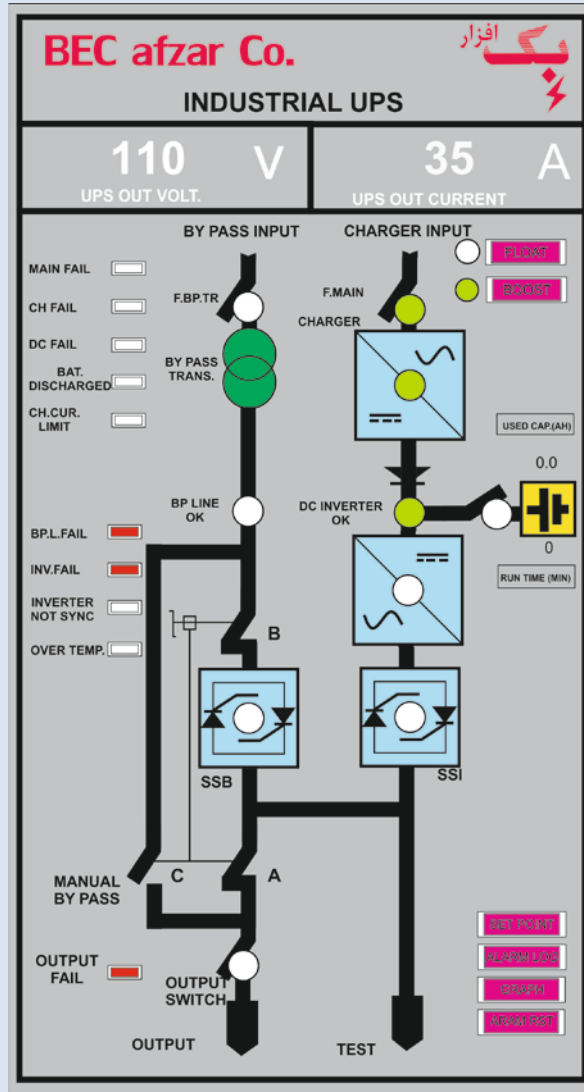
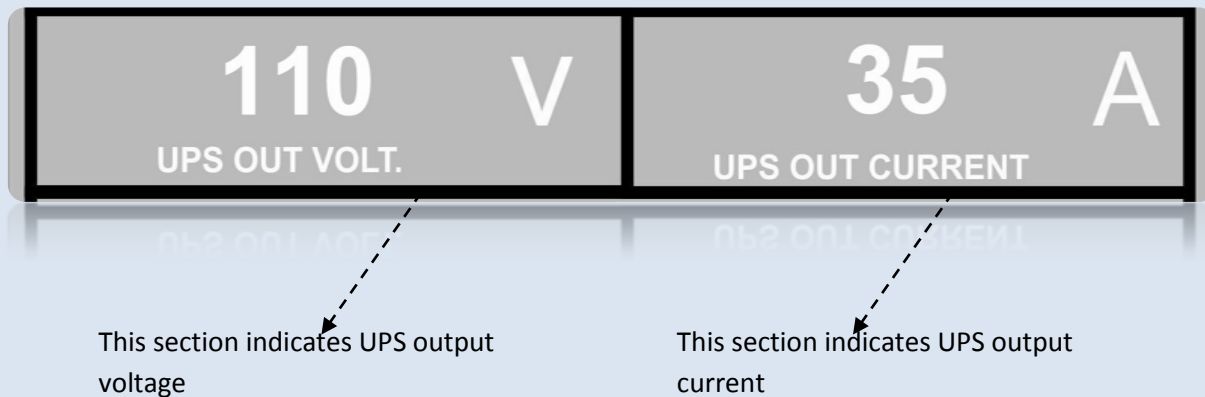


