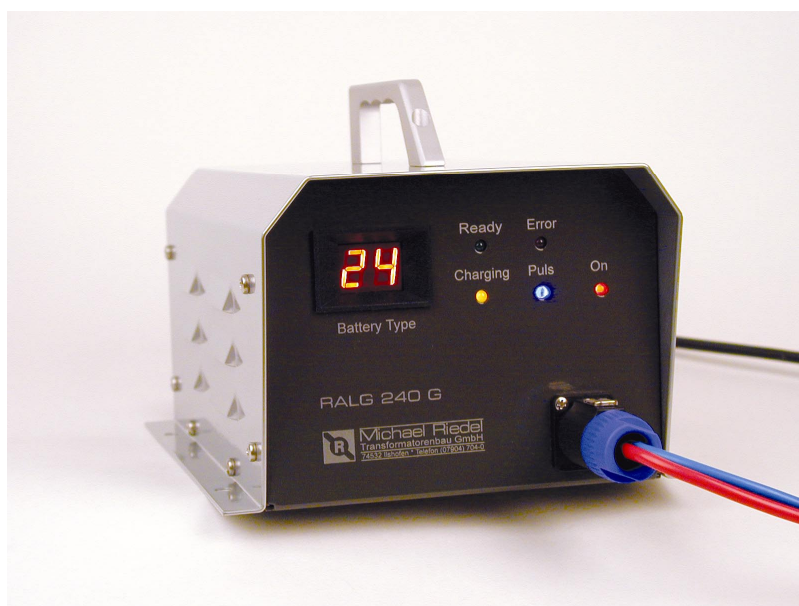


## *Intelligent Automatic Charger for 12, 24 and 42V Accumulators*

### *Type RALG 240G*

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

Maximal charging power 240 Watt



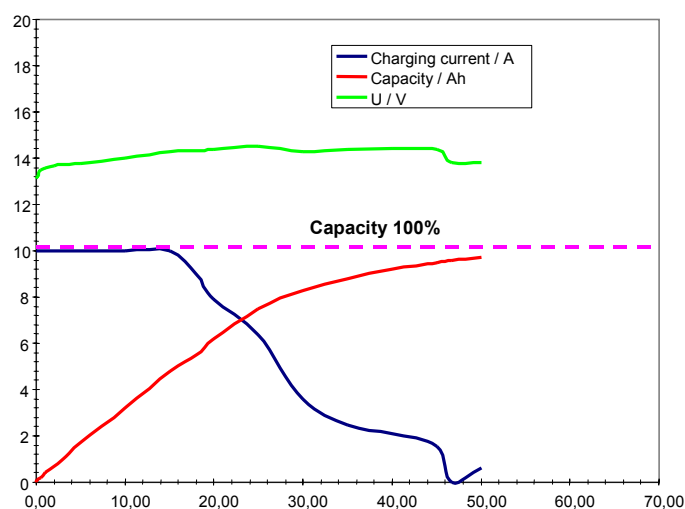
#### **Essential features:**

- ◆ 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.

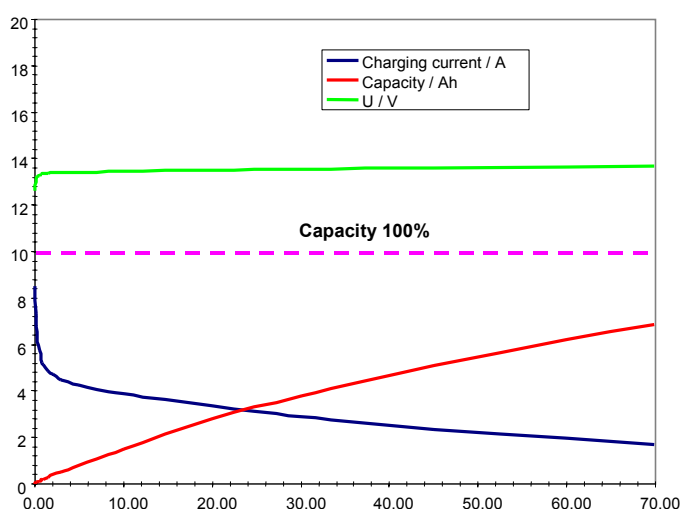


## TECHNICAL DATA

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 Puls@42V, 10ADC Puls@24V and 12V
Reverse current	at line off, $I \leq 0,1\% I_{MAX}$
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
Overload protection	via internal electronic current limitation
RFI suppression	better than VDE 0871, limit curve B
Status LED report	operation on LED orange LED blue LED green LED yellow LED red Display
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	I
Insulation class	E
Recommended fuse protection on line side	line circuit breaker C6, B10
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



ECS charger \* charging characteristic 10A/12V \* battery 12V/55Ah



classic U/I charger \* charging characteristic 10A/13,8V \* battery 12V/55Ah