



Fig. 750 Series
Delivered without miniature WSB markers

The thermocouple input module allows the direct connection of two thermocouples. The module automatically linearizes the entire temperature range. Cold junction compensation is utilized to compensate for 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 trouble-free communication with the buscoupler. The shield (screen) is directly connected to the DIN rail.

- -100 °C ... +1370 °C; type K
- -50 °C ... +1700 °C; type S

- -100 °C ... +400 °C; type T
- -100 °C ... +1200 °C; type J
- -100 °C ... +1000 °C; type E
- -100 °C ... +900 °C; type L

All listed sensor types are supported by the configurable variation. Set-up using the WAGO-I/O-Check 2 software. Other variations are available upon request: 600 °C ... +1800 °C; type B, -100 °C ... +1300 °C; type N, 0 °C ... +1700 °C; type R, -25 °C ... +600 °C; type U, -120 mV ... +120 mV.

| Description | Item No. | Pack. Unit |
|---|-----------------|------------|
| 2AI Thermocouple/K/Diagn. | 750-469 | 1 |
| 2AI Thermocouple/S/Diagn. | 750-469/000-001 | 1 |
| 2AI Thermocouple/T/Diagn. | 750-469/000-002 | 1 |
| 2AI ±120mV Diagn. | 750-469/000-003 | 1 |
| 2AI Thermocouple/J/Diagn. | 750-469/000-006 | 1 |
| 2AI Thermocouple/E/Diagn. | 750-469/000-008 | 1 |
| 2AI Thermocouple/L/Diagn. | 750-469/000-012 | 1 |
| 2AI Thermocouple/K/Diagn./S5 ¹⁾ | 750-469/000-200 | 1 |
| 2AI Thermocouple/Free Config. | 750-469/003-000 | 1 |
| 2AI Thermocouple/K/Diagn. (without connector) | 753-469 | 1 |
| 2AI Thermocouple/Free Config. (without connector) | 753-469/003-000 | 1 |

¹⁾ Data format for S5 control with FB 251

Approvals

| | |
|---|---|
| Conformity marking | CE |
| Korea Certification | |
| Marine applications (versions upon request) | ABS, BV, DNV, GL, KR, LR, PRS, RINA |
| UL 508 | |
| ANSI/ISA 12.12.01 | Class I, Div. 2, Grp. ABCD, T4 |
| TÜV 07 ATEX 554086 X | I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc |
| IECEx TUN 09.0001 X | Ex d I Mb, Ex nA IIC T4 Gc, Ex tc IIIC T135°C Dc |

| Technical Data | |
|-------------------------------------|---|
| Number of inputs | 2 |
| Power supply | via system voltage DC/DC |
| Max. current consumption (internal) | 65 mA |
| Sensor types | Type K; -100°C ... +1370°C (basic variation), optional variations available for type J, B, E, N, R, S, T, U and L |
| 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 |
| Isolation | 500 V system/supply |
| Bit width | 2 x 16 bits data 2 x 8 bits control/status (optional) |
| Wire connection | CAGE CLAMP® |
| Cross sections | 0.08 mm² ... 2.5 mm² / AWG 28 ... 14 |
| Strip lengths, 750/753 Series | 8 ... 9 mm / 0.33 in 9 ... 10 mm / 0.37 in |
| Width | 12 mm |
| Weight | 38.2 g |
| EMC immunity of interference | acc. to EN 61000-6-2, marine applications |
| EMC emission of interference | acc. to EN 61000-6-4, marine applications |

| Accessories | Item No. | Pack. Unit |
|------------------------------------|----------------|------------|
| 753 Series Connectors | 753-110 | 25 |
| Coding elements | 753-150 | 100 |
| Miniature WSB Quick marking system | see Section 11 | |