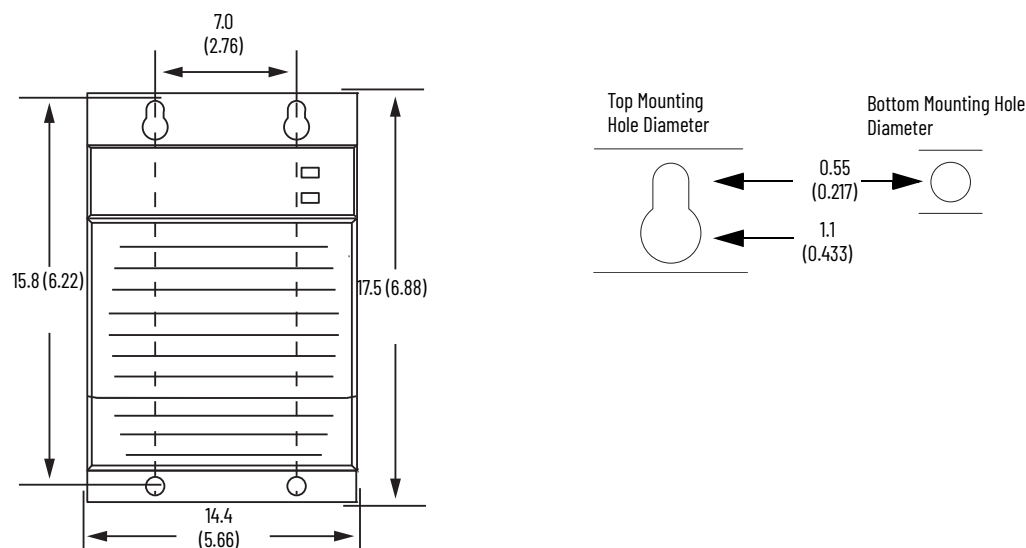


## Mounting Dimensions



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-PA75RK                                                                                                                                           | 1756-PB75R, 1756-PB75RK    |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Input voltage range         | 85...265V AC <sup>(1)</sup>                                                                                                                                       | 18...32V DC <sup>(2)</sup> |
| 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 <sup>(3)</sup> | 2 cycles @ 60 Hz<br>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<br>Type tested at 3250V DC for 60 s |                            |
| 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)                                                                                                                                                  |                            |

## Technical Specifications - ControlLogix Redundant Power Supplies (Continued)

| Attribute                       | 1756-PA75R, 1756-PA75RK                                                                                                                                                                                                                                                                                                        | 1756-PB75R, 1756-PB75RK |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Chassis                         | 1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17                                                                                                                                                                                                                                                                                 |                         |
| Wire size                       | Power:<br>2.5 mm <sup>2</sup> (14 AWG) solid or stranded copper wire that is rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation max<br><br>Annunciator:<br>0.25...2.5 mm <sup>2</sup> (22...14 AWG) solid or stranded copper wire that is rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation max |                         |
| Wire category <sup>(4)</sup>    | 3 - on annunciator ports<br>1 - on power ports<br>3 - on 1756-CPR2 connections                                                                                                                                                                                                                                                 |                         |
| Pilot duty rating               | Annunciator - not rated                                                                                                                                                                                                                                                                                                        |                         |
| Conductor screw torque          | 0.565 N•m (5 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 - ControlLogix Redundant Power Supplies

| Attribute                                                                                                                                                                                                            | 1756-PA75R, 1756-PA75RK                                                                                                                                                                                           | 1756-PB75R, 1756-PB75RK |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Temperature, operating<br>IEC 60068-2-1 (Test Ae, Operating Cold),<br>IEC 60068-2-2 (Test Be, Operating Dry Heat),<br>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<br>IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold),<br>IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat),<br>IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock) | -40...+85 °C (-40...+185 °F)                                                                                                                                                                                      |                         |
| Relative humidity<br>IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)                                                                                                                                                  | 5...95% noncondensing                                                                                                                                                                                             |                         |
| Vibration<br>IEC 60068-2-6 (Test Fc, Operating)                                                                                                                                                                      | 2 g @ 10...500 Hz                                                                                                                                                                                                 |                         |
| Shock, operating<br>IEC 60068-2-27 (Test Ea, Unpackaged Shock)                                                                                                                                                       | 30 g                                                                                                                                                                                                              |                         |
| Shock, nonoperating<br>IEC 60068-2-27 (Test Ea, Unpackaged Shock)                                                                                                                                                    | 50 g                                                                                                                                                                                                              |                         |
| Emissions                                                                                                                                                                                                            | IEC 61000-6-4                                                                                                                                                                                                     |                         |
| ESD immunity<br>IEC 61000-4-2                                                                                                                                                                                        | 6 kV contact discharges<br>8 kV air discharges                                                                                                                                                                    |                         |
| Radiated RF immunity<br>IEC 61000-4-3                                                                                                                                                                                | 10V/m with 1 kHz sine wave 80% AM from 80...2000 MHz<br>10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz<br>10V/m with 200 Hz 50% Pulse 100% AM at 1890 MHz<br>3V/m with 1 kHz sine wave 80% AM from 2000...2700 MHz |                         |
| EFT/B immunity<br>IEC 61000-4-4                                                                                                                                                                                      | ±4 kV at 5 kHz on power ports<br>±4 kV at 5 kHz on annunciator ports                                                                                                                                              |                         |
| Surge transient immunity<br>IEC 61000-4-5                                                                                                                                                                            | ±1 kV line-line (DM) and ±2 kV line-earth (CM) on power ports                                                                                                                                                     |                         |
| Conducted RF immunity<br>IEC 61000-4-6                                                                                                                                                                               | 15V rms with 1 kHz sine wave 80% AM from 150 kHz...80 MHz                                                                                                                                                         |                         |

