55W Battery Charger Switching Power Supply

HF55W-SB Series

FEATURES

- Universal AC input / full range
- To charge lead acid battery by floating charge
- Auto switch when power off (UPS function)
- AC mains failure signal
- Battery low signal
- Battery +/- pole reverse connection protection
- Approvals: CE
- Protections: overload/ over voltage/ short circuit
- 5 years limited warranty
- F605 160 x 98 x 39mm

SPECIFICATIONS

Input Voltage	85~264VAC (120~370VDC)
Input Current	1.8A
Input Frequency	47~63Hz
Inrush Current	cold start, 20A/115V, 40A/230V
Input Leakage Current	< 0.7mA/230VAC
Line Regulation (full load)	± 0.5%
Voltage Adjust Range	V1: ± 5%, V2: not adjustable
Output Overload Protection	105~150%, hiccup mode, auto recovery
Output Over Voltage Protection	115~150%, hiccup mode, auto recovery
Short Circuit Protection	hiccup mode, auto recovery
Rise Time	50ms @full load (typical)
Hold up Time	20ms @full load (typical)
Mechanical Feature	enclosed
Battery Reverse Connection Indication	red LED on when battery +/- pole reverse connected
Dimensions	160 x 98 x 39mm (L x W x H)

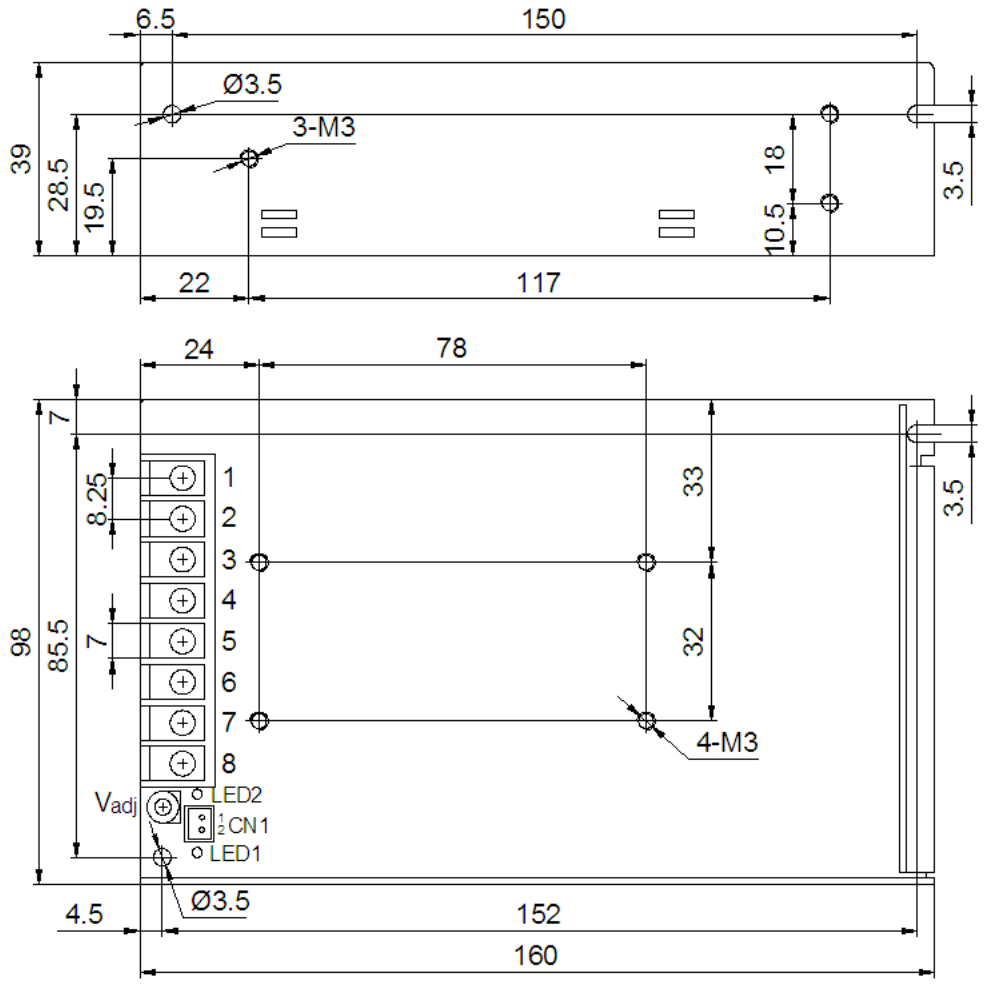
Operating Temperature	-10°C ~+50°C
Storage Temperature	-20°C ~+85°C
Operating Humidity	20%~93%RH(non condensing)
Storage Humidity	20%~95%RH(non condensing)
MTBF	>100,000 hours
Cooling	convection
Safety Standards	GB4943, UL60950, EN60950
EMC Standards	GB9254, EN55022 Class B EN55024, EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11
Withstand Voltage	I/P - O/P: 3.0KVAC/1min I/P - F/G: 1.5KVAC/1min O/P-F/G: 0.5KVAC/1min
Vibration	10~150Hz, 2G 10min/1cycle, 30min each along X, Y, Z axes
Connection	8P/8.25mm pitch terminal block
Packing	0.49kgs, 36pcs/18.5kgs/0.045CBM per carton

Model No.	DC Output	Voltage Adjust Range	Voltage Tolerance	Charging Current	Battery Low Voltage Protection	Ripple & Noise (max.)	Efficiency
HF55W-SB-13.8	13.8V 4A	± 5%	±1%	0.23A	9.6V ± 0.5V	120mVp-p	75%
	13.4V 0.23A (charger)	not adjustable	±3%				
HF55W-SB-27.6	27.6V 2A	± 5%	±1%	0.16A	19.6V ± 0.5V	150mVp-p	76%
	26.5V 0.16A (charger)	not adjustable	±3%				

NOTE

1. All parameters are measured at 230VAC input, rated load and 25°C ambient temperature.
2. Line regulation is measured from low line to high line at rated load.
3. Load regulation is measured from 0% to 100% of rated load for single output models. For multi-output models, it is measured from 20% to 100% of rated load, and other output at 60% rated load.
4. Ripple & noise are measured at 20MHz of bandwidth by using a 12” twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
5. The power supply is regarded as a component which will be installed into the final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

Drawing



Length of assembly screw: max. 6mm

Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,7	COMMON “-” of DC & BATTERY OUTPUT
2	AC/N	5	DC OUTPUT +V
3	FG	6	BATTERY “+” POLE
		8	NO USE

CN1 Pin No. Assignment

Pin No.	Assignment
1	Battery low signal (low level < 0.7V when battery works normally, high level > 3V when battery low. The battery will be switched off after it gives the battery low signal. When battery switched off, you have to re-power on AC mains, so the battery can recover.)
2	AC mains failure signal (low level < 0.7V when AC power on, high level > 3V when AC mains fails)