

Allen-Bradley 1756 Series Service Manual

1756-PA75R

1. Description

Mfr. Part Number:

2. Specifications

Specification	Value
Manufacturer	Rockwell Automation
Dimensions	17.5 x 14.5 x 13.7 cm (6.9 x 5.7 x 5.4 in.)
Weight	1.45 kg (3.2 lb)
Module	Type Redundant Power Supply
Series	ControlLogix
Part	Number/Catalog No. 1756-PA75R
Brand	Allen-Bradley
Nom	Input Voltage 120/240VAC
Input	Voltage Range 85-264VAC
Isolation	Voltage 250V (continuous), Reinforced Insulation Type, Power Input to Backplane, Power Input to Annunciator, Annunciator to Backplane Type tested at 3250V DC for 60 s
Max	Inrush Current 20 Amperes
Current	Capacity 1.5 A at 1.2VDC; 4A at 3.3VDC; 13 A at 5.1VDC and 2.8 A at 24VDC
Output	Power 75 W @ 0...60 °C (32...140 °F)
Annunciator	Power 240V AC 50/60 Hz, 240V DC, 50 mA, resistive only
Hold	Up time 2 cycles @ 60 Hz; 2 cycles @ 50 Hz
Chassis	Compatibility 1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17
Input	Voltage 120-220 Volts AC
Voltage	Range 85-265 Volts AC
Input	Power 115 Watts
Input	Frequency 47-63 Hertz
Power	Output 75 Watts at 60 Celsius
Chassis	Series B
Location	Panel Mounted
Operating	Temperatu

3. Product Information

Mfr. Part Number:

1756-PA75R

Manufacturer: Allen-Bradley / Rockwell Automation

Description: Allen-Bradley 1756-PA75R ControlLogix Power Supply Redundant 85-265VAC/5V@13A

Full Description: Allen-Bradley 1756-PA75R ControlLogix 85-265 VAC Redundant Power Supply, (5V @ 13 Amp). Input Voltage Range: 85-265V AC; Input Power: 120VA, 115A; Output Power: 75W @ 60°C; Maximum Backplane Output Current: 1.5A @ 1.2V, 4A @ 3.3V, 13A @ 5.1V, 2.8A @ 24V; Non-replaceable fuse is soldered in place. The Allen-Bradley 1756-PA75R redundant power supply requires a 1756-CPR2 cable to connect Power Supply to the chassis adapter module. The 1756-CPR2 cable uses two female ends to connect to male connectors on the redundant power supply and the chassis adapter module. A solid state relay on the 1756-PA75R redundant power supply can be connected to an input module. This connection monitors whether the power supplies are functioning properly. The Allen-Bradley 1756-PA75R is a ControlLogix Redundant Power Supply. Aside from having the same features as a standard power supply, the 1756-PA75R supports Automatic chassis load sharing between the redundant power supplies. Each of the power supply is externally powered by an input Voltage range of 85-265VAC, 47-63 Hz. It has an output power rating of 75 W @ 0...+60 °C Technical specifications for 1756-PA75R

Manufacturer Rockwell Automation

Dimensions 17.5 x 14.5 x 13.7 cm (6.9 x 5.7 x 5.4 in.)

Weight 1.45 kg (3.2 lb)

Module Type Redundant Power Supply

Series ControlLogix

Part Number/Catalog No. 1756-PA75R

Brand Allen-Bradley

Nom Input Voltage 120/240VAC

Input Voltage Range 85-264VAC

Isolation Voltage 250V (continuous), Reinforced Insulation Type, Power Input to Backplane, Power Input to Annunciator, Annunciator to Backplane Type tested at 3250V DC for 60 s

Max Inrush Current 20 Amperes

Current Capacity 1.5 A at 1.2VDC; 4A at 3.3VDC; 13 A at 5.1VDC and 2.8 A at 24VDC

Output Power 75 W @ 0...60 °C (32...140 °F)

Annunciator Power 240V AC 50/60 Hz, 240V DC, 50 mA, resistive only

Hold Up time 2 cycles @ 60 Hz; 2 cycles @ 50 Hz

Chassis Compatibility 1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17

Input Voltage 120-220 Volts AC

Voltage Range 85-265 Volts AC

Input Power 115 Watts

Input Frequency 47-63 Hertz

Power Output 75 Watts at 60 Celsius

Chassis Series B

Location Panel Mounted

Operating Temperature 32-140 Fahrenheit (0-60 Celsius)

Enclosure None

UPC 10612598274229

UNSPSC 32151706 Description

The 1756-PA75R is a Redundant power supply. The features of this power supply are similar to a standard power supply except that this module is installed outside of the chassis and paired with a redundant power supply partner of the same catalog number.

The 1756-PA75 is primarily used for redundant operation and capable of implementing automatic chassis load sharing between the redundant power supply pair. It is also installed with individual status indicator to indicate the operation of the power supply pair. It also has a Solid-state relay that provides contact output that may be used to indicate supply status when wired a signaling device.

The build a redundant power supply pair, a pair of power supply is needed or Two (2) 1756-PA75R, Two (2) redundant power supply cable such as 1756-CPR2, 1756-CPR2D, and 1756-CPR2U, One (1) Redundant power supply chassis adapter with catalog number 1756-PSCA2, 1756-PSCA2K, or 1756-PSCA2XT and optional signaling device such as an annunciator for monitoring the state of operation of the power supply modules.

The 1756-PA75R operates when supplied by an input Voltage range of 85-265VAC, 47-63 Hz with nominal values of 120VAC / 240VAC and 50/60 Hz. It has an input power requirement of 120VA / 115 W and delivers an output power rating of 75 W when operated at 0...+60 °C (+32...+140 °F) and current capacities of 1.2 A at 1.2 VDC; 4A at 3.3VDC; 13 A at 5.1VDC and 2.8 A at 24VDC. When installing annunciator device, recommended annunciator is 240VAC 50/60 Hz, 240V DC, 50 mA, resistive only.

The dimensions of the 1756-PA75R are approximately 6.9 x 5.7 x 5.4 inches. The weight of this power supply is around 3.2 lb and the annunciator and conductor wire category of this power supply are Category 3 and Category 1 respectively. The annunciator wire size of the 1756-PA75R is 22-14 AWG stranded at 167 °F and made of copper. The conductor wire size of this power supply is 14 AWG. The Allen-Bradley 1756-PA75R has a surge-transient immunity that is based on the IEC 61000-4-5. The surge transient immunity of this power supply is ± 1 kV line-line (DM) and it is ± 2 kV line-earth (CM) on the signal ports. The Conducted RF immunity of the 1756-PA75R is 10 Vrms with a 1 kHz sine-wave of 80% AM from 150 kHz to 80 MHz. The 1756-PA75R is considered to be a Class 1, Class A Appliance in accordance with IEC / CISPR Publications 11. Keep in mind that under proper precautions there may be potential difficulties in ensuring electromagnetic compatibility in other environments due to disruption and radiation.

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