

Allen-Bradley 1756 Series Service Manual

1756-OA16

1. Description

Mfr. Part Number:

2. Specifications

Specification	Value
Manufacturer	Rockwell Automation
Brand	Allen-Bradley
Series	ControlLogix
Part	Number/Catalog No. 1756-OA16
Outputs	16-Points
Module	Type Digital AC Output Module
Voltage	120-140 Volts AC
No.	of Outputs Sixteen (16) mechanically fused
Voltage	Category 120 / 240 Volts AC
Operating	Voltage Range 74-265 Volts AC
Maximum	Output Current Rating-Point 0.5 Amps at 60 degrees Celsius
Output	Delay Time Programmable 9.3 or 11 milliseconds
Maximum	Output Current Rating-Module 4 Amps at 60 degrees Celsius
Current	per point 0.5 A @ 60 °C (140 °F)
Removeable	Terminal Block(s) 1756-TBNH, 1756-TBSH
Current	per module 4 A @ 60 °C (140 °F)
Isolation	Voltage 50 Volts Continuous
Backplane	Current at 5 Volts 400 mA
Power	Dissipation (Max) 6.5 W @ 60 °C (140 °F)
Enclosure	None
UPC	10612598171368
Backplane	Current at 24 Volts 2 mA
Removable	Terminal Block(s) 1756-TBCH, 1756-TBSH Description
The	1756-OA16 module is a sixteen (16) point digital output module from the ControlLogix Series of modules made by the A

3. Product Information

Mfr. Part Number:

1756-OA16

Manufacturer: Allen-Bradley / Rockwell Automation

Description: Allen-Bradley 1756-OA16 ControlLogix Output Module 74-265 VAC 16-Ch (20 Pin)

Full Description: Allen-Bradley 1756-OA16 ControlLogix AC Output Module, 74-265V AC, 16 Mechanically Fused/Group Outputs (8 Points/Group, 20 Pin) The 1756-OA16 is a ControlLogix Discrete output module which operate at a voltage category of 79 to 265V AC at a frequency of 47 to 63 Hz. This module has Sixteen (16) mechanically fused channels with Two (2) groups of Eight (8) channels each. This module is directly installed to a 1756 local or remote chassis. Technical specifications for 1756-OA16

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Brand Allen-Bradley

Series ControlLogix

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Module Type Digital AC Output Module

Voltage 120-140 Volts AC

No. of Outputs Sixteen (16) mechanically fused

Voltage Category 120 / 240 Volts AC

Operating Voltage Range 74-265 Volts AC

Maximum Output Current Rating-Point 0.5 Amps at 60 degrees Celsius

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Current per point 0.5 A @ 60 °C (140 °F)

Removeable Terminal Block(s) 1756-TBNH, 1756-TBSH

Current per module 4 A @ 60 °C (140 °F)

Isolation Voltage 50 Volts Continuous

Backplane Current at 5 Volts 400 mA

Power Dissipation (Max) 6.5 W @ 60 °C (140 °F)

Enclosure None

UPC 10612598171368

Backplane Current at 24 Volts 2 mA

Removable Terminal Block(s) 1756-TBCH, 1756-TBSH, Description

The 1756-OA16 module is a Sixteen (16) point digital output module from the ControlLogix Series of modules made by the Allen-Bradley. The output voltage range of this digital module is 74 to 265 Volts AC at 46 to 63 Hertz. The output current rating per point, per group, and per module are 0.5 Amperes at 60 degrees Celsius, 2 Amperes at 60 degrees Celsius, and 4 Amperes at 60 degrees Celsius, respectively. The minimum load current is 10 mA per point. Furthermore, the backplane current of 1756-OA16 is 400 mA at 5.1 Volts DC and 2 mA at 24 Volts DC, constituting a total backplane power dissipation of 2.1 Watts. Moreover, the maximum power dissipation and thermal dissipation ratings are 6.5 Watts at 60 degrees Celsius and 22.17 BTU/hour, respectively. The 1756-OA16 also supports 2 removable terminal blocks, the 1756-TBSH and the 1756-TBNH. The 1756-OA16 module can be set to different operating or non-operating states, including the on-state, off-state, and last state (a reset function that resets a module that was suddenly powered down to the last operating state that it was in). The maximum voltage drop in the on-state is 1.5 Volts at 0.5 Amps and 5.7 Volts at a load current of less than 50 mA. On the other hand, the maximum leakage current in the off-state is 3 mA per point. The 1756-OA16 also features an output delay time for the off to on state which is 9.3 milliseconds at 60 Hertz, and one for the on to off state is 11 milliseconds at 50 Hertz. To alert the users if the point or group fuse is blown, the 1756-OA16 module will indicate this with the fault word tag name FuseBlown. Another fault word tag name is FieldPwrLoss which indicates a loss of field power to the modules output points. The 1756-OA16 can operate in a temperature range of 32 to 140 degrees Fahrenheit and it can be stored or transported at a temperature range of -40 to 185 degrees Fahrenheit. It can operate and be stored in an environment with a relative humidity range of 5 to 95%, non-condensing.

This module is mounted to any compatible ControlLogix chassis 1756-A4, 1756-A7, 1756-A10, 1756-A13 and 1756-A17. It also requires a Removable Terminal Block (RTB) that serves as the termination points of I/O signals. It may be installed in local or remote I/O ControlLogix chassis. Local ControlLogix chassis is where the ControlLogix processor is installed while remote I/O chassis refers to a chassis that communicates to the local chassis through a communication module. This chassis may also be referred to as Remote I/O or distributed I/O. This module has a Pilot duty rating of 0.5 A. It can energize or trigger inductive loads such as Solenoid actuated devices which may be valves, cylinders and other devices. It may also be used to activate relays even magnetic contactors however, if the module is planned to energize higher inductive loads with high inrush currents, it is recommended to install an isolation such as an interposing circuit to protect the module.

This module is compatible with any ControlLogix processor. It is also compatible with any ControlLogix communication module including encompass partner modules. It may also work along a GuardLogix module.

This module has front panel indicators that provide status of each channel. Whenever a channel is supplied with an appropriate signal, the dedicated LED indicator will be activated to confirm that the signal is received by the module.