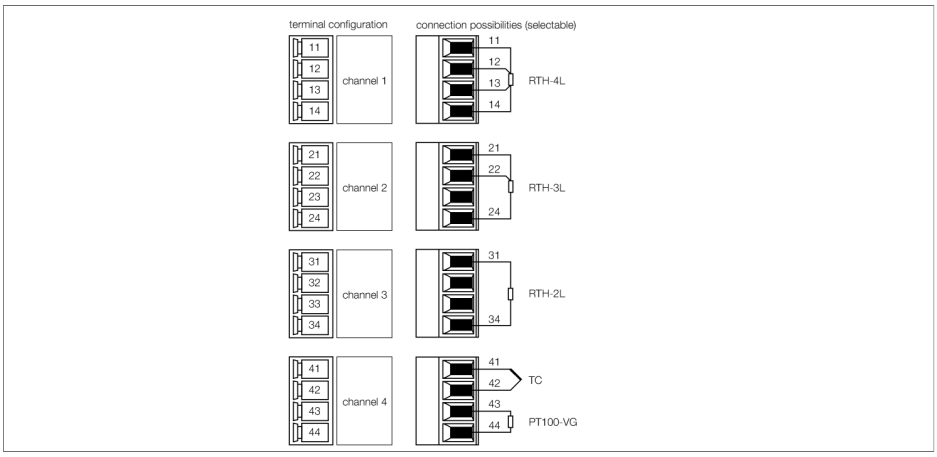
Remote I/O system *excom*®
input module, temperature, 4-channel
TI40-N



The input module TI40-N is used for the connection of 2, 3 and 4-wire temperature probes of the types PT100, PT200, PT500, PT1000, Ni100 and CU100, as well as for the connection of thermocouples of the types B, E, D, J, K, L, N, R, S, T and U. The module can also be used for the measurement of low voltages (-75…+75 mV, -1.2…+1,2 V) and resistances (0…30 Ω, 0…300 Ω, 0…3 kΩ).

Line compensation of 2-wire temperature resistors is performed during parametrization by means of preset resistant values. The values have to be determined first through measurements.

When using thermocouples, external cold junction compensation can be accomplished separately for each channel by connecting resistors such as the PT100 to the two unused terminals. Internal compensation instead is parametrized for all channels via an integrated PT100 resistor.

The resolution is 16 bit, i.e. the analog value is represented as a number between 0 and 65535. The temperature is indicated in Kelvin. For conversion to °C, please observe an offset of 273.2.

Parameters such as line monitoring, substitute values etc. can be adjusted for each channel separately and are initialized solely by the master.

- **Input module for the connection of temperature probes**
- **Complete galvanic separation**

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input module, temperature, 4-channel
TI40-N

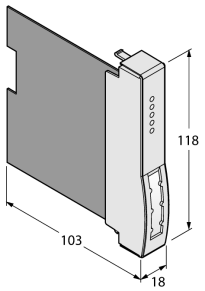
Industrial Automation

Type code	TI40-N
Ident no.	6884222
Supply voltage	via module rack, central power supply
Power consumption	≤ 1 W
Galvanic separation	Complete galvanic separation
Number of channels	4-channel
Input circuits	PT100 PT200 PT500 PT1000 Ni 100 Cu100 thermocouple
Resolution	16 Bit
max. Messabweichung	

≤ **max. Messabweichung %**	**max. Messabweichung**
0.1	bei geschirmtem Signalkabel
1	bei ungeschirmtem Signalkabel

Linearitätsabweichung	≤ 0.05% of full scale der Messspanne
Temperature drift	≤ 0.005 % / K
Rise time/fall time	≤ 1.3 s (10 … 90 %)
Indication	
Operational readiness	1 x green / red
State/ Fault	4 x red
Housing material	Plastic
Connection mode	module, plugged on rack
Protection class	IP20
Ambient temperature	-20…+60 °C
Relative humidity	≤ 95% at 55 °C acc. to EN 60068-2
Vibration test	acc. to IEC 60068-2-6
Shock test	acc. to IEC 60068-2-27
EMC	acc. to EN 61326-1 (2006) acc. to Namur NE21 (2007)
MTTF	62 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	18x 118x 103 mm
Weight	75 g

Dimensions



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