BCM

02.11.2007 /JAK

Basic Central Monitoring system TST1809

BCM unit is separate module which connects central battery units to the same system. BCM can monitor the status of different central battery units and also battery- and luminaire tests can be launched from BCM.

Every central battery unit needs to have XST1901 installed which communicates with BCM.

XST1901 board includes next:

Address DIP which is used to give address to the central battery unit
4 inputs to monitor status of relays
one relay to remotely control central battery unit to battery usage
one output which is used to launch luminaire test (this feature works only if central battery unit is of type TK23xxC)

TST0901 board gets it's operating feed from BCM unit through bus +24V, DATA, GND

RAJAPINTA are relay outputs of central battery units so the central battery unit can be of any type that has this relays.

BCM unit includes three different boards

XST1801	manages data transfer and monitor central battery units
XST1802	acts as power source and input/output board
TST0801	manages printing and PC connection

Function

When BCM is turned on it immediately checks how many central battery units are connected to it and what is the status of different relays. This information is stored to Configuration memory from where it is used as basic data to which later results of tests are compared.

following actions can be launched from BCM:

Remote control
Battery tests
Luminaire tests

BROWSE button is used to browse the status of different central battery units. LEDs indicate the possible changes in state of relays. LEDs also indicate if central battery unit is running luminaire or battery test.

BATTERY TEST button is used to launch battery test. Test can be interrupted by pressing this button again and after appr. 20 seconds the test ends.

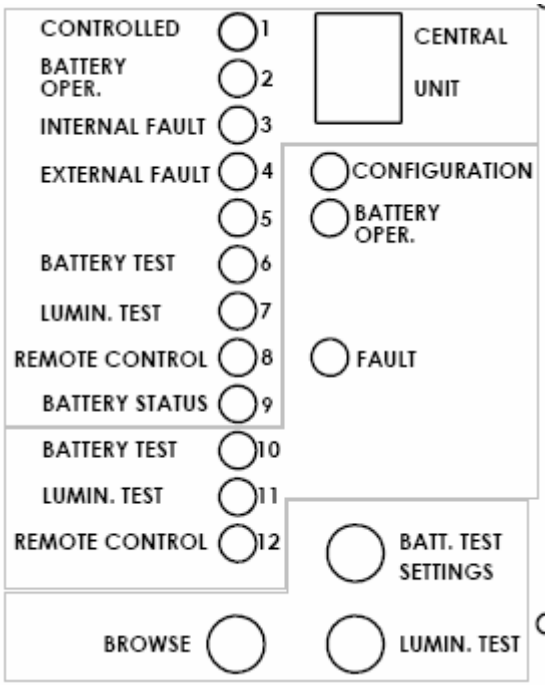
LUMINAIRE TEST button is used to launch luminaire test. (This feature works only with TK23xxC)

REMOTE CONTROL button is used to remotely force central battery units to battery mode. This can be interrupted by releasing button.

In normal mode BCM rotates the number of different central battery units in the display. Also the status of current central battery unit is shown in display.

If BCM is in normal mode and button of desired test is pressed the test will start on all central battery units.

If browse button is used to choose one central battery unit and test button is pressed, the test will start only on desired central battery unit.



1 Controlled	lit if this central battery unit is under monitoring of BCM
2 Battery operation	Indicates if central battery unit is on battery operation mode
3 Internal fault	Indicates if central battery unit has internal fault
4 External fault	Indicates if central battery unit has external fault (mostly luminaire fault)
6 Battery test	lit if central battery unit has battery test currently running
7 Luminaire test	lit if central battery unit has luminaire test currently running
8 Remote control	lit if central battery unit has been remotely forced to battery mode
9 Battery status	lit when central battery unit has succeeded in battery test result. Otherwise LED is not lit
10 Battery test	lit if at least one central battery unit has battery test currently running
11 Luminaire test	lit if at least one central battery unit has luminaire test currently running
12 Remote control	lit if at least one central battery unit has been remotely forced to battery mode
Configuration	Blinks if configuration is currently running
Batt. oper.	lit if at least one central battery unit is currently on battery mode
Fault	lit if at least one central battery unit has active fault

Example of launching a test

Use browse button to choose number 2 to the display. Now status of this central battery unit is shown in LEDs. Press remote control button and LED 12 is lit. LED 8 starts to blink first and after that LED is constantly lit as this central battery unit has been changed to remote control mode. Remote control mode can be ended by releasing remote control button. If remote control is continued and simultaneously the central battery unit will go to deep discharge mode, the remote control will be ceased.

