



# BPRB RANGE



### 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**

		BPRB 0524M	BPRB 1012M	BPRB 1024M	BPRB 2024M
OUTPUT	DC VOLTAGE	24 V	12V	24V	24V
	RATED CURRENT	5A	10A	10A	20A
	CURRENT RANGE	0 ~ 5A	0 ~ 10A	0 ~ 10A	0 ~ 20A
	RATED POWER	120 W	120 W	240 W	480 W
	RIPPLE NOISE (Max.)	120mVp-p	120mVp-p	300mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	24 ~29V (26.4V)	12 ~15V (13.2V)	24 ~28V (26.4V)	
	LINE REGULATION	(+/-) 0.5%			
	LOAD REGULATION	(+/-) 0.5%		(+/-) 1.0%	
	SETUP, RISE TIME	2000ms, 70ms, 50ms/400V <sub>AC</sub> 2000ms, 70ms, 10ms/230V <sub>AC</sub> <i>at full load</i>	2000ms, 70ms, 50ms/400V <sub>AC</sub> 2000ms, 70ms, 10ms/230V <sub>AC</sub> <i>at full load</i>	800ms, 150ms/400V <sub>AC</sub> 1500ms, 150ms/230V <sub>AC</sub> <i>at full load</i>	800ms, 150ms/400V <sub>AC</sub> 2000ms, 150ms/230V <sub>AC</sub> <i>at full load</i>
	HOLD UP TIME (Typ.)	50ms / 400V <sub>AC</sub> 10ms / 230V <sub>AC</sub> <i>at full load</i>		18ms / 400V <sub>AC</sub> 18ms / 230V <sub>AC</sub> <i>at full load</i>	
INFORMATION	Please adjust output voltage required with the potentiometer according to the battery charger				
INPUT	VOLTAGE RANGE	180 ~ 550V <sub>AC</sub> 254 ~ 780V <sub>DC</sub>		180 ~ 550V <sub>AC</sub> 254 ~ 780V <sub>DC</sub>	
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	91% / 400V		91%	
	AC CURRENT (Typ.)	0.55A/400V <sub>AC</sub> 1.2A/230V <sub>AC</sub>		1A/400V <sub>AC</sub> 2A/230V <sub>AC</sub>	
	INRUSH CURRENT (Typ.)	Cold start 50A			
	LEAKAGE CURRENT	<3.5mA / 530V <sub>AC</sub>			
PROTECTION	OVERLOAD <i>(Rated output power)</i>	105 ~ 130%		105 ~ 150%	
	OVER VOLTAGE	31 ~ 37V		16 ~ 18V	
	OVER TEMPERATURE	110°C (+/-)5°C (TSW1)		105°C (+/-)5°C (TSW1)	
FUNCTION	FAULT RELAY CONTACT <i>(Relay contact rating(max.))</i>	30V / 1A resistive load			
	BOOST MODE	Contact closed = boost mode Boost voltage =+4% above floating voltage			
	WORKING TEMPERATURE	(-)25 ~ (+)70°C <i>(Refer to output load derating curve)</i>		(-)30 ~ (+)70°C <i>(Refer to output load derating curve)</i>	
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non condensing		20 ~ 95% 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	WITHSTAND VOLTAGE	I/P-O/P:3KV <sub>AC</sub> I/P-FG:1.5KV <sub>AC</sub> O/P-FG:0.5KV <sub>AC</sub> O/P-DC OK:0.5KV <sub>AC</sub>		
ISOLATION RESISTANCE		I/P-O/P, I/P-FG, O/P-FG:100M Ohm / 500V <sub>DC</sub> / 25°C / 70% RH			
EMI CONDUCTION & RADIATION		Compliance with EN55011 (CISPR11), EN55022 (CISPR22), EN61204-3 Class B			
EMT 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)		268Khrs min MIL-HDBK-217F (25°C)	
	DIMENSION (W x H x D)	40 x 125.2 x 113.5mm		63 x 125.2 x 113.5mm	
	PACKING	0.65Kg		1.06Kg	
NOTES	All parameters NOT specially mentioned are measured at 400V <sub>AC</sub> 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 0.1 uf & 47 uf parallel capacitor.				
	The battery chargers is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives.				
	Installation clearances: 40mm on top, 20mm on bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.				
Derating may be needed under low input voltage. Please check the derating curve for more details.					

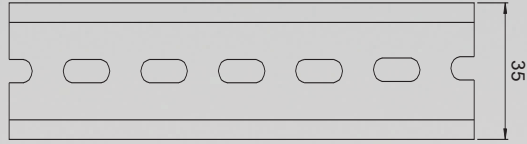
battery chargers

product information

# BPRB RANGE

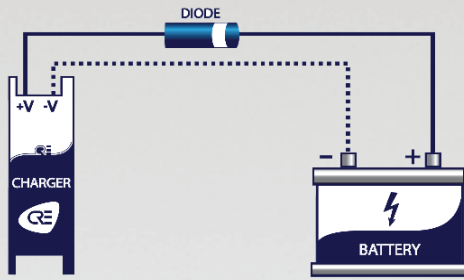


## MECHANICAL SPECIFICATIONS



ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

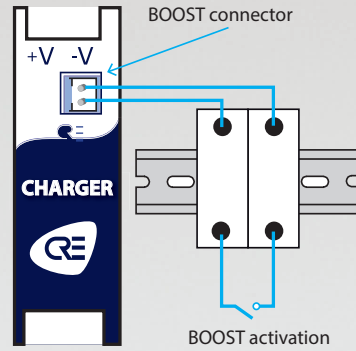
## BP DIODE KIT PROVIDED WITH CHARGER



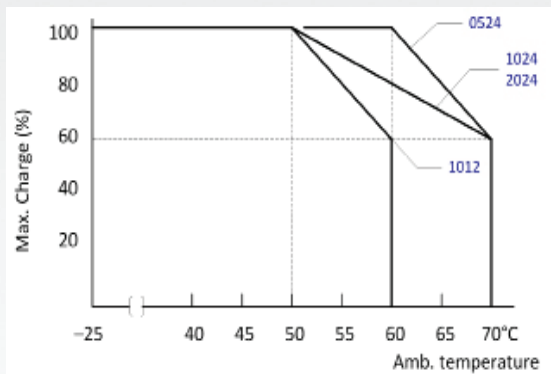
**ASSEMBLY INSTRUCTIONS**

P/N: BPX DIODE

## BOOST CONNECTION



## DERATING CURVE



## BATTERY CHARGE CURVE

