



BP RANGE



FEATURES

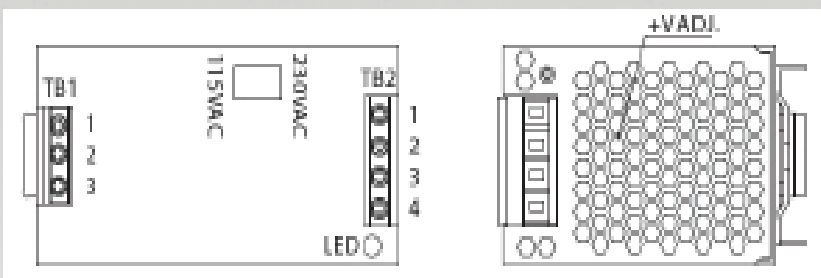
- AC input range selectable by switch
- Protections: Short circuit/ Overload/ Over voltage/ Over temperature
- Cooling by free air convection
- LED indicator for power on
- Can be installed on DIN rail TS-35/7.5 or TS-35/15
- 100% full load burn-in test
- Fixed switching frequency at 55kHz (120kHz for BP1024M)
- 3 years warranty

		BP 1024M	BP 2024M	BP 2024T	BP 4024T
OUTPUT	DC VOLTAGE	24V	24V	24V	24V
	RATED CURRENT	10A	20A	20A	40A
	CURRENT RANGE	0 ~ 10A	0 ~ 20A	0 ~ 20A	0 ~ 40A
	RATED POWER	240W	480 W	480W	960W
	RIPPLE NOISE (Max.)	80mVp-p	120mVp-p	80mVp-p	80mVp-p
	VOLTAGE ADJ. RANGE	24 ~28V (26.4V)	24 ~28V (26.4V)	24 ~28V (26.4V)	24 ~28V (26.4V)
	LINE REGULATION	(+/-) 0.5%			
	LOAD REGULATION	(+/-) 1.0%		(+/-) 0.5%	(+/-) 0.5%
	SETUP, RISE TIME	800ms, 40ms/230VAC 800ms, 40ms/115VAC at full load	1200ms, 40ms/230VAC at full load		200ms, 60ms/400VAC 200ms, 60ms/500VAC at full load
	HOLD UP TIME (Typ.)	24ms/230VAC 24ms/115VAC at full load	16ms/230VAC at full load		
INFORMATION	Please adjust output voltage required with the potentiometer according to the battery charger				
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370Vdc	180 ~ 264VAC 250 ~ 370VDC	3-Phase 340~ 550VAC (Dual phase operation possible in connecting L1L3) 480~ 780VDC	
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	84%	89%	89%	91%
	AC CURRENT (Typ.)	2.8A/115VAC 1.4A/230VAC	4A/230VAC	1.7A/400VAC 1.3A/500VAC	2A/400VAC 1.6A/500VAC
	INRUSH CURRENT (Typ.)	Cold start 27A/115VAC 45A/230VAC	Cold start 40A/230VAC	Cold start 50A	
	LEAKAGE CURRENT	<3.5mA / 240VAC		<3.5mA / 530VAC	
PROTECTION	OVERLOAD (Rated output power)	105 ~ 150%		105 ~ 125%	
		Protection type: constant current limiting with auto-recovery after fault condition is removed			
	OVER VOLTAGE	30 ~ 36V Protection type : shut down o/p voltage, re-power on to recover			
	OVER TEMPERATURE	100°C (+/-) 5°C (TSW1)		110°C (+/-) 5°C (TSW1)	110°C (+/-) 5°C (TSW1)
	Protection type: shut down o/p voltage, recovers automatically after temperature goes down				
ENVIRONMENT	WORKING TEMPERATURE (Refer to output load derating curve)	(-)10 ~ (+)70°C	(-)20 ~ (+)70°C	(-)20 ~ (+)70°C	(-)20 ~ (+)60°C
	WORKING HUMIDITY	20 ~ 90% RH non condensing			
	STORAGE TEMP, HUMIDITY	(-)20 ~ (+)85°C, 10 ~ 95% RH		(-)40 ~ (+)85°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT	(+/-)0.03%/°C (0 ~ 50°C)			
	VIBRATION	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 _{AC} I/P-FG:1.5KV _{AC} O/P-FG: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, EN55022 (CISPR22), EN61204-3 Class B			
	HARMONIC CURRENT	Compliance with EN61000-3-2,-3			
	EMT IMMUNITY	Compliance with EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A			
OTHERS	MTBF	289.9hrs min MIL-HDBK-217F (25°C)	180.9Khrs min MIL-HDBK-217F (25°C)	91.1Khrs min MIL-HDBK-217F (25°C)	122.5Khrs min MIL-HDBK-217F (25°C)
	DIMENSION (W x H x D)	125.5 x 125.2 x 100mm	227 x 125.2 x 100mm		276 x 125.2 x 100mm
	PACKING	1.2kg	2.4kg	2.5kg	3.3kg
NOTES	All parameters NOT specially mentioned are measured at 230VAC (400VAC for 2024T and 4024T) 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.				

