



# COMPACT RANGE



### FEATURES

- **Protections:** Short circuit/ Overload/ Over voltage
- **LED indicator** for power on
- **Cooling** by free air convection
- **Can be installed** on DIN rail TS-35/7.5 or TS-35/15
- **FAULT** contact
- **No load power consumption** <0.75W
- **100% full load burn-in test**
- **3 years warranty**

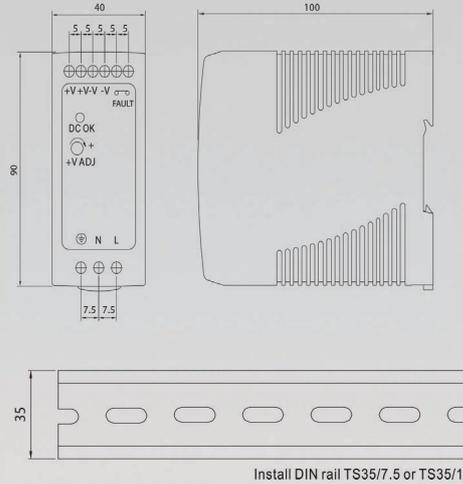
		BPR 0324S	BPR 0512S
OUTPUT	DC VOLTAGE	24 V	12V
	RATED CURRENT	2.5A	5A
	CURRENT RANGE	0 ~ 2.5A	0 ~ 5A
	RATED POWER	60 W	60 W
	RIPPLE NOISE (Max.)	150mVp-p	120mVp-p
	VOLTAGE ADJ. RANGE	24 ~30V (26.4V)	12 ~15V (13.2V)
	LINE REGULATION	(+/-) 1%	
	LOAD REGULATION	(+/-) 1%	
	SETUP, RISE TIME	500ms, 30ms/230V <sub>AC</sub> 500ms, 30ms/115V <sub>AC</sub> at full load	
	HOLD UP TIME (Typ.)	50ms/230V <sub>AC</sub> 20ms/115V <sub>AC</sub> at full load	
INFORMATION	Please adjust output voltage required with the potentiometer according to the battery charger		
INPUT	VOLTAGE RANGE	85 ~ 264V <sub>AC</sub> 120 ~ 370V <sub>DC</sub>	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	88%	86%
	AC CURRENT (Typ.)	1.8A/115V <sub>AC</sub> 1A/230V <sub>AC</sub>	
	INRUSH CURRENT (Typ.)	Cold start 30A/115V <sub>AC</sub> 60A/230V <sub>AC</sub>	
	LEAKAGE CURRENT	<1mA / 240V <sub>AC</sub>	
PROTECTION	OVERLOAD (Rated output power)	105 ~ 150% rated output power Protection type: constant current limiting with auto-recovery after fault condition is removed	
	OVER VOLTAGE	31.2 - 36V	15.6 - 18V
	OVER TEMPERATURE	Protection type : shut down o/p voltage, recovers automatically after temperature goes down	
FUNCTION	<b>FAULT RELAY CONTACT</b> (Relay contact rating(max.))	30V/1A resistive Contact open = NO FAULT / Contact closed = FAULT	
ENVIRONMENT	<b>WORKING TEMPERATURE</b>	(-)25 ~ (+)70°C (Refer to output load derating curve)	
	<b>WORKING HUMIDITY</b>	20 ~ 90% RH non condensing	
	<b>STORAGE TEMP, HUMIDITY</b>	(-)40 ~ (+)85°C, 10 ~ 95% RH	
	<b>TEMP. COEFFICIENT</b>	( +/-)0.03%/°C (0 ~ 50°C)	
	<b>VIBRATION</b>	Component: 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes ; Mounting : Compliance with IEC60068-2-6	
SAFETY & EMC	<b>WITHSTAND VOLTAGE</b>	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>	
	<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG, O/P-FG:100M Ohm / 500V <sub>DC</sub> / 25°C / 70% RH	
	<b>EMI CONDUCTION &amp; RADIATION</b>	Compliance with EN55011 (CISPR11), EN55022 (CISPR22), EN61204-3 Class B	
	<b>EMT IMMUNITY</b>	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	<b>MTBF</b>	299.2Khrs min    MIL-HDBK-217F (25°C)	
	<b>DIMENSION (W x H x D)</b>	40 x 90 x 100mm	
	<b>PACKING</b>	0.33Kg	
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

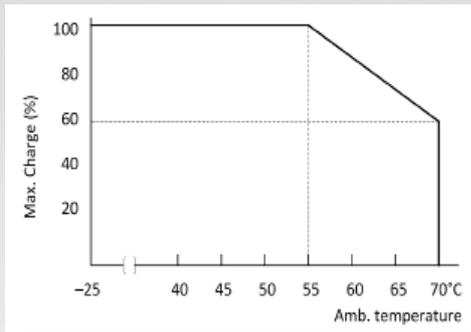
product information

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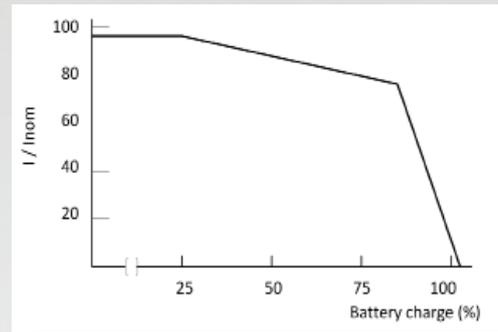
## MECHANICAL SPECIFICATIONS



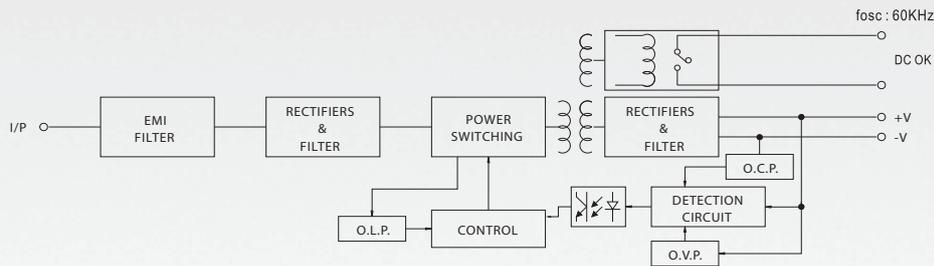
## DERATING CURVE



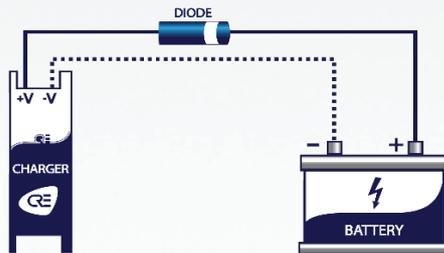
## OUTPUT DERATING vs INPUT VOLTAGE (V<sub>AC</sub>)



## BLOCK DIAGRAM



## BP DIODE KIT PROVIDED WITH CHARGER



### ASSEMBLY INSTRUCTIONS

P/N: BPX DIODE

product information battery chargers



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