

- >> MOVING IRON
- >> RECTIFIED MOVING COIL
- >> FREQUENCY METERS
- >> PHASE SEQUENCE INDICATORS
- >> NULL VOLTMETERS

- >> WATTMETERS
- >> VARMETERS

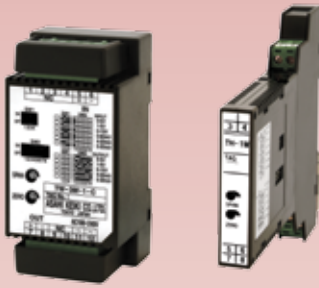
Analogue Signal Conditioners

ELTIME CONTROLS

Global Suppliers of Measurement and Protection Equipment for Industry

- >> ELECTROMECHANICAL HOURMETERS
- >> LCD HOURMETERS
- >> KWK METERS
- >> MAXIMUM DEMAND METERS
- >> COUNTERS
- >> DIRECT READING KWK METERS
- >> LDA-C MULTIFUNCTION MONITORS
- >> DIGITAL TRIP UNITS
- >> LDA-C MULTIFUNCTION MONITORS
- >> CURRENT TRANSFORMERS
- >> SPLIT CORE CURRENT TRANSFORMERS
- >> SWITCHBOARD SHUNTS
- >> E-SERIES TRANSDUCERS
- >> ANALOGUE SIGNAL CONDITIONERS
- >> ELECTRONIC PROTECTION RELAYS
- >> EARTH LEAKAGE RELAYS
- >> CORE BALANCE TRANSFORMERS
- >> MULTIFUNCTION TIME RELAYS
- >> SLIMLINE ELECTRONIC TIMERS
- >> ELECTRONIC TIMERS
- >> ROTARY SELECTOR SWITCHES
- >> TIMESWITCHES
- >> MINI-DISBARS

www.etime.co.uk



Analogue Signal Conditioners

Analogue signal conditioners isolate and convert DC voltage or current signals. The signal conditioner converts the DC voltage or DC mA signal to either a DC mA or DC voltage output which is directly proportional to the input signal value.

The user can select the input range and output range through the DIP switches on the front of the isolator. These signal conditioners offer isolation between the DC input signal and the DC output which can be used to prevent earth loops.

The 1.5kV isolated output signals can then be fed to analogue meters, digital meters or PLC's.

Models Available

TH-5M Slim Analogue Signal Conditioner
24Vdc Auxiliary Powered

TW-3M Analogue Signal Conditioner
100-240Vac Powered

Product Features

- Convert and isolate process signals
- User selectable input and output
- Linearity 0.1% full scale
- Adjustable 'span' and 'zero'
- DIN rail mounting enclosure
- 1.5kV rms 50Hz 1 minute isolation between input / output / auxiliary
- Screw type terminals
- Fingerproof terminal cover included

For converting and isolating DC process signals

Specification

Linearity:

- < 0.1% full scale

Accuracy:

- < 1% full scale after switches adjusted

Temperature Variation:

- 0.02% full scale / °C

Response Time:

- < 50ms for 0-90% of input value

Insulation Resistance:

- > 100Mohm between input / output / auxiliary

Isolation:

- 1.5kV rms 50Hz for 1 minute between input / output / auxiliary

Power Supply:

- TH-5M 24Vdc $\pm 10\%$
- TW-3M 100-240Vac $\pm 10\%$

Power Consumption:

- < 60mA at 24Vdc
- < 50mA at 100-240Vac

Operating Temperature:

- -5°C to 50°C

Operating Humidity:

- < 90% non-condensing

Mounting:

- 35mm DIN rail (DIN-EN 50022)

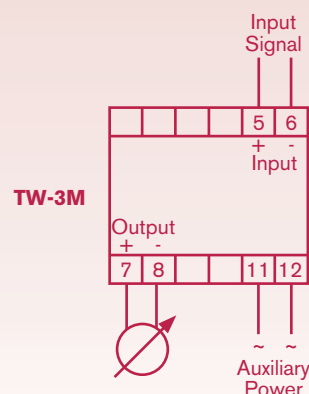
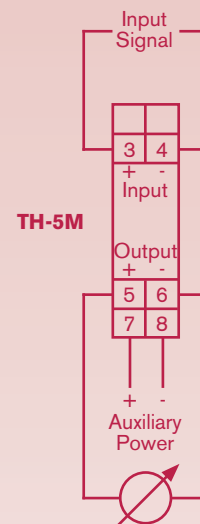
Weight:

- TH-5M 80g, TW-3M 130g

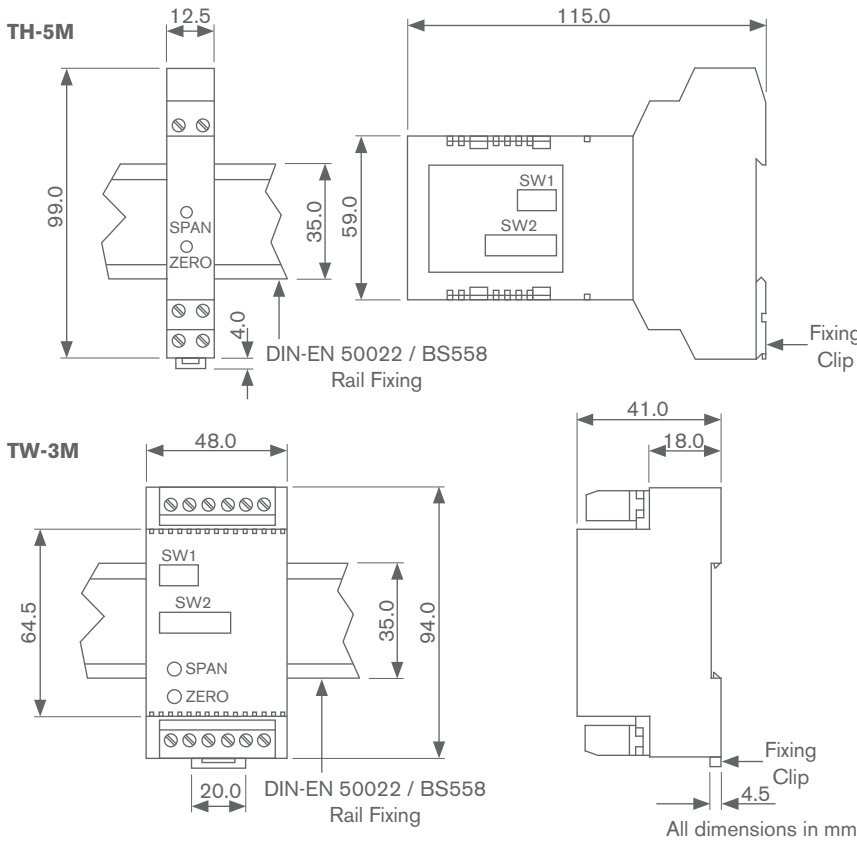
Markings:

- CE marked

Connections



Dimensions



Ordering information

Code	Description
TH-5M	Slim Analogue Signal Conditioner - 24Vdc
TW-3M	Analogue Signal Conditioner - 100-240Vac

Example **TW-3M**

Note: Calibration can be factory set at a specific input and output if required (specify when ordering).

Range Settings

Input Range Setting

	SW1	SW2
0-5V	ON OFF	
1-5V	ON OFF	
0-10V	ON OFF	
0-60mV	ON OFF	
4-20mA	ON OFF	
0-20mA	ON OFF	

Output Range Setting

	SW1	SW2
0-5V	ON OFF	
1-5V	ON OFF	
0-10V	ON OFF	
±2V*	ON OFF	
±2.5V*	ON OFF	
±5V*	ON OFF	
±10V*	ON OFF	
0-4V*	ON OFF	
4-20mA	ON OFF	
0-20mA**	ON OFF	

Resistance Values

Input	Input Resistance
0-5Vdc 1-5Vdc 0-10Vdc 0-60mV	More than 1Mohm
4-20mA 0-20mA	250 ohms

Output	Allowable Load Resistance
0 to 5Vdc 1 to 5Vdc 0 to 10Vdc -2 to +2Vdc* -2.5 to +2.5Vdc* -5 to +5Vdc* -10 to +10Vdc* 0 to 4Vdc*	More than 2kohm
4 to 20mA 0 to 20mA**	Less than 550 ohms

* Only on TH-5M

** Only on TW-3M

Specification subject to change without notice.



Eltime Controls: Hall Road, Maldon, Essex, CM9 4NF England.

Telephone: +44(0)1621 859500 Fax: +44(0)1621 855335 Email: sales@eltime.co.uk Web: www.eltime.co.uk

ELTIME CONTROLS