



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.

ECVC-P

Voltage Converter

- Voltage input: 0...100V, 0...200V, 0...300V, 0...400V, 0...500V,
- Selectable AC, DC, AC-DC measurement method,
- 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,
- All settings via front-panel potentiometers,
- Rail-mountable enclosure,
- CE certified according to EN standards.



Order Code

ECVC-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
Input Impedance	4 MΩ
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

Voltage Input	0 ...100V, 0 ...200V, 0 ...300V, 0 ...400V or 0 ...500V AC / DC, selected with the INPUT potentiometer
Measurement Method	AC, DC or AC-DC, selected with the MODE potentiometer
Input Accuracy	± 0.5% (full scale)

Outputs

Analog Output(mA)	0 ...20mA / 20 ...0mA / 4 ...20mA / 20 ...4mA DC, Load resistance max 300ohm
Analog Output(V)	0 ...5V / 5 ...0V / 0 ...10V / 10 ...0V / -5 ...+5V, Max 10mA (short-circuit protection)
Output Accuracy	± 0.2% (full scale)

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

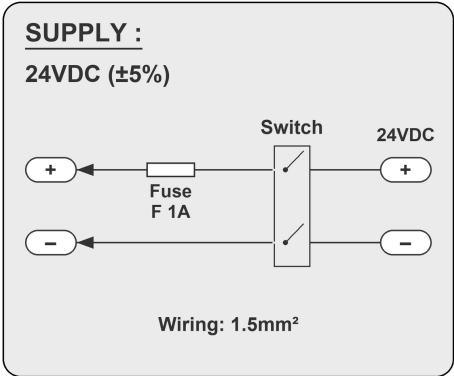
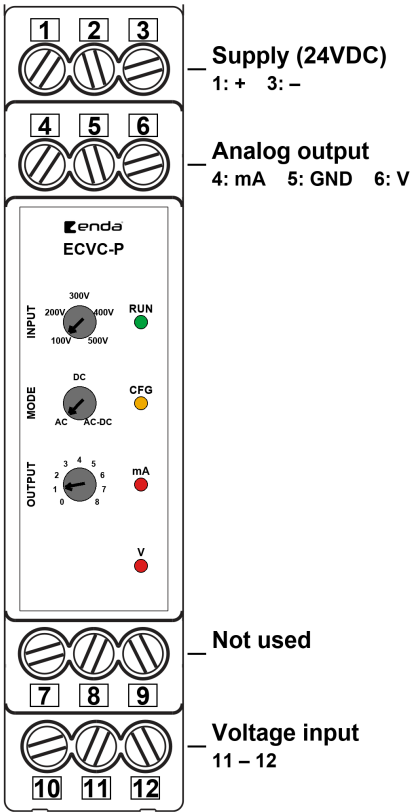


The device should not be cleaned with solvent-containing or abrasive cleaning agents (thinner, gasoline, acid, etc.).

