DAT 25

POWER-LINE TRANSDUCERS

T25-WB

ACTIVE & REACTIVE POWER

T25-WB is a combined watt and var electronic transducer utilising the time-division (TDM) principle of computing the AC active & reactive power input to produce two corresponding DC output value from a single unit. , available for Unidirectional and Bidirectional.

Models

T25-WB12	-	3ph 3w balanced load watt & var transducer
T25-WB13	-	3ph 4w balanced load watt &var transducer
T25-WB20	-	3ph 3w unbalanced load watt &var transducer
T25-WB30	-	3ph 4w unbalanced load watt &var transducer

General Specifications

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

Impulse test
5kV, 1.2/50µs 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
applicable
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, < ℘ 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
150V, 300V & 500V
415V, ± 25 %

burden
0.2VA

permissible overload
1.25 X rated current continuous,

Current
1A, 5A

burden
0.3VA / element

permissible overload
2 X rated continuous,
10 X rated - 10 sec,

25 X rated - 2 sec,
50 X rated - 1 sec,

Frequency
50 or 60 Hz ± 2Hz

Output

0…1 mA into 0-10kΩ
0…5 mA into 0-2kΩ
0…10mA into 0-1kΩ
0…20 mA into 0-500Ω
4…20 mA into 0-500Ω

0…1V, min 200Ω
0…5V, min 1kΩ
0…10V, min 2kΩ
1…5V, min 1kΩ
2…10V, min 2kΩ
(Other ranges on request)

Accuracy (23 ±5 °C)
± 0.2%(avg.) ±0.4% (RMS) 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

Auxiliary Power Supply

Standard Range
110Vor 220V ± 20% 50/60Hz,

Options
self power and other AC power supplies models available at additional costs

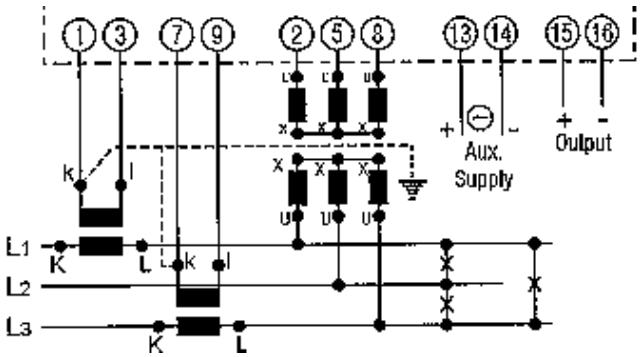
Physical Specifications

Dimensions
100W x 78H x 116D mm

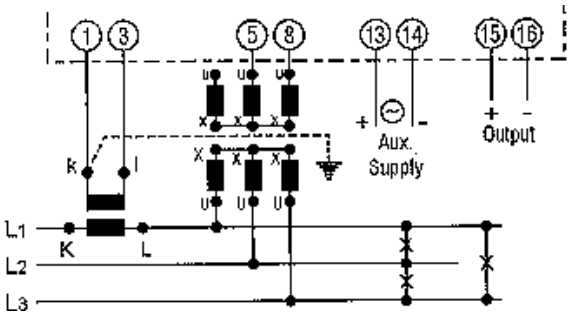
Enclosure code
IP 50 (case)
IP 30 (terminal)
according to IEC 529/DIN40050

Wiring Connections

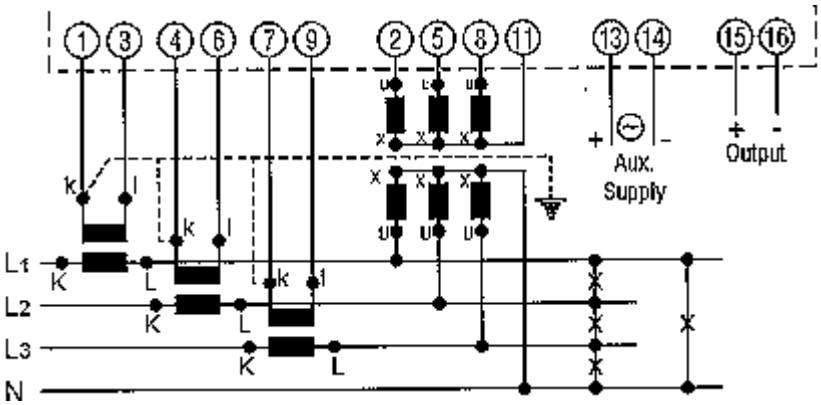
T25-WB..



3Phase 3 or 4Wire Balanced Load
T25-B12/B13



3Phase 3Wire Unbalanced Load
T25-B20



3Phase 4Wire Unbalanced Load
T25-B30

- **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