BECAFZAR

INDUSTRIAL UPS

HMI MONITORING SYSTEM



HMI panel description:**Different charger modes selector button :**

- 1- FLOAT
- 2- BOOST

NOTE 1: after pre set time charger will return to float mode

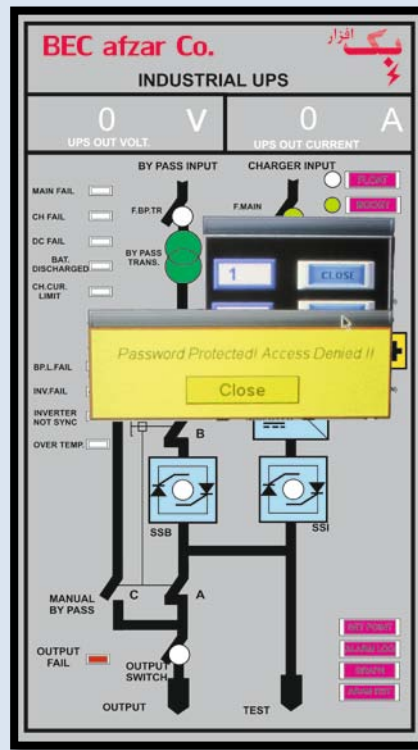
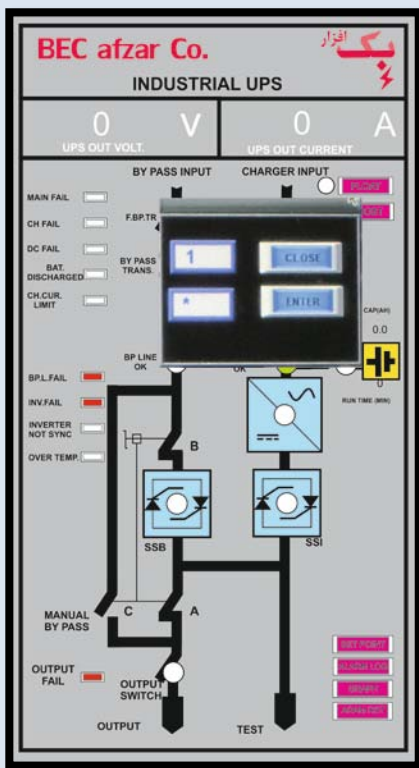
NOTE 2: adjustment of float and boost voltage is possible by P14,P13 on charger PCB.

- 3- **AUTOMATIC mode:** if main power black-out take place longer than pre set time on HMI panel or battery voltage drops below the pre set level on PLC then the system will apply BOOST charge automatically and after pre set time charger will return to FLOAT mode.

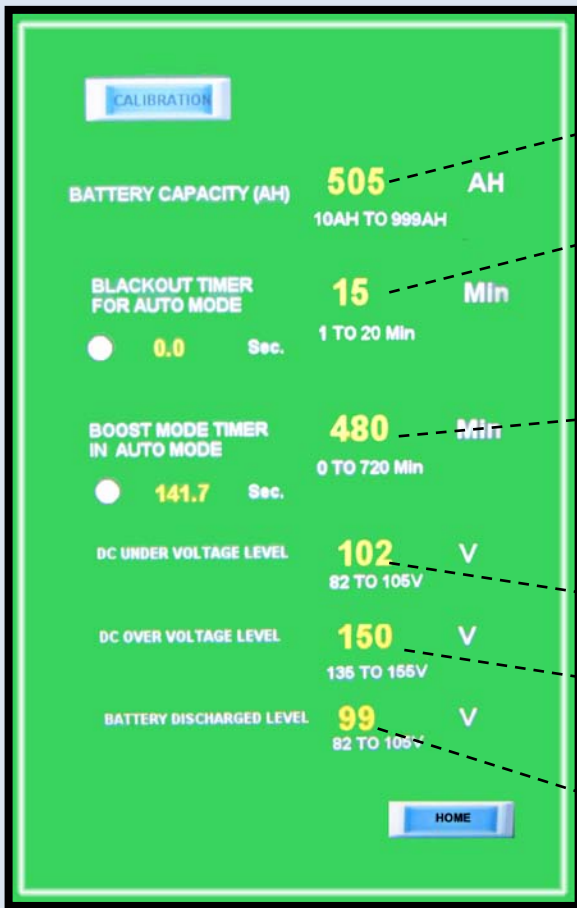
ALARM RESET button: use this button as alarm silence.

