



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

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





## ELECTRONIC FEATURES

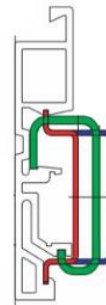
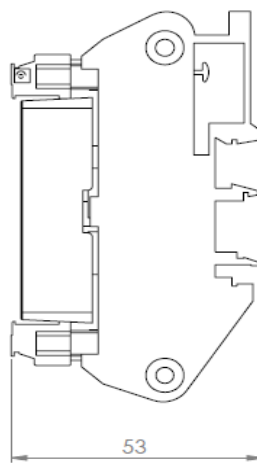
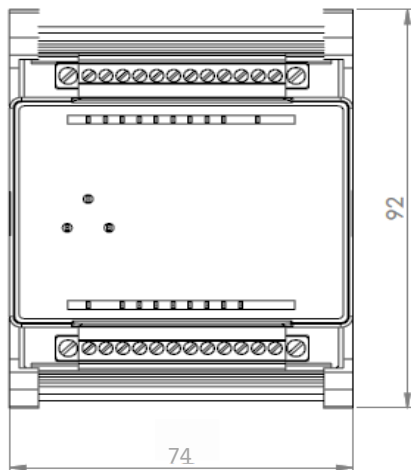
SLAVE USAGE	EDS FILE
MASTER USAGE	ALMEClab
	STANDARD C PROGRAM LANGUAGE
PROGRAMMING	FIRMWARE UPLOAD BY CAN BUS WITH ALOADER SOFTWARE TOOL
CPU	FAMILY: ARM Cortex M4, 32bit core

## 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.

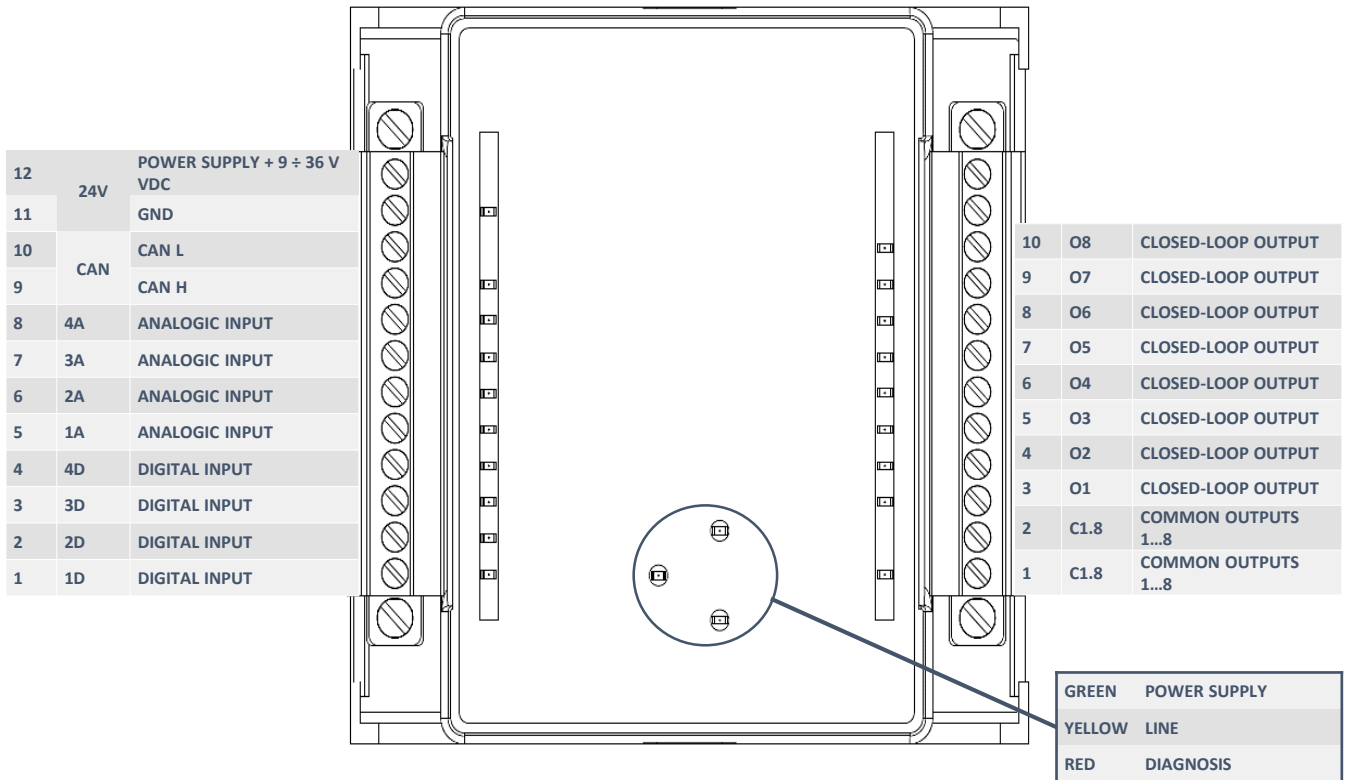
## SIZE (mm)



**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