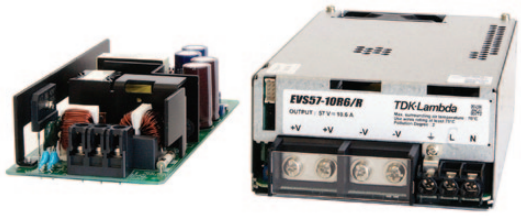
Industrial Comm Renewable Automation

300 and 600W Constant Current Power Supplies

Features	Benefits
• 300W Convection cooled and 600W fan model	• Silent fanless chargers
• CC (constant current) mode	• Quick recharge, avoid battery overcharging
• CV (constant voltage) mode	• Supports charging of 12, 24 and 48V batteries
• 5 Year warranty	• Provides high reliability for battery charger and electrical storage system



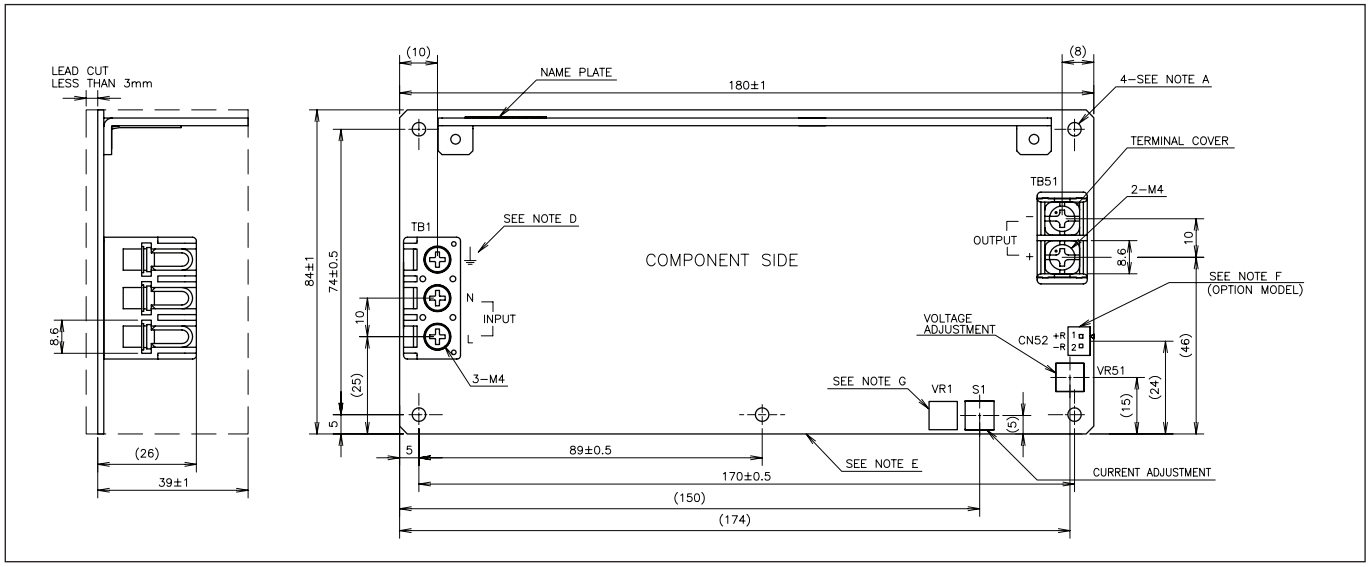
Specification

Model		EVS300	EVS600
Input Voltage	V	85-265VAC (47-63Hz)	85-265VAC (47-63Hz)
Input Current	A	3.6 / 1.8	7.2 / 4.0
Inrush Current (100/200VAC)	A	15 / 30	20 / 40
Power Factor (100/200VAC)	-	0.97/0.93	0.95/0.9
PFHC	-	Meets EN61000-3-2	
Leakage Current	mA	< 0.5mA	< 0.75mA
Temperature Coefficient	%/°C	<0.02%/°C	
Constant Current Setting Accuracy	A	±10%	
Overvoltage Protection	V	18V*: 19.8-23.4V, 36V: 39.6-46.8V, 57V: 62.7-74.1V (* EVS300 only)	
Hold Up Time (Typ)	ms	10ms at 100/110VAC input	
Efficiency (100/200VAC)	%	18V: 86/89%, 36V: 88/91%, 57V: 87/90%	36V: 85/88%, 57V: 84/87%
Remote On/Off	-	Optional	
Series & Parallel Operation	-	Yes, see instruction manual	
Operating Temperature (No external airflow)	°C	-20°C to +70°C Derate linearly to 40% load from 45°C to 70°C	-20°C to +70°C Derate linearly to 20% load from 50°C to 70°C
Operating Temperature External airflow (1.4m/s)	°C	-20°C to +70°C Derate linearly to 70% load from 60°C to 70°C	-20°C to +70°C Not applicable (EVS600 has internal fan)
Storage Temperature	°C	-30°C to +75°C	
Humidity (non condensing)	%RH	Operating: 30 - 90%RH, Storage: 10 - 90%RH	
Cooling	-	Convection or forced air	Internal fan
Withstand Voltage	VAC	Input to Ground 2kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.	
Isolation Resistance	MΩ	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC	
Vibration (non operating)	-	10 - 55Hz (1 minute sweep), 19.6m/s^2 constant, X, Y, Z 1 hour each	
Shock	-	< 196.1 m/s^2	
Safety Agency Certifications	-	UL60950-1, CSA60950-1, EN60950-1, CE Mark	
Conducted & Radiated EMI	-	EN55011/EN55022-B, FCC Class B, VCCI-B	
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11; EN61000-6-2	
Weight (Typ)	g	540g (open frame)	1600g
Size (WxHxD)	mm	84 x 42 x 180mm	120 x 61 x 190mm
Warranty	yrs	5	

