



"Steca battery charging systems –  
ready for the next task!"



**Battery charging systems**



**Battery chargers**



**Mobile use**
















**Stationary use**



**Equipment**



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## Environmental protection in series

### We are thinking of tomorrow

For Steca, there are many aspects to environmental and climate protection and the resultant reduction in CO<sub>2</sub> and environmental poisons.

With Steca charging technology, the devices in battery charging systems use the maximum energy storage potential and treat damaged or totally discharged batteries. Complete management systems for bus maintenance facilities help prevent environmental pollution by reducing cold-run phases.

In addition to the obvious need to apply environmentally-friendly processes, electronic products

from Steca contribute both to reducing energy consumption and environmental pollution around the world, as well as to spreading the use of regenerative energy sources by means of solar technology.

Not without reason is Steca listed as an authority for energy generation in the German federal government's environmental technology atlas "Green Tech made in Germany". Products in the area of solar electronics facilitate environmentally-friendly use of clean and free solar energy. Today, in the photovoltaic and solar thermal energy sectors, over 1.5 million controllers manage and control solar energy systems around the world.

The company contributes to energy savings with the millions of electronic components it



"From the assembly of the components to the finished device – from the development to the after-sales service."

produces for devices classified in energy efficiency class A<sup>++</sup>, such as motion detectors or network circuit breakers. Devices for water and weather measuring technology facilitate further research into our environment. Electronics utilised in the fields of medicine and industry regulate analysis and production processes and thereby save energy and materials. Further examples include photovoltaic controllers for improving the energy balance in automobile applications. All battery-operated devices are developed for minimum electricity consumption with maximum output.

Steca environmental policy is based on sustainability and environmental compatibility, with a view to providing services and producing products for an ecological future. The company takes account of the whole value-added chain and involves suppliers and customers. Steca is certified in accordance with ISO 14001:2004 and organised in accordance with the EU Environmental Management and Audit Scheme.



## Super charging ...

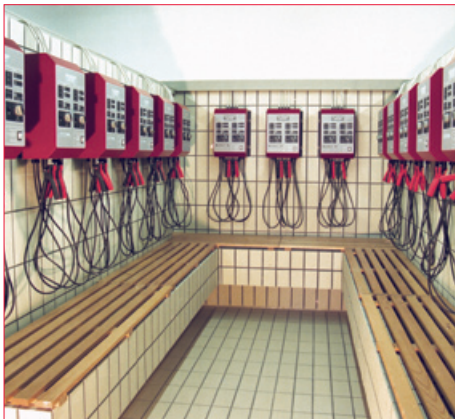
### ... ready for the next task!

Steca develops charging and testing methods in collaboration with leading battery manufacturers and institutes in order to make your batteries last longer. Our expertise in the field of battery charging systems combines charging, testing and assessing commercially available batteries and special designs.

As well as the chargers themselves, Steca supplies you with planned and installed charging systems for mobile use, for stationary use and all the equipment required to operate them safely.

All chargers can be networked together and controlled from a single control station.







## Battery chargers

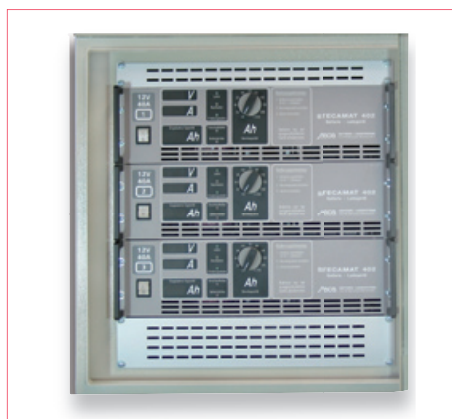
### Energy recharging for your application

The products we offer range from reasonably-priced single charging units via modular charging devices with microcontrollers right through to computer-controlled charging and electric power supply programs.

#### Panel-mounted units



#### 19-inch units





Units for heavy-duty operating conditions



Wall-mounted and tabletop units





## Systems for mobile use

Depot supply systems, mobile charging points and driverless transport systems are examples of mobile applications of Steca charging systems.

### Depot supply systems for bus depots and fire stations



### Driverless transport systems





Mobile charging points:  
warning trailers, trolleys and  
supporting frames



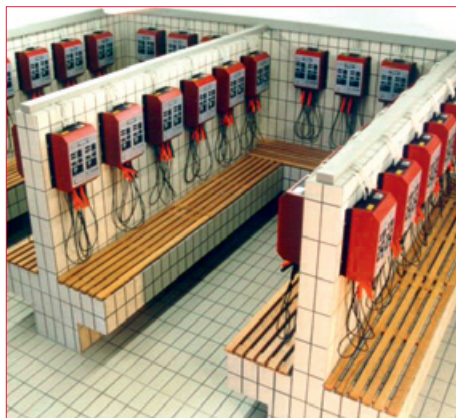


## Systems for stationary use

Examples of stationary applications of Steca charging systems include charging rooms, charging cabinets and charging containers.

Charging rooms are used to charge up drive batteries and lighting batteries, starter batteries and device batteries.

### Charging rooms

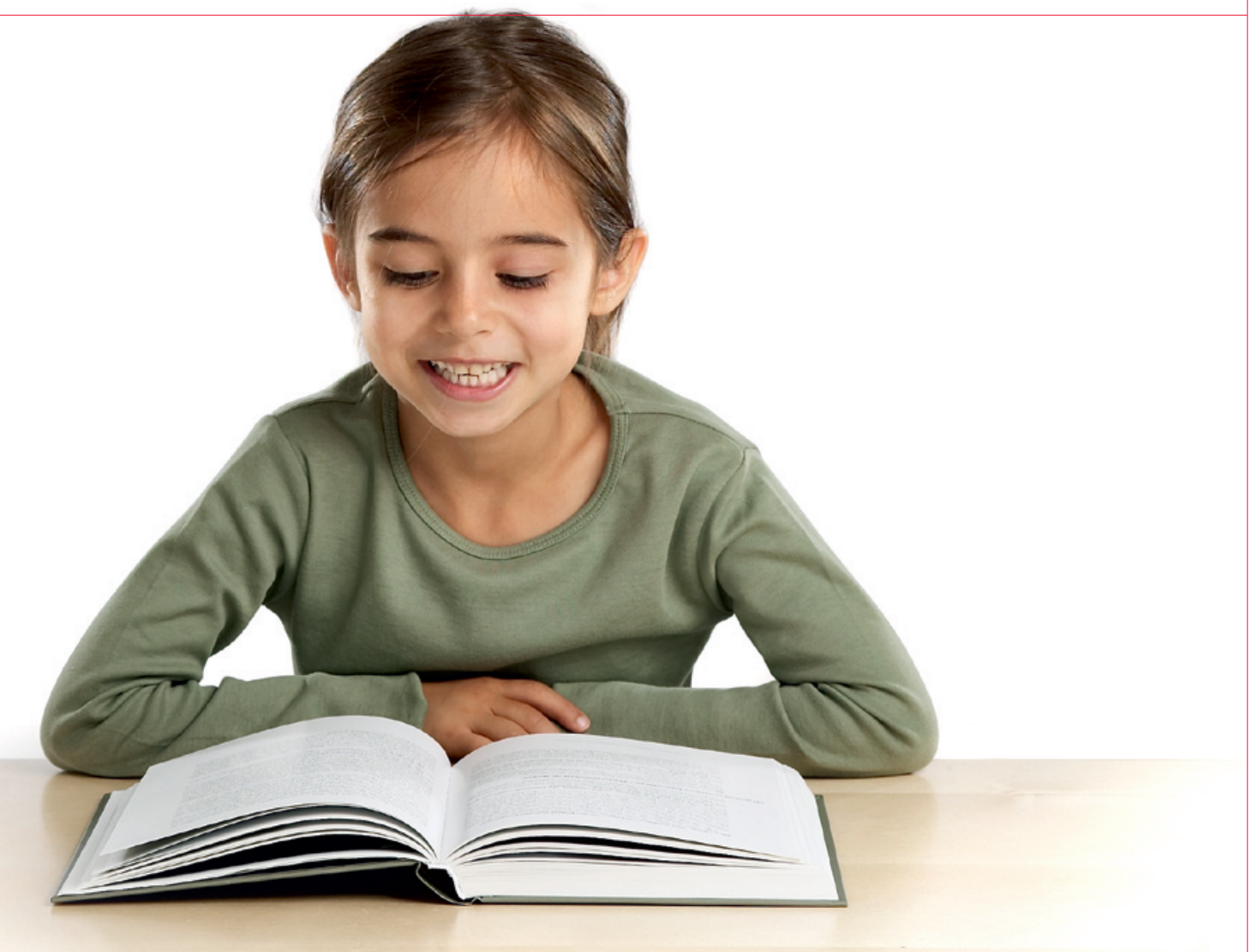


Areas of application include motorway and street maintenance areas, fire brigades, car factories and applications where batteries have to be charged frequently.

Charging batteries in charging cabinets carries the advantage of not having to ventilate the entire room, but just the cabinet itself.

### Charging cabinets





A charging container offers the option of making a charging room semi-mobile.

They are used on building sites where the container is used at a fixed location over a period of time.

Steca plans and installs charging rooms, charging cabinets and charging containers according to your requirements.



Charging containers



## Equipment to operate your system safely

For the safe operation of your system Steca offers a wide range of equipment such as charging posts, cable and hose retractors, connections and plug systems, distributors, ventilation and accessories.



Connections, plug systems and accessories



Charging posts



Distributors



Ventilation



Cable and hose retractors





## A

### Accessory cabinet

double-door material cabinet with shelves.

### Acid waste disposal system

electric barrel pump for suctioning the waste from the sump on site, pump volume 40 l/h, hose with tap, hanging device and intake sieve.

## B

### Battery controller

allows you to get a reliable assessment of the battery's state of charge.

### Battery filling device

electric acid filling device with vacuum pump to safely fill batteries with acid.

### Battery casing

with connection for non-heating appliance plug, for housing two 6-V lead batteries.

### Battery service set

consisting of a filling funnel, acid filling cup, cell tester, two pole cleaners and two washing bottles.

