



**TC-MAK Series Thyristor Controlled Charger 12V – 50A**  
<http://www.mak-powersis.de/12v-50a-battery-charger.html>

|              |           |   |   |
|--------------|-----------|---|---|
| <b>Input</b> | Power kVA | 690VA   |   |
|              | Voltage   | 400VAC Default ( 230V – 380V – 415V - 480V AC ) 50Hz – 60Hz | 3 |
|              | Current   | 0.01A   |   |
|              | Harmonics | <%7   |   |

|               |            |   |  |
|---------------|------------|---|--|
| <b>Output</b> | Power kVA  | 589W  |  |
|               | Voltage    | 12VDC   |  |
|               | Current    | 600A Max ( Automatically by Controlling Battery Condition ) |  |
|               | Efficiency | Minimum %85   |  |
|               | Ripple     | <%4 (Optional Less)   |  |

|                |             |                                    |  |
|----------------|-------------|------------------------------------|--|
| <b>Control</b> | Technologie | Thyristor Technology               |  |
|                | CPU         | Micro Controller Texas Instruments |  |
|                | Pulse       | 12 Pulse                           |  |

|                |                         |  |  |
|----------------|-------------------------|--|--|
| <b>GENERAL</b> | Color                   | RAL7032                                    |  |
|                | Transformer             | Copper                                     |  |
|                | Timer                   | Exists Adjustable Working Time             |  |
|                | External Stop           | Standard                                   |  |
|                | Input Protection        | Thermionic Magnetic Circuit Breaker        |  |
|                | Over Current Protection | MCCB & Software                            |  |
|                | Parallel Operation      | Optional                                   |  |
|                | Dry Contacts            | Optional                                   |  |
|                | Cooling Type            | Air Cooled or Oil Cooled                   |  |
|                | Remote Controller       | 50 Meter (Optional)                        |  |
|                | Communication           | SNMP, RS232, RS485, USB, MODBUS (Optional) |  |
|                | Working Temperature     | 0C / +40C Celcius – Batterien 0C – 25C     |  |
|                | Protection Additional   | Standard Information                       |  |
|                | Over Current Protection | Via Software                               |  |
|                | Voice (1m)              | <65Db                                      |  |
|                | LCD                     | LCD Screen with buttons                    |  |

|                |                  |      |  |
|----------------|------------------|------|--|
| <b>Chassis</b> | Width mm         | 420  |  |
|                | Depth mm         | 410  |  |
|                | Height mm        | 540  |  |
|                | Weight kg        | 13   |  |
|                | Protection Class | IP21 |  |