# JAKKA
# Control Kit 6



14/06 PT    🕒II 12 05

24 °C

SET : 23 °C

⏻  SETUP  ▲  ▼  MODE / OK

Automation User Manual

JAKKA®
www.jakkagroup.com

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# INDEX

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# WARNINGS & SAFETY INFORMATION

**PROHIBITED**

- This unit has to be used under proper conditions according to its technical specification and design purpose. (Otherwise responsibility belongs to practitioner)
- Unauthorized personnel must not interfere in unit and/or must not use unoriginal spare parts. (Otherwise responsibility of failure that may occur belongs to practitioner)
- Do not use this control system other than the operating conditions specified in the installation and maintenance manual of the device. Do not use this control system in environments exposed to rain. (Otherwise, it may cause electric shocks or malfunction of the device)
- Do not use this unit in acid, alkali or organic solvent vapors, paint or other toxic gases, gases containing corrosive substances, or in environments with high concentrations of oily smoke. Failure to heed this warning may result not only in the control system malfunctioning, but also in fire, electric leakage, and electric shock.

**ATTENTION**

- The relevant connection diagram is on the cover of the panel.
- Use the designated electrical wires for the terminal board connections and connect the wires securely so that they will not be disconnected. (Failure to ensure proper connections may result in fire.)
- In the ducts passing through the building, in the parts of the ducts that are in contact with the building construction, make sure that the ducts are not in any electrical contact with the metal parts. (Electric leaks can cause fire and explosion.)
- Gloves should be worn while installation. (Failure to heed this warning may result in injury.)
- A dedicated circuit breaker must be installed at the origin of mains power supply. This circuit breaker must be provided with a means for locking (lock and key).
- The unit, the room control panel and cables must be at least 3 meters away from equipment or cables that create a high electromagnetic field. (Otherwise it may cause the device not to work.)
- During the replacement of spare parts, the layout of the panel must be maintained and the part must be assembled as it came from the factory.

This product must not be disassembled under any circumstances. Only authorized repair technicans are qualified to conduct disassembly and repairs.
(Failure to heed this warning may result in fire, electrical shock or injury.)

Connect the product properly to the ground. (Malfunctioning or power leaks can cause electrical shock.)

An isolator switch having minimum contact gap of 3 mm in all poles must be provided as a means of disconnecting the power supply.

**NOTE:** The installations, which is not available for installation and otomation manual, is out of guarantee.

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# STANDARD PANEL
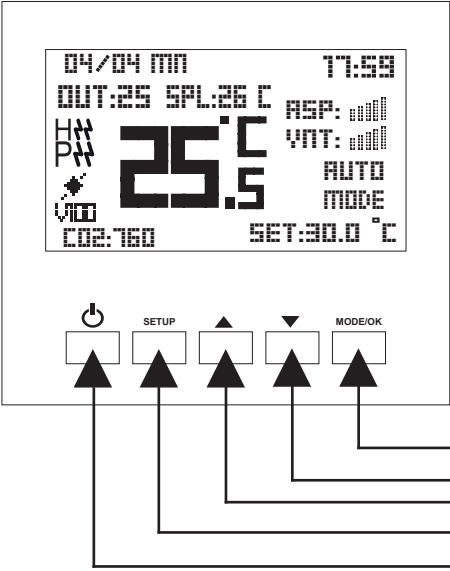


- 3.1" Graphic Panel
- Aspirator, Ventilator 6 Level Speed Control
- Automatic / Manual Mode
- Heating / Cooling / Fan Mode
- Language Option
- Internal Return Air Temperature Input
- Minimum & Maximum Set Temperature Limit
- Weekly Program

Mode/Ok
Down
Up
SetUp
On/Off

## Technical Specifications

| Environmental Specifications | |
|---|---|
| Operating, Stock Temperature | 0 … + 50°C (There should be no icing or condensation in the environment.) |
| Electrical Specifications | |
| Control | Digital Wall Panel (Max. 30 m) / Building Automation |
| Relay Current Capacity | Resistive 5A (Heater Contactor) |
| Supply | 230V AC Outputs |

# CONTROL

## Fan Speed Control Function

Control board has 7 different fan speeds. These fan speeds are set to specific values by default. The maximum fan speed is "boost". If it is desired to change fan speeds, set values can be changed by control panel and service menu parameters. If the device is on and in manual or fan mode, it is brought to the state that ASP or VNT is flashing by pressing **Mode/OK** button and ASP, VNT level is adjusted with ▲ and ▼ buttons.