### Battery bank

made of hardwood (kiln-dried copper beech), planed and bevelled on all sides, with three coats of acid-proof lacquer.

### Battery charging cabinet

as a complete, area-independent charging station for lead-acid batteries.

### Battery testing device

program-controlled, fully automatic testing device for 12 V starter batteries and controller test.

### Battery tray

acid-resistant PE tray where the batteries are placed for charging.

## C

### Cable holder

as a hanging device for charging cable which is not being used.

### Cable retractor

made of high-quality plastic, protective electrical insulation, protection class IP 44, ball-bearing axis, hair-spring drive, surface grinding rings, twin-contact take-up, cable locking device which can be turned off, adjustable cable stopper, up to 10 m cable length, available as a fire brigade model with connector system according to DIN 14690.

### Cable spring balancer

housing and cable drum made of sheet steel, rotating safety hook, steplessly adjustable spring resistance, 2 m cable pull-out length.

### Canister tipper

for holding a 60-litre canister. Mobile and stationary models.

### Carbon dioxide fire extinguisher

with snow nozzle, fire class B, complete with mounting, contents 5 kg.

### Chassis

for mobile use of the charging devices Stecamat 202, 222, 302, 312. Robust design with large wheels, storage shelves for cables, acid siphon and tools.

## D

### Disposable overall

with hood and elastic on sleeves, hood, legs and waist. Protection against liquids, dust, fibres and chemicals.

## E

### Eye-washing station

in wall-mounted cupboard, equipped with eye wash bottle (with dust-protection cap and spare bottle) and isotonic common salt solution.

## F

### First-aid kit

combination first-aid kit made of shock-resistant plastic with wall fixture. Contents protected against dust and splashes of water.

## G

### Grating

made of acid-resistant stainless steel with fitted frames, for covering the sump.

## H

### Hardhat

according to DIN 4840, made of polyethylene, extremely light, with injection-moulded ridge, adjustable ventilation and protective face guard.

### Hose retractor

for compressed air supply, in high-quality plastic design, maintenance-free axis, hair-spring drive, hose locking device, hose stopper, wall fixture, 6.5 m hose length.

## I

### Ionomat ion exchanger

for producing distilled water according to DAB (German Pharmacopoeia) 6 and VDE (Association of German Engineers) regulations, with hose for connecting to the water pipe.

## P

### PCE connection system

in 12 V and 12 V / 24 V models. Surface and flush-mounted wall sockets, connector and coupler plug.

### Platform lift

for lifting loads, height of lift up to 80 cm, frame and platform are manufactured in a warp-resistant steel construction and weight-reducing light design from high-strength sectional steel.

### Plastic plate

made from acid and alkaline resistant PE, shock- and abrasion-proof, as protective covering for shelves.

### Portable battery lamp

explosion-proof portable search light, incl. charging device.

### Protective gloves

with sleeve, sure-grip, resistant to acids, bases and chemicals.



## R

### Round water barrel

made of low-pressure polyethylene, side drop handles, decanting armature, for distilled water.

### Rubber mat

acid-proof

## S

### Small lead battery

rechargeable, absolutely maintenance-free lead-gel battery, protected against deep discharge, short circuit-proof, high cycle resistance, 6 V / 5 Ah.

### Slatted wooden frame

made of hardwood (kiln-dried copper beech), planed and bevelled on all sides, with three coats of acid-proof lacquer, to lay over the battery bank.

### Spiral cable

special spiral cable, oil-, petrol- and grease-resistant, spiral diameter 49 mm.

### Spiral hose

spiral compressed air hose, approx. 11 m when extended, approx. 0.6 m when stowed.

### Starter charger

for 12 V and 24 V, start help and normal charging, with chassis for easy transport, built-in LCD amperemeter, safety and monitoring electronics.

### Sub-distributor

with VDE (Association of German Engineers) 0510 / DIN 57510 ventilator control, for installation before or in the charging station, for 2 to 24 chargers.

## T

### Transport trolley for liquid container

bottle holder with safety chain, suitable for outdoor use due to the high-quality powder coating.

## V

### Ventilation conduit system

made of plastic, galvanized sheet steel or stainless steel on request.

### Ventilation unit

to ventilate battery charging rooms.

## W

### Warning sign

made of thermoplastic, self-adhesive, with text "Unauthorised entry forbidden".

### Warning sign

made of thermoplastic, self-adhesive, with text "Battery room, no open flames, no fire, no smoking".

### Warning sign

made of thermoplastic, self-adhesive, with text "Careful, acid".

### Water refilling trolley

for refilling battery water independently of water mains, with filling pistol, plastic container with 60 l water capacity, 12 V / 6.5 Ah battery and accompanying charger.

## Stecamat 860

### Processor-controlled charger for lead-acid batteries

The Stecamat 860 battery charger is available in a range from 12 V to 48 V with a rated power of 720 W to 1,080 W in a sealed casing. The processor-controlled charging process ensures gentle and rapid charging of your battery. The Stecamat 860 also enables the processing of damaged or totally discharged batteries, ensuring long service life. A LED provides rapid information on the state of charge.

The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use. This and the easy handling of the device make for trouble-free operation.

#### Product features

- IP 65 jet waterproof case
- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

#### Electronic protection functions

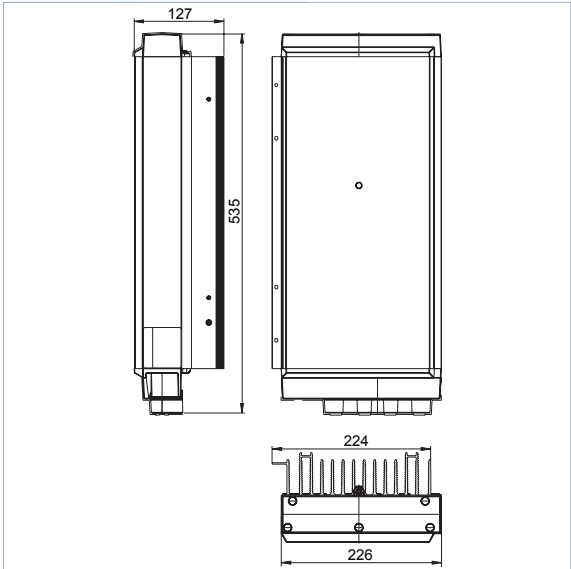
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- Multi-coloured LED shows operating statuses

#### Operation

- Mains grid switch



Technical data				
Charging rated voltage	12 V	24 V	36 V	48 V
Charging current	50 A	35 A	25 A	18 A
End-of-charge voltage	14.4 V	28.8 V	43.2 V	57.6 V
Trickle charge voltage	13.8 V	27.6 V	41.4 V	55.2 V
Characteristic curve	UoUoUoU			
Grid voltage	230 V AC ± 10 %			
Grid frequency	50 Hz			
Mains electricity	3.7 A (230 V)	5.5 A (230 V)		
Discharge current during grid failure	1 mA			
Protection class	I			
Casing / ingress protection	aluminium/plastic, IP 65			
Ambient temperature	-40 °C ... +60 °C			
Cooling	convection			
Dimensions X x Y x Z	226 x 535 x 127 mm			
Weight	approx. 11.5 kg			
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510			

\* Customised versions are available on request. Technical data at 25 °C/77 °F



## Stecamat 861

### Processor-controlled charger for lead-acid batteries

The Stecamat 861 battery charger is available in a range from 12 V to 48 V with a rated power of 720 W to 1,080 W in a sealed casing. The processor-controlled charging process ensures gentle and rapid charging of your battery. For individual adjustment of current, voltage, time and the ideal monitoring of your battery, the Stecamat 861 battery charger has a selection of preset battery profiles and the option of entering new battery profiles. The Stecamat 861 also enables the processing of damaged or totally discharged batteries, ensuring long service life. A backlit display provides rapid information on the state of charge.

The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use. This and the easy handling of the device make for trouble-free operation.



### Product features

- Besides preset battery profiles there is the option of entering new battery profiles
- IP 65 jet waterproof case
- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Adjustable rated capacity determines the charging current
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

### Electronic protection functions

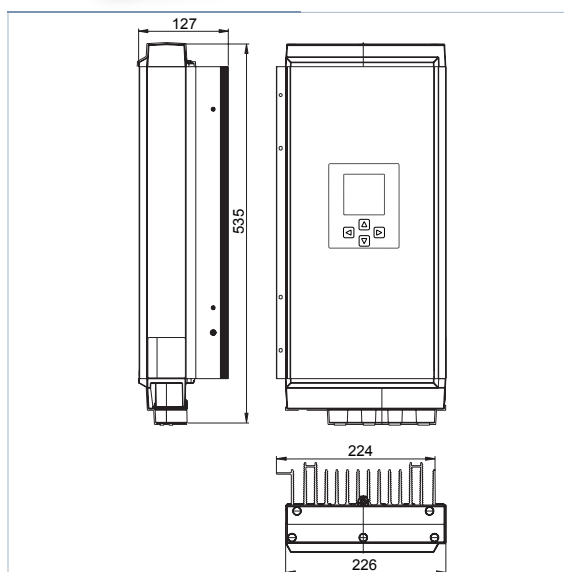
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

### Display

- Multifunction graphical LCD display with backlighting for voltage, current, charged capacity, charging phase, menu

### Operation

- Mains grid switch
- Four cursor buttons for menu selection



Technical data				
Charging rated voltage	12 V	24 V	36 V	48 V
Charging current	50 A	35 A	25 A	18 A
End-of-charge voltage	14.4 V	28.8 V	43.2 V	57.6 V
Trickle charge voltage	13.8 V	27.6 V	41.4 V	55.2 V
Characteristic curve	UoIUoIU			
Grid voltage	230 V AC ± 10 %			
Grid frequency	50 Hz			
Mains electricity	3.7 A (230 V)	5.5 A (230 V)		
Discharge current during grid failure	1 mA			
Protection class	I			
Casing / ingress protection	Aluminium/plastic, IP 65			
Ambient temperature	-20 °C ... +60 °C			
Cooling	Convection			
Dimensions X x Y x Z	226 x 535 x 127 mm			
Weight	approx. 11.5 kg			
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510			

\* Customised versions are available on request. Technical data at 25 °C/77 °F





## Stecamat 820

### Processor-controlled charger for lead-acid batteries

The Stecamat 820 battery charger is available in a range from 12 V to 48 V with a rated power of 720 W to 1080 W. The processor-controlled charging process ensures gentle and rapid charging of your battery. The current, voltage, time and ideal monitoring of your battery are individually adjusted by the setting of the rated capacity. The Stecamat 820 also enables the processing of damaged or totally discharged batteries, ensuring long service life. A LED provides rapid information on the state of charge.