SET POINTS BUTTON:

By pressing this button and entering correct password you can enter to set points page.



You can adjust some of parameters of system in this page :



You can enter the capacity of the battery set by touching the yellow number.

You can change the pre set time for main power black-out by touching the yellow number.(this value is used for automatic mode pre condition)

You can change the boost time by touching the yellow number.(this value specified that how much time the boost charge will be applied)

You can change the DC under voltage level by touching the yellow number.

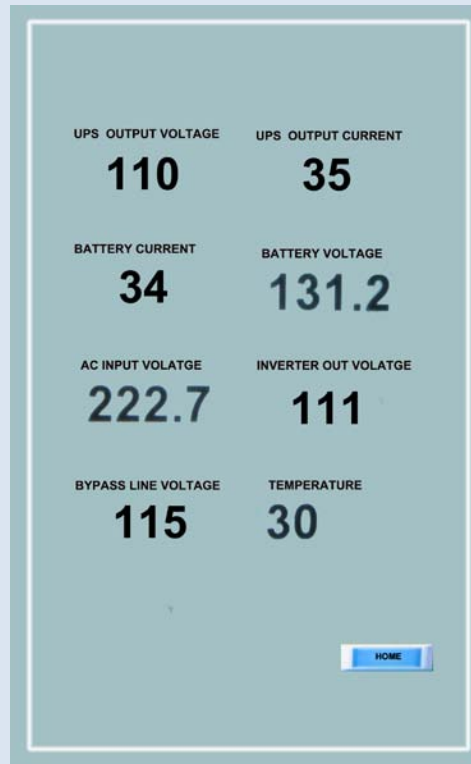
You can change the DC over voltage level by touching the yellow number.

You can change the battery discharged voltage level by touching the yellow number.

Note : 3 above voltage level only specify the HMI alarm level and they don't affect on system hardware.

The protection levels which perform DC cut-off or inverter cut-off are adjusted in the charger & inverter PCBs.

In this page by pressing CALIBRATION button you can enter following page:



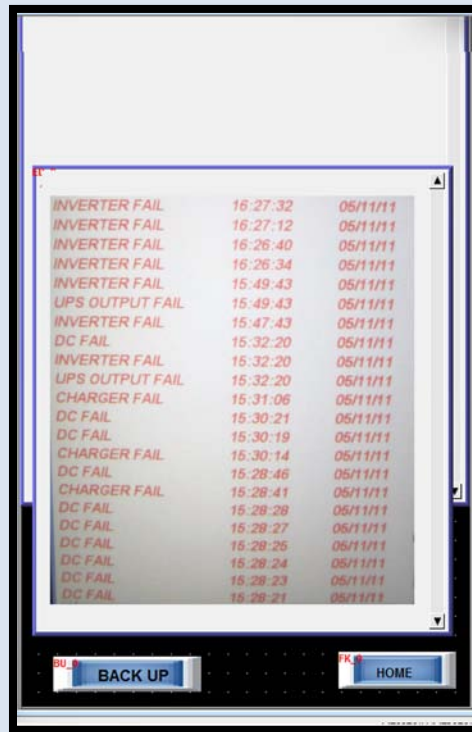
This page uses for reading the important values of system as above, also this page is used in the factory tests for adjusting interface circuits.

Home: by pressing this button you can go to main page

ALARM LOG:

When you click on this button you can enter the event log page.

In the event log page you can see all the alarms with their occurring time.



