



**SCHEIBER**

## BLOC 9

Réf : 41.70509.01

### User Manuel & Troubleshooting Guide



Acknowledgement.....	P.2
Safety Warnings.....	P.2
Accessories / Associated references.....	P.2
Equipment description.....	P.3
Technical characteristics.....	P.4
Electrical characteristics.....	P.4
Description of the markings used.....	P.4
Installation instructions.....	P.6
Connection.....	P.6
Wiring.....	P.7
Operation.....	P.8
IBS sensor.....	P.8
Troubleshooting guide.....	P.9
Terms and conditions.....	P.10
Warranty terms.....	P.10



**SCHEIBER**

2 Bellevue, 85120 Saint-Pierre du Chemin • France

Phone : +33 (0)2 51 51 73 21 • [clients@scheiber.fr](mailto:clients@scheiber.fr) • [sav@scheiber.fr](mailto:sav@scheiber.fr) • [www.scheiber.fr](http://www.scheiber.fr)



## Acknowledgement

We thank you for your purchase and hope that you are fully satisfied with this product.

Before you use this product, we recommend you read the instructions below carefully. This manual explains how to use and install the product in accordance with its intended use.

## Safety Warnings

**WARNING: Do not disassemble the device**

Any contact with the product's internal components can cause injury. In the event of a malfunction, only a qualified technician is authorised to repair the device

**WARNING: In the event of impact**

If the product falls or undergoes heavy impact, immediately contact a qualified person to ensure the device is working correctly

**WARNING: Unpacking the equipment**

After unpacking the product, make sure that it is complete and in good condition. If you are not sure, immediately contact a person with the required professional qualification

**WARNING: Unpacking the equipment**

Do not leave any part of the packaging within the reach of children or vulnerable adults

## Accessories / Associated references

Designation	Reference
120Ω BUS CAN Termination	0D.CRD399
CAN cable (length available from 0.2m to 15m)	0D.CRD470 - 486
LIN cable (length available from 0.4m to 15m)	0D.CRD570 - 585
Power cable (length available from 1, 5 or 10m in 6mm <sup>2</sup> )	0D.CRD212.010 ou .050 ou .100
Quick connectors (be careful, some references are sold with the connectors)	62.SAC13004A00
Labels (10x10mm)	On demand



## Equipment description

### The power bloc can control up to 6 functions

#### With this box, it's possible to :

- Centralize power commands of 6 electrical functions.
- Provide electrical protection for each output.
- View the status of each system through status LED.
- Physically troubleshoot each order in the event of an electronic failure.
- Receive data from 6 IBS sensors (Intelligent Battery Sensor).
- Integrate into a MULTIBLOC compatible network, and therefore be controlled by equipment of the type:
  - NAVICOLOR display.
  - WIFI server.
  - Multiplexed switch module.

### A forced operation of each output is possible using a bypass fuse (2 fuses are supplied : 15A et 25A).

The 6 power outputs are adjustable from 3 to 25A and can control 12/24 DC networks like:

- interior lights,
- navigation instruments,
- navigation lights,
- the pumps,
- comfort devices,
- etc, ...

### Several modules (Bloc 9 can be installed side by side depending on the number of functions to be controlled).

#### LED Status

One LED per function indicates the status of the system:

- LED off: the circuit is inactive.
- LED on: the circuit is active.

#### Troubleshooting

The Bloc 9 has 6 fuse holders (for Mini Blade Fuse) to install the bypass for each circuit. This solution allows each output to be overridden if there is a major failure of the electronic system.

#### Electrical protection

The Bloc 9 provides electrical protection for your systems:

- Rating adjustable from 3 to 25 A according to your needs
- Reverse polarity protection (+/- battery inversion)
- Current surge protection.

#### Integration in a Multibloc Network

#### One or more Blocs 9 can be integrated in a MULTIBLOC network. A NAVICOLOR display can then be used to:

- Configure the Bloc 9 outputs
- Control the outputs
- Read the output status
- Read the IBS measurements of battery status.