The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use. This and the easy handling make for trouble-free operation, even when wearing gloves.



#### Product features

- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Adjustable rated capacity determines the charging current
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

#### Electronic protection functions

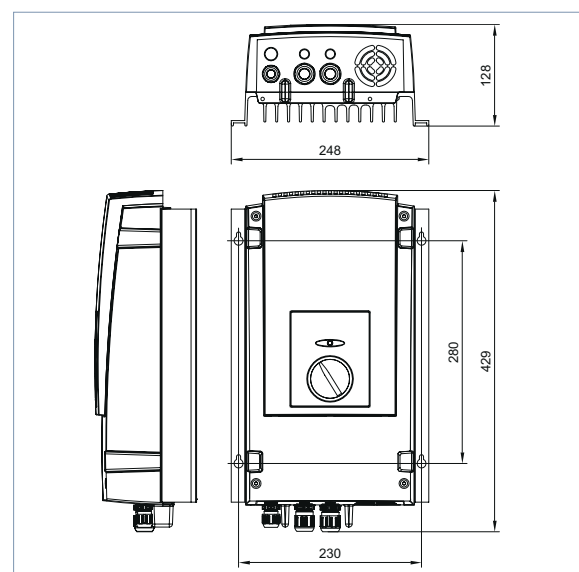
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- Multi-coloured LED shows operating statuses

#### Operation

- Adjustable rated capacity via rotary switch



#### Technical data

Charging rated voltage	12 V	24 V	36 V	48 V
Charging current	50 A	35 A	25 A	18 A
End-of-charge voltage	14.4 V	28.8 V	43.2 V	57.6 V
Trickle charge voltage	13.8 V	27.6 V	41.4 V	55.2 V
Characteristic curve	UoIUoIU			
Grid voltage	230 V AC ± 10 %			
Grid frequency	50 Hz			
Mains electricity	3.7 A (230 V)	5.5 A (230 V)		
Discharge current during grid failure	1mA			
Protection class	I			
Casing / ingress protection	plastic, IP 21			
Ambient temperature	-20 °C ... +60 °C			
Cooling	regulated fan			
Dimensions X x Y x Z	248 x 429 x 128 mm			
Weight	approx. 6 kg			
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510			

\* Customised versions are available on request. Technical data at 25 °C/77 °F





## Stecamat 821

### Processor-controlled charger for lead-acid batteries

The Stecamat 821 battery charger is available in a range from 12 V to 48 V with a rated power of 720 W to 1080 W. The processor-controlled charging process ensures gentle and rapid charging of your battery. For individual adjustment of current, voltage, time and the ideal monitoring of your battery, the Stecamat 821 battery charger has a selection of preset battery profiles and the option of entering new battery profiles. The Stecamat 821 also enables the processing of damaged or totally discharged batteries, ensuring long service life. A backlit display provides rapid information on the state of charge.

The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use. This and the easy handling of the device make for trouble-free operation.

### Product features

- Besides preset battery profiles there is the option of entering new battery profiles
- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Adjustable rated capacity determines the charging current
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

### Electronic protection functions

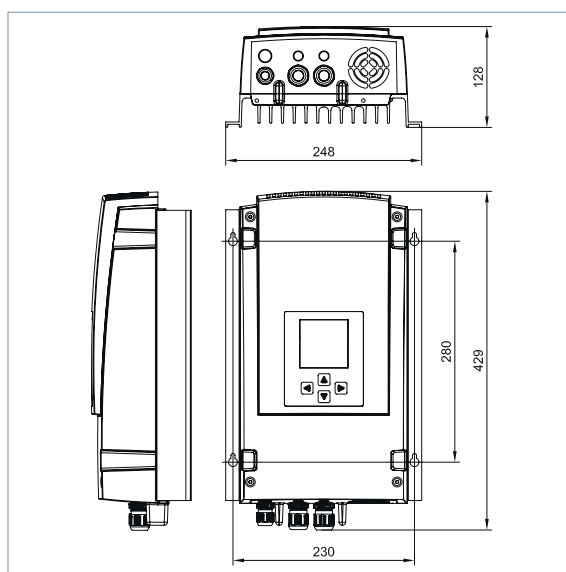
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

### Display

- Multifunction graphical LCD display with backlighting for voltage, current, charged capacity, charging phase, menu

### Operation

- Four cursor buttons for menu selection



### Technical data

Charging rated voltage	12 V	24 V	36 V	48 V
Charging current	50 A	35 A	25 A	18 A
End-of-charge voltage	14.4 V	28.8 V	43.2 V	57.6 V
Trickle charge voltage	13.8 V	27.6 V	41.4 V	55.2 V
Characteristic curve	UoUoUoU			
Grid voltage	230 V AC ± 10 %			
Grid frequency	50 Hz			
Mains electricity	3.7 A (230 V)	5.5 A (230 V)		
Discharge current during grid failure	1mA			
Protection class	I			
Casing / ingress protection	plastic, IP 21			
Ambient temperature	-20 °C ... +60 °C			
Cooling	regulated fan			
Dimensions X x Y x Z	248 x 429 x 128 mm			
Weight	approx. 6 kg			
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510			

\* Customised versions are available on request. Technical data at 25 °C/77 °F



## Stecamat 202

### Processor-controlled charger for lead-acid batteries

The Stecamat 202 battery charger is available in 12 V and 24 V with a rated power of 570 W to 860 W; automatic switching is also available. The processor-controlled charging process ensures gentle and rapid charging of your battery. The current, voltage, time and ideal monitoring of your battery are individually adjusted by the setting of the rated capacity. The Stecamat 202 also enables the processing of damaged or totally discharged batteries, ensuring long service life. Clearly arranged, large and illuminated displays provide rapid information on the state of charge.

The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use. This and the easy handling make for trouble-free operation, even when wearing gloves.



#### Product features

- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Adjustable rated capacity determines the charging current
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

#### Electronic protection functions

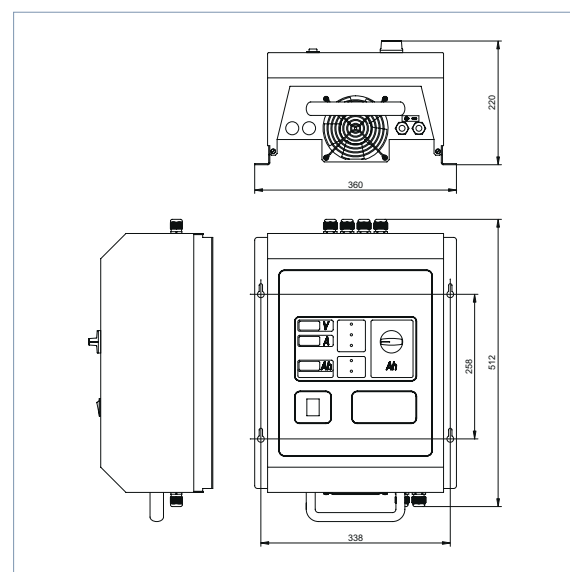
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- 3-digit 7-segment LED display for voltage, current, charged capacity
- 5 LEDs show operating statuses for charging (pre-charging), recharging, trickle charging, piping error, battery fault

#### Operation

- Mains grid switch
- Adjustable rated capacity via rotary switch



Technical data					
			With automatic switching		
Charging rated voltage	12 V	24 V	12 V / 24 V	12 V / 24 V	24 V
Charging current	40 A	20 A	40 A / 20 A	40 A / 30 A	30 A
End-of-charge voltage	14.4 V	28.8 V	14.4 V / 28.8 V		28.8 V
Trickle charge voltage	13.8 V	27.6 V	13.8 V / 27.6 V		27.6 V
Characteristic curve	UoIUoIU				
Grid voltage	230 V AC ± 10 %, option 110 V AC ± 10 %			230 V AC ± 10 %	
Grid frequency	50 Hz, option 60 Hz			50 Hz	
Mains electricity	3.3 A (230 V), option 6.6 A (110 V)			5 A (230 V)	
Discharge current during grid failure	1.3 mA	2.6 mA			
Protection class	I				
Casing / ingress protection	metal, coated, IP 21				
Ambient temperature	-20 °C ... +40 °C				
Cooling	convection			regulated fan	
Dimensions X x Y x Z	360 x 512 x 220 mm				
Weight	approx. 20 kg			approx. 22 kg	
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510				

\* Customised versions are available on request. Technical data at 25 °C/77 °F

[areas of application]





## Stecamat 222

### Processor-controlled double charger for lead-acid batteries

The Stecamat 222 battery charger monitors and controls the charging of two batteries or battery sets. The device is available with 2 x 12 V and 2 x 24 V with a rated power of 570 W. The crucial advantages of the 2 in 1 concept are the individual, totally independent processing of two 12 V / 24 V batteries and substantially longer service life than that achieved by charging with one 24 V / 48 V battery charger. There is also the option of the equalisation charging of two batteries from 24 V / 48 V battery sets. The processor-controlled charging process ensures gentle and rapid charging of your batteries. The current, voltage, time and ideal monitoring of your batteries are individually adjusted by the setting of the rated capacities. The Stecamat 222 also enables the processing of damaged or totally discharged batteries, ensuring long service life. Clearly arranged, large and illuminated displays provide rapid information on the state of charge.

The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use. This and the easy handling make for trouble-free operation, even when wearing gloves.

