

Allen-Bradley 1794-OB32P Manual

Brand	Allen-Bradley
Product Series	1746 1747
Product Type	Flex I/O Digital DC Output Module

Description

The 1794-OB32P is an Allen-Bradley Flex I/O electronically protected discrete output module. This module comes with individual channel protection, having thirty-two (32) 24 Volt DC sourcing output channels. It is compatible for use with the 1794-TB32 and 1794-TB32S terminal base units. It has an output current rating of 14.0 Amperes per module, with 6 Amperes total for channels 0...15 and 8 Technical specifications for 1794-OB32P

Manufacturer Rockwell Automation

Output Current Rating 14.0 A max per module (6 A total for channels 0...15; 8 A total for channels 16...31)

Part Number/Catalog No. 1794-OB32P

Brand Allen-Bradley

Product Description: Flex IO DC Output Module

Number of Outputs: Thirty-Two (32) Channels

Output circuit type: Sourcing

Terminal base: 1794-TB32 and 1794-TB32S

ON state Voltage, min: 10VDC

ON state Voltage, max. 31.2VDC

ON state Voltage, nom: 24VDC

Enclosure Open-type

Mounting: DIN Rail

Wire Size: Determined by installed terminal base

Operating Temperature: 0 to 55 C (32 to 131 F)

Storage Temperature: -40 to 85 C (-40 to 185 F)

Vibration: 5g @ 10 to 500 Hz

Operating Shock: 30 g

Product Type Flex I/O Digital DC Output Module

Outputs 32 Sourcing Current

On-state Voltage nom. 24V DC

On-state Current max. 500mA per Channel

On-state Voltage Drop max. 0.5V DC

Off-state Leakage Current max. 0.5mA

Isolation Voltage 50V Continuous

Flexbus Current 80mA @ 5V DC

Power Dissipation 5.3W @ 31.2V DC max.

Thermal Dissipation 18.1 BTU/hr. @ 31.2V DC max.

UPC 10612598286031 Description

The Allen-Bradley 1794-OB32P is a FLEX I/O digital 24V DC module. It comes with 32 outputs that are electronically fused and grouped into 2 groups of 16 outputs, with each group having a separate voltage source. Each output is self-protected against temperature overloads and shocks. It also has 32 yellow status indicators and measures 1.8 x 3.7 x 2.1 inches. The 1794-OB32P can be installed using a DIN rail mount and is only compatible with the 1794-TB32 and 1794-TB32S terminal base units. The on-state output voltage of the 1794-OB32P module ranges from a minimum of 10V DC and a maximum of 31.2V DC and it also has a maximum on-state output voltage drop of 0.5V DC. Per channel, the module has a minimum on-state current output of 1 mA and a

maximum on-state output of 500 mA per channel, or a total of 14 A per module. However, this module has a varying total number of amperes for the 2 output groups, as Channels 0-15 have a total of 6 A while Channels 16-31 has a total of 8 A. The module has a maximum output surge current of 2 A for 50 ms, which is repeatable every 2 s, as well as an off-state output leakage current of 0.5 mA. The 1794-OB32P's external DC supply current range is 103-273 mA and its external DC supply voltage range is 10-31.2V DC, with the 5% AC ripple included. This module has a maximum output delay of 0.5 ms from OFF to ON state and 1 ms from ON to OFF state. It also has a continuous isolation voltage of 50V between the field side and the system. The 1794-OB32P has a maximum thermal dissipation of 18.1 BTU/hr at 31.2V DC and a maximum power dissipation of 5.3 W also at 31.2V DC.

The Allen-Bradley 1794-OB32P is a sourcing discrete output module. This module is part of the Flex I/O product family, featuring thirty-two (32) electronically protected output channels. Discrete output modules, including the 1794-OB32P, are used to implement the control output commands of Programmable Logic Controllers (PLC). Specifically, the 1794-OB32P is especially compatible for use with electronic and electrical components operating at 24 Volts DC voltage such as indicating devices like pilot lamps and revolving light; Sounding devices such as buzzer, horn and siren; Electrical loads such as relay coils, solenoid actuated devices, and similar components.

The 1794-OB32P output module is used with terminal base units. Compatible terminal base units are 1794-TB32 and 1794-TB32S. This module has a maximum output current of 14.0 Amperes; maximum of 6 Amperes delivered by channels 0-15 and maximum of 8 Amperes provided by channels 16-31 while the minimum output current rating per channel is 1.0 milliamperere. It has a minimum on-state voltage output of 10 Volts DC, a nominal on-state output voltage of 24 Volts DC, and a maximum on-state output voltage of 31.2 Volts DC.

The module exhibits an output signal delay of 0.5 milliseconds for off-to-on transition and 1.0 millisecond for on-to-off transition. It has a current draw of 80 milliamperes @ 5 Volts DC, a maximum power dissipation of 5.3 Watts @ 31.2 Volts DC, and a maximum thermal dissipation of 18.1 British Thermal Units (BTU) per hour @ 31.2 Volts DC.

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Technical Specifications

Manufacturer Rockwell Automation

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