

Allen-Bradley 1794-IA16 Manual

Brand	Allen-Bradley
Product Series	1746 1747
Product Type	Flex I/O AC Digital Input Module

Description

The Allen-Bradley 1794-IA16 is a Flex I/O AC input module. This module has Sixteen (16) non-isolated input channels with input voltage range of 74VCA-132VAC. It is compatible for use with Flex I/O communication adapters and terminal bases such as 1794-TB3, 1794-TB3S, 1794-TBN(2), 1794-TB3K, 1794-TB3SK, 1794-TBNK. Technical specifications for 1794-IA16

Manufacturer Rockwell Automation

Brand Allen-Bradley

Product Family: Flex I/O

Product Description: AC Input Module

Number of Inputs: 16, non-isolated

Terminal base: 1794-TB3, 1794-TB3S ,1794-TBN, 1794-TB3K, 1794-TB3SK and 1794-TBNK

Keyswitch Position: 8

ON state Voltage, min: 74VAC

ON state Voltage, max. 132VAC

OFF state Voltage, max: 20VAC

Indicators: 16 Yellow status indicators

Mounting: DIN Rail

Wire Size: Determined by installed terminal base

Dimensions: 94 x 94 x 69 mm (3.7 x 3.7 x 2.7 in.)

Enclosure type rating: None (open-style)

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

Part Number/Catalog No. 1794-IA16

Product Type Flex I/O AC Digital Input Module

Inputs 16 Nonisolated

On-state Voltage min. 74 Volts AC

On-state Voltage max. 132 Volts AC

On-state Current min. 5.49 mA

On-state Current max. 14.8 1mA

Off-state Voltage max. 20 Volts AC

Off-state Current min. 2.9 mA

Nominal Input Current 12 mA at 120 Volts AC

Flexbus Current 20 mA

Power Dissipation 6.4 Watts at 132 Volts AC max.

UPC 10612598179913

UNSPSC 32151602 Description

The Allen-Bradley 1794-IA16 is a Discreet Input module that belongs to the Flex I/O product family. This module has Sixteen (16) non-isolated Discrete AC input modules which can be used to interface various electrical and signaling devices. This module supports DIN rail installation.

The 1794-IA16 is compatible for use with Flex I/O communication adapters such as ControlNet adapter with catalog numbers 1794-ACN, 1794-ACNR, and 1794-ACNR15; Ethernet communication adapters such as 1794-AENT and 1794-AENTR as well as Remote I/O adapter with catalog number 1794-ASB.

The 1794-IA16 is basically an I/O circuitry only. For termination and installation, a terminal base is required to be used with the AC input module. Compatible terminal bases for the 1794-IA16 are 1794-TB3, 1794-TB3S, 1794-TBN, 1794-TB3K, 1794-TB3SK and 1794-TBNK. Terminal base also allows daisy-chain connection of power connections. Power connections may be transferred from one module to another without the need of physically connecting to the power supply. This simplifies wiring connection and lessens wire lengths.

The module's input voltage range is 74-132VAC, with nominal input Voltage of 120VAC. This specifically pertains to a minimum On-state voltage of 74VAC and maximum of 132VAC. Additionally, the OFF-state voltage is 20VAC. The 1794-IA16 is powered via the flex I/O bus. it requires a Flexbus current of 20 mA @ 5V DC. The module's maximum Power dissipation is 6.4 W @ 132V AC and maximum thermal dissipation of 21.8 BTU/hr @ 132V AC. This module has 16 yellow status indicators for indicating the energization state of each input channels. It also has a minimum off-state input current of 2.9 mA, a minimum on-state current of 5.49 mA, a maximum on-state current of 14.81 mA, and a nominal input current of 12 mA at 120 Volts AC. Its external nominal AC power supply voltage is 120 Volts AC and its external AC power voltage range is 74 to 132 Volts AC. The FlexBus current of this module is 20 mA. The power dissipation is 6.4 W also at 132 Volts AC. The module has been type-tested between field side and system at 1,264 Volts AC for 60 seconds and its continuous isolation voltage is 120 Volts. It has an operating temperature of 32 to 131 degrees Fahrenheit and a storage temperature of -40 to 185 degrees Fahrenheit, with a non-condensing relative humidity of 5 to 95%. Its operating vibration is 5 G at 10 to 500 Hertz, its non-operating shock is 50g, and its operating shock is 30 G.

Technical Specifications

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Manufacturer Rockwell Automation

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Nominal Input C

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