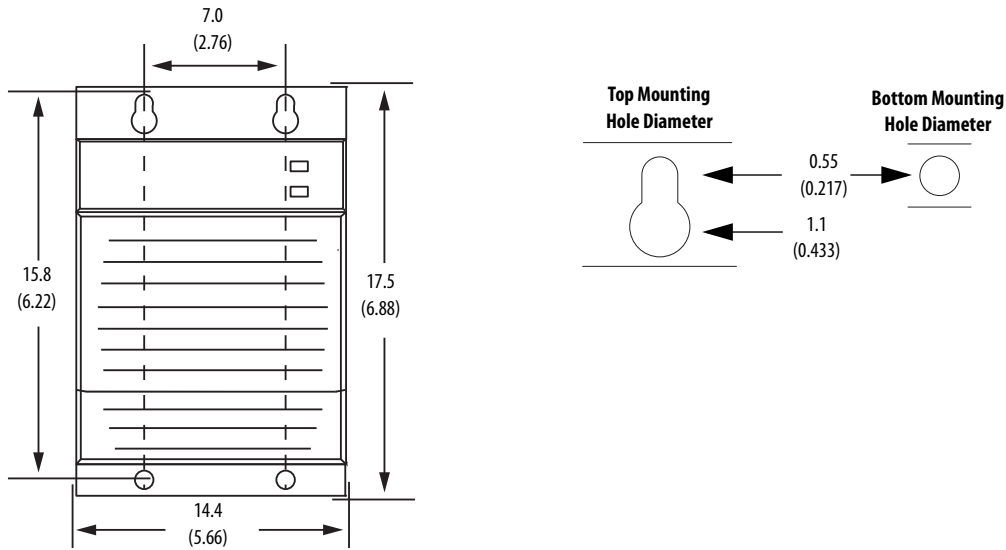


Mounting Dimensions



Dimensions are in cm (in.).

Redundant Power Supply Features

The redundant power supplies offer the same features as the standard power supplies, and the following:

- Redundant operation
- Automatic chassis load sharing between the redundant power supplies
- Status indicators for visual operating status of the pair
- Solid-state relay for system recognition of supply status when wired to an input module
- The ControlLogix redundant power supply system is designed to account for operational anomalies in only the power supply (the chassis adapter and power supply cables are excluded)

Technical Specifications - ControlLogix Redundant Power Supplies

Attribute	1756-PA75R	1756-PB75R
Input voltage range	85...265V AC ⁽¹⁾	18...32V DC ⁽²⁾
Input voltage	120V/240V AC, 50/60 Hz	24V DC
Input frequency range	47...63 Hz	—
Input power, max	120VA 115 W	110 W
Output power, max	75 W @ 0...60 °C (32...140 °F)	
Inrush current, max	20 A	30 A
Hold up time ⁽³⁾	2 cycles @ 60 Hz 2 cycles @ 50 Hz	20 ms
Current capacity @ 1.2V	1.5 A	
Current capacity @ 3.3V	4 A	
Current capacity @ 5.1V	13 A	
Current capacity @ 24V	2.8 A	
Annunciator power	240V AC 50/60 Hz, 240V DC, 50 mA, resistive only	90V DC for ATEX/IECEx
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	

Technical Specifications - ControlLogix Redundant Power Supplies

Attribute	1756-PA75R	1756-PB75R
Dimensions (HxWxD), approx	17.5 x 14.5 x 13.7 cm (6.9 x 5.7 x 5.4 in.)	
Weight, approx	1.45 kg (3.2 lb)	
Chassis	1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17	
Wire size	Power: 2.5 mm ² (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation max Annunciator: 0.25...2.5 mm ² (22...14 AWG) solid or stranded copper wire rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation max	
Wire category ⁽⁴⁾	3 - on annunciator ports 1 - on power ports 3 - on 1756-CPR2 connections	
Pilot duty rating	Annunciator - not rated	
Conductor screw torque	0.79 N·m (7 lb·in)	
North American temperature code	T3C	T4
ATEX temperature code	—	T4
IEC temperature code	—	T4
Enclosure type rating	None (open-style)	

(1) UL certification for 120/240V AC, 50/60 Hz nominal. Rockwell Automation specified 85...265V AC, 47...63 Hz.

(2) UL certification for 24V DC nominal. Rockwell Automation specified 18...32V DC.

(3) The hold up time is the time between input voltage removal and DC power failure.

