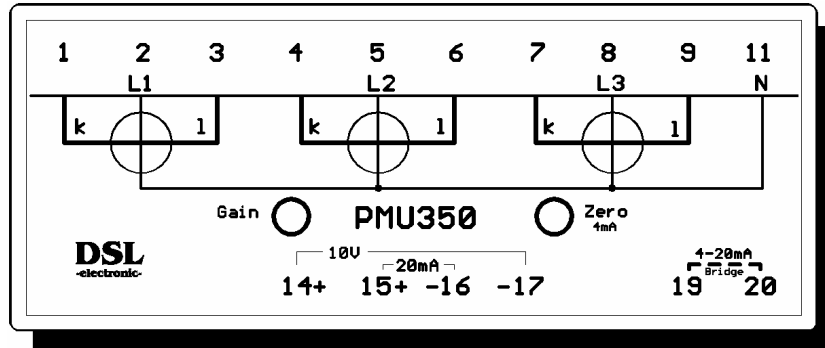


Active Power Transducer PMU353 (5A)
"Three conductors, asymmetrical" PMU313 (1A)



Function

The measuring transducers PMU353 and PMU313 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). **The unit still provides the correct active power if one voltage phases fail.** The unit is supplied with auxiliary voltage via any L – L phase (400V).

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 PMU353 (PMU313) 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 PMU353 (5A), PMU313 (1A), 3-conductor 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 |
| Measuring delay | appr. 100 ms |
| Output signal | +/- 20mA (4 - 20mA) to 500 Ohm (max.) and +/- 10V (10mA max.) 20mA and 10V output circuits must be potential seperated |
| 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 |