Connection Diagram



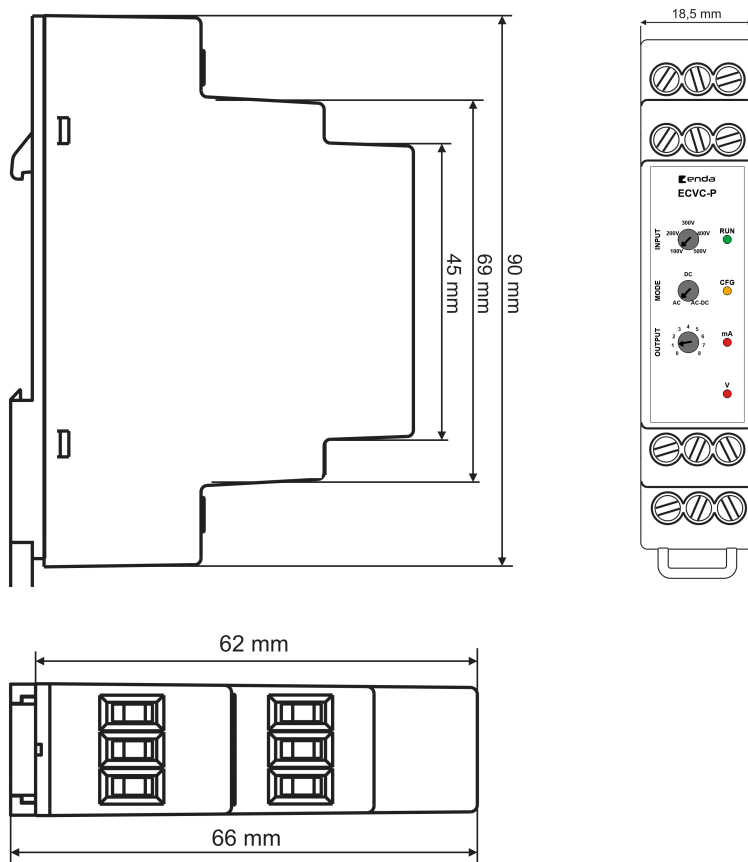
ENDA ECVC-P is a rail-mountable device. The device must be used in accordance with the instructions. Installation and electrical connections must be carried out by technical personnel in accordance with the instructions in the user manual. Care should be taken to ensure that there is no electricity during 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.



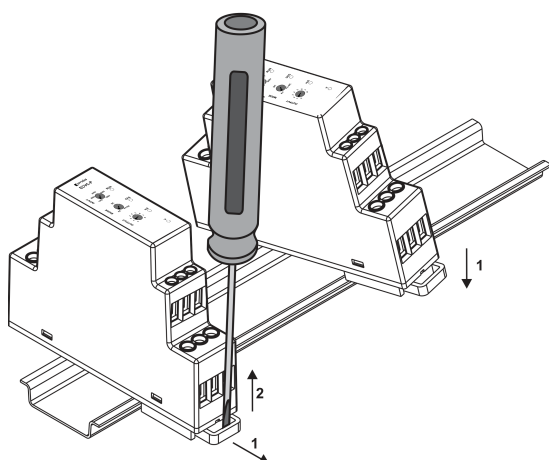
Screw torque 0.4 Nm

Voltage Input	
AC / DC	• For the voltage input: Connect the voltage to be measured to terminals 11 and 12; the connection direction does not matter. The input range (0 ...100V to 0 ...500V) is selected with the INPUT potentiometer and the measurement method (AC / DC / AC-DC) with the MODE potentiometer.

Dimensions and Montage



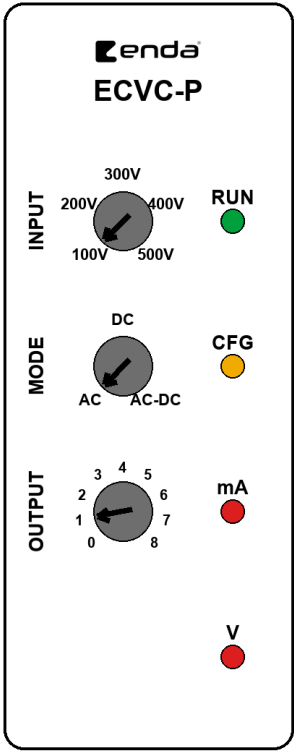
The dimensions are in millimeters.



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 device is configured with the three front-panel potentiometers: **INPUT** selects the voltage input range, **MODE** the measurement method (AC / DC / AC-DC), **OUTPUT** 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.

INPUT potentiometer		OUTPUT potentiometer	
Position	Input range	Position	Output type
0	0 ...100V	0	0 ...20mA
1	0 ...200V	1	20 ...0mA
2	0 ...300V	2	4 ...20mA
3	0 ...400V	3	20 ...4mA
4	0 ...500V	4	0 ...5V
		5	5 ...0V
		6	0 ...10V
		7	10 ...0V
		8	-5 ...+5V

MODE potentiometer	
Position	Measurement method
0	AC
1	DC
2	AC-DC

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 potentiometer 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	
	Calibration error
	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.