N20Z DIGITAL PANEL METER

FEATURES:

PD14 Programmer | eCon | IP65 | Linear char. | 3-color display

INPUTS:

AC | Hz

OUTPUTS:

2 x

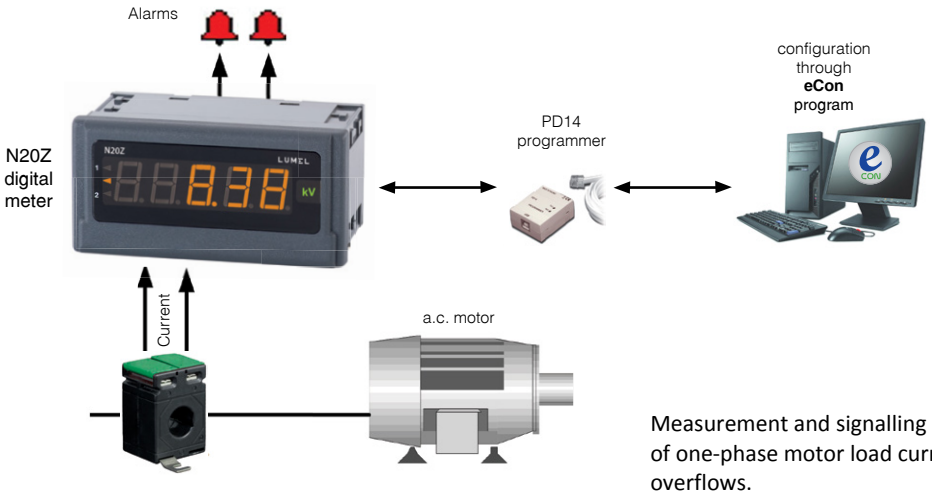
GALVANIC ISOLATION:

Supply | PD14 Programmer



- Measurement of voltage, a.c. current or frequency,
- Three-colour LED display (5 digits, 14 mm high).
- Two alarm outputs of OC type.
- Programmable parameters through the PD14 programmer:
  - recounting of indications (individual characteristic),
  - two alarms of OC type operating in 6 working modes,
  - kind of measured signal: a.c. or a.c. + d.c. (True RMS),
  - display colour programmable in three intervals,
  - precision of displayed results (decimal point),
  - thresholds of displayed overflows,
  - highlight of the unit,
  - measurement averaging time.

EXAMPLE OF APPLICATION



Measurement and signalling of one-phase motor load current overflows.

INPUTS

Kind of input	Measuring range	Parameters	Basic error
Voltage input	1...100...120 V 2.5...250...300 V 4...400...480 V	Input resistance: > 2 MΩ	± (0.5% of range + 1 digit)
Current input	0.01...1...1.2 A 0.05...5...6 A	Input resistance: 50 mΩ ± 10% Input resistance: 10 mΩ ± 10%	± (0.5% of range + 1 digit)
Frequency (in the range of voltages: 24...480 V)	20...500 Hz	Input resistance: > 2 MΩ	± (0.02% of range + 1 digit)

OUTPUTS

Kind of input	Features
Alarm outputs	• 2 alarm outputs of OC type

EXTERNAL FEATURES

Readout field	5 digital LED displays. Indication range -19999...99999 Digit height: 14 mm	Three-colour display (changes of colour depend on the displayed value): red, green, orange.
Weight	< 0.25 kg	
Overall dimensions	96 × 48 × 64 mm	Panel cut-out: $92^{+0,6} \times 45^{+0,6}$ mm
Protection grade (acc. to EN 60529)	From frontal side: IP65	From terminal side: IP10

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RATED OPERATING CONDITIONS

Supply	85...253 V a.c. (45...65 Hz) or d.c., 20...40 V a.c. (45...65 Hz) or d.c.	Power consumption < 6 VA
Temperature	Ambient: -10...23...55°C	Storage: -25...85°C
Relative humidity	< 95%	Condensation inadmissible
Operating position	any	

SAFETY AND COMPATIBILITY REQUIREMENTS

Electromagnetic compatibility	noise immunity	acc. to EN 61000-6-2
	noise emissions	acc. to EN 61000-6-4
Safety requirements		acc. to EN 61010-1

CONNECTION DIAGRAMS

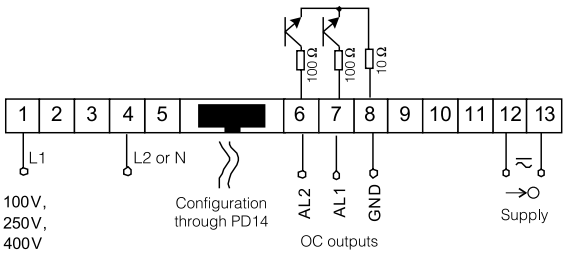


Fig. 1 Electrical connections of the N20Z meter with the measurement of voltage and frequency.

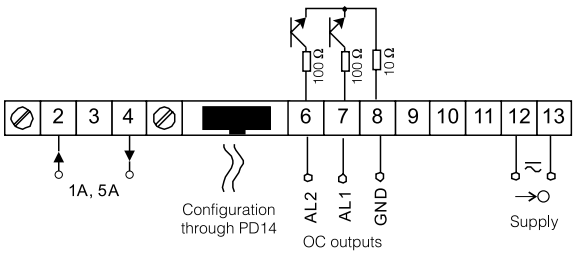


Fig. 2 Electrical connections of the N20Z meter with the measurement of current.

ORDERING

TABLE 1. ORDERING CODES:

N20Z -	X	X	XX	XX	X
Input:					
100 V	1				
250 V	2				
400 V	3				
1 A	4				
5 A	5				
Frequency: 20...500 Hz	6				
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	
Aceptance 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

ORDER EXAMPLES

Example 1

The code **N20Z - 3 1 01 00 8** - means: N20 meter with voltage input on 400 V, supply: 85... 253 V a.c., without extra quality requirements, „V" unit

Example 2

The code **N20Z - 3 1 03 99 8 + description**

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

Highlight of the measured unit	ON
Kind of input	AC
Averaging time	5 s
Upper overflow of measurement	99999
Lower overflow of measurement	-19999
Individual characteristic	ON
Parameter ***a*** of the individual characteristic	0.1
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
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

- means: N20Z meter with voltage input on 400 V, supply: 85...253 V a.c., executed acc. to given detailed parameter description by the user, without extra quality requirements („mV" unit - acc. to table 2).

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