



**C.M. TECHNOLOGY**

Designed and Manufactured in Australia

[www.cmtechnology.com.au](http://www.cmtechnology.com.au)

## PRODUCT SHORTFORM

Rev. A1

Tel: +61 (2) 9764 5655

### Battery Charger



## CR Series

*The CR Series is a compact 90-264 V AC Input to DC Flying Lead Output Battery Charger. Ideal for forklift, battery bank and car battery charger applications*

- Monitors AC Input and DC Output
- 100% full load burn in tested
- Built-in Active PFC functionality
- Low ripple noise
- Overload/Overvoltage/Over temperature protection
- 1 Meter Flying Lead Output Connection

#### Available Configurations

<b>CR1210</b>	90-264VAC, 50/60 Hz, 1.6A Input, 13.8V @ 10 A Output
<b>CR2806</b>	90-264VAC, 50/60 Hz, 1.6A Input, 28.8V @ 6 A Output



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## PRODUCT SHORTFORM

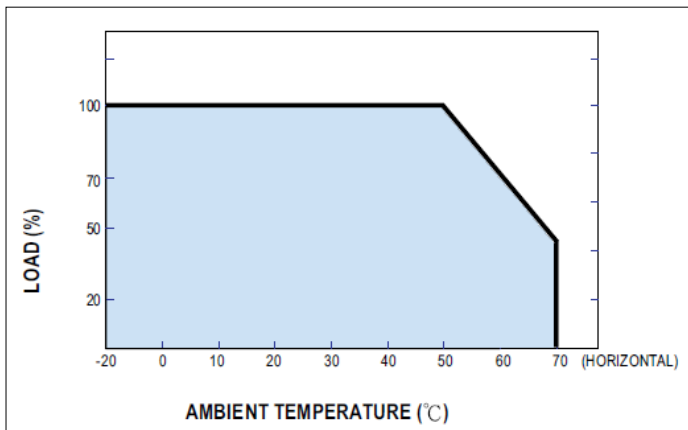
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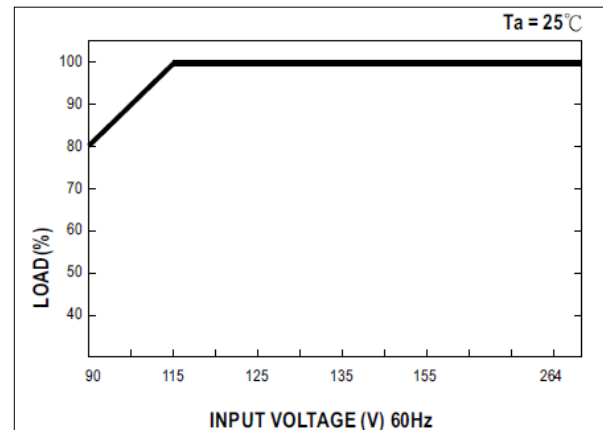
### Overview:

The CR Series has been designed to suit the unique requirements of AC-DC converters utilised in forklift and battery bank charging applications.

The CR Series has been designed for AC supplies ranging from 90 to 264 volts.



*Derating Curve*



*Output Rating vs Input Voltage*

Manufactured using switchmode electronics, the CR Series is designed for a high energy efficiency of >85%. This relatively high efficiency allows convection cooling with a maximum 70°C ambient working temperature.

Our high quality components are housed in a black anodised aluminium extruded construction specifically designed for industrial applications. The front and back panels are 1 mm stainless steel. The case sits on 4 soft feet for desk top use. The front is powder coated black and lettered with "DC ok" and "AC On". The DC connections are by means of a pair of flying leads on the back panel.

The finished AC-DC converters are all burnt in at full load to provoke any infant mortality failures, with some products held on long term burn-in.

The CR Series is compliant with the Australian C-Tick Standard.

### Dimensions H X W X L (mm) :

81 x 180 X 280





## Specifications for CR1210:

Output DC Voltage	13.8V
Output Rated Current	10A
Current Range	0-10A
Ripple & Noise (Maximum)	100mV <sub>peak-to-peak</sub>
Voltage Tolerance	±2.0%
Line Regulation	±0.5%
Load Regulation	±1.0%
Setup, Rise Time	1000 ms, 20 ms
Hold up Time (Typical)	16 ms at full load
Input Frequency Range	50 — 60 Hz
Input AC Current	1.6A
Inrush Current (Typical)	Cold Start 40A / 230VAC
Leakage Current (Typical)	<180 µA
Power Factor	>0.95 at full load
Overload Protection	120 — 160% rated output power
Overtemperature Protection	95°C ± 5°C
EMC Immunity	EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, Light industrial, Criteria A
EMC Emmision	EN55022 (CISPR22) Class B, EN61000-3-2,-3
Isolation Resistance	Input-Output, Input-Ground, Output-Ground: 100 MΩ/500V DC/25°C/70% Room Humidity
Withstand Voltage	Input-Output: 4KV DC, Input-Ground: 1.5KV DC, Output-Ground: 1.5KV DC
Safety Standards	UL60950-1, TUV EN60950-1
MTBF	262,100 hrs min. MIL-HDBK-217F (25°C)
Vibration	10 ~ 500Hz, 2G 10 min./1cycle, 60 min. each along X, Y, Z axis
Working Temperature	-20°C — +70°C (Refer to Derating Curve)
Working Humidity	20% — 90% Room Humidity Non-condensing
Storage Temperature & Humidity	-40°C — +85°C, 10% ~ 90% Room Humidity

