

MTL4676-THC

TEMPERATURE CONVERTER

mV/THC input, 2-channel

The MTL4676-THC converts low-level dc signals from temperature sensors mounted in a hazardous-area into 4/20mA currents. Software selectable features include linearisation for standard thermocouple types, ranging, monitoring, testing and tagging. Configuration is carried out using a personal computer. The field connections include cold-junction compensation and do not need to be ordered separately.

SPECIFICATION

See also common specification

Number of channels

Two

Signal source

THC types J, K, T, E, R, S, B or N to BS 60584 and XK mV input

Input signal range

-75 to +75mV

Input signal span

3 to 150mV

Cold junction compensation

Automatic or selectable

Cold junction compensation error

≤ 1.0°C

Common mode rejection

120dB for 240V at 50Hz or 60Hz

Series mode rejection

40dB for 50Hz or 60Hz

Calibration accuracy (at 20°C)

(includes hysteresis, non-linearity and repeatability)

Input: ±15µV or ±0.05% of input value (whichever is greater)

Output: ±16µA

Temperature drift (typical)

Input: ±0.003% of input value/°C

Output: ±0.6µA/°C

Safety drive on sensor burnout

Upscale, downscale, or off

Output range

4 to 20mA nominal into 300Ω max. (direct or reverse)

Maximum lead resistance

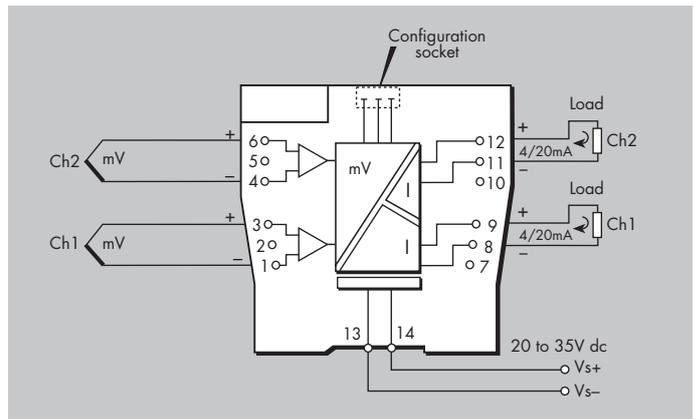
300Ω

Response time

Configurable - 500 ms default

(Accuracy at 100/200ms - contact MTL)

MTL4676-THC



LED indicator

Green: power and status indication

Yellow: one provided for channel status

Red: alarm indication

Power requirement, Vs with 20mA signal

60mA at 24V

Power dissipation within unit with 20mA signal

1.4W at 24V

Isolation

Functional isolation channel-channel for input and output circuits.

Configurator

A personal computer running MTL PCS45 software with a PCL45USB serial interface.

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.



Powering Business Worldwide

Eaton Electric Limited,

Great Marlings, Butterfield, Luton
Beds, LU2 8DL, UK.
Tel: + 44 (0)1582 723633 Fax: + 44 (0)1582 422283
E-mail: mtlenquiry@eaton.com
www.mtl-inst.com

© 2016 Eaton
All Rights Reserved
Publication No.
EPS4676T Rev 2 010916

EUROPE (EMEA):

+44 (0)1582 723633 mtlenquiry@eaton.com

THE AMERICAS:

+1 800 835 7075 mtl-us-info@eaton.com

ASIA-PACIFIC:

+65 6 645 9888 sales.mtlsing@eaton.com