

PSO-120 series

120W Switching Power Supply with UPS function



■ Features:

- Universal AC input range / Full range
- Output Protections: Short circuit / Overload
- Battery Protections: Battery cut-off
- Built-in battery charger with charging current control circuit
- LED alarm signals: AC OK, DC OK, Battery charging
- Cold start function: power ON without AC mains through ST switch
- Cooling by free air convection



Ⓞ ELECTRICAL SPECIFICATION

MODEL	PSO-120-13	PSO-120-27
OUTPUT		
Rated Voltage	13.8V	27.6V
Voltage Adjustment Range	12.3 ÷ 14.9V	23.5 ÷ 29.8V
Rated Current	8.5A	4.2A
Current Range	0 ÷ 8.5A	0 ÷ 4.2A
Rated Power	120W	120W
Line Regulation	± 0.5%	± 0.5%
Load Regulation	± 1%	± 1%
Voltage Tolerance [3]	± 3%	± 3%
Ripple & Noise (max.) [2]	480mV _{p-p}	960mV _{p-p}
Setup, Rise Time [4]	800ms, 50ms / 230VAC; 1600ms, 50ms/115VAC at full load	
Hold up Time (typ.)	80ms / 230VAC; 16ms/115VAC at full load	
BATTERY		
Rated Voltage	12V	24V
Charging parameters	13.4V ± 0.2V / 0.5A ± 0.1A	27.4V ± 0.2V / 0.5A ± 0.1A
INPUT		
Voltage Range	80 ÷ 264VAC	
Frequency Range	47 ÷ 63Hz	
Power Factor (typ.)	PF > 0.6 / 230VAC at full load	
Efficiency (typ.)	84%	86%
AC current (typ.)	2.8A/115VAC; 1.4A / 230VAC	
Inrush current (max.)	75A / 230VAC(25°C)	

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OUTPUT PROTECTIONS

Over Current	Range: 110 ÷ 150%
	Type: hiccup mode, auto-recovery
Short Circuit	Type: hiccup mode, auto-recovery

BATTERY PROTECTIONS

Battery Cut-off	Range: 9.5 ÷ 11V	Range: 19 ÷ 22V
	Type: shut off, re-power on to recovery	

WORKING ENVIRONMENT

Working Temperature	-10°C ÷ +50°C (Refer to derating Curve)
Working Humidity	20 ÷ 90% RH non-condensing
Storage Temperature and Humidity	-20°C ÷ +85°C, 10 ÷ 95% RH non-condensing

SAFETY AND EMC REGULATIONS

Safety Standards	Compliance to EN60950-1
Withstand Voltage	IN/OUT: 1.5kVAC; IN/FG: 1.5kVAC; OUT/FG: 0.5kVAC
EMC Emission	Compliance to EN55032
EMC Immunity	Compliance to EN55024
Harmonic Current	Compliance to EN61000-3-3; EN61000-3-2

OTHERS

Dimensions	159 x 98 x 38mm (L x W x H)
Weight	0.5kg

EAN Code



59018851205755



59018851205762

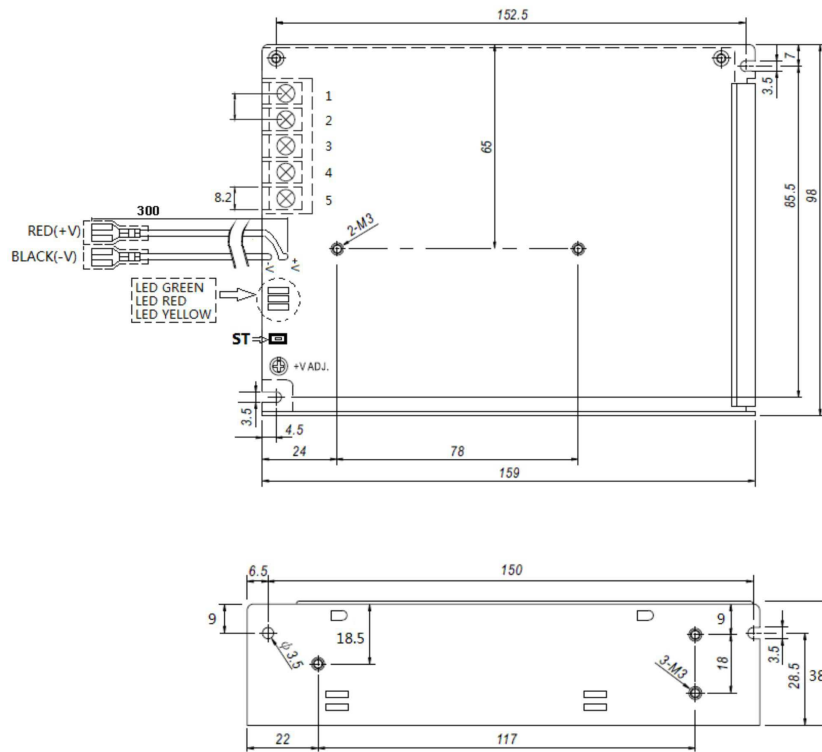
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF i 47µF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation and load regulation.
4. Setup and rise time is measured from 0 to 90% rated output voltage.
5. Power supply is considered as component not indented to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-quality to comply with EMC Directives.

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© MECHANICAL SPECIFICATION



PIN ASSIGNMENT

INPUT and OUTPUT (Screw terminal block 10mm pitch)		BATTERY (Faston 6.35x0.8mm)		Alarm Signals	
No.	Assignment	No.	Assignment	No.	Assignment
1	Input: AC/N	RED (+V)	Battery positive	LED GREEN	■ - DC Power On - DC power Off
2	Input: AC/L	BLACK (-V)	Battery negative	LED RED	■ - AC Input ON - AC Input off
3	Input: FG			LED YELLOW	■ - Battery is charging - Battery is not charging
4	Output: U _{OUT} -			ST	Short Push when AC input off to power on DC output
5	Output: U _{OUT} +				

DERATING CURVE

