



# BOSCH BCM-0000-B Battery Controller Module Installation Guide

[Home](#) » [Bosch](#) » BOSCH BCM-0000-B Battery Controller Module Installation Guide 



# BOSCH

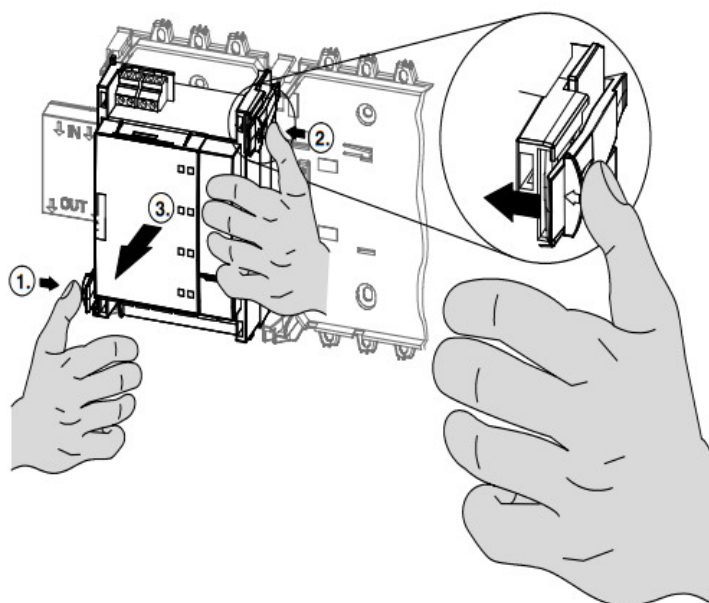
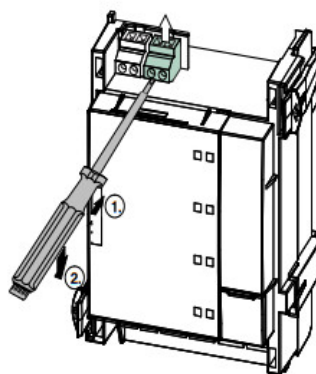
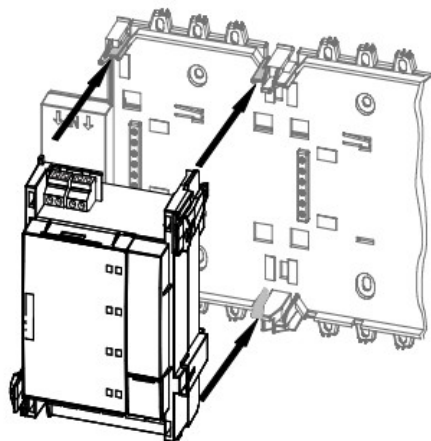
## BCM-0000-B Battery Controller Module Installation Guide

