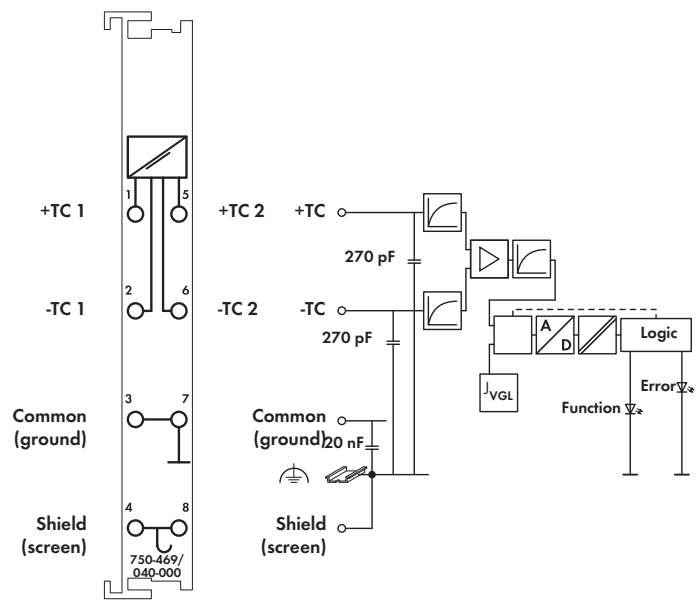
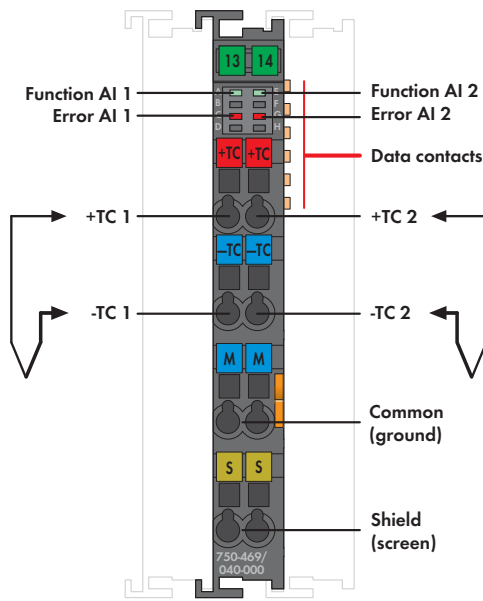


2-Channel Analog Input Module for Thermocouples

for eXTReme environmental conditions



This input module directly connects to two thermocouples. Internal electrical isolation allows operation of grounded sensors. The bus module linearizes the entire temperature range. Cold junction compensation mitigates the clamping unit offset voltage over the 0-55 °C operating range. A line break is indicated by a red LED. A green LED indicates readiness for operation and error-free communication with the bus coupler. The shield (screen) is directly connected to the DIN rail.

The module is ideally suited for operation in harsh environmental conditions:

- strongly extended temperature range
- higher dielectric strength and EMC resistance
- higher vibration and shock resistance

Description	Item No.	Pack. Unit
2AI Thermocouple/configurable /XTR	750-469/040-000	1
Accessories		
Miniature WSB Quick marking system		
plain	248-501	5
with marking	see Section 11	
Approvals		
Conformity marking	CE	
Korea Certification	KC	
Marine applications	GL, LR	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	
TÜV 17 ATEX 193969 X	II 3G Ex ec IIC T4 Gc	
IECEx TUN 16.0046 X	Ex ec IIC T4 Gc	
Technical Data		
Wire connection	CAGE CLAMP®	
Cross sections	0.25 mm ² ... 2.5 mm ² / AWG 24 ... 14	
Strip lengths	8 ... 9 mm / 0.33 in	
Dimensions (mm) W x H x L	12 x 62 x 100	
Weight	38.2 g	
Operating temperature	-40 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Operating altitude	without temperature derating: 0 m ... 2000 m; with temperature derating: 2000 m ... 5000 m (0.5 K/100 m); max.: 5000 m	
EMC immunity of interference	acc. to EN 61000-6-1, -2, EN 61131-2, marine applications, EN 50121-3-2, -4, -5, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994	
EMC emission of interference	acc. to EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, -4, -5	

Technical Data	
Number of inputs	2
Sensor types	Type L: -100 °C ... +900 °C; Type K: -100 °C ... +1370 °C; Type J: -100 °C ... +1200 °C; Type E: -100 °C ... +1000 °C; Type T: -100 °C ... +400 °C; Type N: -100 °C ... +1300 °C; Type U: -25 °C ... +600 °C; Type B: +600 °C ... +1800 °C; Type R: 0 °C ... +1700 °C; Type S: -50 °C ... +1700 °C;
	-30 mV ... +30 mV; -60 mV ... +60 mV; -120 mV ... +120 mV
Internal resistance	1 MΩ
Cold junction compensation	at each pair of terminal blocks
Resolution (over entire range)	0.1 °C
Conversion time	320 ms (each channel)
Measuring error (25 °C)	< ± 6 K (volt. input < ± 2 K, cold junct. < ± 4 K)
Temperature coefficient	< ± 0.2 K/K
Max. admissible current between the ground contacts 3 and 7:	100 mA
Max. current consumption (internal)	65 mA
Rated surge voltage	1 kV
Bit width	2 x 16 bits data 2 x 8 bits control/status (optional)
Vibration resistance	acc. to IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155, EN 61373
Shock resistance	acc. to IEC 60068-2-27 (15g/11 ms/half- sine/1000 shocks; 25g/6 ms/1000 shocks), EN 50155, EN 61373
Relative humidity	Max. 95 % short-term condensation per Class 3K7/IEC EN 60721-3-3 and E DIN 40046-721-3 (except wind-driven precipitation, water and ice formation)