

PSS10/12/0.8
4



connectwell
THE RIGHT CONNECTION

0.84A,10W Single Phase Din Rail Mountable Switching Power Supplies

- Full Range Input selection from 90 to 264VAC
- Typical efficiency of 76%
- Compact design with a width of only 22.5mm
- Two years product warranty

GENERAL SPECIFICATION

| | |
|--|--|
| Switching Frequency (typ.) | 132 KHz |
| Min. Isolation Voltage -AC (Input-FG) | 1500 VAC |
| Min. Isolation Voltage -AC (Input-Output) | 3000 VAC |
| Min. Isolation Voltage -DC (Input-FG) | 2121 VDC |
| Min. Isolation Voltage -DC (Input-Output) | 4242 VDC |
| Isolation Resistance (Input-Output @500VDC) | 100 MΩ |
| Ambient Temperature Range (Operational at Vi norm) | -20 to +71 deg.C |
| Derating from +61°C to +71°C (see derating curve) | 2.5%/ °C |
| Ambient Temperature Range (Storage) | -25 to +85 deg.C |
| Relative Humidity Range | 20 to 95 %RH |
| Temperature Coefficient Range | +/- 0.03 % per deg. C |
| MTBF (Bellcore Issue 6 @40°C, GB) | 803000 hr |
| Altitude During Operation (IEC 60068-2-13) | 4850 m |
| Dimension | Spring Terminal Type , L90 X W22.5 X D114 mm |
| Cooling | Free Air Convection |
| Pollution Degree | 2 |

ORDERING INFORMATION

| | |
|-----------------------|---------------|
| Cat. No. | PSS10/12/0.84 |
| Output Voltage | 12 VDC |
| Output Current | 840 mA |
| Output Wattage | 10 W |
| Efficiency (min.) | 73% |
| Efficiency (typ.) | 75% |
| Input Voltage Range | 90 - 264 VAC |
| Standard Packing Qnty | 1 |

PHYSICAL SPECIFICATIONS

| | |
|------------------------|--|
| Dimensions (H x W x D) | 90 X 22.5 X 114 mm |
| Weight | 120 g |
| Case Material | Plastic |
| Packing | 0.21 kg ; 56 pcs / 12.5 kg / 2.16 CUFT |

APPROVALS



ACCESSORIES

| IMAGES | CAT. NO. | DESCRIPTION | STD. PACK |
|--------|---------------|--|-----------|
| | CA501-1M | Din 32 Rail unslotted 1 meter | 50 |
| | CA501-1M-S | Din 32 Rail slotted 1 meter | 50 |
| | CA501-2M | Din 32 Rail unslotted 2 meter | 50 |
| | CA501-2M-S | Din 32 Rail slotted 2 meter | 50 |
| | CA701-1M | Din 35 Rail unslotted 1 meter | 50 |
| | CA701-2M | Din 35 Rail unslotted 2 meter | 50 |
| | CA701-2M-S | Din 35 Rail slotted 2 meter | 50 |
| | CA701-1M-S | Din 35 Rail slotted 1 meter | 50 |
| | CA701-15-1M | Din 35 Rail 15 deep unslotted 1 meter | 50 |
| | CA701-15-1M-S | Din 35 Rail 15 deep slotted 1 meter | 50 |
| | CA701-15-2M | Din 35 Rail 15 deep unslotted 2 meter | 50 |
| | CA701-15-2M-S | Din 35 Rail 15 deep slotted 2 meter | 50 |
| | CA202 | End Clamp in Polyamide suitable for Din 35 / Din 35-15 Rails | 25 |
| | CA702 | End Clamp in Polyamide 66 suitable for Din 32 / Din 35 / Din 35-15 Rails | 50 |
| | SCS0.5/3 | Electricians Screwdriver for slotted screws | 10 |

