

Product Information BAT 430



Automotive Aftermarket

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Description

- BAT 430 is an electronic charger for 12 and 24 Volt on board electrical systems this means that the BAT 430 can be applied to all lead acid batteries found on the market.
- With a maximum 30 Amps charging current the BAT 430 is a more powerful variety of BAT 415
- BAT 430 controls and runs the complete charging procedure so that the charging becomes quick, easy and safe.



Description

- BAT 430 is a professional battery charger for workshops, vehicle fleets, car dealers, fleet services,...
- BAT 430 is user friendly and safe in handling.
- BAT 430 stands for short recharge time and a risk less use, due to its electronic charging characteristics.



Description

BAT 415 and BAT 430 belong to the one product family.

Externally both charger differ only by the labeling, a different front panel and the weight.

Both chargers are suitable for 12V lead acid, AGM and Gel-batteries.

While the BAT 415 provides a nominal charging current of 15 A the BAT 430 can do up to 30 A.

BAT 430 offers also a 24V use and includes even an automatic detection of the voltage level.



BAT415



BAT430

Functions

- The device is reverse polarity and overload protected.
- Permanent charging and floating mode, (13,5V/max. 30A) is possible. (27V/30A)
- For a unconcerned battery exchange the device has a back up mode (12V/24V/2A).
- Charging current reduction for deep exhausted batteries.
- Electronic charge control → overcharge protection
- In accordance to DIN 40839 suitable for charging at vehicle electrical system
(sensible vehicle electronics)



Functions

Charging Technique

due to the new characteristic charging curve it was achieved that the BAT 430 is able to adapt to the different types of batteries like (maintenance-free, standard-, gel- or AGM batteries) automatically without switching

In addition the BAT 430 achieves a much quicker charging as conventional chargers due to its power supply unit (variable resistance)



BAT 430

Easy handling

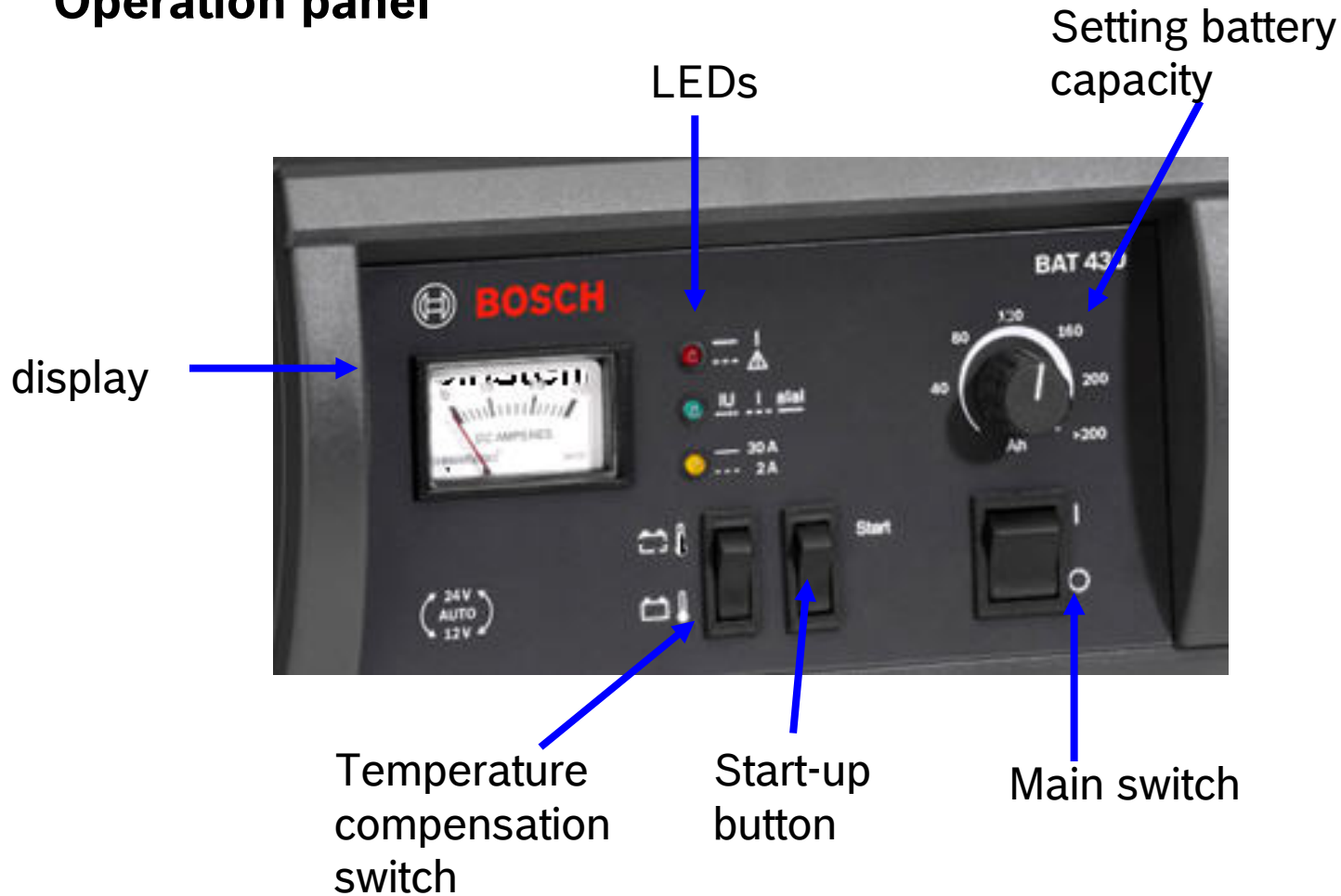
Connect device to power supply (230V)

