

Product Details and Certifications

Cross Reference RA Part Number: 1794-PS13 B

 **Product: 1794-PS13**

Description: 1794-P 85-264 VAC To 24 VDC 1.3A Power Supply



Representative Photo Only (actual product may vary based on configuration sections)

POWER SUPPLY DATA

| | |
|------------------------|--|
| Bulletin Number | 1794 I/O System |
| Indicators | 1 Green Power Indicator |
| Nominal Supply Voltage | 120V AC, 47...63 Hz, 0.62 A / 230V AC, 47...63 Hz, 0.42 A |
| Voltage Range | 85...264V AC |
| Input Current, Max | 0.7 A |
| Inrush Current | 30A, 1AC Cycle @ Vin 264V AC, 55 °C |
| Interruption | Output will stay within specification when input drops out for 1/2 cycle @ 47 Hz, 85V AC with maximum load |

CERTIFICATIONS AND APPROVALS

UL
CE
C-Tick
KCC

For UL Certifications Directory:

<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

1794-PS13, 1794-PS3

FLEX I/O Power Supply Modules

Input Specifications

| Attribute | 1794-PS13 | 1794-PS3 |
|------------------------|--|--|
| Indicators | 1 green power indicator | |
| Nominal supply voltage | 120V AC, 47...63 Hz; 0.62 A 230V AC, 47...63 Hz; 0.42 A | 120V AC, 47...63 Hz; 1.4 A 230V AC, 47...63 Hz; 0.8 A |
| Voltage range | 85...264V AC | |
| Input current, max | 0.7 A | 1.9 A |
| Inrush current | 30 A, 1 AC cycle @ Vin 264V AC, 55 °C | |
| Interruption | Output will stay within specification when input drops out for 1/2 cycle @ 47 Hz, 85V AC with maximum load | |

Output Specifications

| Attribute | 1794-PS13 | 1794-PS3 |
|--|--|---|
| Nominal output | +24V DC | |
| Output voltage regulation | 20.4...27.6V DC ($\pm 15\%$, includes noise and 5% AC ripple) | |
| Output current, max | 1.3 A | 3 A horizontal mount, 2.8 A all other mounting |
| Output power | 31.2 W | 72 W |
| Output ripple | $\pm 5\%$ 1200mV peak-to-peak max | |
| Minimum load | 0 mA | 50 mA |
| Output surge | Sufficient to drive 4 adapters | Sufficient to drive 10 adapters |
| Overvoltage protection | Output internally limited to 40V DC. Cycle power to reenergize. | |
| Leakage current | 0.5 mA rms max @ rated input and output | |
| Isolation voltage | Isolation will be required between the AC input terminals and the DC output terminals. Isolation voltage requirements: 2500V DC for 1 s | |
| Overcurrent protection | 1.4 A | 3.2 A |
| Thermal dissipation | 23.9 BTU/hr | 41.0 BTU/hr |
| Power dissipation | 7 W | 12 W |
| Terminal base screw torque | 0.8 Nm (7 lb-in.) | |
| Conductors Wire size | 0.33 mm ² ...3.31 mm ² (22...12 AWG) stranded copper wire rated @ 75 °C or higher 1.2mm (3/64 in.) insulation max | |
| Category ⁽¹⁾ | 2 | |
| North American temperature code | T3C | T3 |
| Enclosure | None (open-style) | |
| Dimensions (HxWxD) | 87 x 69 x 69 mm (3.4 x 2.7 x 2.7 in.) | 87 x 94 x 69 mm (3.4 x 3.7 x 2.7 in.) |
| Publication, installation instructions | 1794-IN069 | |

(1) You use this category information for planning conductor routing as described in Allen-Bradley publication [1770-4.1](#), Industrial Automation Wiring and Grounding Guidelines

Environmental Specifications



| Attribute | 1794-PS13 | 1794-PS3 |
|---------------------------|---|----------|
| 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...55 °C (32...131 °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 Nonoperating Damp Heat): 5...95% noncondensing | |
| Vibration | IEC 60068-2-6 (Test Fc, Operating): 5 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 | CISPR 11: Group 1, Class A | |
| 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 30...1000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz 10V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz | |
| EFT/B immunity | IEC 61000-4-4: ±2 kV @ 5 kHz on power ports | |
| Surge transient immunity | IEC 61000-4-5: ±1 kV line-line(DM) and ±2 kV line-earth(CM) on AC power ports | |
| Conducted RF immunity | IEC 61000-4-6: 10Vrms with 1kHz sine-wave 80%AM from 150 kHz...80 MHz | |

Certifications

| Certification ⁽¹⁾ (When marked on product) | 1794-PS13 | 1794-PS3 |
|--|---|---|
| c-UL-us | UL Listed for Class 1, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810. UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584. | |
| CE | European Union 2004/108/IEC 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 2006/95/EC LVD, compliant with: EN 61131-2; Programmable Controllers (Clause 11) | |
| C-Tick | Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions | |
| KC | — | Korean Registration of Broadcasting and Communications Equipment, compliant with: Article 58-2 of Radio Waves Act, Clause 3 |

(1) See the Product Certification link at <http://www.rockwellautomation.com/products/certification/> for Declaration of Conformity, Certificates, and other certification details.