

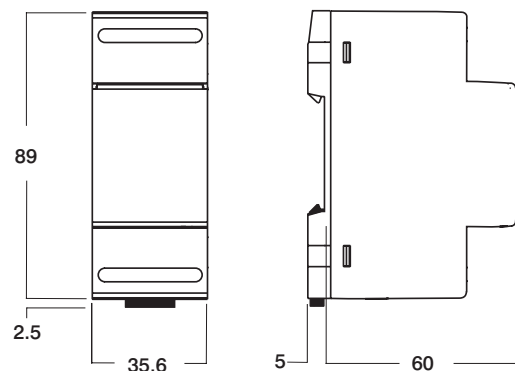


Features

- Field selectable output ranges
- Compact size 36mm x 89mm
- DIN rail mounting

The TM3U is a transducer for measuring single-phase AC voltages. The AC voltage input is converted into a proportional DC analogue signal output. Output signal ranges are selectable by switches on the front panel. A transparent cover over the switches has provision for fitting a wired seal to prevent unauthorised access.

Dimensions in mm



Information required when ordering

- Quote part number 'ACT'
- Input Signal
- Output Signal
- Supply Voltage and Frequency

SPECIFICATION

INPUTS

Voltage ranges (V_n): 100V, 250V, 400V, 500V

others available on request

Sinusoidal waveform, form factor 1.11

Measuring range: 0 - 120% V_n

Frequency: 50/60Hz (400Hz on request)

OUTPUTS

Switch selectable

Current:

0-5mA into 3000 ohms max

0-10 into 1500 ohms max

0-20 into 750 ohms max

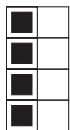
4-20mA into 750 ohms max

Voltage: 0-5V into 5000 ohms min

0-10V into 5000 ohms min

2-10V into 5000 ohms min

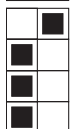
Switch settings:



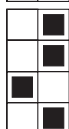
0 - 5 mA



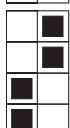
0 - 5 V



0 - 10 mA



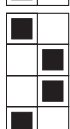
0 - 10 V



0 - 20 mA



2 - 10 V



4 - 20 mA

ACCURACY

Class 0.5

INPUT OVER-RANGE

1.2 V_n continuous, 1.5 V_n / 10s (max 450V)

RESPONSE TIME

≤ 300ms

RIPPLE

≤ 1%

INPUT BURDEN

≤ 0.5VA

AUXILLIARY SUPPLY

115 or 230VAC 50/60 Hz ± 10% ≤ 3VA

INSULATION

Input to output: 2kV 50Hz / 1 min

All circuits to earth: 4kV 50Hz / 1 min

Impluse: 5kV 1.2/50 μ s

ENVIRONMENTAL

Temperature range:

Operating: 0 - 45 deg C

Storage: -25 - 70 deg C

Relative humidity:

up to 75% suitable for tropical climates

EMC

Emissions: EN50081-1

Immunity: EN50082-2

CE certified

MECHANICAL

Weight: 200g

Connections: screw terminals, capacity up to 4mm²

Mounting: DIN rail (top hat TH35-15 EN60715)

Protection: Front frame IP 40, Terminals IP 20

TERMINAL CONNECTIONS



WARNING: Ensure that power to the instrument is switched off and signal wiring isolated from hazardous voltages before carrying out installation or maintenance.



WARNING: Installation should be conducted by appropriately skilled and authorised personnel only.

Input

1
3

} AC Voltage input signal

Output

17 Voltage output signal (-)

18 Current output signal (-)

19 Output signal (+)

Supply

20 Line

21 Neutral



WARNING: THIS UNIT IS MAINS POWERED. ISOLATE WIRING FROM DANGEROUS VOLTAGES BEFORE INSTALLING OR CARRYING OUT MAINTENANCE WORK.

Continuous development may necessitate changes in these details without notice

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