporated into 15 and 30 module boxes with insulated DSU back.

Reference	Number of terminals x mm ² section	To couple to boxes / enclosures
RBL/21656 M	2 × 16 mm ² + 5 × 6 mm ²	COMBINORM - DSU - DTU
RBL/21686 M	2 × 16 mm ² + 8 × 6 mm ²	COMBINORM - DSU - DTU
RBL/216146 M	2 × 16 mm ² + 14 × 6 mm ²	COMBINORM - DSU - DTU
RBL/216296 M	2 × 16 mm ² + 29 × 6 mm ²	COMBINORM - DSU - DTU
RBLZ/21656	2 × 16 mm ² + 5 × 6 mm ²	DSU - DTM - CRD/CMD
RBLZ/21686	2 × 16 mm ² + 8 × 6 mm ²	DSU - DTM - CRD/CMD
RBLZ/216146	2 × 16 mm ² + 14 × 6 mm ²	DSU - DTM - CRD/CMD
RBLZ/216296	2 × 16 mm ² + 29 × 6 mm ²	DSU - DTM - CRD/CMD
RBL/416286 K	2 × 16 mm ² + 14 × 6 mm ²	DSU

Bimetal BBH terminals



Terminals especially designed for branching cables on plates; their main application is busbar connection.

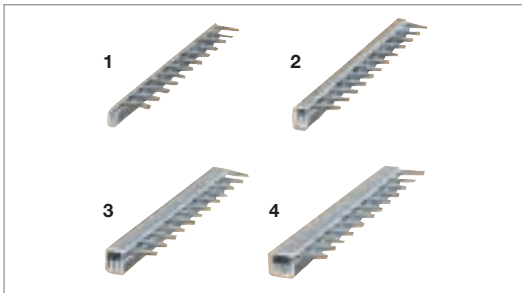
The BBH terminals are made of a tinned, hot cast copper alloy and are suitable for connecting to a conductor of copper or aluminium indistinctly (bimetal).

Reference	Main section mm ²	Bypass section mm ²
BBH-29P	6-50	-
BBH-29 PC*	6-50	-
BBH-29 DP	6-50	6-50
BBH-29 DPC*	6-50	6-50

* Include terminal cover CBBH-29

Reference	Main section mm ²	Bypass section mm ²
BBH-29	6-50	-
BBH-29 C*	6-50	-
BBH-30	10-95	-
BBH-31	16-150	-
BBH-32	50-240	-
BBH-29 D	6-50	6-50
BBH-29 DC*	6-50	6-50
BBH-30 D	10-95	10-95
BBH-31 D	25-150	16-150
BBH-32 D	95-240	5-240

Distribution terminals



For the distribution in a single row of automatic switches with a total of 12 modules.

Reference	No. of bars	No. of poles per bar	Fig. No.
BDS 1/12	1	12	1
BDS 2/6	2	6	2
BDS 3/4	3	4	3
BDS 4/3	4	3	4
BAP 25	Section 25 mm ²		5
BAH 25	Section 25 mm ²		6

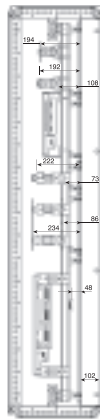
Dinimel 2000 modular distribution system



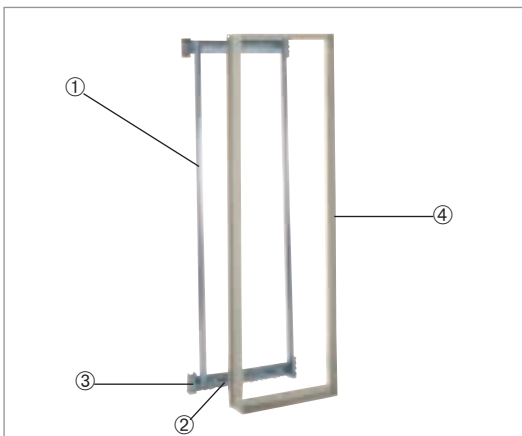
**OLN 186/60 KT + DM/OL 186 + CTLM 1550/0
+ CTLM 3050/4C + PMCD 6050 + CTLM 6050/0**

DINIMEL 2000 chassis coupling kit for **OLN** enclosures prepared for incorporation of all the necessary components for forming electrical control panels with a large capacity for distribution.

- Dimensional modularity of 150 ↑ × 250 → mm in accordance with DIN 43870.
- Depth adjustment of the various fixing planes of the equipment with respect to the covers.
- Structure designed to be incorporated along with the standard heavy and/or voluminous material distribution components, using special high impact resistant supports.
- Facilitates chassis wiring inside the enclosure due to the complete access of the **OLN** enclosure.



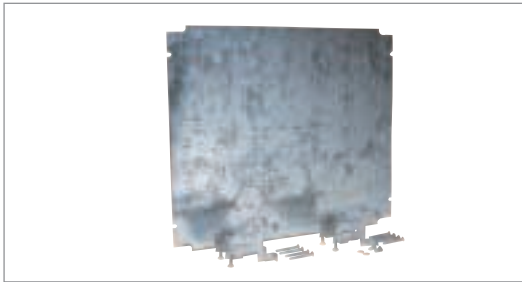
Coupling kit for DINIMEL 2000 chassis



Kit comprised of 2 or 4 MCM ①, profiles, 2 crossbars ②, adaptor pieces ③ and the cover adjustment set ④.

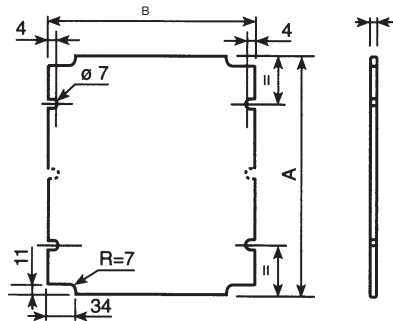
Enclosure dimensions		Maximum No. of 18 mm modules	No. of rows at ↑ 150 mm	No. of columns at → 250 mm	Reference
Height (A)	Width (B)				
1600	600	240	10	2	DM/OL 166
1800	600	264	11	2	DM/OL 186
1800	1000	396	11	3	DM/OL 1810
2000	600	288	12	2	DM/OL 206
2000	1000	432	12	3	DM/OL 2010

Standard DINIMEL 2000 chassis mounting plate

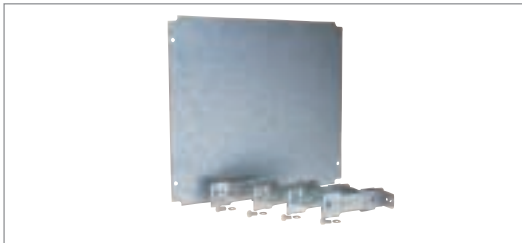


Standard mounting plate with **SDCD** fixing supports (included).

To be coupled to modular dimensions		Plate dimensions		Reference
↑ 150 mm Height	250 mm Width →	Height (A)	Width (B)	
150	250	100	220	PMCD 1525
150	500	100	470	PMCD 1550
300	250	250	220	PMCD 3025
300	500	250	470	PMCD 3050
450	250	400	220	PMCD 4525
450	500	400	470	PMCD 4550
600	250	550	220	PMCD 6025
600	500	550	470	PMCD 6050

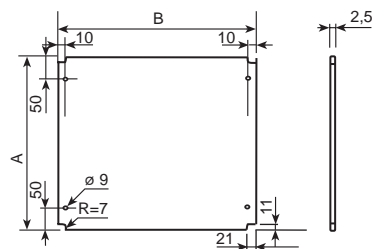


Reinforced DINIMEL 2000 chassis mounting plate



Reinforced mounting plate with **SDCM** fixing supports (included).

To be coupled to modular dimensions		Plate dimensions		Reference
↑ 150 mm Height	250 mm Width →	Height (A)	Width (B)	
300	500	250	444	PMCM 3050
300	750	250	694	PMCM 3075
450	500	400	444	PMCM 4550
450	750	400	694	PMCM 4575
600	500	550	444	PMCM 6050
600	750	550	694	PMCM 6075



DINIMEL 2000 chassis plain insulated covers



To be coupled to modular dimensions		Reference
↑ 150 mm Height	250 mm Width →	
150	250	CTL 1525/0
150	500	CTL 1550/0
300	250	CTL 3025/0
300	500	CTL 3050/0
600	250	CTL 6025/0
600	500	CTL 6050/0



DINIMEL 2000 chassis plain metal covers



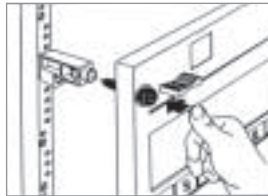
To be coupled to modular dimensions		Reference
↑ 150 mm Height	250 mm Width →	
150	250	CTLM 1525/0
150	500	CTLM 1550/0
300	250	CTLM 3025/0
300	500	CTLM 3050/0
600	250	CTLM 6025/0
600	500	CTLM 6050/0

DINIMEL 2000 chassis insulated cut-out covers



Covers with cut-outs for rails with **CO35D/...** automatic switches (included).
On the 500 mm width covers two modules can be installed per row by cutting the separation between windows.

To be coupled to modular dimensions		Reference
↑ 150 mm Height	250 mm Width →	
150	250	CTL 1525/1C
150	500	CTL 1550/2C
300	250	CTL 3025/2C
300	500	CTL 3050/4C
600	250	CTL 6025/4C
600	500	CTL 6050/8C



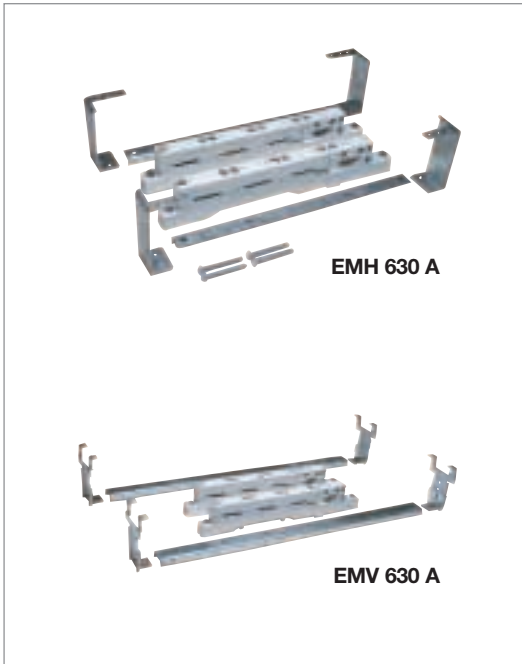
DINIMEL 2000 chassis cut-out metal covers



Covers with cut-outs for rails with **CO35D/...** automatic switches (included).
On the 500 mm width covers two modules can be installed per row by cutting the separation between windows.

To be coupled to modular dimensions		No. of windows	No. of rows	No. of modules (18 mm)	Reference
↑ 150 mm Height	250 mm Width →				
150	250	1	1	12	CTLM 1525/1C
150	500	2	1	24	CTLM 1550/2C
300	250	2	2	24	CTLM 3025/2C
300	500	4	2	48	CTLM 3050/4C
600	250	4	4	48	CTLM 6025/4C
600	500	8	4	96	CTLM 6050/8C

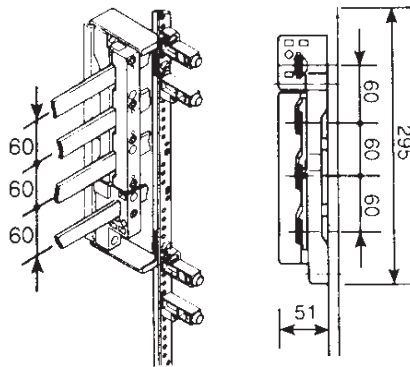
DINIMEL 2000 chassis 630 A busbar



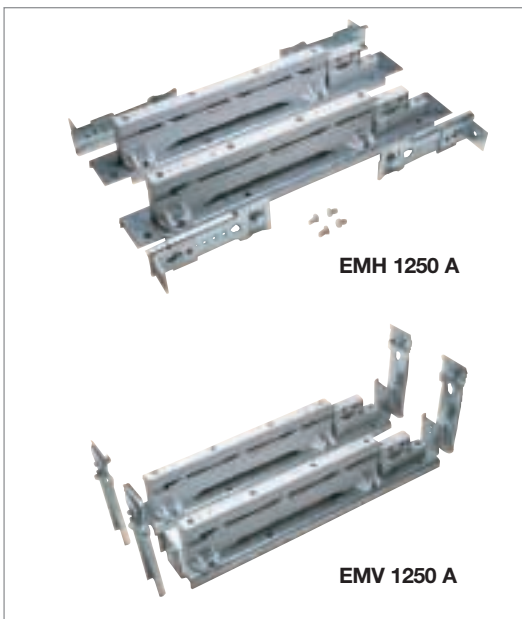
EMH 630 A horizontal busbar to be coupled to 300 mm modules.

EMV 630 A vertical busbar to be coupled to a 500 mm width (or two 250 mm width) chassis.

Plate phase (mm)	Int. Nominal (A)	Neutral plate (mm)		Earth plate (mm)	Reference
12 × 5	200	12 × 5-10		6 × 3	EMH 630 A
15 × 5	250	12 × 5-10		10 × 3	(horizontal)
20 × 5	320	20 × 5-10		10 × 6	
25 × 5	390	25 × 5			
30 × 5	440	30 × 5			
20 × 10	500				EMV 630 A
30 × 10	630				(vertical)



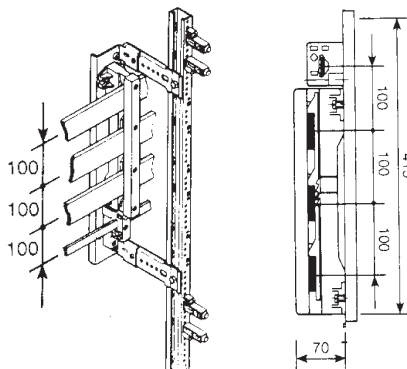
DINIMEL 2000 chassis 1250 A busbar



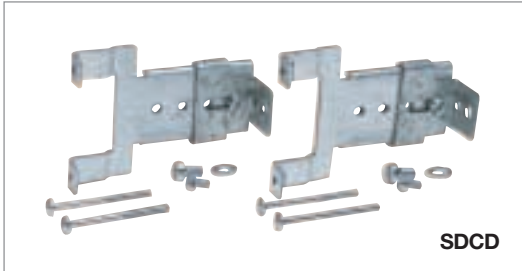
EMH 1250 A horizontal busbar to be coupled to 600 mm height modules.

EMV 1250 A vertical busbar to be coupled to a 500 mm width (or two 250 mm width) chassis.

To be coupled to modular dimensions		Neutral plate (mm)		Earth plate (mm)	Reference
Plate phase (mm)	Int. nominal (A)				
30 × 10	630	12 × 5-10			EMH 1250 A
40 × 10	850	15 × 5-10		6 × 3	(horizontal)
50 × 10	1,000	20 × 5-10		10 × 3	
60 × 10	1,250	25 × 5		10 × 6	
		30 × 5			
					EMV 1250 A
					(vertical)



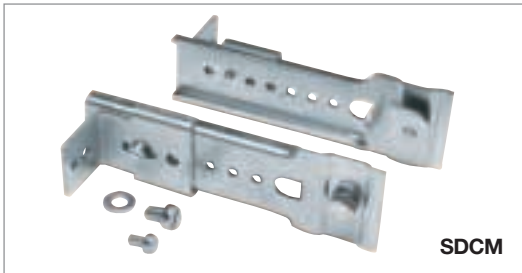
DINIMEL 2000 chassis supports



Set of two supports for direct fixing to the profiles. The distance between the equipment fixing plane and the interior of the cover is indicated in mm.

Standard adjustable supports

Reference: **SDCD**.



Reinforced adjustable supports

Reference: **SDCM**.

DINIMEL 2000 chassis reinforced 35 DIN rail



Separate rails to be fixed to the chassis profiles directly or using **SDCD** supports.

Modular length (mm)	Reference
250	CO 3515D/25
500	CO 3515D/50

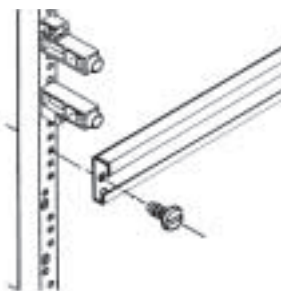


DINIMEL 2000 chassis asymmetrical rail



Separate rails to be fixed to the chassis profiles directly or using **SDCD** supports.

Modular length (mm)	Reference
250	CA 32D/25
500	CA 32D/50

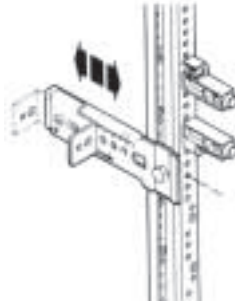


DINIMEL 2000 chassis reinforced rail with SDCM support



Reinforced rail for fixing using **SDCM** supports (included).

Modular length (mm)	Reference
250	CO 3515M/25
500	CO 3515M/50
750	CO 3515M/75



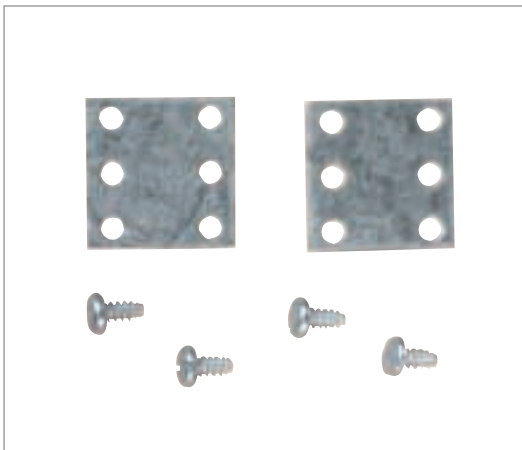
DINIMEL 2000 chassis profile



Set consisting of two profiles.

Enclosure dimensions Height (A)	Reference
1600	MCM 1570
1800	MCM 1720
2000	MCM 1870

DINIMEL 2000 profile coupling pieces



To reinforce the joint between profiles.

Reference: **UMD**.



UNIDIS distribution system



OLN 186/60 + AFCOL 186 + CP 2060/1 + CPH 4060/2 +
CP 4060/2 + CPH 2060/1 + CPH 4060/0

UNIDIS chassis coupling kit for **OLN** enclosures prepared for incorporation of all the necessary components for forming electrical control panels with a large capacity for distribution.

A trim frame, coupled to the front frame of the enclosure, allows for mounting:

- 600 or 800 mm width covers, plain or slotted, fixed or hinged version, with heights in multiples of 150 or 200 mm (up to 600 mm).
- Material supporting rails, fixed or depth adjustable.
- Mounting plate supports, plain or slotted, for coupling non-modular equipment.

To make double modular chassis or with busbars, Himel provides kits comprised of trim frames for supporting material, covers and trim supports.

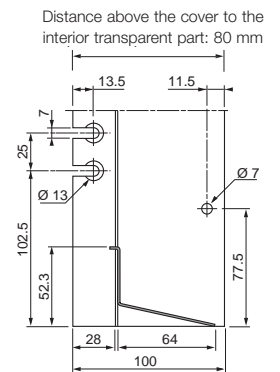
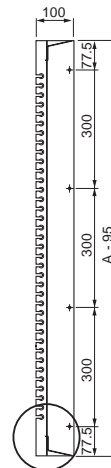
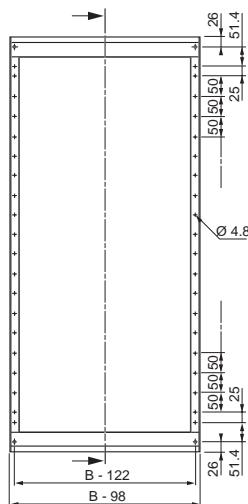
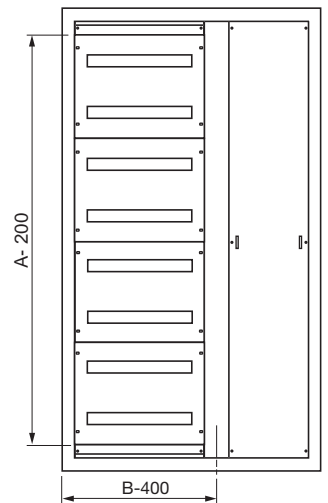
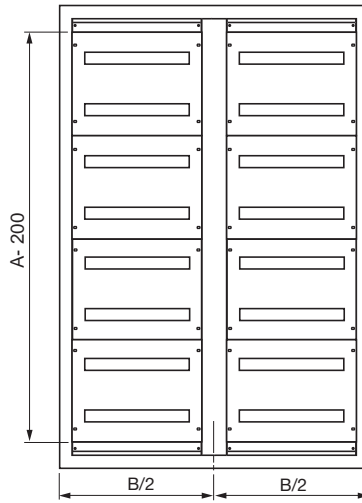
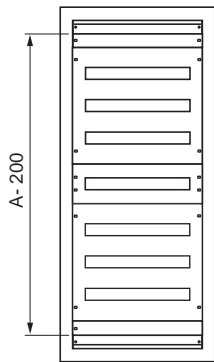
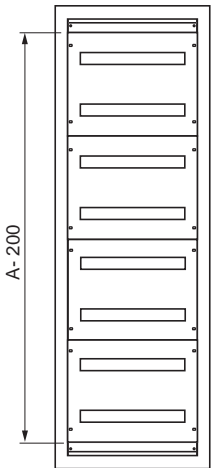
- Double chassis are mounted on 1200 to 1600 mm width enclosures.
- The vertical busbar cover kits are mounted on 1000 or 1200 mm width enclosures.
- All the accessories, covers, rails and plate supports are combined in the kits just as for a simple chassis.

Coupling kit for UNIDIS chassis

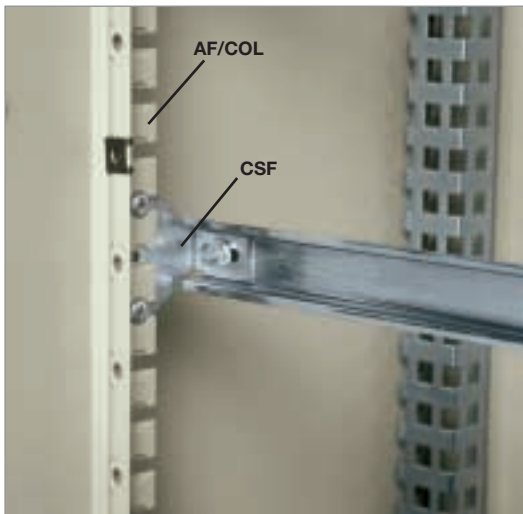


Set of vertical and horizontal profiles for fixing covers and supports.

