



Read the user manual carefully before using the device! Responsibility for any damage, loss or accidents to persons arising from failure to comply with the warnings in the user manual belongs to the user. In case of malfunctions in this case, the device will be out of warranty.

ECPC-P

Temperature Converter

- PT100 (EN 60751) resistance thermometer input,
- Current output: 0...20mA, 20...0mA, 4...20mA, 20...4mA,
- Voltage output: 0...5V, 5...0V, 0...10V, 10...0V, -5...+5V,
- 3-way isolation: input, output, power supply,
- Output type set via front-panel potentiometer,
- Rail-mountable enclosure,
- CE certified according to EN standards.



Order Code

ECPC-P

Technical Specifications

Electrical Specifications

Supply Voltage	24VDC (±5%)
Power Consumption	Maximum 6W
Isolation	1.5 kVrms between input, output and power supply
Wiring	1.5mm ² terminal
Line Resistance	Max 20Ω for 3-wire PT100
Data Retention	FLASH memory (min 20 years)
EMC	EN 61326-1: 2021 (Performance criterion B for EN 61000-4-3 standard is met)
Safety Requirements	EN 61010-1: 2010 (Pollution degree 2, overvoltage category II)

Environmental Specifications

Ambient/Storage Temperature 0 ...+50°C/-25 ...+70°C (without icing)

Relative Humidity Up to 31°C 80%, then linearly decreasing to 50% at 40°C

Protection Rating IP20 according to EN 60529

Operational Height Max 2000m



KEEP AWAY device from exposed to corrosive, volatile and flammable gasses or liquids

Inputs

Input Type		Scale Range		Accuracy
PT100 Resistance thermometer	EN 60751	-199.9 ...600.0°C	-199.9 ...999.0°F	± 0.5% (full scale)

Outputs

Analog Output(mA) 0 ...20mA / 20 ...0mA / 4 ...20mA / 20 ...4mA DC ± 0.2% (full scale), load resistance max 300ohm

Analog Output(V) 0 ...5V / 5 ...0V / 0 ...10V / 10 ...0V / -5 ...+5V ± 0.2% (full scale), max 10mA (short-circuit protection)

Housing

Mounting Style Mountable on rail (according to DIN 43 700)

Dimensions W18.5xH90xD66mm

Weight Approx. 120g (with packaging)

Housing Material Self-extinguishing plastics used

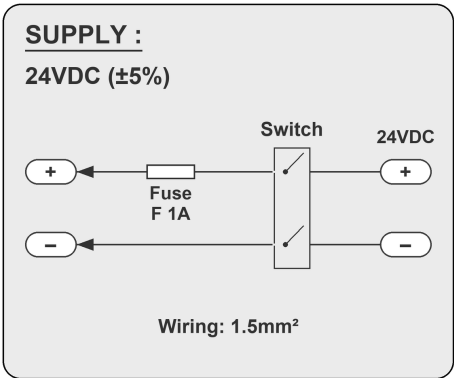
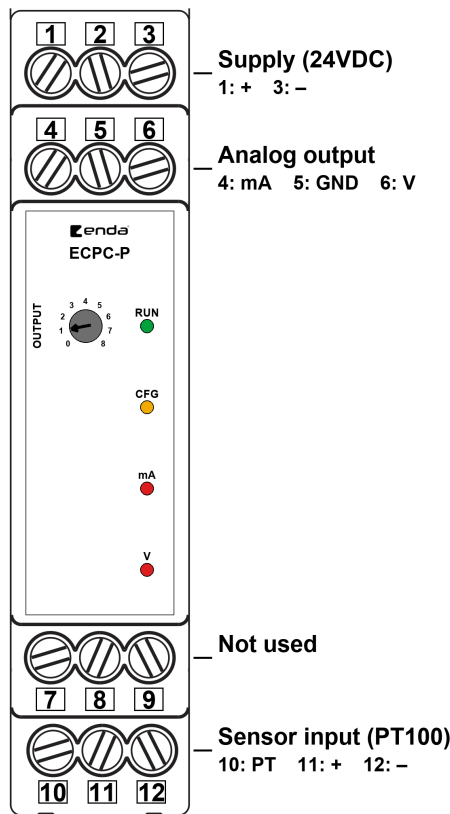


The device should not be cleaned with solvent-containing or abrasive cleaning agents (thinner, gasoline, acid, etc.).

Connection Diagram

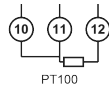


ENDA ECPC-P is a rail-mountable device. The device must be used in accordance with the instructions. Installation and electrical connections must be carried out by technical personnel in accordance with the instructions in the user manual. Care should be taken to ensure that there is no electricity during installation. The device must be protected from moisture, vibration, and pollution. Attention should be paid to the operating temperature. Installation cables should not pass near high power lines and other devices.



