

P12H- DC VOLTAGE AND DC CURRENT TRANSDUCERS WITH ANALOG, RELAY AND RS-485 DIGITAL OUTPUT

FEATURES:

- 21 points charact.
- Password protection
- PD14 Compatible
- RJ-11 connector
- PD11 program

INPUTS:



OUTPUTS:

- 0/4...20 mA
- 0...10 V
- 2x
- RS 485

GALVANIC ISOLATION:

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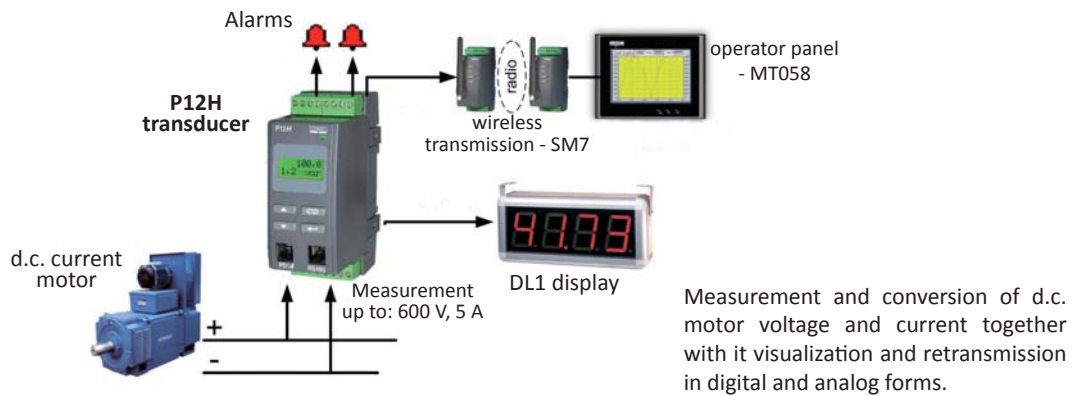
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- Universal programmable measuring input:
 - d.c. voltage (up to +/- 600 V),
 - d.c. current (up to +/- 5 A).
- Easy to configure through the PD11 program.
- Automatic compensation.
- Individual characteristic (up to 21 points).
- Analog output.
- RS-485 Modbus digital interface.
- 2 alarm relays.
- Backlighted display.
- Signaling of alarms on the display.
- Accuracy class: 0.2.

EXAMPLE OF APPLICATION



INPUTS

Input type	Range	Minimal sub-range with class preservation	Error	Remarks
Voltage	(-100 .. 100) V	50 V	0.2	input resistance > 4.2 mΩ
Voltage	(-600 .. 600) V	300 V	0.2	
Voltage (option)	(-100 .. 100 mV), (-1 .. 1 V), (-10 .. 10 V)	100 mV	0.2	
Current	(-1 .. 1) A	0.5 A	0.2	input resistance = 10 mΩ +/- 10%
Current	(-5 .. 5) A	2.5 A	0.2	input resistance = 10 mΩ +/- 10%

OUTPUTS

Output type	Properties	Remarks
Analog: 0/4 .. 20 mA	maximal response time: 100 ms	load resistance < 500 Ω
Analog: 0 .. 10 V	maximal response time: 100 ms	load resistance > 500 Ω
Relay	voltageless NO contacts (normally open)	load capacity: - voltage 250 V a.c., 150 V d.c., - current 5 A for: 30 V d.c. or 250 V a.c.

