Deactivation of DHCP / setting of TCP/IP static parameters

1. In the computer, to which you will connect the device, you should set the static parameters of the TCP/IP panel. These settings depend on the OS (see OS documents):
• the IP address should be in a range 192.168.0.1 – 192.168.0.254 (except 192.168.0.51), for example, 192.168.0.11;
• subnet mask – 255.255.255.0.

2. Connect MB-GATEWAY to the configured computer with a UTP (RJ45) cable (included in the supply). If it fails to operate (the computer fails to support Auto MDI-X), the computer and MB-GATEWAY should be connected to the network switch.

3. Connect the power supply unit (included in the supply) and hold down user button for 2 seconds until MB-GATEWAY switches into the service mode. Test the network connection using PING from Command Prompt: ping 192.168.0.51

4. In the address window of the internet browser (Google Chrome is recommended), enter **192.168.0.51** (MB-GATEWAY IP address in service mode).

5. In the Web page that appears, select B3 – MB-GATEWAY setting window. Switch off DHCP support. Set TCP/IP static parameters. If it is planned to interconnect several MB-GATEWAY in the local network, they must be assigned unique IP addresses. After restart, MB-GATEWAY will be available in the network by the new IP address you have assigned to it.

⚙ TECHNICAL SPECIFICATIONS

PARAMETER	UNITS	VALUE
Anchoring		Surface, DIN rail
Voltage	[AC/DC]	12 V - 25 V (2 W) (included in the supply with an AC/DC adapter)
Communications line		Ethernet RJ45, ModBus RS485
Cable length	[m]	UTP cable (1 m) RS485 communications cable with RJ10/RJ45 plugs (2 m) RS485 communications cable with RJ10/RJ10 plugs (2 m)
Power source	[mm]/[m]	73 x 40 x 38 mm / Cable – 1 m
Dimensions (W x H x D)	[mm]	90 x 36 x 58
Package dimensions	[mm]	140 x 110 x 86
Package weight	[g]	340g ±10g
Protection class		IP-20
Ambient temperature	[°C]	-20 +70
Relative humidity	[%]	30-85 (without condensation)

⏎ SOFTWARE UPGRADING

Software upgrading requires a microSD card

1. Downloading (https://select.salda.lt/file/mbgatewayfirmware) upgrade **FIRMWARE.BIN** and writing it to the microSD root catalogue.
2. If writing through the FTP client, the power source should not be switched off.
3. If writing when the microSD card is removed from the module, the power supply of the module must be switched off when inserting the card.
4. Insert the card and connect the power supply.
5. If the file is proper, the module begins the upgrading procedure. The RJ45 LED lamps flash alternately around every 1 s. The power source must not be switched off during this process.
6. After around 5 minutes, the module completes upgrading and switches to the normal status.
7. After upgrading, **FIRMWARE.BIN** is erased automatically.

RJ45 connection LED indications
• Both LED indications flash slowly and evenly – the MB-GATEWAY has no software installed.
• The LED indications flash slowly and alternately – the software upgrading is in progress.
• LED indications do not light – no power source and/or connection with the Ethernet network.

Should any problems arise in the course of upgrading, please address the local distributor.

↺ RESTORING TO FACTORY SETTINGS

If connection fails (you have forgotten the password, IP address, etc.), you can always restore to factory settings:
1. Switch off the power source;
2. Open the upper cover;
3. While holding the button pressed, switch on the power source;
4. Wait until the LED indications of the RJ45 connection begin flashing;
5. The factory settings are restored as soon as the press-button is released.

☁ FTP SERVER

This module also has an FTP server, so the content of the microSD memory card can be accessed and edited without removing the card. The login data of the FTP server are the same as those of the protected WEB pages. Make sure to indicated Passive Mode in the FTP client programme.

