

Features

- input signal 0/4-20 mA (e.g. from CLM or ULM)
- 4 digit LED display
- up to 4 relay-outputs with direct function
- placed in a wall-mounted case (dimension 110 x 80 x 67 mm) or at front panel (dimension 98 x 48 x 100 mm)
- option for isolated analog current output
- RS-485 / Modbus RTU



Description

The programmable display unit PDU measures and displays wide range of physical values (level, pressure, flow, temperature, etc.). It is designed as a panelmeter, so its montage is provided onto a front panel cutout or as wall-mounted case. Terminal blocks are on rear side in panelmeter and inside in wall-mounted case. At the front panel there are four buttons for setting up all functions and LEDs for indication of limits (max. four) and LED for alarm. The device operates in the following modes: linear, square, root and user defined (max. 20 points). All settings are saved in EEPROM memory..

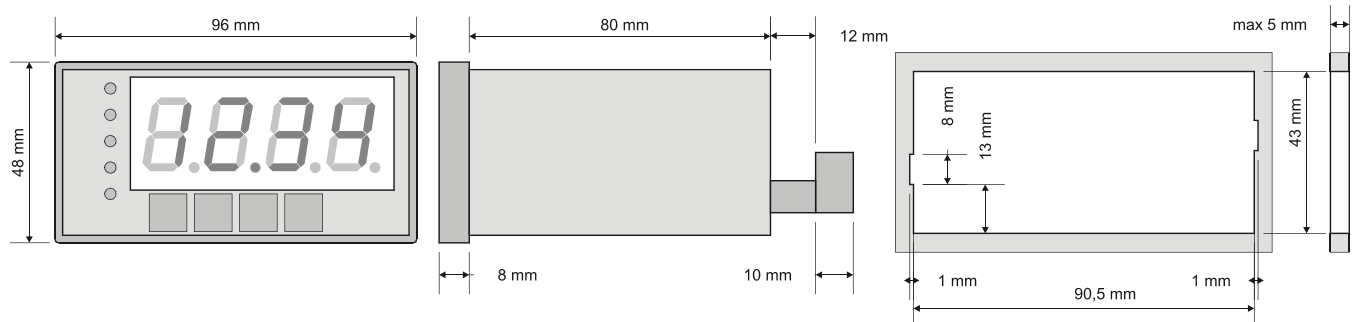


Possibilities of custom settings

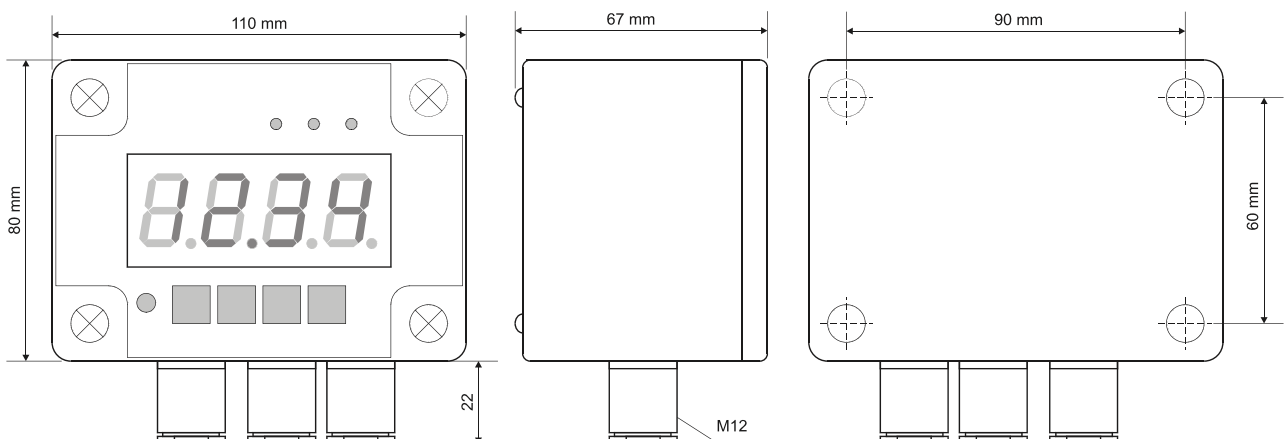
- password protection
- programmable measuring range
- overload-protection current input
- programmable indication filtration
- programmable relay hystereses and delay