DIGITAL INTERFACE

Interface type	Properties	Remarks
RS-485 Modbus	Modes: ASCII (8N1, 7E1, 7O1) and RTU (8N2, 8E1, 8O1, 8N1)	baud rate: 2400, 4800, 9600 bit/s maximal response time: 300 ms
RS-232	programmer socket	baud rate 9600 bit/s

FEATURES

Transducer memory	750 samples
Minimal recording interval	1 sec
Additional error from ambient temperature changes	+/- (0.1% of the range/ 10 K)
Password	password protection against unwanted change of parameters

EXTERNAL FEATURES

Readout field	display: LCD 2 x 8	indication range: -99999 .. 99999
Overall dimensions	45 x 100 x 120 mm	
Weight	< 0.3 kg	
Protection grade	IP40	
Fixing	on a 35 mm DIN rail	

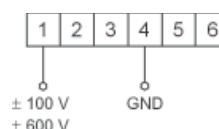
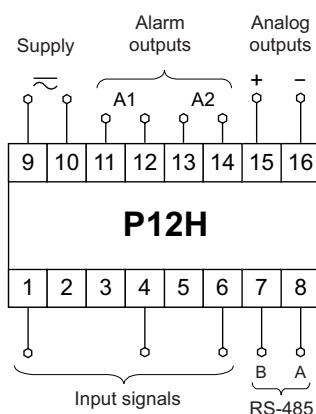
RATED OPERATION CONDITIONS

Supply voltage	85 .. 230 .. 253 V a.c./d.c. or 20 .. 24 .. 50 V a.c./d.c. (40 .. 50/60 .. 440 Hz)	input power < 4 VA
Temperature	ambient: -25...23...55°C	storage: -25...85°C
Humidity	< 95%	inadmissible condensation
Operating position	any	
Conversion time	min 100 ms	

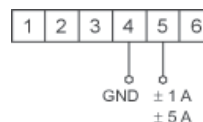
SAFETY AND COMPATIBILITY REQUIREMENTS

Electromagnetic compatibility	noise immunity	acc. to EN 61000-6-2
	noise emissions	acc. to EN 61000-6-4
Isolation between circuits	basic	acc. to EN 61010-1
Pollution level	2	
Installation category	III	acc. to EN 61010-1
Maximal phase-to-earth voltage	600 V	

CONNECTION DIAGRAMS



voltage input: 100 V and 600 V



current input: 1 A and 5 A

ORDERING

	P12H -	X	XX	X	X	X	XX	X
Kind of transducer:								
without display		1						
with display		2						
Input signal¹⁾:								
voltage -100 .. 100 V			00					
voltage -600 .. 600 V			01					
current -1 .. 1 A			02					
current -5 .. 5 A			03					
as per order ²⁾			XX					
Output signal:								
voltage 0...10V				1				
current 0...20mA				2				
current 4...20mA				3				
current 0...5 mA				4				
as per order ²⁾				X				
Supply:								
85...253 V d.c./a.c.					1			
20...50 V d.c./a.c.					2			
Kind of terminals:								
socket-plug with screw connections						0		
as per order ³⁾						X		
Version:								
standard							00	
custom-made ²⁾							XX	
Acceptance tests:								
without extra quality requirements								8
with an extra quality inspection certificate								7
according to customer's request ²⁾								X

The transducer maintains its class to the fourfold decrease of the basic range of the input signal. In the P12H-1 transducer, besides the basic range, one must give the required sub-range in remarks. In case when the given sub-range is smaller than the basic range divided by four, one must precise the input signal on the XX order.

Order example:

the code **P12H-2-02-3-1-0-00-0** means:

- P12H** - transducer of P12H type,
- 2** - with a display,
- 02** - programmed by the manufacturer on the input range: -1 .. 1 A,
- 3** - analog output signal: 4 .. 20 mA,
- 1** - supply: 85 .. 253 V a.c./d.c.,
- 0** - socket-plug with screw connection,
- 00** - standard version,
- 8** - without extra quality requirements.

¹⁾ The transducer has an universal input. One must give in the order, the code of the input signal which has to be programmed.

²⁾ After agreeing with the manufacturer.

³⁾ Possible version with self-locking sockets.

SEE ALSO:



KD7 recorder.



PD10 converter (RS-485/USB).

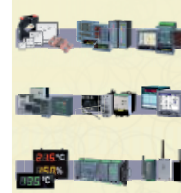


Programmable meters with multicolor bargraphs - NA5 and NA6.



Digital displays for outdoor applications - DN.

OUR OFFER



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