

PLC Controller

ELP14R18

1. Technical details



- Supply voltage : 24 V AC/DC +/-10%
- Communication link: 3 x RS-485
- Modbus RTU, BACnet MS/TP protocols
- Alarm and Communication indicator
- Built-in RTC clock and calendar
- Storage temperature: -20...70 °C
- Operating temperature: -20...50 °C
- USB connector
- Dedicated HMI connector
- Assembly: rail DIN 35
- Dimensions: 102 x 132 x 58 mm

2. Resources

DIGITAL INPUTS

- 3 inputs triggered signal 24V AC / DC

ANALOG INPUTS:

- 2 analog outputs 0-10V / 0-20mA with integrated PTC protection

For voltage inputs:

- Allowable input voltage: 0 – 10 VDC
- Input resistance: 450 kOhm +/- 5%
- The frequency of measurement: 2,5ms
- Accuracy: +/- 0,005 V
- Resolution: 12 bits

For current inputs:

- Allowable input current: 0 - 20 mA
- Input resistance: 120 Ohm +/- 5%
- The frequency of measurement: 2,5ms
- Accuracy: +/- 0,01 mA

TEMPERATURE INPUTS:

- 5 PT1000 temperature inputs with built-in PTC protection
 - Sensor's current: 1 mA
 - Minimum load resistance: 0 Ohm
 - The frequency of measurement: 2,5ms
 - The measuring range: -50..170°C
 - Accuracy: +/- 0,2°C
 - Resolution: 8 bits / °C

ANALOG OUTPUTS:

- 3 0-10V analog outputs with built-in PTC protection
 - Nominal output voltage: 0 - 10 VDC
 - Maximum output: 20 mA
 - Maximum load impedance: 500 Ohm
 - Resolution: 8 bits / V

RELY OUTPUTS:

- 3 relay outputs with NO contact, 10A AC1
- 2 relay with double NO contact, 8A AC1

COMMUNICATION LINKS:

- RS1 – RS-485 MASTER - galvanically isolated
- RS2 – RS-485 HMI
- RS3 – RS-485 SLAVE

All RS-485 communication interfaces are overvoltage and overload PTC protected.

Possible work with Modbus RTU and BACnet MS/TP protocols.

Link RS1 is galvanically isolated from the rest of the circuit.

3. Versions of the configuration of drivers

PLC controller ELP14R18 can appear in several versions of the optional configuration:

Name	Connectors		Enclosure and display on the controller	Modbus RTU	BACnet MS/TP
	USB	HMI			
ELP14R18-MOD-RTU	✓	✓	✓	✓	–
ELP14R18-MOD-RTU BASIC	–	–	–	✓	–
ELP14R18-BAC-MSTP	✓	✓	✓	✓	✓
ELP11R32-BAC-MSTP BASIC	–	–	–	✓	✓