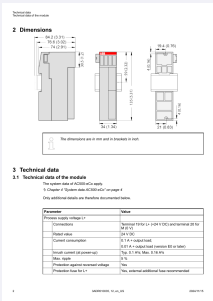


AMIKON TECHNICAL INTELLIGENCE

Product Data Sheet

ABB AO561

Two-channel Analog Output Module



OUTPUTS

2 configurable

VOLTAGE LOAD

Max. +/-2 mA

CURRENT BURDEN

0-500 ohm

ISOLATION

None

ABB AO561 generates two configurable analog output signals for an AC500 S500-eCo station. Each channel can serve a voltage or current load through its assigned terminals; the unused signal terminal of that channel must remain disconnected.

01

VERIFIED PRODUCT PARAMETERS

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
Maximum module dissipation	3.1 W; 1 W at E0 or later
Galvanic isolation	No
Output data length	4 bytes

Technical values were verified against ABB 3ADR010035 rev.12, 2024-11-15; AO561 hardware connections.

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ADDITIONAL TECHNICAL DATA

Conversion error	Typical +/-0.5% FS at +25 deg C; max. +/-2% FS at 0 to +60 deg C or EMC disturbance
Supply ripple limit	Maximum 5%
Voltage-output terminals	Channel 0: 13; channel 1: 15
Current-output terminals	Channel 0: 14; channel 1: 16
Shielded signal cable	Up to 100 m; conductor cross-section greater than 0.14 mm ²

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SYSTEM ROLE AND APPLICATIONS

Order 1TNE968902R1201 for AO561. Match the receiver burden, signal reference and selected range before energizing the output. The output circuits are not galvanically isolated, and hardware index E0 changes resolution and electrical consumption relative to earlier versions.

- Analog drive reference: ABB documents AO561 wiring to the differential input of MicroFlex e190.
- Current actuator command: connect a suitable current receiver within the specified 0-500 ohm burden.
- Voltage actuator command: connect a compatible voltage receiver without exceeding +/-2 mA output load.

04

OFFICIAL INSTALLATION FACTS

- 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.

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OFFICIAL DOCUMENTATION

[ABB 3ADR010035 rev.12, 2024-11-15; AO561 hardware connections](#)

AMIKON PRODUCT SUPPORT

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