

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.

PRODUCT SNAPSHOT

BRAND
ABB

FAMILY
ABB S800 I/O

PART
AO810V2 3BSE038415R1

DOCUMENT STATUS
Controlled engineering copy

APTER POWER

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PRODUCT OVERVIEW

AO810V2 3BSE038415R1 provides eight current-output channels for a documented ABB S800 I/O station.

-  Eight 0...20 mA or 4...20 mA outputs
-  14-bit output resolution
-  Groupwise isolation from ground
-  Cyclic self-diagnostics and open-circuit supervision

SYSTEM COMPONENTS

DOCUMENTED COMPONENT	ROLE IN SYSTEM
AO810V2 3BSE038415R1 product assembly	Matched host system
Documented field interfaces	Approved configuration record

ENGINEERING CONTEXT

The module operates with a compatible MTU and the configured ModuleBus position. Commissioning restores every channel range, output value, external supply path, OSP state and controller assignment before controlled loop testing.

TECHNICAL DATA

PARAMETER	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

PARAMETER	VALUE
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
Keying code	AE
Protection	Short-circuit-proof current-limited outputs
Diagnostics	Power-low, open-circuit and channel error reporting
Operating temperature	0 to +55 C; approval limits apply

RELATED GE PRODUCT PAGES

1

ABB dsqc662

2

ABB 3hac5954-1

3

ABB 3hac14551-2

4

ABB 3hac043569-004

5

Siemens 6au1455-2ad00-0aa0

6

ABB 3hac021799-003

7

ABB dsqc223

8

ABB datx100

9

ABB dsqc679

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.

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

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.

PRODUCT PRECAUTIONS

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.

6

Restore the exact MTU, AE keying, OSP settings and controller configuration.

7

Review module, power-low, open-circuit and channel diagnostics after energization.

8

Command each output with controlled values and record loop response before release.

ENGINEER FAQ

Q1 How is the exact AO810V2 3BSE038415R1 execution identified?

Match AO810V2 and ABB article number 3BSE038415R1.

Q2 What documented function does AO810V2 3BSE038415R1 perform?

It provides eight 14-bit unipolar current-output channels.

Q3 Which installed system must be matched before fitting AO810V2 3BSE038415R1?

Match the S800 ModuleBus position and compatible TU810/TU812/TU814/TU830/TU833 MTU.

Q4 Which interfaces must be recorded for AO810V2 3BSE038415R1?

Record L1+/L2+ supply, channel polarity, load, range and terminal assignment.

Q5 What handling controls apply to AO810V2 3BSE038415R1?

Isolate external loop power and use ESD controls before handling.

Q6 What must be restored after installing AO810V2 3BSE038415R1?

Restore AE keying, OSP behavior, channel ranges and controller configuration.

Q7 What evidence confirms AO810V2 3BSE038415R1 is ready for service?

Retain diagnostics plus controlled output and field-response results for all eight channels.

Q8 Which manufacturer record supports the AO810V2 3BSE038415R1 page?

ABB's AO810V2 data sheet supplies the exact model, channel, performance and compatibility data.

RELATED APTER POWER PAGES

1 ABB dsqc662

2 ABB 3hac5954-1

3 ABB 3hac14551-2

4 ABB 3hac043569-004

5 Siemens 6au1455-2ad00-0aa0

6 ABB 3hac021799-003

7 ABB dsqc223

8 ABB datx100

9 ABB dsqc679

SOURCE AO810V2 Data Sheet | ABB Compact Product Suite hardware selector

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