

# SCP Series, 30 Watt; Single, Dual and Triple



The SolaHD SCP switchers are compact, rugged power supplies designed to power many of your industrial control and instrumentation devices and equipment, with high reliability and tight regulation through the most difficult factory floor conditions around the globe. "User friendly" applies to these unique power supplies that feature easy-to-install DIN rail and chassis mounting. Terminations are also easy to access (AC and DC terminations are well separated) and simple to wire. Safety is another aspect where the SCP distinguishes itself. The encapsulated design meets IP20 specifications, and the wide range of voltages will reliably support almost any low power device in your cabinet or system for years to come.

#### **Features**

- International approvals for global use
- DIN Rail or Chassis Mount
- Rugged, encapsulated design to resist environment
- IP20 protection
- Many output voltages, 3.3-48 Volts; single, dual, triple
- Five year limited warranty

#### **Packaging and Mounting Specifications**

- Simple snap-on for DIN Rail TS35/7.5 or TS35/15
- M3 screw clamp terminations
- Chassis mounting possible on -DN Low Profile versions by removing DIN clips (simply unscrew at the back of the unit).

### Selection Table

| Low Profile<br>Catalog<br>Number | Description          | Output Voltages |     |     |     |     | Min |            |              |
|----------------------------------|----------------------|-----------------|-----|-----|-----|-----|-----|------------|--------------|
|                                  |                      | V1              |     | V2  |     | V3  |     | Load<br>V1 | Efficiency % |
|                                  |                      | Vdc             | A   | Vdc | A   | Vdc | A   | A          | ,,,          |
| SCP 30S3.3-DN                    | 3.3 V                | 3.3             | 6.0 | -   | -   | -   | -   | 0          | ≥ 62         |
| SCP 30S5-DN                      | 5 V                  | 5               | 6.0 | -   | -   | -   | -   | 0          | ≥ 70         |
| SCP 30S12-DN                     | 12 V                 | 12              | 2.5 | -   | -   | -   | -   | 0          | ≥ 75         |
| SCP 30S15-DN                     | 15 V                 | 15              | 2.0 | -   | -   | -   | -   | 0          | ≥ 75         |
| SCP 30S24-DN                     | 24 V                 | 24              | 1.3 | -   | -   | -   | -   | 0          | ≥ 77         |
| SCP 30S48-DN                     | 48 V                 | 48              | 0.6 | -   | -   | -   | -   | 0          | ≥ 77         |
| SCP 30D12-DN                     | Dual O/P +/- 12 V    | 12              | 1.2 | -12 | 1.2 | -   | -   | 0.12       | ≥ 68         |
| SCP 30D15-DN                     | Dual O/P +/- 15 V    | 15              | 1.0 | -15 | 1.0 | -   | -   | 0.15       | ≥ 68         |
| SCP 30D512-DN                    | Dual O/P 5 V & 12 V  | 5               | 3.0 | 12  | 1.2 | -   | -   | 0.3        | ≥ 68         |
| SCP 30D524-DN                    | Dual O/P 5 V & 24 V  | 5               | 3.0 | 24  | 0.6 | -   | -   | 0.3        | ≥ 68         |
| SCP 30T512-DN                    | Triple O/P 5/12/12 V | 5               | 3.0 | -12 | 0.6 | 12  | 0.6 | 0.3        | ≥ 68         |
| SCP 30T515-DN                    | Triple O/P 5/15/15 V | 5               | 3.0 | -15 | 0.5 | 15  | 0.5 | 0.3        | ≥ 68         |

Please order using the following model number suffixes:

**-DN:** Low Profile – DIN Rail or Chassis Mount (ie: SCP30S3.3-DN).

**B-DN:** Slim Line – DIN Rail Mount Availability Only (ie: SCP30S3.3B-DN).

Note: Slim line version not available on SCP30D512-DN

# **Options and Accessories**

- SCP-MDC Pair of metal DIN clips
- SCP-PDC 1 plastic DIN clip with lever for removal from rail

## **Certifications and Compliances**

- c **Tus** UL Recognized Component, ITE, E137632
- (6
  - IEC/EN 60950-1, 2nd Edition
- IP20
- RoHS Compliant