Service parameter:
3       Aspirator Fan Manual Speed Value
4       Ventilator Fan Manual Speed Value

## Mode Selection

• Mode selection can be made by pressing the **Mode/OK** button on the panel when the device is on.

• If the device is in Manual Heating or Automatic Heating, the set temperature is selected by pressing **Mode/OK.**

• In the manual heating and automatic heating mode, if the **Mode/OK** button is pressed while in the set temperature setting section, the next mode is entered directly.

• If the device is in Automatic mode, you can switch to the next mode by pressing **Mode/OK.**

## Temperature Settings

• If the device is in manual or automatic heating mode when the device is on, the set temperature is set to flash by pressing the **Mode/OK** button and the set temperature is adjusted with the **Up** and **Down** buttons.

• If the device is in manual or automatic heating mode when the device is on, the set temperature is set to flash by pressing the **Mode/OK** button and the set temperature is adjusted with the **Up** and **Down** buttons.

## Filter Function (Optional)

This function controls filter change time. There are 2 alternatives to control filters:

**1.** It records run time of the unit. Filter change time is set a particular run time by factory settings. When set time expires, control board gives an alert (red warning light flashes) for filter change.

**Note:** The instant filter time can be monitored from Parameter 115.

**2.** Filter change time can be controlled by pressure switch mechanically. With this method, when filter needs to be changed, control board gives an alert.

## By-pass Function (Optional)

| | |
|---|---|
|  | By-pass is off. |
|  | By-pass is on. |

By-pass function only exists on units which have by-pass module. It is used when filtered fresh air is desired to be supplied to indoor without passing through heat exchanger (transition seasons). Control board decides whether by-pass module will be opened or not by controlling outdoor air temperature, return air temperature and set temperature values.

**Note:** By-pass status can be monitored from the 44th parameter of the service menu (0: Closed / 1: Open)

## Electrical Pre-heater Function (Optional)

It is used to prevent icing inside the device in regions where the outside temperatures are very low. It works gradually depending on the outside temperature. The opening temperature of the preheater is set to 0 °C by default. It can be changed in the service menu.



Electrical Pre-heater
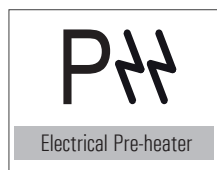
**Note1:** If a pre-heater is connected, the terminals specified in the electrical diagram of the device can be used directly. In order to receive the electric preheater alarm, the connection must be made by removing the jumper at the relevant terminal.

**Note2:** Pre-heater step can be monitored from the 63th parameter of the service menu.

The heater thermostat information can be monitored from the 20th parameter.

## Electric Heater Control Function (Optional)

Electric heater control function only exists on units which have duct type electric heater. This function controls electric heater that is used to increase temperature of supply air. It runs due to the return air temperature and set temperature values. 1 or 2 steps electric heater can be controlled.

H⚡⚡
Electric Heater

**Note1:** If an electric heater is connected, the terminals specified in the electrical diagram of the device can be used directly. In order to receive the electric preheater alarm, the connection must be made by removing the jumper at the relevant terminal.
**Note2:** Electric heater step can be monitored from the 62th parameter of the service menu. The heater thermostat information can be monitored from the 20th parameter.

## Heating Coil Function (Optional)

This function is used in units which have duct type hot water coils. It controls the hot water coil which helps to increase supply air temperature and works due to set and return air temperature. It can control 230V On/Off valve connected to water coil. It can also control proportionally.
Note: H100 / V100 indicates that 100% output is given to the heating coil.

