

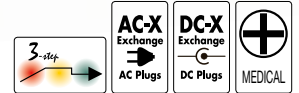
# 3845 LI Max 6,3W

## Charger for Li-ion batteries

### Versions with and without R<sub>ID</sub>

- Universal input voltage (90-264 VAC)
- 3-step adaptive charge control.
- Charge adapts to battery pack type automatically (RID only)
- NTC input on request: automatic battery temp monitoring and thermal control to prevent charge of cold/warm batteries.
- Wake up and low current start-up of deeply discharged batteries.
- Error indication for reverse polarity, short circuit, charging battery packs with wrong number of cells and safety timer run-out.
- Order plugs and mains cord separately.
- Custom specifications on request
- Approvals:
  - Medically certified
  - Safety: EN 60601-1 ed. 3.1 and EN 60601-1-11
  - EMC: EN 60601-1-2 ed. 4
  - UL approved

For updates: see [www.mascot.no](http://www.mascot.no)



## TECHNICAL SPECIFICATIONS

### GENERAL INPUT/OUTPUT

Input voltage:	90-264 VAC
Line Frequency:	47 – 63Hz
Switch frequency, approx.:	55 kHz
Leakage current from batt. with mains switched off:	≈ 0A
Temperature range	
• Operating:	-25 °C - +40 °C
• Storage:	-25 °C - +85 °C
Ripple:	< 40 mV p-p/<25 mV p-p
Dimensions (LxWxH):	108,5 × 49 × 29 mm
Weight:	150g
Input terminals:	2-pin IEC 60320/C8
Output terminals:	DC conn, battery clips, push-on terminals or open ends
IP-code:	41

### SAFETY PROTECTION EMC

Protection:	Protected against reversed polarity and short circuit proof.
NTC input (on request)	0-45°C: normal charge
Insulation class:	Class II
Insulation voltage	
Primary – secondary:	4000VAC / 5700VDC
Electrical safety std:	
• Medical:	EN/IEC/ANSI 60601-1
• Household batt. charger:	EN/IEC 60335-1 and -2-29
• A/V and Comm. tech:	EN/IEC/UL 62368-1
	Replaces IEC 60950-1 and IEC 60065
EMC standards	
• Generic:	EN 61000-6-1 and -3
• Medical:	EN 60601-1-2
• Household:	EN 55014-1 and -2
• Information tech.:	EN 55022 and EN 55024
• Multi media:	EN 55032