Enclosure dimensions		Maximum No. of 18 mm modules	Made up of columns with width	Reference	Fig. No.
Height (A)	Width (B)				
1200	600	126	600	AF/COL 126	1
1200	800	192	800	AF/COL 128	1
1400	600	168	600	AF/COL 146	1
1400	800	256	800	AF/COL 148	1
1600	600	183	600	AF/COL 166	1
1600	800	288	800	AF/COL 168	1
1800	600	210	600	AF/COL 186	1
1800	800	320	800	AF/COL 188	1
1800	1000	210	600+400	AF/COL 1864	3
1800	1200	320	800+400	AF/COL 1884	3
1800	1200	420	600+600	AF/COL 1866	2
2000	600	252	600	AF/COL 206	1
2000	800	384	800	AF/COL 208	1
2000	1000	252	600+400	AF/COL 2064	3
2000	1200	384	800+400	AF/COL 2084	3
2000	1200	504	600+600	AF/COL 2066	2



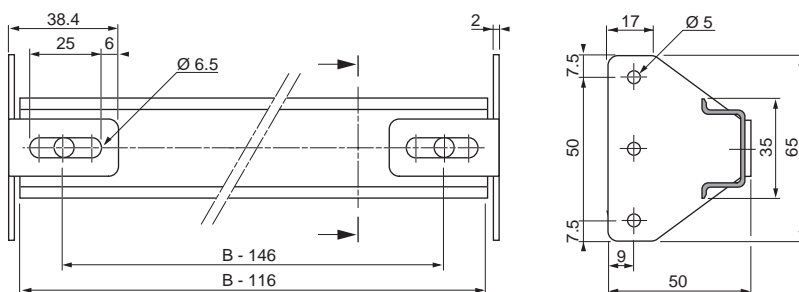
Set for fixed rail with supports



35 x 15 mm symmetrical rail, galvanised with mounting supports included.

- Easy installation. Screwed directly to the vertical profiles of the **AF/COL** coupling kit.
- For the installation of modular equipment.
- Set of 2 supports (without rail), Ref. **CSF**.

Enclosure dimensions		Reference
Width (B)		
600		CSCF 60
800		CSCF 80



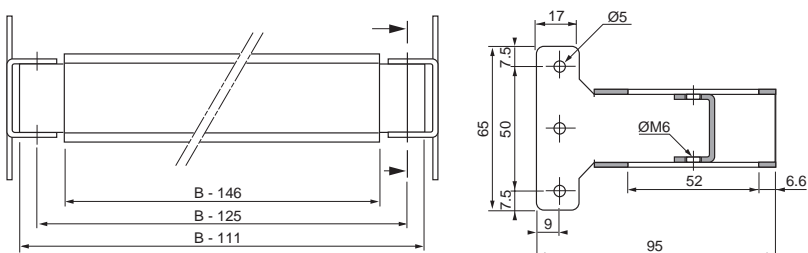
Set for depth adjustable rail with supports



35 x 15 mm symmetrical rail, galvanised with mounting support included.

- Easy installation. Screwed directly to the vertical profiles of the **AF/COL** coupling kit.
- For the installation of modular equipment.
- Rail is depth adjustable.
- Set of 2 supports (without rail), Ref. **CSA**.

Enclosure dimensions		Reference
Width (B)		
600		CSCA 60
800		CSCA 80



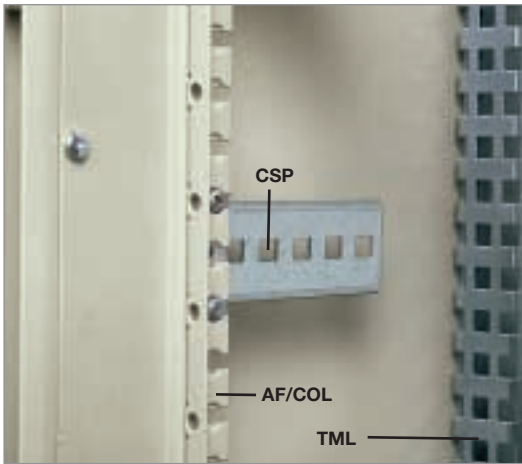
Partial metal mounting plate



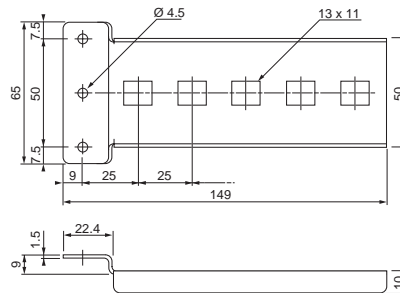
For installation of non-modular equipment.

Enclosure dimensions		Reference
Plate height	Width (B)	
247	600	PMP 2560
397	600	PMP 4060
597	600	PMP 6060
247	800	PMP 2580
397	800	PMP 4080
597	800	PMP 6080

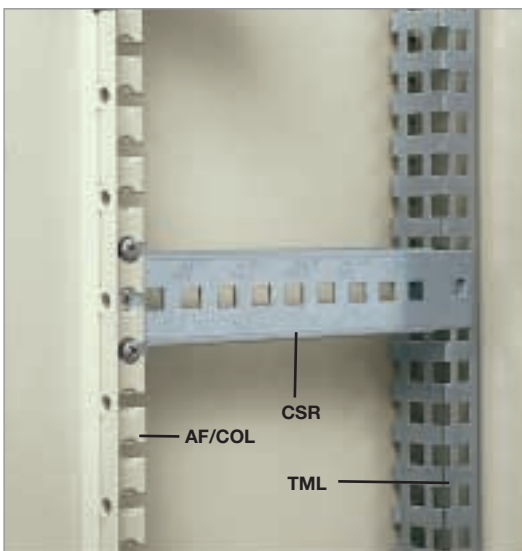
Set of 2 short supports for mounting plates



- Allows fixing of the material-supporting plate for small equipment.
- Made of galvanised sheet steel, folded and welded.
- Easy installation. Screwed directly to the vertical profiles of the **AF/COL** coupling kit. Ref.: **CSP**.

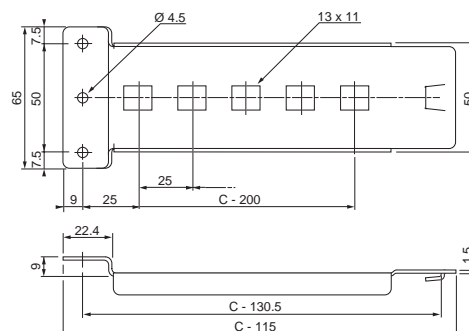


Set of 2 reinforced plate supports



- Allows fixing of the material-supporting plate or profiles for heavy equipment.
- Fixing on the front, screwed to the vertical profiles of the **AF/COL** coupling kit, and in the back on vertical **TML** profiles on the back of the enclosure.
- Made of galvanised sheet steel, folded and welded.

Enclosure depth (C)	Reference
300	CSR-30
400	CSR-40
500	CSR-50
600	CSR-60



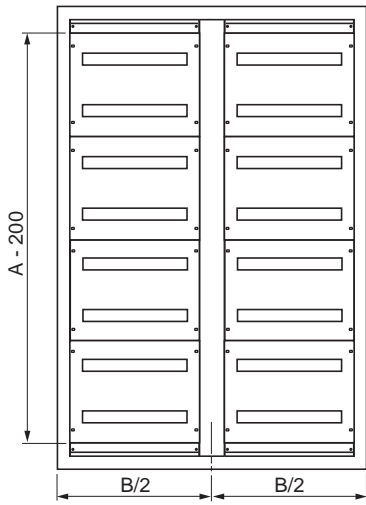
Metal protective covers



- Plain and with knock-outs in fixed and hinged versions.
- Made of sheet steel, painted with polyester epoxy in grey RAL-7032.
- Combinable in modules of 150 or 200 mm on the same profile.
- On plain covers or covers with knock-outs done by the client to protect control equipment or for non-modular protection.
- Covers with knock-outs suitable for modular equipment, with the possibility of incorporating blanking plates, Ref.: **ATP UND**.
- Hinged covers.
- Adjustable covers designed to fill the front depending on the space combinations, in multiples of 150 to 200 mm.

Dimensions		Snap-on covers	Plain covers		Covers with knock-outs						
Cover height (A)	Enclosure width (B)		Screwed-on reference	Hinged reference	No. of 18 mm modules	Screwed-on reference	(D)	(E)	Hinged reference	(D)	(E)
50	600	CSC 560	-	-		-			-		
50	800	CSC 580	-	-		-			-		
150	600	-	CP 1560/0	CPH 1560/0	21	CP 1560/1	-	-	CPH 1560/1	-	-
150	800	-	CP 1580/0	CPH 1580/0	32	CP 1580/1	-	-	CPH 1580/1	-	-
200	600	-	CP 2060/0	CPH 2060/0	21	CP 2060/1	-	-	CPH 2060/1	-	-
200	800	-	CP 2080/0	CPH 2080/0	32	CP 2080/1	-	-	CPH 2080/1	-	-
300	600	-	CP 3060/0	CPH 3060/0	42	CP 3060/2	52	150	CPH 3060/2	52	150
300	800	-	CP 3080/0	CPH 3080/0	64	CP 3080/2	52	150	CPH 3080/2	52	150
400	600	-	CP 4060/0	CPH 4060/0	42	CP 4060/2	77	200	CPH 4060/2	77	200
400	800	-	CP 4080/0	CPH 4080/0	64	CP 4080/2	77	200	CPH 4080/2	77	200
450	600	-	CP 4560/0	CPH 4560/0	63	CP 4560/3	52	300	CPH 4560/3	52	300
450	800	-	CP 4580/0	CPH 4580/0	96	CP 4580/3	52	300	CPH 4580/3	52	300
600	600	-	CP 6060/0	CPH 6060/0	63	CP 6060/3	77	400	CPH 6060/3	77	400
600	800	-	CP 6080/0	CPH 6080/0	96	CP 6080/3	77	400	CPH 6080/3	77	400

Coupling kit for double chassis



For 1200 and 1600 mm width enclosures.

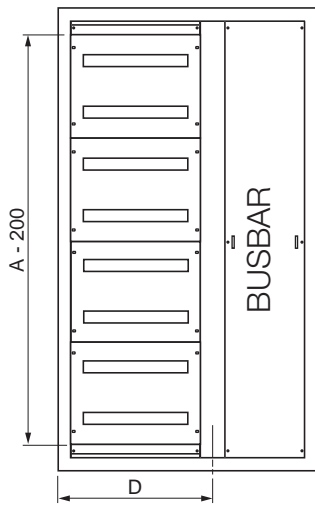
The kit includes:

- 2 modular chassis.
- 1 intermediate centre profile.
- Hardware required for installation.

Enclosure dimensions		Max. No. 18 mm modules	Reference
Height (A)	Width (B)		
1400	1200	336	AF/COL 1466*
1600	1200	378	AF/COL 1666*
1800	1200	420	AF/COL 1866*
2000	1200	504	AF/COL 2066*
1800	1600	640	AF/COL 1888
2000	1600	768	AF/COL 2088

* For CMO enclosures, the upper/lower adjustment rails (Ref.: DCOL...) for depth adjustment must be ordered separately.

Coupling kit for chassis with busbar area



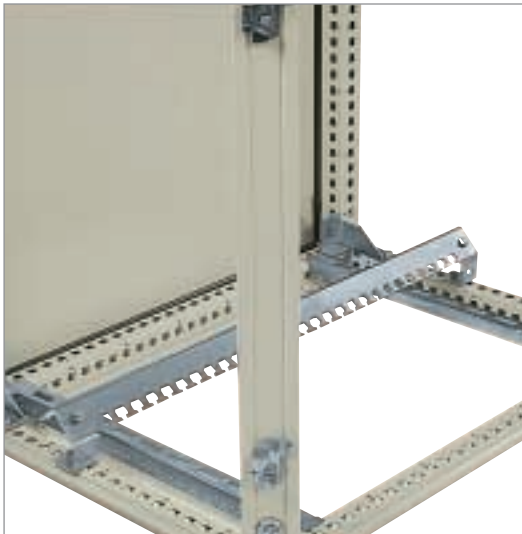
For 1000 and 1200 mm width enclosures.

The kit includes:

- 1 modular chassis.
- 1 intermediate centre profile.
- 1 busbar blanking cover (300 mm width).
- The hardware and supports required for installation.

Enclosure dimensions		D	Reference
Height (A)	Width (B)		
1400	1000	600	AF/COL 1464
1600	1000	600	AF/COL 1664
1800	1000	600	AF/COL 1864
2000	1000	600	AF/COL 2064
1400	1200	800	AF/COL 1484
1600	1200	800	AF/COL 1684
1800	1200	800	AF/COL 1884
2000	1200	800	AF/COL 2084

Cable guide profile



Allows quick fixing of the enclosure's entry-exit cables. Depth adjustable in 25 mm intervals.

Enclosure width dimensions (B)	Reference
600	TFC/OL 6
800	TFC/OL 8
1000	TFC/OL 10

Cable guide profile in door



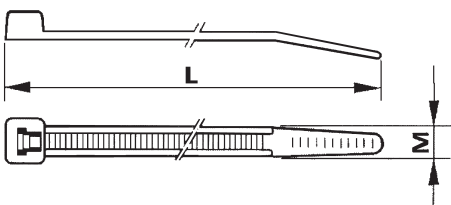
Indicated for fixing cables to the interior equipment of the door. Fixed directly to the reinforcement frame. Height adjustable in 25 mm intervals.

Enclosure width dimensions (B)	Reference
600	TFP/OL 6
800	TFP/OL 8
1000	TFP/OL 10

Adjustable ties



Made of 6.6 nylon in natural colour or black for outdoor conditions.



Reference		L	M	Use	
White	Black			∅ minimum	∅ maximum
LZ25100	LN25100	100	2.5	1.6	22
LZ25200	LN25200	200	2.5	1.6	49
LZ35150	LN35150	150	3.5	1.6	35
LZ35200	LN35200	200	3.5	1.6	49
LZ35300	LN35300	300	3.5	1.6	75
LZ46150	LN46150	150	4.6	1.6	36
LZ46200	LN46200	200	4.6	1.6	49
LZ48270	LN48270	270	4.8	1.6	73
LZ46390	LN46390	390	4.6	1.6	109
LZ76390	LN76390	390	7.6	4.7	108

Tightening tools



To tighten and cut to size the adjustable ties. They facilitate wiring and save time, preventing the packets of cables from loosening.

Tool adjustable according to the thickness of the tie. Can be used with the following models: LZ25100 up to LZ46390. Ref.: **MARK3**.

A very light and ergonomic tool, the cut on the tie is done by twisting the tool. Can be used on the following models of ties: LZ25100 up to LZ46390. Ref.: **MARK20, 21**.



Reference	Admissible width ties
MARK3	2.5 ÷ 4.8

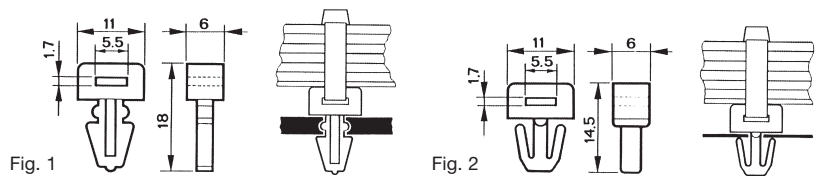
Reference	Admissible witch ties
MARK20	2.5 ÷ 4.8
MARK21	4.6 ÷ 7.6

Locking clips



Allows fixing ties from the series LZ25100 up to LZ46390 on panels up to 3.2 mm thick. Material: 6.6 nylon.

Reference	∅ perforation mm	Maximum width panel mm	Figure
SFC1	6	3.2	1
SFC2	6	1	2

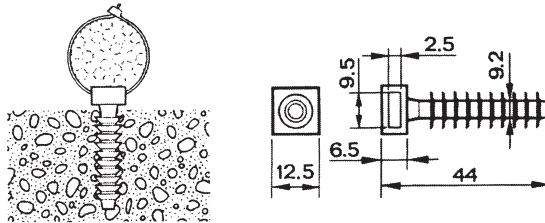


Stud



To use with soft materials: Ø 7 mm, or hard materials: Ø 8 mm. For ties up to 9 mm width. Material: black 6.6 nylon.

Ref.: **LOK01**.

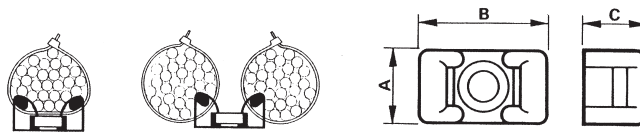


Tie fixing support



To attach one or two ties, mounted with a single screw. Material: 6.6 nylon. Allows for attaching ties from the entire range.

Reference	A	B	C	Fixing screw	Admissible width ties
KR6	12	18	9	M4	2.5 ÷ 4.8
KR8	14.5	25	12	M6	2.5 ÷ 7.6

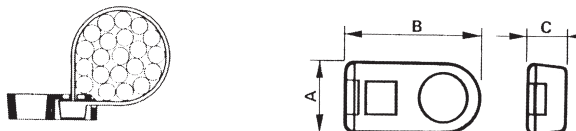


Support heads



To transform normal ties into ties with fixing heads, introduce a tie into this head before closing it on the cable bundle. Material: 6.6 nylon.

Reference	A	B	C	Fixing screw	Admissible width ties
FH18	7.1	13.3	4	M4	2.5
FH30	9.5	17.9	4.7	M5	3.5
FH50	11.3	22.2	6.2	M6	4.7

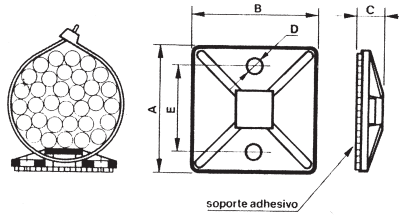


Self-adhesive support base



Permits insertion of 1 tie from 4 points at a 90° angle. Attaches ties from the series LZ25100 up to LZ46390. Material: 6.6 nylon.

Reference	A	B	C	D	E	Admissible width ties
MB3A	19.1	19.1	4.8	3.2	13.2	2.5 ÷ 3.5
MB4A	28.5	28.5	5.5	4	20.2	2.5 ÷ 4.8

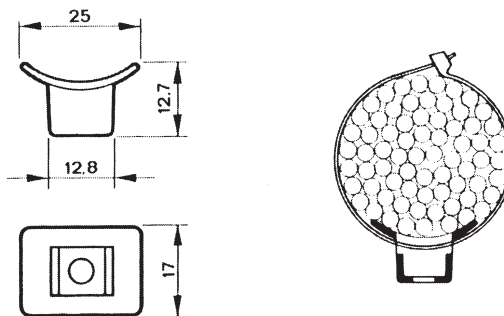


Tie fixing support



To attach ties from any series. Material: 6.6 nylon.

Reference	Admissible width ties mm	Fixing screw
LKC	2.5 ÷ 7.6	M5

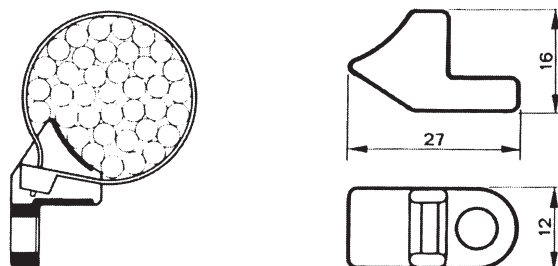


Lateral tie fixing support



Covers the head of the tie in its end, thus obtaining neater cabling. Material: 6.6 nylon.

Reference	Admissible width ties mm	Fixing screw
LKM/HE	2.5 ÷ 7.6	M5



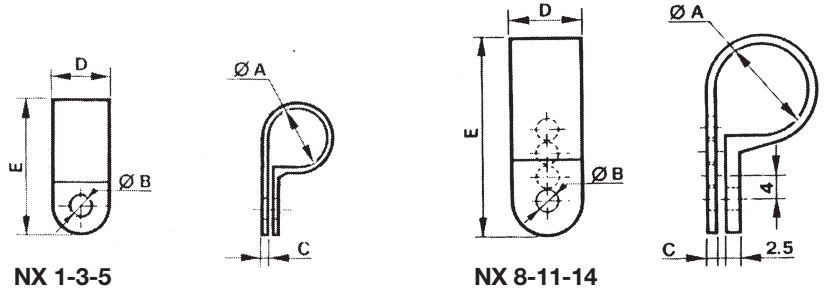
Fixing loop for tubes, hoses, etc.



2 versions, fixed and graduated, Ø from 5 to 25.4 mm. Material: black 6.6 nylon.

Reference	Ø A min. - max.	B	C	D	E
NX1	5	3.5	1	6.2	13.7
NX3	8	3.9	1	9.4	20.5
NX5	12	3.9	1	9.4	24
NX8*	14.3 ÷ 15.8	4	1.3	12.6	32
NX11	17.4 ÷ 20	4	1.3	12.6	37
NX14	22.2 ÷ 25.4	4.3	1.5	16	45

* The NX8 model only has 3 adjustment holes.



Adjustable membrane glands



Insulated membrane glands made of PVC with entry that can be adjusted for cables.

To couple to **DP** and **DPC** insulated junction boxes, **CGPH** general protection boxes and in general to thicknesses adapted to dimension E.

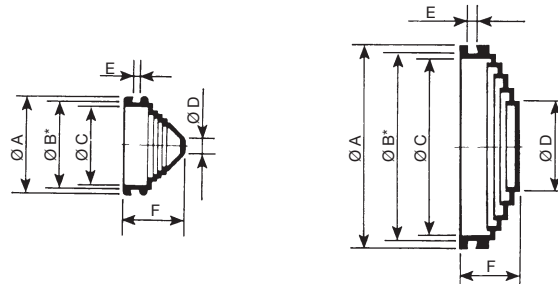


Fig. 1

Fig. 2

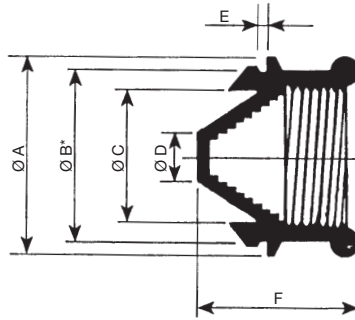
Reference	Fig.	Ø A	Ø B*	Ø C	Ø D	E	F	Capacity	
								Ø cable	Tube
ECPC-3	1	25	21.5	18	5	3.2	13	5 to 18	Pg 9 to 11
ECPC-5	1	33	29.5	26	5	3.2	20	5 to 26	Pg 9 to 16
ECPC-6	1	43	38.5	36	5	3.2	22	5 to 36	Pg 9 to 21
ECPC-9	2	70	63	60	28	3	20	28 to 60	Pg 21 to 48
ECPC-15	2	98	90	87	28	3	23	28 to 87	Pg 21 to 48

* Mounting perforation.

Adjustable membrane glands



Insulated membrane glands made of PVC with entry threaded to the diameter and spacing of Pg tubes and with knock-out entry for cables on the back. These characteristics also permit entries for any class of cable and normal and flexible tubes with diameter between B dimensions and the core of the thread (\varnothing maximum). To be coupled to **DB** and **DA** metal junction enclosures, to **DBX** and **DAX** metal boxes with doors, and in general to thicknesses adapted to dimension E.



