Switching Power Supply Type SPD 240W 3 phases DIN rail mounting





- Universal AC 3 phases input full range
- Installation on DIN rail 7.5 or 15mm
- PFC as standard
- High efficiency up to 90%
- Power ready output
- Parallel connection feature
- Compact dimensions
- UL, cUL listed and TUV/CE

Input type:

Product Description

The Switching power supplies SPD series are specially designed to be used in all automation application where the

installation is on a DIN rail and compact dimensions and performance are a must.

Model—Mounting (D = Din rail)—Output voltage Output power Input Type

3 = three phase

(or single phase 400/500VAC3)

Approvals









Output performances

Model	Rated output Voltage (VDC)		Output Current	Voltage Trim Range ²⁾				DC low LED Thereshold after startup(VDC)		Typical Efficiency
	voltage (vDO)	1 Ower (W)	(A) ¹⁾	Min. VDC	Max. VDC	Min.	Max.	Min.	Max.	Linciency
SPD24	24	240	10 (7.5)	22.5	28.5	17.6	19.4	17.6	19.4	89%
SPD48	48	240	5 (3.75)	47.0	56.0	37.0	43.0	37.0	43.0	90%

¹⁾ When powered with three phases input; with biphase input value is in the brackets.

Output data

Line regulation	± 1%
Load regulation	
Parallel mode	± 5%
Non parallel mode	± 1%
Ouput Voltage accuracy	from 0 to +1% (factory adjusted)
Ripple and Noise	100mV

Temperature Coefficient	+0.02% / °C		
Hold up time Vi = 230VAC	20ms		
Minimum load	0%		
Parallel Operation (only with S/P switch on "P" position)	2 units max.		

Input data

Rated input voltage	400/500VAC
Voltage range	
AC in	340 - 575VAC ³⁾
DC in	480 - 820VDC
Rated input current (380/500)	0.85A / 0.7A

Biphase or triphase input (biphase can be: L1 L2, L2 L3 or L1 L3. Note: when used as biphase, the maximum output power is 75% of rated power.

Frequency range	47- 63 Hz
Inrush current	10A
P.F.C. (Vi= 500VAC, Io nom.)	0.6

²⁾ When S/P switch is set to parallel, it is not possible to trim output voltage.



Controls and Protections

Input Fuse Overvoltage ProtectionSPD24 SPD48	2.0A/600VAC internal/phase ⁴⁾ 30 – 33VDC 60 – 68VDC	Power ready output (only SPD 24) Threshold voltages Contact rating at 60VDC	17.6 - 19.4VDC 0.3A
Output Short Circuit Continous	Current limit	insulation Overtemperature	500VDC 100 - 110°C
Rated Overload Protection	115 - 135%		(shutdown with auto-restart when temperature is back to normal)

⁴⁾ Not replaceable by user.

General data (@ nominal line, full load, 25°C)

Ambient temperature	-25°C to 71°C	C
Derating (>61°C to +71°C)	2.5%/°C	N
Ambient humidity	20 - 95%RH	C
Storage temperature	-25°C to +85°C	٧
Dimensions L x W x D Screw terminal type	123.6 x 89.0 x 110.7 mm 4.87 x 3.50 x 4.36 inches	P

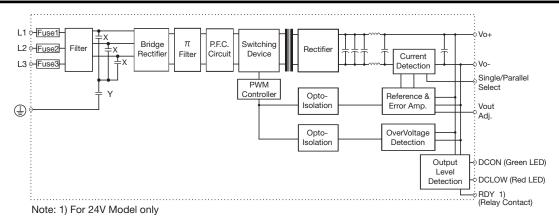
Cooling	Free air convection
MTBF (MIL-HDBK-217F)	n.a.
Case material	Metal (powder painted aluminium)
Weight	1.1Kg / 38,80oz
Protection degree	IP20

Approvals and EMC

Insulation voltage I/O	3.000VAC
Insulation resistance I/O	
@ 500VDC	100ΜΩ
UL / cUL	UL508 listed, UL60950-1,
	Recognized
TUV	EN60950-1

EN61000-6-3 EN55022 class B EN61000-3-2 EN61000-3-3 EN61000-6-2 EN55024

Block diagrams



CE



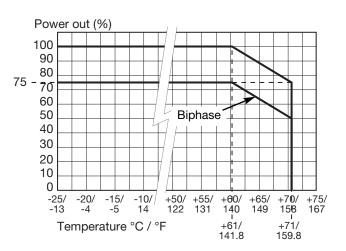
Pin assignement and front controls

Pin No.	Designation	Description
1	V+	Positive output terminal
2	V+	Positive output terminal
3	V-	Negative output terminal
4	V-	Negative output terminal
5	GND	Ground terminal to minimise High frequency emissions
6	L1	Input terminals
7	L2	Input terminals
8	L3	Input terminals
9	RDY	A normal open relay contact for DC ON level control
10	RDY	A normal open relay contact for DC ON level control
	DC ON	DC output ready LED
	DC LO	DC low indicator LED
	Vout ADJ.	Trimmer for fine output voltage adjustment
	S/P	Single / Parallel select switch

Installation

Ventilation and cooling	Normal convection All sides 25mm free space for cooling is recommended
Screw connections	10-24AWG flexible or solid cable 8mm stripping recommend
Max. torque for screws terminals	
Input terminals	1.008Nm (9.0lb-in)
Output terminals	0.616Nm (5.5lb-in)

Derating Diagram



Mechanical Drawings mm/inches