This network is provided through the CAN bus.

The various Blocs 9 in the network are differentiated via the MICROSITCH which can be used to allocate a number in the network.

#### Additional function of Bloc 9 when integrated into a Multibloc network:

#### Fuel transfer

Associated with a Bloc 7 and a Navicolor, Bloc 9 allows operation of pumps to make fuel transfers from one tank to another one directly from the touch screen.

#### Management of IBS sensors

The bloc 9 can manage up to 6 IBS which can transmit the following battery information:

- Voltage
- Incoming and outgoing current
- Charge and discharge current
- Battery temperature
- Residual capacity
- Ageing.

The IBS are connected to the bloc 9 through the LIN bus. Measurements are read and alerts configured through a NAVICOLOR display.



## Technical characteristics

### BLOC 9

<b>REFERENCE</b>	41.70509.01
<b>POWER SUPPLY</b>	8-32 V DC up to 16 mm <sup>2</sup>
<b>DETAILS AND FEATURES OF THE INPUTS</b>	- 2 x CAN connectors type 6-way Micro-Fit - 1 x LIN connector type 4-way Micro-Fit
<b>DETAILS AND FEATURES OF THE OUTPUTS</b>	- 6 adjustable power outputs in current from 3 to 25A. - 2 x connectors 6-way in 6mm <sup>2</sup> max.
<b>BYPASS FUSE (SUPPLIED)</b>	15A (blue) 25A (brown) Check that the cable section is sufficient depending on the size of the fuse used
<b>LIN BUS</b>	To manage up to 6 IBS sensor
<b>CAN BUS</b>	2 x connectors type 6-way Micro-Fit
<b>ENVIRONMENTAL CONDITIONS</b>	Indoor use Altitude up to 2000m Operating temperature: 0 to +50 °C Relative humidity: 0 to 93% - non-condensing Protection index: IP20
<b>MOUNTING</b>	Organize a panel cut-out 84,50 x 125,50 mm and 2 screws support
<b>MOUNTING DISTANCE</b>	138 mm
<b>MECHANICAL</b>	ABS Box UL94-V0
<b>WEIGHT</b>	0,19 Kg
<b>STANDARDS</b>	EN 60945
<b>FIRMWARE VERSION</b>	V7.21 or higher
<b>DIMENSIONS (LxWxH)</b>	150 x 95 x 69,6 mm (with socket mounted)

## Electrical characteristics

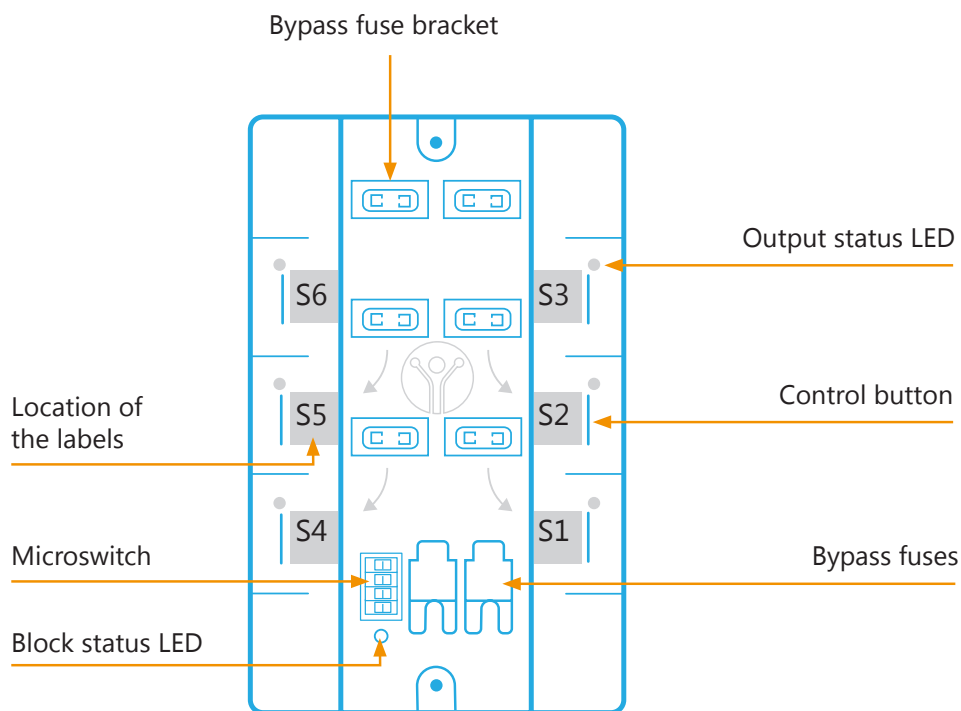
<b>INPUT RATED VOLTAGE (VDC)</b>	8-32 V DC
<b>OUTPUT RATED VOLTAGE (VDC)</b>	equal to the input voltage
<b>SELF-CONSUMPTION</b>	60 mA max.
<b>MAXIMUM CURRENT PER OUTPUT</b>	adjustable from 3 to 25A
<b>MAXIMUM CUMULATIVE CURRENT</b>	50A

