

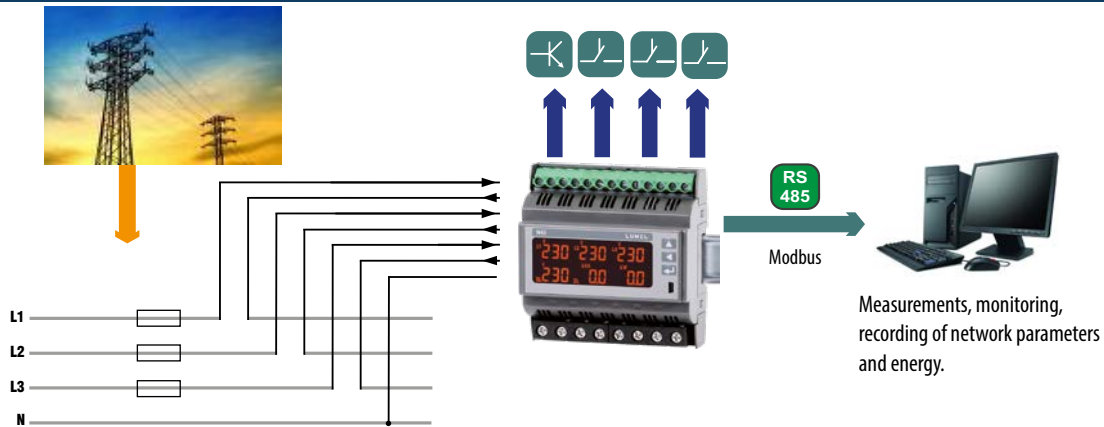


N43 - RAIL MOUNTED POWER NETWORK METER

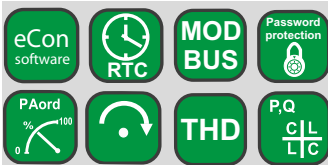


- For direct (up to 63A) and indirect measurement, in 3 phase 4 wire/ 3 wire balanced and unbalanced systems.
- The measurement of: rms values of voltage and current, active, reactive and apparent power, active, reactive energy, power factors, frequency, THD.
- Indications considering values of programmed ratios.
- Programmable display pages.
- 3 programmable alarm outputs and 1 pulse output in standard version.
- Pulse output for monitoring of 3-phase active energy.
- Analog outputs after adding S4A0 module.
- Digital transmission to the master system through the RS-485 interface (MODBUS).
- USB for configuration by using free eCon software.
- Modern design allows for installation of the meter in modular switchgear in accordance with EN 62208 (meter has a width of 6 modules) on 35 mm rail.

EXAMPLE OF APPLICATION



FEATURES



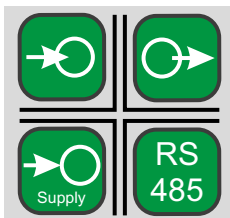
INPUT



OUTPUTS



GALVANIC ISOLATION



MEASURED QUANTITIES AND MEASURING RANGES

Measured value	Measuring range	L1	L2	L3	Σ	Accuracy**
Current In 1 A ~ 5 A ~ 63A ~	0.002... 1.20 A or kA ~ * 0.010 ... 6.00 A or kA ~ * 0.10...76.0 A ~	•	•	•		±0.5% r
Voltage L-N 57,7 V ~ 230 V ~ 290 V ~	2.80...70.0 V or kV* 10.0 ... 276 V ~ 14.0 ... 348 V ~	•	•	•		±0.5%
Voltage L-L 100 V ~ 400 V ~ 500 V ~	5.0 ... 120 V or kV* ~ 20.0 ... 480 V ~ 25 ... 600V ~	•	•	•		±1%
Frequency	47.0 ... 63.0 Hz				•	±0.5%
Active power	0.00 ... 999 kW, kWh ou MWh	•	•	•	•	±1%
Reactive power	0.00 ... 999 VAR, kVAR ou MVAR	•	•	•	•	±1%
Apparent power	0.00 ... 999 VA, kVA ou MVA	•	•	•	•	±1%r
Active energy (import or export)	0.00 ... 999999.9 kWh ou MWh				•	±1%
Reactive energy (capacitive or inductive indication)	0.00 ... 999999.9 kVARh ou MVARh				•	±1%
Power factor PF	-1 ... 0 ... 1	•	•	•	•	±1%
Tangent φ	-1.2 ... 0 ... 1.2	•	•	•	•	±1%