Model Selector

Model	Nominal Voltage Output	Adjust Range (V)	Max Current (100VAC)	Max Current (200VAC)	Current Adjust Range (100VAC)	Current Adjust Range (200VAC)	CV Line Reg (mV)	CV Load Reg (mV)	Ripple & Noise (mV)
EVS18-16R7	18V	12 - 18V	16.7A		8.35 - 16.70A		72	144	200
EVS36-8R4	36V	24 - 36V	8.4A		4.20 - 8.40A		144	252	250
EVS36-16R7	36V	24 - 36V	15.3A	16.7A	8.35 - 15.30A	8.35 - 16.70A	144	288	200
EVS57-5R3	57V	48 - 57V	5.3A		2.65 - 5.30A		228	285	250
EVS57-10R6	57V	48 - 57V	9.7A	10.6A	5.30 - 9.70A	5.30 - 10.60A	228	456	200

Outline Drawing EVS300W Series

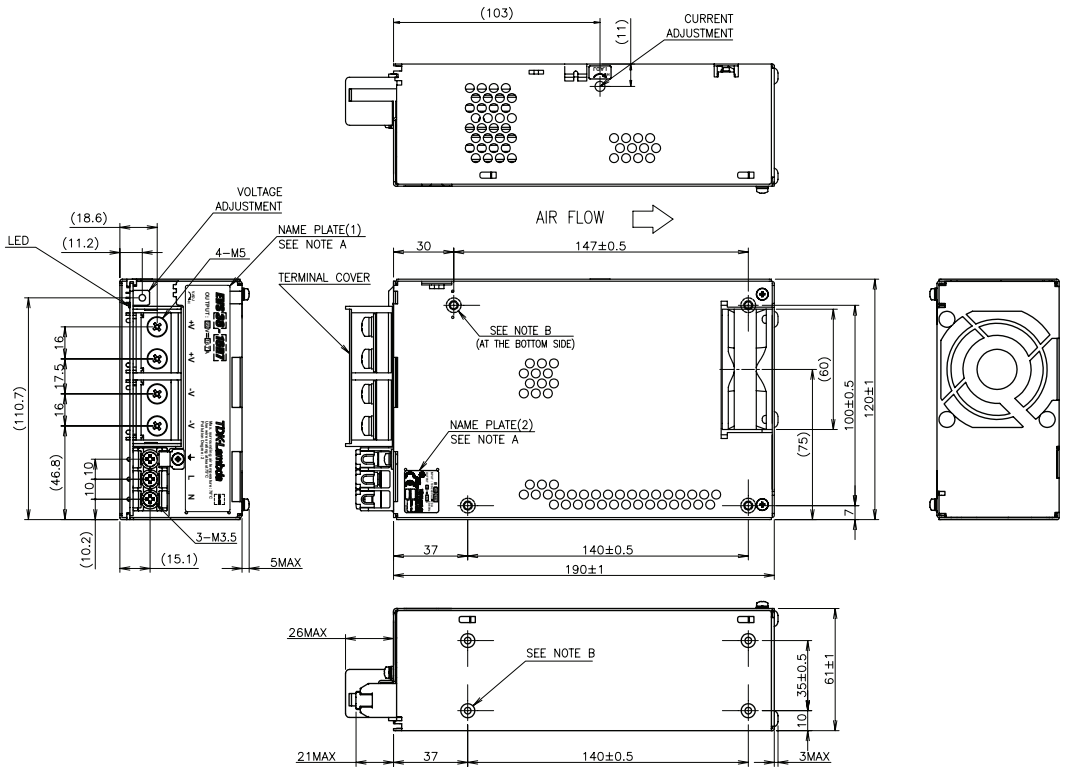


Options

Suffix	Description
-	None
/A	Cover & L Bracket (Standard on EVS600) *
/R	Remote On/Off
Example	EVS57-5R3/RA