## Description of the markings used

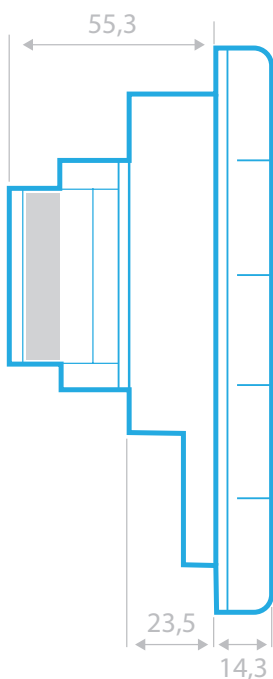
<b>V</b>	Volt
<b>A</b>	Ampere
<b>== ou DC</b>	Direct current



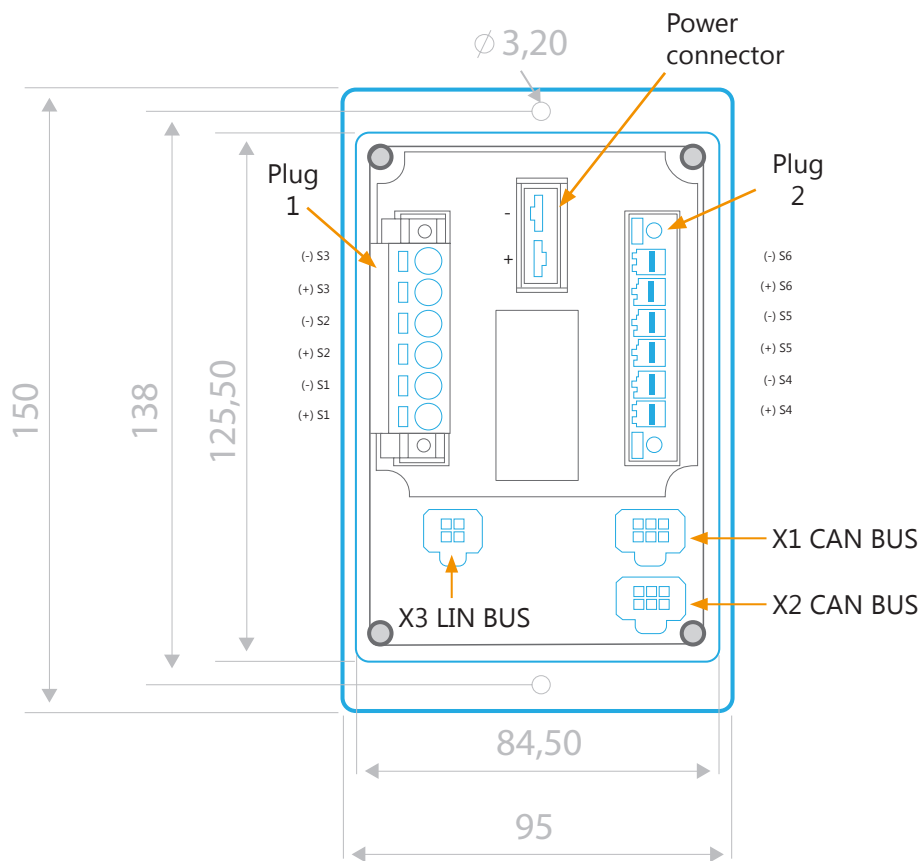
### Front view



### Side view (connector mounted)



### Back view





## Installation instructions

- This device must be placed in a place protecting it from any risk of water splashing. Install in a ventilated location
- Do not install on supports that are sensitive to heat, such as carpet or PVC flooring, etc.
- The product must be installed away from heat and humidity

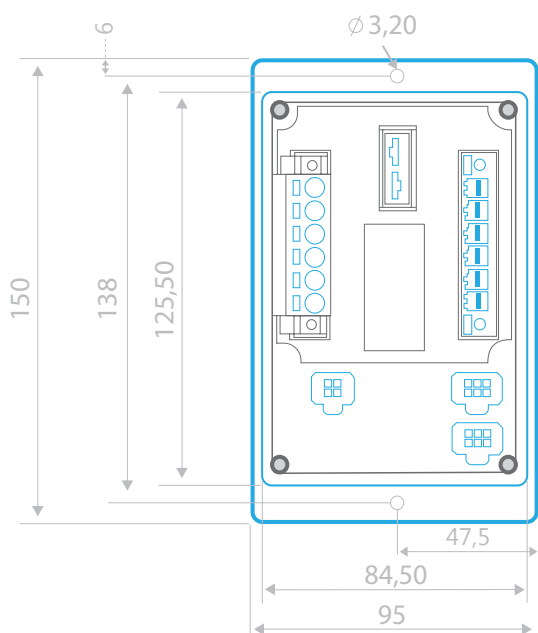


**WARNING: Connection/disconnection with power on**  
**Do not perform connection or disconnection with power on.**

### Meaning of the LEDs:

- LED off: the circuit is inactive.
- LED on: the circuit is active.

### Mounting:



Installation cutouts:  
84,50 x 125,50 mm

Mounting distance :  
45 x 138 mm

Mounting distance of the 2 screws support :  
138 mm

