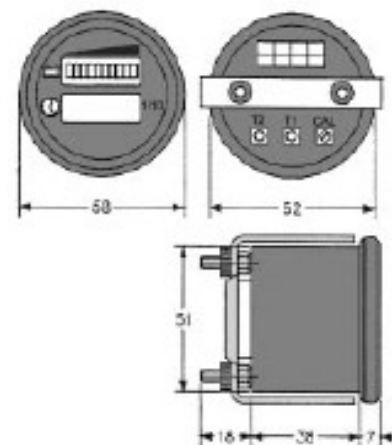


BATTERY CAPACITY METER 24 - 128 V DC TYPE BHCP

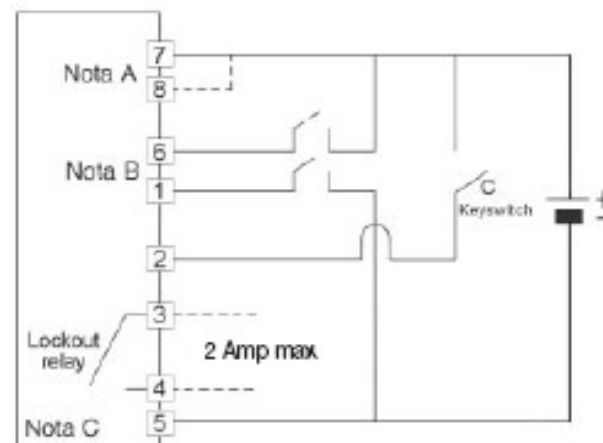


It's the ultimate generation of battery capacity meter, based on microprocessor technology with highly sophisticated algorithms, it assures superior monitoring accuracy to measure capacity for batteries: Lead acid - Gel - AGM. The analysis of state of charge is made by using adjustable and customised parameters depending by the application and battery type. The nominal voltage is automatically selected by microprocessor when meter is switched on. Moreover the meter displays total working hours, trip hours, and count down timer for maintenance purpose. A super light of 10 segments LED bar graph shows the state of charge - 7 green LED light up un sequence from right to left side following the battery discharge - At 30% capacity the first red LED will light up - then at 20% the second and third will flash simultaneously and lock out relay will be activated. The meter is able to track battery state of charge following opportunity state of recharges irrespective of remains connected during charging process.

Cat. Numbers	BHCP2480	BHCP96128
Norm. Battery Voltage	24 - 36 - 48 - 72 - 80 VDC	96 - 120 - 128 V DC
LCD Hours count display	99999,9 Total hours	
Lock out relay	Normally closed - 2 Amp	
LED Display	10 LEDS (7 green - 3 red)	
Hours resolution	0,1 Hour	
Data storage	25 years EEPROM	
Reset levels	OCR 2,08 V/C HVR 2,35 V/C	
Environment protection	IP 66	
Shock	30 g	
Connector	Molex minifit: housing MLLX 5557R-Contact 5556T	
Ambient temperature	- 20 °C to + 60 °C	
Housing	ABS Black	
Front	Polycarbonate with bevelled black bezel	
Reverse polarity protection	Yes	



WIRING DIAGRAM



NOTE A

PIN 7 always connected to B+ for 24 - 36 - 48 - 72 - 96 - 128 V DC

PIN 8 must be connected to B+ only for 80 - 120 V DC

NOTE B

PIN 6 switch on hourmeter with B+ while PIN1 with B-.

Both can be connected for automatic counting.

NOTE C

PIN 3 - 4 can be connected for general purpose or to lock out pump motor contactor.

WIRING FOR AUTOMATIC HOURCOUNTER

Connect PIN6 to PIN2 (disconnect PIN6 from B+)

Connect PIN 1 to PIN5

For every voltage variation corresponding to current supply from battery the counter will activate automatically and timer symbol will flash.

After 30 secs. without voltage variation the counter will be deactivated and timer symbol stops to flash.