Reference	Ø A	Ø B*	Ø C	Ø D	E	F	Capacity	
							Ø cable	Tube
EC-1	25	19.5	16	3	1.2	21	3 to 16	Pg 9
EC-2	25	19.5	16	6	1.2	21	6 to 16	Pg 11
EC-3	27	21.5	18	7	1.2	23	7 to 18	Pg 13.5
EC-4	29.5	23.5	20	8	1.2	26	8 to 20	Pg 16
EC-5	35	29.5	26	10	1.2	27	10 to 26	Pg 21
EC-6	42	38.5	35	12	1.5	30	12 to 35	Pg 29
EC-7	52	48.5	44	13	1.5	30	13 to 44	Pg 36

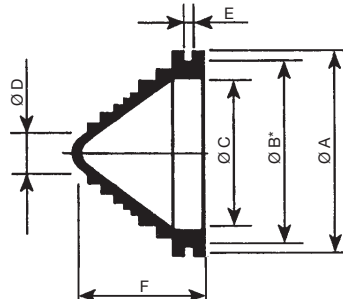
• Mounting perforation.

Adjustable membrane glands



Insulated membrane glands made of neoprene. This material has extraordinary mechanical, di-electrical and thermal characteristics, as well as resistance to corrosive environments.

To be coupled to **DB** and **DA** metal junction enclosures, to **DBX** and **DAX** metal boxes with doors, and in general to thicknesses adapted to dimension E.



Reference	Ø A	Ø B*	Ø C	Ø D	E	F	Capacity	
							Ø cable	Tube
ECN-1	24	19.5	14	8.6	1.75	20	8.6 to 14	-
ECN-5	34	29.5	26	9	1.75	22	9 to 26	Pg 9 to 16
ECN-6	43	38.5	32	9	1.75	28	9 to 32	Pg 9 to 21
ECN-7	53	48.5	36	9	1.75	32	9 to 36	Pg 9 to 29
ECN-10	71	65	60	9.2	1.75	40	9.2 to 60	Pg 9 to 48

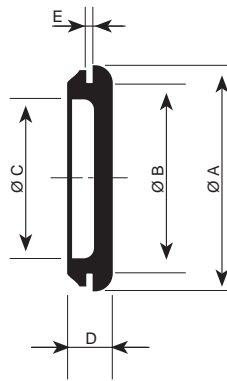
* Mounting perforation.

Plain plugs



Made of black PVC, they cover all the existing diameters of the knock-outs of the enclosures.

Reference	Ø A	Ø B	Ø C	D	E
TC-1	25.5	20	16.5	7	1.2
TC-2	27.5	22	19	7	1.2
TC-3	29.5	24	21	7	1.2
TC-4	36.5	29.5	27	7	1.5
TC-5	46.5	39	35	7.5	1.5
TC-6	56.5	49	45	7.5	1.5

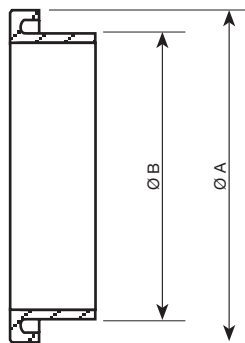


Protective sleeves



Small protective sleeves for cables coming out of tubes, as indicated in the instructions for MI BT 019. Made of flexible and durable PVC, in light grey colour.

Reference	A	Ø B	Tube
PC-1	15.2	12.7	Pg 9
PC-2	18.6	16	Pg 11
PC-3	20.4	17.8	Pg 13.5
PC-4	22.5	19.8	Pg 16
PC-5	28.3	25.3	Pg 21
PC-6	37	33.6	Pg 29
PC-7	47	43	Pg 36



Useful information about Pg tubes and HIMEL accessories to be

MODELS, DIMENSIONS AND REFERENCES

Designation	Ø exterior	Steel	Tubes								Ø perforations to		HIMEL accessories to be coupled			
			Ø interior			Cables inserted*				Insert			To the tubes		To the perforations	
			Flexible steel	PVC	Flexible steel with PVC	No. of conductors						Adjustable membrane glands	Protective sleeves	Adjustable membrane glands	Plain plugs	
						1	2	3	4							
Pg 9	15.2	12.7	12.4	12	11.1	4				16	14	EC-1 to EC-7				
						6	2.5	-	-			ECPC-3 to ECPC-6	PC-1	-	-	
Pg 11	18.6	16	15.5	14.5	14.2	10	4	2.5		19	17.5	EC-2 to EC-7		EC-1		
						16	6	4	2.5			ECPC-5; ECPC-6	PC-2	EC-2	TC-1	
						25						ECN-5 to ECN-10		ECN-1		
Pg 13.5	20.4	17.8	17.5	16.3	16	35	10	6	4	21	19.5	EC-3 to EC-7		EC-3		
												ECPC-5; ECPC-6	PC-3	ECPC-3	TC-2	
												ECN-5 to ECN-10				
Pg 16	22.5	19.8	18.7	18.5	17.6	50	16	10	6	23	21.5	EC-4 to EC-7				
												ECPC-5; ECPC-6	PC-4	EC-4	TC-3	
												ECN-5 to ECN-10				
Pg 21	28.3	25.3	24.7	23	23	70	25	16	10	29	27	EC-5 to EC-7		EC-5		
												ECPC-6 to ECPC-15	PC-5	ECPC-5	TC-4	
												ECN-6 to ECN-10		ECN-5		
Pg 29	37	33.6	33.5	31	31	95	35	25	16	38	35.5	EC-6; EC-7		EC-6	TC-5	
						120	50	35	25			ECPC-9; ECPC-15	PC-6	ECPC-6	TCP-5	
						150						ECN-7; ECN-10		ECN-6		
Pg 36	47	43	41.5	41	40.3	185			35	48	45.5	EC-7		EC-7		
						240	70	50	50			ECPC-9; ECPC-15	PC-7	ECN-7	TC-6	
						300						ECN-10				
Pg 42	54	50	48	48	47	-	95	70		55	52.5	ECPC-9; ECPC-15				
							120	95	70			ECN-10	-	-	-	
Pg 48	60	56	54.2	52.5	51.4	-	150	150	120	61	58	ECPC-9; ECPC-15				
												ECN-10	-	-	-	

* Number and section in mm² of the conductors that may be housed inside each tube (orientative).

For more information, consult the electrotechnical rules for low voltage (MI BT 019).

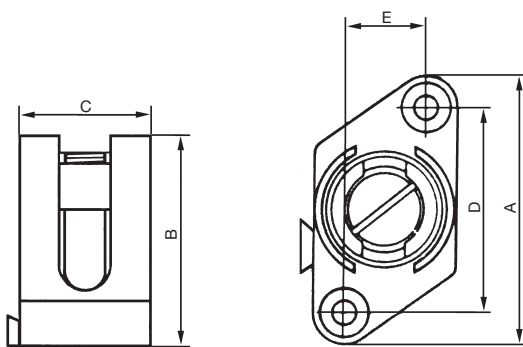
Sigma safety terminals



Safety terminals: base made of black matte self-extinguishing polyamide-6, terminal of **MS58** (DIN17660) brass ring of tempered steel zinc dichromate, and cap of orange self-extinguishing polypropylene.

- **Anti-cut.** The connection is made using a tightening mechanism that spreads the pressure out throughout the entire contact surface, avoiding the occasional rubs and stresses that damage the conductors.
- **Loosening proof.** The ring that surrounds the brass body ensures that the pressure exerted by the conductors cannot open the terminal and loosen the connection.
- **Total insulation.** All the SIGMA "S" terminals are supplied with a terminal cap, avoiding any accidental contact with live parts.

All the calibres may be coupled one to the other, allowing the formation of strips of any length. Service voltage: 500 V.



Reference	Section m/m ²	A	B	C	D	E
S.04	1 × 4	30	20	13	21	4
S.06	1 × 6	33	25	16	24	7
S.10	1 × 10	38	28	16	28	6
S.16	1 × 16	42	32	19	32	9
S.25/35	1 × 35	46	38	23	34	11
S.50	1 × 50	52	45	27	40	15
S.70	1 × 70	55	50	30	40	15
S.95/100	1 × 100	58	54	33	40	20

NOTE: each terminal accepts up to 2 conductors of the section indicated.

Bimetal BBH terminals



Terminals especially designed for branching cables on plates; their main application is busbar connection.

The **BBH** terminals are made of a tinned, hot cast copper alloy and are suitable for connecting to a conductor of copper or aluminium indistinctly (bimetal).

Reference	Main section mm ²	Bypass section mm ²
BBH-29	6-50	-
BBH-29C*	6-50	-
BBH-30	10-95	-
BBH-31	16-150	-
BBH-32	50-240	-
BBH-29D	6-50	6-50
BBH-29DC*	6-50	6-50
BBH-30D	10-95	10-95
BBH-31D	25-150	16-150
BBH-32D	95-240	5-240

Reference	Main section mm ²	Bypass section mm ²
BBH-29P	6-50	-
BBH-29PC*	6-50	-
BBH-29DP	6-50	6-50
BBH-29DPC*	6-50	6-50

* Include terminal cover **CBBH-29**.

Plate/cable terminals

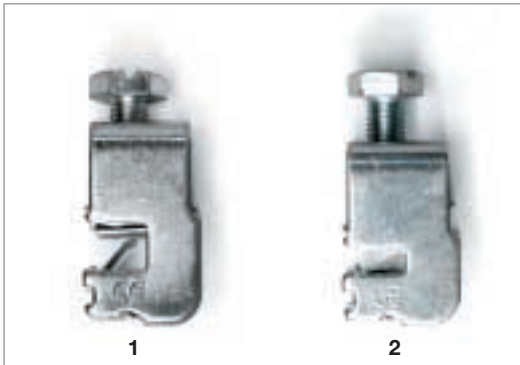


Plate entry and bypass by cable, plate or terminal.

Reference	Cable bypass section (mm ²)	Plate thickness (mm)	Figure
BPCH 516	1.5 to 16	5	2
BPCH 550	1.5 to 50	5	2
BPCH 5120	16 to 120	5	2
BPCH 1016	1.5 to 16	10	1
BPCH 1050	1.5 to 50	10	1
BPCH 10120	16 to 120	10	1

Three-phase bypass terminals

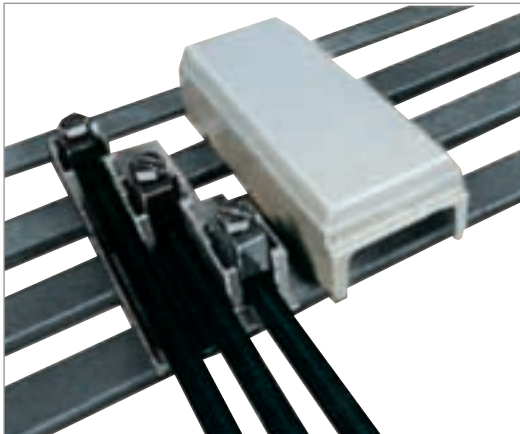


Plate entry and cable bypass (for **EMH-630** and **EMV-630** busbars).

Reference	Entry plate width mm	Entry plate thickness mm	Sect. Cable bypass mm ²
BTE 630 TBT	12/15/20/25/30	5 to 10	35 to 120

Compact lamp

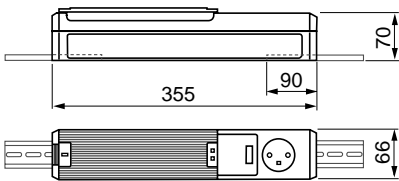


Compact fluorescent lamps, designed especially for use in electronic enclosures. May be fixed with a magnet.

- Connection voltage 220 V/50 Hz.
- Consumption 11 W.
- Connection/disconnection switch.
- 200 V/16 A socket with earthing.
- Maximum ambient temperature 60 °C.
- Lighting output = 75 W bulb.



Specifications	Reference	Plug	Tension
Lamp fixed with a magnet or on 35 mm symmetrical DIN rail	LAM-75	220 V/16 A	220 V/50 Hz
Lamp fixed on a 35 mm symmetrical DIN rail	LAC-75	220 V/16 A	220 V/50 Hz
Lamp fixed with a magnet or on 35 mm symmetrical DIN rail	LAM-75/120	120 V/15 A	120 V/60 Hz
Lamp fixed on a 35 mm symmetrical DIN rail	LAC-75/120	120 V/15 A	120 V/60 Hz

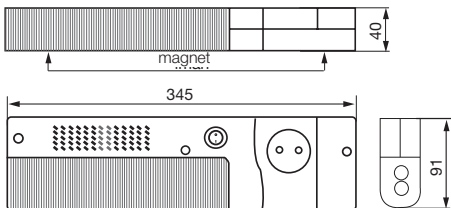


Slimline lamp



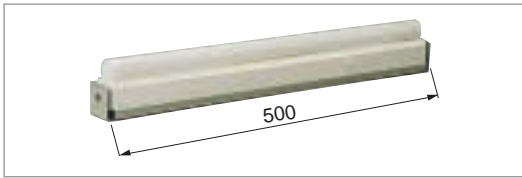
Magnetic-fixing flat lamps equipped with energy efficient light bulbs, with or without a plug.

- Electronic ballast.
- Power: 11 W.
- Luminosity: 900 lm.
- Lifespan: 10000 h.
- Plastic casing UL94 V0.
- IP20.
- Class I.



Reference	Plug	Socket	Approval
LAMS75	AC 230 V/16 A	SCHUKO	VDE
LAMX75	AC 230 V/-	-	VDE
LAMU75	AC 120 V/15 A	USA	UL

Incandescent lamp



Incandescent lamp designed especially for use in electronic enclosures.

- Connection voltage 220 V/50-60 Hz.
- Consumption 60 W.
- Connection/disconnection switch.
- Terminal connection entry.

Reference: **LAI/OL68**.

Dual lamp

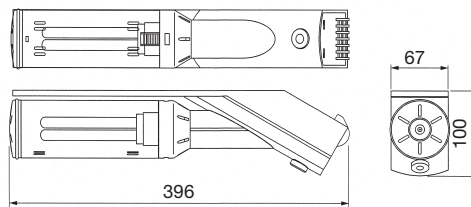


Light fixtures designed especially for use in electronic enclosures with various possibilities for fixing and operating.

- Energy efficient electronic lamp E27, 20 W, 220-240 V/50-60 Hz or 120 V/60 Hz.
- Lighting output = 100 W bulb.
- Fixed models connection via 2.5 mm² terminal strip and the mobile model via cable.
- Degree of protection IP20.
- Insulation class II.
- Conforming to EN 55014 and EN 50082-1.

Specifications	Support fixing	Figure	Reference	Tension
Motion-activated	Magnetic, using screws and/or (1) 35 DIN rail	1	LAMDP LAMDP 120	220 V/56 Hz 120 V/60 Hz
On/off switch with the possibility of connecting door switch	Magnetic, using screws and/or (1) 35 DIN rail	2	LAMIN LAMIN 120	220 V/50 Hz 120 V/60 H
Mobile lamp, connection via cable	Adhesive or screws	3	LAMPO LAMPO 120	220 V/50 Hz 120 V/60 Hz
Support for LAMDP , LAMIN , LAMPO lamp	Adhesive or screws	4	SOLAM	

(1) DIN rail not provided.



Door switch

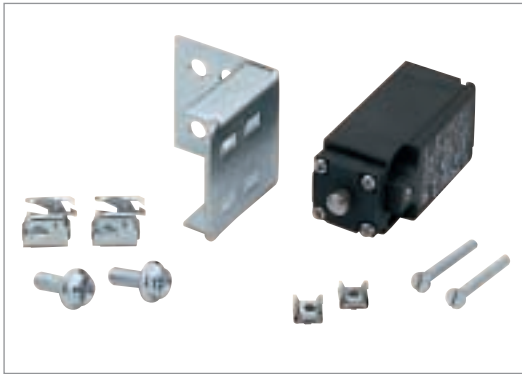


INL:

Switch/commutator device with a special support and hardware for direct incorporation into the structure of the enclosure.

- Possibility of connecting a lamp at the opening of the door, stopping the cooling elements, etc.
- Door switch/commutator $I_n = 10 \text{ A}$.

Reference: **INL**.



INL/BRP:

Switch/commutator device with a special support and hardware for direct incorporation into the structure of the enclosure.

- Possibility of connecting a lamp at the opening of the pivoting rack, for both 120° and 180°, stopping the cooling elements, etc.

DOOR SWITCH FOR RACK

Specifications	Reference
Door switch/commutator $I_n = 10 \text{ A}$	INL/BRP

Top elevation brackets



Set of 4 elevators for the top of the enclosure for interior ventilation.

- Top elevation: 14 mm.

Reference: **VET 12**.

Aerosol



Specifications	Reference
RAL-7032 150 g	BPA-7032

Touch-up paint



Air-dry touch-up paint.
Available in 2 colours.


Reference	Colour
TUP7032	RAL-7032
TUP7035	RAL-7035

PC application



OLNP 186/60 + ZUN 66/100

Metal enclosure consisting of a galvanised steel structure with a triangular closed profile with welded top and base and vertical, removable bolted profiles, giving the suite optimum versatility and robustness. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin.

- Easy interior access.
- Maximum versatility for all kind of installations.
- Doors opening to 120°.
- Lock located outside of the sealed area. Standard double bar  lock with handle, possibility of different types of operation and latches.
- Tempered glass transparent door.

Basic composition:

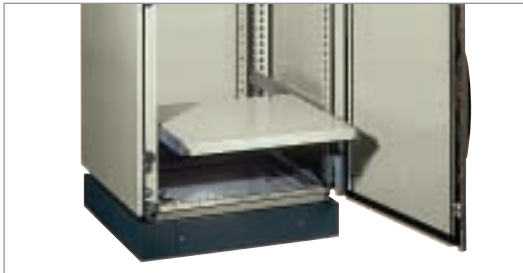
- Welded upper frame.
- Welded lower frame.
- Vertical profiles.
- Removable top.
- Removable lateral panels, screwed from the interior.
- Transparent upper front door.
- Keyboard panel.
- Plain lower door.
- Monitor support tray.
- Keyboard support tray with adjustable guides.
- Rear door without reinforcement frame.
- **ECON/1** mounted on the lower part.



Detail of monitor compartment with 14" or 17" **KT** transparent door.



Detail of keyboard compartment with side tray for mouse.



Detail of printer tray, optional.

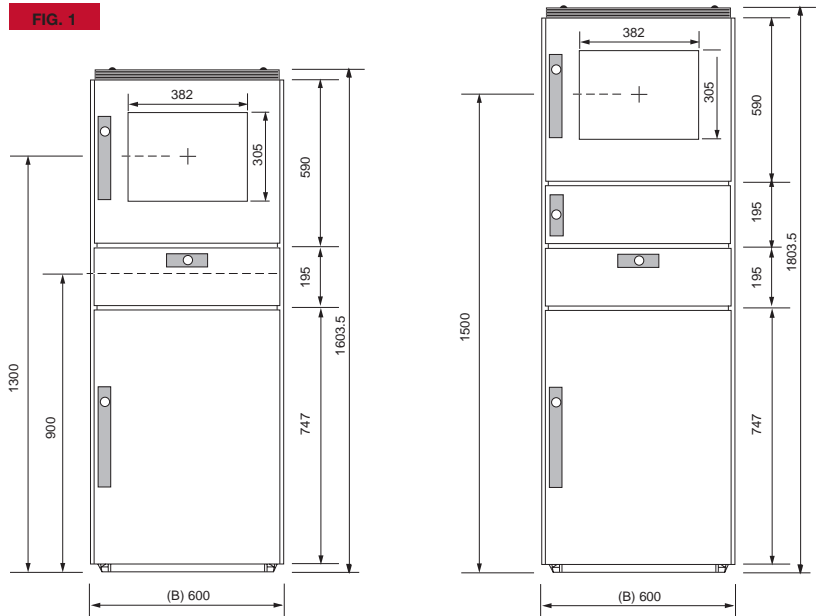
TABLE OF MODELS, DIMENSIONS AND REFERENCES

Dimensions ext. in mm			Reference
Height (A)	Width (B)	Depth (C)	
1600	600	600	OLNP 166/60
1600	600	800	OLNP 166/80
1800	600	600	OLNP 186/60
1800	600	800	OLNP 186/80

ACCESSORY AND COMPLEMENTS PANEL

510 × 390 mm fixed tray	BFOL64
510 × 390 mm adjustable tray	BDOL64
Profiles for installing tray in 600 mm depth enclosures	TML40/60
Profiles for installing tray in 800 mm depth enclosures	TML40/80
A4 printer support (with paper support) for 600 mm depth enclosures	
For coupling in 800 mm depth enclosures, 2 TML 40/80 are needed	SIMPA 4
A3 printer support for 800 mm depth enclosures	SIMPA 3
6 base Schuko distribution plinths with circuit breaker	ZDBE6P
6 base Schuko distribution plinths with switch	ZDBE6I

Dimensions (mm)



Motor control centre



OLNM 208/60



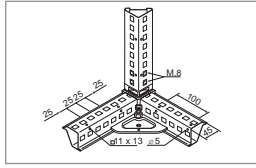
OLNM 208/60 + PPMC 2060 N + PPMC 4060 N KT + PPMC 2060 N + PPMC 4060 N + PPMC 6060 N

Metal enclosure formed by a closed triangular structure in galvanised steel with welded top and base. Removable screwed vertical profiles that offer great versatility and robustness. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin. The OLNМ system permits combining partial doors from 200 up to 1,000 mm height in multiples of 200 and control desks on the front part. The 19" system, depth adjustable mounting plates, rear closing covers and lateral, rear and lower covers can also be installed. Electricity may be supplied from the upper, lower or side part of the enclosure using the busbar chambers. This system allows for quick and customised mounting.

- Easy interior access.
- Maximum versatility for all kind of installations.

Basic composition:

- Welded upper frame.
- Welded lower frame.
- Vertical profiles.
- Removable top.
- Removable rear panel.
- Front upper and lower panel for modularity.



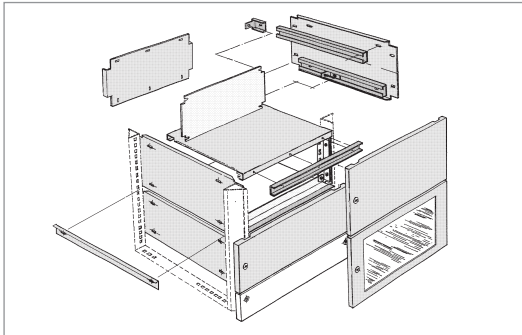
Structure based on a perforated triangle profile of $\square 11 \times 13$ at 25 mm intervals and $\varnothing 5$ mm reference perforation every 100 mm.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions in mm			Reference
Height (A)	Width (B)	Depth (C)	
2000	600	600	OLNM 206/60
2000	600	800	OLNM 206/80
2000	800	600	OLNM 208/60
2000	800	800	OLNM 208/80



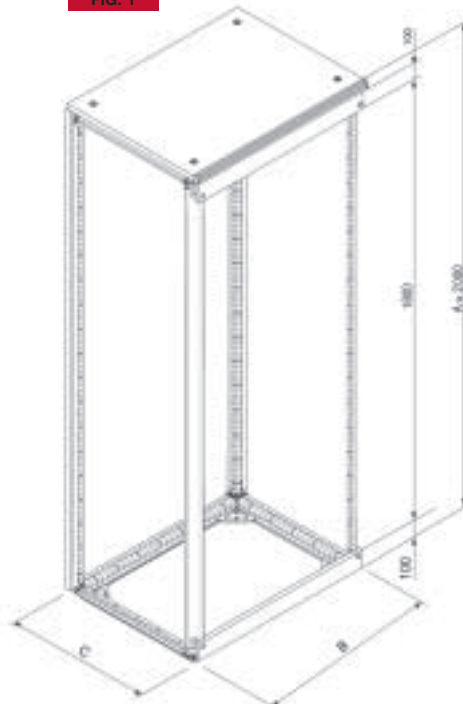
Detail of the upper front panel for modularity.