## Environmental Specifications - ControlLogix Redundant Power Supplies (Continued)

| Attribute                           | 1756-PA75R, 1756-PA75RK                                                                                                                                                                                                 | 1756-PB75R, 1756-PB75RK                                                                                                                                                                                                                            |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conducted audio immunity<br>IEC 945 | 2 W max from rated frequency to the 200th harmonic on AC supply ports                                                                                                                                                   |                                                                                                                                                                                                                                                    |
| Voltage variation<br>IEC 61000-4-11 | 30% dips for 1 period at 0° and 180° on AC supply ports<br>60% dips for 5 and 50 periods on AC supply ports<br>±10% fluctuations for 15 min on AC supply ports<br>>95% interruptions for 250 periods on AC supply ports | -                                                                                                                                                                                                                                                  |
| Voltage variation<br>IEC 61000-4-29 | -                                                                                                                                                                                                                       | 10 ms interruption on DC supply ports <sup>(1)</sup><br>60% dips for 100 ms on DC supply ports<br>100% dips for 50 ms on DC supply ports<br>±20% fluctuations for 15 min on DC supply ports<br>5 s interruptions on DC supply ports <sup>(2)</sup> |

(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 - ControlLogix Redundant Power Supplies

| Certification <sup>(1)</sup> | 1756-PA75R, 1756-PA75RK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1756-PB75R, 1756-PB75RK                                                                                                                                                                                                                                                                                                                                         |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| c-UL-us                      | UL Listed Industrial Control Equipment, which is certified for US and Canada. See UL File E65584.<br>UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, which are certified for U.S. and Canada. See UL File E194810.                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                 |
| CSA                          | CSA Certified Process Control Equipment. See CSA File LR54689C.<br>CSA Certified Process Control Equipment for Class I, Division 2 Group A,B,C,D Hazardous Locations. See CSA File LR69960C.                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                 |
| UKCA                         | In conformity with the following UK Statutory Instruments and their amendments: <ul style="list-style-type: none"> <li>2016 No. 1091, Electromagnetic Compatibility Regulations</li> <li>2016 No. 1101, Electrical Equipment (Safety) Regulations</li> <li>2016 No. 1107, Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations</li> <li>2012 No. 3032, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                 |
| 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: <ul style="list-style-type: none"> <li>EN 61326-1; Meas./Control/Lab., Industrial Requirements</li> <li>EN 61000-6-2; Industrial Immunity</li> <li>EN 61000-6-4; Industrial Emissions</li> <li>EN 61131-2; Programmable Controllers (Clause 8, Zone A &amp; B)</li> </ul> European Union 2014/35/EU LVD, compliant with: <ul style="list-style-type: none"> <li>EN 61131-2; Programmable Controllers (Clause 11)</li> </ul>                          |                                                                                                                                                                                                                                                                                                                                                                 |
| RCM                          | Australian Radiocommunications Act, compliant with: <ul style="list-style-type: none"> <li>EN 61000-6-4; Industrial Emissions</li> </ul>                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                 |
| Ex                           | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | European Union 2014/34/EU ATEX Directive, compliant with: <ul style="list-style-type: none"> <li>EN IEC 60079-0; General Requirements</li> <li>EN IEC 60079-7; Potentially Explosive Atmospheres, Protection "e"</li> <li>II 3 G Ex ec IIC T4 Gc</li> <li>UL 22 ATEX 2819X</li> </ul>                                                                           |
| IECEx                        | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | IECEx System, compliant with: <ul style="list-style-type: none"> <li>IEC 60079-0; General Requirements</li> <li>IEC 60079-7; Potentially Explosive Atmospheres, Protection "e"</li> <li>II 3 G Ex ec IIC T4 Gc</li> <li>IECEx UL 22.0064X</li> </ul>                                                                                                            |
| UKEX                         | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | In conformity with the following UKEx Statutory Instruments and their amendments: <ul style="list-style-type: none"> <li>Schedule 1 of the UKEX Regulation 2016 No. 1107</li> <li>Equipment protection by increased safety "e", reference certificate number UL22UKEX2605X</li> <li>Zone 2 classification according to UKEX Regulation 2016 No. 1107</li> </ul> |
| KC                           | Korean Registration of Broadcasting and Communications Equipment, compliant with: <ul style="list-style-type: none"> <li>Article 58-2 of Radio Waves Act, Clause 3</li> </ul>                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                 |
| EAC                          | Russian Customs Union TR CU 020/2011 EMC Technical Regulation<br>Russian Customs Union TR CU 004/2011 LV Technical Regulation                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                 |
| CCC                          | CCC 202012230911830, 202012230911998, 2020122309113868<br>CNCA-C23-01 强制性产品认证实施规则 防爆电气<br>CNCA-C23-01 CCC Implementation Rule Explosion-Proof Electrical Products                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                 |

(1) See the Product Certification link at [rok.auto/certifications](http://rok.auto/certifications) for Declarations of Conformity, Certificates, and other certification details.