## Cooling Coil Function (Optional)

This function is used in units which have duct type cold water coils. It controls the cold water coil which helps to decrease supply air temperature and works due to set and return air temperature. It can control 230V On/Off valve connected to water coil. It can also control proportionally.
Note: C100 / V100 indicates that 100% output is given to the cooling coil.

## Frost Protection Function (Optional)

Condensation occurs inside the unit where outdoor air temperature is below 0°C. Heat exchanger can be damaged if condensation water freezes inside. Control board changes fan speed periodically to protect freezing. When the temperature drops below the specified value, one or more of the following scenarios can be used;
1. The speed of the blower fan can be reduced (Parameter 518),
2. It will be active if there is a pre-heater (Parameter 513),
3. It will be active if there is a by-pass. (Parameter 160-153).

## Bms Function (Optional)

BMS Function makes the unit to be monitored on a central automation system. Terminals on the control board can be used for the BMS connection.

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## Boost Function

It is used to provide for high amounts of exhaust and fresh air that will occur due to any effects that may occur in the environment (such as bad smell in the kitchen, using the bathroom and / or toilet) while the device is operating in any location. When **BOOST** mode is activated, the fans are fully operated. After working for the specified **BOOST** time, the device continues to operate normally.

      1. **BOOST** terminals can be used as shown in the electrical diagram (optional)

      2. It can be activated using parameter 117 of the service menu.

**Note:** BOOST time can be changed.

## Fire Function (Optional)

There is a dry contact relay on the control board. The fire function is activated in case of on fire, if the dry contact relay is attached to fire system.

**Note :** Fire scenario can be selected from parameter 144 of service menu.

## Sensor (VOD) (Optional)

It operates with $CO_2$, air quality or humidity sensor connection. Fan speeds are automatically changed according to the data from these sensors.

**Note:** The sensor value can be monitored from the service menu and panel screen:

    27 Humidity Value

    28 Air Quality Value

    29 $CO_2$ Value parameters

    38 $CO_2$ Set Value

    39 Humidity Set Value

**Note:** If a $CO_2$ sensor will be added when the unit is in the field, the following parameters must be changed.

| Parameter | Description | $CO_2$ Config. Value |
|-----------|-------------|----------------------|
| 381 | Analog Input 1 Type Selection | 1 |
| 321 | Analog Input 1 Min Value | 0 |
| 331 | Analog Input 1 Max Value | 2000 |
| 530 | Humidity control Open/Close | 0 |
| 38 | $CO_2$ set value | 0..2000 |
| 102 | Full auto mod | 1 |
| 529 | $CO_2$ control type | 2 |
| 114 | Analog value screen | 1 |

**Note:** If a humidity sensor will be added when the unit is in the field, the following parameters must be changed.

| Parameter | Description | Hum. Config. Value |
|-----------|-------------|--------------------|
| 381 | Analog Input 1 Type Selection | 3 |

| Parameter | Description | Hum. Config. Value |
|-----------|-------------|--------------------|
| 321 | Analog Input 1 Min Value | 25 |
| 331 | Analog Input 1 Max Value | 155 |
| 530 | Humidity control Open/Close | 1 |
| 39 | Humidity set value | 0..100 |
| 114 | Analog value screen | 3 |

## Date and Time Settings

```
SETTINGS              Date and Time
 Weekly Program
>Date and Time        DATE: 08/12/2021
 Language             TIME: 12:26
 Display Light        DAY:  WD
 Display Const.
```

- While the device is on, press the Setup button on the panel for 2 seconds.
- Select Date Time Setting with the Down button and press the **Mode/OK** button.
- Select the day, month and year setting with the **Up and Down** button and proceed using the **Mode/OK** button.
- Select the hour and minute settings with the **Up and Down** buttons and proceed using the **Mode/OK** button.
- Select the day with the **Up and Down** button and scroll using the **Mode/OK** button and turn **On/Off** Exit with the button.

## Weekly Program Settings

```
SETTINGS              Weekly Program
>Weekly Program       Sn Mn Ts Wd Th Fr St
 Date and Time
 Language             Start:   12:00    ⊗
 Display Light
 Display Const.       Stop:    12:00
```

Weekly timer function is available on Panel. Unit can be programmed to operate automatically on certain periods of the week.

