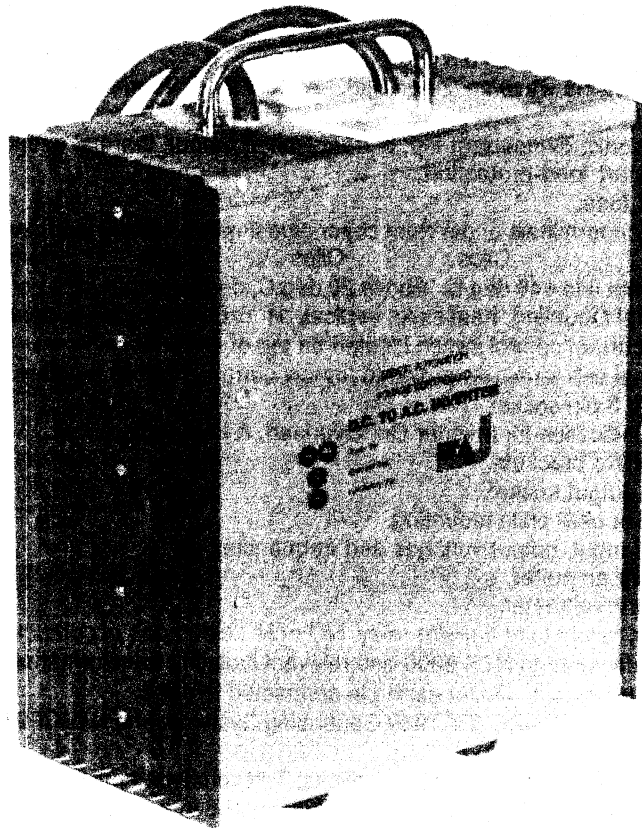


Ebbett Automation Ltd

SINE-WAVE INVERTER

230 Volt Power From A Battery



Extra low RFI emission

For sensitive communications environments

- * Safety transformer output, full input/output isolation
- * Automatic voltage regulation
- * Local or remote on/off/reset
- * Optional mounting brackets, meters
- * Industrial-quality design
- * Current-limit
- * Floating battery

EBBETT SINE-WAVE INVERTER

SPECIFICATIONS:

OUTPUT LOAD:	Cont	150 VA																	
	Surge	300 VA																	
BATTERY VOLTAGE:		12 V	24 V	48 V	110 V														
BATTERY CURRENT:	No load	500 mA	250 mA	200 mA	100 mA														
	Max	15 A	8 A	4 A	2 A														
PHYSICAL DIMENSIONS:	250 H x 210 W x 115 D																		
WEIGHT:	5 kg																		
OUTPUT VOLTAGE:	230 V AC plus or minus 5%.																		
FREQUENCY:	50 Hz plus or minus 0.5 Hz.																		
WAVE-FORM:	Voltage sine-wave on linear load. At cont load, Vb max, distortion less than 7%.																		
EFFICIENCY:	>70%.																		
PROTECTION:	Electronic; overcurrent trip, current-limited output, thermal overload, low output voltage trip, soft-start load-protection. Input fuse.																		
BATTERY CONNECTION:	Klippon terminals under front cover plus 2 metre battery lead, terminated with :- Clips Clips Lugs Lugs																		
OPERATING TEMPERATURE:	Ambient 0 to +40 deg C. Above 20 deg C, derate output ~1% per deg C. Normal mounting, heat sinks vertical. Horizontal mounting, derate output 15%.																		
ON-OFF-RESET:	Low current control switch located on top of cabinet. Internal pcb terminals provided for low current, remote on-off-reset.																		
POWER OUTLET:	Single 3 pin socket.																		
INDICATION:	LED indication for Inverter On, Overload, & Low Battery Trip.																		
OPTIONS:	Mounting brackets. Dual output socket. Rack or gear plate mounting. Other input, output voltages and frequencies etc. Battery ammeter. Battery voltmeter. Mains-failure load transfer relay. NO or NC clean pair of contacts for remote alarm.																		
ELECTRICAL SAFETY:	Manufactured to NZS 6200 and relevant isolating transformer requirements. Floating output. Outlet earth-pin connected to case. Complies with NZECP4 1989 Generating Systems, and NZECP29 1989 Boat Marinas & Pleasure Craft.																		
ELECTRICAL INTERFERENCE:	RFI emission less than 60 microvolts. Telecom type approval No 2044. Supplied ex factory, battery input floating above earth. Alternatively positive or negative terminals can be connected to chassis for maximum RFI suppression.																		
PERMANENT INSTALLATION:	6 mm threaded holes for bulkhead mounting from rear, or standard mounting brackets available as an optional extra.																		
TYPICAL APPLICATIONS:	<table><tr><td>* Sensitive communications equipment</td><td>* Laptop computers, disk drives, printers</td></tr><tr><td>* Telecom modems</td><td>* Fax machines, mobile phones</td></tr><tr><td>* Telemetry equipment</td><td>* Calculators, rechargeable battery equipment</td></tr><tr><td>* TVs, video, audio recorders</td><td>* Clocks</td></tr><tr><td>* Musical instruments</td><td>* Electronic typewriters</td></tr><tr><td>* Industrial instruments</td><td>* Electronic scales</td></tr><tr><td>* Power tools, sewing machines, shavers (series motors up to cont load rating).</td><td>* Radios & transmitters</td></tr></table>					* Sensitive communications equipment	* Laptop computers, disk drives, printers	* Telecom modems	* Fax machines, mobile phones	* Telemetry equipment	* Calculators, rechargeable battery equipment	* TVs, video, audio recorders	* Clocks	* Musical instruments	* Electronic typewriters	* Industrial instruments	* Electronic scales	* Power tools, sewing machines, shavers (series motors up to cont load rating).	* Radios & transmitters
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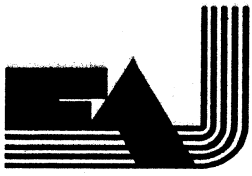
Note: Derate approximately 50% for starting fans (induction motor).