⚒ POSSIBLE ERRORS AND THEIR SOLUTION

PROBLEM	SOLUTION
Time indications are not saved after restarting the equipment	Check whether the spare power battery is inserted
Failed connection to the ventilation unit (Connection lost or Control board not found message)	• Check the connection settings; • Check the power source; • Check the communication cables (Ethernet, PRV/MCB); • Check the communication configuration switches on the MCB or miniMCB panel;
The WEB environment is not displayed after entering the IP address in the browser window	Check whether the microSD card is inserted properly
The MB-Gateway module does not operate / the indicators on the RJ45 connection do not flash after connecting a power source and communication cables	Address the supplier

🗑 DISPOSAL

Waste electrical and electronic equipment

• In managing the waste equipment, comply with effective rules.
• In order to reduce impact on the environment and public health, remove the equipment to an electronics waste site or container.
• For detailed information concerning processing, address the seller supplier.

MB-GATEWAY

EN   QUICK START GUIDE

⚡ SALDA

To download the latest full version of the User Manual, please visit www.salda.lt

Google Play store:

iTunes Apple store:

SaldaAir mobile application:

SAFETY INSTRUCTIONS AND WARNINGS

Basic safety instructions.

1. Make sure that the equipment is operated only within the specified temperature interval.

2. Protect the equipment inside against the penetration of moisture.

3. Protect the equipment against direct sunlight.

4. Protect the equipment against mechanical damage (shocks, scratches, etc.).

5. Installation works may be performed only by a qualified person.

6. Electrical connection shall be performed in compliance with the circuit diagrams and technical requirements specified by the manufacturer.

7. Protect the equipment against the penetration of foreign objects.

DESCRIPTION

The MB-GATEWAY network module is intended for the connection of SALDA ventilation units to the computer (Ethernet) network:

• Ventilation units and other appliances controlled by PRV controllers (RIS EKO 3.0, RIRS EKO 3.0, Smarty 3R VER/VEL 3.0), MCB/Mini-MCB (Smarty, modular and compact ventilation units);

• Modbus-controlled units.

Functions of the module
• TCP/IP Modbus gateway;
• BACnet/IP gateway;
• IPv4 protocol;
• DHCP protocol;
• NetBIOS/hostname;
• WEB server;
• FTP server;
• Formation of Modbus commands/responses to HTTP queries;
• authorised login;
• automated data transmission between Modbus devices;
• data logger;
• dateTime synchronization;
• sending the malfunction messages and notifications of the AHU via email;
• module software upgrading through the microSD memory card (the upgrade can also be written through the FTP client);
• RTC;
• galvanically insulated RS485 communications line.

> **Attention!**
> • Some clauses of this Guide may be inapplicable to your equipment – it depends on the type of the control panel of the unit.
> • Always choose accessories manufactured by Salda UAB. Otherwise, no warranty would apply.
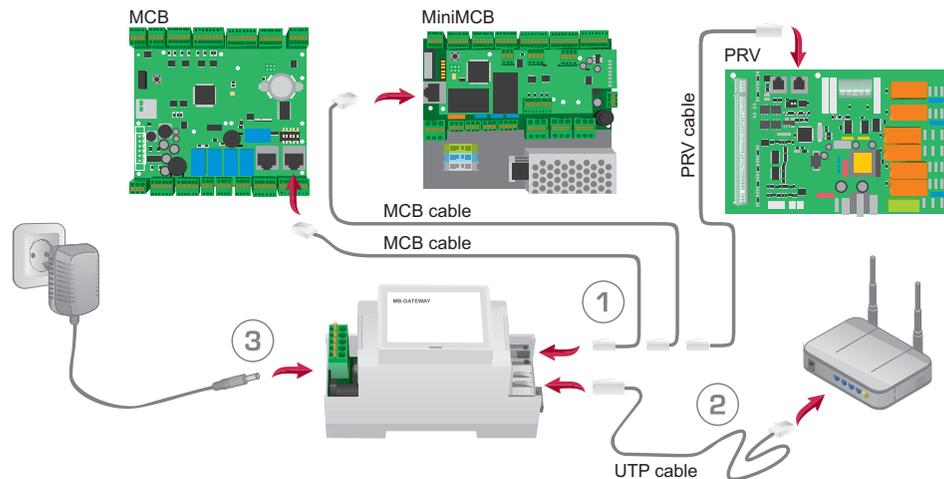
MB-GATEWAY ACCESSORIES

• 1 x MB-GATEWAY unit;

Figure 1

Figure 2   *Figure 3*   *Figure 4*   *Figure 5*

• 1 x power source;
• 4 x power source adapters;
• 1 x microSD card (in the MB-GATEWAY unit) with an SD adapter;
• 1 x UTP cable (RJ45 ↔ RJ45);
• 1 x MCB cable (RJ10 ↔ RJ45);
• 1 x PRV cable (RJ10 ↔ RJ10);
• Quick Start Guide.

