

DI885

Compact Product Suite hardware selector



This module has 8 digital inputs. The input voltage range is 11.8 - 60 V d.c. and the input current is 1.6 mA at 24 V d.c., (3.2 mA at 48 V d.c.). Every input channel consists of current limiting components, EMC protection components, input state indication LED and optical isolation barrier. The sensor power supply supervision gives an error signal if the voltage disappears, and the Warning LED turns on. The error signal can be read through the ModuleBus.

Features and benefits

- 8 channels for 24/48 V d.c. inputs with current sinking
- Input status indicators
- Sequence of event (SOE) functionality
- External 24 or 48 V d.c. sensor power supply
- Internal 48 V d.c. sensor power supply
- Short circuit protection to ground and 48 Volt
- Channel supervision
- Sensor power supply supervision
- Shutter filter

General info	
Type	Digital Input
Signal specification	24 V d.c.
Article number	3BSE013088R1
Number of channels	8
Signal type	Current sinking
HART	No
SOE	Yes
Redundancy	No
High integrity	No
Intrinsic safety	No
Mechanics	S800

Detailed data	
Input impedance	15 kΩ
Isolation	Groupwise isolated from ground
Filter times (digital, selectable)	0...255 ms
Current limiting	Sensor power can be current limited by the MTU
Maximum field cable length	600 meters (656 yards)
Event recording accuracy	-0.5 ms...+1.3 ms
Event recording resolution	1 ms
Rated insulation voltage	%0 V
Dielectric test voltage	500 V a.c.
Power dissipation	Typ. 3 W
Current consumption +5 V Modulebus	160 mA
Current consumption +24 V Modulebus	91 mA
Current consumption +24 V external	91 mA (for 24 V), 22 mA (for 48 V)

Diagnostics	
Front LED's	F(ault), R(un), W(arning), Channel 1-16 Status
Supervision	Process voltage, 1 per group Loop supervision on 48V signal range
Status indication of supervision	Module Error, Module Warning, Channel error

Environment and certification	
CE mark	Yes
Electrical safety	IEC 61131-2, UL 508
Hazardous Location	C1 Div 2 cULus, C1 Zone 2 cULus, ATEX Zone 2
Marine certification	ABS, BV, DNV-GL, LR, RS, CCS
Protection rating	IP20 according to IEC 60529
Corrosive atmosphere ISA-S71.04	G3
Climatic operating conditions	0 to +55 °C (Storage -40 to +70 °C), RH=5 to 95 % no condensation, IEC/EN 61131-2
Pollution degree	Degree 2, IEC60664-1
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)
Max ambient temperature	55 °C (131 °F), for vertical mounting in compact MTU 40 °C (104 °F)
RoHS compliance	-
WEEE compliance	DIRECTIVE/2012/19/EU

Compability	
Use with MTU	TU810, TU812, TU814, TU818, TU830, TU833
Keying code	BF

Intrinsic Safety parameters

Dimensions	
Width	45 mm (1.77")
Depth	102 mm (4.01"), 111 mm (4.37") including connector
Height	119 mm (4.7")
Weight	0.22 kg (0.48 lbs.)

Related products



TU814V1



TU810V1



TU833



TU812V1



TU830V1

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