

Allen-Bradley 1769 Series Service Manual

1769-IA8I

1. Description

Mfr. Part Number:

2. Specifications

Specification	Value
Series	1769 Compact I/O
Module	Type Individually isolated discrete input module
Part	Number/Catalog No. 1769-IA8I
Brand	Allen-Bradley
Manufacturer	Rockwell Automation
No.	of Input Eight (8) isolated input channels
Input	Voltage 100/120 VAC
Operating	Voltage Range 79-132VAC
Input	Frequency 47-63 Hz
Module	Width Single slot
Supported	mounting DIN rail / Panel Mount
Input	Delay Time, OFF to ON 20 ms
Backplane	Current at 5.1 Volts 90 mA
Product	Line CompactLogix
Input	Type Analog Input
Communication	Cable 8 Point
Shipping	Weight 2 lbs.
Shipping	Dimensions 8X8X5 in.
Enclosure	Type Open
Backplane	Current 1.4 Amps at 24 Volts
Power	Consumption 33.6 Watts
Power	Dissipation 7.5 Watts
UPC	10662468992831 Description
The	1769-IA8I is a 1769 Compact I/O module. This module is an AC input module that is designed with individually isolated input channels. It is capable of receiving 79-132VAC voltage signal range with frequency of 47-63 Hz.

3. Product Information

Mfr. Part Number:

1769-IA8I

Manufacturer: Allen-Bradley / Rockwell Automation

Description: Allen-Bradley 1769-IA8I CompactLogix 8-Point 120VAC Isolated Input Module

Full Description: Allen-Bradley 1769-IA8I CompactLogix 8-Point 100/120V AC Individually Isolated Input Module; Operating Voltage Range: 79-132V AC, 47-63 Hz, Backplane Current: 90 mA @ 5.1V, Power Supply Distance Rating: 8

UPC / GTIN: 10662468992838

Status: Current Product The Allen-Bradley 1769-IA8I is a 1769 Compact I/O individually isolated 120VAC input module. This module features Eight (8) isolated input that accepts 79-132VAC voltage range. This module has power supply distance rating of Eight (8) and compatible for use with the CompactLogix and MicroLogix 1500 controllers. Technical specifications for 1769-IA8I

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UPC 10662468992838 Description

The 1769-IA8I is a 1769 Compact I/O module. This module is an AC input module that is designed with individually isolated input channels. It is capable of receiving 79-132VAC voltage signal range with frequency of 47-63 Hz.

The 1769-IA8I input channels has input response time of 20 ms for OFF to ON and OFF to ON signal transitions. It draws 5.1 mA current from the backplane and dissipated heat amounting to 1.81 Watts. The module's minimum ON-state signal voltage is 79 VAC while the maximum ON-state signal voltage is 132VAC. Similarly, the minimum ON-state current is 5 mA at 74VAC and maximum ON-state current of 12mA at 120VAC. Conversely, the maximum OFF-state signal voltage is 20VAC while the maximum OFF-state current is 2.5 mA.

The 1769-IA8I individually isolated input channels provides isolation rating of 1517V AC for 1 s or 2145V DC for 1 s. Isolation is measured from the input point to bus and group to group 132V AC working voltage isolation according to IEC Class II reinforced insulation. This module is a single slot width module that mount directly to any available slot of the chassis. It supports DIN rail and direct panel mounting, following the standard supported mounting methods of the Logix platform.

The 1769-IF8I must not be mounted more than Eight (8) modules away from the power supply. This is referred to as the power supply distance rating. Additionally I/O power supply such as 1769-PA2, 1769-PB2, 1769-PA4, 1769-PB4 may be installed to provide sufficient power supply to the CompactLogix bus.

It also comes with LED status indicators and can be mounted using a DIN rail or panel mount. The entire module measures 1.38 x 3.43 x 4.65 inches and has an open-type enclosure.

The input voltage of the 1769-IA8I ranges from 79 to 132 Volts AC at 47 to 63 Hertz, while its voltage rating is 100 to 120 Volts AC. It has a maximum off-state voltage of 20 Volts AC and a minimum on-state voltage of 79 Volts AC. It also has an off-state current of 2.5 mA and an on-state current that ranges from a minimum of 5 mA at 74 Volts AC and a maximum of 12 mA at 120 Volts AC. The 1769-IA8I's current draw is 90 mA at 5.1 Volts and an inrush current of 250 mA. The power dissipation is at 1.81 W while the input impedance is 12 K Ω at 50 Hertz and 10 K Ω at 60 Hertz. It also has a power consumption of 33.6 W. The 1769-IA8I has a non-condensing relative humidity of 5 to 95% and a delay response time of 20 milliseconds for both the ON and OFF states. It has an operating vibration of 5g at 10 to 500 Hertz and a relay operating vibration of 2g. The 1769-IA8I's operating shock is 30g when panel-mounted and 20g when DIN-rail-mounted, its relay operating shock is 7.5g when panel-mounted and 5g when DIN rail-mounted and its non-operating shock is 40g when panel-mounted and 30g when DIN rail-mounted. The 1769-IA8I's operating temperature range is from 0 to 60 degrees Celsius while its storage temperature is from -40 to 85 degrees Celsius.

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