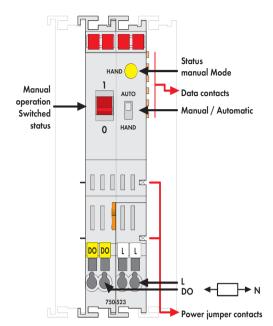
## 1-Channel Relay Output Module 230 V AC, 16 A

Isolated output; 1 make contact; bistable; manual operation

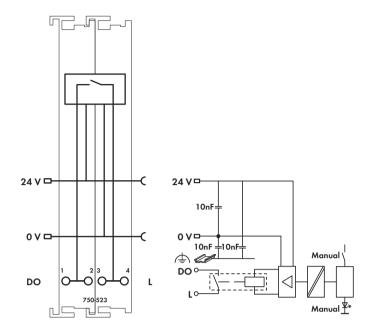


Delivered without miniature WSB markers

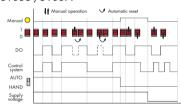
A connected actuator or load is switched via the relay output module. The 24VDC supply is derived from the power jumper contacts to trigger the relays. The switched status of the relay is shown by the manual switch (1/0). The operating mode can be set using a manual/automatic selector switch. The mode status is indicated by an LED and via status bits in the process image. Manual: Coil triggering is interrupted. Actuation only via the red manual operating switches.

Auto: The relay is operated via the control system. Manual status changeover via manual operating switch is canceled by the control system in less than 500ms

The manual switch can also be used without 24V supply to switch the output  $\mathsf{ON}.$ 



The relay meets both international standards of IEC and DIN EN 61810 part  $1\/VDE\/0435$  part 201 as well as overload and short circuit requirements of IEC and DIN EN 61036 /61037.