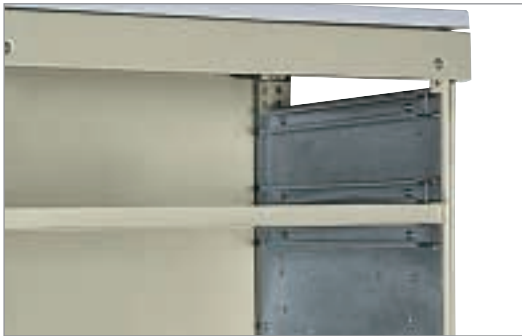
Detail of compartments and partial doors on the **OLNM** system.

Dimensions (mm)

FIG. 1



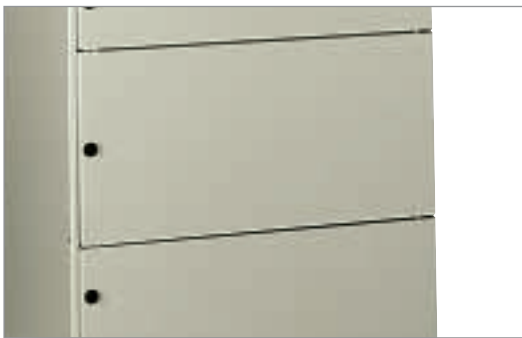
Intermediate crossbar




To be positioned between partial doors or doors and control desks.
Painted in RAL-7032.

Width	Reference
600	TIMC 60 N
800	TIMC 80 N

Partial doors




Plain door with standard lock,  with the possibility of different types of mechanism and latch.
Painted in RAL-7032.

Nominal dimensions in mm		Reference
Width	Height	
600	200	PPMC 2060 N
	400	PPMC 4060 N
	600	PPMC 6060 N
	800	PPMC 8060 N
800	1000	PPMC 10060 N
	400	PPMC 4080 N
	600	PPMC 6080 N
	800	PPMC 8080 N
	1000	PPMC 10080 N

KT partial doors



Tempered glass transparent door with standard lock,  with the possibility of different types of mechanism and latch.
Painted in RAL-7032.

Nominal dimensions in mm		Reference
Width	Height	
600	200	PPMC 2060 N KT
	400	PPMC 4060 N KT
	600	PPMC 6060 N KT
	800	PPMC 8060 N KT
800	1000	PPMC 10060 N KT
	400	PPMC 4080 N KT
	600	PPMC 6080 N KT
	800	PPMC 8080 N KT
	1000	PPMC 10080 N KT

Drill hole template



For fixing partial doors on the front of the enclosure.

Reference: **PLTON**.

Side covers



Set of 2 side closing covers for forming modules.

Height	Depth	Reference
200	600	2TLMC 2060
200	800	2TLMC 2080
400	600	2TLMC 4060
400	800	2TLMC 4080

Guide rails



Set of 4 guide rails for adjusting the mounting plate.

Nominal dimensions	Reference
600	4DPMC 60
800	4DPMC 80

Separating tray



Separating tray between doors.

Nominal dimensions in mm		Reference
Width	Depth	
600	400	BSMC 6040
600	500	BSMC 6050
800	400	BSMC 8040
800	500	BSMC 8050

Tray crossbar




For its positioning between partial doors separated by the **BSMC** tray.
Painted in RAL-7032.

Nominal dimensions in mm		Reference
Width		
600		TBMC 60
800		TBMC 80

Control desks



May be inserted just as a partial door in any position on the enclosure.
Painted RAL-7032 with a folding panel and standard lock .

Nominal dimensions in mm			Reference
Height	Width	Depth	
400	600	500	PKMC 60
400	800	500	PKMC 80

19" rack



For fastening 19" components.

Nominal dimensions in mm			Reference
Height	No. of units	Width	
200	3	600	BRF 3 MC
400	7	600	BRF 7 MC
600	12	600	BRF 12 MC
800	16	600	BRF 16 MC
1000	21	600	BRF 21 MC
1200	25	600	BRF 25 MC

Mounting plates



For fixing components, made of galvanised sheet steel.

Nominal dimensions in mm		Reference
Width	Height	
600	200	PMMC 2060 N
	400	PMMC 4060 N
	600	PMMC 6060 N
	800	PMMC 8060 N
800	1000	PMMC 10060 N
	200	PMMC 2080 N
	400	PMMC 4080 N
	600	PMMC 6080 N
	800	PMMC 8080 N
	1000	PMMC 10080 N

Rear covers



Rear closing covers for forming modules.

Nominal dimensions in mm		Reference
Width	Height	
600	200	TPMC 2060
	400	TPMC 4060
	600	TPMC 6060
	800	TPMC 8060
800	1000	TPMC 10060
	400	TPMC 4080
	600	TPMC 6080
	800	TPMC 8080
	1000	TPMC 10080

Lateral closing cover



To be placed between **TLMC** lateral covers.

Nominal dimensions in mm	Reference
Depth	
600	CLCM 60

Electronic application



OLNE 186/60 SP



OLNE 186/60 KT


Metal enclosure consisting of a galvanised steel structure with a triangular closed profile with welded top and base and vertical, removable bolted profiles, giving the suite optimum versatility and robustness. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin.

Basic composition:

OLNE.../...SP enclosure

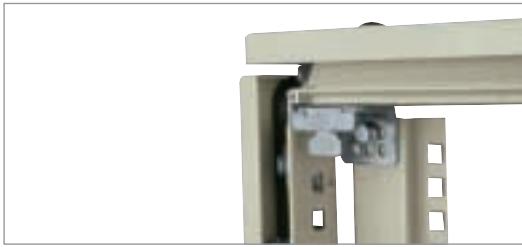
- Welded upper frame.
- Welded lower frame.
- Vertical profiles.
- Removable top.
- Quick closing side panels.
- 2 removable real panels.
- Front trim frame.
- Front and rear 19" rack profiles.

OLNE.../...KT enclosure

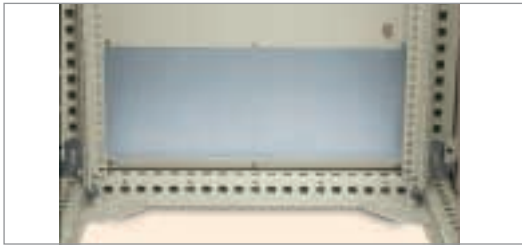
- Welded upper frame.
- Welded lower frame.
- Vertical profiles.
- Removable top.
- Quick closing side panels.
- 2 removable real panels.
- Front and rear 19" rack profiles.
- Tempered glass transparent front door.
- Doors opening to 120°.
- Lock located outside of the sealed area with 4-point locking system for 1600 mm height enclosures or larger. Standard 5 mm double bar lock  with handle, possibility of different types of operation and latches.



Detail of front frame and lock on removable, quick-fixing side panel.



Detail of fixing of the **BRF** rack.



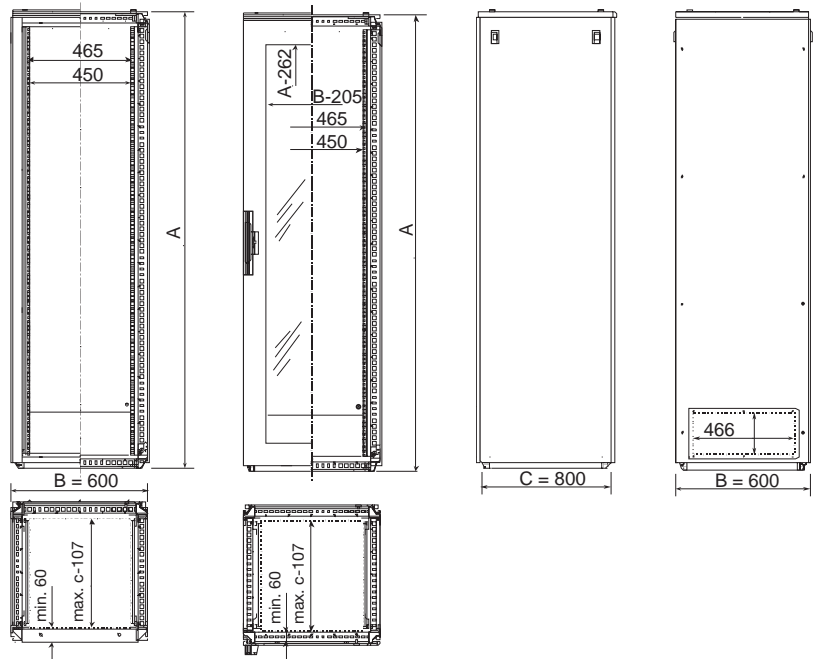
Lower view of rear panel.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions in mm			No. of units	Reference	
Height (A)	Width (B)	Depth (C)		Without door	With transparent door
1200	600	600	24	OLNE 126/60 SP	OLNE 126/60 KT
1200	600	800	24	OLNE 126/80 SP	OLNE 126/80 KT
1400	600	600	29	OLNE 146/60 SP	OLNE 146/60 KT
1400	600	800	29	OLNE 146/80 SP	OLNE 146/80 KT
1600	600	600	31	OLNE 166/60 SP	OLNE 166/60 KT
1600	600	800	31	OLNE 166/80 SP	OLNE 166/80 KT
1800	600	600	36	OLNE 186/60 SP	OLNE 186/60 KT
1800	600	800	36	OLNE 186/80 SP	OLNE 186/80 KT
2000	600	600	42	OLNE 206/60 SP	OLNE 206/60 KT
2000	600	800	42	OLNE 206/80 SP	OLNE 206/80 KT

Dimensions (mm)

FIG. 1



19" rack



For fastening 19" components.

Nominal dimensions in mm			Reference
Height	No. of units	Width	
200	3	600	BRF 3 MC
400	7	600	BRF 7 MC
600	12	600	BRF 12 MC
800	16	600	BRF 16 MC
1000	21	600	BRF 21 MC
1200	25	600	BRF 25 MC

System of 19" racks



**OLN 168/60 KT +
BRP 31/OL**



**OLN 168/60 KT +
BRP 21/OL**

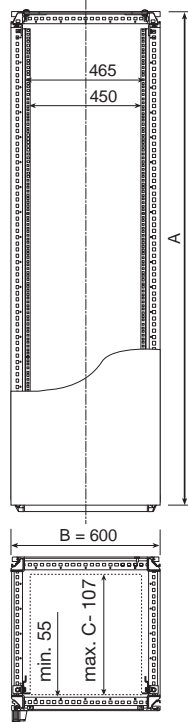


**OLN 166/60 KT +
BRF 33/OL**

System of very robust 19" metal racks, ready to be coupled directly to OLN enclosures available in versions: fixed and pivoting.

- Fixed rack, RAL-7032, comprised of 2 profiles with hardware.
- Pivoting racks, RAL-7032, opening to 125° and 180°. Key-operated 5 mm double bar espagnolette lock. Supports loads up to 140 kg.
- Partial pivoting rack, RAL-7032. 5 mm double bar key-operated lock with locking kit in enclosures with widths greater than 800 mm.
- Centred pivoting rack, RAL-7032. Key-operated 5 mm double bar espagnolette lock.

19" fixed rack



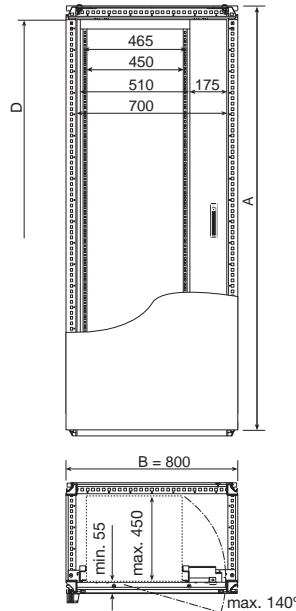
Ready to be coupled to 600 mm width enclosures.

Permits direct fixing on the standard perforations of any model of 19" modular chassis. Colour RAL-7032.

Enclosure dimensions		No. of units	Reference
Height (A)	Width (B)		
1200	600	24	BRF 24/OL
1400	600	29	BRF 29/OL
1600	600	33	BRF 33/OL
1800	600	38	BRF 38/OL
2000	600	42	BRF 42/OL
2200	600	47	BRF 47/OL

C = nominal depth of enclosure.

Off-centre 19" pivoting rack



Permits direct fixing on the standard perforations of any model of 19" modular chassis.

Ready to be coupled to 800 mm width enclosures.

Colour RAL-7032.

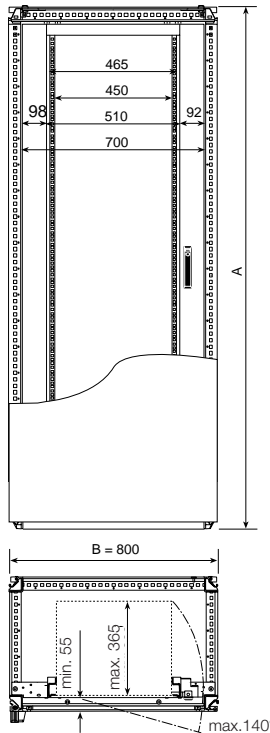
Maximum opening: 140°.

PARTIAL			
Rack height (D)	Enclosure width (B)	No. of units	Reference
354	800	6	BRP 6/OL
621	800	12	BRP 12/OL
887	800	18	BRP 18/OL
1021	800	21	BRP 21/OL

Enclosure dimensions		No. of units	Reference
Height (A)	Width (B)		
1400	800	27	BRP 27/OL
1600	800	31	BRP 31/OL
1800	800	36	BRP 36/OL
2000	800	40	BRP 40/OL
2200	800	45	BRP 45/OL

C = nominal depth of enclosure.

Centred 19" pivoting rack



Permits direct fixing on the standard perforations of any model of 19" modular chassis.

Ready to be coupled to 800 mm width enclosures.

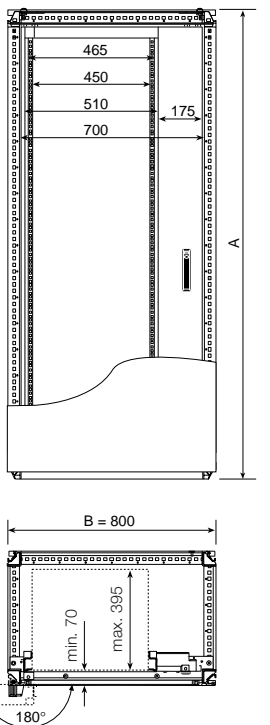
Rack centred in the enclosure.

Colour RAL-7032.

Maximum opening: 140°.

Enclosure dimensions		No. of units	Reference
Height (A)	Width (B)		
1400	800	27	BRPC 27/OL
1600	800	31	BRPC 31/OL
1800	800	36	BRPC 36/OL
2000	800	40	BRPC 40/OL
2200	800	45	BRPC 45/OL

19" 180° pivoting rack



Permits direct fixing on the standard perforations of any model of 19" modular chassis.

Ready to be coupled to 800 mm width enclosures.

Door opening to 180°. Colour RAL-7032.

Enclosure dimensions		No. of units	Reference
Height (A)	Width (B)		
1400	800	27	BRP 27/OL 180
1600	800	31	BRP 31/OL 180
1800	800	36	BRP 36/OL 180
2000	800	40	BRP 40/OL 180
2200	800	45	BRP 45/OL 180

KT transparent doors for off-centre racks



Transparent doors to be coupled to **BRP./OL** and **BRP./OL 180** racks.

Enclosure dimensions		Reference
Height (A)	Width (B)	
1200	800	PPKT 128 BRP
1400	800	PPKT 148 BRP
1600	800	PPKT 168 BRP
1800	800	PPKT 188 BRP
2000	800	PPKT 208 BRP
2200	800	PPKT 228 BRP

KT transparent doors for centred racks



Transparent doors to be coupled to **BRPC./OL** and **BRF./OL** racks.

Enclosure dimensions		Reference
Height (A)	Width (B)	
1200	800	PPKT 128 BRPC
1400	800	PPKT 148 BRPC
1600	800	PPKT 168 BRPC
1800	800	PPKT 188 BRPC
2000	800	PPKT 208 BRPC
2200	800	PPKT 228 BRPC

Set of 2 side covers for centred fixed rack



Set of 2 covers to be adapted to **BRF./OL** racks on 800 mm width enclosures.

Enclosure dimensions		Depth	Reference
Height (A)	Width (B)		
1200	800	600	TBRF 24/OL 60
1400	800	600	TBRF 29/OL 60
1600	800	600	TBRF 33/OL 60
1800	800	600	TBRF 38/OL 60
2000	800	600	TBRF 42/OL 60
2200	800	600	TBRF 47/OL 60
1200	800	800	TBRF 24/OL 80
1400	800	800	TBRF 29/OL 80
1600	800	800	TBRF 33/OL 80
1800	800	800	TBRF 38/OL 80
2000	800	800	TBRF 42/OL 80
2200	800	800	TBRF 47/OL 80

Plain cover



CRTM 6U



CRTA 6U

Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel in finely texturised grey RAL-7035 **CRTM** or of 3 mm aluminium **CRTA**.

No. of units	Reference	
	Metal	Aluminium
1	CRTM 1U	CRTA 1U
2	CRTM 2U	CRTA 2U
3	CRTM 3U	CRTA 3U
6	CRTM 6U	CRTA 6U
9	CRTM 9U	CRTA 9U
10	CRTM 10U	CRTA 10U
12	CRTM 12U	CRTA 12U

Cable entry cover



Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With perforations for cable entry with protection.

No. of units	No. of cut-outs	Reference
1	2	CRTM 1U2

Cable entry cover with housing



Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With perforated cable entries with protection and support groove.

No. of units	No. of cut-outs	Reference
1	2	CRTM 1UA2

Cable entry cover with brush

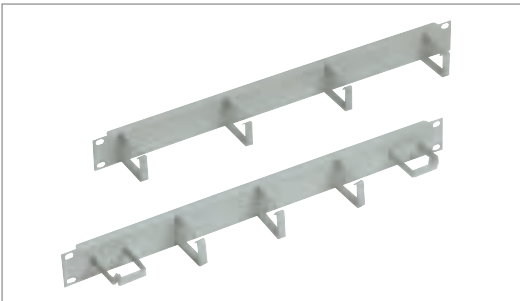


Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With a perforated cable entry and anti-dust protection.

No. of units	No. of cut-outs	Reference
1	2	CRTM 1U1P

Cover with metal flanges



Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With welded cable guide flanges.

No. of units	No. of flanges/position	Reference
1	4 vert.	CRTM 1U40B
1	3 vert./2 hor.	CRTM 1U32B

Cover with insulated flanges



Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With 5 insulated cable guide flanges, able to be positioned horizontally, vertically and diagonally.

No. of units	Reference
1	CRTM 1U5GCA

Cover with protection and ventilation controls

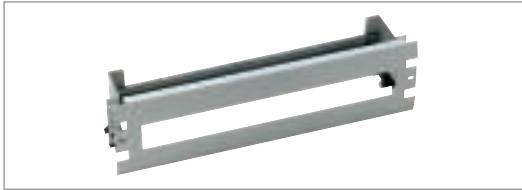


Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1.2 mm sheet steel. With a light switch and **TS-141** thermostat for activating and controlling the fans.

No. of units	Reference
1	CRTM 1UVT

DIN rail cover



Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Made of 1 mm sheet steel, DIN rail cover module with a capacity for 22 modules. With an easily-removable front cover in finely texturised grey RAL-7035.



No. of units	No. of modules (18 mm)	Reference
3	22	CRTM 3UD

Cover with groove



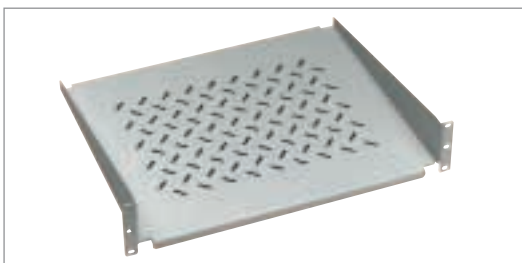
Directly fixed to the 19" rack using screws, Ref. **GFR95**.

Cover with wire-guide groove, made of 1.2 mm sheet steel, with easily removable cover and cables not visible. Painted finely texturised grey RAL-7035.



No. of units	Reference
2	CRTM 2UC

2 U fixed perforated tray



Directly fixed to the front 19" rack using screws, Ref. **GFR95**.

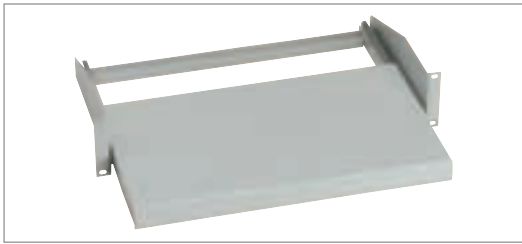
Made of 1.5 mm perforated sheet steel, painted finely texturised RAL-7035.

Maximum load 20 kg.



Tray dimensions			Reference
Height	Width	Depth	
2 U	450	250	BF 2U25P
2 U	450	380	BF 2U40P

2 U telescopic tray

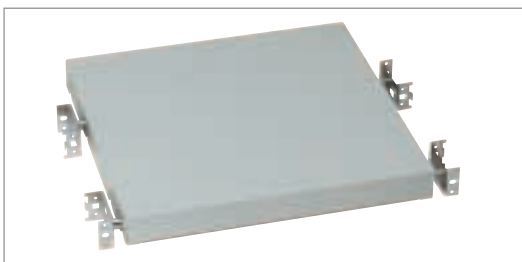


Directly fixed to the front 19" rack using screws, Ref. **GFR95**. Made of 1.2 mm sheet steel, painted finely texturised RAL-7035. With telescopic guides and a locking device. Maximum load 5 kg.

Tray dimensions			Reference
Height	Width	Depth	
2 U	450	250	BT 2U25



1 U plain fixed tray



Fixed directly to the 19" front and rear racks (two 19" rack sets must be ordered). Made of 1.5 mm sheet steel, painted finely texturised RAL-7035. Maximum load 25 kg.

Tray dimensions			For enclosures with depths	Distance front-rear racks	Reference
Height	Width	Depth			
1 U	450	400	600/800	258	BBF 1U40
1 U	450	600	800	458	BBF 1U60



1 U fixed perforated tray

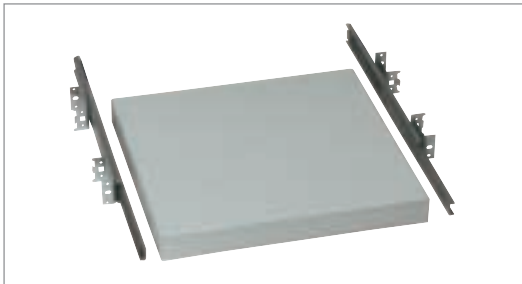


Fixed directly to the 19" front and rear racks (two 19" rack sets must be ordered). Made of 1.5 mm perforated sheet steel, painted finely texturised RAL-7035. Maximum load 25 kg.