#### Product features

- Individual, totally independent processing of two 12 V/24 V batteries
- Substantially longer battery life than that achieved by charging with one 24 V / 48 V charger
- Equalisation charging of two batteries from 24 V / 48 V vehicle battery sets
- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Adjustable rated capacity determines the charging current
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

#### Electronic protection functions

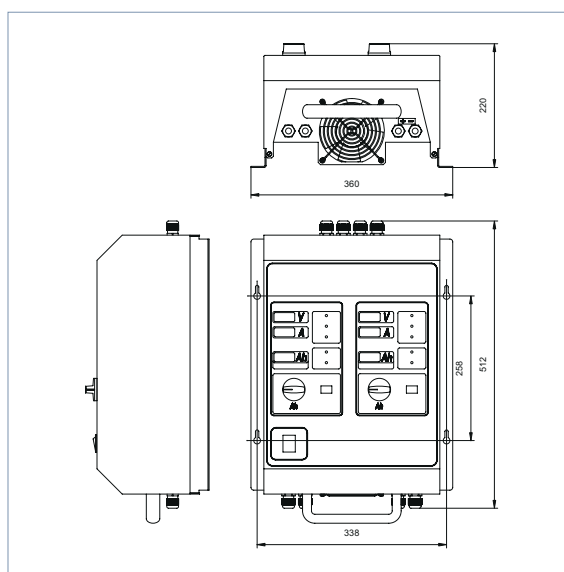
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- 3-digit 7-segment LED display for voltage, current, charged capacity:
- 5 LEDs show operating statuses for charging (pre-charging), recharging, trickle charging, piping error, battery fault

#### Operation

- Mains grid switch
- Adjustable rated capacity via rotary switch
- Charge stop via button



Technical data		
Charging rated voltage	2 x 12 V	2 x 24 V
Charging current	2 x 20 A	2 x 10 A
End-of-charge voltage	14.4 V	28.8 V
Trickle charge voltage	13.8 V	27.6 V
Characteristic curve	2 x UoIUoIU	
Grid voltage	230 V AC $\pm$ 10 %, option 110 V AC $\pm$ 10 %	
Grid frequency	50 Hz, option 60 Hz	
Mains electricity	3.3 A (230 V), option 6.6 A (110 V)	
Discharge current during grid failure	1.3 mA	2.6 mA
Protection class	I	
Casing / ingress protection	metal, coated, IP 21	
Ambient temperature	-20 °C ... +40 °C	
Cooling	regulated fan	
Dimensions X x Y x Z	360 x 512 x 220 mm	
Weight	approx. 22 kg	
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510	

\* Customised versions are available on request. Technical data at 25 °C / 77 °F





## Stecamat 210

### Processor-controlled 10x charger and trickle charger for lead-acid batteries

Batteries are often used only intermittently or on a seasonal basis. If lead-acid batteries are not charged for several weeks or months, their capacity decreases and permanent damage is done. With the Stecamat 210, up to 10 lead-acid batteries can be individually processed. The Stecamat 210 monitors and controls the charging and/or trickle charging of 12 V or 6 V systems with a rated power of 144 W.

The processor-controlled charging process, with voltage, current and time control, ensures the gentle charging of your batteries, for all ten channels. Equalisation charging with a long life cycle is conducted on a weekly basis. This ensures the optimal charge status of the batteries in the trickle charge state, even over a long period of time. The charging status of each individual battery can be accessed in the display by means of the rotary switch.

The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use. A charging cable distribution unit for 10 batteries can be supplied with the device. This and the easy handling of the device make for trouble-free operation.

#### Product features

- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Charging below the gassing voltage
- Battery performance is maintained over years
- Minimal electrolyte loss (no maintenance work)
- The current and voltage values of every battery can be individually accessed
- Replaceable battery connection cables with battery pliers
- Hanging rack for unused battery connection cables
- Individual adaptation to spatial conditions

#### Electronic protection functions

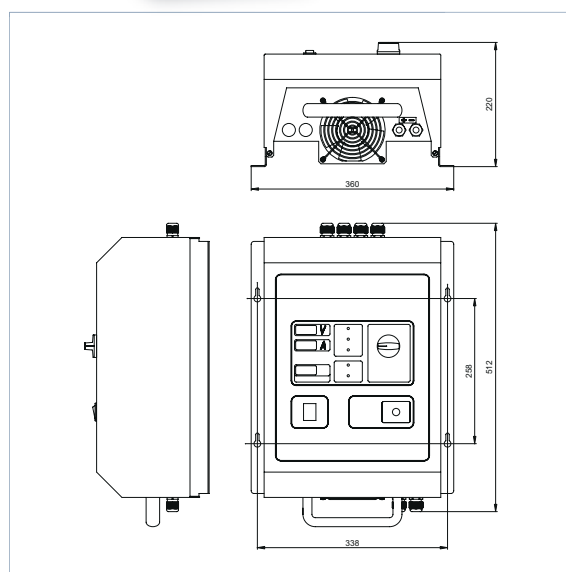
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- 3-digit 7-segment LED display for voltage, current, battery number
- 5 LEDs show operating statuses for charging (pre-charging), trickle charging, long life cycle, piping error, battery fault

#### Operation

- Mains grid switch
- Battery selection via rotary switch
- Charge stop via button



#### Technical data

Charging rated voltage	10 x 12 V	10 x 6 V
Charging current	10 x 1 A	10 x 2 A
End-of-charge voltage	14.4 V	7.2 V
Trickle charge voltage	13.8 V	6.9 V
Characteristic curve	10 x IU	
Grid voltage	230 V AC $\pm$ 10 %	
Grid frequency	50 Hz	
Mains electricity	0.8 A (230 V)	
Discharge current during grid failure	1 mA	
Protection class	I	
Casing / ingress protection	metal, coated, IP 21	
Ambient temperature	-20 °C ... +40 °C	
Cooling	convection	
Dimensions X x Y x Z	360 x 512 x 220 mm	
Weight	approx. 13 kg	
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510	

\* Customised versions are available on request. Technical data at 25 °C/77 °F





## Stecamat 318

### Processor-controlled 8x charger and trickle charger for lead-acid batteries

The Stecamat 318 battery charger monitors and controls the charging of up to eight batteries. This charger is available with 12 V and 24 V with a rated power of 570 W to 920 W.

The processor-controlled charging process, with voltage, current and time control, ensures the gentle and rapid charging of your batteries, for all eight channels. The Stecamat 318 also enables the processing of damaged or totally discharged batteries, ensuring long service life. The charging status of each individual battery can be accessed in the display by means of the rotary switch.

The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use. This and the easy handling of the device make for trouble-free operation.



Diagram of Stecamat 318 for grid operation

### Product features

- Suitable for solar and grid operation
- IP 54 jet waterproof case
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Charging below the gassing voltage
- The current and voltage values of every battery can be individually accessed
- Individual adaptation to spatial conditions

### Electronic protection functions

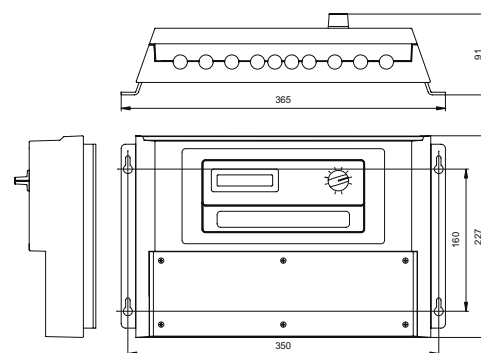
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

### Display

- Text LCD display for voltage, current, charged capacity, state of charge

### Operation

- Battery selection and charge stop via rotary switch



### Technical data

Charging rated voltage	8 x 12 V	8 x 24 V
Charging current	8 x 5 A	8 x 4 A
End-of-charge voltage	14.4 V	28.8 V
Trickle charge voltage	13.8 V	27.6 V
Characteristic curve	8 x UoIUoIU	
Grid voltage	230 V AC $\pm$ 10 %	
Grid frequency	50 Hz	
Mains electricity	3.3 A (230 V)	5 A (230 V)
Discharge current during grid failure	0.2 mA	0.4 mA
Protection class	I	
Casing / ingress protection	plastic/aluminium, IP 54 battery charger	
Ambient temperature	-20 °C ... +40 °C	
Cooling	battery charger: convection mains grid device: regulated fan	
Dimensions X x Y x Z	battery charger: 365 x 227 x 75 mm mains grid device: 432 x 325 x 210 mm	
Weight	approx. 9 kg	approx. 13 kg
Options	fault messaging, Steca ventilation system in accordance with VDE 0510	

\* Customised versions are available on request. Technical data at 25 °C/77 °F





## Stecamat 302

### Processor-controlled lead-acid battery charger and power supply unit

The Stecamat 302 battery charger and power supply unit is available in a range from 12 V to 36 V with a rated power of 430 W to 650 W; automatic switching is also available. It also supplies parallel connect loads, up to the maximum current of the device. The processor-controlled charging process ensures gentle and rapid charging of your battery. The Stecamat 302 also enables the processing of damaged or totally discharged batteries, ensuring long service life. A LED provides rapid information on the state of charge.

The robust and splash-proof casing of the Stecamat 302 charger makes it suitable for use in vehicles. The wide ambient temperature range with convection cooling and the easy handling of the device make for trouble-free operation. The selective on-board protective circuit ensures the greatest possible safety during operation in vehicles. The wide range of accessories facilitates the optimal solution for every application. For example, a special fire engine model is available.