## VERSIONS WITH R<sub>ID</sub>\*

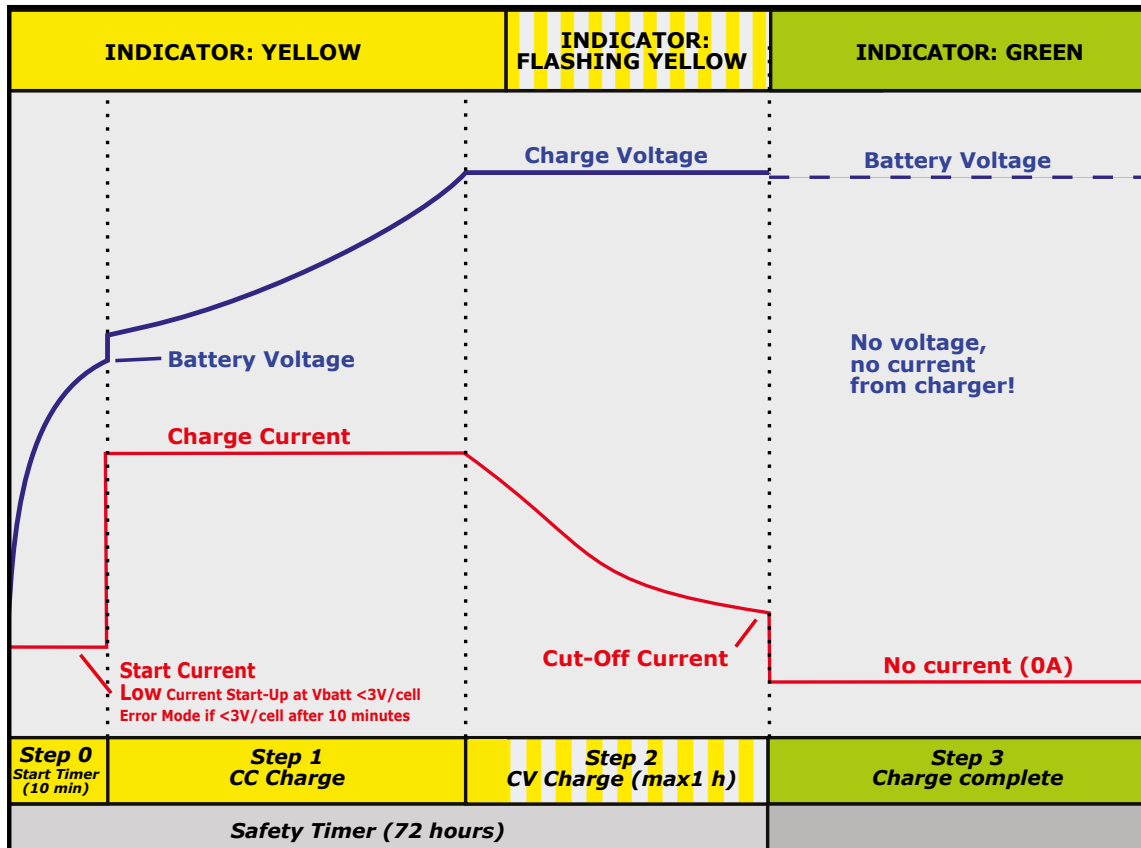
CHARGE CONTROL	R <sub>ID</sub> ≈	Step 0 (yellow)	Step 1 (yellow)	Step 2 (Flash yellow)	Step 3 (green)	
Max output power (W)	Ω	Low Current start-up for deeply discharged batt.	Charge Current	Charge Voltage	Charge termination when Ich:	Restart when Vbat
1.9W	3k9Ω	CC 40mA ± 10mA when batt. < 3V	0.45A ± 50mA	4.2V ± 0.05V	< 25mA or max. 1 hr.	< 4.1V ± 0.05V
3.6W	10kΩ	CC 55mA ± 15mA when batt. < 3V	0.85A ± 0.1A		< 55mA or max. 1 hr.	
6.3W	24kΩ	CC 125mA ± 30mA when batt. < 3V	1.5A ± 0.15A		< 125mA or max. 1 hr.	
6.3W	52k3Ω	CC 200mA ± 50mA when batt. < 3V	1.5A ± 0.15A		< 260mA or max. 1 hr.	

## VERSIONS WITHOUT R<sub>ID</sub>\*

6.3W		CC 100mA ± 25mA when batt. < 3V	1.5A ± 0.1A	4.2V ± 0.05V	< 100mA or max 1 h.	< 4.1V ± 0.05V
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\* Custom charge parameters on request, max. 1,5A 6,3W

## Charging characteristics and LED indication \*



\* an animated video of this charging progress is available on our website

### BATTERY NOT CONNECTED INDICATIONS

Battery not connected is indicated by FLASHING GREEN. In this mode charger will apply short pulses attempting to wake up deeply discharged batteries.

### ERROR INDICATIONS

- 2 red blinks: Battery is connected to charger with wrong polarity!
- 3 red blinks: Charger output is shorted. Check output cable connection!
- 4 red blinks: Battery voltage is low. Check battery status or voltage.
- 5 red blinks: Safety timer has run out. Check battery status or capacity.
- LED off: Battery voltage is too high. Check battery voltage.

### WAIT MODE INDICATIONS (For NTC versions only)

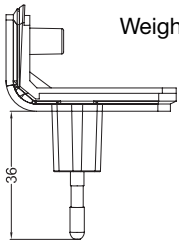
- Yellow with 1 red blink: Battery temperature is too low ( $< 0^{\circ}C$ )
- Yellow with 2 red blink: Battery temperature is too high ( $> 45^{\circ}C$ )



## Exchangeable AC plugs

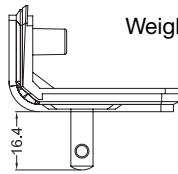
### EU plug adapter

Part no. 127000  
Weight: 20,9 g



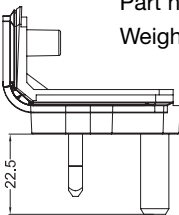
### US plug adapter

Part no. 127100  
Weight: 13,4 g



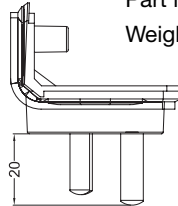
### UK plug adapter

Part no. 127200  
Weight: 29,2 g



### AUS plug adapter

Part no. 127300  
Weight: 21,4 g



**2-pin IEC 60320 C7 mains cord**  
1800 mm  
EU part no. 131306, UK part no. 131148,  
US part no. 131368, AU part no. 013108