INVERTER FAIL	16:27:32	05/11/11
INVERTER FAIL	16:27:12	05/11/11
INVERTER FAIL	16:26:40	05/11/11
INVERTER FAIL	16:26:34	05/11/11
INVERTER FAIL	15:49:43	05/11/11
UPS OUTPUT FAIL	15:49:43	05/11/11
INVERTER FAIL	15:47:43	05/11/11
DC FAIL	15:32:20	05/11/11
INVERTER FAIL	15:32:20	05/11/11
UPS OUTPUT FAIL	15:32:20	05/11/11
CHARGER FAIL	15:31:06	05/11/11
DC FAIL	15:30:21	05/11/11
DC FAIL	15:30:19	05/11/11
CHARGER FAIL	15:30:14	05/11/11
DC FAIL	15:28:46	05/11/11
CHARGER FAIL	15:28:41	05/11/11
DC FAIL	15:28:28	05/11/11
DC FAIL	15:28:27	05/11/11
DC FAIL	15:28:25	05/11/11
DC FAIL	15:28:24	05/11/11
DC FAIL	15:28:23	05/11/11
DC FAIL	15:28:21	05/11/11

At the bottom of the screen, there are two buttons: "BACK UP" and "HOME".

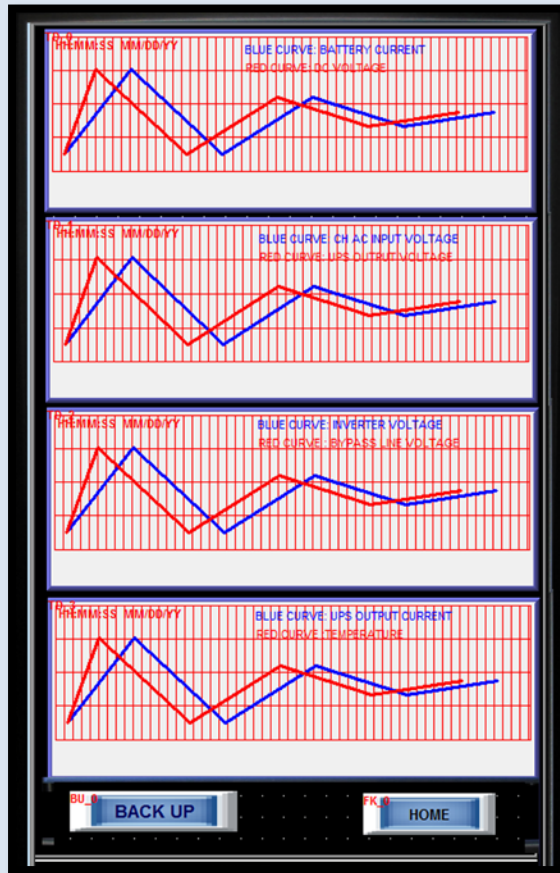
BACK UP: you can insert a flash memory in to HMI special socket and then by clicking on the back up button you will have the file of recorded events on your flash memory. For reading this file you should use the HMI software.

GRAPH button:

