

ALLEN-BRADLEY · SLC 500

1746-OW16

16-Point Relay Output Module

The 1746-OW16 provides sixteen mechanical relay outputs for switching documented AC or DC field loads in an Allen-Bradley SLC 500 system.

Lifecycle status	Discontinued
Discontinued date	2022-11-24
Replacement category	Engineering Replacement

Technical specifications

Manufacturer	Allen-Bradley
Model	1746-OW16
Product family	SLC 500
Product type	16-point relay output module
Outputs	16 relay outputs
Output grouping	Two groups of eight points per common
Operating voltage	5-125 V DC; 5-265 V AC at 47-63 Hz
Backplane current at 5 V DC	0.170 A
Backplane current at 24 V DC	0.180 A
Maximum signal delay	10 ms, Off-to-On and On-to-Off
Minimum load	10 mA at 5 V DC
Maximum off-state leakage	0 mA
Continuous current	16 A per module; 8 A per common
Operating temperature	0-60 deg C
Dimensions	34.6 x 144.45 x 130.18 mm
Weight	0.3 kg approximate

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Configuration and service data

Documented configuration

Hardware series	Series A, Series B, Series C, and Series D
Module location	SLC 500 chassis I/O slot
Terminal connection	Removable terminal block
Output technology	Mechanical relay contacts
Supported load types	AC or DC loads within the documented relay contact ratings
Field protection	Use load-appropriate branch protection and suppression

Selection and installation checks

- Verify the load voltage, steady-state current, inrush, switching frequency, and duty cycle against the relay contact ratings.
- Keep incompatible field potentials on separate common groups and confirm all terminal assignments before energizing the module.
- Apply suppression suitable for inductive AC or DC loads to reduce contact arcing and electrical noise.
- Confirm SLC chassis power capacity because the module draws current from both the 5 V DC and 24 V DC backplane supplies.
- Test the replacement with the machine in a safe state before returning the system to normal operation.

Typical documented uses

- Switching AC contactors, pilot devices, and interposing relays from an SLC 500 controller.
- Controlling DC solenoids and other discrete field loads within the documented relay ratings.
- Mixed-voltage machine control where the two common groups are wired to suitable field supplies.

Service note

Mechanical relay contacts are wear components. Intermittent or welded outputs require checks of the program command, common wiring, load inrush, suppression, terminal condition, and relay contact condition.

This document is a model-specific technical summary for 1746-OW16. Verify the installed unit label, hardware series, wiring, and application requirements before replacement.