STANDARD USED FOR TESTING

| | |
|----------------------|---|
| UL/cUL | UL 508 Listed UL 60950-1, UL 1310 Class 2 Power Recognized ISA 12.12.01(Class 1, Division 2, Groups A, B, C and D) |
| TUV | EN 60950-1, CB scheme |
| CE | EN 61000-6-3, EN 55022 Class B, EN 61000-3-2, EN 61000-3-3 EN 61000-6-2, EN 55024, EN 61000-4-2 Level 4, EN 61000-4-3 Level 3 EN 61000-4-4 Level 4, EN 61000-4-5 L-N Level 3, L / N-FG Level 4 EN 61000-4-6 Level 3, EN 61000-4-8 |
| CCC | GB4943, GB9254, GB17625.1 |
| Vibration Resistance | meet IEC 60068-2-6 (Mounting by rail : 10-500 Hz, 2G, along X, Y, Z each Axis, 60 min for each Axis) |
| Shock Resistance | meet IEC 60068-2-27 (15G, 11ms, 3 Axis, 6 Faces, 3 times for each Face) |

INPUT SPECIFICATIONS

| | |
|------------------------|-----------|
| Input Phase | Single |
| AC Input Voltage Range | 90 to 264 |

PSS10/12/0.8
4



connectwell
THE RIGHT CONNECTION

INPUT SPECIFICATIONS

| | |
|--|------------|
| DC Input Voltage Range | 120 to 375 |
| Rated Max. Input Voltage | 240 VAC |
| Rated Min. Input Voltage | 100 VAC |
| Line Frequency-Max. | 63 Hz |
| Line Frequency-Min. | 47 Hz |
| Max. Inrush Current (Vi: 115 VAC) | 10 A |
| Max. Inrush Current (Vi: 230 VAC) | 18 A |
| Rated Input Current -Typ. (Vi : 90 VAC) | 300 mA |
| Rated Input Current -Typ. (Vi : 115 VAC) | 200 mA |
| Rated Input Current -Typ. (Vi : 230 VAC) | 130 mA |
| Power Dissipation (Vi: 230 VAC, Io norm) | 3.4 W |
| Leakage Current (Input-Output) | 0.25 mA |

OUTPUT SPECIFICATIONS

| | |
|---|-------------------------------|
| Output Voltage | 12 VDC |
| Output Current | 840 mA |
| Output Voltage Accuracy (Adjusted before shipment) | 0 to +1 % |
| Minimum Load | 0 % |
| Line Regulation | +/-1 % |
| Load Regulation | +/-2 % |
| Output Voltage Trim Range | -10 to +15 % |
| Rated Continuous Loading | 0.84A @12Vdc / 0.72A @13.8Vdc |
| Hold Up Time (Vi: 115VAC) | 25 msec |
| Hold Up Time (Vi: 230VAC) | 100 msec |
| Turn On Time | 1000 ms |
| Turn On Time With 3500 µF | 1500 msec |
| Rise Time | 150 ms |
| Rise Time With 3500 µF | 500 ms |
| Fall Time | 150 msec |
| Transient Recovery Time | 2 ms |
| Ripple and Noise (BW = 20MHz) | 50 mV |
| Power Back Immunity | 18 VDC |
| Capacitor Load | 3500 µF |
| DC ON Indicator Threshold at start up (Green LED) | 9.0 to 10.8 VDC |
| DC LOW Indicator Threshold after start up (Red LED) | 9.0 to 10.8 VDC |
| Efficiency | 76% |

CONTROL AND PROTECTION SPECIFICATIONS

| | |
|---|-----------------------|
| Input fuse | T2A / 250VAC internal |
| Internal surge voltage protection: IEC61000-4-5 | Varistor |
| Rated over load protection | 110 to 145 % |
| Over voltage protection | 125 to 145 % |
| Output short circuit | Hiccup mode |

CONTROL AND PROTECTION SPECIFICATIONS

| | |
|----------------------|------|
| Degree of protection | IP20 |
|----------------------|------|

PIN CONFIGURATION

| PIN NO | POSITION | DESIGNATION | DESCRIPTION |
|--------|----------|-------------|--|
| 1 | OUT | V+ | Positive output terminal |
| 2 | OUT | V- | Negative output terminal |
| 3 | IN | Ground | Ground this terminal to minimize high frequency emissions |
| 4 | IN | N | Input terminals (neutral conductor, no polarity at DC input) |
| 5 | IN | L | Input terminals (phase conductor, no polarity at DC input) |
| | OTHER | ON | Operation indicator LED |
| | OTHER | LO | DC LOW indicator LED |
| | OTHER | Vout ADJ. | Trimmer-potentiometer for Vout adjustment |

