

DATA SHEET

## **AO895**

## Compact Product Suite hardware selector



The AO895 Analog Output Module has 8 channels. The module includes Intrinsic Safety protection components and a HART interface on each channel for connection to process equipment in hazardous areas without the need for additional external devices.

Each channel can drive up to 20 mA loop current into a field load such as an Ex-certified current-to-pressure converter and is limited to 22 mA in overload conditions. All eight channels are isolated from the ModuleBus and power supply in one group. Power to the output stages is converted from the 24 V on the power supply connections.

## Features and benefits

- 8 channels of 4...20 mA outputs.
- HART communication.
- 1 group of 8 channels isolated from ground.
- Power to drive Ex certified I/P actuators.

General info		
Article number	3BSC690087R1	
Туре	Analog Output	
Signal specification	420 mA	
Number of channels	8	
Signal type	Unipolar single ended	
HART	Yes	
SOE	No	
Redundancy	No	
High integrity	No	
Intrinsic safety	Yes	
Mechanics	\$800	

Detailed data		
Resolution	12 bit	
Isolation	Groupwise isolated from ground	
Under/over range	2.5 / 22.4mA	
Output load	<725 ohms at 20 mA, no over-range <625 ohms at up to 22 mA	
Error	Typ. 0.05%, Max. 0.1% at 650 ohms	
Temperature drift	Typ. 50 ppm/°C, Max. 100 ppm/°C	
Rise Time	30 ms (10% to 90%)	
Current limiting	Short circuit proof current limited output	
Rated insulation voltage	50 V	
Dielectric test voltage	500 V a.c.	
Power dissipation	4.25 W	
Current consumption +5 V Modulebus	Typ. 130 mA	
Current consumption +24 V external	Typ. 250 mA, Max. <330 mA	

Diagnostics	
Front LED's	F(ault), R(un), W(arning), O(SP), Tx (HART communiation)
Supervision	Internal process supply, Open wire if > 1 mA is set

Environment and certification		
CE mark	Yes	
Electrical safety	EN 61010-1, EN 61010-2-201	
Hazardous Location	ATEX/IECEx Zone 2 with interface to Zone 0, cFMus C1, Div 2/Zone 2 with interface to C1, C2, C3 Div 1/Zone 0	
Marine certification	-	
Temperature, Operating	0 to +55 °C (+32 to +131 °F)	
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	TU890, TU891 and TU891Z
Keying code	AF

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**



**TU890** 



TU891



solutions.abb/compactproductsuite solutions.abb/controlsystems

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