SETTINGS OF BATTERY CAPACITY METER

The parameters to adjusted, according battery and application type will appear on hourcounter LCD display in sequence with the below symbol:

- cu 1** BATTERY TYPE
1 Lead acid battery heavy duty
2 Gel battery
3 AGM battery
4 Lead acid battery light traction
- dE 1.73** CELL VOLTAGE AT FULLDISCHARGE
Adjustable according battery type (cu) selected (see table)
- rE 2.08** CELL VOLTAGE FOR REST WHEN KEYSWITCH ON
Adjustable according battery type (cu) and Cell voltage (dE) selected (see table). It must be always higher than dE.
- ti 60** DISCHARGE ANALYSIS TIME
High value for long discharge cycle and viceversa.
Adjustable from: 30 to 180 secs.
- to 0** COUNT DOWN TIMER
(see paragraph Hourmeter Settings).

Press button T1 to select parameter to be adjusted, within 5 secs press T2 and selected parameter will flash, turn CAL to fix requested value. Press T2 confirm value. After 5 secs the display will return to hourmeter function.

cu 1	d E (V/Cell)		r E (V/Cell)		t i (secs)	
Battery type	Min	Max	Min	Max	Min	Max
1	1,65 to 1,80	1,96 to 2,11	2,30	30 to 180		
2 - 3	1,72 to 1,87	1,93 to 2,08	2,30	30 to 180		
4	1,77 to 1,92	1,94 to 2,09	2,30	30 to 180		
DEFAULT VALUE						
cu 1	d E 1.73		r E 2.08		ti 60	

HOURLY METER SETTINGS

The timer symbol flashes where hourcounter will be activated. Two main values are displayed.

ABSOLUTE VALUE
It counts the total key switch or working hours depending by wiring used. Such value can not be reset.

TRIP VALUE
It's shown on display by letter P. Press T2 to read trip value when hourcounter is activated. Press T2 for 5 secs. to reset value.

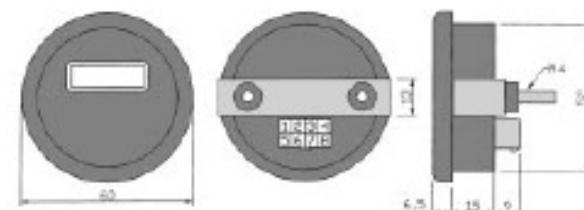
COUNTDOWN TIMER
Press T1 select parameter. Press T2 and set requested hours with CAL. Confirm value pressing T2. After 5 secs total hours will be displayed. The counter down timer will activate and during last hour the absolute value will flash. Elapsed 60 minutes the lockout relay will open.

BATTERY CAPACITY METER 12 - 80 V DC TYPE BCP - MCP

Such meters without hour counter use same microprocessor technology as BHCP. They are presented by manufacture with parameters for Lead Acid and Gel batteries.



BCP



Cat. Numbers	BCP2480	BCP121A	MCP1224	MCP3648
Nom. Battery Voltage	24-36-48-72-80 V	12 V	12 - 24 V	36 - 48 V
knock-out size	Ø 52 mm		41,5 x 26,5 mm	
LED Display	10 Led segment (7green + 3 red)			
Lock out relay	2 AMP NC - NA		-	
Environment protection	IP 66			
Mechanical shock	30 g			
Ambient temperature	OCR 2,08 V DC - HVR: 2,35 V DC			
Reset Levels	IP 66			
Connectors	Molex minifit: Housing 5557R Contacts 5558T		AMP/TYCO Faston 6,35 mm	
WIRING PINS:	2 Relay N.O. Contact 3 Relay N.C. Contact 4 Relay Common Contact 5 Battery - 7 Battery + 8 Battery + (only for 80 V) 1 - Non collegato per tempo analisi scarica 180 sec. Not connected for discharge analysis time 180 sec. 1 - B+ Per tempo analisi scarica 60" B+ For discharge analysis time 60" 6 - Non collegato per V/CELLA a fine scarica 1,73 V Not connected for V/CELL full discharge 1,73 V 6 - B+ Per V/CELLA a fine scarica 1,85 V B+ For V/CELL full discharge 1,85 V		PIN3 B - PIN2 B+	



MCP

