# Escolha das cartas para o PLC

## Entradas e saídas necessárias

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Módulo** | **Digital Input** | **Digital Output** | **Analog Input** | **Analog Output** |
| **Direcção** |  | 1 | 2 | 1 |
| **Travão de mão** | 2 | 4 |  |  |
| **Mudanças** | 5 | 4 |  |  |
| **Embraiagem** |  | 1 | 1 | 1 |
| **Travão** |  | 1 | 1 | 1 |
| **Admissão** |  | 1 | 2 | 1 |
| **Ignição** |  | 2 |  |  |
| **Monitorização** |  | 6 | 5 |  |
| **Emergência** | 5 |  |  |  |
| **Total** | **12** | **20** | **11** | **4** |

## Entradas e saídas do PLC

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Digital Input** | **Digital Output** | **Analog Input** | **Analog Output** |
| **CPU 1214C** | 14 | 10 | 0 |  |
| **SB1232** |  |  |  | 1 |

## Necessidade de entradas e saídas

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Digital Input** | **Digital Output** | **Analog Input** | **Analog Output** |
| **Necessário** | 0 | 10 | 11 | 3 |

## Proposta 2.1 de compra de cartas

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Digital Input** | **Digital Output** | **Analog Input** | **Analog Output** |
| **SM1222** |  | 16 |  |  |
| **SM1231** |  |  | 8 |  |
| **SM1231** |  |  | 4 |  |
| **SM1232** |  |  |  | 4 |
| **Total** |  | 16 | 12 | 4 |
| **Extra** | 2 | 6 | 1 | 1 |

## Proposta 2.2 de compra de cartas

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Digital Input** | **Digital Output** | **Analog Input** | **Analog Output** |
| **SM1222** |  | 8 |  |  |
| **SM1222** |  | 4 |  |  |
| **SM1231** |  |  | 8 |  |
| **SM1231** |  |  | 4 |  |
| **SM1232** |  |  |  | 4 |
| **Total** |  | 12 | 12 | 4 |
| **Extra** | 2 | 2 | 1 | 1 |