

DATA SHEET

DI814

Freelance hardware selector



The input voltage range is 18 to 30 volt dc and the input current source is 6 mA at 24 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 through the ModuleBus.

Features and benefits

- 16 channels for 24 V d.c. inputs with current sourcing
- 2 Isolated groups of 8 with voltage supervision
- Input status indicators

General info		
Article number	3BUR001454R1	
Туре	Digital Input	
Signal specification	24 V d.c.	
Number of channels	16	
Signal type	Current sourcing	
HART	No	
SOE	No	
Redundancy	No	
High integrity	No	
Intrinsic safety	No	
Mechanics	S800	

Detailed data		
Input voltage range, "0"	-30 5 V	
Input voltage range, "1"	15 30 V	
Input impedance	3.5 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. 1.8 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, TU830, TU838
Keying code	BE

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	TU830V1
TU838	



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