

WATT TRANSDUCER

WT-1

0.1 % ACCURACY

SINGLE - PHASE

CURRENT OUTPUT

WIDE INPUT AND OUTPUT RANGES

COMPLETE ISOLATION

3 YEAR WARRANTY



The WT-1 is an active power transducer.

The unit provides proportional dc current output extracted from the voltage and current inputs and their relative phase angle.

The WT-1 can be calibrated to wide input ranges.

The WT-1 provides complete galvanic isolation by applying transformers that isolate among input voltage, input current, output and power supply sections.

Exceptional input to output high common mode rejection (CMR) and a high degree of filtering, provide a low ripple output current.

The WT-1 output module design enables a wide selection of output formats.

The advanced circuitry design makes the WT-1 a top grade instrument, offering true 0.1% accuracy of power measuring.

The WT-1 is housed in a polycarbonate plastic enclosure mounted on a standard DIN rail.

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SPECIFICATIONS

WT-1

INPUTS

CONNECTION: 1 phase

POWER FACTOR: Unity - to, lead or lag, zero

CALIBRATION SPAN: ± 170 to $\pm 10,000$ W

OVER RANGE: +42% (at full accuracy)

ISOLATION:
2.5 KV RMS/1 minute (current input)
4KV RMS/1 minute (voltage and mains)

CURRENT

CURRENT SPANS: 1 - 5 Aac RMS
(up to 10 Aac - optional)

CURRENT OVER RANGE: +20%
(at full accuracy)

PEAK OVERLOAD: 40 Aac RMS, for 5 seconds
every 10 minutes

VOLTAGE

VOLTAGE SPANS: 85 - 500 Vac

VOLTAGE OVER-RANGE: +20%
(at full accuracy)

VOLTAGE OVERLOAD : 1.6 x [nominal rating]
continuous, limited to 600 Vac

FREQUENCY

FREQUENCY RANGE: 50, 60, 400 Hz

FREQUENCY VARIATION EFFECT: $\pm 0.02\%$ /Hz

POWER SUPPLY

SUPPLY RANGES: 115, 230 Vac $\pm 10\%$
and Self-powered

BURDEN

INPUT CURRENT: 0.26 VA @ 5 Aac

INPUT VOLTAGE:
0.15 VA @ 150 Vac, 0.3 VA @ 300 Vac

SUPPLY: 2.4 - 2.6 VA @ 115/230 Vac at 20 mA

OUTPUT

OUTPUT CONFIGURATION: 0/4 – 20mA

MAXIMUM OUTPUT LOAD:
 $R_{load} (K\Omega) = 16/I_{out} (mA)$

LOAD VARIATION EFFECT: $< \pm 0.03\%$ of span

RESPONSE TIME: < 200 msec (10-90% of span)

ACCURACY: $\pm 0.1\%$ of span typical at 5 - 100%
range

TEMPERATURE

OPERATING : -5 to +65°C
STORAGE : -35 to +85°C

TEMPERATURE STABILITY:
 $< \pm 0.01\%$ of span/1°C

HUMIDITY: 5 - 95% relative, non condensed

HOUSING: Plastic Polycarbonate

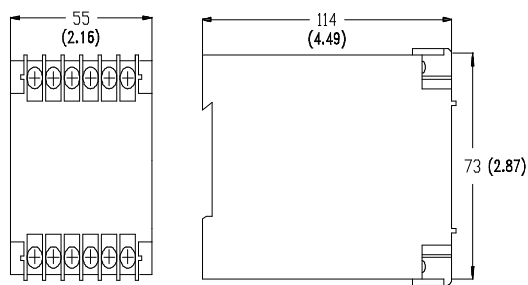
PROTECTION LEVEL:
Box: According to IP-40
Terminals: According to IP-20

WEIGHT: 0.5 Kg

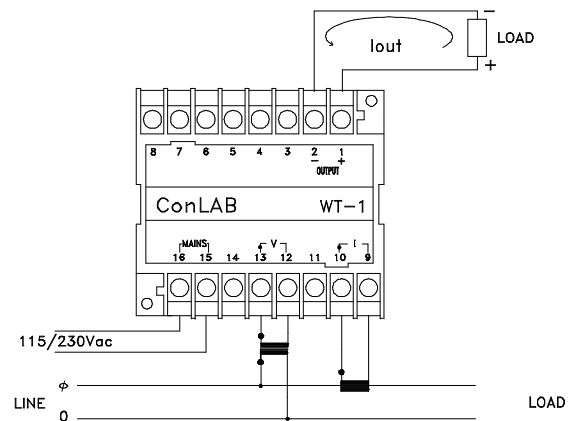
SPECIFICATIONS

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Dimensions mm (inch)



Connection Diagram



Ordering Information

WT-1	-S	-F1	-V2	-I2	-U	-P2
	S: Self Powered A: 115 Vac B: 230 Vac	F1: 50 Hz F2: 60 Hz F3: 400 z	V1: 115 Vac V2: 230 Vac V3: 380 Vac	I1: 0-1 Aac I2: 0-2 Aac I3: 0-3 Aac I4: 0-5 Aac	U: Uni B: Bi Directional	P1: 0-1mA P2: 0-5mA P3: 0-10mA P4: 0-20mA P5: 4-20mA P6: 4-12-20mA P7: 0-1V P8: 0-5V P9: 0-10V P10: 1-5V P11: 2-10V

data subject to change without notice

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