



BP+ 305 RANGE

Product information - Battery chargers

FEATURES

- Voltage input: 90 to 305V_{AC}
- Economic
- Protections: Short circuit, overload, overvoltage, over temperature and reverse power (diode integrated)
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or TS-35/15
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty



BP+ 0512M - 305



BP+ 0324M



BP+ 1012M - 305



BP+ 0524M - 305

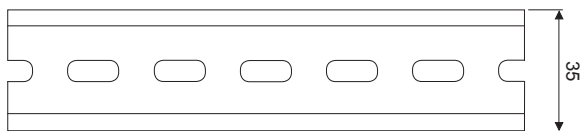


BP+ 1024M - 305

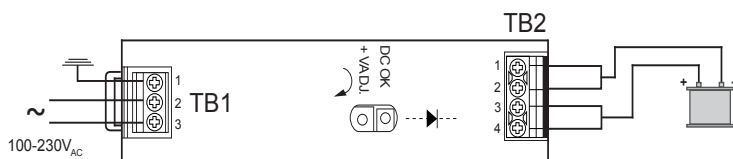
		BP+ 0512M - 305	BP+ 0324M	BP+ 1012M - 305	BP+ 0524M - 305	BP+ 1024M - 305
OUTPUT	DC VOLTAGE	12V	24V	12V	24V	24V
	RATED CURRENT	5A	3A	10A	5A	10A
	CURRENT RANGE	0 ~ 5A	0 ~ 3A	0 ~ 10A	0 ~ 5A	0 ~ 10A
	RATED POWER	75 W	75 W	120 W	120 W	240 W
	RIPPLE & NOISE (Max.)	100mVp-p	120mVp-p	100mVp-p	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE (By default)	12 ~ 14V (13.2V)	24 ~ 28V (26.4V)	12 ~ 14V (13.2V)	24 ~ 28V (26.4V)	24 ~ 28V (26.4V)
	LINE REGULATION	(+/-) 0.5%				
	LOAD REGULATION	(+/-) 1.0%				
	SETUP, RISE TIME	1500ms, 60ms/230V _{AC} 3000ms, 60ms/115V _{AC} at full load				
	HOLD UP TIME (Typ.)	16ms/230V _{AC} 12ms/115V _{AC} at full load				
	INFORMATION	Please adjust output voltage required with the potentiometer according to the battery charger				
INPUT	VOLTAGE RANGE	90 ~ 305V _{AC} 127 ~ 370V _{DC}	90 ~ 264V _{AC} 127 ~ 370V _{DC}	90 ~ 305V _{AC} 127 ~ 370V _{DC}	90 ~ 305V _{AC} 127 ~ 370V _{DC}	90 ~ 305V _{AC} 127 ~ 370V _{DC}
	FREQUENCY RANGE	47 ~ 63Hz				
	EFFICIENCY (Typ.)	83%	87%	84%	87%	87%
	AC CURRENT (Typ.)	1.6A/115V _{AC} / 0.9A/230V _{AC}	1.6A/115V _{AC} / 0.9A/230V _{AC}	2.65A/115V _{AC} / 1.45A/230V _{AC}	2.65A/115V _{AC} / 1.45A/230V _{AC}	2.8A/115V _{AC} / 1.4A/230V _{AC}
	INRUSH CURRENT (Typ.)	20A/115V _{AC} 35A/230V _{AC}				
	LEAKAGE CURRENT	<1mA / 240V _{AC}				
PROTECTION	OVERLOAD	105 ~ 130% rated output power Protection type: constant current limiting with auto-recovery after fault condition is removed				
	OVER VOLTAGE	14 - 17V	29 - 33V	14 - 17V	29 - 33V	29-33V
		Protection type: shut down o/p voltage, re-power on to recover				
	OVER TEMPERATURE	110°C (+/- 5°C) Protection type: shut down o/p voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMPERATURE	(-)20 ~ (+)70°C (Refer to output load derating curve)				
	WORKING HUMIDITY	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 _{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				
	EMI 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	486Khrs min MIL-HDBK-217F (25°C)		456Khrs min MIL-HDBK-217F (25°C)		230.2Khrs min MIL-HDBK-217F (25°C)
	DIMENSION (W x H x D)	32 x 125.2 x 102mm	32 x 125.2 x 102mm	40 x 125.2 x 113.5mm	40 x 125.2 x 113.5mm	63 x 125.2 x 113.5mm
	PACKING	0.51kg	0.51kg	0.57kg	0.57kg	1kg
NOTES	All parameters NOT specially mentioned are measured at 230V _{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 0.1 uf & 47 uf parallel capacitor.					
	The battery charger 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 and extreme temperature. For 115V, please check the derating curve.						



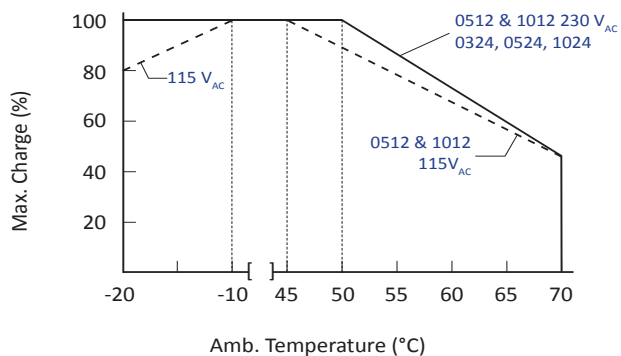
MECHANICAL SPECIFICATIONS



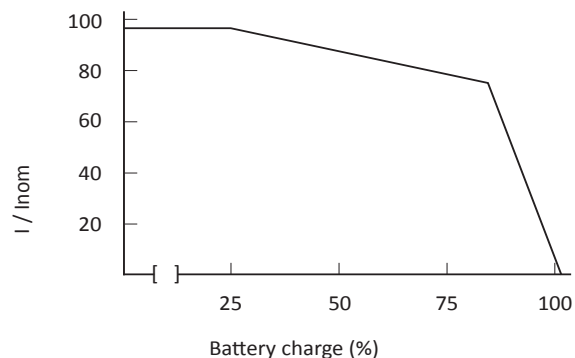
ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15



DERATING CURVE/TEMPERATURE



BATTERY CHARGE CURVE



BLOCK DIAGRAM

