

INDUSTRIAL AUTOMATION PRODUCT

AO810V2 3BSE038415R1

AO810V2 8-Channel Analog Output Module

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.

CONTROLLED ENGINEERING COPY

IDENTITY	VERIFIED VALUE
Manufacturer	ABB
System family	ABB S800 I/O
Part number	AO810V2 3BSE038415R1
Document status	Controlled product and system reference

DOCUMENT SCOPE

Exact article identity, official technical data, host matching, installation checks, applications, precautions and controlled acceptance evidence.

MODEL-SPECIFIC ENGINEERING 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.

System Role and Architecture

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.

FUNCTION 1
Eight 0...20 mA or 4...20 mA outputs

FUNCTION 2
14-bit output resolution

FUNCTION 3
Groupwise isolation from ground

FUNCTION 4
Cyclic self-diagnostics and open-circuit supervision

MATCHED SYSTEM COMPONENTS

NO.	DOCUMENTED COMPONENT / ROLE
01	ABB S800 I/O
02	Matched extension cable and ClickLoc connector loop
03	3300 XL Proximity Sensor host channel
04	AISI 4140 steel target or approved equivalent

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Host identity	ABB S800 I/O
Interface role	AO810V2 8-Channel Analog Output Module
Field / power context	The module operates with a compatible MTU and the configured ModuleBus position. Commissioning
Commissioning evidence	Identity, gap, polarity, response and alarm diagnostics recorded

INSTALLATION AND CONNECTION CHECKS

- 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.

Technical Specifications

Technical values below are limited to the named product record and directly applicable manufacturer documentation.

PARAMETER	VALUE	PARAMETER	VALUE
ABB article number	3BSE038415R1	Rise time	0.35 ms at 500 ohm
Module type	Analog output	Update cycle	2 ms or less
Channels	8	Rated insulation voltage	50 V
Signal ranges	0...20 mA and 4...20 mA	Compatible MTUs	TU810, TU812, TU814, TU830, TU833
Resolution	14 bit	Keying code	AE
Isolation	Groupwise isolated from ground	Protection	Short-circuit-proof current-limited outputs
Output load	500 ohm with L1+; 250 to 850 ohm with L2+	Diagnostics	Power-low, open-circuit and channel error reporting
Current error	Maximum 0.1% at 0 to 500 ohm	Operating temperature	0 to +55 C; approval limits apply
Temperature drift	Typical 30 ppm/C; maximum 60 ppm/C		

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

ENGINEERING BOUNDARY

Confirm AO810V2, 3BSE038415R1, compatible MTU, AE keying, external supply, eight channel ranges, loads, OSP behavior, polarity, diagnostics and controlled loop-test evidence before commissioning.

PRE-INSTALLATION CHECKS

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.

Applications and Engineering Context

Process control outputs

Drives eight documented current loops.

Valve and actuator commands

Provides configured 0/4...20 mA setpoints.

S800 I/O maintenance

Restores an exact AO810V2 ModuleBus position.

Analog-loop commissioning

Supports controlled scaling and response tests.

TECHNICAL 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.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	AO810V2 3BSE038415R1 recorded
Host / carrier	ABB S800 I/O
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

IMPORTANT NOTICE

Confirm AO810V2, 3BSE038415R1, compatible MTU, AE keying, external supply, eight channel ranges, loads, OSP behavior, polarity, diagnostics and controlled loop-test evidence before commissioning.

Related Products and Source Record

Brand-qualified Apter Power navigation links are provided for system planning only; manufacturer evidence remains the named source record.

RELATED PRODUCTS ON APTER POWER

1

ABB 3hac021799-003

View ABB 3hac021799-003 page

2

ABB dsqc223

View ABB dsqc223 page

3

ABB datx100

View ABB datx100 page

4

ABB dsqc679

View ABB dsqc679 page

5

ABB dsqc662

View ABB dsqc662 page

6

ABB 3hac5954-1

View ABB 3hac5954-1 page

7

ABB 3hac14551-2

View ABB 3hac14551-2 page

8

ABB 3hac043569-004

View ABB 3hac043569-004 page

9

Siemens 6au1455-2ad00-0aa0

View Siemens 6au1455-2ad00-0aa0 page

MANUFACTURER SOURCE RECORD

AO810V2 Data Sheet | ABB Compact Product Suite hardware selector

APTER POWER SALES TEAM

WHATSAPP / PHONE

+86 180 3023 5313

EMAIL

sales13@apterpower.com

WEBSITE

www.apterpower.com



RECOMMENDATION SCOPE

These links support product navigation and comparison. Technical values in this document are sourced only from the manufacturer record above.