

BCP Series

Control Panels

20260506R1

Technical Catalogue



The **Havkon BCP.2021** is a modern HVAC room control panel designed for **heat recovery units (HRU)**, ventilation systems and various air handling applications requiring reliable and user-friendly climate control operation. Featuring a **3.1" widescreen display** together with an intuitive front button interface, the device provides comfortable daily control of room conditions and ventilation functions.

Designed for both **user comfort** and **stable HVAC operation**, BCP.2021 offers independent aspirator and ventilator fan speed control together with **automatic and manual operating modes**. Integrated weekly scheduling, adjustable set temperature settings and flexible user parameters make the device suitable for residential and commercial HVAC applications.

BCP.2021 operates as a **two-piece control solution** consisting of a room panel and a dedicated control board. The integrated **Modbus RTU communication infrastructure** enables seamless connectivity with HVAC controllers and building management systems while supporting reliable long-term operation.

Its compact wall-mounted structure, modern interface and simplified service configuration menus allow the **BCP.2021** to deliver dependable HVAC control performance together with practical daily operation and commissioning convenience.

Features

- **3.1" Widescreen LCD Display**
- **Independent Aspirator & Ventilator Control**
- **6-Stage Fan Speed Adjustment**
- **Automatic & Manual Operating Modes**
- **Weekly Scheduling Function**
- **Integrated Modbus RTU Communication**
- **Built-in Room Temperature Sensor**
- **User-Friendly Interface**

Order Codes

BCP.2021

HRU Room Control Panel

Warnings



Before installing and operating the device, carefully read the user manual and the instructions below.

- The user is responsible for any damage, loss, or injury caused by improper use or failure to follow these instructions.
- Do not modify, disassemble, or attempt to repair the device.
- Ensure correct supply voltage before powering the device.
- Disconnect power before installation and wiring.

Failure to comply with these instructions may result in device malfunction and will void the warranty.

BCP Series

Control Panels

20260506R1

Technical Catalogue

Product Overview



The Havkon BCP.2021 is a compact and user-friendly **HRU room control panel** designed for ventilation and heat recovery applications requiring reliable daily HVAC operation. Its clear LCD interface provides easy access to operating modes, temperature settings and independent aspirator / ventilator fan control functions for comfortable system management.

The device supports **automatic and manual operating modes**, weekly scheduling functionality and integrated Modbus RTU communication for flexible HVAC control and seamless system integration. With its modern wall-mounted structure and simplified user interface, BCP.2021 delivers practical daily operation together with dependable long-term performance.

Key Features & Functions

Application Areas

- HRU Systems
- Ventilation Units
- Air Handling Applications

System Architecture

- Two-Piece Structure
- Dedicated Room Panel
- Stable Controller Communication

User Experience

- Automatic / Manual Modes
- User-Friendly Interface
- Independent Fan Control

Control Functions

- Temperature Adjustment
- Weekly Scheduling
- Alarm Monitoring
- Modbus RTU Communication

BCP Series

Control Panels

20260506R1

Technical Catalogue

Technical Specifications

Electrical Data	Power Supply	5 VDC $\pm 10\%$
	Power Consumption	Max. 1 W
	Connection	Terminal block, 1.5 mm ²
	Cable Length	Max. 100 m with 4x1 mm ² cable
	Communication	Modbus RTU (RS-485)
Environmental Conditions	Operating Temperature	0 ... +50°C
	Storage Temperature	-10 ... +50°C (without icing and condensation)
	Relative Humidity	Max. 90% RH (Non-condensing)
User Functions	Display	3.1" LCD Display
	User Interface	Front Push Buttons
	Operating Modes	Automatic / Manual Modes
	Fan Control	Independent Aspirator & Ventilator Control
	Weekly Program	Available
	Parameter Access	Via Touch Interface
	Alarm Monitoring	Available
Protection & Standards	Protection Degree	IP 20
	Standard	EN 60529
	Housing	ABS / PC Plastic Enclosure
	Color Options	White

Enclosure Specifications

Mounting	Wall mounting
Dimensions	W86xH86xD22mm (Width x Height x Depth)
Visible Screen Area	W66xH48mm
Weight	87 g

Connections

The device must be installed and operated in accordance with applicable electrical regulations.

- Ensure that the power supply is disconnected before installation and wiring.
- Use appropriate cable cross-sections according to load and installation conditions.
- Do not route signal cables together with power cables.
- Protect the device from moisture, dust, and vibration.

BCP Series

Control Panels

20260506R1

Technical Catalogue

User Interface & Operation

The main screen provides real-time monitoring of room temperature, operating mode, fan speed level and system status. Users can easily adjust set temperature values and navigate device functions using the front push buttons.

