

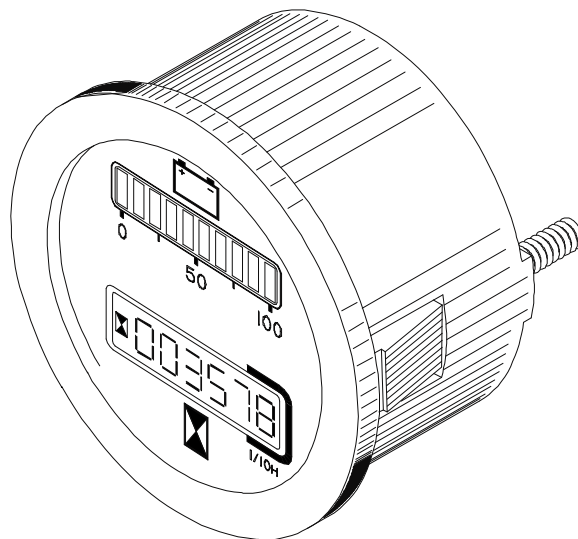


elektrosistem



HCBLM HCBLMR

MICROPROCESSOR BATTERY CHARGE INDICATORS WITH HOUR METER



The microprocessor aided battery charge indicators with digital hour meter series HCBLM and HCBLMR use a flexible algorithm to control discharging and can be used for all applications with a lead acid battery. HCBLM is a standard model whereas HCBLMR is equipped with a relay for lift lockout.

They are extremely precise in controlling discharge level and are therefore able to extend battery life.

OPERATION - Supply terminals must be connected between the battery negative wire and the positive wire coming from the key switch. The indicator does not operate properly when directly connected to the battery, it should be series connected with the key switch. When switched on the in-

dicator measures battery voltage to check whether a charging process has occurred.

Battery charge indication can be reset only when battery voltage is at least 2.08 V/cell (battery charged). The length of the light bar decreases proportionally according to battery discharging. In the "R" model when 5% of charge level is reached the last LED begins flashing to signal the lockout until discharging is total, then the last two LEDs of the light bar flash alternatively and the lockout relay is excited.

It is important to bear in mind that a complete discharge of a lead acid battery causes damages that can limit battery life and capacity. In order to protect the battery this indicator blocks the operation preventing deep discharge.

TECHNICAL FEATURES

- Microprocessor aided indicator.
- Ten light bars for battery charge indication, each signalling 10% of charge level.
- Lockout controlled by a change-over relay (only for "R" model).
- Control of permanent memory on EEPROM, no buffer battery for storing.
- Protection against battery polarity inversion.
- Standardized case, 52 mm diameter.
- Possibility to fit an external wire on request to enable the digital hour meter (controlled in positive).

TECHNICAL SPECIFICATIONS

Running voltage	12-24-36-48-60-72-80-96V
Reset voltage	2.08 V/cell
Max. current absorbed	50 mA (60 mA only for R model)
Max. running temperature	-20°C +40°C
Max. relative humidity	90% at 25°C

Specifications subject to change without notice

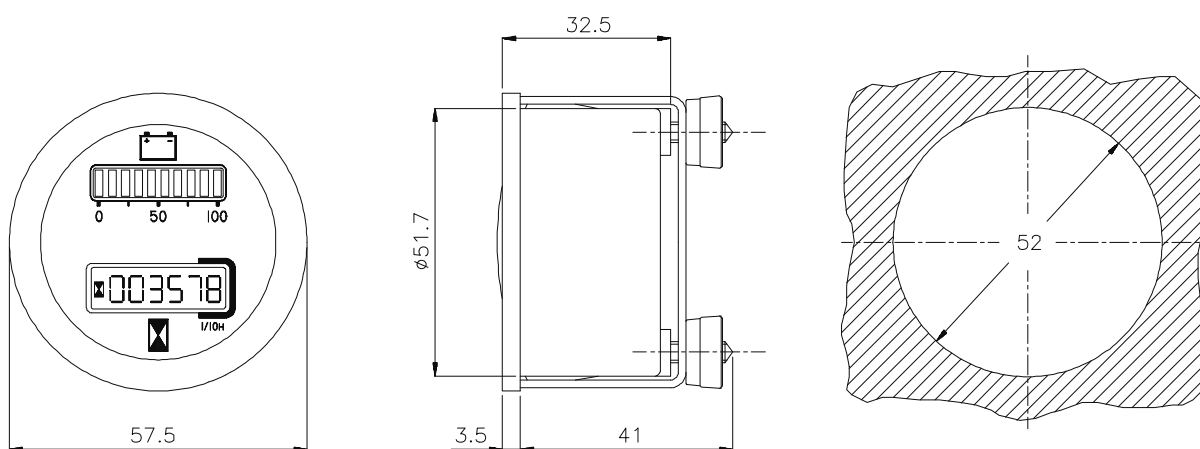


MODELS

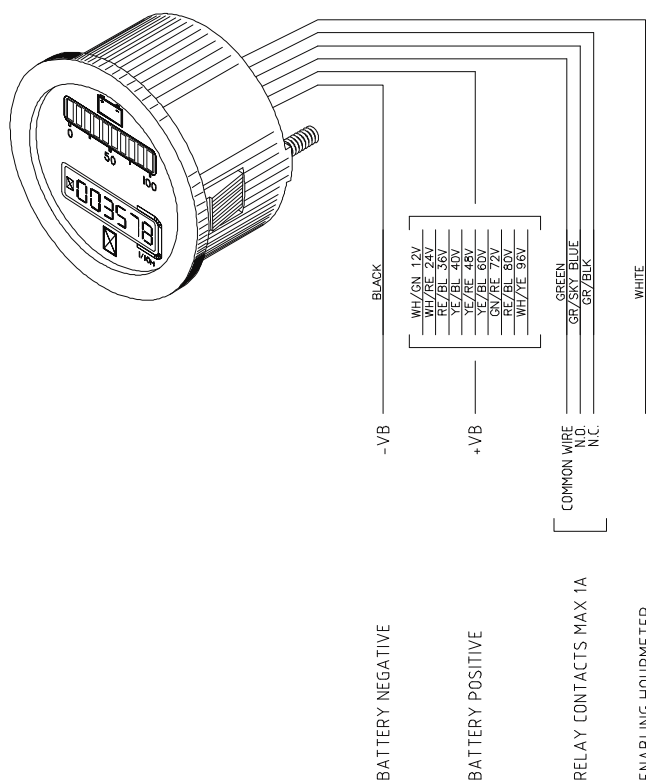
MODEL	12V	24V	36V	48V	60V	72V	80V	96V
HCBLM	•	•	•	•	•	•	•	•
HCBLMR *	•	•	•	•	•	•	•	•

* The lift lockout contact has a max. capacity of 1A at 24VDC.

DIMENSIONS



WIRING DIAGRAM



N.B. The data of lockout relay are referred to discharged battery.

To enable the hour meter connect the white wiring to battery positive.