

DATA SHEET

DI811

Freelance hardware selector



This module has 16 digital inputs. The input signal voltage range is 36 to 60 volt d.c. and the input current is 4 mA at 48 V. The inputs are divided into two individually isolated groups with eight channels and one voltage supervision input in each group. Every input channel consists of current limiting components, EMC protection components, input state indication LED and optical isolation barrier. The process voltage supervision input give channel error signals if the voltage disappears. The error signal can be read via the ModuleBus.

Features and benefits

- 16 channels for 48 V d.c. inputs with current sinking
- 2 isolated groups of 8 with voltage supervision
- Input status indicators

General info	
Article number	3BSE008552R1
Туре	Digital Input
Signal specification	48 V d.c.
Number of channels	16
Signal type	Current sinking
HART	No
SOE	No
Redundancy	No
High integrity	No
Intrinsic safety	No
Mechanics	S800

Detailed data				
Input voltage range, "0"	-60 +10 V			
Input voltage range, "1"	30 60 V			
Input impedance	11 kΩ			
Isolation	Groupwise isolated from ground, 2 groups with 8 channels			
Filter times (digital, selectable)	2, 4, 8, 16 ms			
Current limiting	Sensor power can be current limited by the MTU			
Maximum field cable length	600 meters (656 yards)			
Rated insulation voltage	50 V			
Dielectric test voltage	500 V a.c.			
Power dissipation	Typ. 2.7 W			
Current consumption +5 V Modulebus	50 mA			
Current consumption +24 V Modulebus	0			
Current consumption +24 V external	0			

Diagnostics				
Front LED's	F(ault), R(un), W(arning), Channel 1-16 ("0" or "1")			
Supervision	Process voltage, 1 per group			
Status indication of supervision	Module Error, Module Warning, Channel error			

Environment and certification		
CE mark	Yes	
Electrical safety	EN 61010-1, UL 61010-1, EN 61010-2-201, UL 61010-2-201	
Hazardous Location	C1 Div 2 cULus, C1 Zone 2 cULus, ATEX Zone 2	
Marine certification	ABS, BV, DNV, LR	
Temperature, Operating	0 to +55 °C (+32 to +131 °F), approvals are issued for +5 to +55 °C	
Temperature, Storage	-40 to +70 °C (-40 to +158 °F)	
Pollution degree	Degree 2, IEC 60664-1	
Corrosion protection	ISA-S71.04: G3	
Relative humidity	5 to 95 %, non-condensing	
Max ambient temperature	55 °C (131 °F), for vertical mounting in compact MTU 40 °C (104 °F)	
Protection class	IP20 according to IEC 60529	
Mechanical operating conditions	IEC/EN 61131-2	
EMC	EN 61000-6-4 and EN 61000-6-2	
Overvoltage categories	IEC/EN 60664-1, EN 50178	
Equipment class	Class I according to IEC 61140; (earth protected)	
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)	
WEEE compliance	DIRECTIVE/2012/19/EU	

Compatibility		
Use with MTU	TU810, TU812, TU814, TU818, TU830, TU833, TU838, TU850	
Keying code	BD	

Dimensions			
Width 45 mm (1.77")			
Depth	102 mm (4.01"), 111 mm (4.37") including connector		
Height	119 mm (4.7")		
Weight	0.15 kg (0.33 lbs.)		

Related products

	TU810V1		TU812V1
	TU814V1	V-Vco-	TU830V1
TE YOU.	TU833		TU838
Year	TU850		



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