



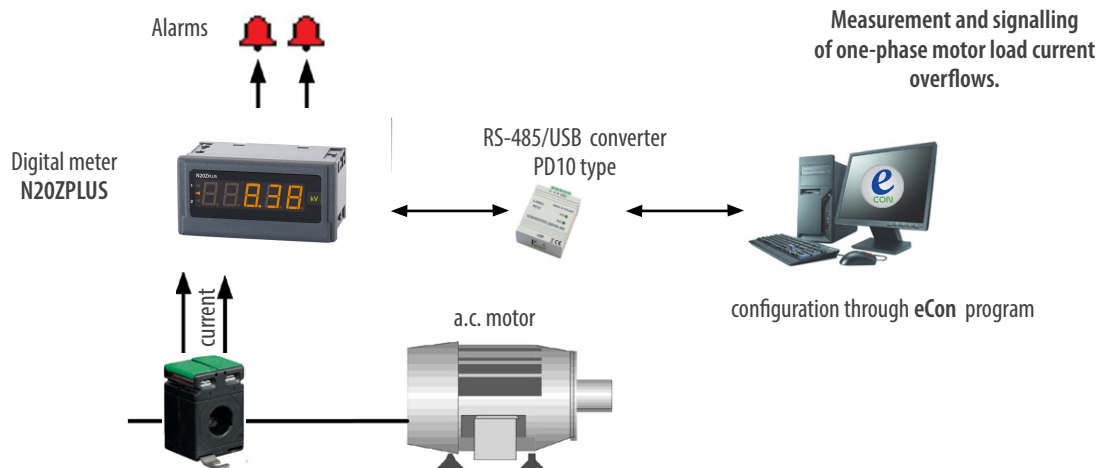
# N20ZPLUS

## - DIGITAL PANEL METER WITH RS-485

- Measurement of voltage, a.c. current or frequency,
- Three-colour LED display (5 digits, 14 mm high).
- **Digital output RS-485 - Modbus RTU protocol.**
- Two alarm outputs of OC type.
- Programmable parameters through RS-485 interface using the free eCon software:
  - 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



FEATURES	INPUTS	OUTPUTS	GALVANIC ISOLATION
MOD BUS eCon IP65 Ind three-colour display	AC Hz	2x RS 485	RS 485 Supply

### TECHNICAL DATA

#### INPUTS

Input type	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)

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## TECHNICAL DATA

### OUTPUTS

Output type	Features
Alarm outputs	• 2 alarm outputs of OC type

### DIGITAL INTERFACE

Interface type	Transmission protocol	Modes	Baudrate
RS-485	MODBUS RTU	8N2, 8E1, 8O1, 8N1	4.8, 9.6, 19.2, 38.4, 57.6, 115.2 kbit/s

### EXTERNAL FEATURES

Readout field	5 digit LED display - 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 x 48 x 64 mm	panel cut-out: 92 <sup>+0.6</sup> x 45 <sup>+0.6</sup> mm
Protection grade (acc. to EN 60529)	from frontal side: IP65	from terminal side: IP 10

### RATED OPERATING CONDITIONS

Supply	85...253 V a.c. / d.c., 20...40 V a.c. / 20...60 V 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

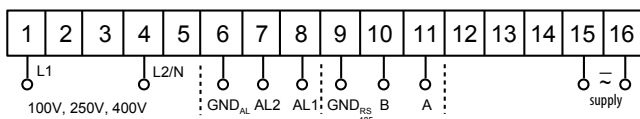


Fig. 1 Electrical connections of the N20ZPLUS meter with the measurement of voltage and frequency.

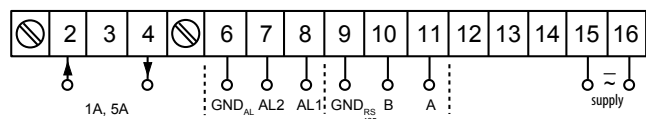


Fig. 2 Electrical connections of the N20Z meter with the measurement of current.

## ORDERING

TABLE 1. ORDERING CODE:

	N20ZPLUS -	X	X	XX	XX	X	X
<b>Input:</b>							
100 V	1						
250 V	2						
400 V	3						
1 A	4						
5 A	5						
frequency 20...500 Hz	6						
<b>Supply:</b>							
85...253 V a.c./d.c.	1						
20...40 V a.c./20...60 V d.c.	2						
<b>Unit:</b>							
unit code number acc. to table 2				XX			
<b>Version:</b>							
standard						00	
custom-made						XX	
<b>Language:</b>							
Polish							P
English							E
<b>Acceptance test:</b>							
without additional quality requirements							0
with an extra quality inspection certificate							1
with an extra calibration certificate							2
acc.to customer's request*							X

\* only 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	obr
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		
15	kAh	32	kPa	XX	on order <sup>1)</sup>
16	m/s	33	MPa		

<sup>1)</sup> -only after agreeing with the manufacturer

#### ORDERING EXAMPLE:

The Code N20ZPLUS - 3 1 01 00 P 0 - means: N20ZPLUS meter with voltage input on 400V, supply 85...253 V a.c., standard version, user's manual in English, without additional quality requirements. Unit,V"