Tray dimensions			For enclosures with depths	Distance front-rear racks	Reference
Height	Width	Depth			
1 U	450	400	600/800	258	BBF 1U40P
1 U	450	600	800	458	BBF 1U60P



1 U plain telescopic tray

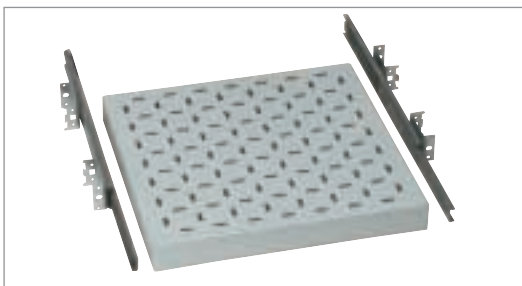


Fixed directly to the 19" front and rear racks (two 19" rack sets must be ordered). Made of 1.5 mm sheet steel, painted finely texturised RAL-7035. With telescopic guides and a locking device. Maximum load 25 kg.

Tray dimensions			For enclosures with depths	Distance front-rear racks	Reference
Height	Width	Depth			
1 U	450	400	600/800	258	BBT 1U40
1 U	450	600	800	458	BBT 1U60



1 U perforated telescopic tray

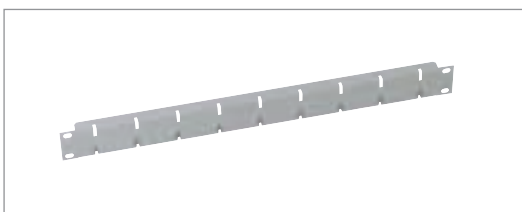


Fixed directly to the 19" front and rear racks (two 19" rack sets must be ordered). Made of 1.5 mm perforated sheet steel, painted finely texturised RAL-7035. With telescopic guides and a locking device. Maximum load 25 kg.

Tray dimensions			For enclosures with depths	Distance front-rear racks	Reference
Height	Width	Depth			
1 U	450	400	600/800	258	BBT 1U40P
1 U	450	600	800	458	BBT 1U60P



Full width cable support crossbar



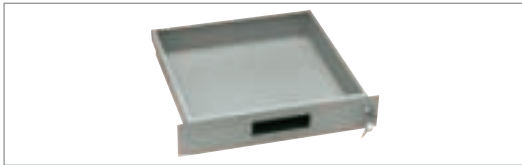
For use as a cable support using adjustable ties (**LZ**).

Made of 1.2 mm galvanised sheet steel. Fixing on the 19" rack, width-wise, using **GFR95** screws.

No. units	No. of housings	Reference
1	9	TVA



19" service drawer

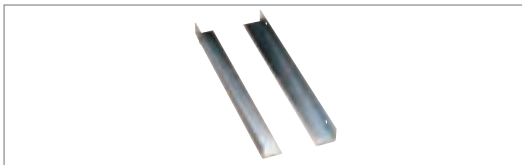


To be installed on **2U** height fixed racks. Installed using **GT...** telescopic guides (not included in the standard supply). RAL-7035.

Reference: **CS2U400**.



19" fixed rack guide

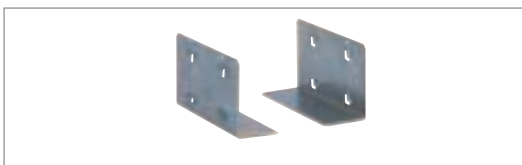


Set of 2 guides to be coupled directly to **BRF** fixed racks. For their fixing, 2 racks must be installed (total of 4 profiles).

Enclosure dimensions			Reference
Length mm	Dist. front-rear racks	Depth (C)	
256	250	400	GF 256
356	350	500	GF 356
456	450	600	GF 456
556	550	800	GF 556



19" rack guide



Set of two guides to be coupled to fixed or pivoting racks.

Reference: **GB/140**.



19" telescopic guide

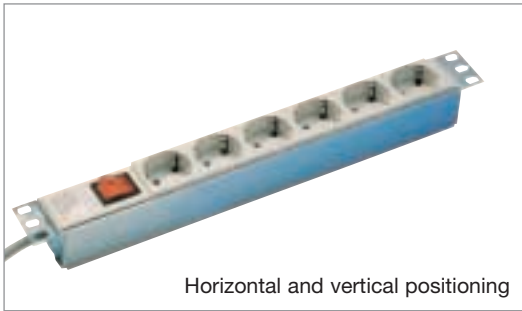


Set of 2 guides. For their fixing, 2 fixed racks must be installed.

Enclosure dimensions Depth (C)	Reference
600	GT 40
800	GT 60



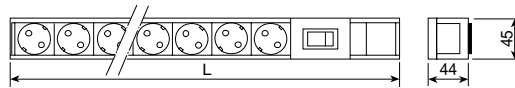
Distribution base plinth with sockets and switch



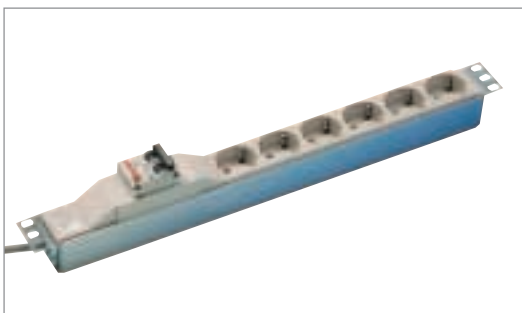
Schuko distribution bases power strip.

Bipolar distribution power strip with switch 16 A. Nominal voltage 250 V. 2 metre supply cable (3 x 1.5 mm²) with pin 2F+T 10/16 A 250 V. Include 2 flat-mounting supports with hardware.

No. of bases	Length (L) mm	Reference
6	440 (19')	ZDBE 6I
8	440 (19')	ZDBE 8IN
12	704	ZDBE 12I



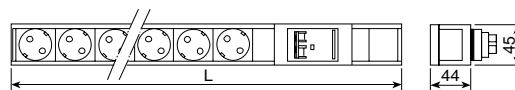
Distribution base plinth with sockets and circuit breaker



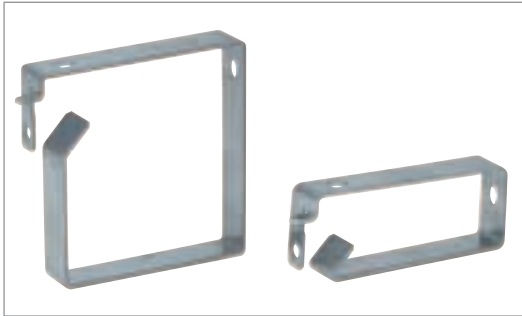
Schuko distribution bases power strip.

Bipolar distribution power strip with circuit breaker. Nominal voltage 250 V. 2 metre supply cable (3 x 1.5 mm²) with pin 2F+T 10/16 A 250 V. Include 2 flat-mounting supports with hardware.

No. of bases	Length (L) mm	Reference
6	440 (19')	ZDBE 6P
12	704	ZDBE 12P



Metal cable guide flange

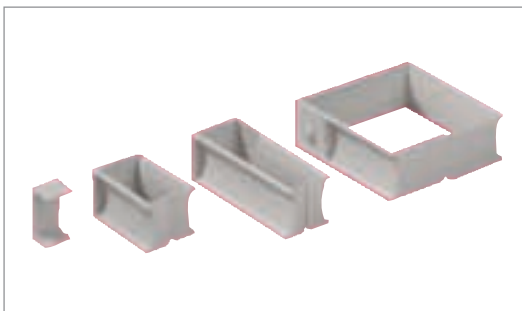


Vertical cable guide flange for fixing on 19" rack. Made of 2 mm sheet steel.

Dimensions (mm)	To be coupled to enclosures with widths	Reference
40×100	600/800	GC 4
100×100	800	GC 10



Insulated cable guide flange



Insulated cable guide flange, for fixing to the 8.5 mm perforated rectangular racks (19").

Adaptor for fixing the cable guide flanges on 6 x 5.4 mm perforations.

Reference: **AD/GCA**.

Dimensions (mm)	Reference
40×60	GCA 46
40×100	GCA 410
100×100	GCA 1010

19" cover fixing screws



Kit comprised of:

1 screw.

1 washer.

1 nut.

Packaging: 50 units.

Reference	Thread type
GFR95M5	M5
GFR95	M6

19" rack retainer



To be coupled to **BRP./OL** racks.

Opening to 120°.

Reference: **RET/BON**.

Pneumatic retainer for 180° 19" rack



To be coupled to the **BRP../OL 180** rack.

Reference: **RETN/BON 180**.

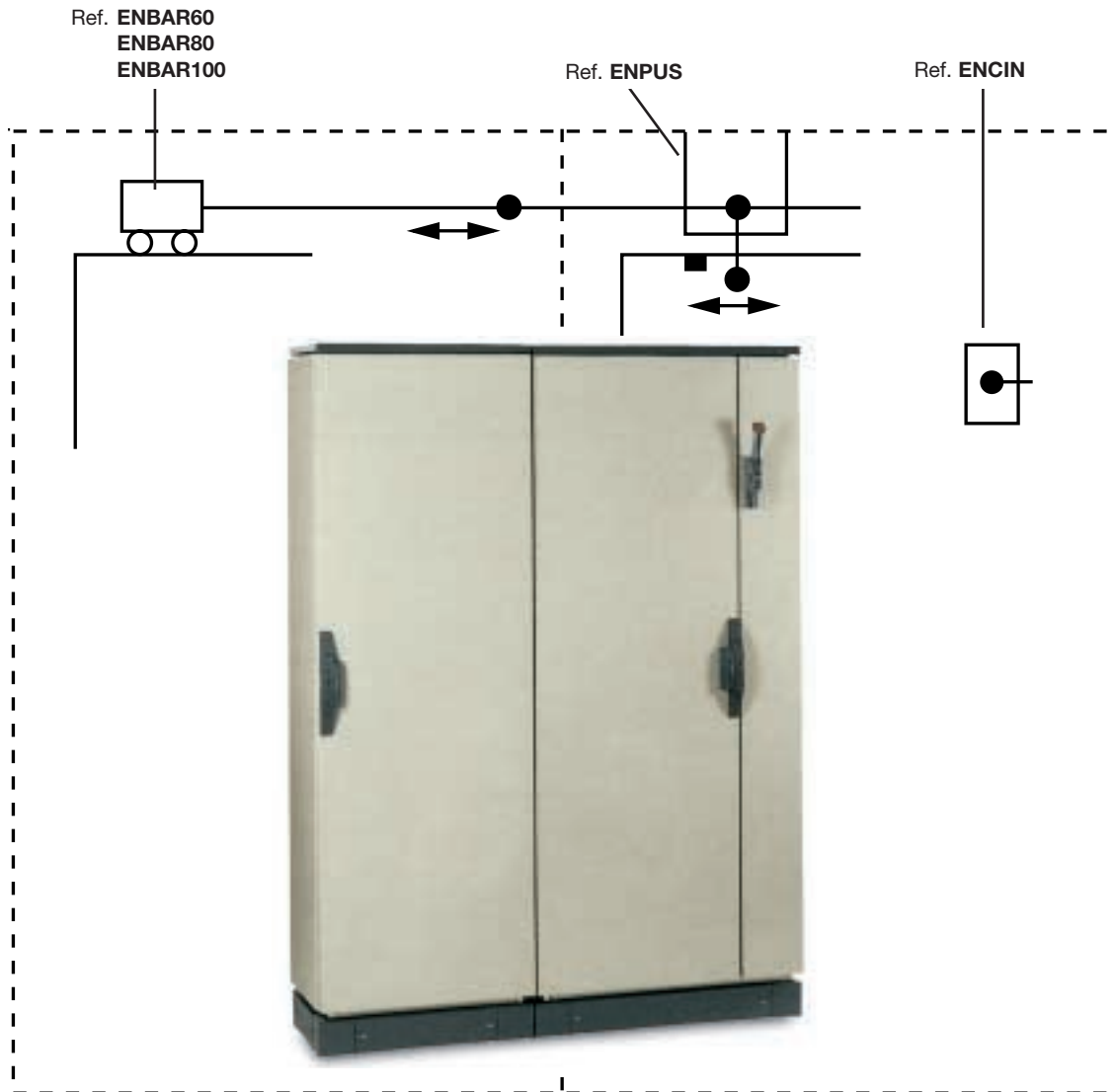
Handles for 19" cover



For use with covers.

Height	Reference
99	ASR 3U
156	ASR 6U

Accessories and complements for the integrated door locking system of the cubicle suites






Designed to be associated with breakers or switches:

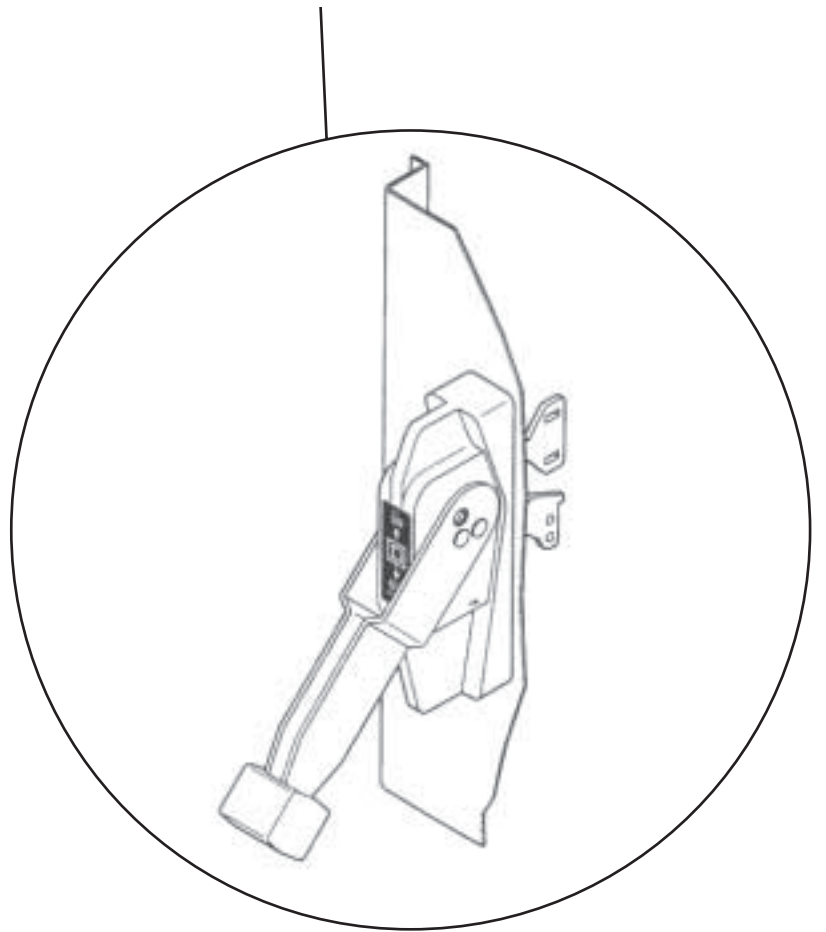
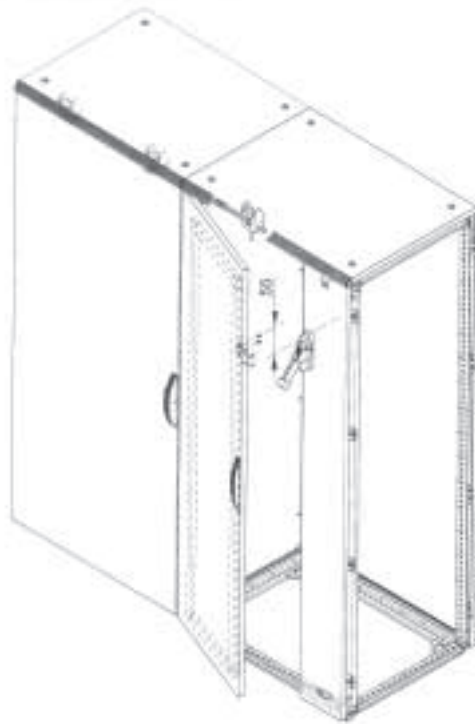
- Allen Bradley (1494 VH11),
- Square D (9422 A1),
- Siemens (FH0H),
- Telemecanique.

The integrated security door locking system (on request) for “arriving” enclosures/“leaving” enclosures permits OLN... enclosures to be adapted to American standards (automobiles).

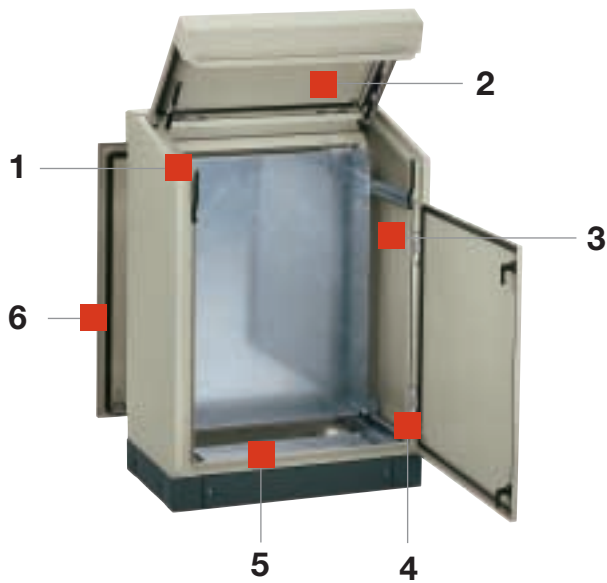
- The system: the door of the “arriving” enclosure is locked using the controls of the main breaker or switch. An integrated locking system with sliding rods locks the opening of the doors of the “leaving” enclosures. Access can only be gained when the arriving unit is in the “O” position, the arriving door open, a manual manoeuvre on the rods unlocks the remaining doors and authorises access.



	Height (A)	Depth (C)
	ENCIN	Main enclosure locking kit
	ENPUS	Secondary door locking kit
	ENBAR60 ENBAR80 ENBAR100	Bar locking kit, coupling of enclosures with 600 width Bar locking kit, coupling of enclosures with 800 width Bar locking kit, coupling of enclosures with 1000 width



PK & PKP.../F metal monobloc control desks for customised solutions



1 Elimination of the front crossbar permits complete accessibility to the interior of the control desk.



5 The cable entry plates come in two sliding pieces to optimise conductor passage. An adhesive seal can be added to these plates to guarantee watertightness.



8 Upper mounting plate.



11 The console and front panels are equipped with vertical perforated profiles for fast fixing of equipment or cable supports.



2 Opening the console is facilitated by a pneumatic retainer, preventing it from falling abruptly.



3 The two versions are equipped with adjustable plate supports that guarantee the fixing, support and depth adjustment (in 25 mm intervals) of the mounting plates and in general of the various equipment supports. **(PKP)** In the version with a rear panel, installing two mounting plates back to back can be done easily and permits the installation of more equipment.



4 Due to the screwed hinges, the reversal of the door opening direction can be completed quickly.



6 PK: fixed rear panel.
PKP: removable rear panel.



7 The 3 mm double bar locking system is standard. A wide variety of lock inserts is available as accessories.



9 Lower mounting plate.



10 A monitor support is available as an accessory.



12 The adjustable plate supports permit equipping the control desk with the accessories from our monobloc and cubicle suite enclosure ranges.



13 Modular consoles for **PKP** control desks.



PK 80-PM + ZUN 84/100

Metal monobloc construction control desk. Back and sides formed from a single folded piece. Complete accessibility due to its design without an intermediate crossbar. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin.

- A pneumatic retainer support facilitates opening the panel of the controls module, preventing it from falling abruptly.
- Double bar door locks can be easily changed to triangle, square or key-operated locks.
- Reinforcement frame on the panel of the controls module for equipment fixing, with Ø 4.25 mm perforations at intervals of 25 mm.
- Earthing on the door, on the body and on the mounting plate.
- 100 or 200 mm high U-shaped plinth in anthracite grey RAL-7022.
- Cable entry plate with maximum passing capacity.
- Galvanised steel mounting plate, depth adjustable in increments of 25 mm.

Basic composition:

- Plain front door.
- 3 mm double bar lock.
- 4 plate fixing supports.
- Mounting plate (only on references **PK...PM**).
- Cable entry plate, in two parts.

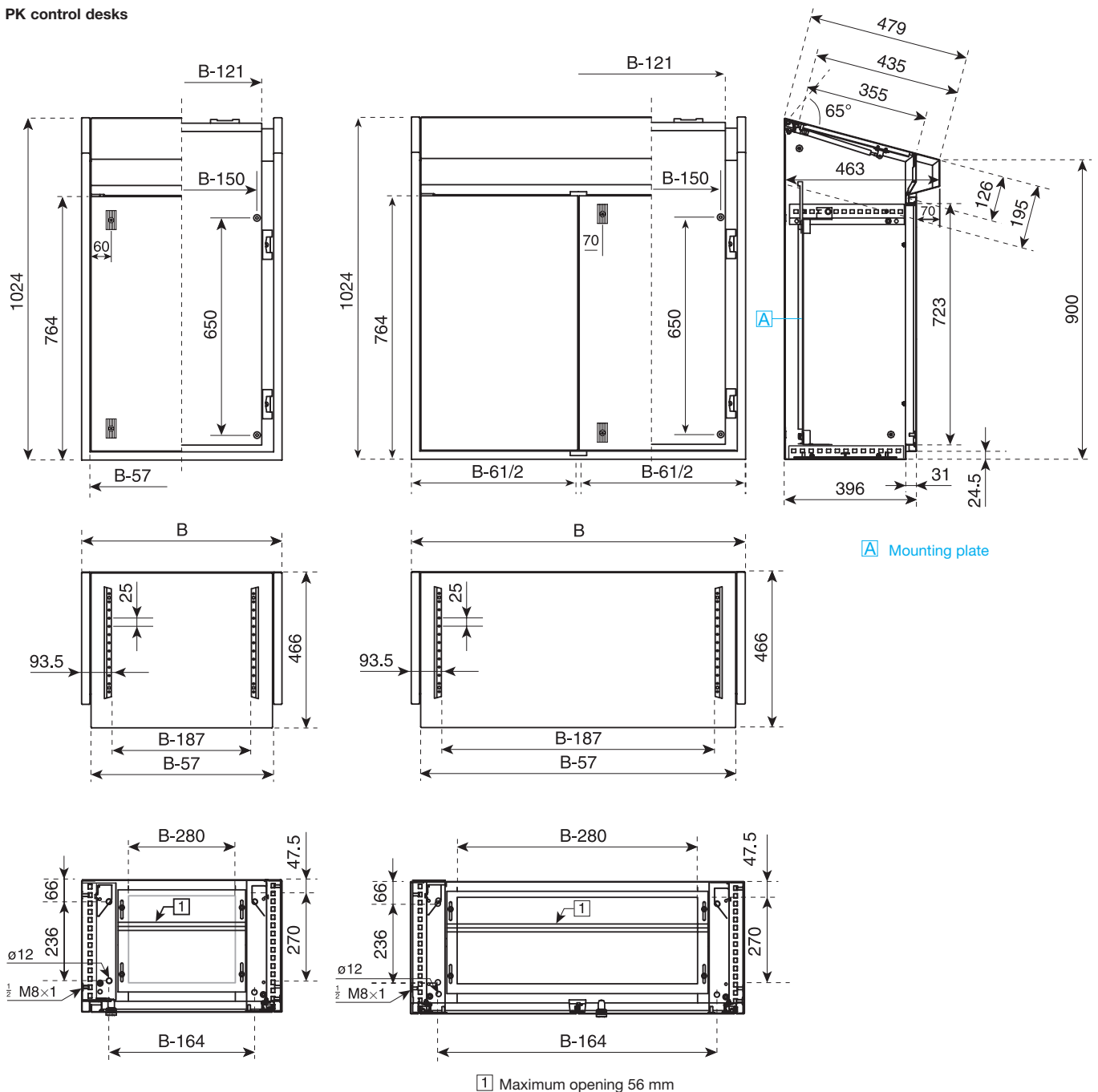
TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions (mm)			Control desks			Metal mounting plates		Universal mounting plates	
Height (A)	Width (B)	Depth (C)	Without mounting plate	With mounting plate	No. of doors	Reference		Height 100 (mm)	Height 200 (mm)
1024	600	466	PK 60	PK 60-PM	1	PMPK-8560	PMR-6760	ZUN 64/100	ZUN 64/200
1024	800	466	PK 80	PK 80-PM	1	PMPK-8580	PMR-6780	ZUN 84/100	ZUN 84/200
1024	1000	466	PK 100	PK 100-PM	2	PMPK-85100	PMR-67100	ZUN 104/100	ZUN 104/200
1024	1200	466	PK 120	PK 120-PM	2	PMPK-85120	PMR-67120	ZUN 124/100	ZUN 124/200

Dimensions (mm)

FIG. 1

PK control desks





PKP 80-PM + ZUN 85/100

Metal monobloc construction control desks in sheet steel. Removable rear panel. Complete accessibility due to its design without an intermediate crossbar. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin.

