

# DO814

## ABB Ability™ System 800xA® hardware selector



The DO814 is a 16 channel 24 V digital output module with current sinking for the S800 I/O. The output voltage range is 10 to 30 volt and the maximum continuous current sinking is 0.5 A. The outputs are protected against short circuits and over temperature. The outputs are divided into two individually isolated groups with eight output channels and one voltage supervision input in each group.

Each output channel consists of a short circuit and over temperature protected low side switch, EMC protection components, inductive load suppression, output 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

- 16 channels for 24 V d.c. current sinking outputs
- 2 isolated groups of 8 channels with process voltage supervision
- Output status indicators
- OSP sets outputs to predetermined state upon error detection
- Short-circuit protection to ground and 30 V
- Over-voltage and over-temperature protection

#### General info

Article number	3BUR001455R1
Type	Digital Output
Signal specification	24 V d.c. (12-32 V d.c.), 0.5 A
Number of channels	16
Signal type	Current sinking, current limiting
HART	No
SOE	No
Redundancy	No
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. 2.1 W
Current consumption +5 V Modulebus	80 mA

Diagnostics	
Front LED's	F(ault), R(un), W(arning), O(SP), Channel 1-16 Status
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	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, TU833 or TU838
Keying code	BE

Dimensions	
Width	45 mm (1.77")
Depth	102 mm (4.01"), 111 mm (4.37") including connector
Height	119 mm (4.7")
Weight	0.18 kg (0.4 lbs.)

## Related products



**TU810V1**



**TU812V1**



**TU814V1**



**TU830V1**



**TU833**



**TU838**

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