Description  1DO 230V AC 16A Relay 1a/ Potentia		Item No.	Pack. Unit
		ıl 750-523	1
Free			
Accessories		Item No.	Pack. Unit
Miniature WSB	Quick marking system		
Commence (	plain	248-501	5
Continuent	with marking	see pages 352 35	3
- Hard Malan			
Approvals		Also see "Approvals Overv	iew" in Sectio
Conformity marking		CE	
Shipbuilding		ABS, DNV, GL, KR, PRS, RI	NA
.®∞ UL 508			
•®• UL 508  Technical Do	ata		
Technical Do	ata loads 100000 operations	/ 30000 operations	
Technical Do	loads 100000 operations	/ 30000 operations 1.25 kW / 2.5 kW	
Technical Do Switchable lamp Incandescent Fluorescent la	loads 100000 operations lamp mp, not compensated	1.25 kW / 2.5 kW 1.2 kW / 2.5 kW	
Technical Do Switchable lamp Incandescent Fluorescent la	loads 100000 operations lamp	1.25 kW / 2.5 kW 1.2 kW / 2.5 kW 650 W / 70 µF / 1.3 kW	
Technical Do Switchable lamp Incandescent Fluorescent lam Fluorescent lam	loads 100000 operations lamp mp, not compensated p, parallel compensated mp, dual circuit	1.25 kW / 2.5 kW 1.2 kW / 2.5 kW	
Technical Do Switchable lamp Incandescent Fluorescent la Fluorescent lam Fluorescent la Halogen lamp	loads 100000 operations lamp mp, not compensated p, parallel compensated mp, dual circuit b (AC 230 V)	1.25 kW / 2.5 kW 1.2 kW / 2.5 kW 650 W / 70 µF / 1.3 kW 2 x 1.2 kW / 2 x 2.5 kW 1.2 kW / 2.5 kW	
Technical Do Switchable lamp Incandescent Fluorescent la Fluorescent lam Fluorescent la Halogen lamp	loads 100000 operations lamp mp, not compensated p, parallel compensated mp, dual circuit	1.25 kW / 2.5 kW 1.2 kW / 2.5 kW 650 W / 70 µF / 1.3 kW 2 x 1.2 kW / 2 x 2.5 kW 1.2 kW / 2.5 kW 500 VA / 500 VA	
Technical Do Switchable lamp Incandescent Fluorescent la Fluorescent la Fluorescent la Halogen lamp Low voltage h Mercury arc/	loads 100000 operations lamp mp, not compensated p, parallel compensated mp, dual circuit b (AC 230 V) alogen lamp with transf. Sodium discharge lamp,	1.25 kW / 2.5 kW 1.2 kW / 2.5 kW 650 W / 70 µF / 1.3 kW 2 x 1.2 kW / 2 x 2.5 kW 1.2 kW / 2.5 kW	
Technical Do Switchable lamp Incandescent Fluorescent la Fluorescent la Fluorescent la Halogen lamp Low voltage h Mercury arc/ not compensa	loads 100000 operations lamp mp, not compensated p, parallel compensated mp, dual circuit b (AC 230 V) alogen lamp with transf. Sodium discharge lamp, ted	1.25 kW / 2.5 kW 1.2 kW / 2.5 kW 650 W / 70 µF / 1.3 kW 2 x 1.2 kW / 2 x 2.5 kW 1.2 kW / 2.5 kW 500 VA / 500 VA 1 kW / 2 kW	/ 140 µF
Switchable lamp Incandescent Fluorescent la Fluorescent la Fluorescent la Halogen lamp Low voltage h Mercury arc/ not compensa Mercury arc/	loads 100000 operations lamp mp, not compensated p, parallel compensated mp, dual circuit b (AC 230 V) alogen lamp with transf. Sodium discharge lamp, ted Sodium discharge lamp,	1.25 kW / 2.5 kW 1.2 kW / 2.5 kW 650 W / 70 µF / 1.3 kW 2 x 1.2 kW / 2 x 2.5 kW 1.2 kW / 2.5 kW 500 VA / 500 VA	/ 140 µF
Switchable lamp Incandescent Fluorescent la Fluorescent la Fluorescent la Halogen lamp Low voltage h Mercury arc/ not compensa Mercury arc/ parallel comp	loads 100000 operations lamp mp, not compensated p, parallel compensated mp, dual circuit b (AC 230 V) alogen lamp with transf. Sodium discharge lamp, ted Sodium discharge lamp, ensated	1.25 kW / 2.5 kW 1.2 kW / 2.5 kW 650 W / 70 µF / 1.3 kW 2 x 1.2 kW / 2 x 2.5 kW 1.2 kW / 2.5 kW 500 VA / 500 VA 1 kW / 2 kW 1 kW / 70 µF / 2 kW / 1	/ 140 µF
Switchable lamp Incandescent Fluorescent la Fluorescent la Fluorescent la Halogen lamp Low voltage h Mercury arc/ not compensa Mercury arc/ parallel comp Dulux lamp, n	loads 100000 operations lamp mp, not compensated p, parallel compensated mp, dual circuit b (AC 230 V) alogen lamp with transf. Sodium discharge lamp, ted Sodium discharge lamp,	1.25 kW / 2.5 kW 1.2 kW / 2.5 kW 650 W / 70 µF / 1.3 kW 2 x 1.2 kW / 2 x 2.5 kW 1.2 kW / 2.5 kW 500 VA / 500 VA 1 kW / 2 kW	/ 140 μF 40 μF

Technical Data	
No. of outputs	1 make contact
Max. current consumption (internal)	5 mA
Max. switching voltage	440 V AC
Switching power	max. 5 kVA
Max. switching current	16 A AC
Contact material	AgSnO2
Mechanical life	10 <sup>6</sup>
Current consumption max. (field side)	80 mAs (peak current)
Isolation	1.5 kV eff. (field/system)*;
	* 2.5 kV rated surge voltage;
	Overvoltage category III
Bit width	2 bits in (Manual status, - ); 2 bits out (DO, - )
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm <sup>2</sup> 2.5 mm <sup>2</sup> / AWG 28 14
Stripped lengths	8 9 mm / 0.33 in
Width	24 mm
Weight	105 g
EMC: C € - immunity to interference	acc. to EN 50082-2 (1996)
EMC: C € - emission of interference	acc. to EN 50081-1 (1993)
EMC: marine applications	
- immunity to interference	acc. to Germanischer Lloyd (2003)
EMC: marine applications	
- emission of interference	acc. to Germanischer Lloyd (2003)

