Intelligent Automatic Charger for 12, 24 and 42V Accumulators

Type RALG 240G

RALG 240G car battery charger, is a universal automatic charger for 12V, 24V and 42V batteries.

Maximal charging power 240 Watt

Essential features:

♦ The MP-driven charger recognizes the voltage level of the connected battery and optimizes its charging process. This is done by checking the accumulator's condition every 30ms and adjusting the charging current accordingly. The result is short charging time and long battery life.

♦ The charging process adjusts to the ambient temperature.

♦ The charger recognizes the condition „Full“. Charging preservation makes overcharging impossible. The battery may remain connected to the charger indefinitely without taking harm.

♦ A minimal reverse current (< 0,1%) prevents self-discharge.

♦ An internal reverse polarity protection prevents damage of charger or battery.

♦ Charging process begins after 0.5 seconds which prevents any sparking during connection. Damage to battery-poles and fire hazards become minimal.

♦ The charging terminals are dead immediately after disconnection.

♦ Extensive protection mechanisms within the unit, for example overtemperature switch-off, undervoltage switch-off, reference control or comparison of setpoint and actual values, assure correct mode of operation even under difficult conditions.

♦ But if a defect in the main charging part should occur after all, then an electronic switch will interrupt the current flow and a red LED will report the failure by blinking.
TECHNICAL DATA

Input voltage  AC 230V
Frequency  50/60 Hz
Battery type  lead acid accumulators  6, 12, 21 cells (12V, 24V, 42V) 20 up to 400 Ah
Maximal charging current  5ADC@24V, 10ADC@42V and 12V
Reverse current  at line off, I <= 0,1% I MAX
Characteristic – charging method  ECS-charging method in connection with patented switching concept
Temperature control during charging  charging according to ambient temperature
Overtemperature protection  automatic switch-off at overtemperature of battery resp. electronics via internal electronic current limitation
Overload protection  better than VDE 0871, limit curve B
RFI suppression  operation on
Status LED report
- LED orange  pulse
- LED blue  charged
- LED green  charging
- LED yellow  battery or charger defect
- LED red  for battery voltage display
Display  operation on
Test voltage input / output  4000VAC RMS 50Hz, 1min
Regulations  VDE 0570 part 2-6, EN 61558-2-6, EN 61131-2/part 2
Line harmonics limitation  EN 61000-3-2
Interference emission  EN 550081-1, EN 55011 class B, EN 55022 class B
Interference immunity  EN 50082-2
Safety  EN 60950, IEC 950
CE-mark  yes
Protection rating comp. VDE 0470 / EN 60529  IP32 metal housing
Protection class comp. IEC 536, VDE 0106 T1  line circuit breaker C6, B10
Insulation class  EN 50082-2
Recommended fuse protection on line side  earthing contact plug
Connection  primary earthing contact plug
secondary cable with battery terminals
Measurements  L/W/H  320/200/134 mm
Weight  6 kg
Installation orientation  any position
Cooling  natural convection
Operation temperature range  full power -20°C...+50°C
Storage temperature  -25°C...+85°C

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**CHARGING CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Charging Current / A</th>
<th>Capacity / Ah</th>
<th>U / V</th>
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<tbody>
<tr>
<td>10A@12V</td>
<td>55Ah</td>
<td></td>
</tr>
<tr>
<td>10A@24V</td>
<td>27.5Ah</td>
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**INTERFERENCE EMISSION**

- EN 550081-1, EN 55011 class B, EN 55022 class B
- EN 50082-2

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**SAFETY**

- EN 60950, IEC 950
- CE-mark yes
- Protection rating comp. VDE 0470 / EN 60529 IP32 metal housing
- Protection class comp. IEC 536, VDE 0106 T1 line circuit breaker C6, B10
- Insulation class EN 50082-2

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**CONNECTOR**

- Primary earthing contact plug
- Secondary cable with battery terminals

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**INSTALLATION ORIENTATION**

- Any position
- Natural convection

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**MEASUREMENTS**

- L/W/H 320/200/134 mm
- Weight 6 kg