

# DI818

## System 800xA 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
Type	Digital Input
Signal specification	24 V d.c.
Number of channels	32
Signal type	Current sinking
HART	No
SOE	No
Redundancy	No
High integrity	No
Intrinsic safety	No
Mechanics	S800

<b>Detailed data</b>	
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

<b>Diagnostics</b>	
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

<b>Environment and certification</b>	
CE mark	Yes
Electrical safety	IEC 61131-2, UL 61010-1, UL 61010-2-201
Hazardous Location	-
Marine certification	ABS, BV, DNV-GL, LR
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, IEC 60664-1
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	DIRECTIVE/2011/65/EU (EN 50581:2012)
WEEE compliance	DIRECTIVE/2012/19/EU

<b>Compability</b>	
Use with MTU	TU818, TU819, TU830
Keying code	EA

<b>Dimensions</b>	
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/800xA](https://solutions.abb/800xA)  
[solutions.abb/controlsystems](https://solutions.abb/controlsystems)

800xA is a registered or pending trademark of ABB. All rights to other trademarks reside with their respective owners.

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© 2022 ABB All rights reserved