- A pneumatic retainer support facilitates opening the panel of the controls module, preventing it from falling abruptly.
- Double bar door locks can be easily changed to triangle, square or key-operated locks.
- Screwed rear panel, with positioning notches for quick mounting.
- Reinforcement frame on the panel of the controls module for equipment fixing, with Ø 4.25 mm perforations at intervals of 25 mm.
- Earthing on the door, on the body and on the mounting plate.
- 100 or 200 mm high U-shaped plinth in anthracite grey RAL-7022.
- Cable entry plate with maximum passing capacity.
- Galvanised steel mounting plate, depth adjustable in increments of 25 mm.

Basic composition:

- Plain front door.
- Removable rear panel.
- 3 mm double bar lock.
- 4 plate fixing supports.
- Mounting plate (only on references **PKP...PM**).
- Cable entry plate, in two parts.

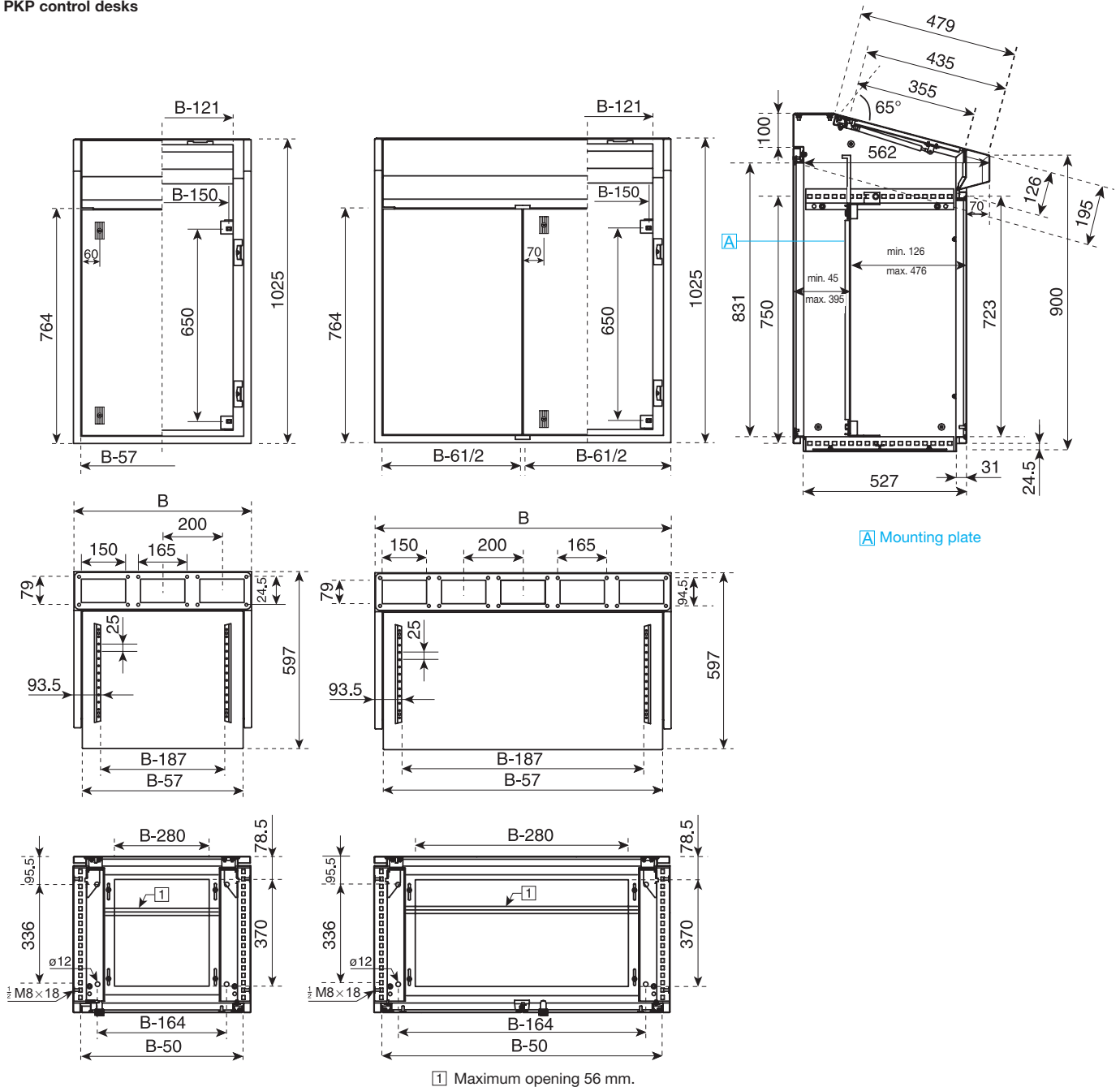
TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions (mm)			Control desks			Metal mounting plates		Plinths	
Height (A)	Width (B)	Depth (C)	Without mounting plate	With mounting plate	No. of doors	Reference	Universal mounting plates	Height 100 (mm)	Height 200 (mm)
1024	600	597	PKP 60	PKP 60-PM	1	PMPK-8560	PMR 6760	ZUN 65/100	ZUN 65/200
1024	800	597	PKP 80	PKP 80-PM	1	PMPK-8580	PMR 6780	ZUN 85/100	ZUN 85/200
1024	1000	597	PKP 100	PKP 100-PM	2	PMPK-85100	PMR 67100	ZUN 105/100	ZUN 105/200
1024	1200	597	PKP 120	PKP 120-PM	2	PMPK-85120	PMR 67120	ZUN 125/100	ZUN 125/200

Dimensions (mm)

FIG. 1

PKP control desks





200 mm console: fixed rear panel.



300 mm console: removable rear panel.



PKP 80 + FE 42 + TA 40

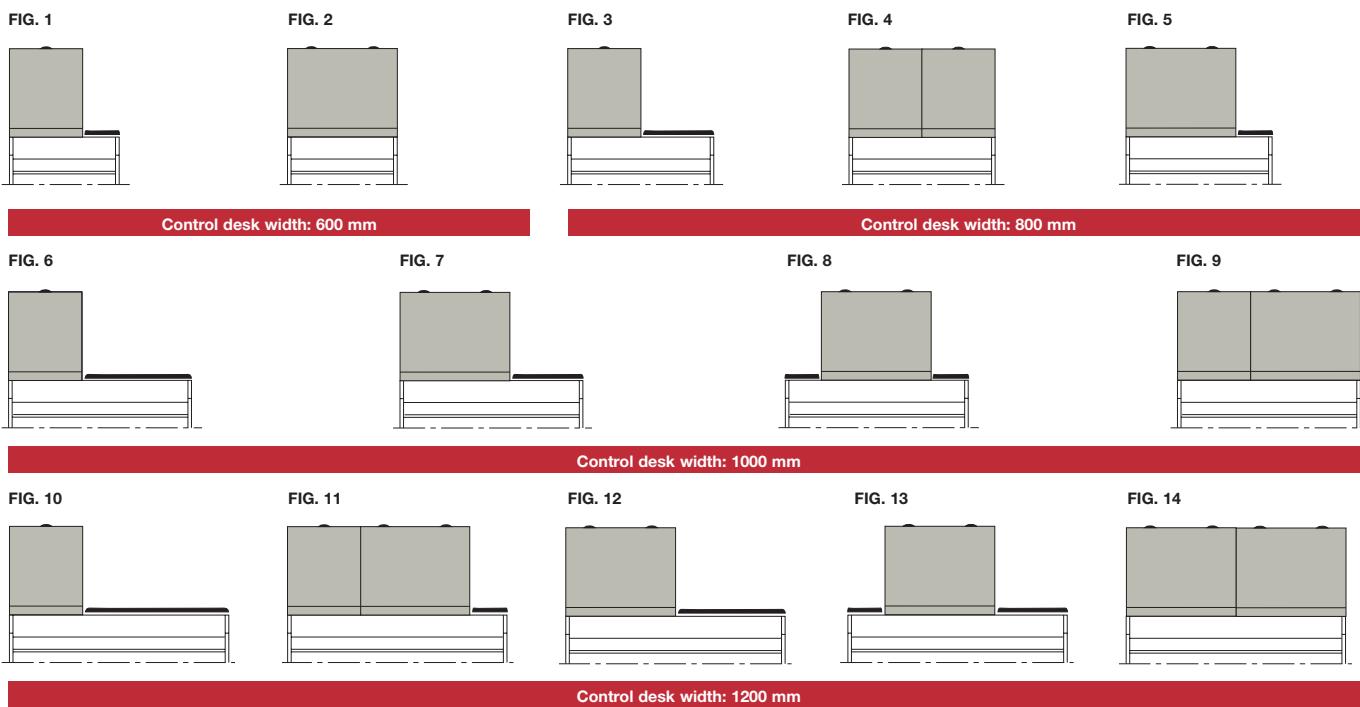
*Modular consoles for **PKP** control desks with removable rear panel made of sheet steel, painted inside and out with textured light grey RAL-7032 polyester epoxy resin.*

- Two widths (400 and 600 mm) and two depths (200 and 300 mm), the latter equipped with a depth-adjustable mounting plate and removable (by unscrewing) rear panel, which permits easy access to the interior from the front.
- Double bar lock on the upper part of the front, thus offering maximum useable space on the door and easy changing of the lock to triangle, square or key-operated.
- Equipped with a door retainer support.
- Blanking plates in various widths: 200, 400, 600 and 800 mm.
- Metal perforated universal mounting plates, fixed to the back of the front cover or adjustable in 300 mm depth models.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

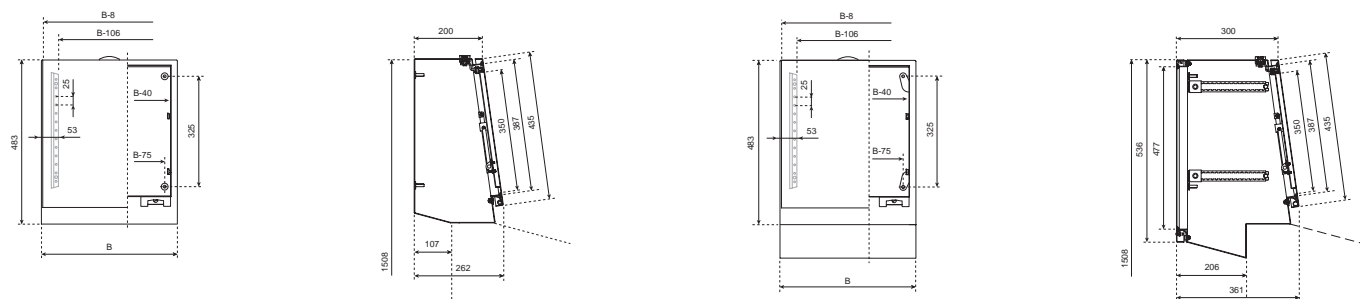
Control desk width	Console references	Blanking plates			Blanking plates	Fig. No.	Mounting plates		
		Width	Depth				Metal	Perforators	Universal
600	PKP 60	400	FE 42	FE 43	TA 20	1	MM 44	MF 44	MR 44
		600	FE 62	FE 63	-	2	MM 64	MF 64	MR 64
800	PKP 80	400	FE 42	FE 43	TA 40	3	MM 44	MF 44	MR 44
		400	2 × FE 42	2 × FE 43	-	4	2 × MM 44	2 × MF 44	2 × MR 44
1000	PKP 100	600	FE 62	FE 63	TA 20	5	MM 64	MF 64	MR 64
		400	FE 42	FE 43	TA 60	6	MM 44	MF 44	MR 44
		600	FE 62	FE 63	TA 40	7	MM 64	MF 64	MR 64
		600	FE 62	FE 63	2 × TA 20	8	MM 64	MF 64	MR 64
		400+600	FE 42 + FE 62	FE 43 + FE 63	-	9	MM 44	MF 44	MR 44
1200	PKP 120	400	FE 42	FE 43	TA 80	10	MM 44	MF 44	MR 44
		400+600	FE 42 + FE 62	FE 43 + FE 63	TA 20	11	MM 44	MF 44	MR 44
							MM 64	MF 64	MR 64
		600	FE 62	FE 63	TA 60	12	MM 64	MF 64	MR 64
		600	FE 62	FE 63	TA 20 + TA 40	13	MM 64	MF 64	MR 64
		600	2 × FE 62	2 × FE 63	-	14	2 × MM 64	2 × MF 64	2 × MR 64

Mounting possibilities



Dimensions (mm)

FIG. 1





PKP 80/F30-PM

Metal monobloc control desk, with upper front cover. Rear door with three-point lock. Both externally and internally painted with texturised RAL-7032 grey polyester epoxy resin.

- A pneumatic retainer support on the panel of the controls module and a mechanical retainer support on the console door facilitate opening and prevent it from falling abruptly.
- Double bar door locks can be easily changed to triangle, square or key-operated locks.
- Reinforcement frame on the panel of the controls module and on the upper front cover to facilitate equipment fixing, with \varnothing 4.25 mm perforations at intervals of 25 mm.
- Galvanised steel mounting plates, to be coupled to the controls module, to the upper front cover and to the base of the control desk, or complete, depth adjustable in 25 mm intervals.
- Earthing on the door, on the body and on the mounting plate.
- 100 or 200 mm high U-shaped plinth in anthracite grey RAL-7022.
- Cable entry plate with maximum passing capacity.

Basic composition:

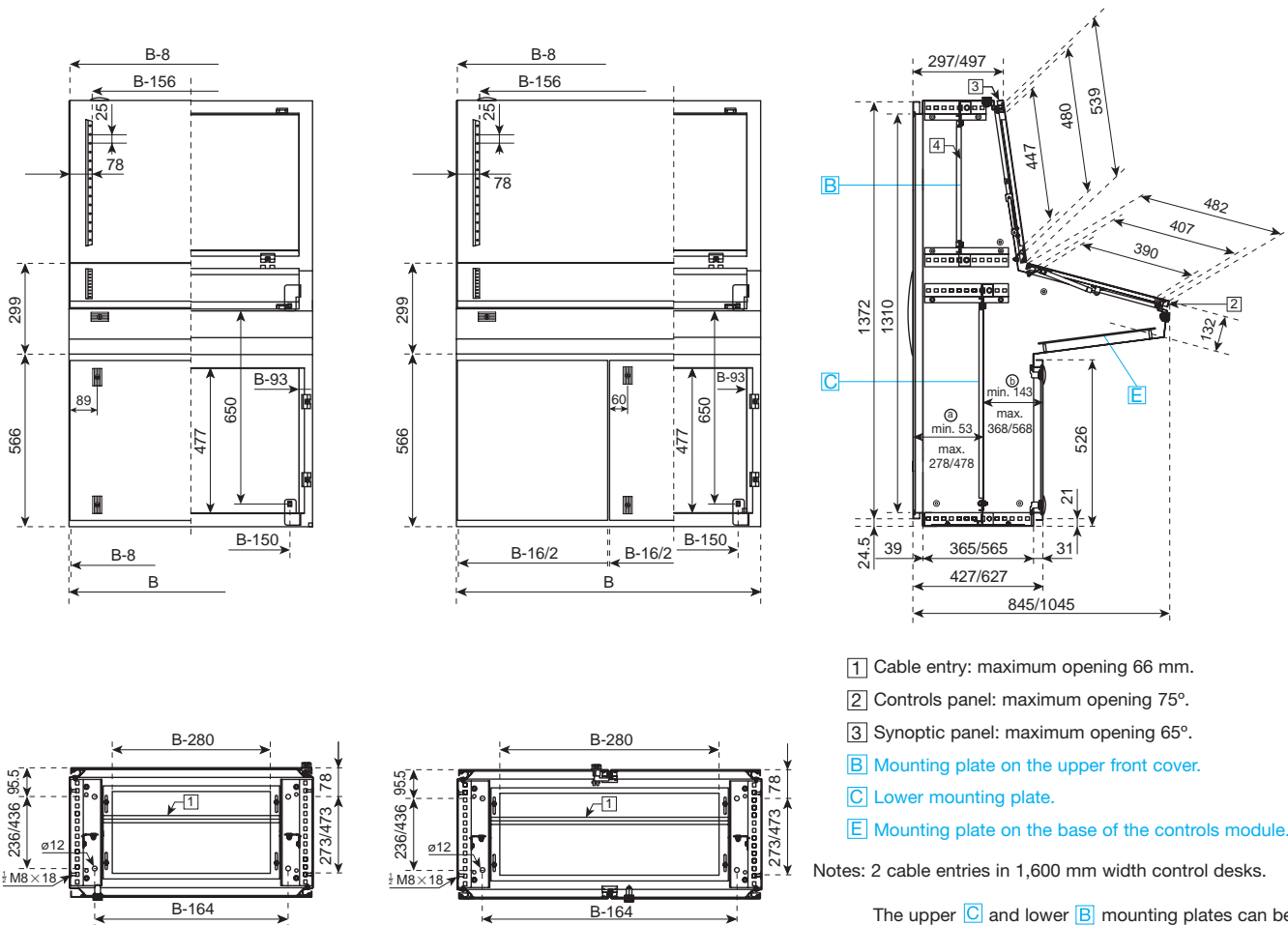
- Upper front cover.
- Plain front door.
- Plain rear door.
- 3 mm double bar lock.
- 4 fixing supports for the lower plate.
- Lower mounting plate, mounting plate and upper fixing supports (only on references **PKP.../F...PM**).
- Cable entry plate, in two parts.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

External dimensions (mm)			Control desks			Metal mounting plates		Universal mounting plates		Plinths	
Height (A)	Width (B)	Depth (C)	Without mounting plate	With mounting plate	No. of doors	Reference		Height 100 (mm)	Height 200 (mm)		
1024	600	845	PKP 60	PKP 60-PM	1	PMPK-8560		PMR 6760	ZUN 65/100	ZUN 65/200	
1400	800	845	PKP80/F30	PKP80/F30-PM	1	PMP7080		PMR 6760	ZUN 84/100	ZUN 84/200	
1400	1000	845	PKP100/F30	PKP100/F30-PM	2	PMP70100		PMR 6780	ZUN 104/100	ZUN 104/200	
1400	1200	845	PKP120/F30	PKP120/F30-PM	2	PMP70120		PMR 67100	ZUN 124/100	ZUN 124/200	
1400	1600	845	PKP160/F30	PKP160/F30-PM	2	PMP70160		PMR 67120	ZUN 164/100	ZUN 164/200	
1400	800	1045	PKP80/F50	PKP80/F50-PM	1	PMP7080		-	ZUN 86/100	ZUN 86/200	
1400	1000	1045	PKP100/F50	PKP100/F50-PM	2	PMP70100		-	ZUN 106/100	ZUN 106/200	
1400	1200	1045	PKP120/F50	PKP120/F50-PM	2	PMP70120		-	ZUN 126/100	ZUN 126/200	
1400	1600	1045	PKP160/F50	PKP160/F50-PM	2	PMP70160		-	ZUN 166/100	ZUN 166/200	

Dimensions (mm)

FIG. 1



- 1 Cable entry: maximum opening 66 mm.
- 2 Controls panel: maximum opening 75°.
- 3 Synoptic panel: maximum opening 65°.

- B Mounting plate on the upper front cover.
- C Lower mounting plate.
- E Mounting plate on the base of the controls module.

Notes: 2 cable entries in 1,600 mm width control desks.

The upper C and lower B mounting plates can be replaced with a single mounting plate D that covers the entire height of the control desk.

Adjustment of the mounting plate in double door enclosures.

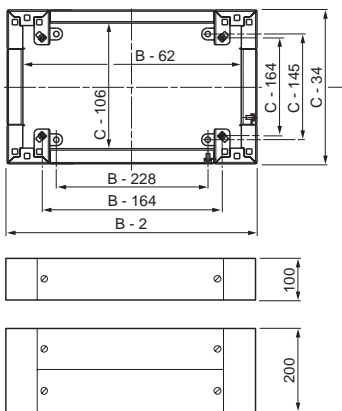
- a +25 mm
- b -25 mm

Plinths



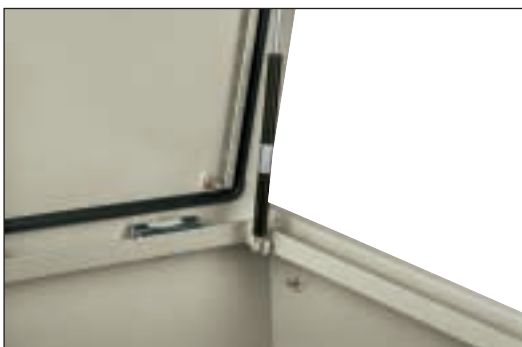
For direct coupling to control desks using the floor fixing holes.

- 100 and 200 mm high.
- Accessible from the front and back.
- Painted with polyester-epoxy paint in anthracite grey RAL-7022.



