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N20

Universal input digital panel meter for measurements of d.c. voltages, d.c. currents or temperature.

N2091XX
Panel Meter, 2 x OC outputs, ±10V input, 85-230V ac



- Universal Input (Programmable)
- Wide voltage, AC/DC control
- 3 Colour, 5 Digit display. Red, green and orange

PRODUCT DESCRIPTION

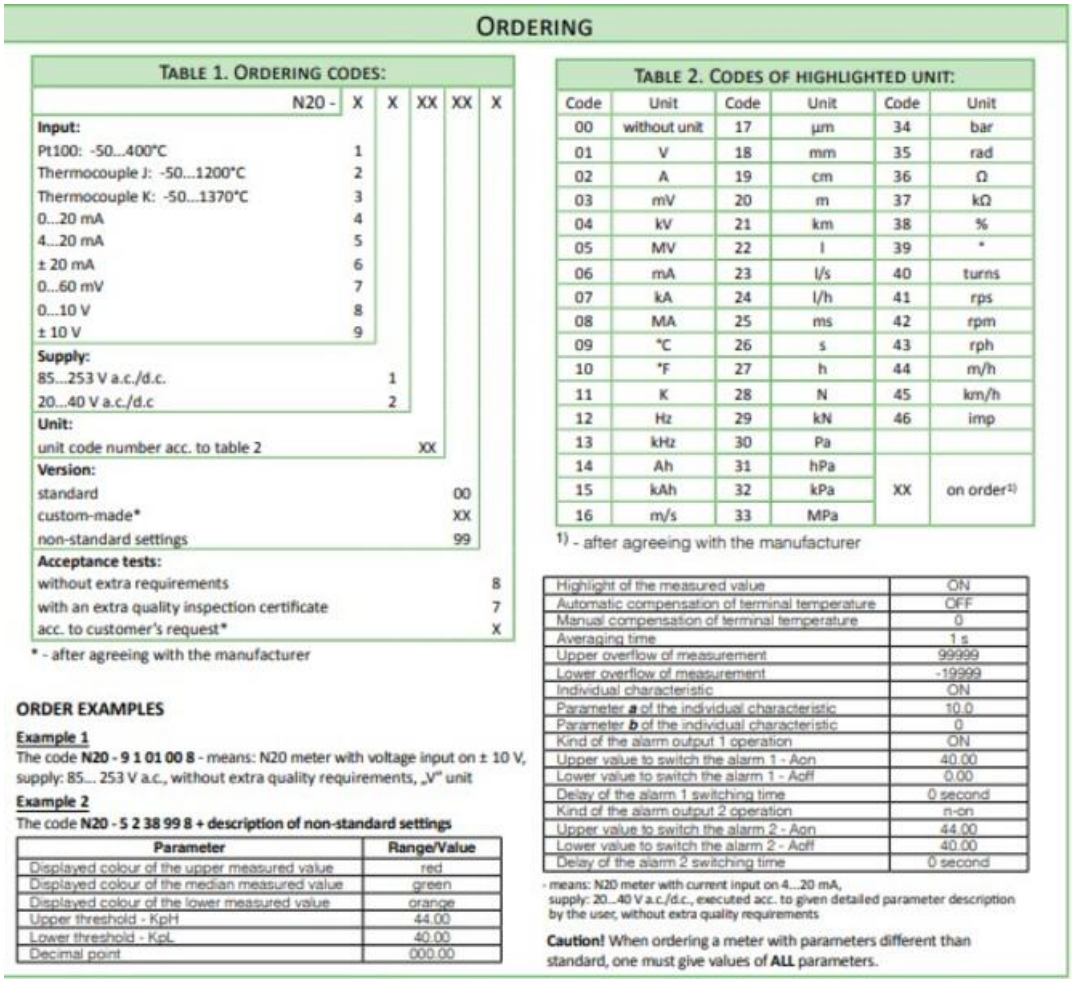
Application

The N20 meter is a digital programmable panel instrument destined for measurements of d.c. voltages or d.c. currents: uni or bipolar, temperature through thermocouples (J, K) and Pt100 resistance thermometers.

Features

– three-colour display: red, orange, green, facilitating the observation of measured value changes,
– readout field: 5-digit LED, 14 mm digit height,
– 2 alarm outputs of OC type (4 types of alarms),
– signaling of alarm states through the highlight of the alarm index,
– housing protection level: IP 65,
– programming possibility of chosen meter parameters with the use of the PD14 programmer and free delivered LPConfig software:
- display colour, individually in three intervals,
- thresholds of displayed overflows
- display precision of the result (decimal point),
- highlight of the unit,
- automatic or manual temperature compensation of ends in measurements with thermocouples,
- averaging time of the measurement,
- two alarms of OC type operating in six working modes.
- recalculation of indications (individual characteristic),

Please refer to the image below for ordering information.



