

PST480/24/20



20A ,3 Phase Din Rail Mountable Switching Power Supplies

- Full Range Input selection from 340 to 575 VAC
- Typical efficiency of 90%
- Compact design with a width of only 150mm
- Parallel function available (Switch)
- Two years product warranty

GENERAL SPECIFICATION

Switching Frequency (typ.)	80 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)	-30 TO +71 Degree Celcius
Derating from +61°C to +71°C (see derating curve)	2.5% per °C
Ambient Temperature Range (Storage)	-40 TO +85 Degree Celcius
Relative Humidity Range	20-95 % RH
Temperature Coefficient Range	+/- 0.03 % / Degree celcius
MTBF (Bellcore Issue 6 @40°C, GB)	411000 hr
Altitude During Operation (IEC 60068-2-13)	4850 m
Dimension	L124 x W150 x D118.8
Cooling	Free air convection
Pollution Degree	2

ORDERING INFORMATION

Cat. No.	PST480/24/20
Output Voltage	24 VDC
Output Current	20 A
Output Wattage	480 W
Efficiency (min.)	88%
Efficiency (typ.)	90%
Input Voltage Range	340 -575 VAC
Standard Packing Qnty	1

PHYSICAL SPECIFICATIONS

Dimensions (H x W x D)	124 x 150 x 118.8 mm
Weight	1720g
Case Material	Metal
Packing	2kg ; 8 pcs / 17.5kg / 2.17CUFT

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
	CA502	End Clamp in Steel suitable for Din 32 Rail	50
	SCPH1	Phillips Screwdriver for Phillips Recess screws	10

STANDARD USED FOR TESTING

UL/cUL	UL 508 Listed UL 60950-1, Recognized ISA 12.12.01(Class I, Division 2, Groups A, B, C and D)
TUV	EN 60950-1, CB scheme EN 61558-1, EN 61558-2-17 (meet EN 60204-1)
CE	EN 61000-6-3, EN 55022 Class B, EN 61000-3-2, EN 61000-3-3 E N 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
CQC	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		PIN CONFIGURATION			
Input Phase	3 Phase	PIN NO	POSITION	DESIGNATION	DESCRIPTION
Nominal Input Voltage	1Ø or 3Ø 380-480 VAC	1	OUT	V -	Negative output terminal
AC Input Voltage Range	340 - 575 VAC	2	OUT	V -	Negative output terminal
DC Input Voltage Range	480 - 820 VDC	3	OUT	V+	Positive output terminal
Rated Max. Input Voltage	500 VAC	4	OUT	V+	Positive output terminal
Rated Min. Input Voltage	400 VAC	5	IN	L3	Input terminals
Line Frequency-Max.	63 Hz	6	IN	L2	Input terminals
Line Frequency-Min.	47 Hz	7	IN	L1	Input terminals
Inrush Current	20 A	8	IN	Earth	Ground this terminal to minimize high-frequency emissions
Max. Inrush Current	25 A	9	OUT	RDY	A normal open relay contact for DC ON level control (Never connect except 24V model)
Rated Input Current -Max. (Vi : 400 VAC)	1.1 A	10	OUT		(Never connect except 24V model)
Rated Input Current -Typ. (Vi : 500 VAC)	0.93 A		OTHER	DC ON	Operation indicator LED
Rated Input Current -Max. (Vi : 400 VAC)	1.4 A		OTHER	DC LO	Trimmer-potentiometer for Vout adjustment
Power Dissipation (Vi: 400 VAC, Io norm)	58 W		OTHER	Vout ADJ.	Trimmer-potentiometer for Vout adjustment
Leakage Current (Input-Output)	0.25 mA		OTHER	S/P	Single / Parallel select switch (Except 24V/E models)
P.F.C.	0.65		OTHER	C / D	Continuous / Discontinuous
OUTPUT SPECIFICATIONS					
Output Voltage	24 VDC				
Output Current	20 A				
Output Voltage Accuracy (Adjusted before shipment)	+ 1 %				
Minimum Load	0 %				
Line Regulation	+/- 1 %				
Load Regulation: Single Mode	+/- 1 %				
Load Regulation: Parallel Mode	+/- 5 %				
Output Voltage Trim Range	22.5 - 28.5 VDC				
Rated Continuous Loading	20 A @ 24Vdc / 16.8 A @ 28.5Vdc				
Hold Up Time	20 msec				
Turn On Time	1000 ms				
Turn On Time With 7000 µF	1500 msec				
Rise Time	150 ms				
Rise Time With 7000 µF	500 ms				
Fall Time	150 msec				
Transient Recovery Time	2 ms				
Ripple and Noise (BW = 20MHz)	100 mV				
Power Back Immunity	35 VDC				
Capacitor Load	7000 µF				
DC On Indicator	Green				
DC ON Indicator Threshold at start up (Green LED)	17.6-19.4 VDC				
DC LOW Indicator Threshold after start up (Red LED)	17.6-19.4 VDC				
Parallel Operation	2 Units				
Efficiency	90 %				