#### Product features

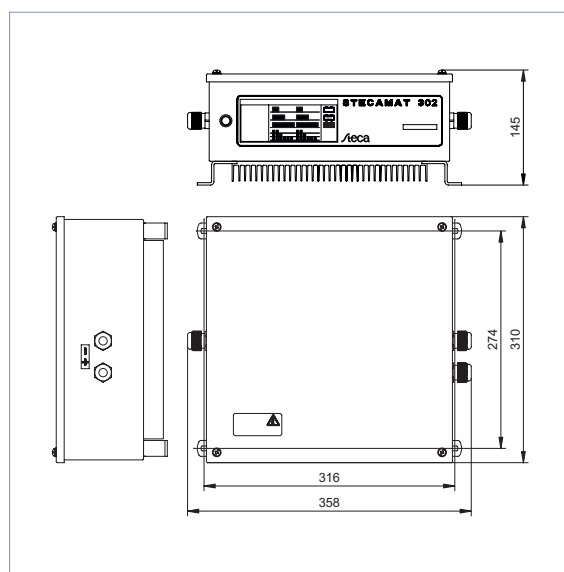
- IP 54 jet waterproof case
- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

#### Electronic protection functions

- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- LED shows operating statuses



#### Technical data

				With automatic switching
Charging rated voltage	12 V	24 V	36 V	12 / 24 V
Charging current	30 A	20 A	15 A	30 / 20 A
End-of-charge voltage	14.4 V	28.8 V	43.2 V	14.4 V / 28.8 V
Trickle charge voltage	13.8 V	27.6 V	41.4 V	13.8 V / 27.6 V
Characteristic curve	UoIUoIU			
Grid voltage	230 V AC $\pm$ 10 %, option 110 V AC $\pm$ 10 %			
Grid frequency	50 Hz, option 60 Hz			
Mains electricity	3.3 A (230 V), option 6.6 A (110 V)			
Discharge current during grid failure	1.3 mA	2.6 mA	3.9 mA	2.6 mA
Protection class	I			
Casing / ingress protection	aluminium/plastic, IP 54			
Ambient temperature	-20 °C ... +60 °C			
Cooling	convection			
Dimensions X x Y x Z	358 x 145 x 310 mm			
Weight	approx. 15 kg			
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510			

\* Customised versions are available on request. Technical data at 25 °C / 77 °F

[areas of application]





## Stecamat 312

### Processor-controlled lead-acid battery charger and power supply unit

The Stecamat 312 battery charger and power supply unit is available in a range from 12 V to 36 V with a rated power of 430 W to 650 W; automatic switching is also available. It also supplies parallel connect loads, up to the maximum current of the device. The processor-controlled charging process ensures gentle and rapid charging of your battery. The Stecamat 312 also enables the processing of damaged or totally discharged batteries, ensuring long service life. Clearly arranged, large and illuminated displays provide rapid information on the state of charge.

The robust and splash-proof casing of the Stecamat 312 charger makes it suitable for use in vehicles. The wide ambient temperature range with convection cooling and the easy handling of the device make for trouble-free operation. The selective on-board protective circuit ensures the greatest possible safety during operation in vehicles. The wide range of accessories facilitates the optimal solution for every application. For example, a special fire engine model is available.

#### Product features

- IP 54 jet waterproof case
- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

#### Electronic protection functions

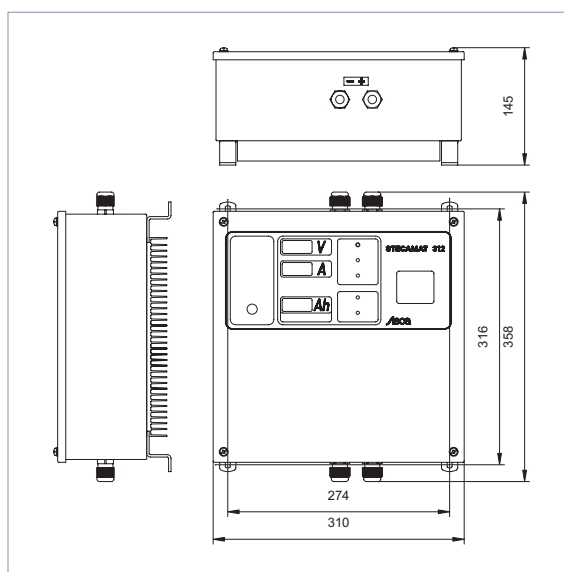
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- 3-digit 7-segment LED display for voltage, current, charged capacity
- 5 LEDs show operating statuses for charging (pre-charging), recharging, trickle charging, piping error, battery fault

#### Operation

- Mains grid switch



Technical data				
				With automatic switching
Charging rated voltage	12 V	24 V	36 V	12 V / 24 V
Charging current	30 A	20 A	15 A	30 A / 20 A
End-of-charge voltage	14.4 V	28.8 V	43.2 V	14.4 V / 28.8 V
Trickle charge voltage	13.8 V	27.6 V	41.4 V	13.8 V / 27.6 V
Characteristic curve	UoIUoIU			
Grid voltage	230 V AC $\pm$ 10 %, option 110 V AC $\pm$ 10 %			
Grid frequency	50 Hz, option 60 Hz			
Mains electricity	3.3 A (230 V), option 6.6 A (110 V)			
Discharge current during grid failure	1.3 mA	2.6 mA	3.9 mA	2.6 mA
Protection class	I			
Casing / ingress protection	metal, coated, IP 54			
Ambient temperature	-20 °C ... +60 °C			
Cooling	convection			
Dimensions X x Y x Z	310 x 358 x 145 mm			
Weight	approx. 15 kg			
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510			

\* Customised versions are available on request. Technical data at 25 °C / 77 °F



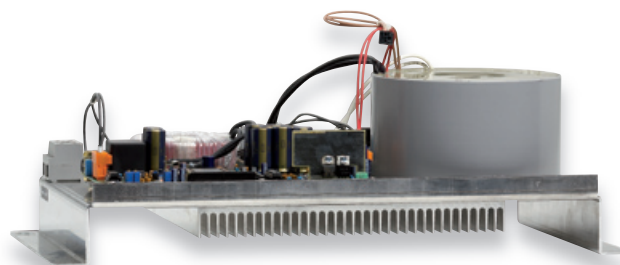


## Stecamat 332

### Processor-controlled lead-acid battery charger and power supply unit

The Stecamat 332 battery charger and power supply unit is available with 12 V and 24 V with a rated power of 570 W to 860 W. The open frame construction of the charger makes it suitable for installation in vehicles and distributors. It also supplies parallel connect loads, up to the maximum current of the device. The processor-controlled charging process ensures gentle and rapid charging of your battery. The Stecamat 332 also enables the processing of damaged or totally discharged batteries, ensuring long service life.

A wide ambient temperature range and the easy handling of the device make for trouble-free operation. The selective on-board protective circuit ensures the greatest possible safety during operation in vehicles. The wide range of accessories facilitates the optimal solution for every application.



### Product features

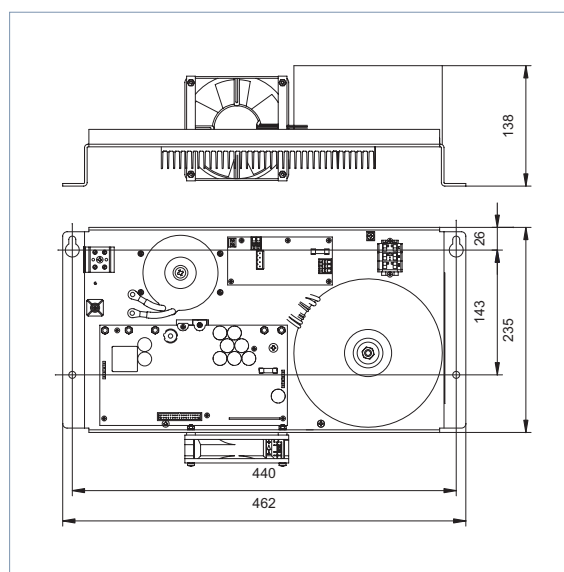
- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

### Electronic protection functions

- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

### Display (optional)

- 3-digit 7-segment LED display for voltage, current, charged capacity
- 5 LEDs show operating statuses for charging (pre-charging), recharging, trickle charging, piping error, battery fault
- LED shows operating statuses



### Technical data

Charging rated voltage	12 V	24 V	24 V
Charging current	40 A	20 A	30 A
End-of-charge voltage	14.4 V	28.8 V	28.8 V
Trickle charge voltage	13.8 V	27.6 V	27.6 V
Characteristic curve	UoUoUoU		
Grid voltage	230 V AC ± 10 %, option 110 V AC ± 10 %		230 V AC ± 10 %
Grid frequency	50 Hz, option 60 Hz		50 Hz
Mains electricity	3.3 A (230 V), option 6.6 A (110 V)		5 A (230 V)
Discharge current during grid failure	1.3 mA		2.6 mA
Protection class	I		
Casing / ingress protection	aluminium, IP 00		
Ambient temperature	-20 °C ... +60 °C		
Cooling	convection		regulated fan
Dimensions X x Y x Z	462 x 138 x 235 mm		
Weight	approx. 12 kg		approx. 14 kg
Options	7-segment LED displays, green LED for operating mode and charging phase of the battery, fault message, IO card, data communication card, Steca ventilation system in accordance with VDE 0510		

\* Customised versions are available on request. Technical data at 25 °C/77 °F





## Stecamat 402

### Processor-controlled 19 inch charger for lead-acid batteries

The Stecamat 402 battery charger is available in 12 V and 24 V with a rated power of 570 W to 860 W; automatic switching is also available. The charger is intended for installation in 19 inch cabinets.

The processor-controlled charging process ensures gentle and rapid charging of your battery. The current, voltage, time and ideal monitoring of your battery are individually adjusted by the setting of the rated capacity. The Stecamat 402 also enables the processing of damaged or totally discharged batteries, ensuring long service life. Clearly arranged, large and illuminated displays provide rapid information on the state of charge.

The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use. This and the easy handling make for trouble-free operation, even when wearing gloves.

