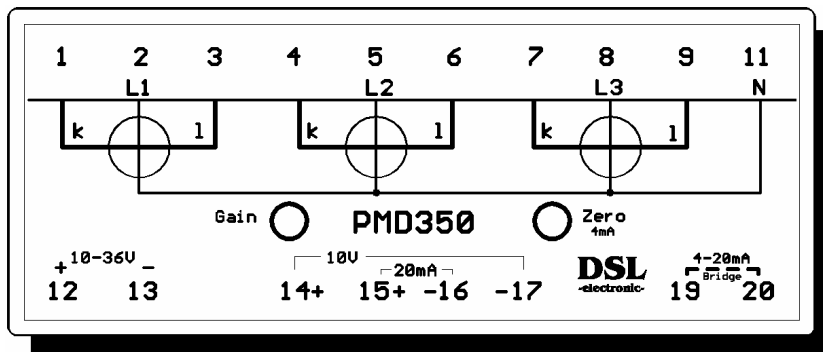


Active Power Transducer PMD350 (5A)
"Four conductors, asymmetrical" PMD310 (1A)
with auxiliary voltage 10 – 36VDC



Function

The measuring transducers PMD350 and PMD310 have three internal 4-quadrant multipliers which record the active power of each phase of a three-phase network connected with high precision. The actual active power is evaluated precisely, even with strongly distorted sine waves and failing half-sine waves. The total power is output at the 20mA / 10V outputs. Negative power (reverse power) is output with negative current (-20mA, -10V). This unit is supplied with auxiliary voltage 10 – 36VDC and works under extreme low measuring voltages.

Application

The unit is used in power supply units, emergency power supplies and interconnected networks for measuring, displaying or monitoring the active power in a 3-phase network. The input values come from power or current transformers as required. The 20mA and 10V signal can be taken simultaneously as the output value, allowing the simultaneous connection of 2 different display circuits (these must have potential separation). The voltage inputs require an N conductor (4-conductor network). The measuring transducer PMD350 (PMD310) is set according to user specifications. The maximum permissible current for the unit is 5A (1A) per phase. The maximum current without current transformer is 3464W (693W). When current transformers are connected, the currents are in the range of 3-5A (0.7-1A). The power is set in the factory according to customer specifications: rated voltage, rated power, turns ratio of current transformer. The settings (power and zero point got 4mA) can be adjusted from the front.

Technical Data

Typ	Active Power Transducer PMD350 (5A), PMD310 (1A), 4-wire asymm.
Construction	Plastic housing on 35mm hat rail as per DIN EN 50022
Material of housing	Bayblend FR 1439/0240 modified ABS with burning protection UL 94 VO
Dimension, Weight	104x68x110mm (WxHxD), ca. 0,9 kg
Rated voltage	231V (L-N) +/- 20%, 50/60Hz, one phase voltage (L-N) is need to operate the unit, other voltages on request
Auxiliary Voltage	10-36VDC 3W potential separation 500VAC 1min
Measuring delay	appr. 250 ms (10-90%)
Output signal	+/- 20mA (4 - 20mA) to 500 Ohm (max.) and +/- 10V (10mA max.) 20mA and 10V output circuits must be potential separated
Class of accuracy	1,0%
Power consumption	2,5 VA
On period	100 %
Connecting terminals	for wire connection up to 2,5 mm ²
Type of protection	Housing IP 40 , Terminals IP 20 (VDE 0106T100/VBG4)
Temperature range	-10 °C to +55°C, 95% Humidity
Mains isolating	EN 60 742 (Safety transformers)
General Regulations	EN 50 178 (electrical units in power current installation)
Radio interference	EN 55 022/B
EMV	EN 61000 und EN V 50 140
Installation position	Any position
Maintenance	Free of maintenance