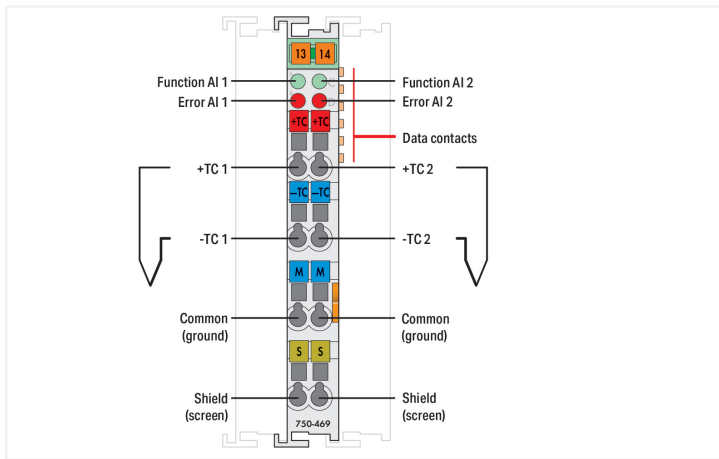
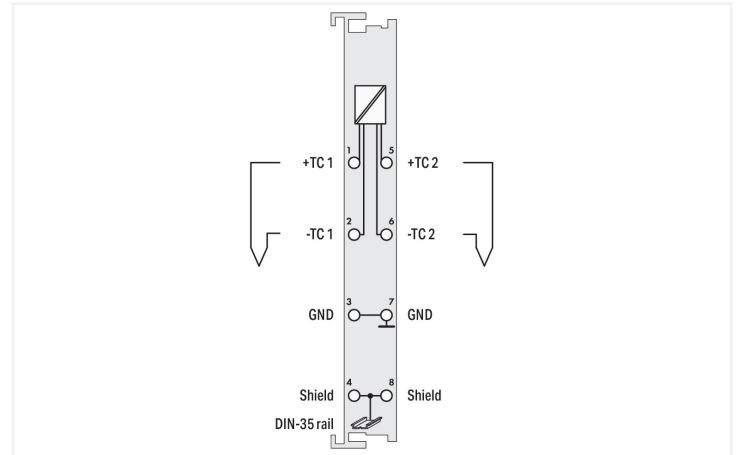
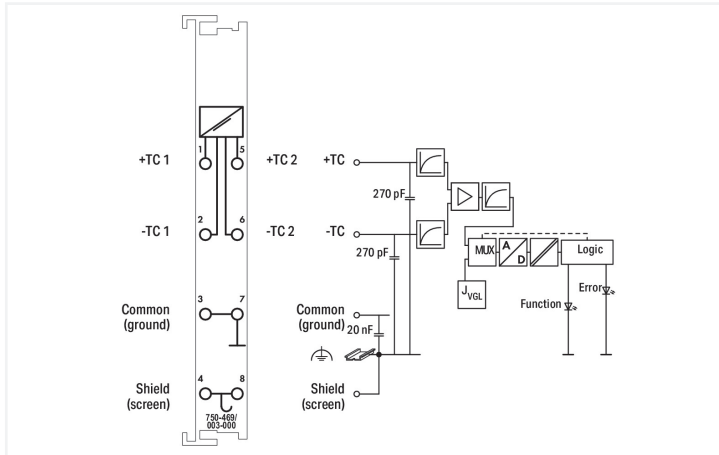


Data Sheet | Item Number: 750-469/003-000
 2-channel analog input; Thermocouple K; Diagnostics, adjustable



<https://www.wago.com/750-469/003-000>



This analog input module directly connects to two thermocouples. Internal electrical isolation allows operation of grounded sensors. The module automatically 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 coupler. The shield directly connects to the DIN-rail.

Technical data	
Number of analog inputs	2
Total number of channels (module)	2
Signal type	Thermocouple Low voltages
Signal type (configurable)	Yes
Sensor connection	2 x (2-wire)
Data width	2 x 16-bit data; 2 x 8-bit control/status (optional)
Internal resistance	1000 kΩ
Resolution (over entire range)	0.1 °C
Conversion time (typ.)	320 ms
Measurement error (25 °C)	< ±6 K (voltage input < ±2 K; cold junction compensation < ±4 K)
Temperature coefficient	< ±0.2 K/K
Sensor types	Thermocouple K; Configurable: L, J, E, T, N, U, B, R, S, mV
Temperature range	Sensor-specific
Cold junction compensation	at each pair of terminal blocks
Configuration options	WAGO-I/O-CHECK CODESYS Library e!COCKPIT

Technical data

Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	65 mA
Isolation	500 V system/field
Indicators	LED (A, C) green: Function AI 1, AI 2; LED (B, D) red: Error AI 1, AI 2

Connection data

Connection technology: inputs/outputs	8 x CAGE CLAMP®
Connection type 1	Inputs/outputs
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	69.8 mm / 2.748 inches
Depth from upper-edge of DIN-rail	62.6 mm / 2.465 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	1 MJ
Weight	38.3 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	horizontal (standing/lying); vertical
Relative humidity (without condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per EN 61000-6-4, marine applications
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm



Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide
RoHS Exemption	7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	72416146-c135-4e6d-ac72-f7915eaf868b
SCIP notification number (Belgium)	b3d1dfca-fa4d-476f-86d4-55ade7e97f56
SCIP notification number (Bulgaria)	ab7c83f8-c4e9-47c9-aeb5-4e070bf60967
SCIP notification number (Czech Republic)	1b450004-ba76-475a-955a-923f669856b2
SCIP notification number (Denmark)	a4b624a1-8df7-4203-a126-63e6b12fc2e4
SCIP notification number (Finland)	bdacf4a5-c854-4083-8689-cd91a4a7421a
SCIP notification number (France)	c9c9a010-2945-450d-acb8-452d4866523d
SCIP notification number (Germany)	681bdadc-f51d-4b76-8d8d-330a4432aa1e
SCIP notification number (Hungary)	b871048e-8eaf-4263-a347-3138ad2ce814
SCIP notification number (Italy)	d2b644ab-a307-4ffa-951a-e9b41d04da01
SCIP notification number (Netherlands)	b2db518d-2aea-4cb6-9e03-5624f01b23b1
SCIP notification number (Poland)	2069c076-9fd2-4a11-8ee7-1a906744e278
SCIP notification number (Romania)	eb8b19ba-2d31-417b-ac1e-cd4ff138c8a5
SCIP notification number (Sweden)	8442d8b3-f33b-40cd-8c16-a9a452e276e6

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-AIM750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	22-2219060
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
BV Bureau Veritas S.A.	-	13453/E0 BV
DNV DNV GL SE	DNV-CG-0339, Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/2236/880590/19
RINA RINA Germany GmbH	-	ELE343521XG001

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Approvals for hazardous areas

PTB 0102  EAC  **IECEX**

Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	
CCC CNEX	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 (2Ex nA IIC T4 Gc X)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 14.0035 X (Ex ec IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TÜV 12.1297 X
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at: www.wago.com



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