ORDERING

TABLE 1. ORDERING CODES:

N20 -	X	X	XX	XX	X
Input:					
Pt100: -50...400°C	1				
Thermocouple J: -50...1200°C	2				
Thermocouple K: -50...1370°C	3				
0...20 mA	4				
4...20 mA	5				
± 20 mA	6				
0...60 mV	7				
0...10 V	8				
± 10 V	9				
Supply:					
85...253 V a.c./d.c.		1			
20...40 V a.c./d.c		2			
Unit:					
unit code number acc. to table 2			XX		
Version:					
standard				00	
custom-made*				XX	
non-standard settings				99	
Acceptance tests:					
without extra requirements					8
with an extra quality inspection certificate					7
acc. to customer's request*					X

* - after agreeing with the manufacturer

TABLE 2. CODES OF HIGHLIGHTED UNIT:

Code	Unit	Code	Unit	Code	Unit
00	without unit	17	µm	34	bar
01	V	18	mm	35	rad
02	A	19	cm	36	Ω
03	mV	20	m	37	kΩ
04	kV	21	km	38	%
05	MV	22	l	39	‰
06	mA	23	l/s	40	turns
07	kA	24	l/h	41	rps
08	MA	25	ms	42	rpm
09	°C	26	s	43	rph
10	°F	27	h	44	m/h
11	K	28	N	45	km/h
12	Hz	29	kN	46	imp
13	kHz	30	Pa		
14	Ah	31	hPa	XX	on order[1)]
15	kAh	32	kPa		
16	m/s	33	MPa		

1) - after agreeing with the manufacturer

Highlight of the measured value	ON
Automatic compensation of terminal temperature	OFF
Manual compensation of terminal temperature	0
Averaging time	1 s
Upper overflow of measurement	99999
Lower overflow of measurement	-19999
Individual characteristic	ON
Parameter ***a*** of the individual characteristic	10.0
Parameter ***b*** of the individual characteristic	0
Kind of the alarm output 1 operation	ON
Upper value to switch the alarm 1 - Aon	40.00
Lower value to switch the alarm 1 - Aoff	0.00
Delay of the alarm 1 switching time	0 second
Kind of the alarm output 2 operation	n-on
Upper value to switch the alarm 2 - Aon	44.00
Lower value to switch the alarm 2 - Aoff	40.00
Delay of the alarm 2 switching time	0 second

ORDER EXAMPLES

Example 1

The code **N20 - 9 1 01 00 8** - means: N20 meter with voltage input on ± 10 V, supply: 85... 253 V a.c., without extra quality requirements, „V" unit

Example 2

The code **N20 - 5 2 38 99 8 + description of non-standard settings**

Parameter	Range/Value
Displayed colour of the upper measured value	red
Displayed colour of the median measured value	green
Displayed colour of the lower measured value	orange
Upper threshold - KpH	44.00
Lower threshold - KpL	40.00
Decimal point	000.00

- means: N20 meter with current input on 4...20 mA, supply: 20...40 V a.c./d.c., executed acc. to given detailed parameter description by the user, without extra quality requirements

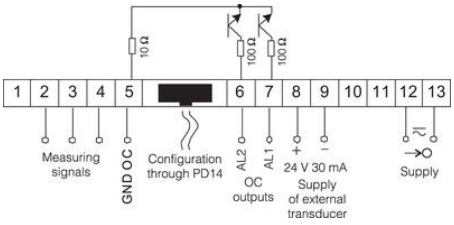
Caution! When ordering a meter with parameters different than standard, one must give values of **ALL** parameters.

