



The PLC.239 controller can handle up to 8 inputs and up to 8 outputs.

The compact design and the wide assortment of inputs and outputs, makes the controller easy to integrate on DIN rails (G / Ω type) installation, inside electrical panels, where flexibility and reliability of the system are required.

It can be implemented in a CAN network as SLAVE.



TECHNICAL FEATURES

| | | |
|---------------------|------------|--|
| MASTER CODE | | PLC.239 |
| POWER SUPPLY | | 9 - 36 VDC |
| INPUT | TOTAL 8 | 4 DIGITAL OPTOCOUPLED INPUTS, WITH COUNTER, ENCODER OPTION 4 ANALOGIC INPUTS: 0÷40Vdc - 4÷20mA - DIGITAL HIGH OR LOW SIDE (SOFTWARE SELECTABLE) |
| OUTPUT | TOTAL 8 | 8 OUTPUTS (CLOSED-LOOP CONTROL SYSTEM, SINGLE OUT 4A MAX) |
| LED | | I/O STATUS CAN PORT STATUS POWER SUPPLY STATUS DIAGNOSE |
| CAN BUS | 1 PORT | 2.0B COMPLIANT - (11, 29 BIT) - ISO 11898 - UP TO 1MBIT/S |
| CAN BUS PROTOCOLS | | CAN OPEN (CIA DS401 DEVICE PROFILE FOR GENERIC I/O MODULE, WITH DS306 EDS FILE) ON REQUEST: SAE J1939 - ISO 11783 (ISO BUS) - FMS |
| SERIAL | 1 PORT | ON REQUEST: RS232 UP TO 115200 BAUD |
| CONNECTIONS | TOTAL 2 | REMOVABLE CLAMP CONNECTOR, WIRE SECTION 1.5 mm ² / 16 awg |
| WORKING TEMPERATURE | | -40°C +80°C |





ELECTRONIC FEATURES

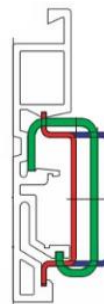
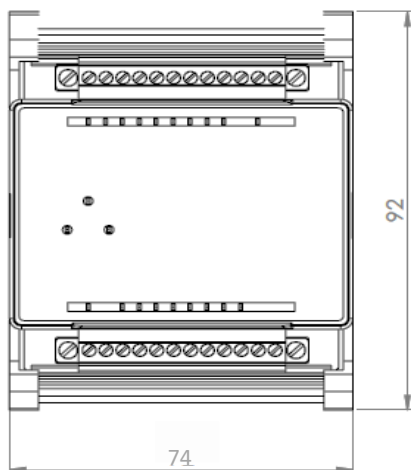
| | |
|--------------|---|
| SLAVE USAGE | EDS FILE |
| MASTER USAGE | ALMEClab |
| | STANDARD C PROGRAM LANGUAGE |
| PROGRAMMING | FIRMWARE UPLOAD BY CAN BUS WITH ALOADER SOFTWARE TOOL |
| CPU | FAMILY: ARM Cortex M4, 32bit core |

STANDARDS

| | |
|------------------------------------|--|
| IMMUNITY TO CONDUCTED INTERFERENCE | ISO 7637-2: 2004, pulses 2a, 3a, 3b, 4, severity level 4, function state A ISO 7637-2: 2004, pulse 1, 2b, severity level 4, function state C ISO 7637-2: 2004, pulse 5, severity level 1, function state A |
| ELECTROMAGNETIC EMISSIONS | EN 61000-6-4// EN 55011 (RF RADIATE) |
| ELECTROMAGNETIC IMMUNITY | EN 61000-6-2// EN 61000-4-2/3/4/6 |
| EQUIPMENT REQUIREMENTS AND TESTS | EN 61131-2 |
| PROTECTION | IP20 |

IN ACCORDANCE WITH THE EN50498 THE DEVICE MEETS THE TECHNICAL SPECIFIC REQUIREMENTS OF 2004-104 DIRECTIVE (AUTOMOTIVE).
THE DEVICE IS EMC 2004/108 COMPLIANT.