#### Product features

- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Adjustable rated capacity determines the charging current
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

#### Electronic protection functions

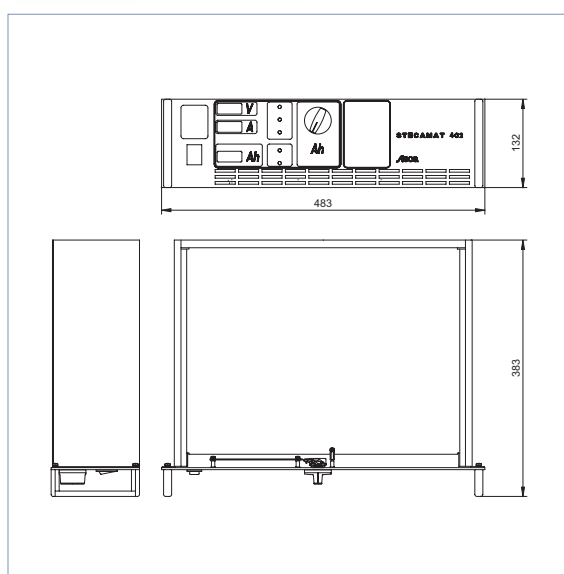
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- 3-digit 7-segment LED display for voltage, current, charged capacity
- 5 LEDs show operating statuses for charging (pre-charging), recharging, trickle charging, piping error, battery fault

#### Operation

- Mains grid switch
- Adjustable rated capacity via rotary switch



Technical data					
			With automatic switching		
Charging rated voltage	12 V	24 V	12 V / 24 V		12 V
Charging current	40 A	20 A	40 A / 20 A	40 A / 30 A	30 A
End-of-charge voltage	14.4 V	28.8 V	14.4 V / 28.8 V		28.8 V
Trickle charge voltage	13.8 V	27.6 V	13.8 V / 27.6 V		27.6 V
Characteristic curve	UoIUoIU				
Grid voltage	230 V AC ± 10 %, option 110 V AC ± 10 %			230 V AC ± 10 %, option 110 V AC ± 10 %	
Grid frequency	50 Hz, option 60 Hz			50 Hz	
Mains electricity	3.3 A (230 V), option 6.6 A (110 V)			5 A (230 V)	
Discharge current during grid failure	1.3 mA	2.6 mA			
Protection class	I				
Casing / ingress protection	metal, coated, IP 20				
Ambient temperature	-20 °C ... +40 °C				
Cooling	regulated fan				
Dimensions X x Y x Z	483 x 132 x 383 mm				
Weight	approx. 20 kg			approx. 22 kg	
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510				

\* Customised versions are available on request. Technical data at 25 °C / 77 °F





## Stecamat 102

### Processor-controlled charger for lead-acid batteries

The Stecamat 102 battery charger is available in 12 V and 24 V with a rated power of 570 W to 860 W; automatic switching is also available. The charger is designed as a mobile tabletop device.

The processor-controlled charging process ensures gentle and rapid charging of your battery. The current, voltage, time and ideal monitoring of your battery are individually adjusted by the setting of the rated capacity. The Stecamat 102 also enables the processing of damaged or totally discharged batteries, ensuring long service life. Clearly arranged, large and illuminated displays provide rapid information on the state of charge.

The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use. This and the easy handling make for trouble-free operation, even when wearing gloves.



#### Product features

- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Adjustable rated capacity determines the charging current
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

#### Electronic protection functions

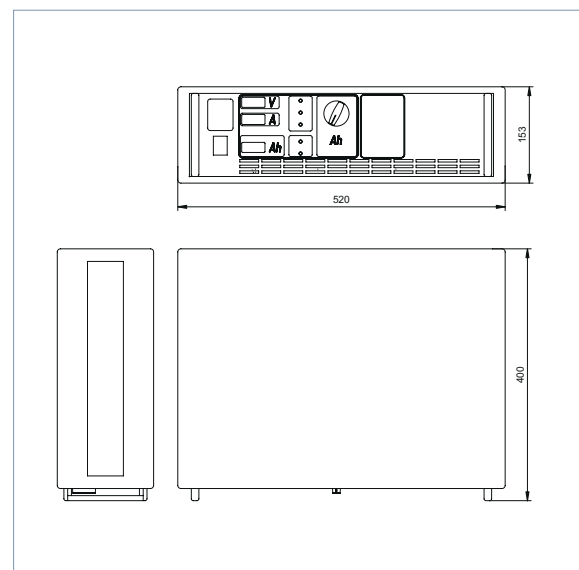
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- 3-digit 7-segment LED display for voltage, current, charged capacity
- 5 LEDs show operating statuses for charging (pre-charging), recharging, trickle charging, piping error, battery fault

#### Operation

- Mains grid switch
- Adjustable rated capacity via rotary switch



Technical data					
			With automatic switching		
Charging rated voltage	12 V	24 V	12 V / 24 V	12 V / 24 V	24 V
Charging current	40 A	20 A	40 A / 20 A	40 A / 30 A	30 A
End-of-charge voltage	14.4 V	28.8 V	14.4 V / 28.8 V		28.8 V
Trickle charge voltage	13.8 V	27.6 V	13.8 V / 27.6 V		27.6 V
Characteristic curve	UoUoUoU				
Grid voltage	230 V AC ± 10 %, option 110 V AC ± 10 %			230 V AC ± 10 %	
Grid frequency	50 Hz, option 60 Hz			50 Hz	
Mains electricity	3.3 A (230 V), option 6.6 A (110 V)			5 A (230 V)	
Discharge current during grid failure	1.3 mA	2.6 mA			
Protection class	I				
Casing / ingress protection	metal, coated, IP 20				
Ambient temperature	-20 °C ... +40 °C				
Cooling	regulated fan				
Dimensions X x Y x Z	520 x 153 x 400 mm				
Weight	approx. 22 kg			approx. 24 kg	
Options	fault messaging, IO card, data communication card, Steca ventilation system in accordance with VDE 0510				

\* Customised versions are available on request. Technical data at 25 °C / 77 °F

[areas of application]





## Steca.pri

### Processor-controlled charger for lead-acid batteries

The Steca.pri battery charger is available at 24 V and a rated power of 90 W to 150 W. The charger is designed as a mobile tabletop device. The processor-controlled charging process ensures gentle and rapid charging of your battery. The Steca.pri thus enables the processing of damaged or totally discharged batteries, ensuring long service life. LEDs provide rapid information on the state of charge.

The Steca.pri battery charger stands out with its robust casing, handy format and low weight, and is suitable for both mobile and domestic use. The easy and comfortable handling of the device makes for trouble-free operation. The Steca.pri battery charger was specially developed for charging batteries for electric wheelchairs, electric scooters, electric bicycles, electric buggies and electric cleaning machines.

### Product features

- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Optimal charging of damaged batteries

### Electronic protection functions

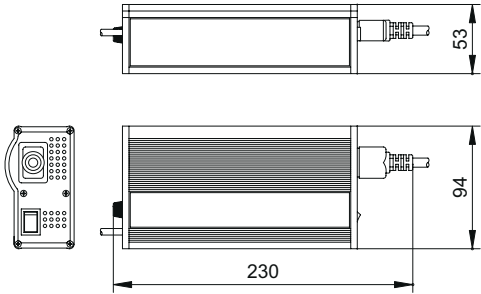
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

### Display

- 2 LEDs show operating statuses

### Operation

- Mains grid switch



Technical data			
Charging rated voltage	24 V		
Charging current	3 A	4 A	5 A
End-of-charge voltage	29.4 V		
Trickle charge voltage	27.6 V		
Characteristic curve	U/I/U		
Grid voltage	230 V AC $\pm$ 10 %, can be switched to 115 V AC $\pm$ 10 %		
Grid frequency	50 Hz / 60 Hz		
Mains electricity	0.5 A (230 V) 1 A (115 V)	0.6 A (230 V) 1.2 A (115 V)	0.7 A (230 V) 1.4 A (115 V)
Discharge current during grid failure	2.5 mA		
Protection class	I		
Casing / ingress protection	aluminium with edge protection, IP 21		
Ambient temperature	-10 °C ... +50 °C		
Cooling	regulated fan		
Dimensions X x Y x Z	230 x 94 x 53 mm		
Weight	approx. 0.85 kg		

\* Customised versions are available on request. Technical data at 25 °C/77 °F





## Steca G1 300

### Processor-controlled charger for lead-acid batteries

The G1 300 battery charger is available in a range from 6 V to 48 V with a rated power of 40 W to 60 W. The charger is designed as a mobile tabletop device. The processor-controlled charging process ensures gentle and rapid charging of your battery. The G1 300 thus enables the processing of damaged or totally discharged batteries, ensuring long service life. LEDs provide rapid information on the state of charge.

The G1 300 battery charger stands out with its robust casing, handy format, low weight and different voltage versions. The easy and comfortable handling of the device makes for trouble-free operation.



### Product features

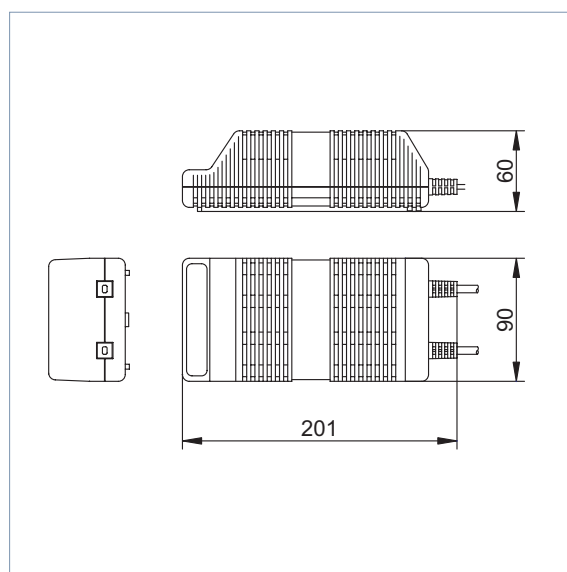
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Charging below the gassing voltage
- Optimal charging of damaged batteries

### Electronic protection functions

- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

### Display

- 4 LEDs show operating statuses for grid, charge, charged, polarity



### Technical data

Charging rated voltage	6 V	12 V	24 V	36 V	48 V		
Charging current	5 A	2 A	4 A	5 A	2.5 A	1.5 A	1 A
End-of-charge voltage	7.2 V	14.4 V	28.8 V	43.2 V	57.6 V		
Trickle charge voltage	6.9 V	13.8 V	27.6 V	41.4 V	55.2 V		
Characteristic curve	U/I/U						
Grid voltage	230 V AC ± 10 %						
Grid frequency	50 Hz						
Mains electricity	0.2 A (230 V)		0.4 A (230 V)				
Discharge current during grid failure	2.5 mA						
Protection class	II / VDE 0805						
Casing / ingress protection	plastic, IP 21						
Ambient temperature	0 °C ... +35 °C						
Cooling	convection						
Dimensions X x Y x Z	201 x 60 x 90 mm						
Weight	approx. 0.6 kg						

\* Customised versions are available on request. Technical data at 25 °C/77 °F





# Steca G2 300

## Processor-controlled charger for lead-acid batteries

The G2 300 battery charger is available in a range from 12 V to 36 V with a rated power of 100 W to 220 W. The charger is designed as a mobile tabletop device. The processor-controlled charging process ensures gentle and rapid charging of your battery. The G2 300 thus enables the processing of damaged or totally discharged batteries, ensuring long service life. LEDs provide rapid information on the state of charge.

