

Programmable transducer PQ430RT combined for active and reactive power

The PQ430 is a μ P based programmable transducer for simultaneously measuring of active and reactive power in a three phase system. 3 or 4 wire unbalanced load. Measuring range and 3 / 4 wire system (2 or 3 element) is programmable via jumpers and a RS 232 port using a PC.

The transducer is connected to the mains directly or via measuring transformers.

It has galvanic separation between in- and output and power supply.

The transducer is made for mounting in 19" rack and has a width of 8 TE, which gives place for 10 modules in a rack.

The transducer is manufactured according to standard IEC60688.



Technical data - Type PQ430RT

Input

| | |
|----------------------|---|
| Voltage | 100,110,115,120 V via jumper |
| Consumption (burden) | $U_{in} \times 1 \text{ mA}$, VA per phase |
| Current | 1 or 5 A via jumper |
| Consumption (burden) | <0,05 VA per phase |
| Frequency | 50 or 60 Hz |
| Overload | Current $2 \times I_{in}$ continuously $10 \times I_{in}$ during 15 s, $40 \times I_{in}$ during 1 s but 200 A max. Voltage $1,5 \times U_{in}$ continuously, $2 \times U_{in}$ during 10 s |

Output

| | |
|--------------------|-----------------------------------|
| Output signal | $\pm 2,5 \text{ mA}$, or 4-20 mA |
| Load | max 15 V |
| Current limitation | <30 mA |
| Ripple | <1% p.p. |

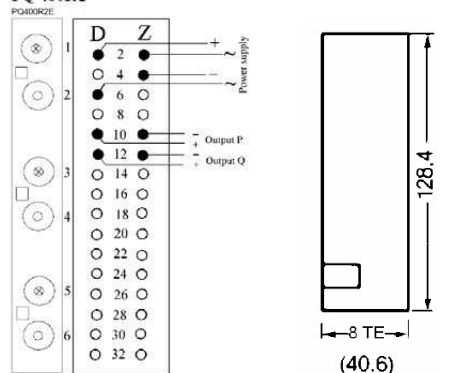
Standards

General standards for measuring transducers IEC60688

| | |
|------------------|---|
| EMC | emission EN50081-2 immunity EN 50082-2 |
| Safety | IEC61010-1, IEC1010-1 |
| Inputs | overvoltage cat. III |
| Outputs | overvoltage cat. II |
| Pollution degree | 2 |

PQ430RT has **test plugs** in front to provide a mirror image of the output signals

PQ 430RT

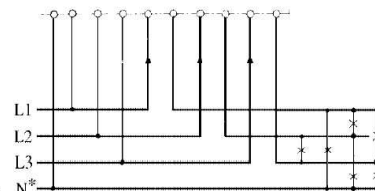


16D 28D 24D 20D 1 2 3 4 5 6

PQ430RT

Three phase, 4 wire unbalanced load

*) Connect neutral if available



General data

Accuracy

| | |
|-----------------------|--|
| Class | 0,2 according to IEC60688 |
| Linearity error | <0,1% |
| Response time 0-90% | <100 ms |
| Temperature influence | <0,05% / 10°C |
| Temperature range | -25...+60 °C operation -40...+70 °C storage |
| Test voltage | 4 kV, 50 Hz, 1 min |
| Power supply | 24 – 130 V DC $\pm 20\%$, ca 4 W |
| Weight | 0.6 kg |