OEM AUTOMATIC

OEM Automatic Ltd
Address: Whiteacres, Whetstone Leicester, LE8 6ZG
0116 284 9900 | Orders@oem.co.uk | www.oem.co.uk

P43 PROGRAMMABLE TRANSDUCER

3-phase transducer of power network parameters

LUMEL
EVERYTHING COUNTS

P43221200
P43 Trans,5A,3 x 230/400V,85-253V ac/dc,2x Ouputs
2x Relays

- Inputs for monitoring 3 phase power networks
- Suitable for balanced or unbalanced systems
- 4 programmable analogue outputs -20 - 0 - +20mA
- Pulse output for consumption monitoring

PRODUCT DESCRIPTION

The P43 transducer is a programmable digital instrument destined for measurement and parameter conversion of 3 or 4-wires power networks, in balanced and unbalanced systems.
It ensures the measurement and conversion of measured values upto 4 standard analog current signals. The value of each measured quantity can be transmitted to the master system by the RS-485 or USB interface. Two relay outputs signal the overflow of selected quantities, and the pulse output can be used for the consumption monitoring of the 3-phase active energy.

Maximal and minimal values are measured for all quantities. Additionally, there is the possibility to accommodate the transducer to external measuring transformers. The actualization time of all available quantities does not exceed 1 second.

All quantities and configuration parameters are accessible through the RS-485 interface and the USB interface. Transducer output signals are galvanically isolated from the input signal and the supply. The transducer housing is made of a self-extinguishing plastic. Outside the transducer, there are socket-plug screw terminal strips.

Quantities measured and calculated by the transducer:
• phase voltages U1, U2, U3
• phase–to-phase voltages U12, U23, U31
• 3-phase mean voltage U
• phase-to-phase mean voltage UPP
• three-phase mean current I
• phase currents I1, I2, I3
• phase active powers P1, P2, P3
• phase reactive powers Q1, Q2, Q3
• phase apparent powers S1, S2, S3
• phase active power factors Pf1, Pf2, Pf3
• reactive/active ratio of power factors $tg\phi1$, $tg\phi2$, $tg\phi3$
• three-phase mean power factors Pf, $tg\phi$
• three-phase active, reactive and apparent powers P, Q, S
• active mean power (e.g.15 min.) Pav
• three-phase active and reactive energy Ept, Eqt,
• frequence f

Please refer to the data sheet for ordering keys and contact us for more information.

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Supply
RS 485
Out_pulse Out1 Out2 Out3 Out4
GND B A
+ + + + +

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

P43

1 2 3 4 5 6 7 8 9 11

L1
L2
L3
N

S1 S2
P1 P2
S1 S2
P1 P2
S1 S2
P1 P2

Supply RS 485 OUimp AL1 AL2 AL3 AL4
GND B A +

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

Version without analog outputs
4 relays

Supply RS 485 OUimp AL1 AL2 OUA3 OUA4
GND B A + + +

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

Version witht 2 analog outputs
2 relays

Supply RS 485 OUimp OUA1 OUA2 OUA3 OUA4
GND B A + + + +

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

Version witht 4 analog outputs
without relays

120
90
35
93
100
P43
USB

Supply
RS 485
Out_pulse Out1 Out2 Out3 Out4
GND B A
+ + + + +

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

P43

1 2 3 4 5 6 7 8 9 11

L1
L2
L3
N

S1 S2
P1 P2
S1 S2
P1 P2
S1 S2
P1 P2

Supply RS 485 OUimp AL1 AL2 AL3 AL4
GND B A +

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

Version without analog outputs
4 relays

Supply RS 485 OUimp AL1 AL2 OUA3 OUA4
GND B A + + +

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Version witht 2 analog outputs
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