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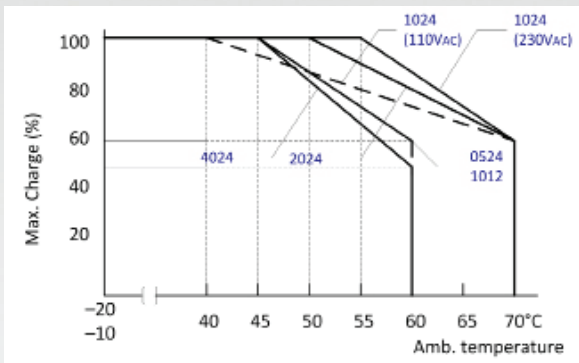


MECHANICAL SPECIFICATIONS

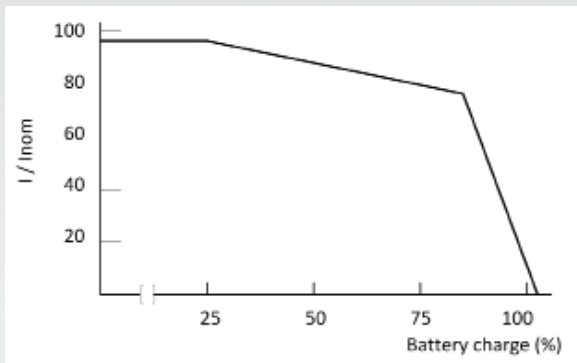


ALARM for BP4024T

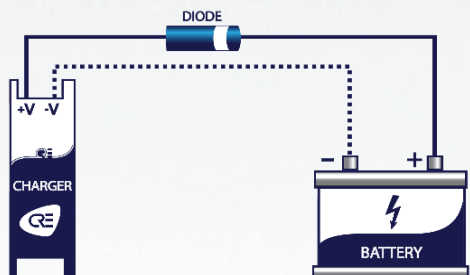
DERATING CURVE/TEMPERATURE



OUTPUT DERATING vs INPUT VOLTAGE (V_{AC})

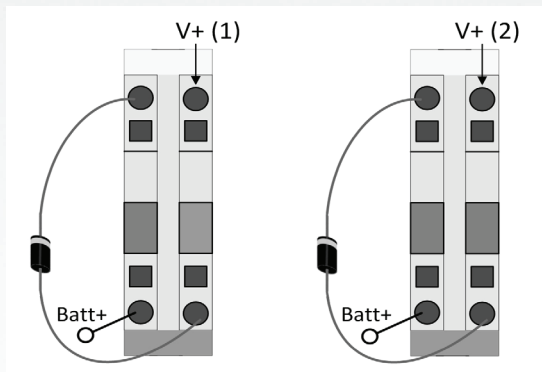


BP DIODE KIT PROVIDED WITH CHARGER



ASSEMBLY INSTRUCTIONS

P/N: BPX DIODE



For BP4024T



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