Distributed by:

Manufactured by:

Ebbett Automation Ltd, 70-72 Victoria St, Petone, Wellington, New Zealand.
Phone 00-64-4-568-6377. Fax 00-64-4-568-2374. Email ebbett.automation@clear.net.nz

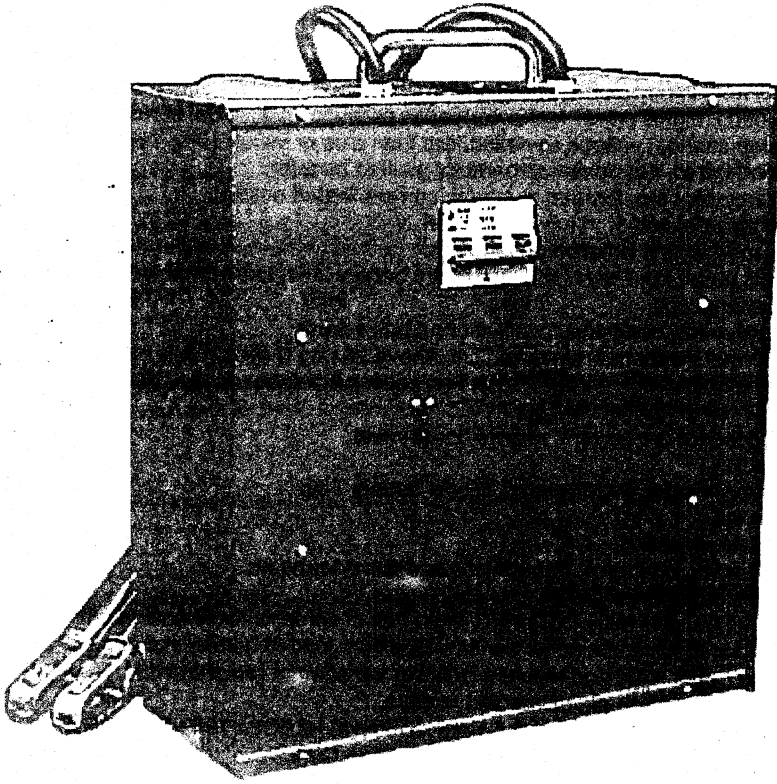
6/5/99 - Specification subject to change without notice



Ebbett Automation Ltd

HP INVERTER

230 Volt Power From A Battery



- * Industrial-quality design
- * Robust, lightweight, construction
- * Completely self-contained
- * Ready for immediate use
- * No expensive installation extras
- * Portable or permanent mounting
- * Ideal for unattended operation

Multi-purpose

High efficiency

Ideal for poor power-factor loads

- * Safety transformer output, full input/output isolation
- * Automatic voltage regulation
- * Local or remote on/off/reset
- * Optional mounting brackets, meters
- * Optional telecom input filter, mains-failure changeover
- * Meets caravan, marine and private generation standards
- * Reverse-polarity protection
- * Current-limit
- * Floating battery

EBBETT HIGH PERFORMANCE INVERTER

SPECIFICATIONS:

LOAD RATING:	0.5 hour	400VA (1.7A)	800VA (3.5A)	1500VA (6.5A)	3000VA (13A)
	4 hours plus	250VA (1A)	500VA (2.1A)	1000VA (4.2A)	1700VA (7.4A)
	Surge (motor start)	500VA (2A)	1000VA (4.2A)	2000VA (8.5A)	4000VA (17.3A)
	Peak	1000VA (4.4A)	2000VA (8.7A)	4000VA (17.3A)	6000VA (26A)
BATTERY VOLTAGE		12V 24V	12V 24V	12V 24V	24V
BATTERY CURRENT: No load		600mA 400mA	600mA 400mA	600mA 400mA	400mA
	Cont load & min Vb	40A 20A	80A 40A	150A 75A	150A
PHYSICAL DIMENSIONS: H x W x D		300 x 210 x 100	320 x 230 x 115	360 x 340 x 145	360 x 340 x 190
WEIGHT:		10 kg	12 kg	15 kg	20 kg
OUTPUT VOLTAGE:		230V AC plus or minus 5%.			
FREQUENCY:		50 Hz plus or minus 0.5 Hz.			
EFFICIENCY:		Greater than 90% for all loads.			
WAVE-FORM:		Step voltage driven, impulse phase corrected wave-form. Especially suitable for poor power-factor loads (digital power-factor correction produces sinusoidal current).			
DYNAMIC RESPONSE:		For full load step-change, voltage deviation less than plus or minus 10%, 1 cycle.			
CIRCUIT:		Pulse-width modulated, Fet-driven, separately-excited inverter.			
PROTECTION:		Electronic; overcurrent trip, thermal overload, current-limited output, low output voltage trip, soft-start load-protection.			
		MCB fitted for mechanical isolation of batteries.			
BATTERY CONNECTION:		Clamp terminals under front cover with two metre battery lead, terminated with; battery clips battery clips lugs lugs Floating			
OPERATING TEMPERATURE:		0 - 40 deg C normal mount heat sinks vertical. Above 20 deg C derate duty cycle - 1% per deg C. Horizontal mount, derate - 15%. Fan cooling increase rating - 20%.			
ON-OFF-RESET:		MCB flush-mounted in front cover.			
POWER OUTLET:		Terminals provided for low current, remote on-off-reset.			
INDICATION:		Single 3 pin socket.			
OPTIONS:		LED indication for Inverter On, Overload, & Low Battery Trip.			
		Mounting brackets.			
		Rack or gear plate mounting.			
		Other input and output voltages, frequencies and wave-forms etc.			
		Battery ammeter. Battery voltmeter.			
		Mains-failure load transfer relay. NO or NC clean pair of contacts for remote alarm.			
		Telecom input filter to eliminate noise transmission from load to battery system.			
ELECTRICAL SAFETY:		Manufactured to NZSS 6200 and relevant isolating transformer requirements.			
		Floating output. Outlet earth-pin connected to case.			
		Complies with NZECP1 1988 Caravans & Caravan Parks, NZECP4 1989 Generating Systems, and NZECP29 1989 Boat Marinas & Pleasure Craft.			
ELECTRICAL INTERFERENCE:		RFI emission less than 60 microvolts.			
PERMANENT INSTALLATION:		6 mm threaded holes for bulkhead mounting from rear, or standard mounting brackets available at extra cost.			

TYPICAL APPLICATIONS:

TVs, video recorders, fax machines	+	+	+	+
Indust Instrmnts, communicatns equip	+	+	+	+
Power tools, sewing machines	+	+	+	+
(series motors up to cont load rating)				
Personal computrs, disc drives, printers	+	+	+	+
I. Washing machines - (1/4 HP Ind motor) -	-	-	+	+
- Gentle Annie	-	+	+	+
Pumps etc - (3/4 HP Ind motor) -	-	-	-	+
II. Fridges - heat exch type	+	+	+	+
- Motor type	-	+	+	+
- 2cu ft (0.5A)	-	-	+	+
- 6cu.ft. (0.8A)	-	-	+	+
- 9cu.ft (1.4A)	-	-	+	+
III. Microwave ovens - 500 W	-	+	+	+

Note:

I Motors should be started off-load. Large flywheels with acceleration delay may cause overload lockout. Battery capacity must be of sufficient to supply the start surge without dropping below low battery trip-voltage.

II If fridge cycle is interrupted, attempted restart before compressor has had time to discharge, may cause overload lockout.

III Recommended manual dial type microwave oven.
Not suitable for a few specialised products that use the incoming wave-form as reference or for their operation.
eg some cheap shaver chargers, some electronic speed controlled appliances, occasional test instrmnts.

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