

FEATURES

- 13.8Vdc 3.25A and 6A and 27.6Vdc 3.0A power supplies with battery backup
- High reliability and high efficiency industrial-grade switching power converter
- Universal AC input range from 115Vac to 240Vac nominal without power derating
- Light weight corrosion resistant aluminium enclosure
- Output overcurrent and short circuit protection
- Output overvoltage protection
- Self-resetting battery fuse
- Overtemperature protection
- Green Mains/DC OK LED and form-C alarm contact
- Green Battery OK LED and form-C alarm contact
- Red Battery Fuse Fail LED



SPECIFICATIONS

INPUT

Nominal Voltage	115-240Vac
Current	PBB2S-13-3.5 MK II: 1.7A PBB2S-13-7 MK II: 2.3A PBB2S-28-3.5 MK II: 2.3A
Nominal Frequency	50-60Hz

OUTPUT - AC Mains Operation

Output Voltage	See Table
Output Current	See Table
Ripple and Noise *1	See Table
Short Circuit Protection	Hiccup, non-latching
Overload Protection	Hiccup overcurrent prot'n <175% of rated current
Overvoltage Prot'n	Shutdown, latching
PBB2S-13-3.5/-7 MKII	16.5V - 21.0V
PBB2S-28-3.5 MKII	33.0V - 40.5V

BATTERY - External

Chemistry	Lead acid
Battery Voltage	See Table
Battery Charger	Current-limited taper charger
Battery Charging Current Limit*2	See Table

OUTPUT - Battery Operation

Voltage Drop	PBB2S-13-3.5 MK II: 0.47V
Battery to Output (typical)	PBB2S-13-7 MK II: 0.55V PBB2S-28-3.5 MK II: 0.47V
Short Circuit Protection	Self-resetting battery fuse
Battery Reverse Polarity Protection	Indefinite

*1 BW=20MHz, AC coupled, measured in parallel with a 0.1µF ceramic capacitor and a 47µF electrolytic capacitor.

*2 Measured at 10.0V or 20.0V (12V or 24V battery), T=25°C.

DISPLAYS / ALARMS

Mains/DC OK	Green LED: ON=OK Form-C contact, 30Vdc/7A
Battery OK	Green LED: OFF=V _{batt} <10.5V, 21.0V ON=V _{batt} >11.5V, 23.0V Form-C contact, 30Vdc/7A
Battery Fuse Fail	Red LED: ON=FAIL

STANDARDS

Safety	AS/NZS 61558.1/.2.16 AS/NZS 62368.1
Short-Circuit Protection	SMPS incorporating a short-circuit-proof safety isolating transformer
Electric Shock Protection	Class I
Overvoltage Category	II
Pollution Degree	2
Isolation	I/P to Output 4.0 kVac, 1 min. I/P to Ground 2.0 kVac, 1 min. O/P to Ground 500 Vac, 1 min.
Alarms to O/P & Ground	500 Vac, 1 min.
EMC	AS/NZS CISPR 32 Class B