The display shows:

- Current room temperature
- Set temperature
- Aspirator / Ventilator fan levels
- Operating mode
- Date and time information

The front buttons provide quick access to operating modes, fan control, parameter settings and temperature adjustment functions.



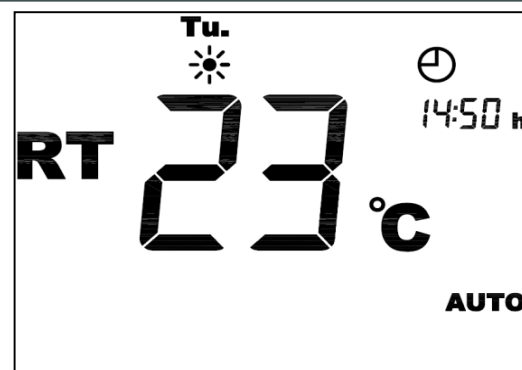
Button	Function
□ Power	Device On / Off
M Mode / OK	Mode Selection / Confirm
Setup	Access Settings Menu
▲	Increase Value / Navigate Up
▼	Decrease Value / Navigate Down

Operating Modes

The device supports multiple operating modes for flexible ventilation and heat recovery system control. Operating modes can be selected directly using the front buttons and monitored from the main display screen..

- **Auto Mode** – Automatic system operation
- **Manual Mode** – Manual fan and temperature control
- **Fan Control** – Independent aspirator / ventilator adjustment
- **Weekly Schedule** – Time-based automatic operation

The active operating mode and system information are continuously displayed on the main screen for practical daily monitoring.

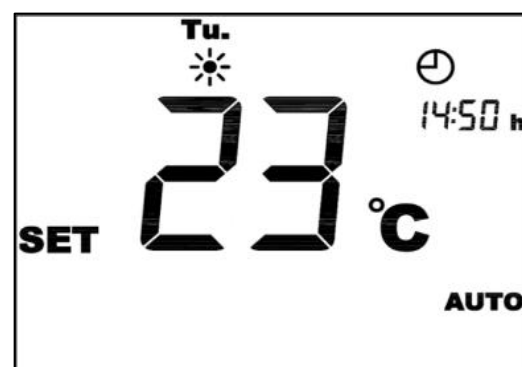


Set Temperature Adjustment

The set temperature can be adjusted directly from the main screen during normal device operation.

Press the **Mode / OK** button once to activate the set temperature adjustment value. The temperature setting flashes on the display and can be adjusted using the ▲ and ▼ buttons.

The updated temperature value is automatically saved after adjustment.



BCP Series

Control Panels

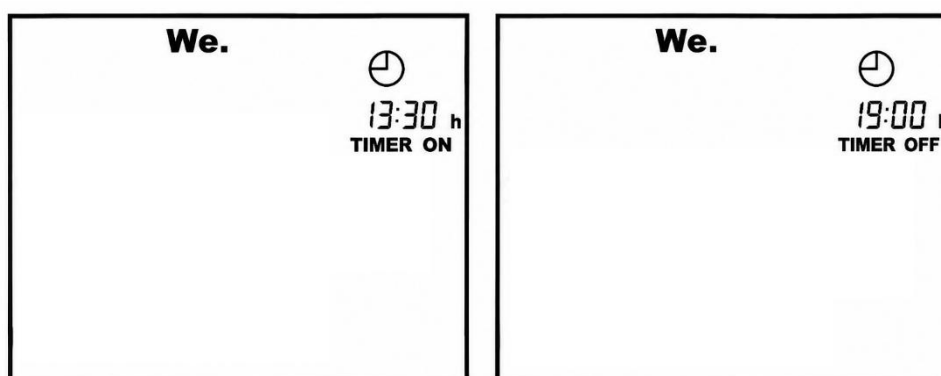
20260506R1

Technical Catalogue

Weekly Program

The BCP.2021 includes a weekly scheduling function for automatic ventilation system operation during selected time periods.

Users can define separate start and stop times for each day of the week through the weekly program menu. The controller automatically manages system operation according to the programmed schedule.



The weekly program menu allows:

- Daily start and stop time adjustment
- Individual weekday programming
- Automatic scheduled operation
- Weekly timer activation and deactivation

When the weekly schedule is active, the clock icon appears on the main display screen.

Notes

- Weekly schedule settings can be configured individually for each day.
- If the start time is later than the stop time, the device remains off during the selected period.
- If the start and stop times are identical, weekly scheduling is disabled for the selected day.

