2-Channel Analog Input Module 0-1 A AC/DC

Differential inputs

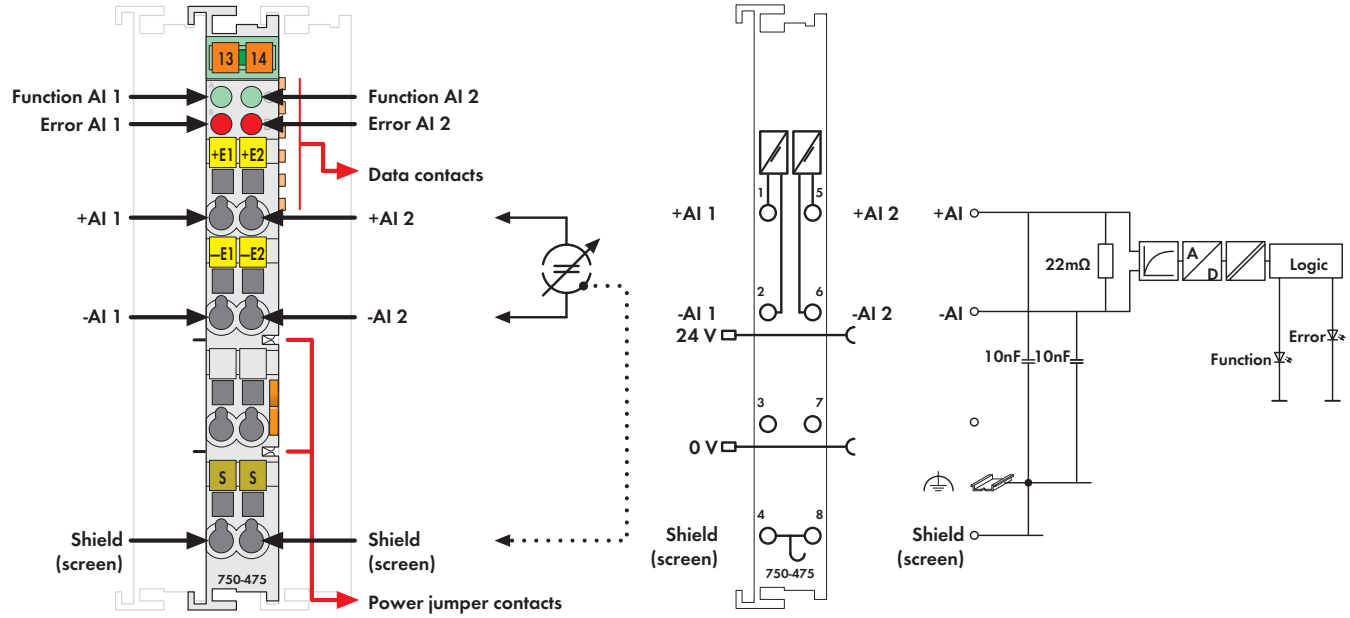

Fig. 750 Series
Delivered without miniature WSB markers

The analog input module receives AC and DC currents of values 0-1A eff.
The module measures the rms value of the current and displays it with a resolution of 100µA.
The maximum current must not exceed 2A.
The differential inputs are electrically isolated.
The fieldside and internal system are electrically isolated.

The internal system supply (via the data bus contacts) is used for the power supply of the module.
The input channels are differential inputs.
The shield (screen) is directly connected to the DIN rail.

Technical data for the 750-475/020-000 model:
Signal current: 0A ... 6A eff
Process data: 0.0 A is 0x0000; 6.0 A is 0x7FFF

Description	Item No.	Pack. Unit
2AI 0-1A AC/DC Differential Input	**750-475**	1
2AI 0-5A AC/DC Differential Input	**750-475/020-000**	1
Differing technical data see text		
2AI 0-1A AC/DC Differential Input	**753-475**	1
(without connector)		

Accessories	Item No.	Pack. Unit
753 Series Connectors	**753-110**	25
Coding elements	**753-150**	100
Miniature WSB Quick marking system		
plain	**248-501**	5
with marking	see Section 11	

Approvals

Conformity marking	CE
Korea Certification	
Marine applications (versions upon request)	ABS, BV, DNV, GL, KR, LR, NKK, PRS, RINA
UL 508	
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4
TÜV 12.1297 X (Brasilien)	Ex nA IIC T4 Gc (750-475)
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
Permissible ambient temperature	0 °C ... +60 °C
IECEx TUN 09.0001 X	Ex d I Mb,
	Ex nA IIC T4 Gc,
	Ex tc IIIC T135°C Dc
Permissible ambient temperature	0 °C ... +60 °C

Technical Data

Number of inputs	2
Power supply	via system voltage DC/DC
Current consumption (internal)	80 mA
Input voltage (max.)	24V AC/DC (-20% ... +20%)
Signal current	0 A ... 1 A eff. (peak value 2.0 A)
Load impedance	22 mΩ
Resolution	16 bits internal (1 LSB = 100 µA)
Conversion time	200 ms
Measuring error (25 °C)	< ± 0.1 % of the full scale value
Temperature coefficient	< ± 110 ppm / K of the full scale value
Error in complete temperature range	≤ ± 0.6 % of the full scale value
Dielectric strength	500 V DC channel/channel or channel/ system
Voltage via power jumper contacts	24 V DC
Bit width	2 x 16 bits data
	2 x 8 bits control/status (optional)
Process data	0.0 A is 0x0000;
	2.0 A DC is 0x4E20
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	47 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