



MEAN WELL

SWITCHING POWER SUPPLY
ISO-9001 CERTIFIED MANUFACTURER

ESC/ESP- 120/240 SERIES

- . LOW COST, HIGH RELIABILITY
- . COOLING FAN ON/OFF AUTOMATICALLY
- . 3 COLORS LED LOADING INDICATION
- . INTERNATIONAL AC INPUT RANGE
- . BUILT IN EMI FILTER, LOW RIPPLE NOISE
- . SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- . SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE, OVER TEMP. PROTECTED
- . HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- . CHARGER PROTECTION (ESC ONLY)
(BATTERY, POLARITY, UNDER VOLTAGE,
OVER VOLTAGE PROTECTION)
- . 105°C OUTPUT CAPACITOR

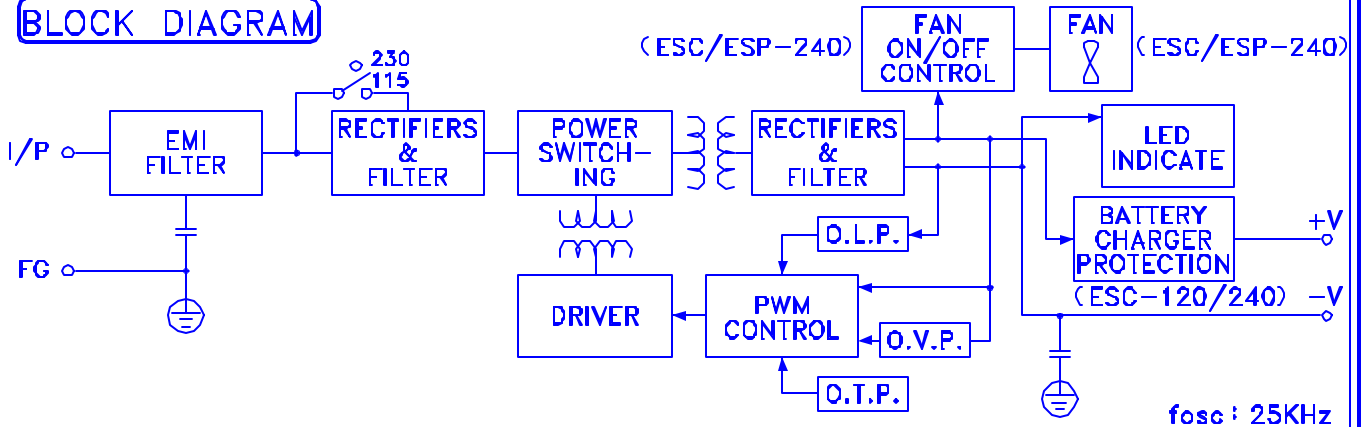


SPECIFICATION	MODEL	ESC/ESP-120			ESC/ESP-240		
		13.5	27	54	13.5	27	54
DC OUTPUT VOLTAGE		13.5V	27V	54V	13.5V	27V	54V
OUTPUT V. TOLERANCE		±2%	±1%	±1%	±2%	±1%	±1%
OUTPUT RATED CURRENT		8A	4A	2A	16A	8A	4A
OUTPUT CURRENT RANGE		0-8A	0-4A	0-2A	0-16A	0-8A	0-4A
RIPPLE & NOISE		120mVp-p	150mVp-p	400mVp-p	120mVp-p	150mVp-p	400mVp-p
LINE REGULATION		±0.5%	±0.5%	±0.5%	±1%	±0.5%	±0.5%
LOAD REGULATION		±2%	±1%	±0.5%	±2%	±1%	±0.5%
DC OUTPUT POWER		108W	108W	108W	216W	216W	216W
EFFICIENCY		81%	83%	84%	81%	84%	85%
DC VOLTAGE ADJ.		12-15V	24-30V	48-56V	12-15V	24-30V	48-56V
INPUT VOLTAGE RANGE	88~132VAC / 176~264VAC SELECTED BY SWITCH 47~63Hz; 249~370VDC						
AC CURRENT	3A/115V 1.5A/230V			4.5A/115V 2.5A/230V			
INRUSH CURRENT	COLD START 35A						
LEAKAGE CURRENT	<3.5mA/240VAC						
OVERLOAD PROTECTION	105%~135% TYPE:FOLDBACK CURRENT LIMITING RESET:AUTO RECOVERY						
OVER VOLTAGE PROTECTION	115%~135%						
FAN CONTROL	NO FAN			RTH5>=60°C FAN ON,<=50°C FAN OFF			
OVER TEMP. PROTECTION	RTH5>=80°C OUTPUT SHUTDOWN			RTH5>=85°C OUTPUT SHUTDOWN			
BATTERY PROTECTION	ESC SERIES WITH BAT. POLARITY, BAT. UNDER VOLTAGE, BAT. OVER VOLTAGE PROTECTION						
SETUP, RISE, HOLD UP TIME	200ms, 100ms, 15ms			200ms, 100ms, 10ms			
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES						
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC						
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms						
WORKING TEMP., HUMIDITY	-10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH						
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%~95% RH						
DIMENSION	150*140*86mm CASE:909						
WEIGHT	1.4Kgs						
SAFETY STANDARDS	CSA INTERNATIONAL MARK APPROVED (CSA1010.1, UL3101-1, IEC1010-1, EN61010-1) APPROVED						
EMC STANDARDS	CISPR22 (EN55022), IEC801-2,3,4 IEC555-2 VERIFICATION						

