

|                                                                               | 1 Cell                                                                                        | 2 Cells                     | 3 Cells                      | 4 Cells                      |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------|------------------------------|------------------------------|
| Available versions                                                            | x                                                                                             |                             |                              |                              |
| Input voltage                                                                 | 90 - 264VAC                                                                                   |                             |                              |                              |
| Line frequency                                                                | 47 - 63Hz                                                                                     |                             |                              |                              |
| Step 1 Charge current                                                         | 2.7A ±0.1A                                                                                    | 2.7A ±0.1A                  | 2.3A ±0.1A                   | 2.0A ±0.1A                   |
| Step 2 Charge voltage                                                         | 4.2V ±0.05V                                                                                   | 8.4V ±0.1V                  | 12.6V ±0.1V                  | 16.8V ±0.1V                  |
| - Charge current >: Orange<br>- Charge current <: Yellow                      | 1.15A ±0.1A                                                                                   | 1.15A ±0.1A                 | 1.00A ±0.1A                  | 0.85A ±0.1A                  |
| Step 3 Charge termination I <                                                 | 100mA                                                                                         |                             |                              |                              |
| Charge start Vbat <                                                           | 4.0V ±0.1V or mains turn-on                                                                   | 8.0V ±0.1V or mains turn-on | 12.1V ±0.1V or mains turn-on | 16.2V ±0.1V or mains turn-on |
| Max output power                                                              | 11W                                                                                           | 23W                         | 29W                          | 34W                          |
| Ripple                                                                        | <100mV p-p                                                                                    |                             |                              |                              |
| Efficiency (at 100% load, 230V) approx.                                       | 0.63                                                                                          | 0.78                        | 0.83                         | 0.84                         |
| Switch frequency approx.                                                      | 40kHz                                                                                         |                             |                              |                              |
| Leakage current from battery with mains switched off                          | <250µA                                                                                        |                             |                              |                              |
| Protection                                                                    | Protected against reversed polarity and short circuit proof                                   |                             |                              |                              |
| Temperature range                                                             | Operating: ÷25 to +40oC / Storage: ÷25 to +85oC                                               |                             |                              |                              |
| Safety                                                                        | EN 62368-1, EN 60601-1, EN 60335-2-29                                                         |                             |                              |                              |
| Insulation class                                                              | Class II                                                                                      |                             |                              |                              |
| Insulation voltage: Primary – secondary                                       | 4000VAC / 5656VDC                                                                             |                             |                              |                              |
| EMC standards                                                                 | Med. EN 60601-1-2 / Emission EN 61000-6-3 / Immunity EN 61000-6-1                             |                             |                              |                              |
| MTBF at Ta = 30oC and full load:<br>Calculated according to MIL – HDBK – 217F | >250 000 hours                                                                                |                             |                              |                              |
| Mains connection                                                              | 2-pins IEC 60320 connector. (Exchangeable mains plugs EU, UK, US, AU available on type 2542). |                             |                              |                              |
| Output terminals                                                              | Cord with/without plug. Exchangeable plugs available.                                         |                             |                              |                              |
| IP-Grade                                                                      | 41                                                                                            |                             |                              |                              |
| Dimensions                                                                    | 107 x 67 x 37mm (117 × 75 × 44mm for type 2542)                                               |                             |                              |                              |
| Weight                                                                        | 250g (280g for type 2542)                                                                     |                             |                              |                              |

|                                                                               | 5 Cells                                                                                       | 6 Cells                      | 7 Cells                      | 8 Cells                      |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------|------------------------------|------------------------------|
| Available versions                                                            | x                                                                                             |                              |                              |                              |
| Input voltage                                                                 | 90 - 264VAC                                                                                   |                              |                              |                              |
| Line frequency                                                                | 47 - 63Hz                                                                                     |                              |                              |                              |
| Step 1 Charge current                                                         | 1.6A ±0.1A                                                                                    | 1.4A ±0.1A                   | 1.2A ±0.1A                   | 1.0A ±0.1A                   |
| Step 2 Charge voltage                                                         | 21.0V ±0.1V                                                                                   | 25.2V ±0.1V                  | 29.4V ±0.1V                  | 33.6V ±0.1V                  |