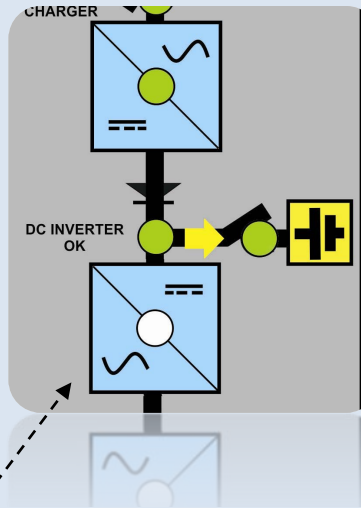
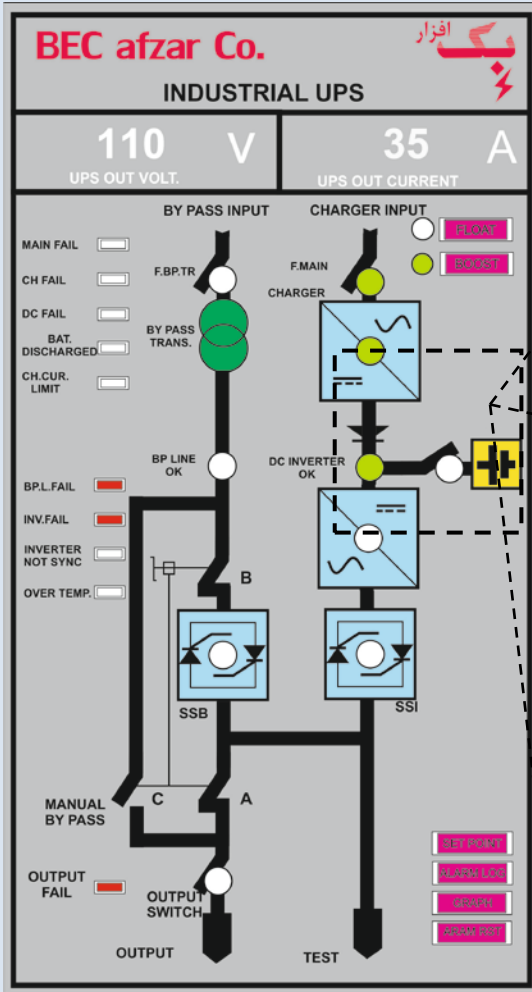
Click on this button to enter the curves page.

As you can see bellow 8 important parameters of the system have been indicated in this page

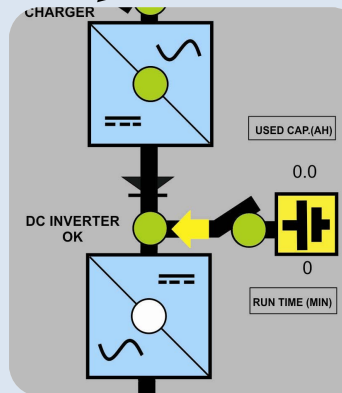
The HMI read the values each 0.5 sec and shows the data in real time trends.



BATTERY CHARGING / DISCHARGING ARROW:



