

AO810V2 3BSE038415R1

AO810V2 8-Channel Analog Output Module

CONTROLLED ENGINEERING COPY

ABB AO810V2 3BSE038415R1 is an S800 I/O analog output module with eight unipolar 0...20 mA or 4...20 mA channels, 14-bit resolution and channel diagnostics.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	AO810V2 3BSE038415R1
Manufacturer	ABB
System family	ABB S800 I/O
Record scope	Installation, application and verification

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01 PRE-INSTALLATION PLAN

- 1

Confirm AO810V2 and 3BSE038415R1 on the module label.
- 2

Place the controller, process and all eight loops in the approved maintenance state.
- 3

Isolate external loop power and record the L1+/L2+ supply arrangement.
- 4

Record the MTU, ModuleBus position, channel ranges, loads and polarities.
- 5

Use ESD controls and inspect keying, base contacts and terminal condition.

MATCHED HARDWARE

- AO810V2 3BSE038415R1 with complete nameplate identity
- Matched host, rack or transducer system
- Recorded cable, terminal and connector schedule
- Approved grounding, shielding and configuration record

INSTALLATION CONTROL RECORD

CONTROL ITEM	REQUIRED RECORD
Identity	AO810V2 3BSE038415R1 recorded
Physical interface	Probe, cable and sensor matched
Functional proof	Static gap and dynamic response

02 WIRING & INTERFACE CHECKS

CHECK ITEM	REQUIRED VALUE
ABB article number	3BSE038415R1
Module type	Analog output
Channels	8
Signal ranges	0...20 mA and 4...20 mA
Resolution	14 bit
Isolation	Groupwise isolated from ground
Output load	500 ohm with L1+; 250 to 850 ohm with L2+
Current error	Maximum 0.1% at 0 to 500 ohm
Temperature drift	Typical 30 ppm/C; maximum 60 ppm/C
Rise time	0.35 ms at 500 ohm
Update cycle	2 ms or less
Rated insulation voltage	50 V
Compatible MTUs	TU810, TU812, TU814, TU830, TU833

RELATED GE PRODUCT PAGES

1 ABB datx100	2 ABB dsqc679	3 ABB dsqc662
4 ABB 3hac5954-1	5 ABB 3hac14551-2	6 ABB 3hac043569-004
7 Siemens 6au1455-2ad00-0aa0	8 ABB 3hac021799-003	9 ABB dsqc223

FIELD NOTE

Match AO810V2 to the documented S800 I/O ModuleBus position and approved MTU. Preserve channel range, output-scale, OSP behavior, external supply connection and field-loop polarity. Do not treat the module as HART, redundant, high-integrity or intrinsically safe hardware.

03 COMMISSIONING WORKFLOW



COMMISSIONING ACCEPTANCE EVIDENCE

EVIDENCE ITEM	ACCEPTANCE CONDITION
Identity	AO810V2 3BSE038415R1
Physical interface	Exact identity, installed position and every connected interface matched
Configuration	Recorded hardware and software configuration restored
Functional proof	Diagnostics and controlled functional response recorded

04 RETURN-TO-SERVICE RECORD

- ☐ Use ESD controls and inspect keying, base contacts and terminal condition.
- ☐ Restore the exact MTU, AE keying, OSP settings and controller configuration.
- ☐ Review module, power-low, open-circuit and channel diagnostics after energization.
- ☐ Command each output with controlled values and record loop response before release.

VERIFICATION RECORD

PRODUCT IDENTITY	AO810V2 3BSE038415R1
INSTALLED POSITION	Documented installed system position
VERIFICATION METHOD	Controlled inspection and functional test
RELEASE RECORD	Final diagnostic state retained before service

FUNCTIONAL ACCEPTANCE CHECKLIST

- ☐ Confirm the exact model remains assigned to the documented host position.
- ☐ Verify every mating interface and field connection against the as-found record.
- ☐ Exercise the intended product function under controlled conditions.
- ☐ Retain the diagnostic and functional-test result before release.

SOURCE IDENTIFIERS

AO810V2 Data Sheet | ABB Compact Product Suite hardware selector