The G2 300 battery charger stands out with its robust casing, handy format, low weight and different voltage versions. The easy and comfortable handling of the device makes for trouble-free operation.

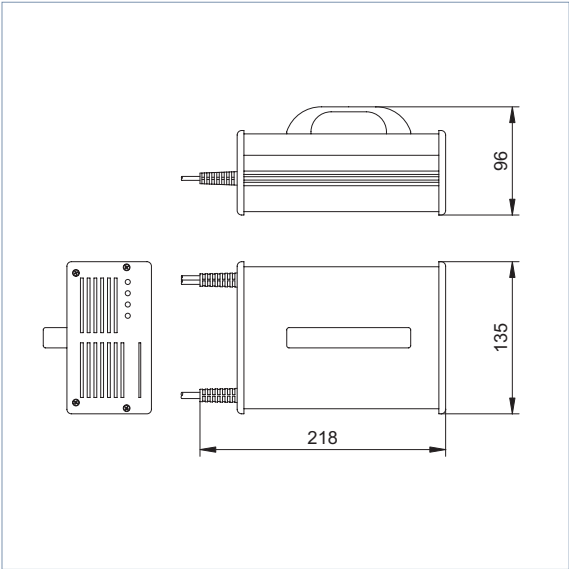


### Product features

- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Charging below the gassing voltage
- Optimal charging of damaged batteries

### Display

- 4 LEDs show operating statuses for grid, charge, charged, polarity



Technical data						
Charging rated voltage	12 V		24 V			36 V
Charging current	7 A	10 A	5 A	7 A	10 A	5 A
End-of-charge voltage	14.4 V		28.8 V			43.2 V
Trickle charge voltage	13.8 V		27.6 V			41.4 V
Characteristic curve	U/I <sub>0</sub> I <sub>U</sub>					
Grid voltage	230 V AC ± 10 %	230 V AC ± 10 %, option 100 V ... 240 V AC			230 V AC ± 10 %	100 V AC ... 240 V AC
Grid frequency	50 Hz / 60 Hz					
Mains electricity	0.8 A (230 V)	0.9 A (230 V) 1.8 A (110 V)	1.1 A (230 V) 2.2 A (110 V)	1.5 A (230 V) 3.0 A (110 V)	2.1 A (230 V)	1.6 A (230 V) 3.2 A (110 V)
Discharge current during grid failure	1 mA					
Protection class	II / VDE 0805					
Casing / ingress protection	plastic, IP 20					
Ambient temperature	0 °C ... +35 °C					
Cooling	convection	regulated fan				
Dimensions X x Y x Z	135 x 96 x 218 mm				220 x 130 x 75 mm	
Weight	approx. 1.2 kg			approx. 1.6 kg		

\* Customised versions are available on request. Technical data at 25 °C/77 °F



## Stecamat 500

### Processor-controlled charger for lead-acid batteries

The Stecamat 500 battery charger and trickle charger maintains the operational readiness of 24 V lead-acid battery sets, particularly in vehicles. The innovative charging process with the "saw tooth" characteristic curve at least doubles the life of your battery. This means the device pays for itself in a very short time. The Stecamat 500 can be used with 24 V battery sets up to 500 Ah. It also supplies parallel connect loads, up to the maximum current of the device. LEDs provide rapid information on the state of charge.

The robust and splash-proof casing of the Stecamat 500 charger makes it suitable for outdoor use. The wide ambient temperature range with convection cooling and the easy handling of the device make for trouble-free operation, even when wearing gloves. The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use.

#### Product features

- Suitable for mobile and stationary use
- "Saw tooth" trickle charging
- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Suitable for totally discharged batteries
- Constant battery operational readiness through integrated trickle charge
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

#### Electronic protection functions

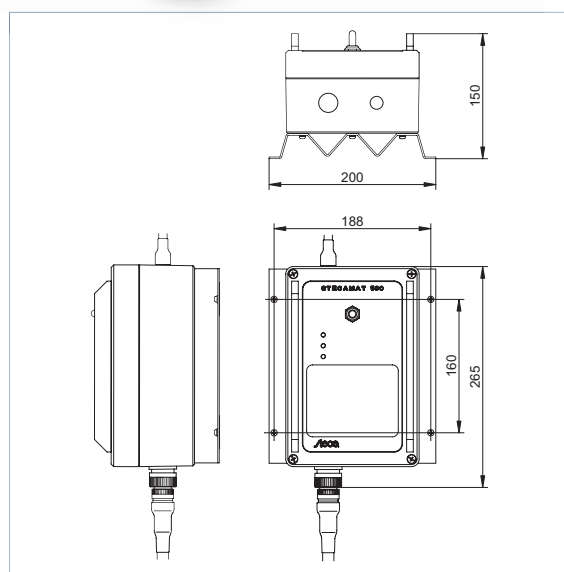
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- 3 LEDs show operating statuses for grid, charging, (trickle charging), fault

#### Operation

- Mains grid switch



#### Technical data

Charging rated voltage	24 V
Charging current	5 A
End-of-charge voltage	28.8 V
Trickle charge voltage	27.6 V (1 A)
Characteristic curve	UoUoUoU "Saw tooth" trickle charging
Grid voltage	230 V AC $\pm$ 10 %
Grid frequency	50 Hz
Mains electricity	0.8 A (230 V)
Discharge current during grid failure	1.5 mA
Protection class	I
Casing / ingress protection	aluminium, IP 54
Ambient temperature	-20 °C ... +60 °C
Cooling	convection
Dimensions X x Y x Z	200 x 265 x 150 mm
Weight	approx. 4 kg

\* Customised versions are available on request. Technical data at 25 °C / 77 °F

[areas of application]





## Stecamat 2000

### Processor-controlled charger for lead-acid batteries

The Stecamat 2000 battery charger is used for recharging discharged, partially discharged and totally discharged 12 V lead-acid batteries. The processor-controlled charging process ensures gentle and rapid charging of your battery. The Stecamat 2000 battery charger has two current selection buttons used to adjust the charging current and ideal monitoring to the batteries being charged. The Stecamat 2000 also enables the processing of damaged or totally discharged batteries, ensuring long service life. LEDs provide rapid information on the state of charge.

The robust and splash-proof casing of the Stecamat 2000 charger makes it suitable for outdoor use. The wide ambient temperature range with convection cooling and the easy handling of the device make for trouble-free operation, even when wearing gloves. The wide range of features and made-to-measure solutions for your application requirements make for high flexibility of use.



### Product features

- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Suitable for totally discharged batteries
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

### Electronic protection functions

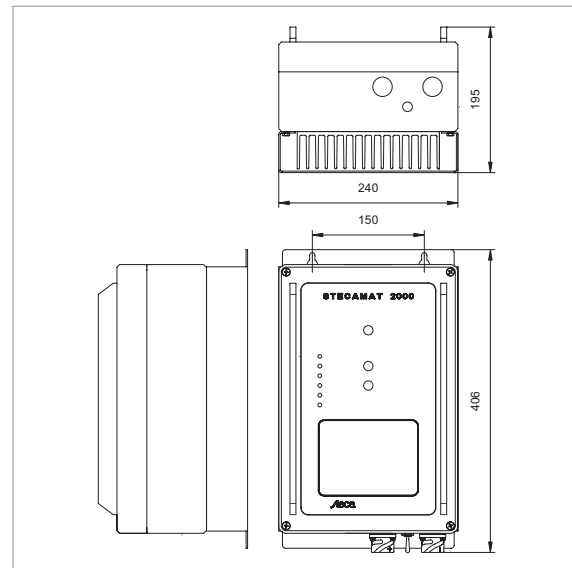
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

### Display

- 6 LEDs show operating statuses for grid, 20 A / 40 A charge, end of charge, battery is defective, device fault

### Operation

- Mains grid switch
- Charging current 20 A and 40 A selectable via two buttons



### Technical data

Charging rated voltage	12 V
Charging current	40 A
End-of-charge voltage	14.4 V
Trickle charge voltage	–
Characteristic curve	UIUa
Grid voltage	230 V AC $\pm$ 10 %
Grid frequency	50 Hz
Mains electricity	0.8 A (230 V)
Discharge current during grid failure	1.5 mA
Protection class	I
Casing / ingress protection	aluminium, IP 54
Ambient temperature	-20 °C ... +60 °C
Cooling	convection
Dimensions X x Y x Z	240 x 406 x 195 mm
Weight	approx. 4 kg

\* Customised versions are available on request. Technical data at 25 °C / 77 °F



## Stecamat 1000

### Processor-controlled charger for lead-acid batteries

The Stecamat 1000 battery charger is used for recharging discharged, partially discharged and totally discharged 12 V lead-acid batteries. The battery type is selected and the rated capacity entered via the multifunction display.

During the charging process the device collects data and assesses the further usability of the batteries. After processing is completed the Stecamat 1000 automatically prints a detailed charging protocol.

Intact batteries are put back into use; defect batteries are documented and disposed of for recycling. This makes a major contribution to reducing costs and to environmental protection.