1.4



## 2-Channel Analog Input Module 0-30 V

Differential measurement input

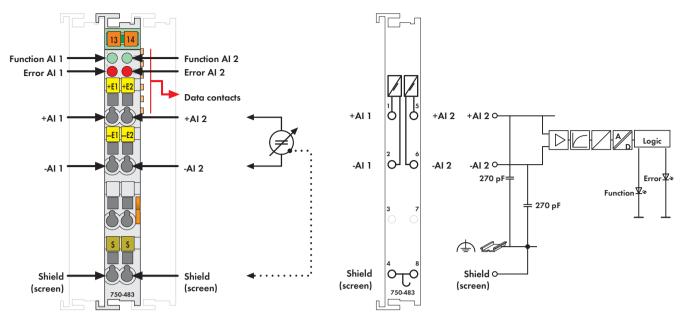


Fig. 750 Series/Technical data see page 24/Delivered without miniature WSB markers 750/753 Series marking see pages 10 ... 11 / 12 ... 13

The 2-channel analog input module processes differential signals of a standard magnitude  $0-30\mbox{VDC}.$ 

The input signal of each channel is electrically isolated and is transmitted with a resolution of 14 bits.

System voltage is used for voltage supply.

The shield (screen) is directly connected to the DIN rail.

- Measured-value acquisition: time synchronous (both inputs)
- Measuring range overflow/underflow: status byte and LED
- Method of conversion: SAR (Successive Approximation Register)
- Operating mode: continuously sampling (preset)
- Protection: RC circuit

Description		Item No.	Pack. Unit		
2AI 0-30V DC Diff	Measur. Inp.	750-483	1		
2AI 0-30V DC Diff.	Measur. Inp. (withou	753-483	1		
connector)					
Accessories		Item No.	Pack. Unit		
andax and any	753 Series Connecto	ors 753-110	25		
	Coding elements	753-150	100		
Learning Commence	Miniature WSB Quick marking system				
	plain	248-501	5		
SALES DE LA CONTRACTION DE LA	with marking	see pages 352 3	53		
Approvals	Also se	Also see "Approvals Overview" in Section 1			
Conformity marking	C€				
Shipbuilding	ABS, B	ABS, BV, DNV, GL, KR, LR*, NKK*, PRS*, RINA*			
	*753	*753 Series, pending			
® UL 508					
® ANSI/ISA 12.1	2.01 Class I,	Class I, Div. 2, Grp. ABCD, T4			
© EN 60079-0, -15	I M2 /	I M2 / II 3 GD Ex nA IIC T4			
EN 61241-0, -1					

Technical Data		
Number of inputs	2, electrically isolated from each other	
Power supply	via system voltage DC/DC	
Current consumption typ. (internal)	80 mA	
Signal voltage	0 - 30V	
Internal resistance	1 ΜΩ	
Input filter	low pass first order, $f_G = 5 \text{ kHz}$	
Resolution of the A/D converter	14 bits	
Monotonicy without missing codes	yes	
Resolution of measured value	14 bits	
Value of a LSB (least significant bit)	1.8 mV	
Measuring error (25°C)	$\leq$ ± 0.05 % of the full scale value	
Temperature coefficient	$< \pm 0.01$ % $/$ K of the full scale value	
Measuring error	≤ 0.4 % over whole temperature scale	
	≤ 0.1 % of upper range value (non-linearity)	
Crosstalk attenuation	≥ 80 dB	
Sampling time of repetition	1 ms	
Sampling delay (module)	1 ms	
Sampling delay (channel/channel)	≤ l µs	
Sampling duration	≤ 5 µs	
Admissible continuous overload	60 V	
Dielectric strength	500 V DC channel/channel or channel/system	
Bit width	2 x 16 bits data	
	2 x 8 bits control/status (optional)	
Wire connection	CAGE CLAMP®	
Cross sections	0.08 mm <sup>2</sup> 2.5 mm <sup>2</sup> / AWG 28 14	
Stripped lengths, 750/753 Series	$8 \dots 9 \; \text{mm} \; / \; 0.33 \; \text{in; } 9 \dots \; 10 \; \text{mm} \; / \; 0.37 \; \text{in}$	
Width	12 mm	
Weight	55 g	
EMC: C € - immunity to interference	acc. to EN 61000-6-2 (2005)	
EMC: $CE$ - emission of interference	acc. to EN 61000-6-4 (2007)	
EMC: marine app immunity to interference	acc. to Germanischer Lloyd (2003)	
EMC: marine app emission of interference	acc. to Germanischer Lloyd (2003)	