Dimension drawing

PDU-4__-P



PDU-420-W

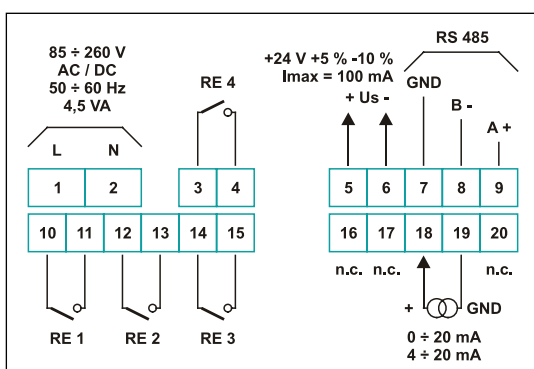


Technical data

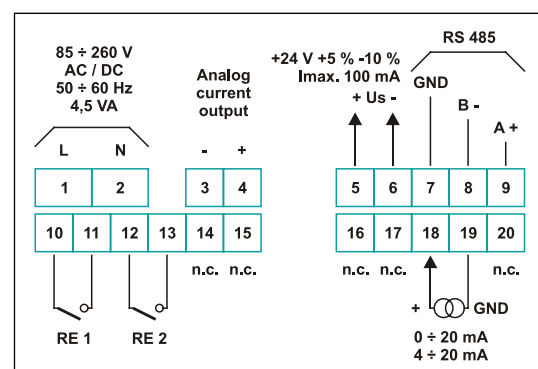
Type	PDU-4__-P	PDU-420-W
Power supply	19 ÷ 50 V DC, 16 ÷ 35 V AC (50 ÷ 60 Hz) or 85 ÷ 260 V AC/DC (50 ÷ 60 Hz)	230 V AC ± 10 % (50 ÷ 60 Hz) or 24 V DC
Power consumption	for 85 ÷ 260 V AC/DC a 16 ÷ 35 V AC: max. 4,5 VA for 19 ÷ 50 V DC: max. 4,5 W	for 230 V AC: max. 2,6 VA for 24 V DC: max. 4,5 W
Display	4 digit, LED, red, 20 mm high	
Input	current 0/4 ÷ 20 mA, programmable, over-load protection, input current limited to about 40 mA	
Measuring range	-999 to 9999, plus decimal point	
Accuracy	± 0,25 % ± one digit in the entire operation range	
Outputs	2 or 4, relays 1 A / 250 V AC (cosφ=1)	2 relays 1 A / 250 V AC (cosφ=1)
Transducer power supply output	24 V DC +5 % ÷ 10 % / max. 100 mA	24 V DC ± 3 V for 230 V AC: max. 25 mA for 24 V DC: max. 100 mA
	not insulated from measuring inputs	
Active current output	operating range max 0 ÷ 24 mA (2 relays)	-
Communication interface	RS 485, 8N1, 1200 ÷ 115200 bit/s Modbus RTU (not galvanically isolated)	
Operating temperature	0°C ÷ +50°C	
Storage temperatures	-10°C ÷ +70°C	
Protection class	IP 40 (front side) IP 20 (case and connection clips)	IP 65
Case	board	wall-mounted
Case material	NORYL - GFN2S E1	ABS + glass fibre
Case dimensions (w, h, d)	96 x 48 x 100 mm panel cut-out: 90,5 x 43 mm	without glands: 110 x 80 x 67 mm with glands: 110 x 105 x 67 mm
Installation depth	min. 102 mm	see dimensions
Board thickness	max. 5 mm	-
Electrical equipment of protection group II		
Electrical safety	EN 61010-1, EN 61010-1/A2	
EMC	EN 61326	

