

DATA SHEET

DO840

Freelance hardware selector



This module has 16 digital outputs. The maximum continuous output current per channel is 0.5 A. The outputs are current limited and protected against over temperature. The outputs are divided into two groups with eight output channels and one voltage supervision input in each group. Each output channel consists of a current limited and over temperature protected high side driver, EMC protection components, inductive load suppression, output state indication LED and optical isolation barrier.

Features and benefits

- 16 channels for 24 V d.c. current sourcing outputs
- 2 isolated groups of 8 channels with process voltage supervision
- Advanced on-board diagnostics
- Output status indicators
- OSP sets outputs to predetermined state upon error detection
- Redundant or single applications
- Current limited and over-temperature protection

General info		
Article number	3BSE020838R1	
Туре	Digital Output	
Signal specification	24 V d.c. (19.2 - 32 V d.c.), 0.5 A	
Number of channels	16	
Signal type	Current sourcing, current limiting	
HART	No	
SOE	No	
Redundancy	Yes	
High integrity	No	
Intrinsic safety	No	
Mechanics	S800	

Detailed data		
Isolation	Groupwise isolated from ground	
Current limiting	Short circuit proof current limited output	
Maximum field cable length	600 meters (656 yards)	
Rated insulation voltage	50 V	
Dielectric test voltage	500 V a.c.	
Power dissipation	Typ. 4.3 W	
Current consumption +5 V Modulebus	130 mA	
Current consumption +24 V Modulebus	0	
Current consumption +24 V external	200 mA	

Diagnostics		
Front LED's	F(ault), R(un), W(arning), O(SP), Channel 1-16 Status	
Supervision	Process power 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	DNV	
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, 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/EN (EN 50581:2012)	
WEEE compliance	DIRECTIVE/2012/19/EU	

Compatibility		
Use with MTU	TU810, TU812, TU814, TU830, TU833, TU842, TU843, TU852	
Keying code	CE	

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
TU833	TU842
TU843	TU852



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