

Allen-Bradley 1756 Series Service Manual

1756-A7

1. Description

Mfr. Part Number:

2. Specifications

Specification	Value
Manufacturer	Rockwell Automation
Mounting	Panel Mount
Module	Type Chassis
Series	ControlLogix
Part	Number/Catalog No. 1756-A7
Brand	Allen-Bradley
No.	of slots Seven (7) slots
Backplane	Current, Chassis/Slot @ 1.2VDC 1.5 A
Backplane	Current, Chassis/Slot @ 3.3VDC 4A/4 A
Backplane	Current, Chassis/Slot @ 5.1VDC 15 A/6 A
Backplane	Current, Chassis/Slot @ 24VDC 2.8 A/2.8 A
Orientation	Horizontal
No.	of mounting tabs Four (4)
Operating	Temperature, Series B 0°C to +60°C (+32°F to +140°F)
Operating	Temperature, Series C -25...+60 °C (-13...+140 °F)
Storage	Temperature -40°C to +85°C (-40°F to +185°F)
Cabinet	size (HxWxD), min 50.8 x 60.9 x 20.3 cm (20 x 24 x 8 in.)
Power	dissipation, max 4.5 W
Slots	7
Power	Dissipation (Max) 4.5 Watts
Dimensions	20 x 24 x 8 inches
Weight	2.4 pounds (1.1 kilograms)
Enclosure	Open
Backplane	Current (5 Volts DC) 10 Amps
Backplane	Current (24 Volts DC) 2.8 Amps
UPC	10612598129314
UNSPSC	32151704 Description
The	Allen-Bradley 1756-A7 is a Seven (7) slot chassis from

3. Product Information

Mfr. Part Number:

1756-A7

Manufacturer: Allen-Bradley / Rockwell Automation

Description: Allen-Bradley 1756-A7 7 Slot ControlLogix Chassis

Full Description: Allen-Bradley 1756-A7 7 Slot ControlLogix Chassis, provides the physical connections between modules and the ControlLogix backplane. The Allen-Bradley/Rockwell Automation 1756-A7 chassis is a small and compact chassis that is made for the Allen-Bradley ControlLogix systems. This chassis is one of the smallest ControlLogix chassis that is available and it has only 2 mounting tabs on the top and only 2 mounting tabs on the bottom. The 1756-A7 chassis can be installed with or without 2 SEM screws, but if it is installed without. Technical specifications for 1756-A7

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Mounting Panel Mount

Module Type Chassis

Series ControlLogix

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Brand Allen-Bradley

No. of slots Seven (7) slots

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Backplane Current, Chassis/Slot @ 3.3VDC 4A/4 A

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Orientation Horizontal

No. of mounting tabs Four (4)

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Dimensions 20 x 24 x 8 inches

Weight 2.4 pounds (1.1 kilograms)

Enclosure Open

Backplane Current (5 Volts DC) 10 Amps

Backplane Current (24 Volts DC) 2.8 Amps

UPC 10612598129314

UNSPSC 32151704 Description

The Allen-Bradley 1756-A7 is a Seven (7) slot chassis from the ControlLogix Programmable Automation Controller (PAC) platform. This hardware is an essential component in building a ControlLogix control system as chassis, such as the 1756-A7 provides backplane connection and allows module to be installed in the provided module insertion slots.

The 1756-A7 also hosts the mounting slot for the Power supply, located at the left most side of the chassis. This chassis supports slim, standard and power supplies.

The 1756-A7 is mounted directly to the enclosure's subpanel via the provided Four (4) mounting tabs. It has physical dimensions of 50.8 x 60.9 x 20.3 cm (20 x 24 x 8 in.) and weighs approximately 1.10 kg (2.4 lb). Depending on the type of power supply used, the overall dimension of the 17560A7 varies. This chassis is also provided with a functional earth ground and protective earth ground terminals. Recommended wire type and size for the functional earth is an 8.3 sq. mm (8 AWG) solid or stranded copper wire with insulation rating of 90 °C (194 °F) or greater while for protective earth terminal, appropriate wire size is 2.1 sq. mm (14 AWG) solid or stranded copper wire with insulation rating of 90 °C (194 °F) or higher.

The 1756-A7 ControlLogix chassis has a power dissipation of 4.5 Watts and provides maximum backplane current supply of 1.5 A @ 1.2 VDC; 4A @ 3.3 VDC; 15 A / 6 A @ 5.1 VDC and 2.8 A / 2.8 A @ 24VDC for chassis / slot.

The operational thermal dissipation rate of the 1756-A7 is valued at 6.1 BTU per hour and the maximum operational power is rated at 1.8 Watts. The backplane current of the 1756-A7 is 2.8 Amps at 24 Volts, 6 Amps or 15 Amps at 5.1 Volts, 1.5 Amps at 1.2 Volts, and 4 Amps at 3.3 Volts. Moreover, the 1756-A7 chassis shipping dimensions are 50.8 x 60.9 x 20.3 in centimeters or 20 x 24 x 8 in inches. It weighs 2.4 pounds. The measured operating temperature range is from 0 to 60 degrees Celsius or 32 to 140 degrees Fahrenheit. The suggested storage temperature range is from -40 and 85 degrees Celsius. Besides, the compatible humidity type for the 1756-A7 is non-condensing and the relative humidity level the chassis can be used at is 5 to 95%. The shock rating of the chassis in its operating state is 30 G (acceleration) and in a non-operating state, the shock rating is 50 G (acceleration). On the other hand, the 1756-A7 has an open type of enclosure which allows the users to easily install it. Furthermore, it uses a stranded or solid copper wire with a size of 8.3 square millimeters (14 AWG) that is rated at 194 degrees Fahrenheit (90 degrees Celsius) or greater for a functional earth ground and a wire with a size of 2.1 square millimeters (14 AWG) for the protective earth ground.

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