Indicates battery charging state



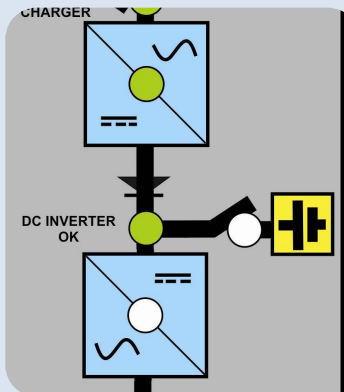
Indicates battery discharging state

USED CAPACITY

It indicates the approximate value of used capacity in each power outage

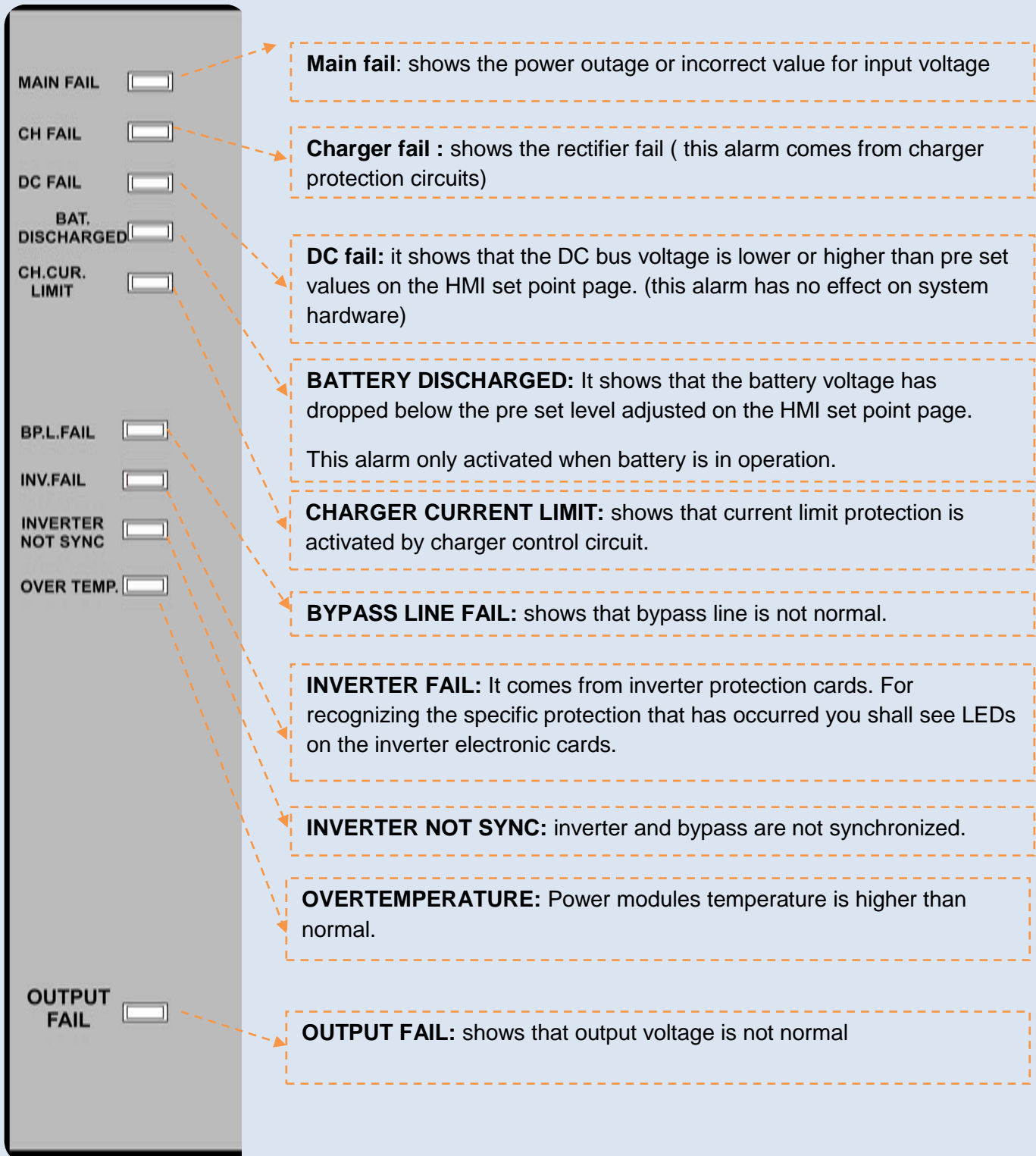
RUNTIME:

