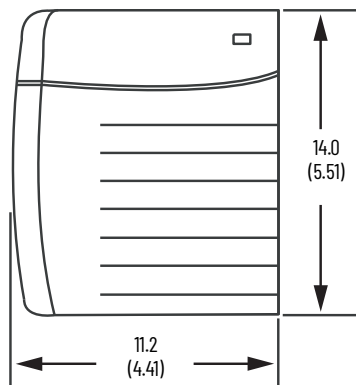


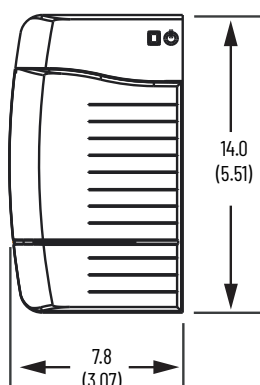
# Standard AC Power Supplies

## Mounting Dimensions

1756-PA72, 1756-PA72K, 1756-PA75, 1756-PA72K



1756-PA50, 1756-PA50K



Dimensions are in cm (in.).

## Technical Specifications - Standard AC Power Supplies

| Attribute                          | 1756-PA50, 1756-PA50K                                                                                                                    | 1756-PA72/C, 1756-PA72K/C                                                                                                   | 1756-PA75/B, 1756-PA75K/B                                                           |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Input voltage range <sup>(1)</sup> | 85...265V AC                                                                                                                             |                                                                                                                             |                                                                                     |
| Input voltage, nom                 | 120V/240V AC                                                                                                                             |                                                                                                                             |                                                                                     |
| Input frequency range              | 47...63 Hz                                                                                                                               |                                                                                                                             |                                                                                     |
| Input power, max                   | 81 W/91VA @ 50 °C (122 °F)<br>68 W/77VA @ 60 °C (140 °F)                                                                                 | 100VA/100 W                                                                                                                 |                                                                                     |
| Output power, max                  | 60 W @ 0...50 °C (32...122 °F) <sup>(3)</sup><br>50 W @ 0...60 °C (32...140 °F) <sup>(4)</sup>                                           | 75 W @ 0...60 °C (32...140 °F) <sup>(6)</sup>                                                                               |                                                                                     |
| Inrush current, max                | 20 A                                                                                                                                     |                                                                                                                             |                                                                                     |
| Hold up time <sup>(2)</sup>        | 4 cycles @85...265V AC, 50/60 Hz, 60 W<br>5 cycles @85...265V AC, 50/60 Hz, 50 W                                                         | 5 cycles @ 85V AC, 50/60 Hz<br>6 cycles @ 120V AC, 50/60 Hz<br>6 cycles @ 200V AC, 50/60 Hz<br>6 cycles @ 240V AC, 50/60 Hz | 2 cycles @ 85V AC, 60 Hz<br>6 cycles @ 120V AC, 60 Hz<br>20 cycles @ 220V AC, 60 Hz |
| Current capacity @ 1.2V DC         | 1.5 A                                                                                                                                    |                                                                                                                             |                                                                                     |
| Current capacity @ 3.3V DC         | 2 A                                                                                                                                      | 4 A                                                                                                                         |                                                                                     |
| Current capacity @ 5.1V DC         | 8 A @ 50 °C (122 °F)<br>6 A @ 60 °C (140 °F)                                                                                             | 10 A                                                                                                                        | 13 A                                                                                |
| Current capacity @ 24V DC          | 2.5 A @ 50 °C (122 °F)<br>2.0 A @ 60 °C (140 °F)                                                                                         | 2.8 A                                                                                                                       |                                                                                     |
| Isolation voltage                  | 250V (continuous), Reinforced Insulation Type,<br>Power Input to Backplane<br>Type tested @ 3150V DC for 60 s                            | 250V (continuous), Reinforced Insulation Type, Power Input to Backplane<br>Type tested at 3500V DC for 60 s                 |                                                                                     |
| Weight, approx                     | 0.77 kg (1.7 lb)                                                                                                                         | 0.95 kg (2.10 lb)                                                                                                           |                                                                                     |
| Dimensions (HxWxD), approx         | 14.0 x 7.8 x 14.5 cm<br>(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.)                                                                              |                                                                                     |
| Module location                    | Left side of 1756 chassis                                                                                                                |                                                                                                                             |                                                                                     |
| Chassis                            | 1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17                                                                                           |                                                                                                                             |                                                                                     |
| Chassis compatibility              | Series A<br>Series B<br>Series C                                                                                                         |                                                                                                                             | Series B<br>Series C                                                                |
| Wire size                          | 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 |                                                                                                                             |                                                                                     |
| Wire category                      | 1 - on power ports <sup>(5)</sup>                                                                                                        |                                                                                                                             |                                                                                     |

## Technical Specifications - Standard AC Power Supplies (Continued)

| Attribute                       | 1756-PA50, 1756-PA50K | 1756-PA72/C, 1756-PA72K/C | 1756-PA75/B, 1756-PA75K/B |
|---------------------------------|-----------------------|---------------------------|---------------------------|
| Conductor screw torque          | 0.565 N•m (5 lb•in)   |                           |                           |
| North American 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) The hold up time is the time between input voltage removal and DC power failure.  
 (3) The combination of all output power (5.1V backplane, 24V backplane, 3.3V backplane, and 1.2V backplane) can't exceed 60 W @ 50 °C (122 °F) maximum temperature.  
 (4) The combination of all output power (5.1V backplane, 24V backplane, 3.3V backplane, and 1.2V backplane) can't exceed 50 W @ 60 °C (140 °F) maximum temperature.  
 (5) Use this conductor category information to plan conductor routing as described in the system level installation manual. See the Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).  
 (6) The combination of all output power (5.1V backplane, 24V backplane, 3.3V backplane, and 1.2V backplane) can't exceed 75 W.

## Environmental Specifications - Standard AC Power Supplies

| Attribute                                                                                                                                                                                                            | 1756-PA50, 1756-PA50K                                                                                                                                                                                                   | 1756-PA72/C, 1756-PA72K/C, 1756-PA75/B, 1756-PA75K/B |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 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 °C < Ta < +60 °C (32 °F < Ta < 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 <sup>(1)</sup>                                                                                                                                                                                                     |                                                      |
| 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 @ 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                                                                                                                                                                                           |                                                      |
| 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                                                                                                                                                                               | 10V rms with 1 kHz sine wave 80% AM from 150 kHz...80 MHz                                                                                                                                                               |                                                      |
| 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 |                                                      |
| Damped oscillatory wave immunity<br>IEC 61000-4-18                                                                                                                                                                   | ±2.5 kV line-line (DM) and ±2.5 kV line-earth (CM) on power ports                                                                                                                                                       | -                                                    |

- (1) Series C chassis have a maximum nonoperating shock value of 30 g. If you select a Series C chassis for use with your power supply, you're limited to a maximum nonoperating shock value of 30 g.

## Certifications - Standard AC Power Supplies

| Certification <sup>(1)</sup> | 1756-PA50, 1756-PA50K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1756-PA72/C, 1756-PA72K/C                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1756-PA75/B, 1756-PA75K/B |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| UL                           | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | UL Listed Industrial Control Equipment. See UL File E65584.                                                                                                                                                                                                                                                                                                                                                                                                                             |                           |
| 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.                                                                                                                                                                                                                                                                          | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                           |
| 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> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                           |
| 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.                                                                                                                                                                                                                                                                                            |                           |
| 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 61010-2-201; Control Equipment Safety Requirements</li></ul>                     | 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>                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                           |
| 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.