

PBSP-740 Series

DC/AC ROLLING STOCK INVERTER

FEATURES

- 4000W DC/AC Inverter
- Rolling Stock Rail 74Vdc Input
- Rugged Build
- High Surge Rating 12KW
- Input Spike & Burst Protected
- Model Variants available; -C, -CL, -D, -G, -H, -R, and -S.
- OPERATIONS HANDBOOK AVAILABLE



SPECIFICATIONS

INPUT	
Input Voltage:	74Vdc (60-84Vdc)
Input Current	40mA standby, 60A (74Vdc input), 160A max.
Startup voltage	67Vdc: (-C, -D, -G, -H, -R, -Z, -ZS) 60Vdc: (-CL)
Under voltage cut-out	59Vdc.
Under voltage re-set	71Vdc.
Over voltage cut-out	90Vdc.
Over voltage re-set	87Vdc
Input Current	Standby: 40mA ON with no load: 400mA Pout = 4000W, Vin=74Vdc; 60A, Any load, 60V < Vin < 84Vdc; 160A max
OUTPUT	
Output Voltage	240Vac $\pm 5\%$
Output Frequency	50Hz $\pm 1\%$
Total Harmonic Distortion	3%
Output power	4kW continuous. (Ta=50C, PF=1.0)
Output current	16.7A rms
Surge power	5kW, 30min; 12kW, 3sec.
Efficiency	90%–95% load dependent.
PROTECTION	
Input protection	100A, AS3111, 10kA MCB Input Over / Undervoltage Cutout
Output overload and short circuit protection	Automatic shutdown Auto restart after 60 secs
Output protection	20A, AS3111/AS3190 4.5kA C-Curve MCB/RCD. Mounted on inverter on all variants except -R. Supplied separately on -R variant Output neutral connected to inverter chassis earth on inverter side of MCB/RCD
Over temperature protection	Automatic Shutdown
Dielectric Strength	Input to Chassis: 1700Vdc Output to Chassis: 2250Vdc Input to Output: 4250Vdc

STANDARDS & APPROVALS

C-Tick	Designed to meet AS/NZS CISPR11: EN50121-3-2 limits
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ENVIRONMENTAL

Operating temperature	0°C to 50°C ambient. Full load operation Derate 65°C at 5mins full load, 25mins @ 150W
Cooling	Internal thermostatically controlled fan.
Shock	4G $\pm 20\%$ longitudinally 2G $\pm 20\%$ laterally 2G $\pm 20\%$ vertically 50ms duration 20 shocks per axis
Vibration	Resonant search: 20 - 2.2mm double amplitude (1-9Hz) 2.2-0.8mm double amplitude (10-50Hz) Endurance: 3 hours per axis (X,Y,Z) at 50Hz 0.8mm double amplitude.

Relative Humidity	95% non-condensing
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DISPLAYS, CONTROLS & ALARMS

Front Panel Controls Variants -C, -CL, -D, -G, -Z, -ZS	DC Input 100A 10kA MCB ON/OFF Toggle Switch AC Output 20A MCB/RCD
Front Panel Controls Variant -H	DC Input 100A 10kA MCB ON/OFF REMOTE Toggle Switch AC Output 20A MCB/RCD
Front Panel Controls Variant -R	DC Input 100A 10kA MCB ON/OFF REMOTE Toggle Switch
Front Panel Displays All Variants	ON / Standby / Overload LED Overtemperature LED DC Volts Out of Range LED
Remote ON/OFF Control Variants -H, -R	Two pins on Alarm/Control connector for external voltage free contact. These pins are connected to internal circuitry which is connected to the 74Vdc input power