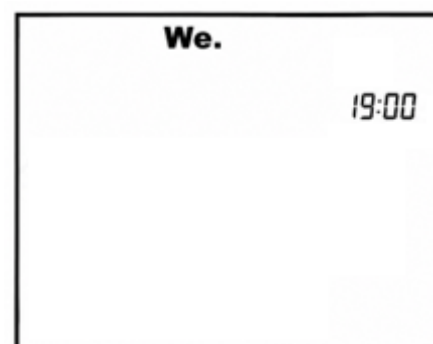
Date & Time Settings

The device includes an integrated date and time setting function for weekly scheduling and time-based ventilation operation.

Users can configure:

- Date information
- Time information
- Day of the week

All settings are adjusted using the front buttons through the setup menu. Correct date and time configuration is required for accurate weekly program operation.



BCP Series

Control Panels

20260506R1

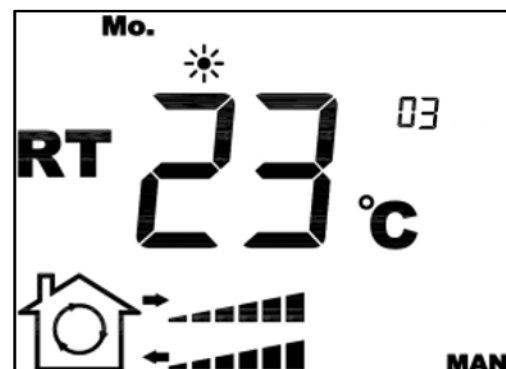
Technical Catalogue

Display Light Adjustment

The display light intensity can be adjusted through the setup menu for improved visibility under different indoor lighting conditions.

Press and hold the **SETUP** button for 2 seconds and select parameter **3** using the **▲** and **▼** buttons. Press the **Mode / OK** button to enter the brightness adjustment menu.

The brightness level can be adjusted between **0** and **10** using the **▲** and **▼** buttons and confirmed with the **Mode / OK** button. The selected brightness value is automatically saved after adjustment.



Device On/Off Screen Light

The BCP.2021 allows the display backlight to remain active or turn off while the device is in OFF mode.

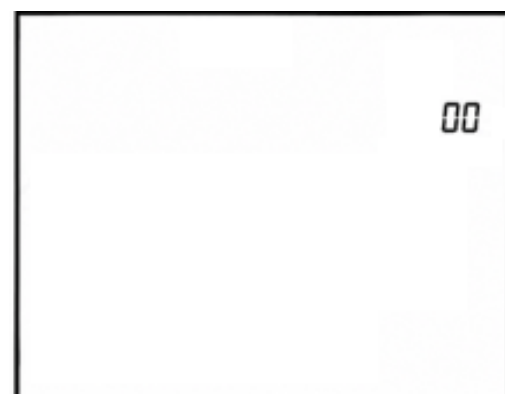
Press and hold the **SETUP** button for 2 seconds to enter the settings menu. Select parameter **3** using the **▲** and **▼** buttons and press the **Mode / OK** button.

After the brightness adjustment screen, press the **Mode / OK** button again to access the device OFF screen light setting. Select:

0 = Screen light OFF

1 = Screen light ON

The selected setting is automatically saved after adjustment.



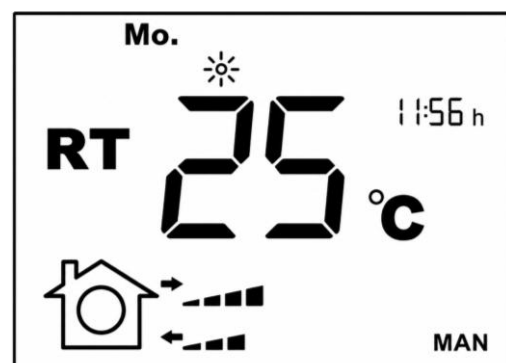
Fan and Ventilation Level Adjustment

The aspirator and ventilator fan levels can be adjusted directly from the main screen during manual operation.

Press the **Mode / OK** button once to select the aspirator fan adjustment parameter. The selected fan level flashes on the display and can be adjusted using the **▲** and **▼** buttons.

Press the **Mode / OK** button again to switch to the ventilator fan adjustment parameter. The selected ventilation level can be adjusted in the same way.

The updated operating levels are automatically saved after adjustment.