Visible thickness after mounting :  
14,3 mm

Back clearance zone for connection :  
80 mm (behind the product)

## Connection

### INPUT / POWER SUPPLY

Type of connection

Clip 8mm + connector 2-way

Cross section

de 6 à 16 mm<sup>2</sup>

### OUTPUT

Type of connection

2 x spring connectors 6-way

Cross section

6 mm<sup>2</sup>

### CAN BUS

2 x CAN connectors type 6-way Micro-Fit

### LIN BUS

1 x LIN connector type 4-way Micro-fit

### CODAGE

With DIP SWITCH

### PROTECTION TO BE PROVIDED ON THE SUPPLY LINE

Protection rating

Fuse or circuit breaker 50A maximum

Protection location

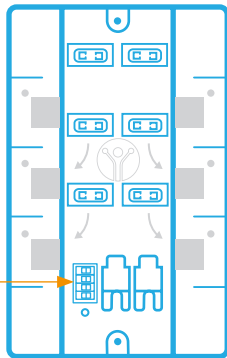
Accessible and identified for the user



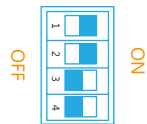


## Wiring

- ① Allocate a number to the module 9 using the microswitches.



Example :  
Allocate number 3



- ② Connect the cables of the equipment to be controlled to the quick connectors, complying with the numbering on the "BACK VIEW" diagram.