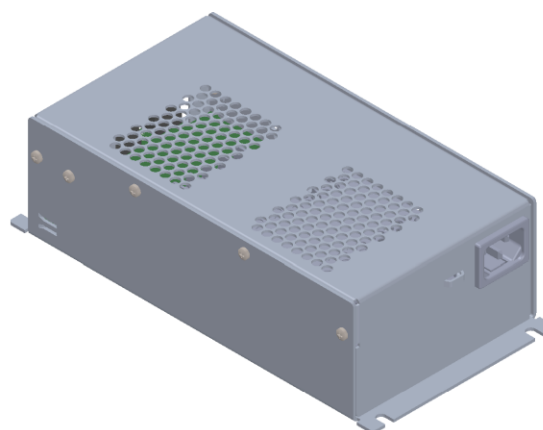
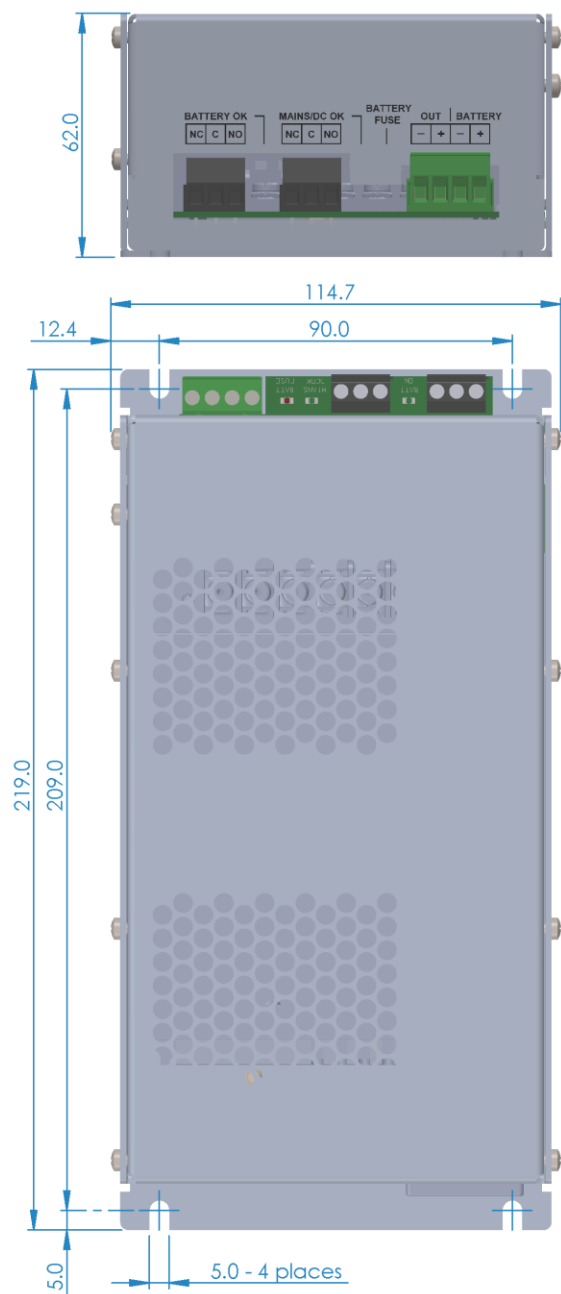
MECHANICAL AND ENVIRONMENTAL

Case Size	219x115x62mm (LxWxH)
Weight	PBB2S-13-3.5 MK II 600g PBB2S-13-7 MK II 670g PBB2S-28-3.5 MK II 670g
Surrounding Operating	
Air Temperature	-10°C ≤ T ≤ 60°C
Output Power Derating	-2.9%/°C for T ≥ 40°C
Cooling	Natural Convection
Overtemperature Prot'n	Shutdown, latching
Protection Index	IP20
Environment	For indoor use only

SELECTION TABLE

Model Number	Output Voltage	Output Current	Ripple and Noise* ¹	Battery Voltage	Battery Charging Current Limit* ²
PBB2S-13-3.5 MK II	13.8Vdc	3.25A	<120mVp-p	13.8Vdc Float (12V battery)	0.25A typ.
PBB2S-13-7 MK II	13.8Vdc	6.0A	<120mVp-p	13.8Vdc Float (12V battery)	0.5A typ.
PBB2S-28-3.5 MK II	27.6Vdc	3.0A	<150mVp-p	27.6Vdc Float (24V battery)	0.35A typ.

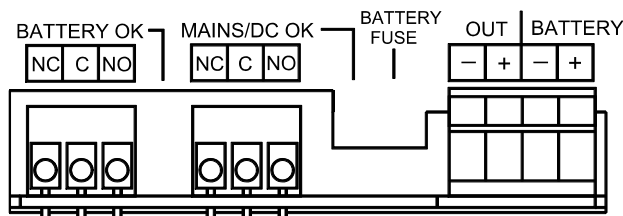
EXTERNAL VIEW



NOTES:

1. AC Mains Termination:
10A IEC 60320 C14 Appliance Inlet.
2. Output and Battery Terminations:
4W Pluggable Screw Terminal Block
Suitable for up to 2.5 sq. mm wire.
3. Alarm Terminations: 3W Screw Terminal Blocks
Suitable for up to 1.5 sq. mm wire.

TERMINATIONS



Note: Alarm terminations show state in normal non-alarm conditions.