

Model 3540 LA

20 A max out • 198-264 VAC input

- 3-step charge control with current detection
- XLR output plug for wheelchairs and scooters available
- Input voltage 198-264 VAC. 115 VAC versions available.
- Fixed mains cable, 2-pin IEC 60320 available
- 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 (fixed cord vers. only)

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 / 20A

24V / 10A

Notes:

Desktop unit

Mounting bracket included

2MOOP standard, 2MOPP available (3540P)

| Specifications for MASCOT type 3540 LA Charger: | 12V |
|---|--|
| Input voltage: / Line frequency: | 198 - 264VAC / 50Hz |
| Max output power: | 294W |
| Step 0 < 30min Step 0 > 30min Step 1 (until Vbat = 14.7V) Step 2 (until I charge < 2.4A or > 4h) Step 3 (until I charge > 18A) Charge timer (step 2): Safety timer: Restart charge current and voltage approx.: | <p>2.4A when battery voltage <10.5V. 0A 20A when battery voltage >10.5V. 14.7V ± 0.1V and charge current is tapering. 13.7V ± 0.2V, supply current up to maximum 18A for possible parallel load. 4h 72h >18A or <13V in 10 sec.</p> |
| Formation Charge: | Low current start-up of deeply discharged battery. |
| Float charge: | 20A pulses at safe float voltage level for maximum topping of battery capacity. |
| Indication when "Battery not connected": | LED flashing Green (1s/1s) |
| Temperature compensation of charge voltage: | -3 to -4mV/°C pr. cell |
| Ripple: | < 100mVp-p |
| Efficiency (at 100% load, 230V) approx.: | 91 % |
| Switch frequency approx.: | 65kHz |
| Leakage current from battery with mains switched off: | < 140 uA @ 12V |
| Protection: | <p>Protected against reversed polarity. Error Indication: Red (2 blinks) Short circuit proof Thermal protection Prevents sparking Charge timer: 4h Safety timer: 72h. Error Indication: Red (5 blinks) Charging of wrong lower voltage battery pack (e.g. 6V) will be limited to 2.4A and terminated after 30min. Indication: Red (4 blinks) Defect battery: Error Indication: Red (6 blinks) - Battery does not accept pulse current in float mode, and battery voltage drops below 10.5V after opening output relay. Charging battery >16.0V terminated immediately. Error Indication: LED is off</p> |

| | |
|--|---|
| Temperature range: | Operating: +25 to +40°C. Storage: +25 to +65°C |
| Derating: | Charge current automatically reduced to approx. 15A at 40°C |
| Safety: | EN 60601-1 |
| Insulation class : | Double insulated (Class II) |
| Insulation voltage: Primary – secondary: | 4000VAC / 5700VDC |
| EMC standards: | EN 60601-1-2: 2015 (Edition 4) |
| Input terminal: | 2 pin IEC60320 or mains cable |
| Output terminals: | Cord with Insulated battery clips and temp. sensor |
| Protection against ingress (IP-code): | IP44 |
| Recommended battery capacity: | 100 - 1000Ah. |
| Dimensions: | 210 × 113 × 53 mm |
| Weight: | With mains cable: 1500g. With IEC60320: 1300g |

| Specifications for MASCOT type 3540 LA Charger: | 24V |
|---|--|
| Input voltage: / Line frequency: | 198 - 264VAC / 50Hz |
| Max output power: | 294W |
| Charge control: | |
| Step 0 < 30min | Yellow |
| Step 0 > 30min | Red (error-mode) |
| Step 1 (until Vbat = 29.4V) | Yellow |
| Step 2 (until I charge <1.4A or >4h) | Flashing yellow |
| Step 3 (until I charge >8.5A) | Green |
| Charge timer (step 2): | 4h |
| Safety timer: | 72h |
| Restart charge current and voltage approx.: | >8.5A or <26V in 10 sec. |
| Formation Charge: | Low current start-up of deeply discharged battery |
| Float charge: | 10A pulses at safe float voltage level for maximum topping of battery capacity |
| Indication when "Battery not connected": | Green "PULSE" LED flashing Green (1s/1s) |
| Temperature compensation of charge voltage: | -3 to -4mV/°C pr. Cell When delivered with temp. sensor. |
| Ripple: | < 100mVp-p |
| Efficiency (at 100% load, 230V) approx.: | >92 % |
| Switch frequency approx.: | 65kHz |
| Leakage current from battery with mains switched off: | < 130 µA @ 24V |
| Protection: | Protected against reversed polarity. Error Indication: Red (2 blinks) Short circuit proof Thermal protection Prevents sparking Charge timer: 4h Safety timer: 72h. Error Indication: Red (5 blinks) Charging of wrong lower voltage battery pack (e.g. 12V) will be limited to 1.4A and terminated after 30min. Indication: Red (4 blinks) Defect battery: Error Indication: Red (6 blinks) - Battery does not accept pulse current in float mode, and battery voltage drops below 21V after opening output relay. Charging battery >32.0V terminated immediately. Error Indication: LED is off |
| Temperature range: | Operating: +25 to +40°C. Storage: +25 to +65°C |
| Derating: | Charge current automatically reduced to approx. 7.5A at 40°C |
| Safety: | EN 60601-1 |
| Insulation class: | Double insulated (Class II) |
| Insulation voltage: Primary – secondary: | 4000VAC / 5700VDC |
| EMC standards: | EN 60601-1-2: 2015 (Edition 4) |
| Input terminal: | 2 pin IEC60320 or mains cable |
| Output terminals: | Cord with Insulated battery clips and temp. sensor or XLR plug |
| Protection against ingress (IP-code): | IP44 |
| Recommended battery capacity: | 50 - 500Ah |
| Dimensions: | 210 × 113 × 53 mm |
| Weight approx.: | With mains cable 1400g. With IEC60320 1150g |

distributed by:



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