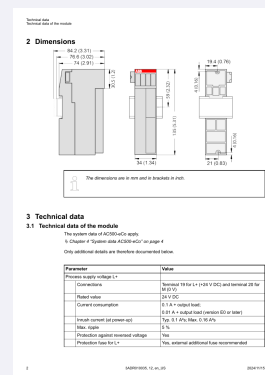


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

ABB AO561

Two-channel Analog Output Module



PRODUCT	AO561
FAMILY	AC500 / S500-eCo I/O
FUNCTION	Two-channel Analog Output Module
STATUS	Verify exact configuration

Prepared by Amikon Limited from ABB 3ADR010035 rev.12, 2024-11-15; AO561 hardware connections. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Analog output channels	2 configurable voltage or current outputs
Signal polarity	Bipolar voltage; unipolar current
Output resolution	12 bits incl. sign; 13 bits incl. sign at E0 or later
Current-output load	0 to 500 ohm
Voltage-output load current	Maximum +/-2 mA
Process supply rating	24 V DC; -15% to +20%
Process supply consumption	100 mA plus load; 10 mA plus load at E0 or later

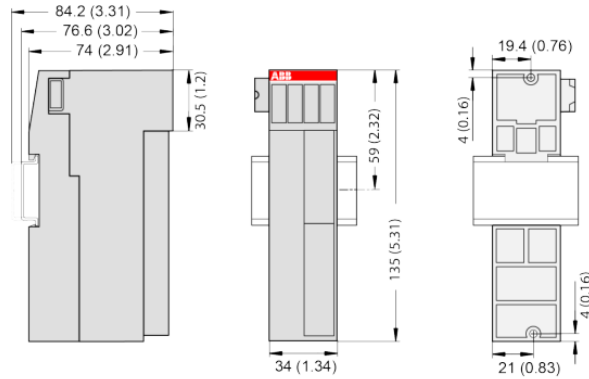
02 MOUNTING AND CONNECTION

- Isolate supply and process voltages, and secure connected actuators against unintended movement before work.
- Mount the module without obstructing convection and fit the selected removable 11-pin terminal block.
- Connect an appropriate 24 V DC SELV/PELV supply to terminal 19 L+ and terminal 20 M.
- Use voltage terminals 13/15 or current terminals 14/16 with common return 17; leave the unselected output terminals unconnected.
- Check receiver load, signal reference and the equipment-specific shield connection before energizing.

OFFICIAL INSTALLATION REFERENCE

Technical data
Technical data of the module

2 Dimensions



The dimensions are in mm and in brackets in inch.

3 Technical data

3.1 Technical data of the module

The system data of AC500-eCo apply.

↗ Chapter 4 "System data AC500-eCo" on page 4

Only additional details are therefore documented below.

Parameter	Value
Process supply voltage L+	
Connections	Terminal 19 for L+ (+24 V DC) and terminal 20 for M (0 V)
Rated value	24 V DC
Current consumption	0.1 A + output load; 0.01 A + output load (version E0 or later)
Inrush current (at power-up)	Typ. 0.1 A²s; Max. 0.16 A²s
Max. ripple	5 %
Protection against reversed voltage	Yes
Protection fuse for L+	Yes, external additional fuse recommended

Official manufacturer reference reproduced from ABB 3ADR010035 rev.12, 2024-11-15; AO561 hardware connections. Use the current source document and all referenced drawings and notes for installation.

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CABLE ROUTING AND CONNECTION

- Mount the module without obstructing convection and fit the selected removable 11-pin terminal block.
- Connect an appropriate 24 V DC SELV/PELV supply to terminal 19 L+ and terminal 20 M.
- Use voltage terminals 13/15 or current terminals 14/16 with common return 17; leave the unselected output terminals unconnected.
- Check receiver load, signal reference and the equipment-specific shield connection before energizing.
- Account for undefined output below 10 V at L+ during supply ramping, then validate commanded and measured signals safely.

05

INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Check output commands and receiver response under safe test conditions.
- Record the installed order number and baseline operating condition.

06

CONTROLLED DOCUMENTS

Official source	ABB 3ADR010035 rev.12, 2024-11-15; AO561 hardware connections
Product record	AO561
Manufacturer	ABB
Support	INFO@AMIKON.CN