It indicates the approximate value of run time

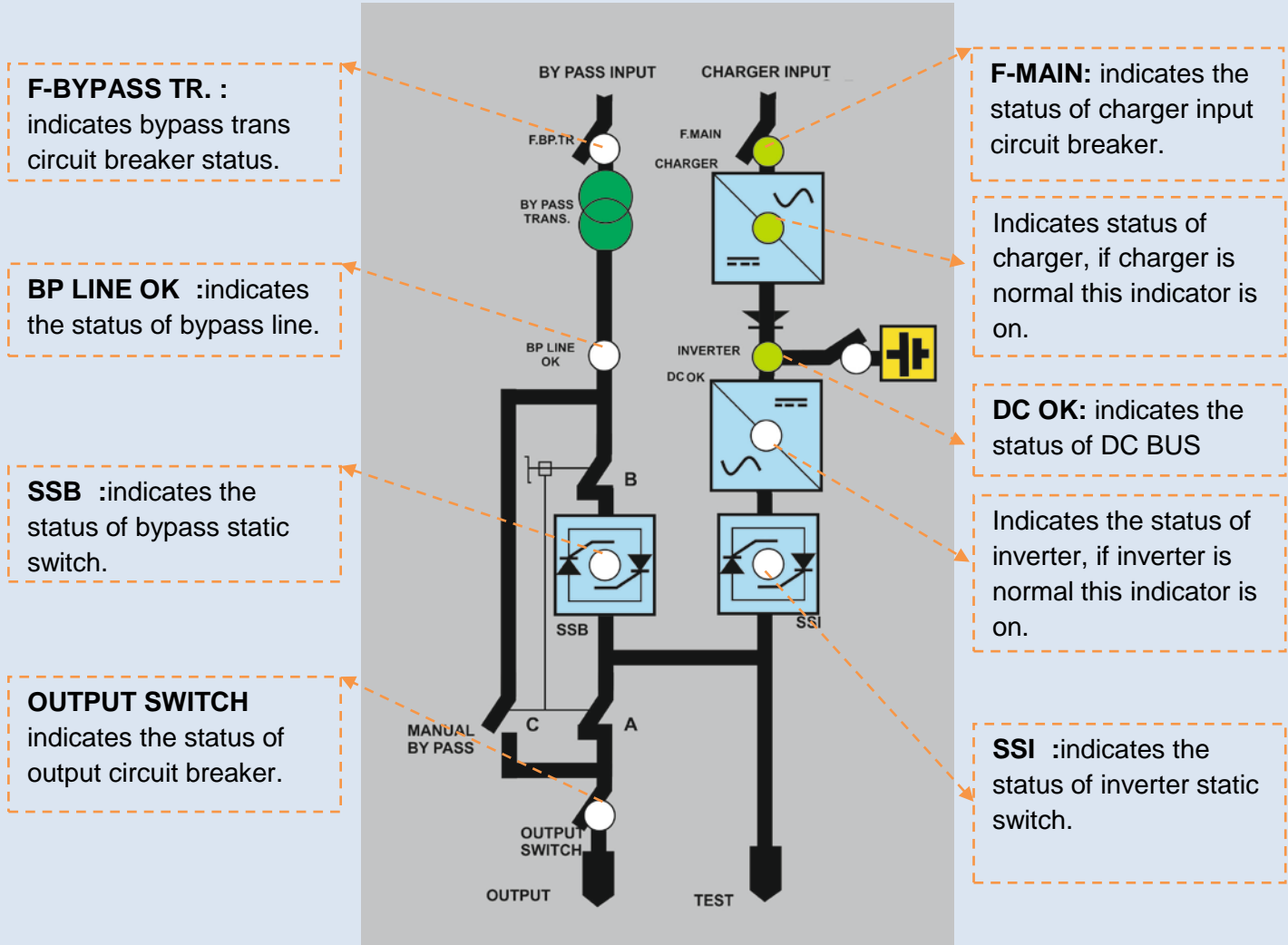


Indicates that battery current is very low (battery charged or battery disconnected)

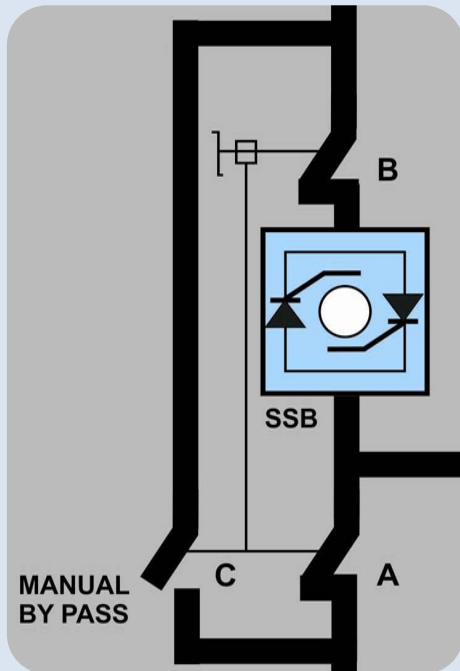
Alarms :



INDICATORS:



Three positions make before break bypass switch:



1. **AUTO** : this is the normal position of this switch which the A and B contacts are closed and C contact is open.
2. **TEST** : in this position B and C are closed and A is open. This position is used for test.
3. **MAINTENANCE BYPASS**: in this position A and B are open and only C is closed.