

Model 3743 LA

1,5 A max out • 90-264 VAC input

- 3-step charge control with current detection
- Universal input voltage
- Wake up and low current start-up of deeply discharged batteries
- Safety indication and protection: against reverse polarity, short circuit, charging battery packs with the wrong number of cells and safety timer run-out

• Approvals:

- Medically certified

Safety: EN 60601-1 ed. 3.1

Home healthcare EN 60601-1-11

EMC: EN 60601-1-2 ed. 4

- UL approved

• Custom specifications on request:

Charging parameters, connectors, cords, logo print, housing/open frame/IP rating and certificates. For more information: [custom design info sheet](#)



Available versions

12V / 1A

24V / 0,56A

Notes:

Plug-in/Desktop unit

Exchangeable AC and DC plugs

Exch. DC cable connectors available

Order plugs & mains cord separately

With NTC input on request

MASCOT type 3743 Lead acid:	6 V	12 V	24 V	48 V
Input voltage: / Line frequency	90 - 264VAC / 47 - 63Hz	90 - 264VAC / 47 - 63Hz	90 - 264VAC / 47 - 63Hz	90 - 264VAC / 47 - 63Hz
Max output power	11 W	14.7 W	16.5 W	17.6 W
Charge control:				
Step 0 < 30min	Yellow	CC 100mA ± 25mA, Vbat < 5V.	CC 100mA ± 25mA, Vbat < 10.5V.	CC 100mA ± 25mA, Vbat < 21V.
Step 0 > 30min	Red (4 blinks)	0A / 0V	0A / 0V	0A / 0V
Step 1 (Constant Current)	Yellow	CC 1.5A ± 5%, 5V < Vbat < 7.35V.	CC 1A ± 5%, 10.5V < Vbat < 14.7V.	CC 0.56A ± 5%, 21V < Vbat < 29.4V.
Step 2 (Constant Voltage)	Flashing Yellow	CV 7.35V ± 0.1V, Ich<400mA ± 10% or 4h.	CV 14.7V ± 0.1V, Ich<250mA ± 10% or 4h.	CV 29.4V ± 0.1V, Ich<150mA ± 10% or 4h.
Charge timer (step2, CV)	4h	4h	4h	4h
Safety timer (all steps)	Red (5 blinks)	72h	72h	72h
Step 3 (Maintenance voltage)	Green	6.85V	13.7V	27.4V
Efficiency (at 100% load) approx.:	80 %	82 %	84 %	84 %
Average efficiency:	> 78 %	> 80 %	> 80 %	> 80 %
No load consumption	< 0,5 W	< 0,5 W	< 0,5 W	< 0,5 W
Switch frequency approx.:	56kHz	56kHz	56kHz	56kHz
Ripple:	< 100mV p-p	< 100mV p-p	< 100mV p-p	< 100mV p-p
Rec. battery capacity:	7.5Ah (C/5) to 20Ah (<400mA charge current as EoC detection) or up to 75Ah (utilizing the 4h CV timer as EoC detection)	5Ah (C/5) to 12.5Ah (<250mA charge current as EoC detection) or up to 50Ah (utilizing the 4h CV timer as EoC detection)	2.8Ah (C/5) to 7.5Ah (<150mA charge current as EoC detection) or up to 28Ah (utilizing the 4h CV timer as EoC detection)	1.5Ah (C/5) to 5Ah (<100mA charge current as EoC detection) or up to 15Ah (utilizing the 4h CV timer as EoC detection)
Formation Charge (Step 0)	Low current start-up of deeply discharged battery.			
Float charge:	Pulses at safe float voltage level for maximum topping of battery capacity.			
Indication when "Battery not connected"	Flashing Green (1s/1s)			
Leakage current from battery with mains switched off:	< 300 µA at nominal battery voltage (< 0.22 Ah/month)			
Protection:	Protected against reversed polarity. Error Indication: Red (2 blinks) Short circuit proof. Error Indication: Red (3 blinks) Charging of wrong lower voltage battery pack will be limited to 100mA and terminated after 30min. Indication: Red (4 blinks) Safety timer. Error Indication: Red (5 blinks) No charge (or charge terminated) if connecting wrong battery pack with higher voltage. Indication: LED is OFF.			
Temperature range:	Operating: +25 to +40°C. Storage: +25 to +85°C			
Safety:	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 (V _{NOM} ≥110VAC) / Battery Charger EN 60335-2-29			
Insulation class :	Class II			
Insulation voltage: Primary – secondary:	4000VAC / 5700VDC			
EMC standards:	EN 55014-1 and -2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2			
Input terminal:	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.			
Output terminals:	Cord with/without plug. Exchangeable plugs available.			
IP-Grade:	IP41			
Dimensions:	108,5 × 49 × 29,3 mm			
Weight:	150g			

distributed by: