

DATA SHEFT

DI825

Compact Product Suite hardware selector



The DI825 is an 8 channel 125 V d.c. digital input module for the S800 I/O. The input range is 71 - 150 V and the input current is 3.0 mA at 125 V. The inputs are individually isolated.

Every input channel consists of current limiting components, EMC protection components, input state indication LED, optical isolation barrier. Channel 1 can be used as voltage supervision input for channels 2 - 4, and channel 8 can be used as voltage supervision input for channels 5 - 7.

If the voltage supervision is used and the voltage connected to channel 1 or 8 disappears, the channel error will be set for the channels and the Warning LED turns on. The error signal can be read from the ModuleBus.

Features and benefits

- 8 channels for 125 V d.c. inputs
- Individually isolated channels
- Input status indicators
- Sequence of event (SOE) functionality
- Signal filtering

General info		
Article number	3BSE036373R1	
Туре	Digital Input	
Signal specification	125 V d.c.	
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 voltage range, "0"	020 V	
Input voltage range, "1"	71 156 V	
Input impedance	41.5 kΩ	
Isolation	Individually isolated channels	
Filter times (digital, selectable)	0100 ms	
Current limiting	Sensor power can be current limited by the MTU	
Maximum field cable length	600 meters (656 yards)	
Event recording accuracy	-0.25 ms1.0 ms	
Event recording resolution	0.4 ms	
Rated insulation voltage	250 V	
Dielectric test voltage	2300 V a.c. Ch - Ground, 1350 V a.c. Ch - Ch	
Power dissipation	Max. 4.9 W	
Current consumption +5 V Modulebus	Max. 90 mA	
Current consumption +24 V Modulebus	0	
Current consumption +24 V external	0	

Diagnostics		
Front LED's	F(ault), R(un), W(arning), Channel 1-8 Status	
Supervision	Process voltage. Channel 1 and 8 can be used 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	-	
Marine certification	-	
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 606641, 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	TU811, TU813, TU831, TU839, TU851
Keying code	АВ

Dimensions	
Width	45 mm (1.77")
Depth	102 mm (4.01"), 111 mm (4.37") including connector
Height	119 mm (4.7")
Weight	0.14 kg (0.31 lbs.)

Related products

TU811V1	TU813
TU831V1	TU839
TU851	



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