

# BATTERY CHARGER, 452115-N, NiMH

| SPECIFICATIONS | 2 | 3-6 | 4-8 | 5-10 | 6-12 | 10-20 |
|---|---|---|---|---|---|---|
| Cell-Con part number: | 452115-NZ | 452115-NA | 452115-NB | 452115-NC | 452115-ND | 452115-NE |
| Input voltage: | 90-265VAC | | | | | |
| Line frequency: | 50-60Hz | | | | | |
| No-load voltage: | 6.3V ±0.7V | 12.8V ±0.7V | 16.5V ±1V | 21V ±1.2V | 24.7V ±1.5V | 41V ±2V |
| Max output power: | 8.2W | 16W | | | | |
| Min. output voltage for -ΔV detection: | 2.5V (min 2 cells x min 1.25V pr. cell) | 3.75V (min 3 cells x min 1.25V pr. cell) | 5.0V (min 4 cells x min 1.25V pr. cell) | 6.2V (min 5 cells x min 1.25V pr. cell) | 7.5V (min 6 cells x min 1.25V pr. cell) | 12V (min 10 cells x min 1.25V pr. cell) |
| Max. output voltage for -ΔV detection: | 5.4V (max 2 cells x max 1.8V pr. cell) | 10.8V (max 6 cells x max 1.8V pr. cell) | 14.4V (max 8 cells x max 1.8V pr. cell) | 18V (max 10 cells x max 1.8V pr. cell) | 21.6V (max 12 cells x max 1.8V pr. cell) | 36V (max 20 cells x max 1.8V pr. cell) |
| -ΔV sensitivity mV/cell: | 10mV/0.6% | | 8mV/0.5% | | | |
| Fast charge current: | 1.3A ±100mA | | 1.0A ±100mA | 0.8A ±100mA | 0.7A ±100mA | 400mA ±50mA |
| Top off charge (duration 1h after -dV detection): | 160mA ±30mA | | 130mA ±30mA | 110mA ±30mA | 100mA ±30mA | 65mA ±20mA |
| Trickle charge current: | 30mA ±15mA (continuously) | | | | | |
| Leakage current from battery with mains switch off: | <1mA | | | | | |
| Start time: | 3 min, no -ΔV detection in this period. | | | | | |
| Top-off timer: | 1 hour | | | | | |
| Safety timer - The charger switch to trickle charge if no ΔV is detected before the safety timer has run out: | 2 hours | | | | | |
| Switch frequency: | 40kHz | | | | | |
| Temperature range: | -20 to +40°C (these values are only for the charger, not for the batteries). | | | | | |
| Charge control: | -ΔV principle. Fast charging stops when the voltage has dropped 0.5% below its maximum recorded level. | | | | | |
| Voltage changes during charging: | -ΔV detection is disabled if the voltage changes quickly. This to avoid false -ΔV if an external load kicks in during charging. | | | | | |
| Battery analyzing: | Max. 20 sec after mains connection/battery connection (yellow LED). | | | | | |
| Efficiency: | Appr. 80% | | | | | |
| Fuses: | Fusible resistor at input. Polyswitch fuse at the output protects the unit against wrong polarity. | | | | | |
| Insulation class: | Class II | | | | | |
| Electrical safety: | EN 60601-1, EN 60950, EN 60335-2-29, UL 60601-1 | | | | | |
| EMC-standards: | EN 61000-6-3, EN 61000-6-1, EN 60601-1-2 | | | | | |
| Insulation voltage (prim-sec): | 4000V AC/5700V DC | | | | | |
| Mains connection: | 2-pins IEC 320 mains connector. | | | | | |
| Output terminals: | Secondary cable with exchangeable plug. | | | | | |
| LED-indication: | Yellow: Initialization/no batt.<br>Orange: Fast charge<br>Green with short yellow flashes: Top off charge:<br>Green: Trickle charge<br>Red-Green flashing (error mode): Battery voltage low | | | | | |
| Resetting: | A new charging cycle starts by reconnecting a battery at the output, or by disconnecting and connecting the main voltage. | | | | | |
| IP-grade: | IP4X | | | | | |
| Dimensions: | 90×45×32mm | | | | | |
| Weight: | 125g | | | | | |
| Other: | Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable. | | | | | |

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