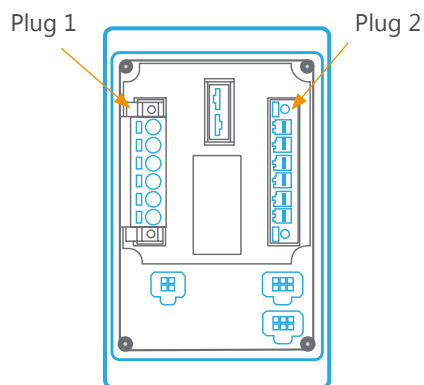


Front view

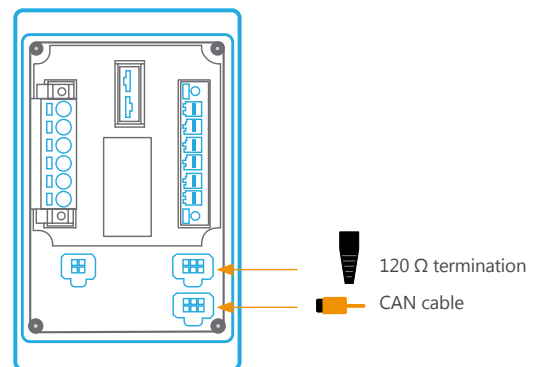


Back view

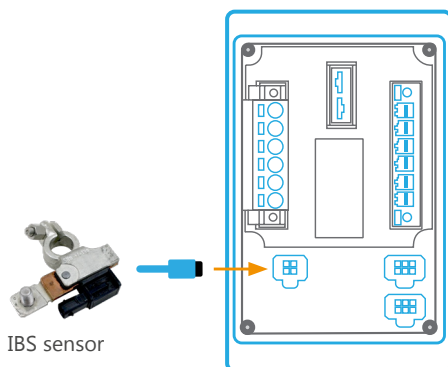
- ③ Connect quick connectors on plugs 1 & 2



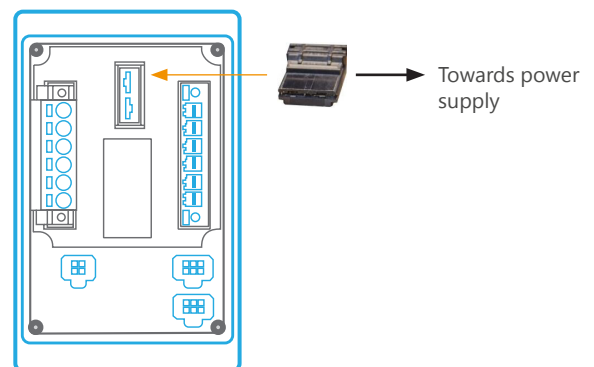
- ④ Connect either a connection cable with another device or a 120 Ω termination to each CAN connector.



- ⑤ Connect the LIN bus to the IBS



- ⑥ Connect the power plug





## Operation

When switching on, check that the MULTIBLOC devices are connected to each other by the CAN network and correctly supplied. The two 120 Ω terminations must also be correctly placed.

Check for each function that:

- The control keys (ON / OFF) are used to control each of the outputs.
- Bypass fuses are used to activate each function.

If your network has a NAVICOLOR type front panel, check that:

- The facade allows to control each of the outputs.

If your network has a NAVICOLOR type front and IBS sensors are mounted on Block 9 check that:

- The front panel allows the values of the batteries to be read and that these values are in accordance with the expected results.

For any problems encountered please consult the chapter "TROUBLESHOOTING GUIDE"

## CONFIGURATION

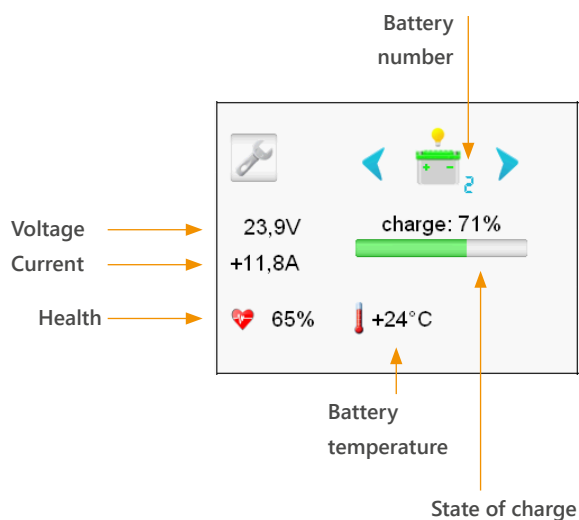
Bloc 9 can be configured from:

- a NAVICOLOR display
- a PC with MULTICOM software and its CAN / USB interface
- the WiFi server configuration interface
- a CAN / CAN SD interface with a configuration created from the Scheiber configuration software.