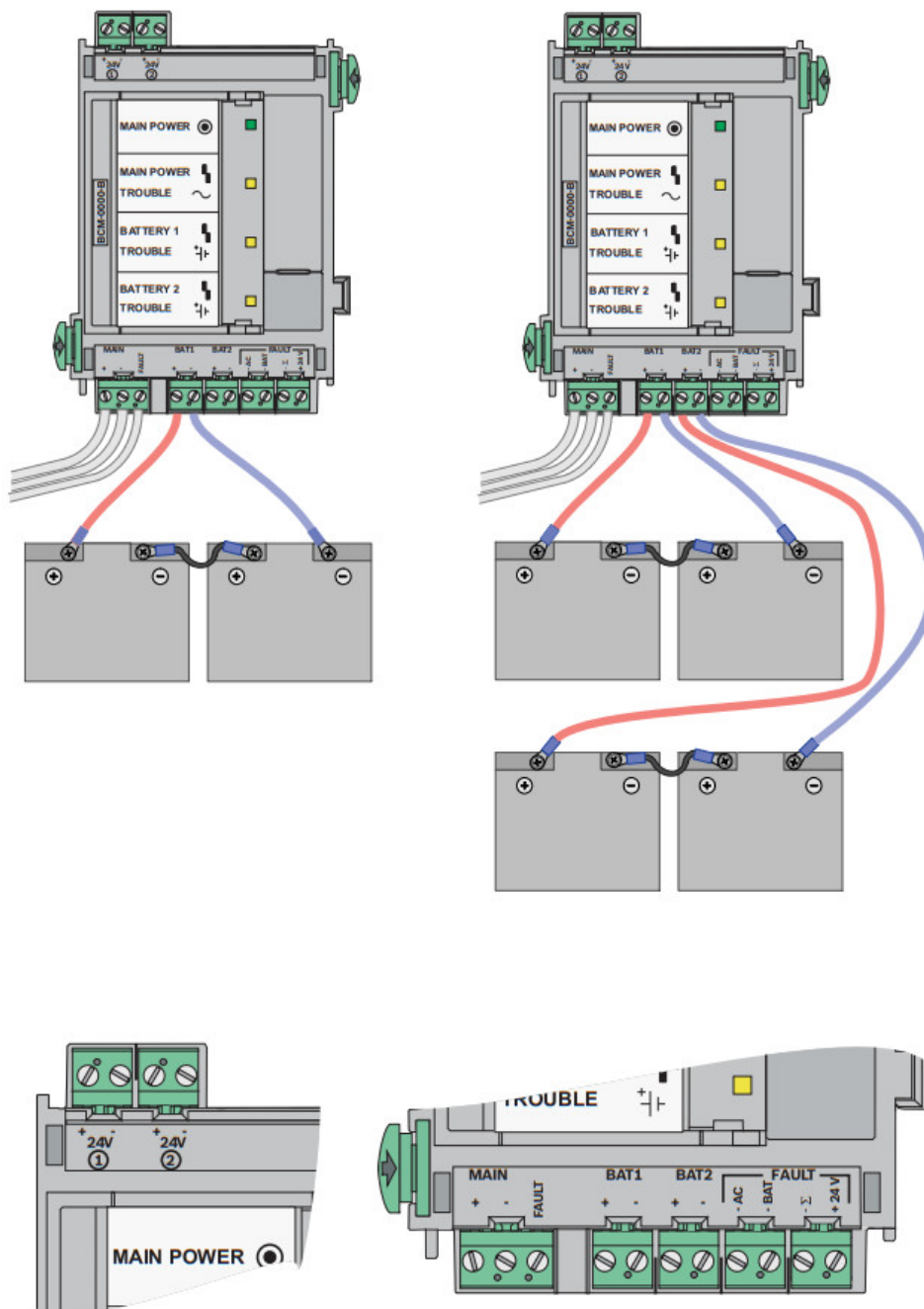
### Contents

- [1 BCM-0000-B Battery Controller Module](#)
- [2 Safety Notes](#)
- [3 Functions](#)
- [4 Terminal assignment](#)
- [5 Technical Specifications](#)
- [6 Documents / Resources](#)
  - [6.1 References](#)

**BCM-0000-B Battery Controller Module**







## Safety Notes



### NOTICE!

- Installation must only be carried out by authorized personnel.
- The BCM-0000-B can only be used with panel controllers FPA-1200-MPC and MPC-xx00-B with software versions from 2.1 onwards.
- The total current for all connected components, including the battery charge current, must not exceed 6 A.
- The 24 V switch outputs must not be connected in parallel.
- The batteries connected to BCM-0000-B must all be the same type and have the same electrical features.
- The length of the cable on the fault switch outputs must not exceed 3 meters (approx. 9.8 feet).
- The cables on the fault switch outputs must only be installed within the housing.

## Functions

The module monitors the power supply for the complete panel and regulates battery charging as a function of time and temperature. The button has three functions, which are dependent on the status of the battery controller module:

- The four module LEDs light up as a confirmation and LED test each time the button is pressed.
- If the batteries have a voltage of between 18 V and 21 V, the battery loading procedure can be started manually. Please note that a power supply must be available.
- The 24 V switch outputs can be reset. The switch output is deactivated if a fault occurs.

