

Allen-Bradley 1756 Series Service Manual

1756-A17

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-A17
Brand	Allen-Bradley
No.	of slots Seventeen (17) slots
Backplane	Current @ 1.2VDC 1.5 A
Backplane	Current @ 3.3VDC 4A/4 A
Backplane	Current @ 5.1VDC 15 A/6 A
Backplane	Current @ 24VDC 2.8 A/2.8 A
Orientation	Horizontal
No.	of mounting tabs Ten (10)
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)
Relative	Humidity 5 to 95% (without condensation)
Wire	size Functional Earth Ground - 8.3 mm ² (8 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater Protective Earth Ground - 2.1 mm ² (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater
Slots	17
Power	Dissipation (Max) 6 Watts
Dimensions	30 x 36 x 8 inches
Weight	4.8 pounds (2.2 kilograms)
Enclosure	Open
Backplane	Current (5 Volts DC) 10 amps
Backplane	Current

3. Product Information

Mfr. Part Number:

1756-A17

Manufacturer: Allen-Bradley / Rockwell Automation

Description: Allen-Bradley 1756-A17 17 Slot ControlLogix Chassis

Full Description: Allen-Bradley 1756-A17 ControlLogix chassis receives power from ControlLogix power supply. Compatible Power Supplies: 1756-PA72, 1756-PB72, 1756-PA75, 1756-PB75, 1756-PC75, 1756-PH75. The backplane of 1756A17 provides a high-speed communication path between modules and distributes power to each of the modules within the chassis. Slot filler modules 1756-N2 are required to fill empty slots. Number of Slots: 17; Backplane current, chassis/slot max @ 1.2V DC: 1.5 A/1.5 A; Backplane current, chassis/slot max @ 3.3V DC: 4 A/4 A; Backplane current, chassis/slot max @ 5.1V DC: 15 A/6 A; Backplane current, chassis/slot max @ 24V DC: 2.8 A/2.8 A; Power dissipation: 6.1 BTU/hr; Power consumption: 1.8 W; Dimensions (WxHxD): 738 x 169 x 145 mm (29.06 x 6.65 x 5.71 in.); Cabinet size (WxHxD), min: 914 x 762 x 203 mm (36 x 30 x 8 in.); Weight, approx.: 2.20 kg (4.8 lb). The 1756-A17 chassis is a ControlLogix series chassis from Allen-Bradley/Rockwell Automation. It has 5 mounting tabs on the top and 5 additional mounting tabs on the bottom. The 1756-A17 ControlLogix chassis can be used with or without SEM screws, but the presence or absence of SEM screws will determine how much and what kinds of other hardware that the chassis needs. With SEM Technical specifications for 1756-A17

Manufacturer Rockwell Automation

Mounting Panel Mount

Module Type Chassis

Series ControlLogix

Part Number/Catalog No. 1756-A17

Brand Allen-Bradley

No. of slots Seventeen (17) slots

Backplane Current @ 1.2VDC 1.5 A

Backplane Current @ 3.3VDC 4A/4 A

Backplane Current @ 5.1VDC 15 A/6 A

Backplane Current @ 24VDC 2.8 A/2.8 A

Orientation Horizontal

No. of mounting tabs Ten (10)

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)

Relative Humidity 5 to 95% (without condensation)

Wire size Functional Earth Ground - 8.3 mm² (18 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater Protective Earth Ground - 2.1 mm² (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater

Slots 17

Power Dissipation (Max) 6 Watts

Dimensions 30 x 36 x 8 inches

Weight 4.8 pounds (2.2 kilograms)

Enclosure Open

Backplane Current (5 Volts DC) 10 amps

Backplane Current (24 Volts DC) 2.8 Amps

UPC 10612598129291 Description

The Allen-Bradley 1756-A17 is a ControlLogix component. This is a 17-slot chassis that is used to mount ControlLogix modules including processors, I/O modules, specialty modules and encompass partner modules.

The 1756-A17 provides module housing including the necessary backplane connection to allow internal module connection and distribution of bus power through the embedded electronic circuitry and provided mounting slots to the chassis. It has a power consumption of 1.5 A @ 1.2VDC; 4A/4A @ 3.3 VDC; 15 A/6 A @ 15 A/6 A and 2.8 A/2.8 A @ 24VDC.

The 1756-A17 supports horizontal mounting only and requires a minimum cabinet size or available space of 76.2 x 91.4 x 20.3 cm (30 x 36 x 8 in.). The provided 10 mounting tabs permit direct panel mounting to the enclosure subpanel for convenient and fast installation. This chassis weighs 2.20 kg (4.8 lb).

When mounting 1756-A17 chassis with nearby ControlLogix chassis, specific space requirements are 10.2 cm (4.0 in.) plus the width of the power supply (left side), 7.7 cm (3.0 in.) plus the width of the power supply (right side), 15.3 cm (6.0 in.) Top clearance and 5.1 cm (2.0 in.) bottom clearance.

The 1756-A17 are available in 3 chassis revisions, specifically, series A, B and C. Series C specifically offers improved slot guidelines, ventilation, tougher mounting tabs, extra holes for mounting tabs and additional ground screw for termination to the panel grounding.

The 1756-A17 Standard Chassis includes inherent time-stamping capabilities for SOE applications. The chassis backplane distributes power to each of the modules within the chassis by providing a high-speed communication path between modules. It requires a Bulletin 1492 wiring IFM or an RTB to connect all the field-side wiring. The 1756-A17 Standard Chassis provides easy maintenance with the RIUP feature. For preventing replacement errors, it also offers electronic keying. In case of any system or field side failure, its comprehensive diagnostic feature helps identify the fault. It is compact, cost-effective, and easily compatible with items such as PanelView operator.