## IBS sensor

How to read the measurements of an IBS sensor?

The NAVICOLOR panel displays the status of the batteries using the following information:



\*Image not contractual





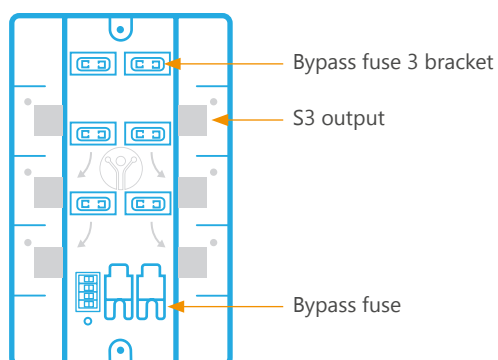
## Troubleshooting guide

In order to force the electrical function in the event of any malfunction of Bloc 9, you must install the Bypass fuse on the output concerned. In the following example we force exit S3 from Bloc 9.

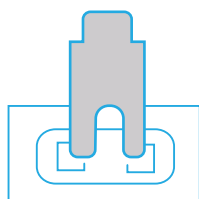
- ① Remove the front cover



- ② Locate the fuse holder corresponding to output 3



- ③ Detach the Bypass fuse and connect it to the fuse holder 3





## Terms and conditions

The manufacturer cannot be held responsible and accepts no responsibility in the event of harm to persons or property due to improper use and in reference to the warnings provided in this manual.

SCHEIBER reserves the right to change the characteristics of its products in the interest of its customers. The manual supplied with this product must not be reproduced, transmitted, stored in a search system or translated into any language, in full or in part, by any means, without the prior written consent of SCHEIBER.

Although every effort has been made to provide you full and accurate information in this manual we ask that you inform the SCHEIBER representative of your country in case of any error or omission we may have overlooked.

SCHEIBER reserves the right to change the characteristics of the hardware and software described in these manuals at any time and without prior notice.

## Warranty terms & after-sales

### **WARRANTY SUBJECT:**

The company SCHEIBER warrants all its products' range against failures or masked-failures according to the article 1641 and followings of the Civil Code. Repairs and replacement of the equipment during the warranty period do not change terms or time of this warranty which is of 2 years. Repairs and replacement of the faulty parts under warranty are made only on presentation of the invoice which certifies the warranty beginning date.

### **WARRANTY DOES NOT APPLY:**

This warranty can not be applied in case of misuse, wrong installation, repair by anyone else than a SCHEIBER authorised technician, damage arising from improper use (fuses replaced by another value), utilisation in an unsuitable environment or if the equipment has suffered from physical damages through handling, transport. It does not cover calibration or verification due to the normal age of the components. Warranty modalities: The equipment freight will be charged to the customer. If the returned equipment is not conform, our company considers it has the right to refuse the free repair and proposes an estimate.

### **RESPONSIBILITY LIMITS:**

In any case, the company SCHEIBER will not be held responsible for direct damages or damages not due to the normal use of the equipment. In case of a dispute arising between the parties, the case shall be submitted to the French Right to the court specified by the company SCHEIBER.



# SCHEIBER

L'innovation française depuis 1965

## Question ?

[contact@scheiber.fr](mailto:contact@scheiber.fr)



## Problem ?

[sav@scheiber.fr](mailto:sav@scheiber.fr)

**2 Bellevue,**  
85120 • Saint-Pierre du Chemin  
France

Phone : +33 (0)2 51 51 73 21  
[sav@scheiber.fr](mailto:sav@scheiber.fr)  
[www.scheiber.fr](http://www.scheiber.fr)