FREQUENCY

The T25-LF frequency transducer converts AC voltage to a linear DC output signal proportional to the frequency of the input. Employing a crystal based oscillator conversion principle, the measured frequency band is accurately represented by proportional linear DC voltage or current output.

Model

T25-LF - frequency transducer

General Specifications

Test voltage
4kV AC rms 1min between terminal/case
2kV AC rms 1min between
input/output/auxillary 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
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
50-300V

Burden
0.2VA

permissible overload
1.25 X rated voltage continuous

Frequency
50 or 60 Hz

Measuring range
± 0.5 Hz,
± 1 Hz,
± 2hz,
± 5Hz & ± 10Hz

Output

Output ranges
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)
± 0.025% of rated frequency
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

Auxillary Power Supply

Standard Range
110V, 220V ± 20% 50/60Hz, <3.5VA

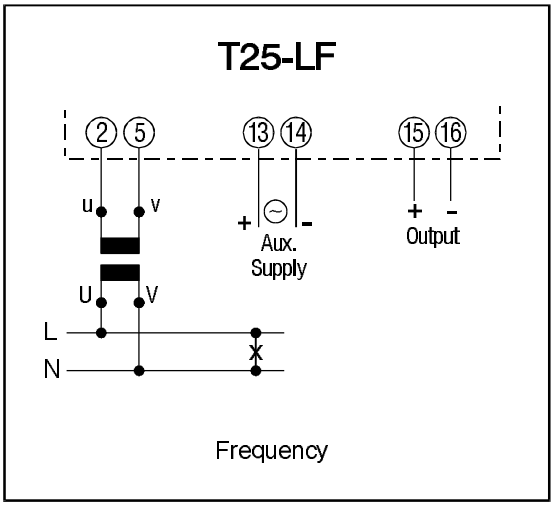
Options
self power and other AC power supplies up to 440V ac on request. DC powered models available at additional costs

Physical Specifications

Dimensions
100W x 78H x 116D mm

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

Wiring Connections



Dimensional Drawings