| - Charge current >: Orange<br>- Charge current <: Yellow                      | 0.70A ±0.1A                                                                                   | 0.60A ±0.1A                  | 0.50A ±0.1A                  | 0.40A ±0.1A                  |
| Step 3 Charge termination I <                                                 | 100mA                                                                                         |                              |                              |                              |
| Charge start Vbat <                                                           | 20.3V ±0.1V or mains turn-on                                                                  | 24.4V ±0.1V or mains turn-on | 28.5V ±0.1V or mains turn-on | 32.6V ±0.1V or mains turn-on |
| Max output power                                                              | 34W                                                                                           | 35W                          | 35W                          | 34W                          |
| Ripple                                                                        | <100mV p-p                                                                                    |                              |                              |                              |
| Efficiency (at 100% load, 230V) approx.                                       | 0.85                                                                                          | 0.87                         | 0.87                         | 0.85                         |
| Switch frequency approx.                                                      | 40kHz                                                                                         |                              |                              |                              |
| Leakage current from battery with mains switched off                          | <250µA                                                                                        |                              |                              |                              |
| Protection                                                                    | Protected against reversed polarity and short circuit proof                                   |                              |                              |                              |
| Temperature range                                                             | Operating: ÷25 to +40oC / Storage: ÷25 to +85oC                                               |                              |                              |                              |
| Safety                                                                        | EN 62368-1, EN 60601-1, EN 60335-2-29                                                         |                              |                              |                              |
| Insulation class                                                              | Class II                                                                                      |                              |                              |                              |
| Insulation voltage: Primary – secondary                                       | 4000VAC / 5656VDC                                                                             |                              |                              |                              |
| EMC standards                                                                 | Med. EN 60601-1-2 / Emission EN 61000-6-3 / Immunity EN 61000-6-1                             |                              |                              |                              |
| MTBF at Ta = 30oC and full load:<br>Calculated according to MIL – HDBK – 217F | >250 000 hours                                                                                |                              |                              |                              |
| Mains connection                                                              | 2-pins IEC 60320 connector. (Exchangeable mains plugs EU, UK, US, AU available on type 2542). |                              |                              |                              |
| Output terminals                                                              | Cord with/without plug. Exchangeable plugs available.                                         |                              |                              |                              |
| IP-Grade                                                                      | 41                                                                                            |                              |                              |                              |
| Dimensions                                                                    | 107 x 67 x 37mm (117 × 75 × 44mm for type 2542)                                               |                              |                              |                              |
| Weight                                                                        | 250g (280g for type 2542)                                                                     |                              |                              |                              |

|                                                                               | 9-cell                                                                                        | 10-cell                      | 11-cell                      | 12-cell                      |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------|------------------------------|------------------------------|
| Available versions                                                            |                                                                                               | x                            |                              | x                            |
| Input voltage                                                                 | 90 - 264VAC                                                                                   |                              |                              |                              |
| Line frequency                                                                | 47 - 63Hz                                                                                     |                              |                              |                              |
| Step 1 Charge current                                                         | 0.9A ±0.1A                                                                                    | 0.8A ±0.1A                   | 0.7A ±0.1A                   | 0.7A ±0.1A                   |
| Step 2 Charge voltage                                                         | 37.8V ±0.2V                                                                                   | 42.0V ±0.2V                  | 46.2V ±0.2V                  | 50.4V ±0.3V                  |
| - Charge current >: Orange<br>- Charge current <: Yellow                      | 0.35A ±0.1A                                                                                   | 0.35A ±0.1A                  | 0.30A ±0.1A                  | 0.30A ±0.1A                  |
| Step 3 Charge termination I <                                                 | 100mA                                                                                         |                              |                              |                              |
| Charge start Vbat <                                                           | 36.9V ±0.4V or mains turn-on                                                                  | 40.7V ±0.4V or mains turn-on | 44.8V ±0.4V or mains turn-on | 48.9V ±0.4V or mains turn-on |
| Max output power                                                              | 34W                                                                                           | 34W                          | 32W                          | 35W                          |
| Ripple                                                                        | <100mV p-p                                                                                    |                              |                              |                              |
| Efficiency (at 100% load, 230V) approx.                                       | 0.85                                                                                          |                              |                              |                              |
| Switch frequency approx.                                                      | 40kHz                                                                                         |                              |                              |                              |
