

DATA SHEET

### **DI818**

## Compact Product Suite hardware selector



This module has 32 digital inputs. The input voltage range is 18 to 30 volt d.c. and the input current is 4.3mA at 24 V. The inputs are divided into two individually isolated groups with 16 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**

- 32 channels for 24 V d.c. inputs with current sinking
- Two Isolated groups of 16 channels with voltage supervision
- Voltage Supervision
- Signal Filtering

General info		
Article number	3BSE069052R1	
Туре	Digital Input	
Signal specification	24V d.c.	
Number of channels	32	
Signal type	Current sinking	
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"	11 30 V	
Input impedance	5.6 kΩ	
Isolation	Groupwise isolated from ground, groups of 16 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. 3.1 W	
Current consumption +5 V Modulebus	70 mA	
Current consumption +24 V Modulebus	0	
Current consumption +24 V external	25 mA	

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	-	
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	TU818, TU819, TU830
Keying code	EA

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**



### TU818



### TU819



TU830V1



solutions.abb/compactproductsuite solutions.abb/controlsystems

We reserve the right to make technical changes to the products or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not assume any responsibility for any errors or incomplete information in this document.

We reserve all rights to this document and the items and images it contains. The reproduction, disclosure to third parties or the use of the content of this document – including parts thereof – are prohibited without ABB's prior written permission.

Copyright© 2024 ABB All rights reserved