To be coupled to control desks	Reference	Width (B)	Depth (C)	Plinth height	
				100 mm	200 mm
Without front cover fixed rear panel	PKP60	600	400	ZUN 64/100	ZUN 64/200
	PKP80	800	400	ZUN 84/100	ZUN 84/200
	PKP100	1000	400	ZUN 104/100	ZUN 104/200
Without front cover removable rear panel	PKP120	1200	400	ZUN 124/100	ZUN 124/200
	PKP60	600	500	ZUN 65/100	ZUN 65/200
	PKP80	800	500	ZUN 85/100	ZUN 85/200
With front cover F30 model	PKP100	1000	500	ZUN 105/100	ZUN 105/200
	PKP120	1200	500	ZUN 125/100	ZUN 125/200
	PKP80/F30	800	400	ZUN 84/100	ZUN 84/200
With front cover F50 model	PKP100/F30	1000	400	ZUN 104/100	ZUN 104/200
	PKP120/F30	1200	400	ZUN 124/100	ZUN 124/200
	PKP160/F30	1600	400	ZUN 164/100	ZUN 164/200
With front cover F50 model	PKP80/F50	800	600	ZUN 86/100	ZUN 86/200
	PKP100/F50	1000	600	ZUN 106/100	ZUN 106/200
	PKP120/F50	1200	600	ZUN 126/100	ZUN 124/200
	PKP160/F50	1600	600	ZUN 166/100	ZUN 164/200

Pneumatic retainers



Quick mount pneumatic retainers facilitate opening the panel of the controls module, preventing it from falling abruptly.

Maximum load per retainer	Reference
21 kg	RETN 21/PK
24 kg	RETN 24/PK
29 kg	RETN 30/PK

Paper guard



Strip designed to be fixed to the edge of the panel of the controls module. Prevents plans or material from falling.

■ Made of **PVC** in RAL-7011.

To be coupled to control desks	Reference
600	REP 6
800	REP 8
1000	REP 10
1200	REP 12
1600	REP 16







Locks for metal control desks

Door and front panel locks



Standard double bar lock, fixing the wing key to the lock converts it from a double bar to a manual handle lock. Operation with **PDB 1** wing key **LDB 5** $\diamond \rightarrow 0$ (according to DIN 43668).

TRANSFORMATION OF THE STANDARD LOCK TO STANDARDISED VARIATIONS

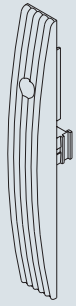







Key operation Ref.	Reference	Specifications
 	TT7/CRN	Triangle lock with 7 mm side
	TT8/CRN	Triangle lock with 8 mm side
 	TC6/CRN	Square lock with □ 6 mm side
	TC7/CRN	Square lock with □ 7 mm side
	TC8/CRN	Square lock with □ 8 mm side
 	TCL/PK	Complete lock with 405 key

Locks for EMP/OLN rear doors

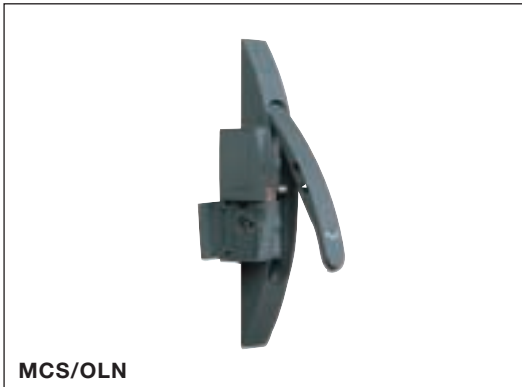


Standard double bar lock. Operation with **LDB 5** $\diamond \rightarrow 0$ key (according to DIN 43668).

TRANSFORMATION OF THE STANDARD LOCK TO STANDARDISED VARIATIONS

Key operation Ref.	Reference	Specifications
  	TPT7/OLN	Triangle lock with 7 mm side
	TPT8/OLN	Triangle lock with 8 mm side
 	TPC6/OLN	Square lock with □ 6 mm side
	TPC7/OLN	Square lock with □ 7 mm side
	TPC8/OLN	Square lock with □ 8 mm side
 	TPDB5/OLN	∅ 5 mm double bar lock
	TPDES/OLN	Slotted-head screwdriver

Optional handle lock for rear doors












MCS/OLN

MCS/OLN

Ergonomic locking system with pivoting handle. Standard double bar mechanism (supplied as standard without insert). Order insert separately.

TRANSFORMATION OF THE STANDARD LOCK TO STANDARDISED VARIATIONS

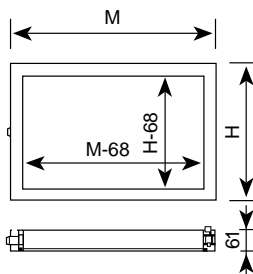
Key operation Ref.	Reference	Specifications
	TT 7/OLN	Triangle lock with 7 mm side
	TT 8/OLN	Triangle lock with 8 mm side
	TCNOMO/OLN	CNOMO-type triangle lock with 6.5 mm side
	TCNOMO/OLN-2P	CNOMO triangle lock 6.5 mm side for two door enclosures
	TC 6/OLN	□ 6 mm square lock
	TC 7/OLN	□ 7 mm square lock
	TC 8/OLN	□ 8 mm square lock
	TDB3/OLN	3 mm double bar
	TDB5/OLN	5 mm double bar
	TS/OLN	Pushbutton lock opening
	TFI/OLN	FIAT lock
	TLR/OLN	Locking catch with reinforced key
	TJIS/OLN	JIS
	TFAC/OLN	FAC-type lock
	TL/OLN	405-type key lock
	TLR/OLN	Top lock with 405 key
	TLE1/OLN	E1 lock
	MCS/MICH8376	Michelin-type handle-operated lock
	MCS/MICH8079	Michelin-type handle-operated lock
	MCS/MICH8133	Michelin-type handle-operated lock

Control protection frames



Made of natural colour anodised extruded aluminium, with a neoprene gasket, hinges that fix directly to the door and a key operated lock.

Height (H)	Width (M)	Reference
400	400	MA-44
400	500	MA-45
400	600	MA-46
500	500	MA-55
600	600	MA-66



Earthing connections and braids

CTI



CTAF

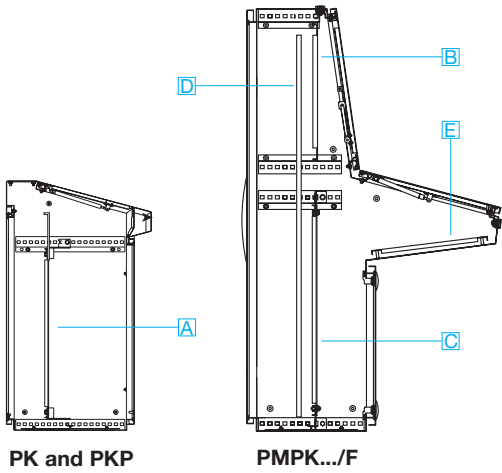


Earthing connection **CTI**: terminal of brass and copper alloy with PVC cover.

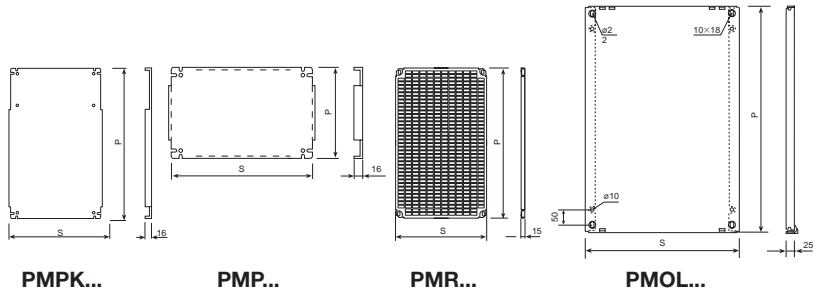
Earthing braid **CTAF**: guarantees the earthing connection for high frequencies, avoiding the interference currents that are produced at high frequencies. Made of tinned copper.

Length mm	Width mm	Section mm ²	∅ terminal mm	Reference
170	-	6	6.4	CTI 17/6
170	-	10	6.4	CTI 17/10
220	-	6	6.4	CTI 22/6
220	-	10	6.4	CTI 22/10
220	-	25	8.3	CTI 22/25
410	-	10	8.3	CTI 41/10
410	-	25	8.3	CTI 41/25
155	20	16	8.5	CTAF 15/16
200	21	25	8.5	CTAF 20/25
200	26	25	8.5	CTAF 25/25
200	40	50	8.5	CTAF 20/50

Mounting plates



Made of galvanised sheet steel, and of steel zinc dichromate for the universal plates.



PK and PKP

PMPK.../F

PMPK...

PMP...

PMR...

PMOL...

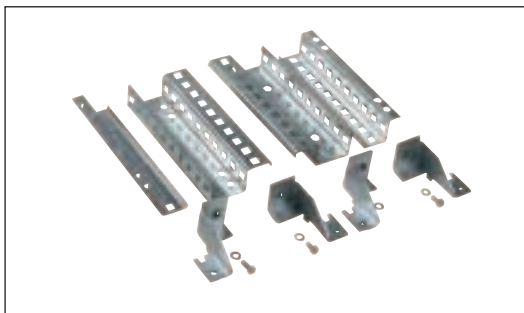
- A Lower mounting plate.
- B Mounting plate on the upper front cover.
- C Lower mounting plate.
- E Mounting plate on the base of the controls module.
- D Full mounting plate.

Notes: The upper B and lower C mounting plates can be replaced with a single full mounting plate D that covers the entire height of the control desk.

To be coupled to control desks reference	Lower A and C							Upper* B							Controls modules E				Full* D					
	Metal	P	S	Universal	P	S	Pos.	Metal	P	S	Pos.	Universal	P	S	Pos.	Metal	P	S	Pos.	Metal	P	S	Pos.	
PK 60	PMPK-8560	847	505	PMR 6760	675	508	A																	
PK 80	PMPK-8580	847	705	PMR 6780	675	708	A																	
PK 100	PMPK-85100	847	905	PMR 67100	675	908	A																	
PK 120	PMPK-85120	847	1105	PMR 67120	675	1108	A																	
PKP 60	PMPK-8560	847	505	PMR 6760	675	508	A																	
PKP 80	PMPK-8580	847	705	PMR 6780	675	708	A																	
PKP 100	PMPK-85100	847	905	PMR 67100	675	908	A																	
PKP 120	PMPK-85120	847	1105	PMR 67120	675	1108	A																	
PKP 80/F30	PMP-7080	697	705	PMR 6780	675	708	C	PMP 4580	447	705	B	PMR 4280	425	708	B	PMP 4080	397	705	E	PMOL 148	1298	697	D	
PKP 100/F30	PMP-70100	697	905	PMR 67100	675	908	C	PMP 45100	447	905	B	PMR 42100	425	908	B	PMP 40100	397	905	E	PMOL 1410	1298	897	D	
PKP 120/F30	PMP-70120	697	1105	PMR 67120	675	1108	C	PMP 45120	447	1105	B	PMR 42120	425	1108	B	PMP 40120	397	1105	E	PMOL 1412	1298	1097	D	
PKP 160/F30	PMP-70160	697	1505	-	-	-	C	PMP 45160	447	1505	B	-	-	-	-	PMP 40160	397	1505	E	-	-	-	-	
PKP 80/F50	PMP-7080	697	705	PMR 6780	675	708	C	PMP 4580	447	705	B	PMR 4280	425	708	B	PMP 4080	397	705	E	PMOL 148	1298	697	D	
PKP 100/F50	PMP-70100	697	905	PMR 67100	675	908	C	PMP 45100	447	905	B	PMR 42100	425	908	B	PMP 40100	397	905	E	PMOL 1410	1298	897	D	
PKP 120/F50	PMP-70120	697	1105	PMR 67120	675	1108	C	PMP 45120	447	1105	B	PMR 42120	425	1108	B	PMP 40120	397	1105	E	PMOL 1412	1298	1097	D	
PKP 160/F50	PMP-70160	697	1505	-	-	-	C	PMP 45160	447	1505	B	-	-	-	-	PMP 40160	397	1505	E	-	-	-	-	

* The DFPK fixing plate set is required for fixing front or full mounting plates.

Set of plate supports



The **DFPK...** set is necessary for fixing the upper or full plates on **PKP..F** control desks.

- Permit depth adjustment.
- For double plates (back to back), the set of 4 separate fixing supports must be ordered. Ref.: **EDF/PK**.

To be coupled to the front of control desks	Reference
PKP.../F30	DFPK-2030
PKP.../F50	DFPK-4050

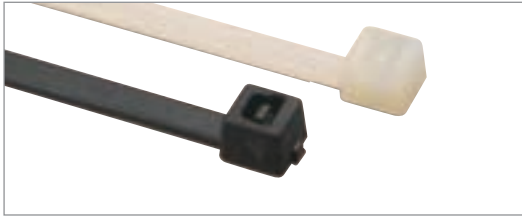
PC monitor support



Monitor support set, to be coupled to the upper front of **PKF.E** control desks, comprised of guides and a horizontal tray.

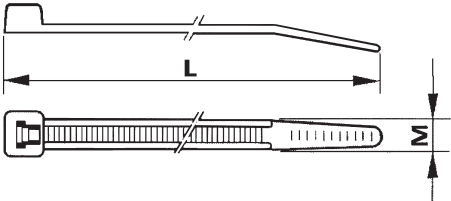
To be coupled to control desks	Reference
PKP800/F...	SPC8
PKP1000/F...	SPC10
PKP1200/F...	SPC12
PKP1600/F...	SPC16

Adjustable ties



Made of 6.6 nylon in natural colour or black for outdoor conditions.

Reference		L	M	Use	
White	Black			∅ minimum	∅ maximum
LZ25100	LN25100	100	2.5	1.6	22
LZ25200	LN25200	200	2.5	1.6	49
LZ35150	LN35150	150	3.5	1.6	35
LZ35200	LN35200	200	3.5	1.6	49
LZ35300	LN35300	300	3.5	1.6	75
LZ46150	LN46150	150	4.6	1.6	36
LZ46200	LN46200	200	4.6	1.6	49
LZ48270	LN48270	270	4.8	1.6	73
LZ46390	LN46390	390	4.6	1.6	109
LZ76390	LN76390	390	7.6	4.7	108



Tightening tools



To tighten and cut to size the adjustable ties. They facilitate wiring and save time, preventing the packets of cables from loosening. Tool adjustable according to the thickness of the tie. Can be used with the following models: LZ25100 up to LZ46390. Ref.: **MARK3**.



A very light and ergonomic tool, the cut on the tie is done by twisting the tool. Can be used on the following models of ties: LZ25100 up to LZ46390. Ref.: **MARK20, 21**.

Reference	Admissible width ties
MARK3	2.5 ÷ 4.8

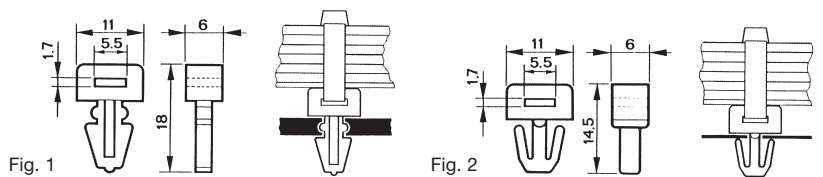
Reference	Admissible width ties
MARK20	2.5 ÷ 4.8
MARK21	4.6 ÷ 7.6

Locking clips



Allows fixing ties from the series LZ25100 up to LZ46390 on panels up to 3.2 mm thick. Material: 6.6 nylon.

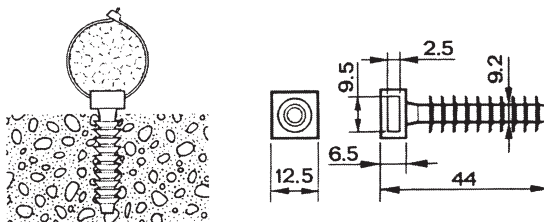
Reference	perforation ∅ mm	Maximum width panel mm	Figure
SFC1	6	3.2	1
SFC2	6	1	2



Stud



To use with soft materials: Ø 7 mm, or hard materials: Ø 8 mm. For ties up to 9 mm width. Material: black 6.6 nylon.
Ref.: **LOK01**.

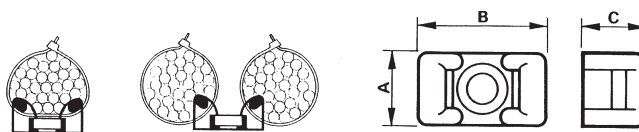


Tie fixing support



To attach one or two ties, mounted with a single screw. Material: 6.6 nylon. Allows for attaching ties from the entire range.

Reference	A	B	C	Fixing screw	Admissible width ties
KR6	12	18	9	M4	2.5 ÷ 4.8
KR8	14.5	25	12	M6	2.5 ÷ 7.6

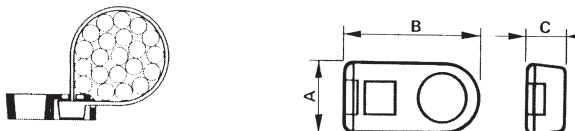


Support heads



To transform normal ties into ties with fixing heads, introduce a tie into this head before closing it on the cable bundle. Material: 6.6 nylon.6.

Reference	A	B	C	Fixing screw	Admissible width ties
FH18	7.1	13.3	4	M4	2.5
FH30	9.5	17.9	4.7	M5	3.5
FH50	11.3	22.2	6.2	M6	4.7

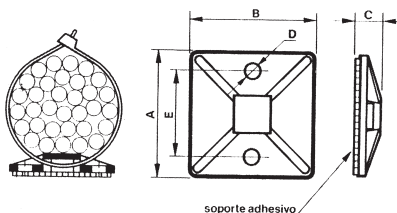


Self-adhesive support base



Permits insertion of 1 tie from 4 points at a 90° angle. Attaches ties from the series LZ25100 up to LZ46390. Material: 6.6 nylon.

Reference	A	B	C	D	E	Admissible width ties
MB3A	19.1	19.1	4.8	3.2	13.2	2.5 ÷ 3.5
MB4A	28.5	28.5	5.5	4	20.2	2.5 ÷ 4.8

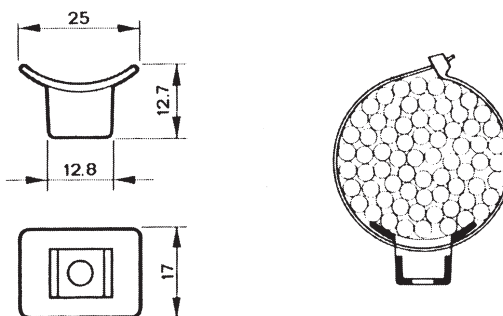


Tie fixing support



To attach ties from any series. Material: 6.6 nylon.

Reference	Admissible width ties mm	Fixing screw
LKC	2.5 ÷ 7.6	M5

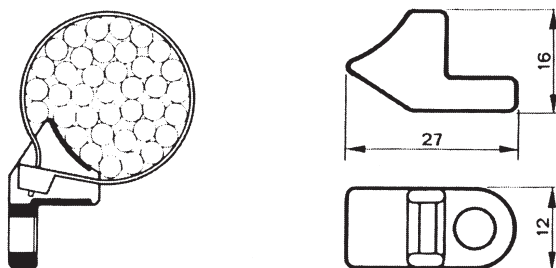


Lateral tie fixing support



Covers the head of the tie in its end, thus obtaining neater cabling. Material: 6.6 nylon.

Reference	Admissible width ties mm	Fixing screw
LKM/HE	2.5 ÷ 7.6	M5



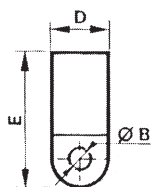
Fixing loop for tubes, hoses, etc.



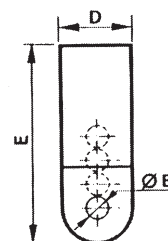
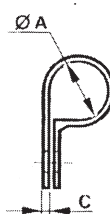
2 versions, fixed and graduated, \varnothing from 5 to 25.4 mm. Material: black 6.6 nylon.

Reference	$\varnothing A$ min. - max.	B	C	D	E
NX1	5	3.5	1	6.2	13.7
NX3	8	3.9	1	9.4	20.5
NX5	12	3.9	1	9.4	24
NX8*	14.3 ÷ 15.8	4	1.3	12.6	32
NX11	17.4 ÷ 20	4	1.3	12.6	37
NX14	22.2 ÷ 25.4	4.3	1.5	16	45

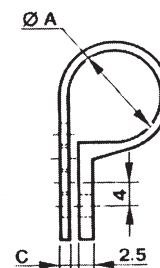
* The NX8 model only has 3 adjustment holes.



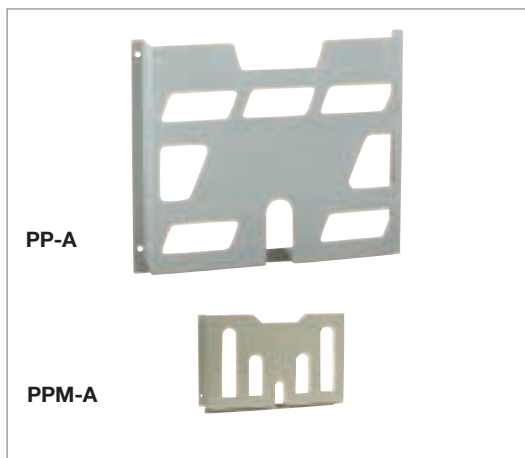
NX 1-3-5



NX 8-11-14



Document pocket



PP-A models made of **PS** in RAL-7035 grey.

- Fixed with adhesive tape or screws.

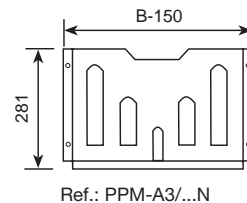
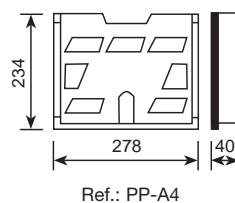
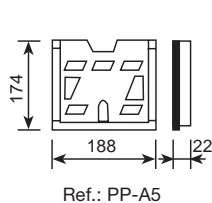
For holding DIN A3, A4 or A5-sized plans.

PPM-A models made of sheet steel and painted grey RAL-7032.

- Fixed to the reinforcement frame of the door with screws.

INSULATED	
Plan size	Reference
A4	PP-A4
A5	PP-A5

METAL	
Enclosure width dimensions (B)	Reference
600	PPM-A3/6N
800	PPM-A3/8N



Aerosol



Specifications	Reference
RAL-7032, 150 g	BPA-7032

Touch-up paint

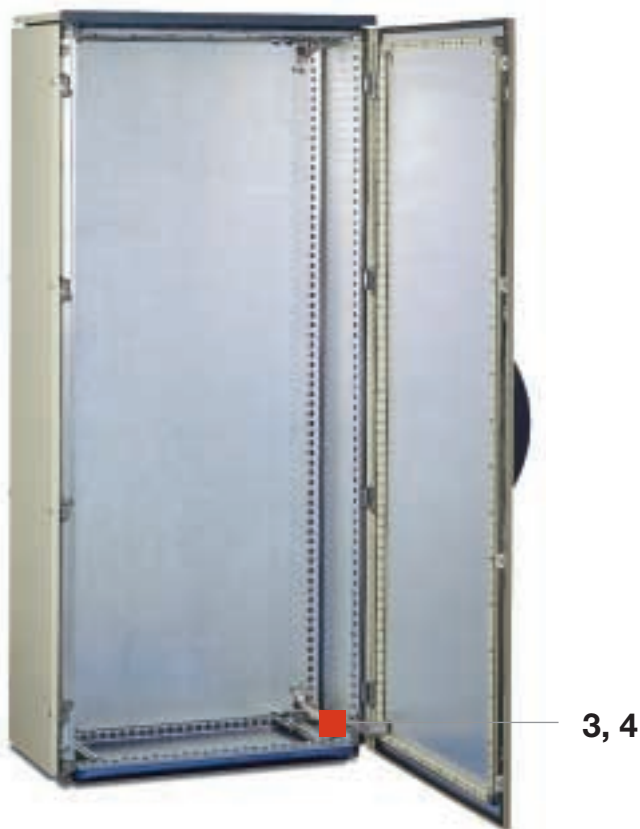


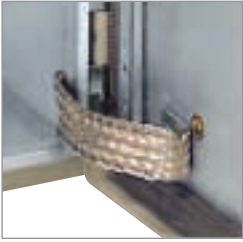
Air-dry touch-up paint.

