

ACTIVE POWER



Time-division-multiplication (TDM) principle of computing the AC power inputs to a corresponding DC output value. The measurements of active power of single or three phase balanced or unbalanced systems, are precisely converted to a highly accurate linear DC voltage or current output.

Model

- T25-W10** - single phase watt transducer
- T25-W12** - 3ph 3w balanced load watt transducer
- T25-W13** - 3ph 4 w balanced load watt transducer
- T25-W20** - 3ph 3w unbalanced load watt transducer
- T25-W30** - 3ph 4w unbalanced load watt transducer

General Specifications

Test voltage

4kV AC rms 1min between terminal/case
2kV AC rms 1min between
input/output/auxiliary according to IEC801-4

Impulse test

5kV, 1.2/50 μ s according to IEC 255-4

Noise test

2.5kV, 1MHz according to IEC 255-22-1

Radio Screening

RFI degree complies with VDE0875

Working condition

-5 °C to 60 °C, 20-99% RH
non condensing

Storage condition

-20 °C to 70 °C, 20-99% RH
non condensing

Humidity

JWE operation class according to
DIN 40040

Stability

100 ppm / °C, < \pm 0.2% drift per year,
non cumulative

Magnetic effect

<0.05% change 1M centre 100AT,
synchronized with line frequency

Aux power effect

<0.005% per volt change

Technical Specifications

Input

Voltage

69V (3ph 4w), 120V, 240V or
415V, \pm 25%

Burden

0.2VA

permissible overload

1.25 X rated voltage continuous

Current

1A, 5A

Burden

0.3VA typically

permissible overload

2 X rated continuous,
10 X rated - 10secs,
25 X rated - 2 secs,
50 X rated - 1 sec.

Frequency

50 or 60 Hz, \pm 2hz

Output

Output ranges

0 ... 1 mA into 0-10k Ω
0 ... 5 mA into 0-2k Ω
0 ... 10mA into 0-1k Ω
0 ... 20 mA into 0-500 Ω
4 ... 20 mA into 0-500 Ω

0 ... 1V, min 200 Ω

0 ... 5V, min 1k Ω

0 ... 10V, min 2k Ω

1 ... 5V, min 1k Ω

2 ... 10V, min 2k Ω

(other ranges on request)

Accuracy (23 \pm 5 °C)

\pm 0.2 % RO according to IEC 688-1

Output load

current - 10V drop max.
voltage - 5mA drive max.

Ripple Factor

less than 0.5% p-p

Response time

<400ms

Output Adjustment

span & zero adjustments where applicable

Auxiliary Power Supply

Standard Range

110V, 220V \pm 20% 50/60Hz, < 7VA

Options

self power and other AC power supplies up to
440V ac on request. DC powered models
available at additional costs

Physical Specifications

Dimensions

100W x 78H x 116D mm

Enclosure code

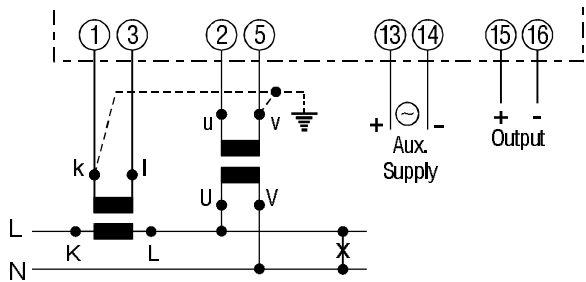
IP 50 (case)

IP 30 (terminal)

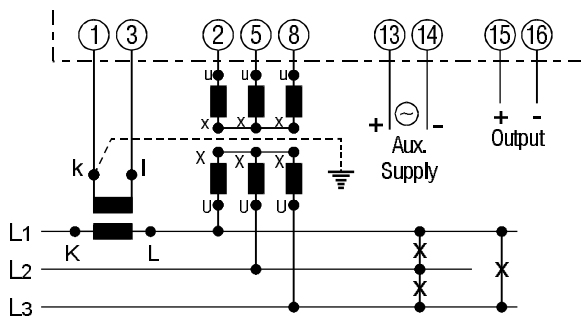
according to IEC 529/DIN40050

Wiring Connections

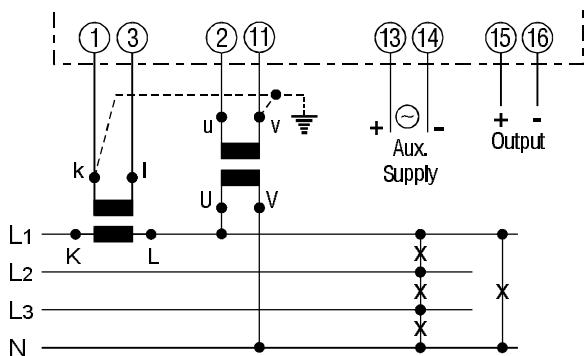
T25-W..



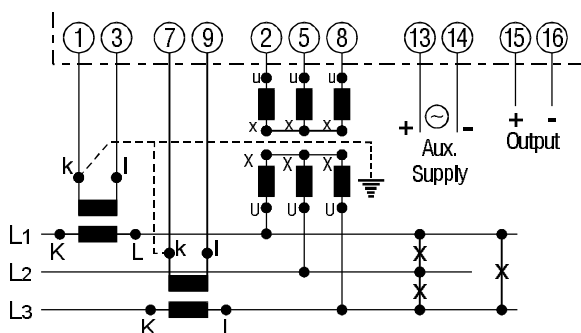
Single Phase ~ T25-W10



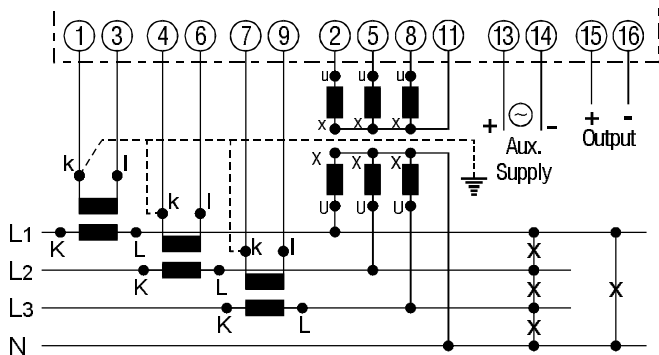
3Phase 3Wire Balanced Load
T25-W12



3Phase 4Wire Balanced Load
T25-W13



3Phase 3Wire Unbalanced Load
T25-W20



3Phase 4Wire Unbalanced Load
T25-W30

★ Voltage Transformers & Auxillary Power Supply are shown where applicable.

★ Current Transformer's primary windings are designated in capital K & L which are also commonly represented as P1 & P2 respectively. Its secondary windings are termed k & l which are respectively similar to S1 & S2.

Dimensional Drawings

