

PB358-DIN Series:

138W PSU for Battery Backup System



FEATURES

- Low noise output
- Independent rectifier & battery charging current limiting
- Front panel adjustable battery charging current limit
- Advanced monitoring and control
- 2 step float charger or 3 step fast charger, switch selectable
- Automatic battery-connections and fuse-fail testing
- Battery low voltage disconnect switch and electronic circuit breaker in battery positive.
- Front panel battery start button
- Optional battery temperature probe for battery float voltage temperature compensation
- Automatic and manual battery condition testing (BCT)
- Full rated output for $T_a = 0$ to 50°C , derated to 50% at $T_a = 70^\circ\text{C}$
- Four form-C alarm relays and alarm/status LEDs: Mains OK, Rectifier OK, Battery OK, and Fault
- Optional Ethernet interface with embedded HTML webpage server and SNMP V1 support
- Screw terminal and IEC60320 C14 appliance inlet options

SPECIFICATIONS

INPUT

Voltage	190-264Vac, 190-400Vdc
Current	1.4A max.
Inrush current	15A on cold start
Frequency	45-65Hz

OUTPUT – AC MAINS OPERATION

Output voltage	See table
Output current	See table
Line regulation	0.2% typ.
Load regulation	1.3% max.
Rectifier current limit*	Constant current $> 6/7.5/15V_{out}$ Hiccup $< 6/7.5/15V_{out}$
Battery charging current limit	Constant current $> \text{LVD volts}$ Front panel adjustable
Short circuit prot'n	Indefinite, autoresetting
Overvoltage prot'n* (Latching)	15.5-19.5V/31.5-39.0V/62.0-73.0V
Ripple & noise* (BW=20MHz)	$< 50\text{mV}_{p-p} / < 100\text{mV}_{p-p} / < 100\text{mV}_{p-p}$
Efficiency*	86%/87%/ 88% typ. at 100% load * (13.8Vout / 27.6Vout / 55.2Vout)

STANDARDS

Safety	AS/NZS60950.1
Protection Degree	IP20
Protection against shock	Class I, with PE connection
EMC	RF emissions AS/NZS CISPR 11, Class B, Grp 1
	Harmonic current AS/NZS 61000.3.2
Isolation	Input to output 4242Vdc, 1 minute
	Input to ground 2121Vdc, 1 minute
	Output to ground 707Vdc, 1 minute

ALARMS & CONTROLS

Relays	Four voltage-free form-C contacts 32Vdc, 1A
Mains OK Relay	OK / Fail
Rectifier OK Relay	OK / Fail, overtemp or shutdown
Battery relays	Determined by DIP switch
	DIP switch 3 = OFF (Default)
Battery OK Relay	OK / Battery low voltage
Fault Relay	Battery disconnected or fuse fail, battery overvoltage, battery overtemperature or BCT Fail
	DIP switch 3 = ON
Battery OK Relay	OK / Battery low voltage, battery disconnected or fuse fail, battery overvoltage, battery overtemperature or BCT Fail
Fault Relay	BCT in progress / not in progress
Controls	External shutdown*
	Input for ext. voltage-free contact Closure reduces rectifier output voltage to 9.6V / 19.4V / 39.1V
Control button (pushbutton)	1s: clear BCT or bat discon. alarm 5s: manually start or abort BCT 10s: reset microcontroller
Battery start button	Closes battery low voltage disconnect switch. Allows load to be started from battery if mains power is not available.
LED's	Four green alarm / status LED's
Mains OK LED	ON: Mains OK / OFF: Mains fail
Rectifier OK LED	ON: Rectifier OK 0.5s flash: External shutdown 0.1s flash: Rectifier overtemp. prot'n OFF: Rectifier fail
Battery OK LED	ON: Battery OK, charger = float 1s flash: Battery OK, charger = bulk 0.5s flash: Battery OK, charger = absorp. 0.2s flash: Battery OK, BCT pending 0.1s flash: Battery OK, battery test or BCT OFF: Battery low voltage
Fault LED	OFF: No faults