#### Product features

- Monitoring and evaluation of the further usability of batteries through protocol printout
- Half the charging time compared to simple, non-controlled chargers with the same rated current
- Optimal for charging batteries with liquid electrolyte and solid gel/absorbed electrolyte (AGM)
- Adjustable rated capacity determines the charging current
- Suitable for totally discharged batteries
- Ready for operation in just a few minutes
- Charging below the gassing voltage
- Optimal charging of damaged batteries
- Individually programmed upon request

#### Electronic protection functions

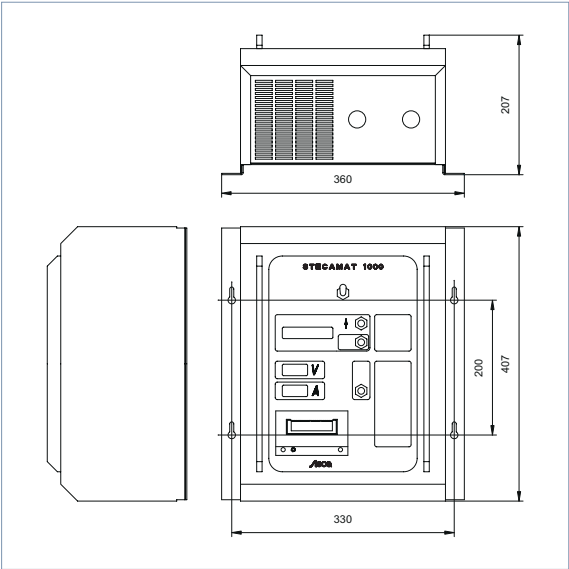
- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage

#### Display

- Multifunction LED display for date, battery type, charged capacity, voltage, current

#### Operation

- Mains grid switch
- Adjustable rated capacity and charge start/stop via 3 buttons
- Integrated graphics capable protocol printer



Technical data	
Charging rated voltage	12 V
Charging current	40 A
End-of-charge voltage	14.4 V
Trickle charge voltage	–
Characteristic curve	UIUa
Grid voltage	230 V AC ± 10 %
Grid frequency	50 Hz
Mains electricity	3.3 A (230 V)
Discharge current during grid failure	1.3 mA
Protection class	I
Casing / ingress protection	metal, coated, IP 21
Ambient temperature	–20 °C ... +60 °C
Cooling	regulated fan
Dimensions X x Y x Z	360 x 407 x 207 mm
Weight	approx. 18 kg

\* Customised versions are available on request. Technical data at 25 °C/77 °F





## Steca BT 3000

### Charger, discharger and testing device for all makes and types of batteries

The Steca BT 3000 provides binding and reliable answers to professional battery users' concerns about battery charge states and much more. The BT 3000, with its charging and trickle charging options, can carry out every conceivable battery-processing task on every type and make of battery on the market.

It is incredibly easy to use, with its step-by-step operation dialogue and large-format, user-friendly membrane keypad. The device checks the plausibility and admissibility of the entries automatically, thereby eliminating almost all operating errors. The battery processing status is shown on the illuminated display.

The integrated protocol printer creates a written record of each step of the battery processing.

In addition to the automatically compiled protocol, the whole programme sequence can be accessed from a PC via the integrated serial interface and then used, for example, for statistic analysis. Complex special applications can be carried out by connecting several devices to a main computer. If the cell tester is used, the voltages of the individual cells of the processed batteries are listed in the protocol. Defective cells can thus be clearly localised.

This ensures that only verifiably defective batteries are taken out of service, which is of great significance both in economic and ecological terms.

### Product features

- Besides preset battery profiles there is the option of entering new battery profiles
- Suitable for mobile and stationary use
- User-defined configuration of battery processing for commissioning, discharging, charging, testing, maintenance, cell voltage measurement
- Batteries that can be processed: leaded lead-acid batteries, sealed (open) lead-acid batteries, open nickel-cadmium batteries, gas-tight nickel-cadmium batteries (round cell construction), gas-tight nickel-cadmium batteries (prismatic construction), rechargeable silver-zinc batteries
- User support for permanent online help, step-by-step description of programme, programme selection via 3-digit number
- Monitoring and evaluation of the further usability of batteries through protocol printout
- Integrated self test

### Electronic protection functions

- Protection in the case of wrong or damaged batteries
- Battery overcharge protection
- Charger output protected against short circuits, reverse polarity and overvoltage



#### Technical data

Charging rated voltage	adjustable from 0.1 V - 50 V discharge: 0.5 V - 39 V
Charging current	adjustable from 0.4 A - 50 A discharge: 0.4 A - 50 A
End-of-charge voltage	adjustable from 0.1 V - 50 V
Trickle charge voltage	adjustable from 0.1 V - 50 V
Characteristic curve	selectable
Grid voltage	230 V AC $\pm$ 10 %
Grid frequency	50 Hz
Mains electricity	14 A (230 V)
Discharge current during grid failure	2 mA
Protection class	I
Casing / ingress protection	metal, coated, IP 21
Ambient temperature	-10 °C ... +55 °C
Cooling	regulated fan
Dimensions X x Y x Z	512 x 295 x 380 mm with outer casing
Weight	approx. 41 kg with outer casing

\* Customised versions are available on request. Technical data at 25 °C/77 °F

### Display

- Multifunction graphical LCD display with backlighting for date, battery type, assessment of capacity, operating guide, digital voltmeter and amperemeter

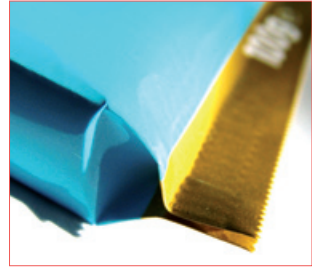
### Operation

- Mains grid switch
- Membrane keypad for entering all parameters
- Integrated graphics capable protocol printer





Photographs from: Steca, www.photocase.com



HOME TECHNOLOGY | INDUSTRIAL AND PROCESS TECHNOLOGY



AGRICULTURAL TECHNOLOGY | AUTOMOTIVE TECHNOLOGY



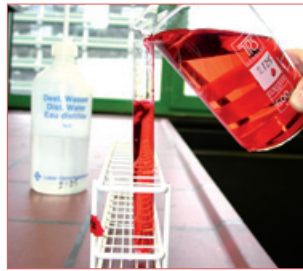
TRAFFIC-CONTROL SYSTEMS | RAILWAY TECHNOLOGY

## Experience the diversity

### Only at Steca

Steca wants to enthuse you with its services and product programme. The great diversity in virtually every field and area of application is typical of Steca. The 3,000 products on the market, which the company offers as an electronics service provider and manufacturer, are testimony to the diversity of the Steca brand.

The comprehensive Steca range ensures that your demands are met. This is what the people at Steca are working so hard for. Steca customers appreciate the wide diversity and vertical range of manufacture in all areas. And that's why our customers are not just customers, but business partners of many years standing.



CESS TECHNOLOGY | MEDICAL ENGINEERING



ENVIRONMENTAL TECHNOLOGY | INFORMATION TECHNOLOGY | MARITIME | BUILDING TECHNOLOGY



TECHNOLOGY | SOLAR TECHNOLOGY | BATTERY CHARGING SYSTEMS | CABLE TECHNOLOGY

### Full power for you

Steca guarantees top quality, safety and reliability, and places considerable emphasis on environmental compatibility during the development, construction, manufacture and distribution of its products.

### Certificates

**Steca is certified according to:**

- DIN EN ISO 9001:2000
- DIN EN ISO 14001:2004,

**audited according to:**

- TS 16949
- VDA 6.3

**and organised according to:**

- DIN EN ISO 13485:2003

**ZERTIFIKAT**  
**ISO 9001:2000**



bescheinigt hiermit, dass das Unternehmen

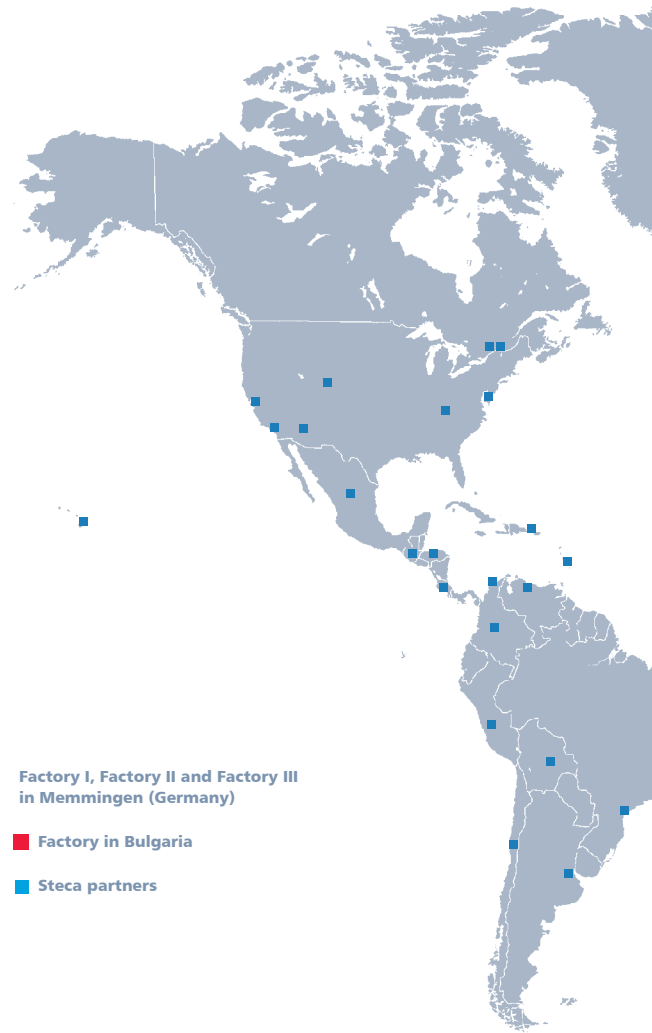
**Steca**

**ZERTIFIKAT**  
**ISO 14001:2004**



bescheinigt hiermit, dass das Unternehmen

**Steca**



Factory I, Factory II and Factory III  
in Memmingen (Germany)

■ Factory in Bulgaria

■ Steca partners

## Regional and international

### For you on-site

Three factories in Memmingen and a factory in Bulgaria ensure the success of the company.

Enthusiastic and motivated staff on site, an experienced international and multilingual sales team as

well as many sales partners and authorised wholesalers worldwide make Steca a significant company on both a national and international scale.



Headquarters and Factory I  
in Memmingen (Germany)





The production site  
in Bulgaria





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