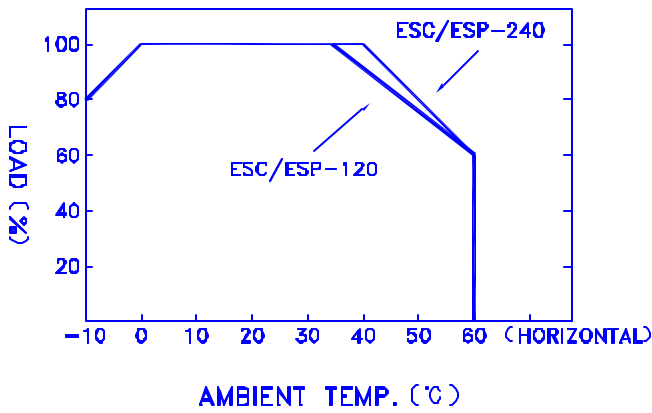
- NOTE :
1. ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
 2. TOLERANCE INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
 3. RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
 4. LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
 5. LOAD REGULATION IS MEASURED FROM 0% TO 100% RATED LOAD.
 6. C2,3,38 MUST BE REMOVED.

ESC/ESP-120/240 SERIES

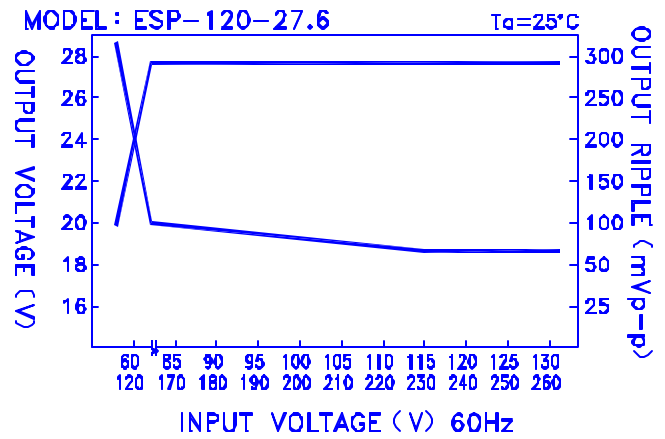
BLOCK DIAGRAM



OUTPUT DERATING



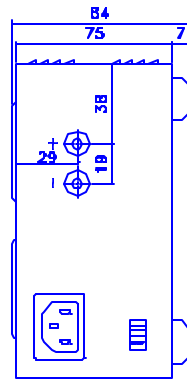
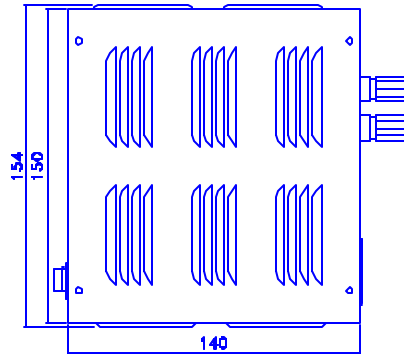
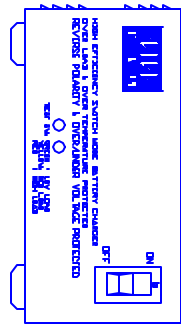
STATIC CHARACTERISTICS



DIMENSION (mm)

- ☒ CASE : 909
- ☒ PIN+ : DC OUTPUT +V
- ☒ PIN- : DC OUTPUT COM

ESC/ESP-120



ESC/ESP-240