| Leakage current from battery with mains switched off                          | <250µA                                                                                        |                              |                              |                              |
| Protection                                                                    | Protected against reversed polarity and short circuit proof                                   |                              |                              |                              |
| Temperature range                                                             | Operating: ÷25 to +40oC / Storage: ÷25 to +85oC                                               |                              |                              |                              |
| Safety                                                                        | EN 62368-1, EN 60601-1, EN 60335-2-29                                                         |                              |                              |                              |
| Insulation class                                                              | Class II                                                                                      |                              |                              |                              |
| Insulation voltage: Primary – secondary                                       | 4000VAC / 5656VDC                                                                             |                              |                              |                              |
| EMC standards                                                                 | Med. EN 60601-1-2 / Emission EN 61000-6-3 / Immunity EN 61000-6-1                             |                              |                              |                              |
| MTBF at Ta = 30oC and full load:<br>Calculated according to MIL – HDBK – 217F | >250 000 hours                                                                                |                              |                              |                              |
| Mains connection                                                              | 2-pins IEC 60320 connector. (Exchangeable mains plugs EU, UK, US, AU available on type 2542). |                              |                              |                              |
| Output terminals                                                              | Cord with/without plug. Exchangeable plugs available.                                         |                              |                              |                              |
| IP-Grade                                                                      | 41                                                                                            |                              |                              |                              |
| Dimensions                                                                    | 107 x 67 x 37mm (117 × 75 × 44mm for type 2542)                                               |                              |                              |                              |
| Weight                                                                        | 250g (280g for type 2542)                                                                     |                              |                              |                              |

|                                                                               | 13-cell                                                                                       | 14-cell                      |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------|
| Available versions                                                            |                                                                                               | x                            |
| Input voltage                                                                 | 90 - 264VAC                                                                                   |                              |
| Line frequency                                                                | 47 - 63Hz                                                                                     |                              |
| Step 1 Charge current                                                         | 0.6A ±0.08A                                                                                   |                              |
| Step 2 Charge voltage                                                         | 54.6V ±0.3V                                                                                   | 58.8V ±0.3V                  |
| - Charge current >: Orange<br>- Charge current <: Yellow                      | 0.25A ±0.05A                                                                                  |                              |
| Step 3 Charge termination I <                                                 | 100mA                                                                                         |                              |
| Charge start Vbat <                                                           | 53.0V ±0.4V or mains turn-on                                                                  | 57.1V ±0.4V or mains turn-on |
| Max output power                                                              | 33W                                                                                           | 35W                          |
| Ripple                                                                        | <100mV p-p                                                                                    |                              |
| Efficiency (at 100% load, 230V) approx.                                       | 0.85                                                                                          |                              |
| Switch frequency approx.                                                      | 40kHz                                                                                         |                              |
| Leakage current from battery with mains switched off                          | <250µA                                                                                        |                              |
| Protection                                                                    | Protected against reversed polarity and short circuit proof                                   |                              |
| Temperature range                                                             | Operating: ÷25 to +40oC / Storage: ÷25 to +85oC                                               |                              |
| Safety                                                                        | EN 62368-1, EN 60601-1, EN 60335-2-29                                                         |                              |
| Insulation class                                                              | Class II                                                                                      |                              |
| Insulation voltage: Primary – secondary                                       | 4000VAC / 5656VDC                                                                             |                              |
| EMC standards                                                                 | Med. EN 60601-1-2 / Emission EN 61000-6-3 / Immunity EN 61000-6-1                             |                              |
| MTBF at Ta = 30oC and full load:<br>Calculated according to MIL – HDBK – 217F | >250 000 hours                                                                                |                              |
| Mains connection                                                              | 2-pins IEC 60320 connector. (Exchangeable mains plugs EU, UK, US, AU available on type 2542). |                              |
| Output terminals                                                              | Cord with/without plug. Exchangeable plugs available.                                         |                              |
| IP-Grade                                                                      | 41                                                                                            |                              |
| Dimensions                                                                    | 107 x 67 x 37mm (117 x 75 x 44mm for type 2542)                                               |                              |
| Weight                                                                        | 250g (280g for type 2542)                                                                     |                              |