

# Operating instructions

## Battery and time controller Type 830

**BAUSER®**

### Please note!

Read this operating instructions carefully. In the event of questions, please contact your dealer or BAUSER directly. Pay attention to the battery manufacturer's information and ensure that the installation and operating conditions described below are observed, since otherwise you may lose your warranty rights. Note in particular the information on the valid protection conditions in the section „Electrical connection“ or the protection regulations applicable in your country.

Type	Function
830	battery- and time controller
830.1	battery- and time controller with integrated service counter

### Functions

The BAUSER battery- and time controller of type series 830 monitors the residual capacity at discharge of „traction-batteries“ and it also registers operating hours. An additional relay contact protects the battery against exhaustive discharge. Optionally the controller can be delivered with integrated service counter.

The controller is adjustable to the different battery types by the exhaustive discharge voltage via potentiometer on the rear of the unit. In order to activate a new adjustment the unit has to be reset! The factory set standard discharge voltage is **1,73 V/cell**. When choosing another adjustment we recommend to verify the correct discharge voltage. The residual capacity of the battery is monitored via a multi LED display (2 red, 3 yellow, 5 green LEDs). If the residual capacity falls under the limiting value „pre-warning“, one red LED starts flashing. When reaching the discharge voltage, the 2 red LEDs flash alternatively and the relay contact (pins 3+4) opens. In order to complete e.g. a lifting operation, the relay contact can be closed one more time for approx. **30s** by switching the key-operated switch off and on. There are 2 possibilities to reset the controller:

- battery is separated from the vehicle: Reset voltage is **2,09V/cell** (reset voltage has to be exceeded for approx. 4 sec.).
- battery remains in the vehicle while charging: The unit tracks battery recharge and even recognizes not fully charged batteries. Battery recharge is indicated via flashing LEDs. In order to activate a new potentiometer adjustment a battery voltage of **2,35V/cell** has to be exceeded.

The operating hours are indicated by a LC display. Type 830.1: The current status of the service down counter is indicated for a period of 5 sec. every time the unit is turned on (or the key switch is turned on resp.). After termination of the service time (service counter = 0), the service counting status is indicated in the LC display (flashes). The service counter is resettable via the reset button on the rear of the controller. The key switch turns on the LEDs and relay and enables the hour counter inputs.

### Exhaustive discharge voltage in V/cell (adjustable via potentiometer on the rear of the controller)

A	B	C	D	E	F	G	H	I	J	K
1,57	1,63	1,68	1,73	1,78	1,82	1,84	1,86	1,89	1,91	1,93

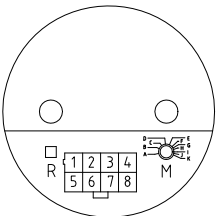
### Delivery

The BAUSER battery- and time controller is delivered with mounting staff and plug connector

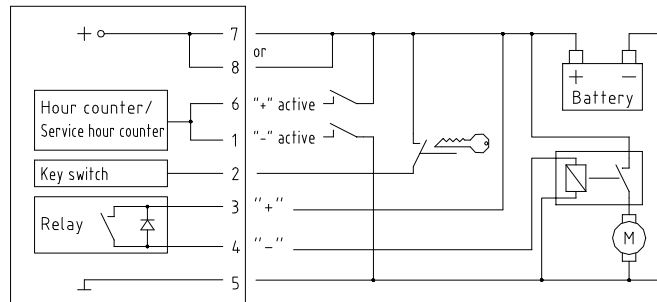
### Mounting

The controller is applicable for flush mounting in a boarding dash (or similar application). Cutout  $\varnothing$  52mm (optionally with adapter for cutout  $\varnothing$  60mm order code:..../735).

rear view:



- 1: hour counter input -
- 2: key-operated switch +
- 3: relay +
- 4: relay -
- 5: battery -
- 6: hour counter input +
- 7: battery +
- 8: battery +
- M: adjustable potentiometer
- R: reset button (option)



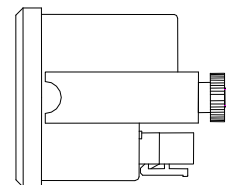
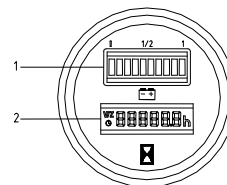
### Electrical connection

The instrument must be installed by an authorised specialist. The relevant conditions must be observed, in particular the operating voltage of the controller must agree with the rated voltage of the battery (see rating plate).

**Check the correct polarity of the relay contacts !**

### Function and operation

- 1 = LED indication (2 red, 3 yellow, 5 green) = battery controller
- 2 = LC display = hour counter



### Technical data:

Operating voltage (V) tolerance $\pm$ 25%:	12	24	36	48
Current consumption max. (mA):	50	35	35	25
EMC:	emission EN 55011			
	immunity EN 50082-2			
	(in case of excess-voltages that are above the approved EMC/EMI protection, we recommend a shielding from custom's side)			
Vibration:	EN 60068-2-34 (1g, 10-500Hz) / SAE J1378 (20g, 10-80Hz)			
Shock:	EN 60068-2-27 (30g, 18ms) / EN 60068-2-29 (25g, 6ms) / SAE J1378 (55g, 10 ms)			
Relay contact:	opens when reaching discharge voltage, voltage free, breaking capacity 12VDC/5A, 24VDC/5A, 36VDC/3A, 48VDC/2A			
Signal inputs:	minimum pulse duration 0,5 sec.			
Display:	multicolor 10-bar LED display (2 red, 3 yellow, 5 green) = battery controller			
	LC display (6 digits) = hour counter			
Counting range:	hour counter up to 99999,9h			
	service counter (option) up to 9999h			
Time divergence:	max. 0,02%			
Ambience:	-30°C to +70°C, max. 95% humidity			
Protection class:	IP65 frontal			