Installation Instructions

Original Instructions

Allen-Bradley
by ROCKWELL AUTOMATION

ControlLogix Power Supply

Catalog Numbers 1756-PA30XT, 1756-PA50, 1756-PA50K, 1756-PA72, 1756-PA72K, 1756-PA75, 1756-PA75K, 1756-PB30XT, 1756-PB50, 1756-PB50K, 1756-PB72, 1756-PB72K, 1756-PB75, 1756-PB75K, 1756-PC75, 1756-PH75, 1756-PH75K, 1756-PAXT, 1756-PBXT

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ControlLogix® power supplies are used with the 1756 chassis to provide 1.2V, 3.3V, 5V, and 24V DC power directly to the chassis backplane. Standard, ControlLogix-XT™, and slim (reduced width) power supplies are available.

The catalog number of the conformal coated product includes the designation 'K' in the last position before the series identifier.

Summary of Changes

This publication contains the following new or updated information. This list includes substantive updates only and isn't intended to reflect all changes.

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Added UKEX information to ATEX, IECEx, and UKEX Hazardous Location Conformity and updated Special Conditions for Safe Use Information	4

Power Supply and Chassis Compatibility

Your chassis series determines the power supply that you can use. This table lists the chassis that can be installed with each power supply.

Power Supply Cat. No.	Chassis Cat. No.
1756-PA72/C, 1756-PA72K	1756-A4/A, 1756-A7/A, 1756-A10/A, 1756-A13/A, 1756-A17/A, 1756-A4/B, 1756-A7/B, 1756-A10/B, 1756-A13/B, 1756-A17/B, 1756-A4/C, 1756-A7/C, 1756-A10/C, 1756-A13/C, 1756-A17/C
1756-PB72/C, 1756-PB72K	
1756-PA50, 1756-PA50K	
1756-PB50, 1756-PB50K	
1756-PA75/B, 1756-PA75K	1756-A4/B, 1756-A7/B, 1756-A10/B, 1756-A13/B, 1756-A17/B, 1756-A4/C, 1756-A7/C, 1756-A10/C, 1756-A13/C, 1756-A17/C
1756-PB75/B, 1756-PB75K	
1756-PC75/B	
1756-PH75/B, 1756-PH75K	
1756-PBXT	1756-A4LXT/B, 1756-A5XT/B, 1756-A7LXT/B, 1756-A7XT/B, 1756-A7XT/C, 1756-A10XT/C
1756-PAXT	
1756-PA30XT	
1756-PB30XT	

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Specifications

Attribute	1756-PA72, 1756-PA72K	1756-PA75, 1756-PA75K	1756-PB72, 1756-PB72K	1756-PB75, 1756-PB75K	1756-PC75	1756-PH75, 1756-PH75K
Voltage and current ratings Input	120/240V AC, 50/60 Hz, 100VA, 100 W	120/240V AC, 50/60 Hz, 100VA, 100 W	24V DC, 95 W	24V DC, 95 W	48V DC, 95 W	125V DC, 95 W
Output (current capacity)	2.8 A, 24V DC; 10.0 A, 5.1V DC; 4.0 A, 3.3V DC; 1.5 A, 1.2V DC; 75 W max, 20 A inrush max	2.8 A, 24V DC; 13.0 A, 5.1V DC; 4.0 A, 3.3V DC; 1.5 A, 1.2V DC; 75 W max, 20 A inrush max	2.8 A, 24V DC; 10.0 A, 5.1V DC; 4.0 A, 3.3V DC; 1.5 A, 1.2V DC; 75 W max, 30 A inrush max	2.8 A, 24V DC; 13.0 A, 5.1V DC; 4.0 A, 3.3V DC; 1.5 A, 1.2V DC; 75 W max, 30 A inrush max	2.8 A, 24V DC; 13.0 A, 5.1V DC; 4.0 A, 3.3V DC; 1.5 A, 1.2V DC; 75 W max, 30 A inrush max	2.8 A, 24V DC; 13.0 A, 5.1V DC; 4.0 A, 3.3V DC; 1.5 A, 1.2V DC; 75 W max, 30 A inrush max
Isolation voltage	250V (continuous), Reinforced Insulation Type, Power Input to Backplane					
Temperature, operating IEC 60068-2-1 (Test Ae, Operating Cold), IEC 60068-2-2 (Test Be, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	0 °C ≤ Ta ≤ +60 °C (+32 °F ≤ Ta ≤ 140 °F)					
Temperature, surrounding air, max	60 °C (140 °F)					
Enclosure type rating	None (open-style)					
Torque	0.565 N•m (5 lb•in)					
Dimensions (HxWxD), approx	14.0 x 11.2 x 14.5 cm (5.51 x 4.41 x 5.71 in.)					
Wire size	2.5 mm² (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation max					
North American temperature code	T4					
ATEX temperature code	-		T4		-	
IECEx temperature code	-		T4		-	

