

# DAT 25

**POWER-LINE TRANSDUCCERS**

## REACTIVE POWER



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

### Models

- T25-B12 - 3ph 3w balanced load var transducer
- T25-B13 - 3ph 4w balanced load var transducer
- T25-B20 - 3ph 3w unbalanced load var transducer
- T25-B30 - 3ph 4w unbalanced load var transducer

### General Specifications

**Test voltage**  
4kV rms 1min between terminal/case  
2kV rms 1min between input/output/auxiliary according to IEC 801-4

**Impulse test**  
5kV, 1.2 /50 $\mu$ 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 , <math>\pm 0.2\%</math> drift per year, non cumulative

**Magnetic effect**  
<math><0.05\%</math> change 1M centre 100AT, synchronized with line frequency

**Aux power effect**  
<math><0.005\%</math> per volt change

### Technical Specifications

**Input Current**  
1A, 5A & 10A (or request)

**Burden**  
0.3VA/element  
1VA/element (for AS)

**permissible overload**  
2X rated current continuous,  
10X rated current - 10secs,  
25X rated current - 2 secs,  
50X rated current - 1 sec

**Frequency**  
50 or 60 Hz  $\pm$  2hz

**Output Output ranges**  
0...1mA into 0-10k $\Omega$   
0...5mA into 0-2k $\Omega$   
0...10mA into 0-1k $\Omega$   
0...20mA into 0-500 $\Omega$   
4...20mA into 0-500 $\Omega$

0...1V, min 200 $\Omega$   
0...5V, min 1 $\Omega$   
0...10V, min 2k $\Omega$   
1...5V, min 1k $\Omega$   
2...10V, min 2k $\Omega$   
(or request)

**Accuracy (23  $\pm$  5 °C)**  
 $\pm 0.5\%$  (avg.)  $\pm 0.4\%$  (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**  
<math><400\text{ms}</math>

**Output Adjustment**  
span & zero adjustments where applicable

### Auxiliary power supply

**Standard Range**  
110,115,125,220V  $\pm$  20% 50/ 60Hz,

<math><3\text{VA}</math> (for AL)  
<math><8\text{VA}</math> (for 3A)

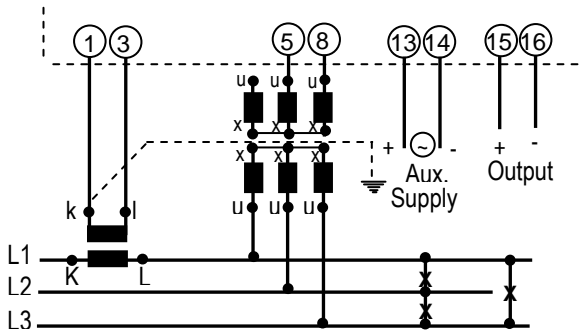
**Options**  
self power and other AC power supplies up to 440V ac on request.  
DC powered models available at additional costs

### Physical Specifications

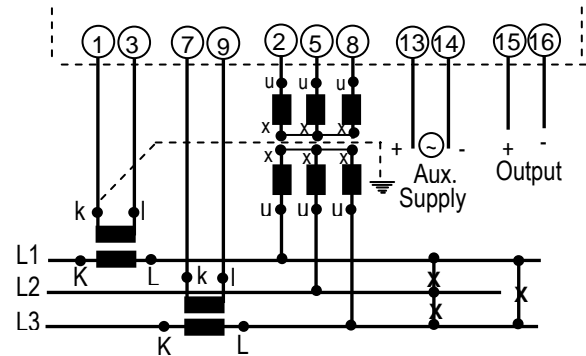
**Dimensions**  
AS/AL  
45Wx78Hx116D mm  
3A  
100Wx78Hx166D mm

**Enclosure code**  
IP 50 (case)  
IP 30 (terminal)  
IEC 529/DIN 40050

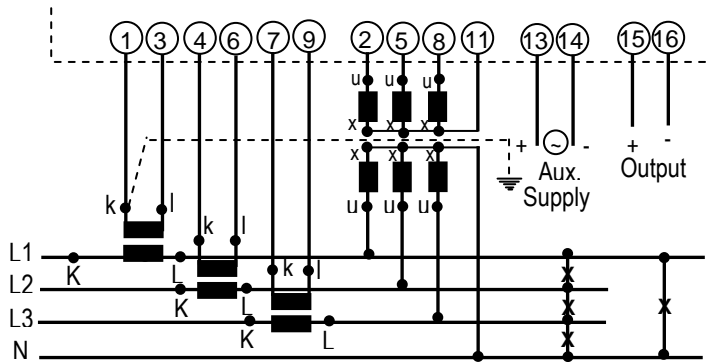
## T25-B



3Phase 3 or a Wire Uabalaced Load  
T25-B12 / B13



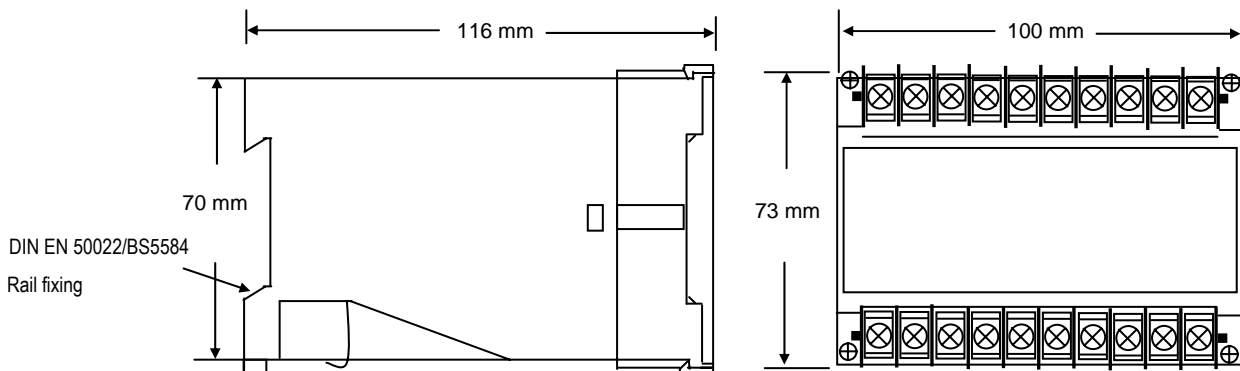
3Phase 3 Wire Uabalaced Load  
T25-B20



3Phase 4 Wire Uabalaced 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 termen k & l which are Respectively similar to S1 & S2.

## Dimensional Drawings



The technical specifications & data given may be amended without prior notice due to continuous developments of our products