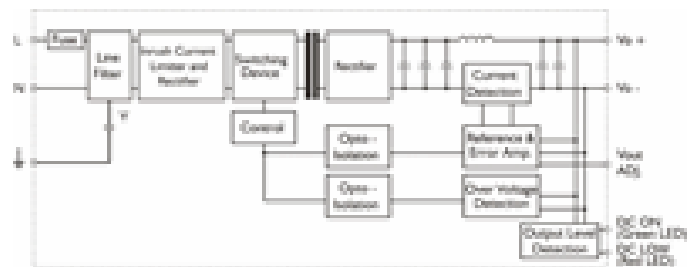
CONNECTION DETAILS

Spring terminal: 2 AWG24-14 (0.2~2mm) flexible / solid cable, 10 m/m stripping at cable end recommends 0 Use copper conductors only, 60 / 75 C

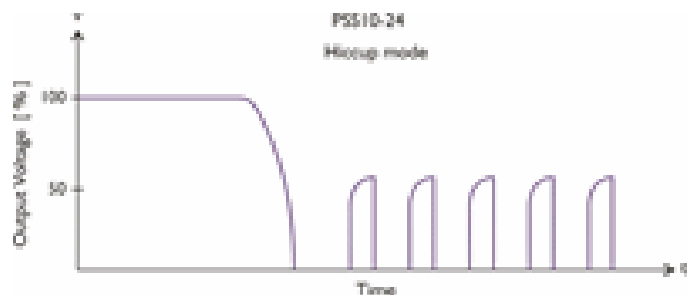
INSTALLATION DETAILS

Ventilation / Cooling Normal convection All sides 25mm free space For cooling recommended

CIRCUIT SCHEMATIC



CURRENT LIMITED CURVE

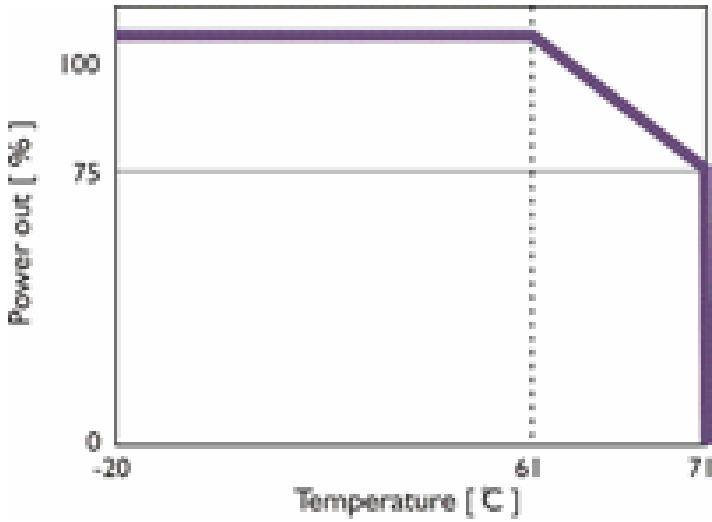


PSS10/12/0.8
4

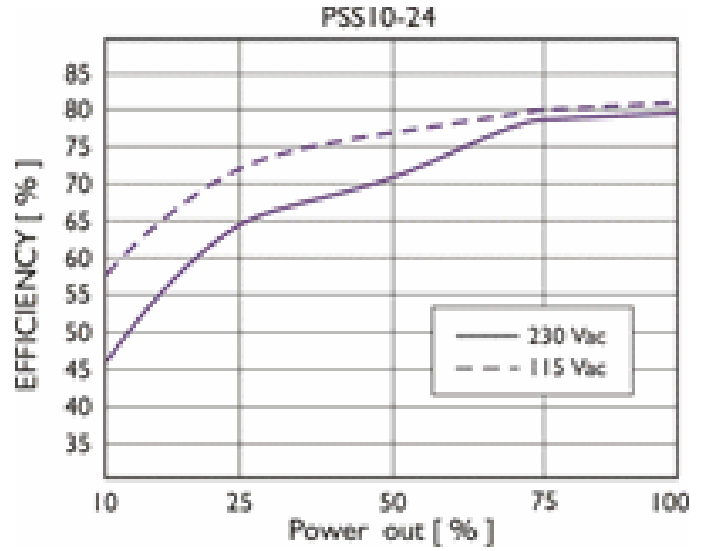


connectwell
THE RIGHT CONNECTION

DERATING CURVE



EFFICIENCY CURVE



DIMENSIONAL DIAGRAM