Connect BAT 430 with the vehicles battery.

Switch on and observe the display.



Operation panel

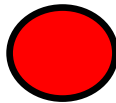
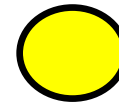
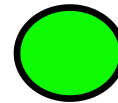
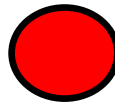




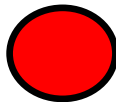
BAT 430

simple operation

3 LEDs show the different operation modes and battery status.



Red LED is active, when the main switch is in position: “on”



A flashing red LED shows reverse polarity connection



BAT 430

simple operation

3 LEDs show the different operation modes and battery status.

The **yellow** LED is showing 2 different modes.

Highlighted: BAT 430 is stabilizing the power supply to 13,5V/(27V). (e.g.: during repair phases of a car).

A yellow flashing LED indicates the back-up mode, for a battery change w/o losing radio code, ECU memory...



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BAT 430

simple operation

3 LEDs show the different operation modes and battery status.

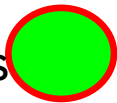
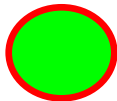
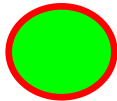
If you press “Start”

The **green** LED is showing 3 different modes.

Flashing fast: Main charging

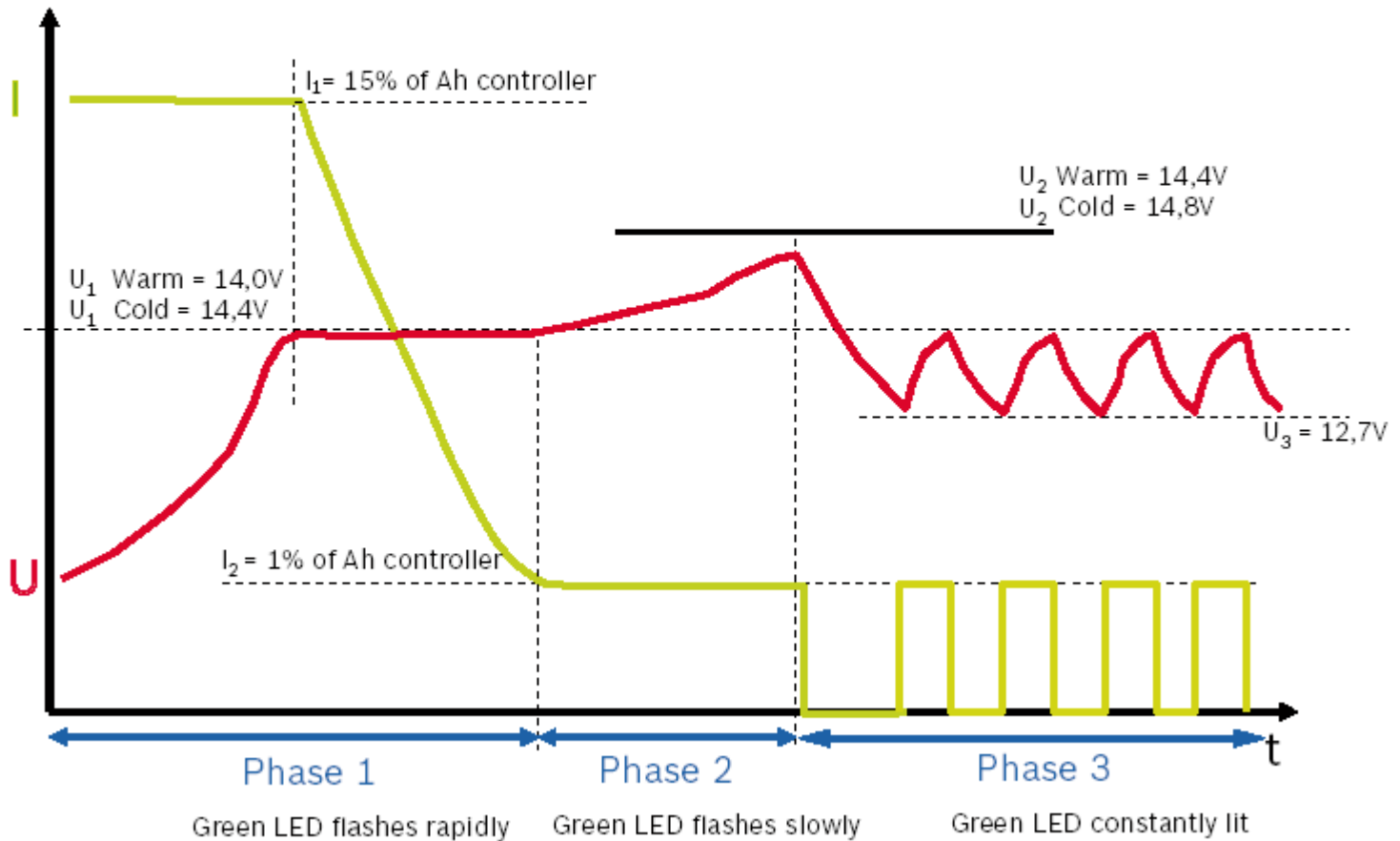
Flashing slow: Secondary charging

Highlighted: Battery full charged – float charge mode



Batterie Status

Characteristic charging curve



Special Features

- due to the application of a microprocessor the weight could be reduced significantly
- The BAT 430 can be applied to all type of Batteries in the market
- The charging device has got extreme compact dimensions
- Temperature compensation switch
- The trickle charging characteristic allows permanent charging
- Can be applied to conventional lead acid batteries as well
- Very easy in handling



Special Features

- Temperature compensation switch
- easy handling
- Automatic recognition of 12 or 24 Volt on board system
- roll up for charging leads at rear of device



Technical Data (1)

Battery types	maintenance free Batteries, standard-batteries, Gel- and AGM batteries
Battery Capacity	15-300 Ah (lead acid batteries) 15-200 Ah (Gel- / AGM batteries)
Case/housing	Sheet metal / PVC, solid
On board electrical systems	12 V and 24 V
Nominal current 12 V Nominal current 24 V	30 A 30 A
Charging current	infinitely variable adjustable, microprocessor steered
Characteristic curves	$I_1 U_1 I_2 a I_3 a I_3 \dots$