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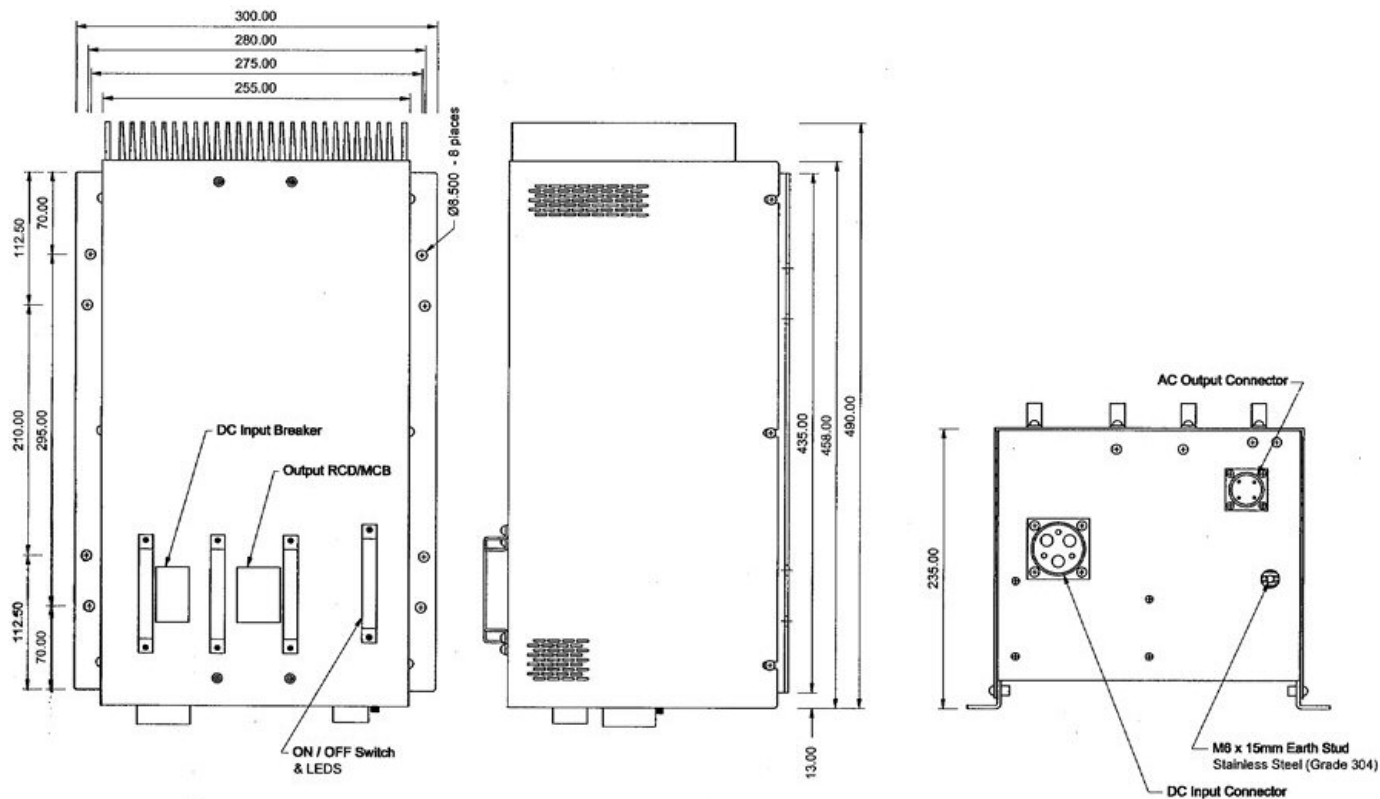
DC/AC ROLLING STOCK INVERTER

SPECIFICATIONS

MECHANICAL	PBSP-740-C, CL-D	PBSP-740-G	PBSP-740-H AND -R
Mechanical Outline	See Technical illustration	See Technical illustration	See Technical illustration
Construction	Powder coated aluminum chassis.	Powder coated aluminum chassis.	Powder coated aluminum chassis.
Dimensions	490 x 300 x 235mm	490 x 300 x 235mm	490 x 300 x 235mm
Weight	38kgs	38kgs	38kgs
DC Input connector Mating connector	MIL-C-5015 MS3102 E28-22P F80 Six crimp pin chassis receptacle MIL-C-5015 MS3108 E28-22S F80 Right angle crimp pin chassis receptacle Supplied with unit	MIL-C-5015 MS3102 E28-22P F80 Six crimp pin chassis receptacle MIL-C-5015 MS3108 E28-22S F80 Right angle crimp pin chassis receptacle Supplied with unit	MIL-C-5015 MS3102 E28-22P F80 Six crimp pin chassis receptacle MIL-C-5015 MS3108 E28-22S F80 Right angle crimp pin chassis receptacle Supplied with unit
AC Output connector Mating connector	-C, -CL: MIL-C-5015 MS3102 E18-10S F80 Four crimp pin chassis receptacle MIL-C-5015 MS3106 E18-10P F80, PG-16 Four crimp pin plug with 16mm conduit fitting Supplied with unit -D: MIL-C-5015 MS3106 E18-10P F80 Four crimp pin plug with strain relief Supplied with unit	Three Wilco WIBM110-LE, single phase 10A 3 flat IP56 insulated socket outlets	MIL-C-5015 MS3102 E18-10S F80 Four crimp pin chassis receptacle MIL-C-5015 MS3106 E18-10P F80 Four crimp pin plug with 16mm conduit fitting Supplied with unit
Alarm / Control Termination Mating connector	-	-	MIL-C-5015 MS3102 E16-1S F80 Seven crimp pin chassis receptacle MIL-C-5015 MS3106 E16S-1P F80 Seven crimp pin plug with 16mm conduit fitting Supplied with unit
Wiring	All internal wiring uses Radox 125 halogen free low smoke cable.	All internal wiring uses Radox 125 halogen free low smoke cable.	All internal wiring uses Radox 125 halogen free low smoke cable.

TECHNICAL ILLUSTRATIONS

PBSP-740-D



PBSP-740 Series

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TECHNICAL ILLUSTRATIONS

PBSP-740-G