* depending on set current ratio : (tr_U (ratio of the voltage transformer: 0.1...4000.0), tr_I (ratio of the current transformer: 1 ... 10000)
** calculated for the nominal range In, Un

OUTPUTS

Kind of input	Properties
Relay output	3 x programmable relay output, normally open voltageless contacts, load capacity 250 V~/0.5 AV~
Pulse output	1 x pulse output, OC type, passive (for monitoring of active energy)

ND43 - RAIL MOUNTED POWER NETWORK METER

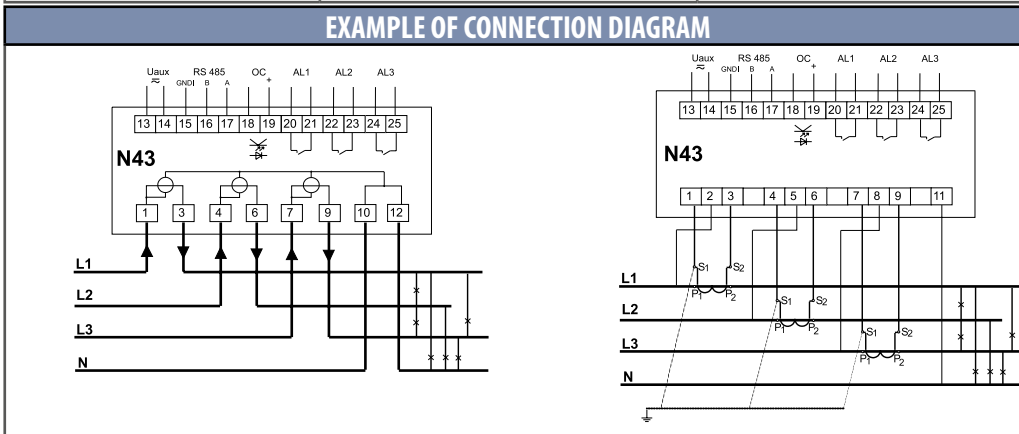


DIGITAL INTERFACE			
Interface type	Transmission protocol	Mode	Baud rate
RS-485	MODBUS RTU	8N2, 8E1, 8O1, 8N1	4.8; 9.6; 19.2; 38.4 kbit/s
USB 1.1/2.0	MODBUS RTU	8N2	9.6 kbit/s

EXTERNAL FEATURES	
Readout field	LCD display, monochromatic with backlight
Weight	< 0.3 kg
Overall dimensions	105 x 110 x 60 mm
Protection grade (acc. to EN 60529)	from housing side: IP50 from terminal side: IP00

RATED OPERATING CONDITIONS	
Supply voltage	85 ... 253 V a.c., 90 ... 300 V d.c. 20 ... 40 V a.c., 20 ... 60 V d.c.
Temperature	ambient: 10...23...55°C
Relative humidity	0 ... 95% inadmissible condensation
Operating position	any
External magnetic field	0...40...400 A/m
Short duration overload	voltage inputs (5 sec): 2Un current inputs: - 1 sec. 50 A (for version In 1 A/ 5 A) - 1 sec. 630 A (for version In 63 A)
Power consumption	- in the supply circuit < 4 VA - in the voltage and current circuits < 2 VA

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



SEE ALSO



Free eCON software



Current transformers.



P43 - three-phase transducer of power network parameters.

For more information about DITEL products please visit our website:

www.ditel.es

ORDERING						
RAIL MOUNTED NETWORK METER N43 -						
	X	X	X	XX	E	X
Current input In:						
1 A /5A (X/1;X/5)		1				
63 A		2				
Voltage input (phase/ phase-to-phase) Un:						
3 x 57.7/100 V			1			
3 x 230/400 V			2			
3 x 290/500 V			3			
Auxiliary supply :						
85 ... 253 V a.c., 90 ... 300 V d.c.				1		
20 ... 40 V a.c., 20 ... 60 V d.c.				2		
Version:						
standard					00	
custom-made*					XX	
Acceptance tests:						
without extra quality requirements						0
with an extra quality inspection certificate						1
acc. to customer's request*						X
* - after agreeing with the manufacturer						

EXAMPLE OF ORDER:

The code **N43 - 2 2 1 00 E 0** means:
 N43 - meter of network parameters of N43 type
 2 - current input: 63 A
 2 - input voltage (phase/phase-to-phase)
 Un = 3 x 230 V / 400 V
 1 - auxiliary supply 85...253 V a.c., 90...300 V d.c.
 00 - standard version
 E - all descriptions and user's manual in English
 0 - without extra quality requirements.



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DS-N43_EN_20190109