



Naskon

Power Conversion products





Naskon Electric Rickshaw Battery Charger – NK ER 164812:

NaskonSoft's Electric Rickshaw battery charger – ER164812, is an SMPS based power supply High frequency switching technology along with appropriate thermal management makes this power supply highly reliable, efficient and compact in size. These chargers are designed to operate with wider AC Input range (175VAC-300VAC), to withstand universal power conditions. The Charger can charge a deep discharged battery up to 32V.

Features:

- ✓ Compact size and highly reliable.
- ✓ SMPS based design
- ✓ Fan cooled
- ✓ Tabletop & Compact size
- ✓ Battery reverse polarity protect

Protections:

- ✓ Output Overload Protection : During over load, output folds back and resumes to normal operation after the removal of over load.
- ✓ Short Circuit Protection : During short circuit at output, the power supply protests and resumes normal operation on removal of short circuit.
- ✓ Over temperature Protection : In case of over temperature the power supply shuts down and resumes to normal when the temperature reduces.

Technical Specifications

PARAMETER		NK ER 4812	RANGE	NOTES AND CONDITIONS
INPUT	Operating Input Voltage	230 Vac	175-300 Vac	-
	Maximum Input Current	6 A	-	100% Load at min. Vin
	Operating Frequency	50 Hz	47-63 Hz	-
	Inrush Current	<40 A	-	Cold start
OUTPUT	Voltage and Regulation (Line/load)	58 V	44-63 V	Measured with cable end
	Operating Output Current	12.5 A Max	-	-
	Ripple and Noise	Max: 500 mV	-	Measured with 10 µF/100V Electrolytic cap and 0.1µF ceramic cap in parallel
	Output power	725 W	-	-
BATTERY CHARGING PROFILE	STAGE 1	Charge with 58V12A constantn current till batery current decreases to 12.0 A.		
	STAGE 2	Charge with 63V10A till battery voltage reaches 62V.		
	STAGE 3	Charge with 63V6A till battery current reaches 1.0 A		
INDICATIONS	MAINS ON	Red LED. Indicates whether power ON.		
	<50% Charging	50% Green LED continuously blinking		
	>50% Charging	50% Green LED continuously ON		
	<80% Charging	80% Green LED continuously blinking		
	>80% Charging	80% Green LED continuously ON		
	<100% Charging	100% Green LED continuously blinking		
PROTECTION	Input over voltage and under voltage	300 VAC 170 VAC	- -	Over voltage cut-off Under voltage cut-off
	Output over voltage	>75 V	-	Cut-off
	Output over load	13 A	-	Fold back
	Output Short Circuit	-	-	Shutdown with automatic recovery
	ENVIRONMENT	Operating Temperature	-	0-50 °C
Storage Temperature		-	-20 to 70 °C	-
Operating Humidity		-	5-95 %RH	Non condensing
Cooling		Fan cooling	-	-
EFFICIENCY	100% Load	80%	-	At input of 230Vac and 50Hz
ISOLATION	Shorted Line and Neutral to Earth	1.5k VAC	-	-
	Ground Leakage Current	4 mA	-	-
Safety, EMI & EMC	Safety	Designed to meet IEC 60950	-	-
	EMI / EMC	Designed to meet CISPR22A	-	-
GENERAL	Dimensions	220x135x85 mm	-	-