BCP Series

Control Panels

20260506R1

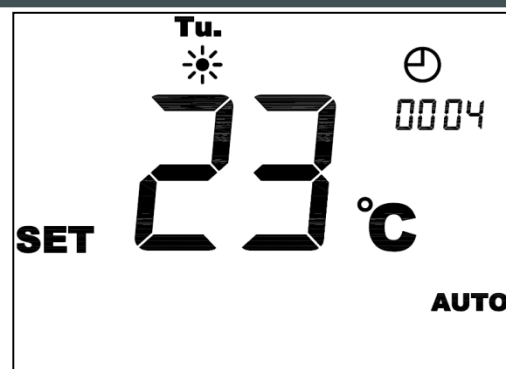
Technical Catalogue

Time-Based Filter Warning Reset

The device supports a time-based filter maintenance warning function for ventilation system monitoring.

If the filter warning indicator appears on the display after filter maintenance is completed, press the **SETUP** button and **Mode / OK** button simultaneously to reset the filter warning timer.

The filter warning duration can be configured through the parameter menu according to application requirements.

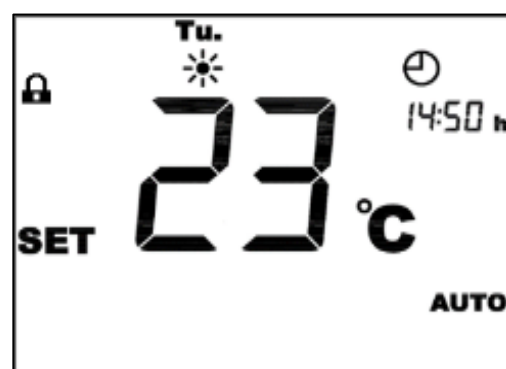


Key Lock Function

The BCP.2021 includes a key lock function to prevent unauthorized parameter or setting changes during normal operation.

Press and hold the **SETUP** and **▼** buttons simultaneously for 5 seconds to enable or disable the key lock function.

When the key lock is active, the lock icon appears on the display screen.



BCP Series

Control Panels

20260506R1

Technical Catalogue

Fault List

Code	Description
E01	Aspirator Fan Fault
E02	Ventilation Fan Fault
E04	Electric Heater Fault
E08	Aspirator Airflow Fault
E16	Ventilation Airflow Fault
E32	Compressor Fault
E64	Low Pressure Fault
E128	High Pressure Fault
E256	Fire Alarm Fault
E512	Phase Fault
E1024	VRF Fault
E99	Panel Communication Fault

Warning List

Code	Description
W01	Disabled by Building Automation System
W02	Boost Mode
W04	Filter 1 Dirty
W08	Filter 2 Dirty
W16	Defrost Mode
W32	Frost Thermostat
W64	Emergency

BCP Series

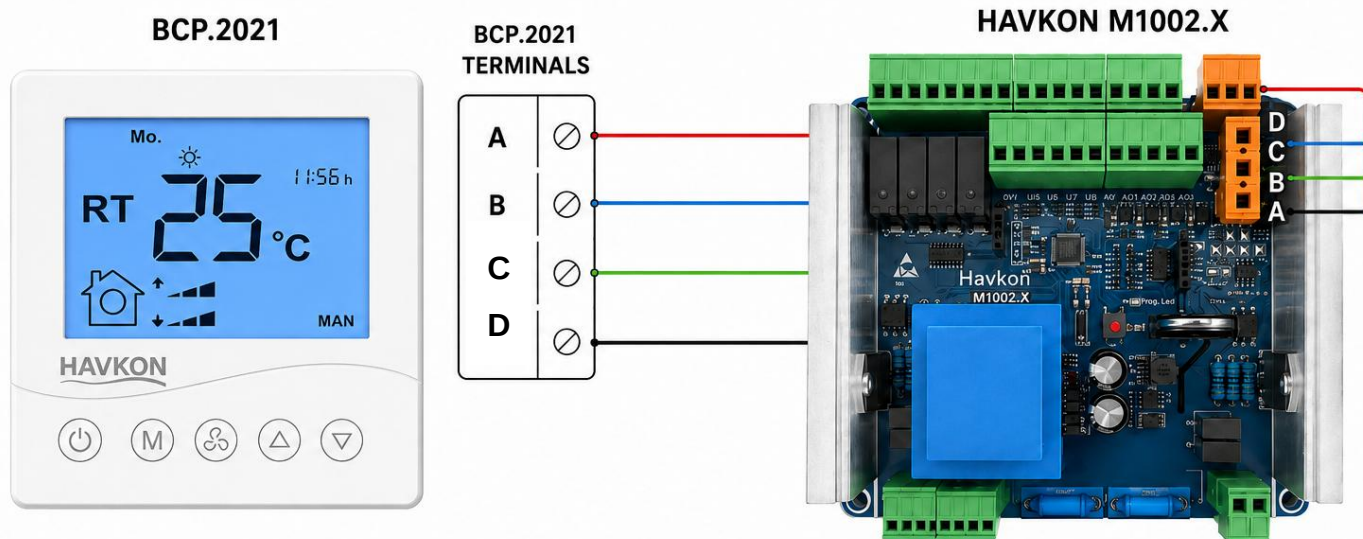
Control Panels

20260506R1

Technical Catalogue

Wiring Diagram

BCP.2021 – HAVKON M1002.X CONNECTION DIAGRAM



EXPLANATION:

