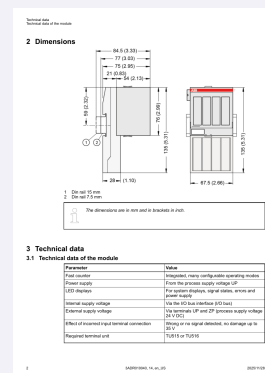


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

ABB DA502

Mixed Signal Output Module



PRODUCT	DA502
FAMILY	AC500 / S500 I/O
FUNCTION	Mixed Signal Output Module
STATUS	Verify exact configuration

Prepared by Amikon Limited from ABB 3ADR010040 rev.14, 2025-11-28, DA502 original instructions. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Signal-channel complement	16 fixed digital outputs, 8 configurable digital I/O, 4 analog inputs and 2 analog outputs
Terminal-unit requirement	TU515 or TU516
Process voltage	24 V DC; -15% / +20%; maximum 5% ripple
Process-supply consumption	0.07 A plus maximum 0.5 A per digital output
Inrush integral at UP	0.04 A2s at power-up
Unloaded module dissipation	Maximum 6 W
Digital output current limits	500 mA per channel; fixed DO0-DO15 bank maximum 4 A; DC16-DC23 bank maximum 4 A before derating

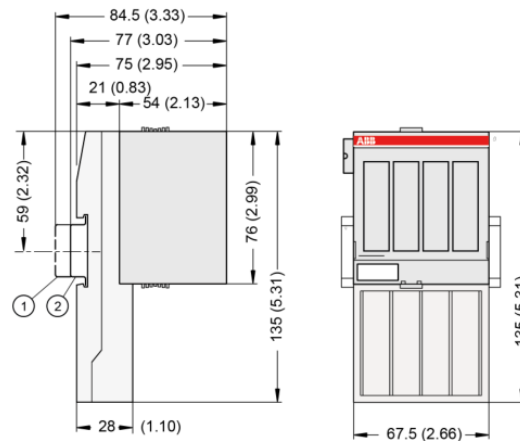
02 MOUNTING AND CONNECTION

- Isolate all process and supply voltages before wiring or exchanging DA502.
- Use TU515 or TU516 and preserve the specified mounting orientation and natural convection.
- Connect SELV/PELV 24 V process power with the documented 10 A fast UP protection.
- Wire DO0-DO15 to terminal banks 1 and 2, DC16-DC23 to bank 4, and analog channels to the documented bank-3 terminals.
- Check the 4 A fixed-output bank limit separately from the configurable-output bank and apply installation derating.

OFFICIAL INSTALLATION REFERENCE

Technical data
Technical data of the module

2 Dimensions



- 1 Din rail 15 mm
- 2 Din rail 7.5 mm



The dimensions are in mm and in brackets in inch.

3 Technical data

3.1 Technical data of the module

Parameter	Value
Fast counter	Integrated, many configurable operating modes
Power supply	From the process supply voltage UP
LED displays	For system displays, signal states, errors and power supply
Internal supply voltage	Via the I/O bus interface (I/O bus)
External supply voltage	Via terminals UP and ZP (process supply voltage 24 V DC)
Effect of incorrect input terminal connection	Wrong or no signal detected, no damage up to 35 V
Required terminal unit	TU515 or TU516

Official manufacturer reference reproduced from ABB 3ADR010040 rev.14, 2025-11-28, DA502 original instructions. Use the current source document and all referenced drawings and notes for installation.

04

CABLE ROUTING AND CONNECTION

- Use TU515 or TU516 and preserve the specified mounting orientation and natural convection.
- Connect SELV/PELV 24 V process power with the documented 10 A fast UP protection.
- Wire DO0-DO15 to terminal banks 1 and 2, DC16-DC23 to bank 4, and analog channels to the documented bank-3 terminals.
- Check the 4 A fixed-output bank limit separately from the configurable-output bank and apply installation derating.
- Restore signal ranges and channel directions; verify individual field loads and measured feedback before service.

05

INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Verify commanded loads and measured analog feedback against the actual wiring schedule.
- Record the installed order number and baseline operating condition.

06

CONTROLLED DOCUMENTS

Official source	ABB 3ADR010040 rev.14, 2025-11-28, DA502 original instructions
Product record	DA502
Manufacturer	ABB
Support	INFO@AMIKON.CN