Examplary pin assignment

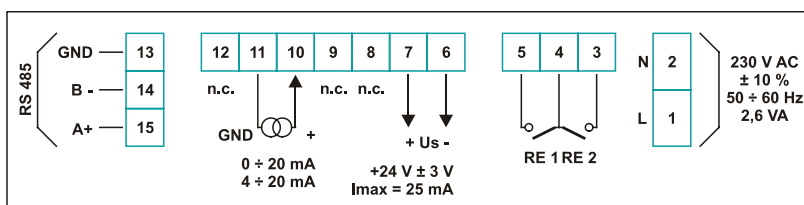
PDU-440-P-230V



PDU-421-P-230V

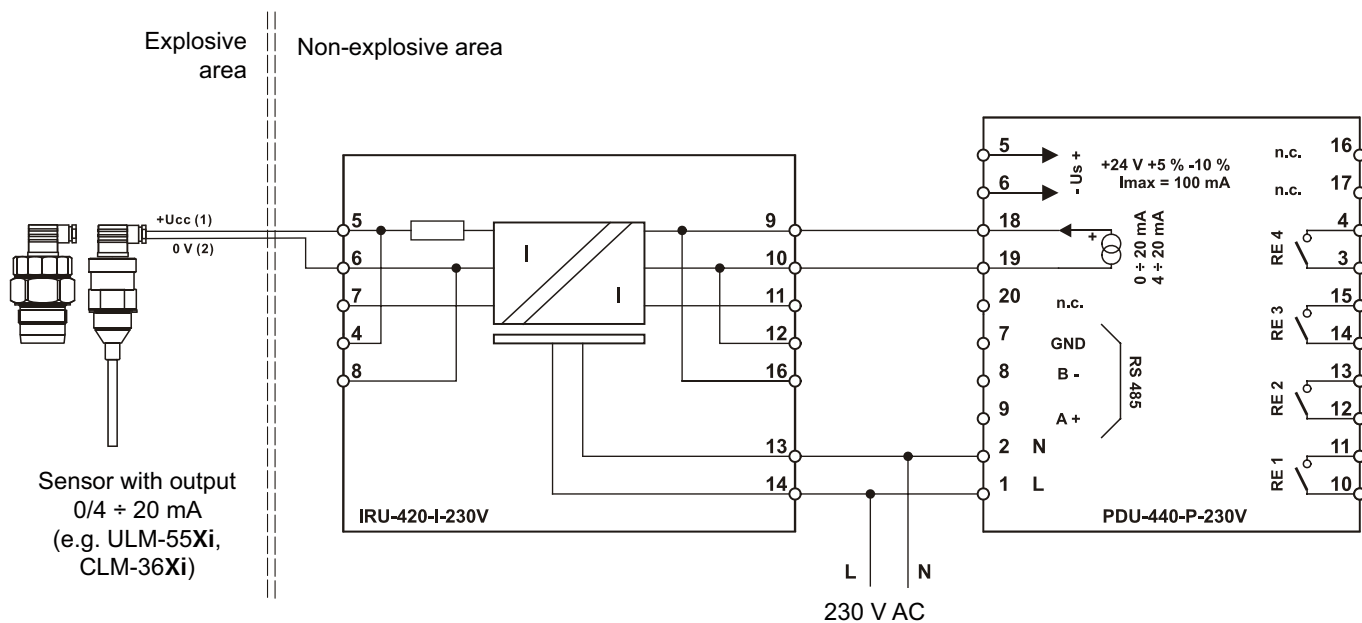


PDU-420-W-230V

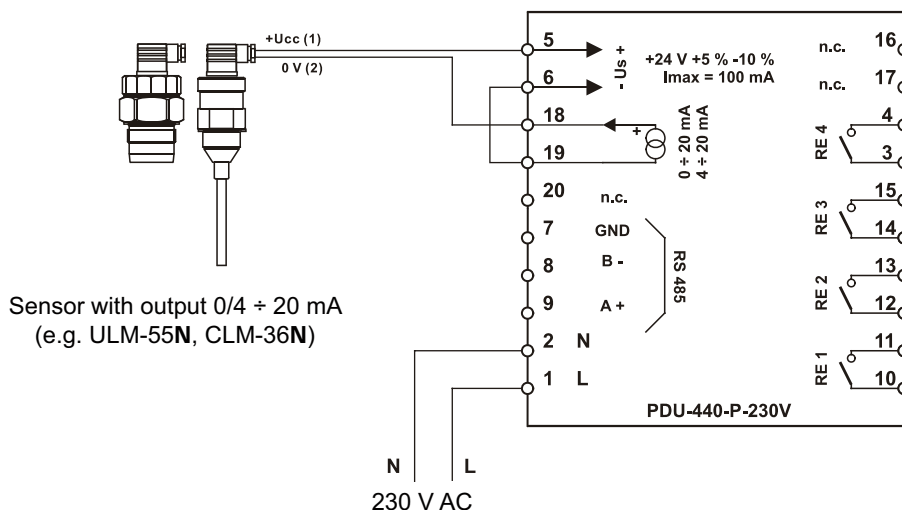


Connection of sensor

I. Sensor in explosive area



II. Sensor in non-explosive area



Specification system

PDU - 4 - - V

- supply voltage:
 - 24** - pro PDU-4__-P: 19 ÷ 50 V DC, 16 ÷ 35 V AC (50 ÷ 60 Hz)
 - pro PDU-420-W: 24 V DC ± 15 %
 - 230** - pro PDU-4__-P: 85 ÷ 260 V AC/DC (50 ÷ 60 Hz)
 - pro PDU-420-W: 230 V AC ± 10 % (50 ÷ 60 Hz)
- mounting to:
 - W** - wall-mounted case (only for PDU-420-W)
 - P** - front panel (only for PDU-4__-P)
- analog output:
 - 0** - without analog output (only for PDU-4_0_)
 - 1** - analog output 4 ÷ 20 mA (only for PDU-4__-P)
- limit outputs:
 - 2** - 2x output relay RE 1 and RE 2 (only for PDU-42_-)
 - 4** - 4x output relay RE 1 to RE 4 (only for PDU-440-P)

Optional accessories for PDU-420-W

———— IR remote control for settings parameters of unit without opening the tight case

fi

- 2 relays output, wall-mounted case, power supply 230 V
- 2 relays output, mounting to front panel, isolated analog output 4 ÷ 20 mA, power supply 24 V
- 4 relays output, mounting to front panel, power supply 230 V

Working areas acc. to EN 60079-10 (non-explosive areas).

Connection to mains only through fuse or overcurrent circuit breaker - max. 2 A.

Electrical equipment of protection group II.

Electrical safety according to EN 61010-1, EN 61010-1/A2.

EMC according to EN 61326.