MB-GATEWAY INSTALLATION

The MB-GATEWAY installation diagram of is shown on Fig. 1. Installation stages:

1. Connect MB-GATEWAY to the ventilation unit.
• Use an MCB cable with RJ10 ↔ RJ45 connection (included in the supply), so that to connect with the ventilation unit equipped with an MCB or miniMCB control panel (Fig. 2, 3);
• Use a PRV cable with RJ10 ↔ RJ10 connection (included in the supply), so that to connect with the ventilation unit equipped with a PRV control panel (Fig. 4);

2. Connect MB-GATEWAY to the network switch with a UTP cable (included in the supply).

3. Connect the supply source (included in the supply).

LED indications of the RJ45 connection:

• The green LED indication lights continuously and the orange one flashes in random intervals – MB-GATEWAY has successfully connected to the Ethernet network;

• The green LED indication does not light – no connection with the network switch;

• The green LED indication lights continuously and the orange one begins flashing in equal time intervals after around 30 s from switching on power supply – the service mode is set for MB-GATEWAY (read the Service Mode).

INSTALLATION

The module can be installed (Fig. 5) in any position convenient to the user (it is recommended to install it on a rail, while ensuring the conditions listed below)

• ambient temperature: -20°C to +70°C;
• relative humidity: 30% to 85% (no condensate is allowed);
• protection against vertically dripping water drops (IP 20).

MB-GATEWAY WEB INTERFACE

In the address window of the internet browser (Google Chrome is recommended) (Fig. 6), enter MB-GATEWAY hostname.

According to the factory settings (by default), MB-GATEWAY hostname is MBGW plus the last six symbols of the MAC address (Fig. 7), e.g. **mbgw900154.**

In the window that appears (Fig. 8), enter the login data: according to the factory settings (by default), the login name is **admin** and the password is **admin**.
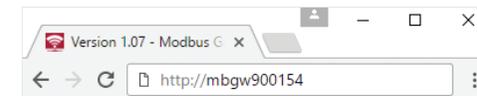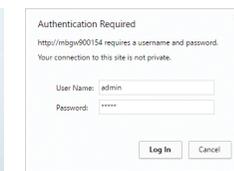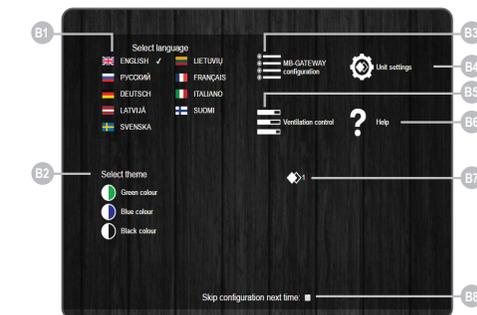

Figure 6

Figure 7   *Figure 8*

If you have done everything properly, MB-GATEWAY Web interface will open.

NUMBER	FUNCTION
B1	Selecting the user environment language
B2	Selecting the desired theme colour
B3	Opening the MB-GATEWAY settings window
B4	Opening the device settings window
B5	Opening the automatics control window If the parameters of RS485 communications line are set improperly or the device is connected improperly, a message of failed search of the control panel is displayed upon pressing B4
B6	Opening the help PDF window
B7	The selected ventilation device is displayed
B8	The displaying of this window at the time of the opening of the page is activated/deactivated

SERVICE MODE

MB-GATEWAY service mode is triggered by holding down user button for 2 seconds, while power is on. Service mode is indicated by slow (constant period) flashing of orange RJ45 LED. MB-GATEWAY IP address in service mode is 192.168.0.51