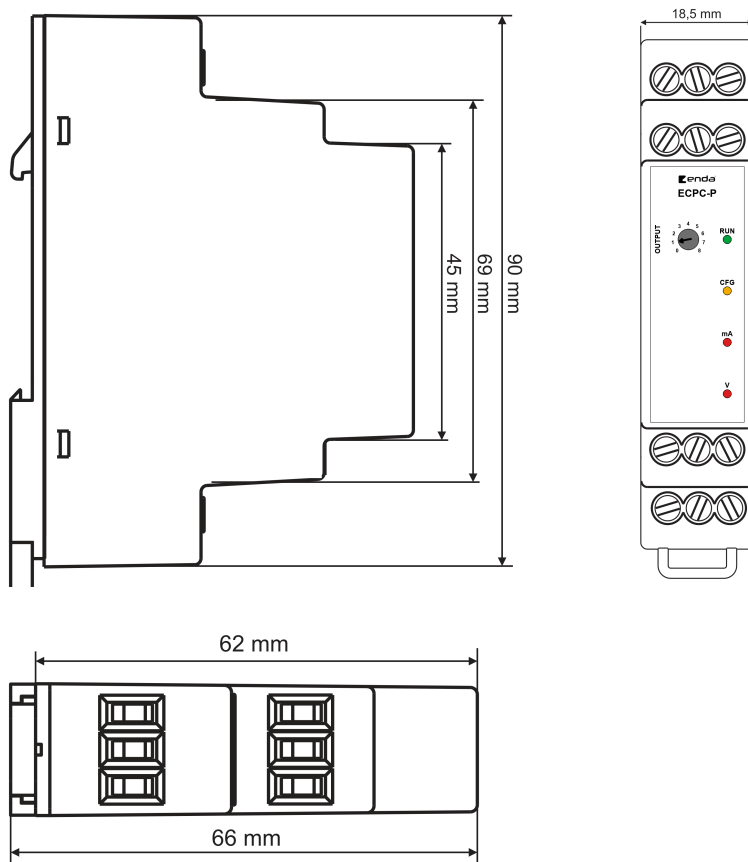
Screw torque 0.4 Nm

Sensor Inputs

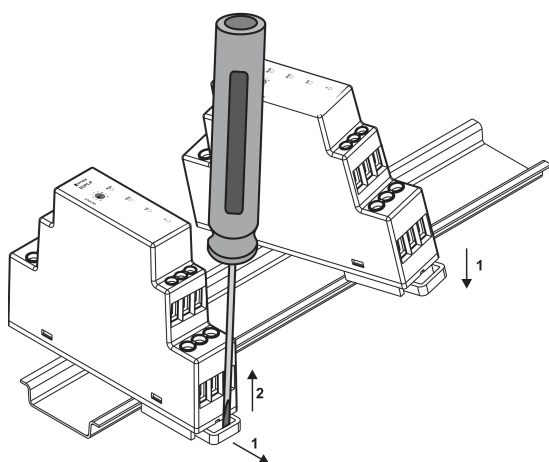


- **For resistance thermometers:**
Connect the PT100 sensor between terminals 11 and 12. When using a 2-wire PT100, short-circuit terminals 10 and 11.

Dimensions and Montage



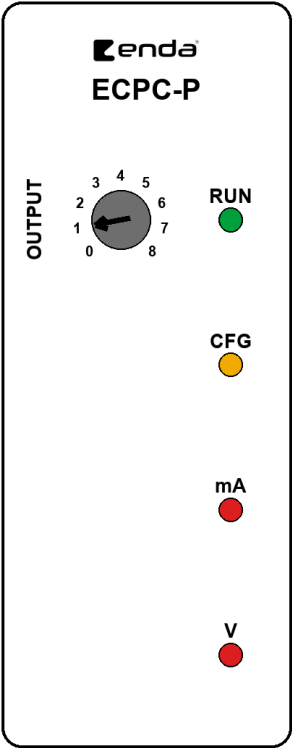
The dimensions are in millimeters.



Mounting: push the device onto the rail in direction 1 so that the rail latch grips the rail.

Removal: push the rail latch with a screwdriver in direction 1 and pull the device in direction 2.

Potentiometer and LED Definitions



The input type is fixed (PT100). The device is configured with the single front-panel potentiometer: **OUTPUT** selects the output type. Turn the arrow to the position mark on the dial; a new position is accepted after 0.5 s and the CFG LED flashes once.

OUTPUT potentiometer	
Position	Output type
0	0 ...20mA
1	20 ...0mA
2	4 ...20mA
3	20 ...4mA
4	0 ...5V
5	5 ...0V
6	0 ...10V
7	10 ...0V
8	-5 ...+5V

LEDs	
RUN	Steady on while the device is running. Flashes an error code during error conditions (see the Error LED Definitions table).
CFG	Flashes once when a new OUTPUT position is accepted.
mA	Lights up when a current output (0 ...20mA, 20 ...0mA, 4 ...20mA, 20 ...4mA) is selected.
V	Lights up when a voltage output (0 ...5V, 5 ...0V, 0 ...10V, 10 ...0V, -5 ...+5V) is selected.

Error Leds Definitions	
RUN LED 960ms 960ms	Calibration error
RUN LED 60ms 120ms 60ms 120ms 60ms 120ms 1320ms	Sensor disconnected / measurement circuit error



NOTE: When an error occurs, the RUN LED flashes periodically. For example, in the case of a calibration error, the LED in the first graph lights up for 960 ms, turns off for 960 ms, and the cycle repeats with a period of 1920 ms. When the error is resolved the LED returns to steady on.