Battery test can be launched in same way. Please note that central battery unit will not change to battery mode immediately. Press Battery test button until led 10 starts to blink. Now after approximately 20 seconds the central battery unit will start battery test and LED 10 is lit constantly.

LED 6 indicates that chosen central battery unit is currently running battery test. If central battery unit succeeds in battery test the battery status LED will be lit. If test fails the battery status LED will blink. Battery status LED can be reseted by starting a new battery test and interrupting it within one minute.

Battery test button can also be used to access clock settings. When battery test is running and LED 10 still blinks and any button is pressed the test will interrupt and settings menu is activated.

Browse button is used to choose what is changed and Test button is used to make the changes.
Battery test button can be used to go back to start in settings.
For example year is 2008, week number is 45, day is 23 and clock is 12:27. Browse button is used to move forward in following menu.

1	Tens of the year setting	20**0**8
2	Specific year	200**8**
3	Tens of the week	**4**5
4	Specific week	4**5**
5	Day	1 Mon, 2 Tue, 3 Wed, 4 Thu, 5 Fri, 6 Sat, 7 Sun
6	Tens of hours 12	
7	Specific hour	12
8	Tens of minutes	27
9	Specific minute	27
10	Battery test duration	Number choosed multiplied by 30 minutes
11	Battery test mode	0 = battery test only manually 1 = battery test automatically
12	Luminaire test mode	0 = luminaire test only manually 1 = luminaire test automatically

Automatic battery test time is in beginning of weeks 26 and 52
Automatic luminaire test time is every day at 24:00 (12:00pm)

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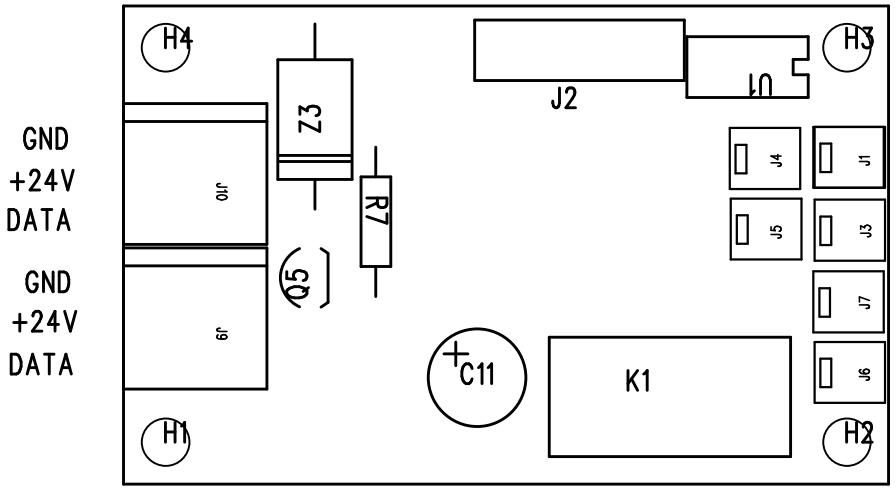

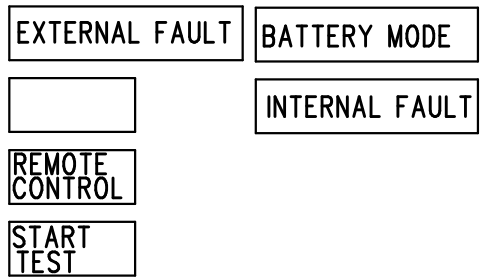

CONNECTIONS TO
CENTRAL BATTERY UNITS

TK23xxC		TKT65xx		TKT41xx	
15 16	6 7		16 18		4 5
	3 4		1 3		1 3
12 13		7 8		7 8	
11 10					

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