Note: * without suffix

Outline Drawing EVS600W Series



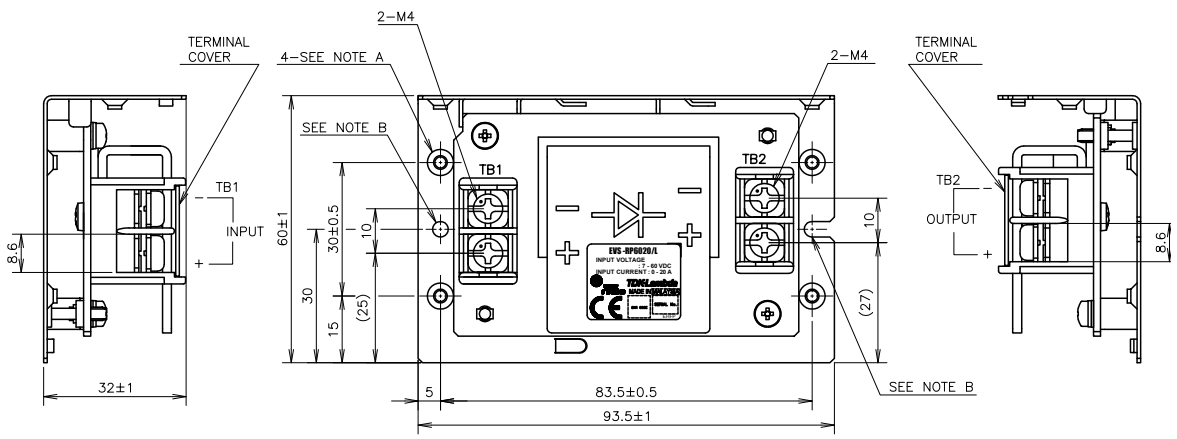
Accessory

Model	Description
EVS-RP6020	20A Reverse current Prevention module for battery charging use (PCB type) *
EVS-RP6020/L	20A Reverse current Prevention module for battery charging use (on L bracket) *

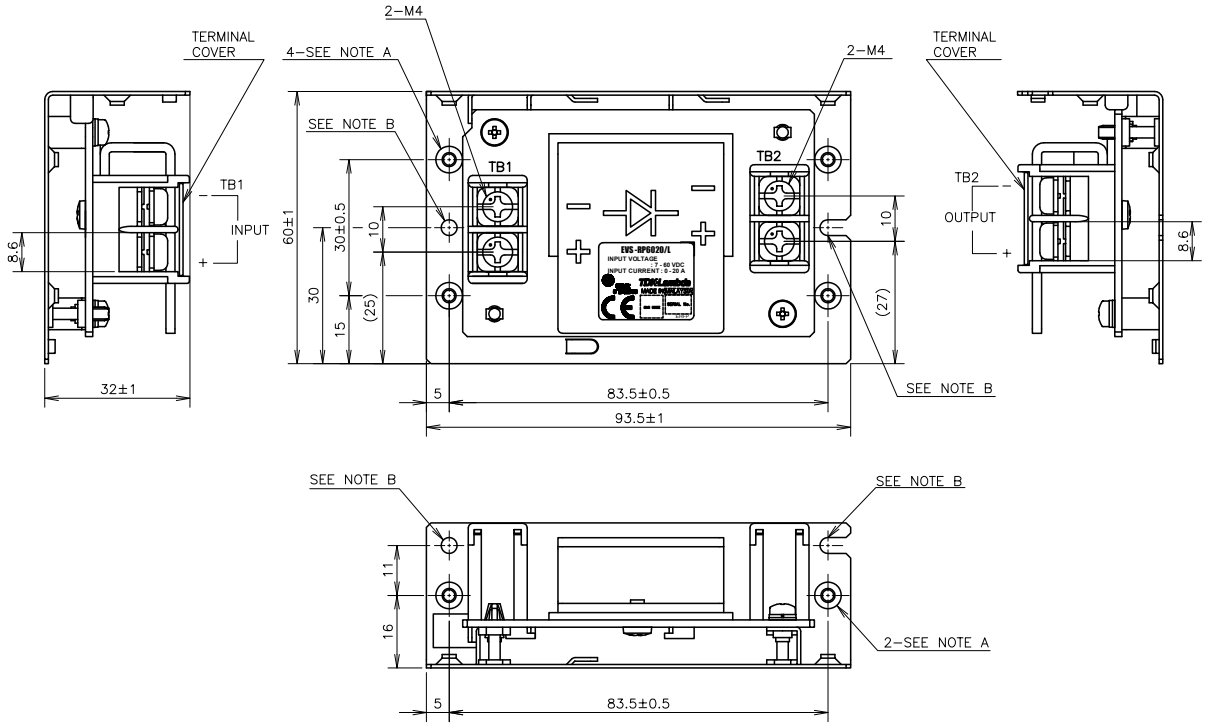
*** The Reverse current Protection modules EVS-RP can also be used as replacement for Diode-modules (as e.g. DLP-PU)**

- For power up in parallel operation
- For Back-up diode (N + I redundant operation)

Outline Drawing EVS-RP6020 (Open frame)



Outline Drawing EVS-RP6020/L Series



Notes:
A: M3 embossed tapped and countersink holes (6) are for customer's chassis mounting
B: Dia 3.5mm holes (2) and R1.75 slot holes (2) are for customer's chassis mounting holes
C: Model name, input range and input current are shown here in accordance with the specifications
D: Country of manufacture will be shown here

Accessories:
* Terminal cover for barrier terminal strip ——2 (attached on terminal TB1 and TB2 at shipment)