dimensions (B x H x T)	260 x 160 x 250mm
Length of charging leads	2,5 m



Technical Data (2)

Charging clamps	fully isolated
Charging at vehicle electrical system	yes
Trickle charging	yes
Tension limitation for 12 V Tension limitation for 24 V	14,0 V warm / 14,4 V cold 28,0 V warm / 28,8 V cold
Floating mode 12 V application Floating mode 24 V application	max. 13,5 V / 30 A max. 27,0 V / 30 A
Back up mode 12 V-mode Back up mode 24 V-mode	max. 12 V / 2 A max. 24 V / 2 A



Technical Data (3)

Overcharge protection	yes
Reverse polarity protection	Yes, only can be started when connected in the right way
Charging of deep exhausted Batteries	Yes, with an extreme low current
Additional power socket	yes
weight	5 kg



Product Features & Key Buying Factors (1)

- I_1 U_1 I_2 a I_3 a I_3-characteristic for maintenance-free batteries, standard batteries, gel-Batteries and fleece-batteries
- Charging current: variable speed, microprocessor controlled
- Short charging times thanks to the optimized charging control
- Charging at vehicles electrical system 12 / 24 Volts
- Floating mode operation and backup mode 12/ 24 Volt
- Trickle charging



Features & Key Buying Factors (2)

- Overcharging protection
- Reverse-polarity protection
- Charging of exhausted batteries
- LED's indicating the status of the system
- Temperature switch ($>15^{\circ}\text{C}/<15^{\circ}\text{C}$)
- Durable metal housing
- Documentation in 8 languages (Ger., Eng., Sp., Fr., It., Sv.,Port., Nl.)



Summary

The BAT 430 is a compact, solid electronic-charger with multifunctional application range. It has a good price performance ratio.

Various safety features and adjustment minimize the risk of wrong handling and allow at vehicle electrical system charging procedures without generating damages in the on board electrical system.

Because of BAT 430 suits for normal lead acid batteries as well as for Batteries with solid electrolyte, it is recommended as an allrounder for smaller sized Workshops as well as a second charging device in bigger sized workshops which run already a powerful charging device.



Summary

Customer groups for BAT 430:

- Automotive Workshops
- Car Dealer - / Dealer ship Workshops
- Transportation fleets
- painting - and body repair workshops
- Camper / Caravans Sales points
- special vehicle (Airport vehicle pool, ambulance, fire police, police etc.)
- User of 12V-Gel- and 12V-Vlies-Batteries