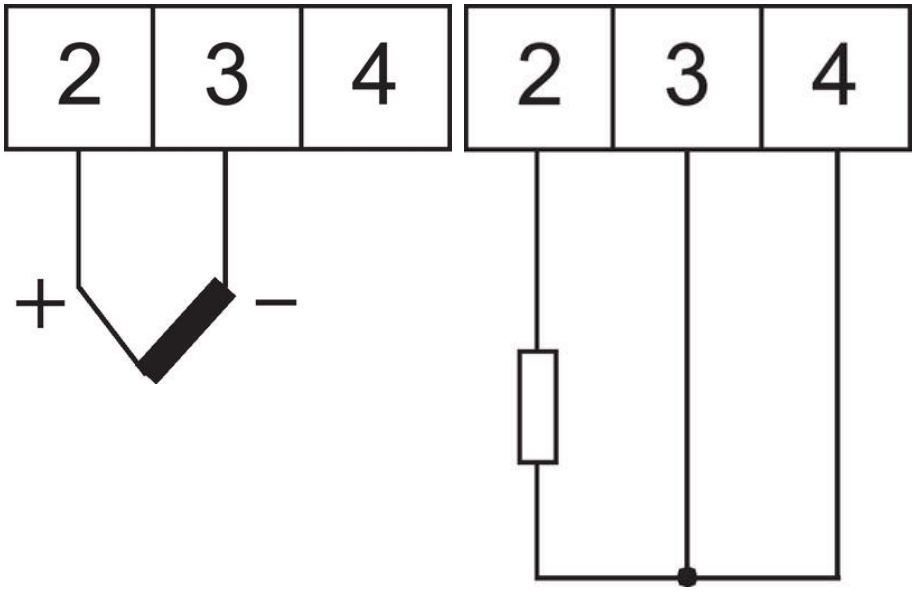
Part numbers have changed from ending with E0 to M0, please be advised any part numbers below that end in E0 will say M0 in the datasheet. The product is the same.

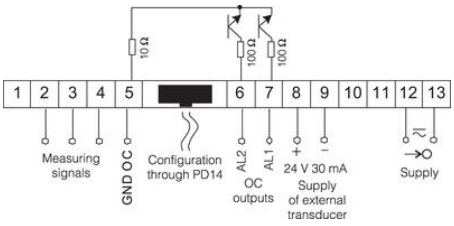
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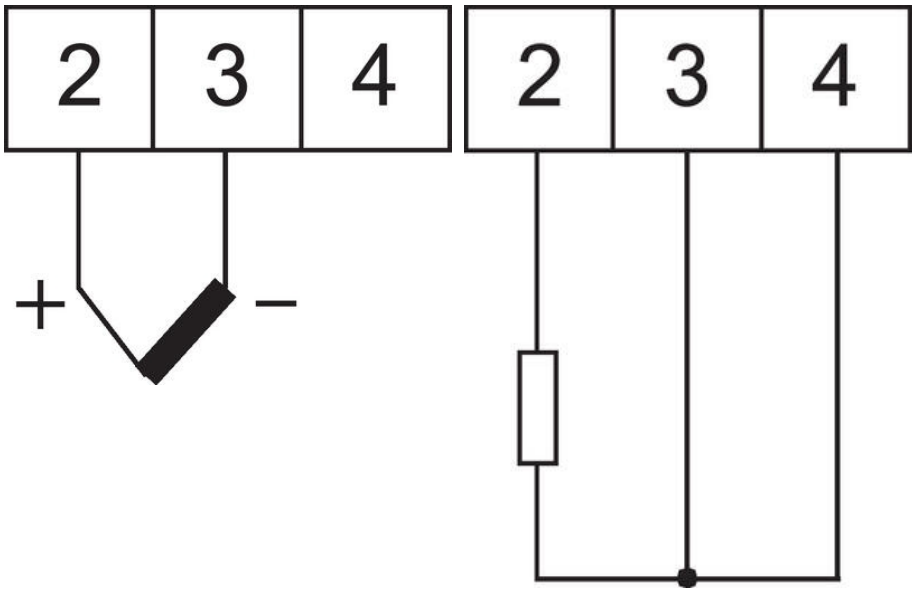
TECHNICAL DATA

Digit height	14 mm
Dimensions	96 x 48 x 64 mm Panel cut-out: 92+0,6 45+0,6 mm
Display	Yes
Input type	±10V
IP class	IP65
Mounting	Panel mount
Number of rows	1
Power consumption	6 VA
Supply voltage	85-253V ac/dc
Type	Without unit,V,A,mV,kV,MV,mA,kA,MA,°C, °F,K,Hz,kHz,Ah,kAh,m/s,µm,mm,cm,m,km,l,l/s,l/h,ms,s,h,N,kN,Pa,hpa,kPa,Mpa,bar,rad,Ω,kΩ,%, °,turns,rps,rpm,rph,m/h,km/h,imp
Weight	0.25 kg


10 Ω
100 Ω
100 Ω
1 2 3 4 5 6 7 8 9 10 11 12 13
Measuring signals
GND OC
Configuration through PD14
AL2
AL1
OC outputs
+
–
24 V 30 mA Supply of external transducer
Supply


2 3 4
+
–
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