

DATA SHEET

DI814

Compact Product Suite 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	
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