



BATTERY CHARGER WITH BOOST MODE

BPR®0524 M

Technical documentation



FEATURES

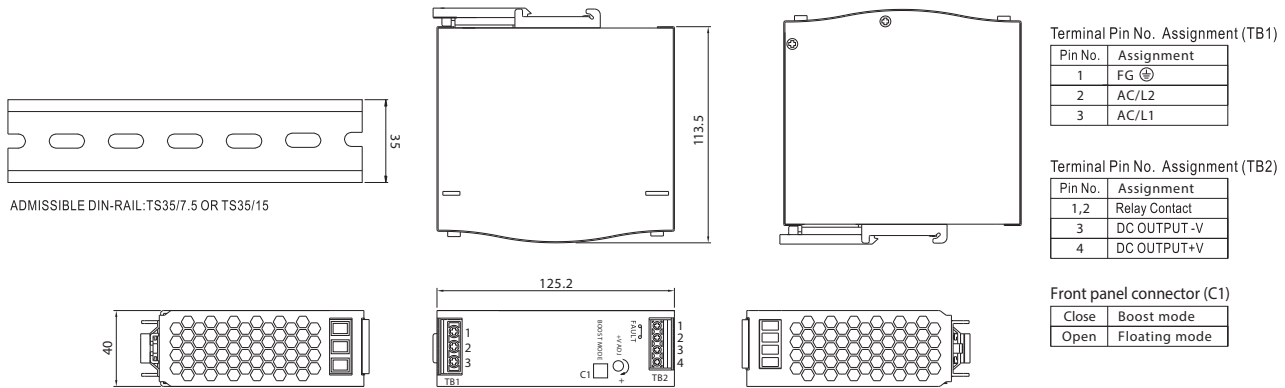
- Protections: Short circuit/ Overload/ Over voltage/ Over temperature
- Boost mode (connector and wires provided)
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or TS-35/15
- Fault relay contact
- 100% full load burn-in test
- 3 years warranty

OUTPUT	DC VOLTAGE	24 V
	RATED CURRENT	5 A
	CURRENT RANGE	0 ~ 5 A
	RATED POWER	120 W
	RIPPLE & NOISE (max.)	120mVp-p
	VOLTAGE ADJ. RANGE	24 ~ 29 V
	LINE REGULATION	(+/-) 0.5%
	LOAD REGULATION	(+/-) 0.5%
	SETUP, RISE, HOLD UP TIME	2000ms, 70ms, 50ms/400V _{AC} 2000ms, 70ms, 10ms/230V _{AC} at full load
	⚠ INFORMATION	Please adjust output voltage required with the potentiometer according to the battery charger type before the commissioning
INPUT	VOLTAGE RANGE	180 ~ 550V _{AC} 254 ~ 780V _{DC}
	FREQUENCY RANGE	47 ~ 63Hz
	EFFICIENCY (typ.)	91% / 400V
	AC CURRENT (typ.)	0.55A/400V _{AC} 1.2A/230V _{AC}
	INRUSH CURRENT (typ.)	Cold start 50A
	LEAKAGE CURRENT	<3.5mA / 530V _{AC}
PROTECTION	OVERLOAD	105 ~ 130% rated output power Protection type: constant current limiting, recovers automatically after fault condition is removed
	OVER VOLTAGE	31 ~ 37V Protection type : shut down o/p voltage, re-power on to recover
	OVER TEMPERATURE	110°C (+/-)5°C (TSW1) Protection type : shut down o/p voltage, recovers automatically after temperatures goes down
FUNCTIONS	FAULT RELAY CONTACT	Relay contact rating(max.) : 30V / 1A resistive Contact open = NO FAULT / Contact closed = FAULT
	BOOST MODE	Contact closed = boost mode Boost voltage =+4% above floating voltage
ENVIRONMENT	WORKING TEMP.	(-)25 ~ (+)70°C (refer to output load derating curve)
	WORKING HUMIDITY	20 ~ 90% RH non condensing
	STORAGE TEMP, HUMIDITY	(-)40 ~ (+)85°C, 10 ~ 95% RH
	TEMP. COEFFICIENT	(+/-)0.03%/°C (0 ~ 50°C)
	VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes ; Mounting : Compliance with IEC60068-2-6
SAFETY & EMC	SAFETY STANDARDS	UL508 approved
	WITHSTAND VOLTAGE	I/P-O/P:3KV _{AC} I/P-FG:1.5KV _{AC} O/P-FG:0.5KV _{AC} O/P-DC OK:0.5KV _{AC}
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohm / 500V _{DC} / 25°C / 70% RH
	EMI CONDUCTION & RADIATION	Compliance with EN55011 (CISPR11), EN55022 (CISPR22), EN61204-3 Class B
	EMS IMMUNITY	Compliance with EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61204-3, EN61000-6-2 (EN50082-2), heavy industry level, criteria A
OTHERS	MTBF	268Khrs min MIL-HDBK-217F (25°C)
	DIMENSION	40 x 125.2 x 113.5mm (W x H x D)
	PACKING	0.65Kg; 20pcs/14Kg/1.16CUFT
NOTES	All parameters NOT specially mentioned are measured at 400V _{AC} input, rated load and 25°C of ambient temperature.	
	Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair wire terminated with a 0.1uf & 47uf parallel capacitor.	
	The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives	
	Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quick may lead to increase of the set up time.	