- Terminals A and B provide Modbus RTU communication between BCP.2021 and the controller.
- +5V and 0V terminals are used for panel supply voltage.
- Connection terminal sequence may vary depending on controller model.
- Compatible with M1001.X / XS and M1002.X / XS controller series.

NOTES:

- Disconnect power before wiring.
- Ensure correct communication polarity.
- Use suitable cable types for RS-485 communication.
- Recommended maximum communication distance depends on installation conditions.

Notes

- Use twisted pair cable for RS-485 communication.
- Do not route communication cables together with power cables.
- Recommended maximum communication distance depends on installation conditions

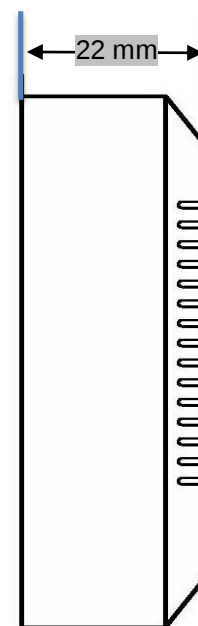
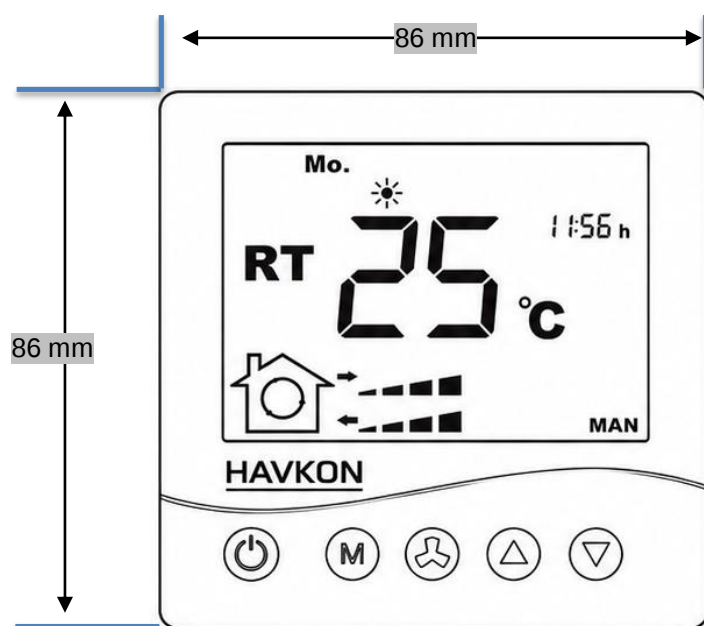
BCP Series

Control Panels

20260506R1

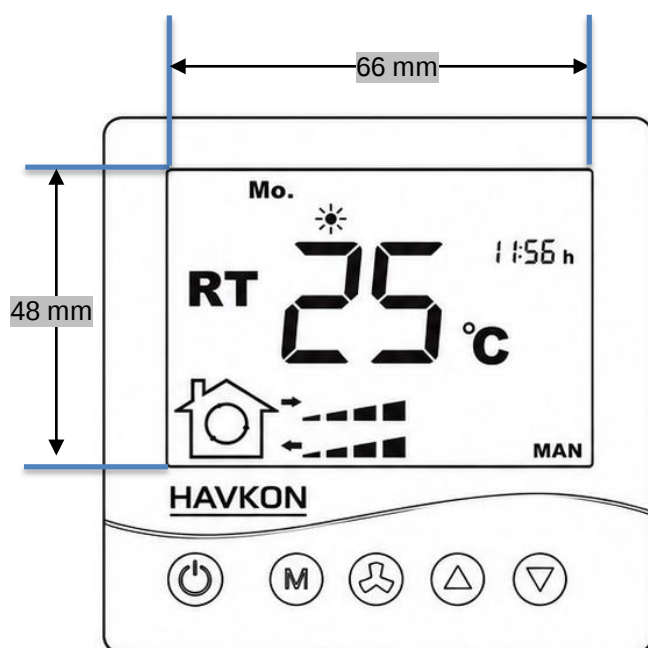
Technical Catalogue

Dimensions



Weight: 87 g.

Visible Screen Area



Recommended Installation Height