(4) Use this conductor category information to plan conductor routing. See the Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

Environmental Specifications - Redundant Power Supplies

Attribute	1756-PA75R	1756-PB75R
Temperature, operating IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	0...60 °C (32...140 °F)	
Temperature, surrounding air, max	60 °C 140 °F)	
Temperature, nonoperating IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock)	-40...+85 °C (-40...+185 °F)	
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)	5...95% noncondensing	
Vibration IEC 60068-2-6 (Test Fc, Operating)	2 g @ 10...500 Hz	
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g	
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	50 g	
Emissions	IEC 61000-6-4	
ESD immunity IEC 61000-4-2	6 kV contact discharges 8 kV air discharges	
Radiated RF immunity IEC 61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 80...2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM at 1890 MHz 3V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz	
EFT/B immunity IEC 61000-4-4	±4 kV at 5 kHz on power ports ±4 kV at 5 kHz on annunciator ports	
Surge transient immunity IEC 61000-4-5	±1 kV line-line (DM) and ±2 kV line-earth (CM) on power ports	

Environmental Specifications - Redundant Power Supplies

Attribute	1756-PA75R	1756-PB75R
Conducted RF immunity IEC 61000-4-6	15V rms with 1 kHz sine-wave 80% AM from 150 kHz . . . 80 MHz	
Conducted audio immunity IEC 945	2 W max from rated frequency to the 200th harmonic on AC supply ports	
Voltage variation IEC 61000-4-11	30% dips for 1 period at 0° and 180° on AC supply ports 60% dips for 5 and 50 periods on AC supply ports ±10% fluctuations for 15 min on AC supply ports >95% interruptions for 250 periods on AC supply ports	—
Voltage variation IEC 61000-4-29	—	10 ms interruption on DC supply ports ⁽¹⁾ 60% dips for 100 ms on DC supply ports 100% dips for 50 ms on DC supply ports ±20% fluctuations for 15 min on DC supply ports 5 s interruptions on DC supply ports ⁽²⁾

(1) Short interruption test verifies ride through. The supply remains fully functional under this condition.

(2) Long interruption test verifies that repetitive inrush surge currents do not create any unsafe conditions. The supply fully shuts down and starts up in this test.

Certifications - Redundant Power Supplies

Certification ⁽¹⁾	1756-PA75R	1756-PB75R
c-UL-us	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584. UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810.	
CSA	CSA Certified Process Control Equipment. See CSA File LR54689C. CSA Certified Process Control Equipment for Class I, Division 2 Group A,B,C,D Hazardous Locations. See CSA File LR69960C.	
FM	FM Approved Equipment for use in Class I Division 2 Group A,B,C,D Hazardous Locations	
CE	European Union 2014/30/EU EMC Directive, compliant with: • EN 61326-1; Meas./Control/Lab., Industrial Requirements • EN 61000-6-2; Industrial Immunity • EN 61000-6-4; Industrial Emissions • EN 61131-2; Programmable Controllers (Clause 8, Zone A & B) European Union 2014/35/EU LVD, compliant with: • EN 61131-2; Programmable Controllers (Clause 11)	
RCM	Australian Radiocommunications Act, compliant with: • EN 61000-6-4; Industrial Emissions	
Ex	—	European Union 2014/34/EU ATEX Directive, compliant with: • EN 60079-0; General Requirements • EN 60079-15; Potentially Explosive Atmospheres, Protection "n" • II 3 G Ex nA IIC T4 Gc • DEMKO13ATEX1325026X
IECEx	—	IECEx System, compliant with: • IEC 60079-0; General Requirements • IEC 60079-15; Potentially Explosive Atmospheres, Protection "n" • II 3 G Ex nA IIC T4 Gc • IECEx UL 14.0008X
KC	Korean Registration of Broadcasting and Communications Equipment, compliant with: • Article 58-2 of Radio Waves Act, Clause 3	
EAC	Russian Customs Union TR CU 020/2011 EMC Technical Regulation Russian Customs Union TR CU 004/2011 LV Technical Regulation	

(1) When marked. See the Product Certification link at <http://www.ab.com> for Declarations of Conformity, Certificates, and other certification details.

Technical Specifications - ControlLogix-XT Redundant Power Supplies

Attribute	1756-PAXTR	1756-PBXTR
Input voltage range	85 . . . 265V AC ⁽¹⁾	18 . . . 32V DC
Input voltage	120V/240V AC	24V DC
Input frequency range	47 . . . 63 Hz	—
Input power, max	75VA 65 W	81 W