

N17Z RAIL-MOUNTED DIGITAL METER

FEATURES:

PD15

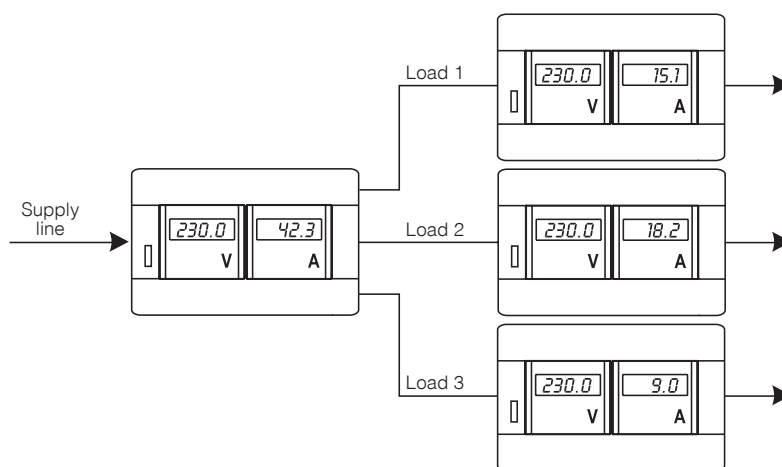


- Measurement of true RMS current and voltage.
- Measurement of frequency.
- Direct or indirect measurement.
Current and voltage ratio programming by means of PD15.
- Assembling of meters on a 35 mm rail,
- Meter overall dimensions enable the assembly together with typical connection elements used in power engineering.
- 3 or 4-digit display in red or green colour.

INPUTS:



EXAMPLE OF APPLICATION



INPUTS

Kind of input	Measuring range	Parameters	Basic error	
Voltage input	1...100 V 3...300 V 5...500 V	Input resistance: $\geq 600 \text{ k}\Omega$ Input resistance: $\geq 1.8 \text{ M}\Omega$ Input resistance: $\geq 3 \text{ M}\Omega$	0.5% of range + 1 digit	Frequency of measuring signal: 30...500 Hz
Current input	0.01...1 A 0.05...5 A 0.1...10 A 0.4...40 A	Input resistance: $20 \text{ m}\Omega \pm 10\%$ Input resistance: $4 \text{ m}\Omega \pm 10\%$ Input resistance: $2 \text{ m}\Omega \pm 10\%$ Input resistance: $0.5 \text{ m}\Omega \pm 10\%$	0.5% of range + 1 digit	Frequency of measuring signal: 30...500 Hz
Frequency	30...500 Hz	Input resistance: $\geq 3 \text{ M}\Omega$	0.1% of range + 1 digit	Amplitude of measuring signal: 5...600 V

EXTERNAL FEATURES

Readout field	3 LED displays - digit height: 14 mm - red or green, indication range: -199...999 4 LED displays - digit height: 10 mm - red or green, indication range: -1999...9999	
Weight	< 0.25 kg	
Overall dimensions	52.5 × 90 × 64.5 mm	Bezel: 52.5 × 45 mm
Protection grade (acc. to EN 60529)	IP20	
Fixing	on a 35 mm rail	acc. to EN 60715

RATED OPERATIONS CONDITIONS

Supply voltage	230 V 50/60 Hz $\pm 10\%$, 110 V 50/60 Hz $\pm 10\%$, 24 V 50/60 Hz $\pm 10\%$, 24 V d.c. $\pm 10\%$,	Power consumption < 6 VA
Temperature	ambient: -10...23...50°C	Storage: -25...85°C
Relative humidity	< 95%	Condensation inadmissible
Operating position	any	

GALVANIC ISOLATION:



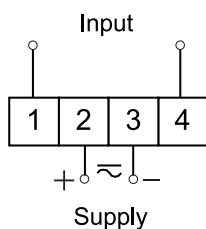
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SAFETY AND COMPATIBILITY REQUIREMENTS

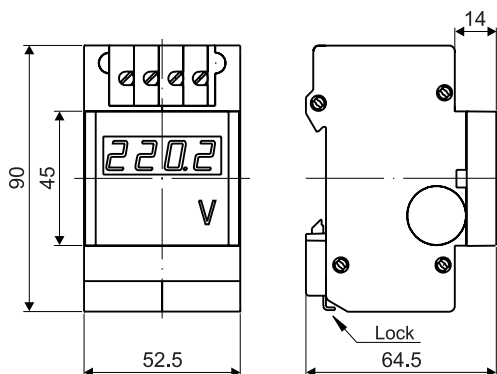
Electromagnetic compatibility	noise immunity	acc. to EN 61000-6-2
	noise emissions	acc. to EN 61000-6-4
Installation category	III	acc. to EN 61010-1
Pollution grade	2	
Phase-to-earth operating voltage	600 V a.c.	

CONNECTION DIAGRAM



Electrical connections of N17Z meter.

EXTERNAL DIMENSIONS



SEE ALSO:



Current transformers from 5 A to 6 kA.



Analog meters of EA series fulfilling IP65 requirements from the frontal side.



N24 and N25 meters (indicators) for measurements of temperature, d.c. or a.c. voltage and current, and frequency.

ORDERING

TABLE 1. ORDERING CODES:

N17Z -	XX	X	X	X	X	XX	...
Input:							
100 V	00						
300 V	01						
500 V	02						
1 A	03						
5 A	04						
10 A	05						
40 A	06						
frequency 30...500 Hz	07						
on order*	XX						
Number of digits:							
3 digits, 14 mm high		3					
4 digits, 10 mm high		4					
Display colour:							
red					R		
green					G		
on order*					X		
Supply:							
230 V 50/60 Hz					1		
110 V 50/60 Hz					2		
24 V 50/60 Hz					3		
24 V d.c.					4		
on order*					X		
Acceptance tests:							
without extra quality requirements						8	
with an extra quality inspection certificate						7	
acc. to customer's request*						X	
Unit:							
unit code number acc to the table 2							XX

Description 1 (introduce in case of another indication than the meter input range) e.g. if for 5 we want the indication 300, write: 5/300.

Description 2 (as standard, the meter measures the a.c.+d.c. signal, write if it is to be different)
 a.c. - only a.c. measurement
 or d.c. - only d.c. measurement

* - after agreeing with the manufacturer

TABLE 2. CODES OF HIGHLIGHTED UNITS:

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

1) - after agreeing with the manufacturer

ORDERING EXAMPLES:

Example 1:

Code: N17Z - 01 4 G 1 8 00 means:

- N17Z** - rail mounted digital meter
- 01** - voltage input: 3...300 V
- 4** - 4-digit display (10 mm high)
- G** - green display colour
- 1** - supply voltage: 230 V, 50/60 Hz
- 8** - without extra quality inspection requirements
- 00** - unit code acc. to the table 2: V

Meter for direct measurement with indications acc. to the input range. The meter measures True RMS signal (a.c.+d.c.)

Example 2:

Code: N17Z - 04 3 R 3 8 01 5/150 A a.c.:

- N17Z** - rail mounted digital meter
- 04** - current input: 0.05... 5 A range
- 3** - 3-digit display (14 mm high)
- R** - red display colour
- 3** - supply voltage: 24 V, 50/60 Hz
- 8** - without extra quality inspection requirements
- 01** - unit code acc. to the table 2: A

5/150 A a.c. - the meter recounts the measuring range 0...5 A into 0...150 A. Programmed indication range: 0... 150 A. The meter measures only the a.c. signal (without the constant component)



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