

Switching Power Supply Type SPD 240W DIN rail mounting

CARLO GAVAZZI



- Universal AC input full range
- Installation on DIN rail 7.5 or 15mm
- Short circuit protection
- PFC as standard
- High efficiency
- Power ready output
- LED indicator for DC power ON
- LED indicator for DC low
- Parallel connection feature
- Compact dimensions
- UL, cUL listed and TUV/CE approved

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.

Ordering Key

SP D 24 240 1 B

Model _____
Mounting (D = Din rail) _____
Output voltage _____
Output power _____
Input Type _____
Optional features _____

Input type: 1= single phase

Approvals



Optional Features

Description	code
Plug-in connectors	B

Output performances

Model	Output Current (A)	Voltage Trim Range ¹⁾		DC @ Start up (VDC)		Dc low after start up (VDC)		Typical Efficiency
		Min. VDC	Max. VDC	Min.	Max.	Min.	Max.	
SPD24	10	22.5	28.5	17.6	18.4	17.6	18.4	89%
SPD48	5	47.0	56.0	37.0	43.0	37.0	43.0	90%

¹⁾ When S/P switch is set to parallel, it is not possible to trim output voltage.

Output data

Line regulation	± 0.5%	Hold up Time Vi = 115Vac	25ms
Load regulation		Hold up time Vi = 230Vac	30ms
Non parallel mode	± 1%	Minimum load	0%
Parallel mode	± 5%	Parallel Operation (only with S/P switch on "P" position)	3 units max.
Output Voltage accuracy	+1% (factory adjusted)		



Input data

Rated input voltage	115/230 (autoselect)	Frequency range	47- 63 Hz
Voltage range		Inrush current	
AC in, 115 selected	93 - 132 Vac	Vi= 115Vac	30A
AC in, 230 selected	186 - 264 Vac	Vi= 230Vac	60A
DC in	210 - 370 Vdc	P.F.C. Vi= 230Vac, Ionom.	0.7
Rated input current (115/230)	5.4 / 2.2A		

Controls and Protections

Input Fuse	T6.3A/250Vac internal*	Power ready output (only SPD 24)	
Overvoltage Protection	120 – 145%	Threshold voltages	17.6 - 19.4 VDC
Output Short Circuit	Current limit	Contact rating at 60Vdc	0.3A
Rated Overload Protection	105-145%	insulation	500Vdc

* Not replaceable by user.

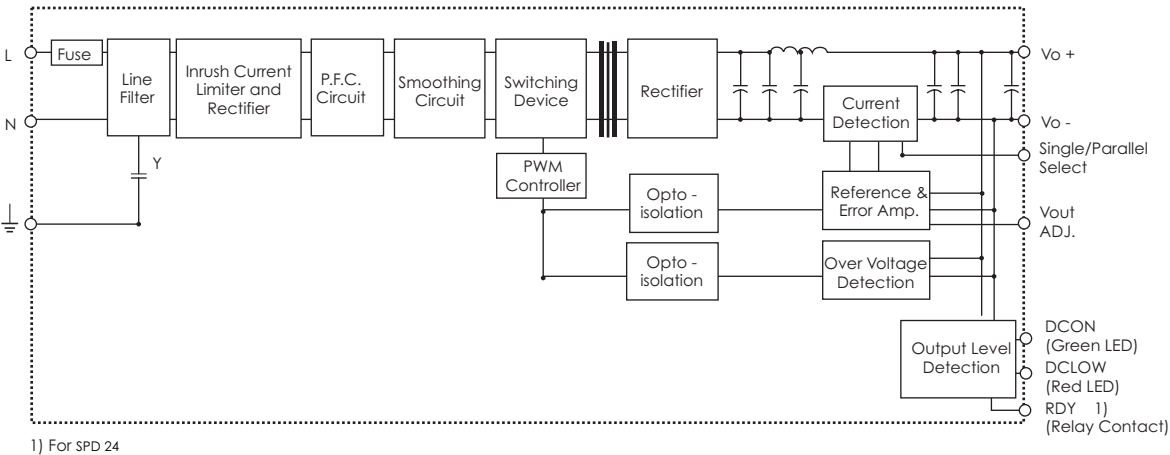
General data (@ nominal line, full load, 25°C)

Ambient temperature	-10°C to 71°C	Cooling	Free air convection
Derating (>60°C to +71°C)	2.5%/°C	MTBF (MIL-HDBK-217F)	514.000h
Ambient humidity	20 - 95%RH	Case material	Metal (powder painted aluminium)
Storage	-25°C to +85°C	Weight	1000g
Dimensions L x W x D		Protection degree	IP20
Screw terminal type	125 x 83 x 126		
Plug in connectors	142 x 83 x 126		

Approvals and EMC

Insulation voltage I / O	3.000Vac	CE	EN61000-6-3
Insulation resistance	100Mohm		EN55022 class B
UL / cUL	UL508 listed, UL60950-1, Recognised		EN61000-3-2
TUV	EN60950		EN61000-3-3
			EN61000-6-2
			EN55024

Block diagrams



Pin assignement and front controls

Pin No.	Designation	Description
1	RDY (only SPD 24)	DC OK, relay normally open contact
2	RDY (only SPD 24)	DC OK, relay normally open contact
3	+	Positive output terminal
4	+	Positive output terminal
5	-	Negative output terminal
6	-	Negative output terminal
7	GND	Ground terminal to minimise High frequency emissions
8	L	Phase input (no polarity with DC input)
9	N	Neutral input (no polarity with DC input)
	DC ON	DC output ready LED
	DC LO	DC low indicator LED
	Vout ADJ.	Trimmer for fine output voltage adjustment
	S/P	Single parallel selection switch

Installation

VENTILATION / COOLING:

- Normal air convection
- 25mm of free space along all sides to allow good cooling

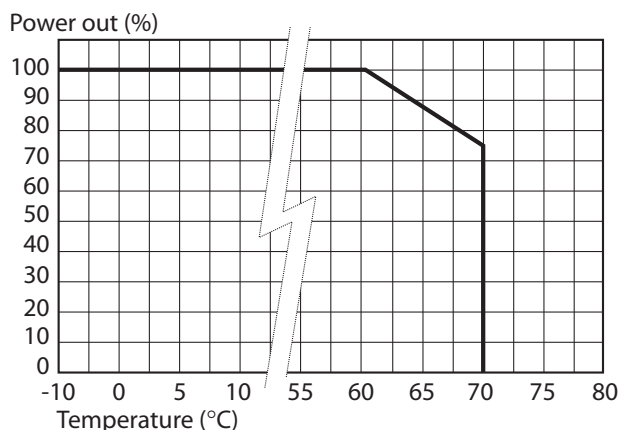
SCREW CONNECTIONS:

- 10-24AWG Flexible or solid cable. 8mm stripping recommended

PLUG IN CONNECTORS:

- 10-24AWG Flexible or solid cable. 7mm stripping recommended

Derating Diagram



Mechanical Drawings