## Terminal assignment

See drawing on page 4.

Labeling	Connection
Upper connections, from left to right	
24 V +/-	Switch output +24 V max. 2.8 A (battery buffered, optional)
24 V +/-	Switch output +24 V max. 2.8 A (battery buffered, optional)
Lower connections, from left to right	
MAIN +/-	Power supply unit connection
MAIN FAULT	Signal input, power supply fault
BAT1 +/-	Battery pair 1 connection
BAT2 +/-	Battery pair 2 connection
FAULT AC –	Switch output, mains fault
FAULT BAT –	Switch output, battery fault
FAULT 1 –	Switch output, collective fault
FAULT +24 V	Switch output +

## Standby current calculation in accordance with EN 54-4

$$(1) I_{\max, \text{Standby}} = \frac{C_{\text{Batt}} - I_{\text{Alarm}} \times 0,5h}{t_{\text{Standby}}} \quad (2) I_{\max, A} = 6A - \frac{C_{\text{Batt}}}{18h}$$
$$(3) I_{\text{nom}} = \min[I_{\max, \text{Standby}}, I_{\max, A}]$$

Formula (1) gives the maximum panel current required to provide a specific buffering time ( $I_{\max, \text{Standby}}$ ). Formula (2) gives the maximum panel current with simultaneous consideration of the battery charge ( $I_{\max, A}$ ). According to formula (3), the required standby current of the panel ( $I_{\text{nom}}$ ) is based on the smaller value of the two maximum current values of the panel.

**Parameter:**

- standby = buffering time in hour
- I Alarm = maximum alarm current (I<sub>max</sub>)
- Catt = battery capacity in Ah

**The following capacities are feasible:**

- 24–26 Ah and 36–45 Ah for 2 batteries
- 48–52 Ah and 72–90 Ah for 4 batteries

**Technical Specifications**

<b>Input voltage</b>	<b>20.4 V to 30 V</b>
Current consumption at 24 V DC – Standby operation – Fault	25 mA 40 mA
Approved battery capacities – with 2 batteries – with 4 batteries	24 – 26 Ah 36 – 45 Ah 48 – 52 Ah 72 – 90 Ah
Maximum current – of the module – to the panel rails (PRS 0002 A/PRS 0004 A) – of the switch outputs	Max. 6 A Max. 6 A Max. 5.6 A (2 x 2.8 A cannot be connected in parallel)
Fault threshold	Max. 430 ma battery resistance
Outputs 2 switch outputs +24 V / 0 to 2.8 A, battery buffered 1 switch output battery fault, 0 V / 0 to 20 mA 1 switch output mains fault, 0 V / 0 to 20 mA 1 switch output Collective fault in accordance with EN 54-4, 0 V / 0 to 20 mA	
Display and operating elements 1 green LED Mains power on 3 yellow LEDs Mains fault, battery 1 fault, battery 2 fault 1 button Charge battery, start panel without mains current, reset fault	
Permissible operating temperature	-5°C to 50°C
Permissible storage temperature	-25°C to 85°C
Permissible relative humidity	max. 95% non-condensing
Housing material and color	ABS plastic, satin finish, anthracite, RAL 7016
Dimensions (H x W x D)	approx. 127 x 96 x 60 mm (5 x 3.8 x 2.4 inches)
Weight	193 g (0.43 lbs)

**Bosch Sicherheitssysteme GmbH**

Robert-Koch-Straße 100

D-85521 Ottobrunn

Germany


Telefon +49 89 6290-0

Fax +49 89 6290-1020

[www.boschsecurity.com](http://www.boschsecurity.com)

© Bosch Sicherheitssysteme GmbH, 2009

Documents / Resources

	<p><b>BOSCH BCM-0000-B Battery Controller Module</b> [pdf] Installation Guide</p> <p>BCM-0000-B Battery Controller Module, BCM-0000-B, Battery Controller Module, Controller Mo dule</p>
---	--

References

-  [Home | Bosch Security and Safety Systems I Global](#)