Attribute	1756-PA50, 1756-PA50K	1756-PB50, 1756-PB50K	1756-PAXT	1756-PBXT	1756-PA30XT	1756-PB30XT
Voltage and current ratings Input	120/240V AC, 50/60 Hz; 81 W (90VA), 50 °C (122 °F); 68 W (77VA), 60 °C (140 °F)	24V DC; 85 W, 50 °C (122 °F); 70 W, 60 °C (140 °F)	120/240V AC 50/60 Hz, 82VA, 64 W	18...32V DC, 70 W	120/240V AC, 50/60 Hz, 50 W (60VA), 70 °C (158 °F)	24V DC, 50 W 70 °C (158 °F)
Output (current capacity)	2.5 A, 24V DC; 8.0 A, 5.1V DC; 2.0 A, 3.3V DC; 1.5 A, 1.2V DC; 50 °C (122 °F), 60 W max; 60 °C (140 °F), 50 W max; 20 A inrush max	2.5 A, 24V DC; 8.0 A, 5.1V DC; 2.0 A, 3.3V DC; 1.5 A, 1.2V DC; 50 °C (122 °F), 60 W max; 60 °C (140 °F), 50 W max; 20 A inrush max	1.75 A, 24V DC, 8.0 A, 5.1V DC, 4.0 A, 3.3V DC, 1.5 A, 1.2V DC, 42 W max, 20 A inrush max	2.1 A, 24V DC, 10.0 A, 5.1V DC, 4.0 A, 3.3V DC, 1.5 A, 1.2V DC, 52 W max, 30 A inrush max	1.25 A, 24V DC; 6.0 A, 5.1V DC; 2.0 A, 3.3V DC; 1.5 A, 1.2V DC; 30 W max, 20 A inrush max	1.25 A, 24V DC; 6.0 A, 5.1V DC; 2.0 A, 3.3V DC; 1.5 A, 1.2V DC; 30 W max, 20 A inrush max
Isolation voltage	250V (continuous), Reinforced Insulation Type, Power Input to Backplane					
Temperature, operating IEC 60068-2-1 (Test Ae, Operating Cold), IEC 60068-2-2 (Test Be, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	0 °C ≤ Ta ≤ +60 °C (+32 °F ≤ Ta ≤ 140 °F)		-25 °C ≤ Ta ≤ +70 °C (-13 °F ≤ Ta ≤ +158 °F)			
Temperature, surrounding air, max	60 °C (140 °F)		70 °C (158 °F)			
Enclosure type rating	None (open-style)					
Torque	0.565 N•m (5 lb•in)					
Dimensions (HxWxD), approx	14.0 x 7.8 x 14.5 cm (5.51 x 3.07 x 5.71 in.)		14.0 x 11.2 x 14.5 cm (5.51 x 4.41 x 5.71 in.)		14.0 x 7.8 x 14.5 cm (5.51 x 3.07 x 5.71 in.)	
Wire size	2.5 mm² (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation max					
North American temperature code	T4		T4	T4A	T4	
ATEX temperature code	-	T4	-	T4	-	T4
IECEx temperature code	-	T4	-	T4	-	T4