

MAK+ BATTERY CHARGER TECHNICAL SPECIFICATIONS SWITCH MODE RECTIFIERS

Technical Specifications:

Input Voltage: 176-260/50-60 Hz AC Single Phase /
Three Phase 3x380 V, 50-60 Hz AC

Output Voltage: 12/24/36/48/72/80/96/110/220 (non-
standard voltage values are for the specific design.)

Output Current: 10 .. 300 A (non-standard design
made specifically for the current values.)

Power Factor: > 0.90 at full load

Yield: > 90%

Number of Phase: 1-3

Ripple Factor: <1%

Power Control: High-frequency switching, MOSFET
Transistor Control System (Switch Mode)

Control Unit: MRS Microprocessor Electronic Control
System

Operation: Manual / Automatic

Control: Operator Panel / Remote Control (Optional) / Automation (OPTIONAL)

Indicators: Digital LCD display (4x20 characters), the display ammeter, voltmeter, time of displaying
a warning and fault

Measurement: Input Voltage (OPTIONAL) / Output Voltage, Output Current, Battery Level
Measurement (OPTIONAL), 1% Accuracy

Control Accuracy: $\pm 1\%$ with the Validated Measurement Instruments Calibration Reports

Start / Stop: The buttons on the panel / External On-Off / Automation System

Type of Cooling: Air Cooled,

Cabinet: IP20-IP44 protected, (OPTIONAL)



Mounting: Standard Materials Using Realized, Modular System

Program: Fast Charge, 3-Step Charger (OPTIONAL), scheduled to serve as Charge and Power Supply, Charger Adjustable Parameters Panel. Dry / Wet or Gel Battery, Parameter Selection based, temperature controlled charging.

Counter time: In the program, 99:59 min timer, Periodicals - Adjustable for indefinite period of time to work

Alert / Alarm: Any fault and warning status can be monitored from the display and audible warning to take.

Phase Error: Standard, MRS Phase Protection Unit and the (3-phase devices)

Input Power Protection: Electronics

Overcurrent Protection: Fuses with the program inside and out

Over Temperature Protection: Temperature sensors on Semiconductors

Short-circuit Protection: YES (OPTIONAL)

Reverse Battery Protection: Yes (OPTIONAL)

Battery Low / High Protection: Yes (OPTIONAL)

Deep discharge protection: special DC contactor, battery over-discharge battery protection unit and the device can be added to prevent degradation. This unit is not running, the device monitors the battery voltage falls below the critical level and separates the load from the battery. Load reaches a certain capacity of the battery charge and again by the device connected to the battery. (OPTIONAL)

DC Earth Leakage Unit: Yes (OPTIONAL)

Input / Output: Power Input, Output Load, Battery Output

Additional Measurements:

A1) Battery Temperature (OPTIONAL)

A2) Load current (OPTIONAL)

A3) Load Voltage (OPTIONAL)

A4) Mains current (OPTIONAL)

A5) Power supply voltage (OPTIONAL)

A6) Frequency (OPTIONAL)

A7) + / - Earth Leakage (OPTIONAL)

(Please choose if you want an Optional Features)

2 - WARRANTY CONDITIONS

Manufacturing, against defects in workmanship and materials for 2 (two) years warranty.

3 - Packaging

Will be purchased under this technical data sheet is not affected by shocks packaged rectifiers.

MAK+ POWER SYSTEMS

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