## **Specifications**

| Parameter                          | Condition   | Value  |  |  |  |
|------------------------------------|---|--|--|--|--|
|                                    | Input   |  |  |  |  |
| AC Input Voltage                   | _   | 85 - 264 Vac   |  |  |  |
| DC Input Voltage                   | _   | 100 - 375 Vdc  |  |  |  |
| Input Frequency                    | _   | 50/60 HZ   |  |  |  |
| Filtering EMI/RFI                  | _   | EN 55011/B, 55022/B  |  |  |  |
| Switching Frequency                | _   | Typ. 100 kHz   |  |  |  |
| Input Fusing Required              | _   | Use 2.0 A Slow Fuse  |  |  |  |
|                                    | Output  |  |  |  |  |
| Output Voltage Accuracy            | V <sub>in</sub> = 230 V, I <sub>out</sub> = max, 25°C                       | V1 ≤ ±1%, V2/3 ≤ ±3%   |  |  |  |
| Ripple                             | V <sub>in</sub> =min, I <sub>out</sub> =max, 25°C                           | ≤1%, V <sub>out</sub>  |  |  |  |
| Noise                              | V <sub>in</sub> =min, I <sub>out</sub> =max, 25°C                           | ≤2%, V <sub>out</sub>  |  |  |  |
| Line Regulation                    | V <sub>in</sub> =min/max 25°C<br>I <sub>out</sub> = max, 25°C               | ≤+0.5%, V <sub>out</sub>   |  |  |  |
| Load Regulation                    | I <sub>out</sub> = 10 to 90 to 10%,<br>25°C V <sub>in</sub> = 230 Vac, 25°C | ≤+0.5%, V <sub>out</sub>   |  |  |  |
| Overcurrent Protection             | _   | 105 to 130% I <sub>nom</sub>                                     |  |  |  |
| Load Regulation Timing             | 10 to 90 to 10%, 25°C   | <4 ms  |  |  |  |
| Temperature Coefficient            | T <sub>amb</sub> = -25 to +65°C   | 0.01%/K  |  |  |  |
| Overload/Short Circuit             | Contir  | nuous  |  |  |  |
| Derating Single/Dual/Triple        | T <sub>amb</sub> >50°C  | 2/3/5%/K max   |  |  |  |
|                                    | General   |  |  |  |  |
| Holdup Time                        | V <sub>in</sub> =230 Vac  | >50 ms   |  |  |  |
| Operating Temperature              |   | -25 to +65°C   |  |  |  |
| Storage Temperature                | $T_{amb} = 25^{\circ}C$   | 45 to +85°C  |  |  |  |
| Case Temperature Rise at Full Load | _   | 45 K max   |  |  |  |
| MTBF at 25°C (input/output)        | acc. MIL-HDBK-217F  | 800,000 hrs  |  |  |  |
| Transient Protection               | _   | EN61000-4-2, 3, 4, 5   |  |  |  |
| Cooling                            | _   | Convection   |  |  |  |
| Weight – lbs (kg)                  | 0.7 (.34)   | 0.8 (.38)  |  |  |  |
| Case Material/Potting              | _   | UL94-VO  |  |  |  |
| Protection                         | _   | IP20   |  |  |  |
| Visual Indicators                  | _   | Green LED indicates<br>DC OK for B-DN Slim<br>Line versions only |  |  |  |

# Dimensions (H x W x D)

# • Low Profile "-DN"

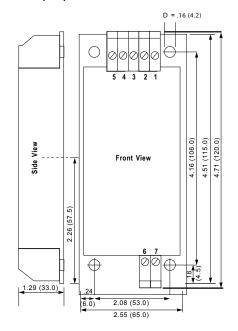
4.72 x 2.55 x 1.29 in (120.0 x 65.0 x 33.0 mm) (Takes up 2.55 in or 65.0 mm on DIN rail)

## • Slim Line "B-DN"

4.72 x 1.29 x 2.68 in (120.0 x 33.0 x 68.0 mm) (Takes up 1.29 in or 33.0 mm on DIN rail)

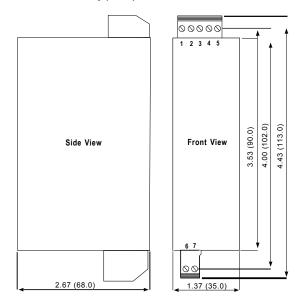
## Dimensional Diagram - in (mm)

## Low Profile DIN Rail (-DN) or Chassis Mount \*



<sup>\*</sup> Unscrew DIN connector for chassis mounting.

#### Slim Line DIN Rail Mount only (B-DN)



## Pin-Out

| SCP 30    | 1   | 2        | 3          | 4      | 5   | 6  | 7  |
|-----------|-----|----------|------------|--------|-----|----|----|
| Single    |     |          |            | RETURN | +V1 | IN | IN |
| Dual sym  |     |          | -V2        | COM    | +V1 | IN | IN |
| Dual asym |     | COM (V1) | +V1        | COM V3 | +V3 | IN | IN |
| Triple    | -V2 | COM (V1) | COM (V2/3) | +V1    | +V3 | IN | IN |