

SCP Series, 30 Watt; Single, Dual and Triple



UL
E137632

These 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 Catalog Number	Description	Output Voltages						Min Load V1 A	Efficiency %
		V1		V2		V3			
		Vdc	A	Vdc	A	Vdc	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

- **UL** UL Recognized Component, ITE, E137632
- **CE** - IEC/EN 60950-1, 2nd Edition
- IP20

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	$V_{in} = 230V, I_{out} = \max, 25^{\circ}C$	$V1 \leq \pm 1\%, V2/3 \leq \pm 3\%$
Ripple	$V_{in} = \min, I_{out} = \max, 25^{\circ}C$	$\leq 1\%, V_{out}$
Noise	$V_{in} = \min, I_{out} = \max, 25^{\circ}C$	$\leq 2\%, V_{out}$
Line Regulation	$V_{in} = \min/\max, 25^{\circ}C$ $I_{out} = \max, 25^{\circ}C$	$\leq +0.5\%, V_{out}$
Load Regulation	$I_{out} = 10 \text{ to } 90 \text{ to } 10\%$, $25^{\circ}C, V_{in} = 230 \text{ Vac}, 25^{\circ}C$	$\leq +0.5\%, V_{out}$
Overcurrent Protection	—	105 to 130% I_{nom}
Load Regulation Timing	10 to 90 to 10%, $25^{\circ}C$	<4 ms
Temperature Coefficient	$T_{amb} = -25 \text{ to } +65^{\circ}C$	0.01%/K
Overload/Short Circuit	Continuous	
Derating Single/Dual/Triple	$T_{amb} > 50^{\circ}C$	2/3/5%/K max
General		
Holdup Time	$V_{in} = 230 \text{ Vac}$	>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 lbs (.34 kg)	0.8 lbs (.38 kg)
Case Material/Potting	—	UL94-VO
Protection	—	IP20
Visual Indicators	—	Green LED indicates DC OK for B-DN Slim Line versions only

Dimensions (H x W x D)

• Low Profile “–DN”

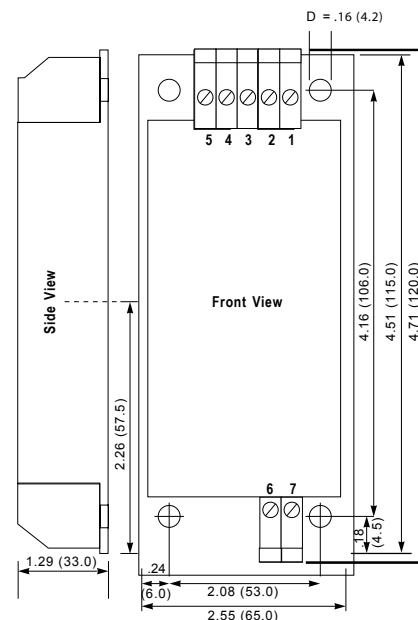
4.72 x 2.55 x 1.29 inches (120.0 x 65.0 x 33.0 mm)
(Takes up 2.55 inches or 65.0 mm on DIN Rail)

• Slim Line “B–DN”

4.72 x 1.29 x 2.68 inches (120.0 x 33.0 x 68.0 mm)
(Takes up 1.29 inches or 33.0 mm on DIN Rail)

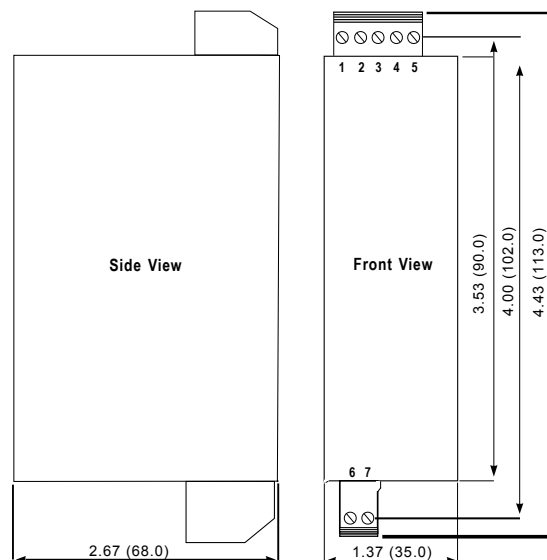
Dimensional Diagram – in (mm)

Low Profile DIN Rail (–DN) or Chassis Mount *



* 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