

# DO815

## Compact Product Suite hardware selector



The DO815 is a 8 channel 24 V digital output module for the S800 I/O. The output voltage range is 10 to 30 V and the maximum continuous output current is 2 A @ 24 V. The outputs are protected against short circuits, and over load. The outputs are divided into two individually isolated groups with four output channels in each group. Each output channel consists of a short circuit and over load protected high side driver with open load detection (on active signal), EMC protection components, inductive load suppression, output status indication LEDs and optical isolation barrier.

### Features and benefits

- 8 channels for 24 V d.c. current sourcing outputs
- 2 isolated groups of 4 channels with under voltage detection
- OSP sets outputs to predetermined state upon communication error
- Output status indicators and a channel wise error flag
- Short-circuit protection to ground and positive supply
- Over load protection
- Open load and short-circuit detection
- Two output fault operation modes: Automatic reset mode and Fault latching mode
- Inductive load driving capability
- Filament lamp load up to 10W

General info	
Article number	3BSE013258R1
Type	Digital Output
Signal specification	24 V d.c. (10 - 32 V d.c.), 2A
Number of channels	8
Signal type	High side driver, current limiting
HART	No
SOE	No
Redundancy	No
High integrity	No
Intrinsic safety	No
Mechanics	S800

Detailed data	
Isolation	Groupwise isolated from ground
Output load	< 0.25 Ω
Current limiting	Short circuit proof current limited output
Maximum field cable length	600 meters (656 yards)
Event recording accuracy	-0 ms / +1.3 ms
Rated insulation voltage	50 V
Dielectric test voltage	500 V a.c.
Power dissipation	Typ. 4 W
Current consumption +5 V Modulebus	Typ. 120 mA, Max. 150 mA
Current consumption +24 V Modulebus	0
Current consumption +24 V external	0

Diagnostics	
Front LED's	F(ault), R(un), W(arning), O(SP), Channel 1-8 Status, Channel 1-8 Fault
Supervision	Short circuit, over load, under voltage and open load
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, 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
Keying code	AA

Dimensions	
Width	45 mm (1.77")
Depth	102 mm (4.01"), 111 mm (4.37") including connector
Height	119 mm (4.7")
Weight	0.2 kg (0.44 lbs.)

## Related products



TU814V1

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