

Allen-Bradley 1756 Series Service Manual

1756-OB16IEF

1. Description

Mfr. Part Number:

2. Specifications

Specification	Value
Manufacturer	Rockwell Automation
Brand	Allen-Bradley
Part	Number/Catalog No. 1756-OB16IEF
Series	ControlLogix
Module	Type DC Output Module
Circuit	Type DC
Input	Voltage Range 10-30 Volts
Operating	Voltage Range 10-30 Volts DC
Maximum	Output Current Rating-Point 2 Amps at 30 degrees Celsius, 1 Amp at 60 degrees Celsius
Maximum	Output Current Rating-Module 8 Amps at 30 degrees Celsius and 4 Amps at 60 degrees Celsius
Power	Dissipation (Max) 3.6 Watts at 60 Celsius
Backplane	Current at 5 Volts 350 milliamps
Backplane	Current at 24 Volts 3 milliamps
Removeable	Terminal Block(s) 1756-TBCH, 1756-TBS6H
Isolation	Voltage 50 Volts Continuous
Enclosure	None
UPC	10885630081783 Description
The	Allen-Bradley 1756-OB16IEF is a ControlLogix DC digitally-isolated, fast peer-control output module. The module is electronically fused and protected on a per-point basis, and has 16 individually isolated outputs. The 1756-OB16IEF module responds to commands for system transition in less than 25µS. It also h

3. Product Information

www.oilautotech.com

Mfr. Part Number:

1756-OB16IEF

Manufacturer: Allen-Bradley / Rockwell Automation

Description: Allen-Bradley 1756-OB16IEF ControlLogix Fast Isolated Output 10-30V DC

Full Description: Allen Bradley 1756-OB16IEF ControlLogix Fast Digital Peer to Peer Output Module with Pulse Width Modulation (PWM), (16) 24V DC Digital Outputs (10-30V DC Range), Isolated, 36-Pin Allen Bradley ControlLogix DC Output Module with DC Circuit Type Technical specifications for 1756-OB16IEF

Manufacturer Rockwell Automation

Brand Allen-Bradley

Part Number/Catalog No. 1756-OB16IEF

Series ControlLogix

Module Type DC Output Module

Circuit Type DC

Input Voltage Range 10-30 Volts

Operating Voltage Range 10-30 Volts DC

Maximum Output Current Rating-Point 2 Amps at 30 degrees Celsius, 1 Amp at 60 degrees Celsius

Maximum Output Current Rating-Module 8 Amps at 30 degrees Celsius and 4 Amps at 60 degrees Celsius

Power Dissipation (Max) 3.6 Watts at 60 Celsius

Backplane Current at 5 Volts 350 milliamps

Backplane Current at 24 Volts 3 milliamps

Removeable Terminal Block(s) 1756-TBCH, 1756-TBS6H

Isolation Voltage 50 Volts Continuous

Enclosure None

UPC 10885630081783 Description

The Allen-Bradley 1756-OB16IEF is a ControlLogix DC digitally-isolated, fast peer-control output module. The module is electronically fused and protected on a per-point basis, and has 16 individually isolated outputs. The 1756-OB16IEF module responds to commands for system transition in less than 25µs. It also has status indicators to show diagnostic and I/O statuses. A removable terminal block housing, or RTB, is needed before installing the module to the chassis. The only compatible RTBs are the 1756-TBS6H and the 1756-TBCH.

This module has a fault-reporting feature and it has an additional feature that allows the definition of the time duration before the module transitions from on to off after an error happens. The 1756-OB16IEF module is a CIP Sync slave-only device and it uses the CIP Sync for timestamps and scheduling. As such, another module is needed to act as the master clock of the network. Other features of the 1756-OB16IEF module include configurable point-level output states, output data echo, isolated and non-isolated varieties of output modules, multiple output point densities, electronic fusing, and a diagnostic information rich.

Available Fault-Mode states are "Hold," "Last State," "On," or "Off." The available Fault Mode durations are 1, 2, 5, 10 s, and "Forever." The final state after Fault Mode can either be "Off" or "On." All these states have "Off" as default except for Fault Mode set at "Forever."

The pilot rating of the 1756-OB16IEF module is 4 A inrush. It has a voltage category of 12/24V DC sink/source, an operating voltage range of 10-30V DC, a current draw of 3 mA at 24V and 320 mA at 5.1V, and a total backplane power of 1.7 W. Its Pulse Width Modulation (PWM) cycle-time is 1 ms min/1 hour max, the PWM on-time is 200 µs min/1 hour max, and the PWM on-time accuracy is +/-20 µs. The module's minimum load current is 1 mA per point, while its surge current is 4 A for 10 ms per point, repeatable every 2 s. It also has a continuous isolation voltage of 250V. The module has a maximum off-state leakage current per point of < 0.1 mA per point and a maximum on-state voltage drop of 0.2V DC at 1 A and 0.4V DC at 2 A. Its maximum current per point is 2 A at 45 Degrees Celsius (maximum of 4 channels) but at 60 Degrees Celsius, it is 1 A. The maximum current per module is 16 A at 60 Degrees Celsius, with a maximum of 1 A per channel, and at 45 Degrees Celsius, it is 8 A with a maximum of 2 A per channel.

www.oilautotech.com