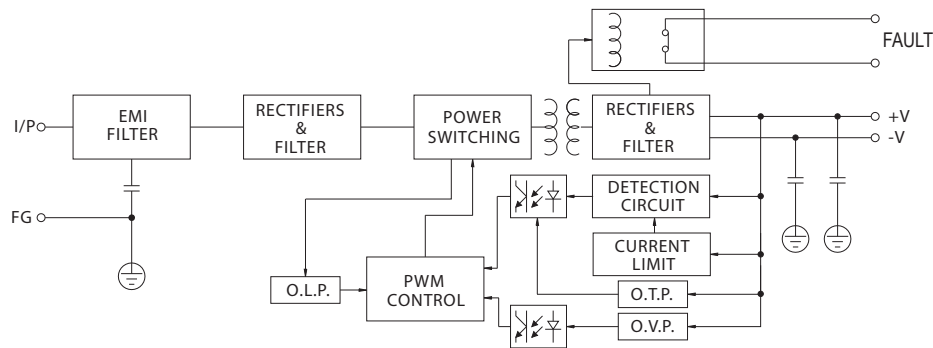


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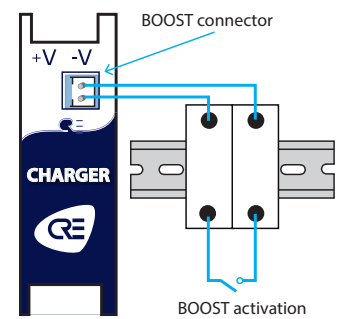
MECHANICAL SPECIFICATIONS



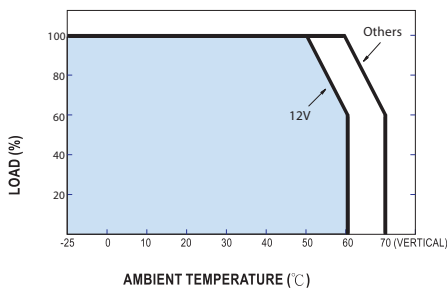
BLOCK DIAGRAM



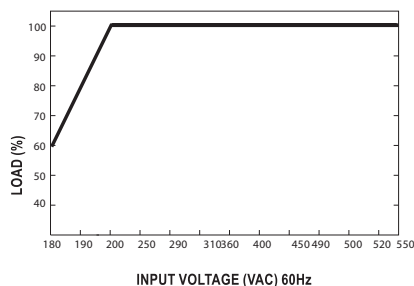
BOOST CONNECTION



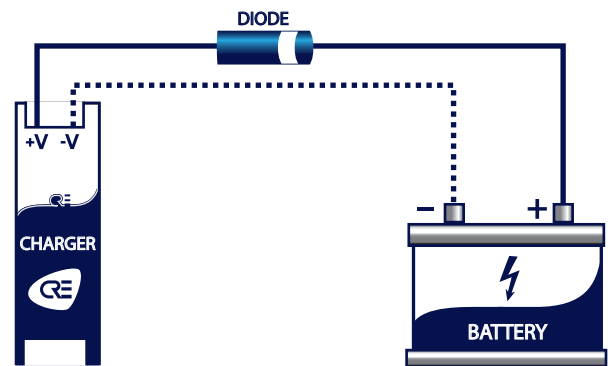
DERATING CURVE



OUTPUT DERATING VS INPUT VOLTAGE (V_{AC})



BP DIODE KIT PROVIDED WITH CHARGER



ASSEMBLY INSTRUCTIONS

P/N: BPX DIODE