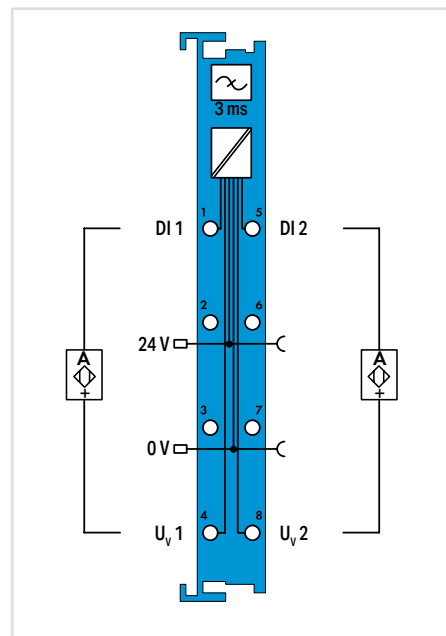
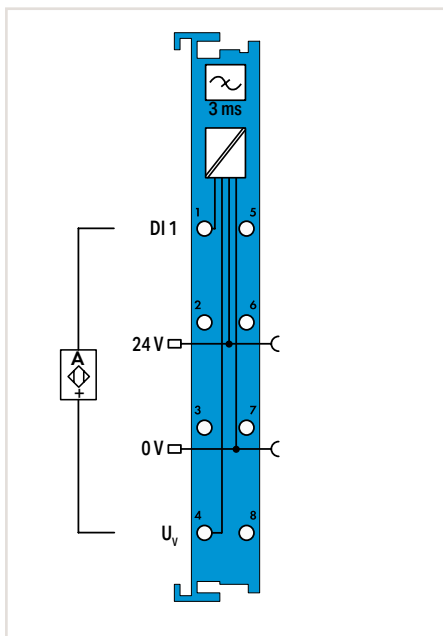


Digital Input; NAMUR; Ex i



Figure: 750-435



Item Description	1-Channel Digital Input; NAMUR; Intrinsically safe	2-Channel Digital Input; NAMUR; Intrinsically safe
Item No.	750-435	750-438
Order Text	1DI; NAMUR; Ex i	2DI; NAMUR; Ex i
Technical Data		
Number of digital inputs	1	2
Signal type	NAMUR	NAMUR
Sensor connection	2-wire	2-wire
Input characteristic	High-side switching	High-side switching
Input filter (digital)	3 ms	3 ms
Open-circuit voltage	8.2 VDC	8.2 VDC
Diagnostics	Short circuit; wire break	-/-
Supply voltage (sensor)	8.2 VDC; short-circuit-protected; isolated channels	8.2 VDC; short-circuit-protected; isolated channels
Supply voltage (field)	24 VDC (Ex i power supply: $U_o = \text{max. } 27.3 \text{ V}$); via power jumper contacts (power supply via blade contact; transmission via spring contact)	24 VDC (Ex i power supply: $U_o = \text{max. } 27.3 \text{ V}$); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Current consumption, field supply (module with no external load)	13 mA	16 mA
Current consumption – system supply (5 V)	2.5 mA	2.5 mA
Data width (internal)	2 bits	2 bits
Isolation	$U_m = 375 \text{ V}$ system/supply	$U_m = 375 \text{ V}$ system/supply
Surrounding air temperature (operation)	0 ... +55 °C	0 ... +55 °C
Dimensions W x H x D	12 x 67.8 x 100 mm	12 x 67.8 x 100 mm
Explosion Protection		
Safety-relevant data (circuit)	$U_o = 12 \text{ V}$; $I_o = 16 \text{ mA}$; $P_o = 48 \text{ mW}$; Linear characteristic curve	$U_o = 12 \text{ V}$; $I_o = 13.5 \text{ mA}$; $P_o = 40.5 \text{ mW}$; Linear characteristic curve
Reactances Ex ia IIC	$L_o = 180 \text{ mH}$; $C_o = 1.4 \mu\text{F}$	$L_o = 190 \text{ mH}$; $C_o = 1.4 \mu\text{F}$
Reactances Ex ia IIB	$L_o = 560 \text{ mH}$; $C_o = 9 \mu\text{F}$	$L_o = 600 \text{ mH}$; $C_o = 9 \mu\text{F}$
Reactances Ex ia IIA	$L_o = 900 \text{ mH}$; $C_o = 36 \mu\text{F}$	$L_o = 1 \text{ H}$; $C_o = 36 \mu\text{F}$
Reactances Ex ia I	$L_o = 1 \text{ H}$; $C_o = 38 \mu\text{F}$	$L_o = 1 \text{ H}$; $C_o = 38 \mu\text{F}$
Reactances	Reactances without accounting for the concurrence of capacitance (C_o) and inductance (L_o)	Reactances without accounting for the concurrence of capacitance (C_o) and inductance (L_o)
Ex guideline	EN IEC 60079-0, -7, -11	EN IEC 60079-0, -7, -11
Approvals	CE; Marine; OrdLoc/HazLoc/AEx; ATEX/IECEX; INMETRO	CE; Marine; OrdLoc/HazLoc/AEx; ATEX/IECEX; INMETRO
Marking	Ⓢ ATEX/IECEX: II 3 (1) G Ex ec [ia Ga] IIC T4 Gc II (1) D [Ex ia Da] IIIC I (M1) [Ex ia Ma] I	Ⓢ ATEX/IECEX: II 3 (1) G Ex ec [ia Ga] IIC T4 Gc II (1) D [Ex ia Da] IIIC I (M1) [Ex ia Ma] I
Data sheet and further information, see:	wago.com/750-435	wago.com/750-438