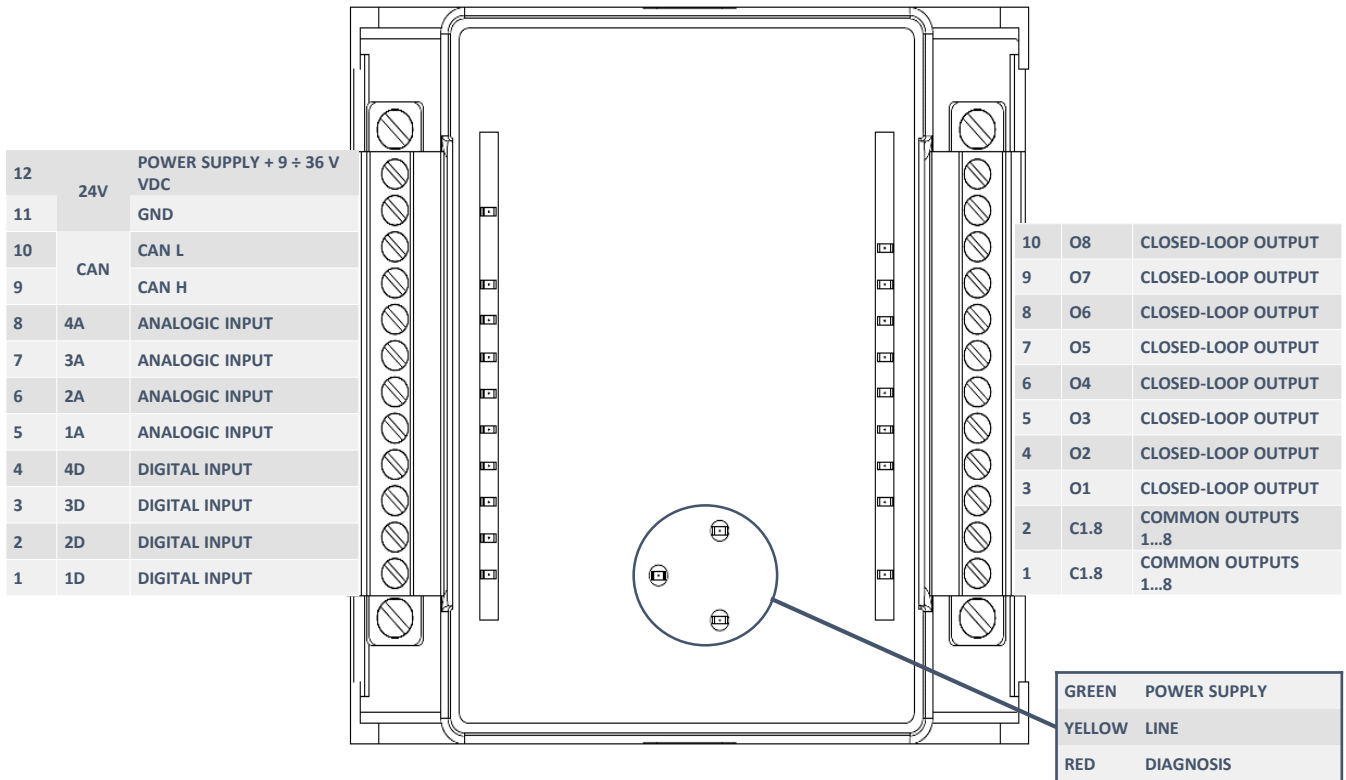
SIZE (mm)



RED: Ω TYPE
IEC/EN 60715 – 35 × 7.5
BLUE: Ω TYPE
IEC/EN 60715 – 35 × 15
GREEN: G -TYPE RAIL (ACCORDING TO EN 50035,
BS 5825, DIN 46277-1)



CONNECTIONS TERMINALS



SAMPLE CONFIGURATIONS (ALMEC PRODUCTS COMBINATION)



| | |
|----------------------|-------------|
| PLC.163 / PLC.163DSP | PLC.239 |
| MASTER USAGE | SLAVE USAGE |

TECHNICAL FEATURES

| | |
|--|---|
| INPUT | UP TO 20 INPUTS: DIGITAL - ANALOG (4÷20mA - 0÷40Vdc) |
| OUTPUT | UP TO 13 OUTPUTS: PWM (PLc & PLd) - DIGITAL - SQUARE WAVE |
| SERIAL | 1 PORT: RS485 – UP TO 3800 BPS |
| CAN | 2 PORTS: CAN OPEN |
| USAGE | SLAVE: EDS FILE MASER: AL.MECLab / STANDARD C |
| PERFORMANCE AND SAFETY INTEGRITY LEVEL | PLd – SIL2 (DUAL CHANNEL INTERNAL SCHEME) |



ALMEC
MECHATRONICS

NOTE