

DATA SHEET

DI818 ABB Ability™ 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
Туре	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	\$800

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	Тур. 3.1 W	
Current consumption +5 V Modulebus	70 mA	
Current consumption +24 V Modulebus	0	
Current consumption +24 V external	25 mA	

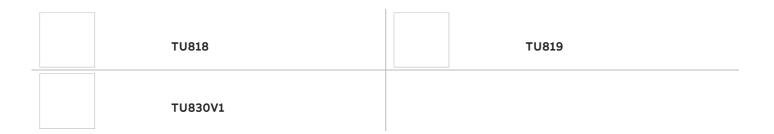
Diagnostics	
Front LED's	F(ault), R(un), W(arning), Channel 1-16 ("0" or "1")
Supervision	Process voltage, 1 per group
Status indication of supervision	Module Error, Module Warning, Channel error

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.)

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