Available in 2 colours.

Reference	Colour
TUP7032	RAL-7032
TUP7035	RAL-7035

Metal enclosures with CEM electromagnetic protection

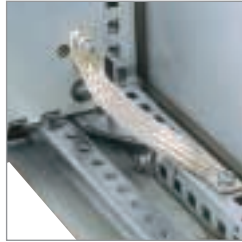




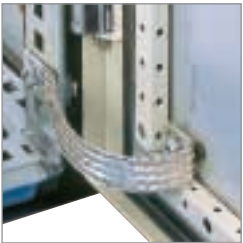
1 Flat earthing braid incorporated in the enclosure between the body and the door that guarantees the proper earthing connection and thus a good EMC.



2 Special gasket for door-back (IP + EMC) that, in addition to watertightness, provides electrical continuity between the door and the back, which is necessary in these assemblies.



3 Flat earthing braid between the mounting plate and structure of the enclosure.



4 Flat earthing braid between the structure of the enclosure and the door.



5 Special gasket. IP + EMC and reinforcement frame on the door.



6 Locking mechanism outside of the sealed area.



7 Mounting plate depth adjusting rail and earthing between the door, mounting plate and back.





CRAF 54/200 PM

Metal monobloc construction enclosures made of special ALUZINC 150 sheet. Body made of a single piece, folded and welded. The 55% aluminium present in the surface guarantees a good reflection of electromagnetic waves. Externally painted with texturised grey RAL-7032 polyester epoxy resin.

- Mounting plate incorporated made of galvanised sheet steel. Its low surface resistance facilitates the equalisation of earthing potentials.
- Special gasket for door-body (IP + EMC) that, in addition to watertightness, provides electrical continuity between the door and the body, which is necessary in these assemblies.
- Body completely closed without cable entry or any openings.
- Flat earthing braid incorporated in the enclosure between the body and the door that guarantees the proper earthing connection and thus a good EMC.
- Metal lock with earthing continuity that contributes to the improvement of general shielding.

Attenuation level of CRN-EMC enclosures

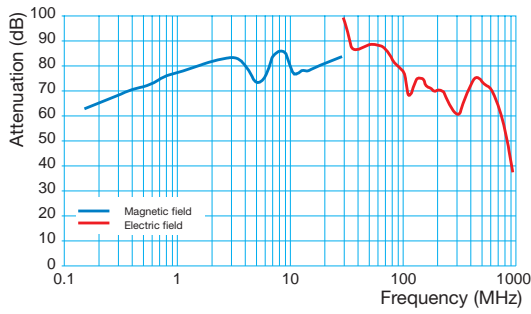
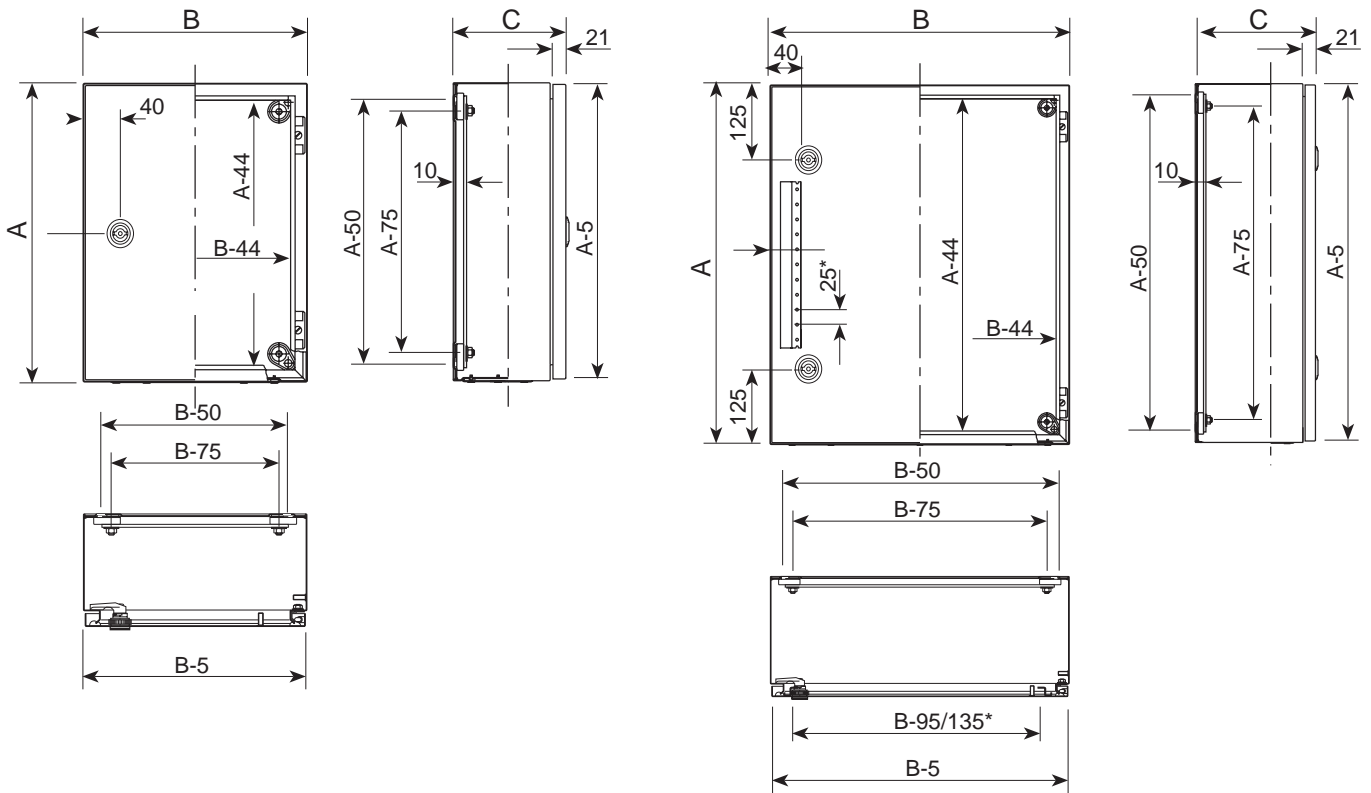


TABLE OF MODELS, DIMENSIONS AND REFERENCES

Nominal dimensions (mm)			Reference	Fig.	Mounting plate
Height (A)	Width (B)	Depth (C)			
400	300	200	CRAF 43/200 PM	1	MM-43
400	600	200	CRAF 46/200 PM	1	MM-64
500	400	200	CRAF 54/200 PM	2	MM-54
600	400	200	CRAF 64/200 PM	2	MM-64
600	600	250	CRAF 66/250 PM	2	MM-66
700	500	250	CRAF 75/250 PM	2	MM-75
800	600	300	CRAF 86/300 PM	2	MM-86
1000	800	300	CRAF 108/300 PM	2	MM-108
1200	800	300	CRAF 128/300 PM	2	MM-128

Dimensions (mm)

FIG. 1



* Model 128.



COAF 188/40 PM

CMO metal monobloc construction enclosures made of special ALUZINC 150 sheet. The surface treatment of the sheet includes 55% aluminium, which guarantees a suitable reflection of electromagnetic waves.

Composition

- Enclosure made of ALUZINC sheet steel, folded and welded. Externally painted with texturised epoxy-polyester paint in RAL-7032.
- Door made of ALUZINC sheet steel, installed with 4 steel hinges. Right or left opening to 120°. Reinforcement frame in the door.
- Special gasket between the body and the door (IP + EMC). In addition to watertightness, it provides continuity between the door and the body.
- Earthing connection incorporated into the enclosure between the body and the door, to ensure the proper earthing connection and thus adequate electromagnetic compatibility.
- Mounting plate of galvanised sheet steel incorporated with earthing connection. Maximum load: 375 kg/m².
- Cable entry plate with 1 entry of ALUZINC sheet and special gasket incorporated.
- **CMO** standard double bar lock outside of the protected sealed area.
- Lifting brackets optional, Ref.: **TMO/12**.
- Plinths optional, Ref.: **ZUN...**

Attenuation level of CMO-EMC enclosures

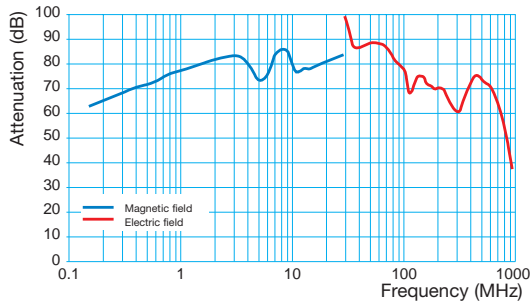
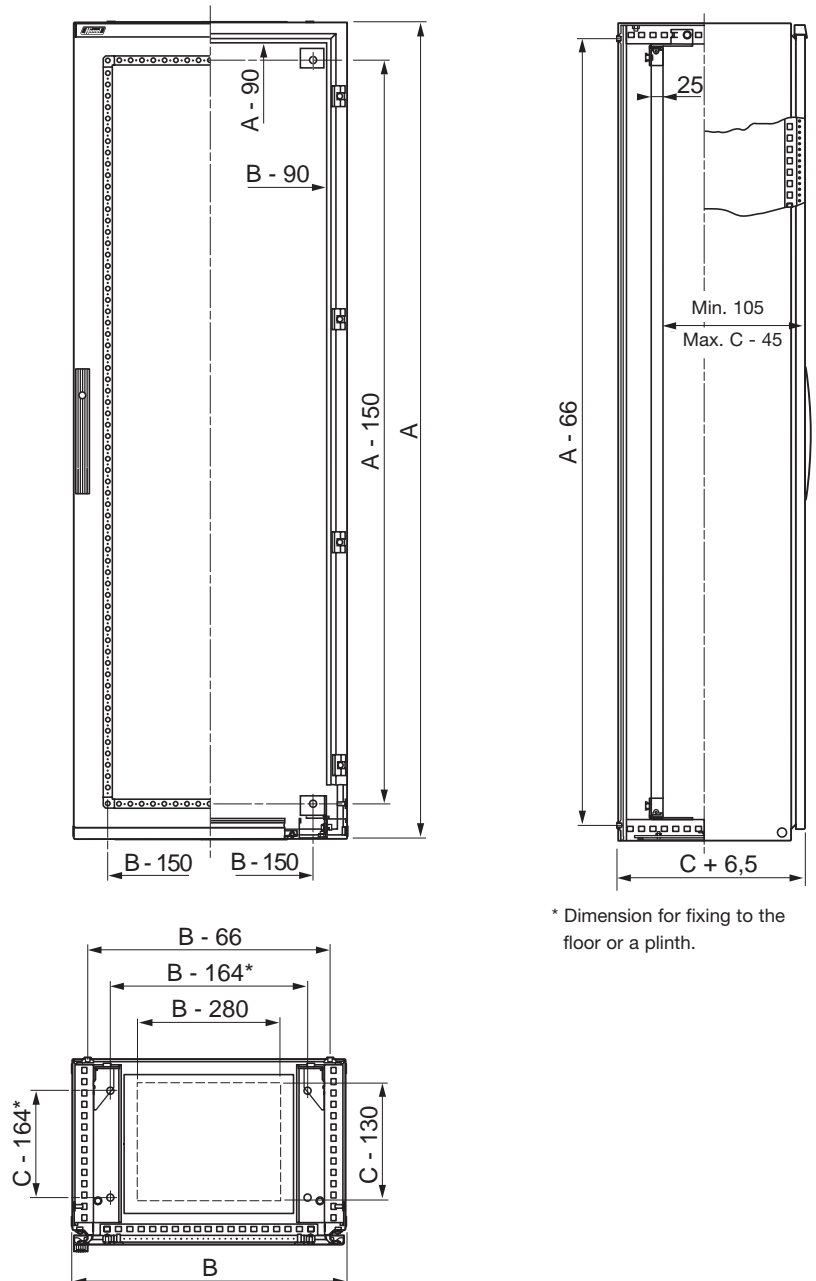


TABLE OF MODELS, DIMENSIONS AND REFERENCES

Nominal dimensions (mm)			No. of doors	Reference	Mounting plate
Height (A)	Width (B)	Depth (C)			
1600	800	400	1	COAF 168/40 PM	PMOL 168
1800	800	400	1	COAF 188/40 PM	PMOL 188
2000	800	400	1	COAF 208/40 PM	PMOL 208

Dimensions (mm)

FIG. 1



* Dimension for fixing to the floor or a plinth.



OLAF 208/50PM + 2 PLAF 285 + ZUN 85/100

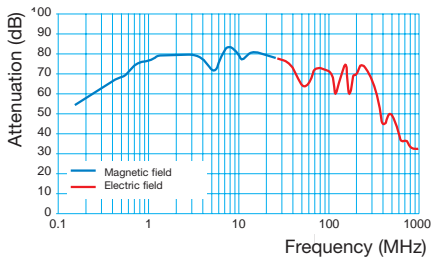
Metal enclosure suites consisting of a closed triangular profile in galvanised steel, back, door and panels. Made of special ALUZINC 150 sheet. The 55% aluminium present in the surface guarantees a good reflection of electromagnetic waves. Externally painted with texturised grey RAL-7032 polyester epoxy resin.

- Mounting plate incorporated made of galvanised sheet steel. Its low surface resistance facilitates the equalisation of earthing potentials.
- Flat earthing braid incorporated in the enclosure between the mounting plate-profile and the profile-door, guaranteeing the proper earthing connection and thus a good EMC.
- Special gasket (IP + EMC) that, in addition to watertightness, provides electrical continuity, which is necessary in these assemblies.
- Cable entry plate in a single piece with a special gasket (IP + EMC) incorporated.
- For the other features, consult the **OLN** section.

TABLE OF MODELS, DIMENSIONS AND REFERENCES

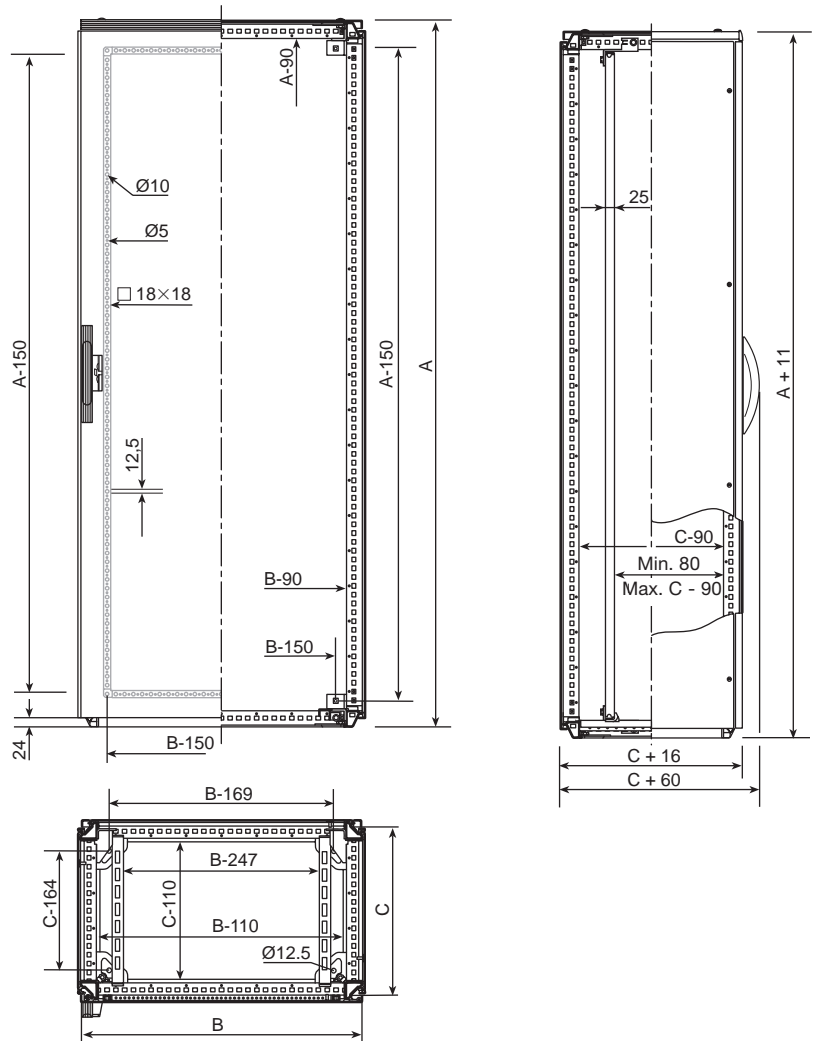
Nominal dimensions (mm)			No. of doors	Reference	Side reference	Plinths height = 100	Plinths height = 200	Mounting plate
Height (A)	Width (B)	Depth (C)						
1800	800	400	1	OLAF 188/40 PM	2PLAF 184	ZUN 84/100	ZUN 84/200	PMOL 188
1800	800	600	1	OLAF 188/60 PM	2PLAF 186	ZUN 86/100	ZUN 86/200	PMOL 188
2000	800	500	1	OLAF 208/50 PM	2PLAF 285	ZUN 85/100	ZUN 85/200	PMOL 208
2000	800	600	1	OLAF 208/60 PM	2PLAF 206	ZUN 86/100	ZUN 86/200	PMOL 208

Attenuation level of OLN-EMC enclosures

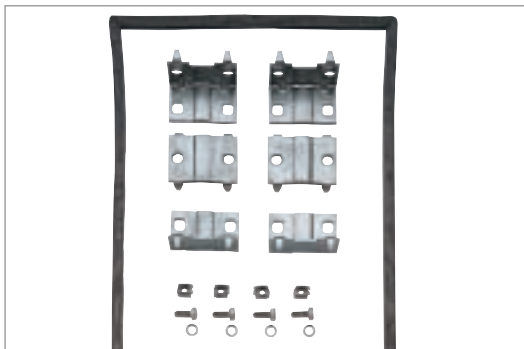


Dimensions (mm)

FIG. 1



Coupling kit for EMC enclosure suites

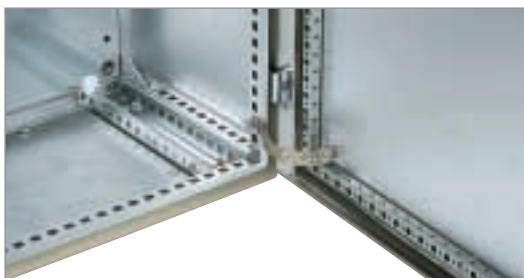


- Used to couple 2 EMC metal enclosure suites laterally or deep.
- Kit comprised of 4 fixing supports and 2 flanges + EMC gasket + hardware.
- The fixing supports and flanges are fixed on the profiles of the enclosure.

Dimensions*	Reference
1800×400	CUNAF184
1800×600	CUNAF186
1800×800	CUNAF188
2000×500	CUNAF205
2000×600	CUNAF206
2000×800	CUNAF208

*Other dimensional combinations can be supplied upon request.

Earthing connections



- Guarantee the proper earthing connection for high frequencies, avoiding the interference currents that are produced at high frequencies.
- Made of tinned copper.

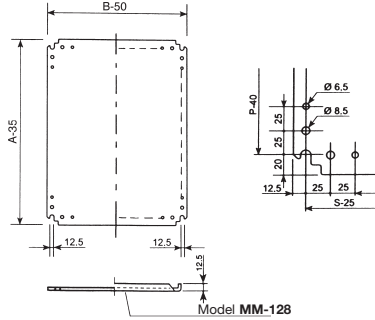
Dimensions		Section mm ²	Reference
Length mm	Width mm		
155	20	16	CTAF 15/16
200	21	25	CTAF 20/25
250	26	25	CTAF 25/25
200	40	50	CTAF 20/50

Mounting plates for enclosures (incorporated in the standard supply)



CRN-CEM

Galvanised mounting plates with perforations for fixing accessories and earthing.



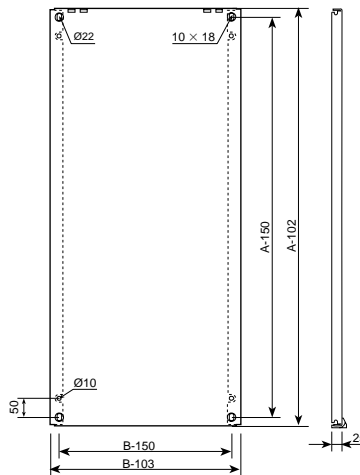
CMO/OLN-CEM

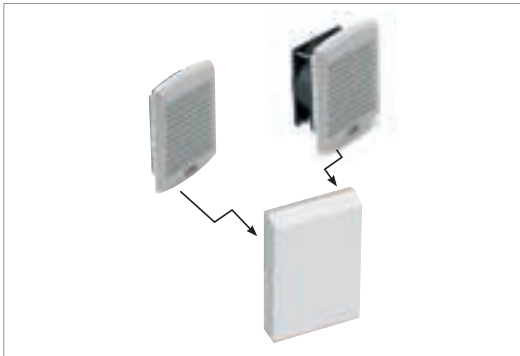
Made of galvanised sheet steel, with a perimeter reinforcement rib and the vertical edges are strengthened with a double edge.

Depth adjustable every 25 mm and easy to insert by sliding using guide supports located on the lower part.

- Maximum load 600 kg if located at the back and 500 kg in intermediate position.

Enclosure dimensions		To be coupled to enclosures			Fig.
Height	Width	CRN-CEM	CMO-CEM	OLN-CEM	
400	300	MM-43	-	-	1
400	600	MM-64	-	-	1
500	400	MM-54	-	-	1
600	400	MM-64	-	-	1
600	600	MM-66	-	-	1
700	500	MM-75	-	-	1
800	600	MM-86	-	-	1
1000	800	MM-108	-	-	1
1200	800	MM-128	-	-	1
1600	800	-	PMOL 168	-	2
1800	800	-	PMOL 188	PMOL 188	2
2000	800	-	PMOL 208	PMOL 208	2



EMC external kit IP55

- They are directly mounted onto the fans and grilles to protect the equipment from electromagnetic interference.

Reference	For fans and grilles with dimensions (mm)
VF85/KITIPCEM	170 × 150
VF165/KITIPCEM	268 × 248
VF560/KITIPCEM	336 × 316