• While the device is on, press the Setup button for 2 seconds on the panel, while the weekly program is selected, press the **Mode/OK** button.

• Select the day to be adjusted by using the **Up and Down** buttons and the **Mode/OK** button.

• While Start is written, the start time of the device is set. Proceed with the **Mode/OK** button and set the end time of the device when Stop is written and save with the **Mode/OK** button.

• The same process steps are repeated for the other days, and the start and end times are adjusted as desired.

• After the weekly program is made, it is returned to the main screen with the **On/Off** button.

**Note 1:** If the start time is after the endtime, the device remains off during the selected day.

**Note 2:** If the start time and end time are the same, the weekly program application will not work for the selected day.

**Note 3:** If the device has a weekly program setting for the current day, the clock logo appears on the screen and operates with in the programmed working hours.

**Note 4:** If the device is programmed weekly for the current day and is within the programmed working hours, the clock stop logo appears on the screen.

⏱ ‖ : The weekly program is active and the device stops.

⏱ : The weekly program is active.

# CONTROL

## The Key Lock/Unlocked



- The key lock is unlocked by pressing the **Setup** and **Down** button for 5 seconds in the open position.
- If you want to close the key lock, the key lock is turned off by pressing **Setup** and **Down** again for 5 seconds.

## Fault Reset Setting

If the fault code flashes in the upper corner of the screen and the fault is fixed, the fault is reset by pressing the **Setup** button and **Up** button at the same time while the screen is on.

**Note:** Before resetting the filter dirty alarm, the filter must be changed by the technical service.

# FAULT LIST

| Value | | Binary | Explanation |
|---|---|---|---|
| E | 1 | 0000.0000.0000.0001 | Aspirator Fan Failure |
| E | 2 | 0000.0000.0000.0010 | Vantilator Fan Failure |
| E | 4 | 0000.0000.0000.0100 | Electrial Heater Failure |
| E | 8 | 0000.0000.0000.1000 | Aspirator Air Flow Error |
| E | 16 | 0000.0000.0001.0000 | Vantilatör Air Flow Error |
| E | 32 | 0000.0000.0010.0000 | Compressor Failure |
| E | 64 | 0000.0000.0100.0000 | Low Pressure |
| E | 99 | - | Communication Error |
| E | 128 | 0000.0000.1000.0000 | High Pressure |
| E | 256 | 0000.0001.0000.0000 | Fire Alarm |
| E | 1024 | 0000.0100.0000.0000 | VRF Error |

# WARNING LIST

| Value | | Binary | Explanation |
|---|---|---|---|
| W | 1 | 0000.0000.0000.0001 | Closed By Building Automation System |
| W | 2 | 0000.0000.0000.0010 | Boost Mode |
| W | 4 | 0000.0000.0000.0100 | Filter 1 Dirty |
| W | 8 | 0000.0000.0000.1000 | Filter 2 Dirty |
| W | 16 | 0000.0000.0001.0000 | Defrost Mode |
| W | 32 | 0000.0000.0010.0000 | Freezing Thermostat |
| W | 64 | 0000.0000.0100.0000 | Emergency |
| W | 4096 | 1000.0000.0000.0000 | Maintenance Alarm |

# SERVICE MENU USAGE

To log in to the user service menu:

• Press the **Up** and **Down** buttons simultaneously through the panel while the device is energized.
• On  the  screen you see, use the **Up** and **Down** buttons to enter the service password and press the **Mode/OK** button.
**Note:** The service password: "58"
• If the password is entered correctly, enter the parameter number you want to change on the display and press the **Mode/OK** button.
• After changing the parameter you want to change, register by pressing the **Mode/OK** button and go to the main menu with the **On/Off** button.
• Press the **On/Off** button to exit the service menu.

⚠️ Changes to be made in the service setting menu must be made by the relevant technical personnel. All responsibility arising from these changes belongs to the person who changed the device parameter.

# MODBUS RTU SETTINGS

To log in to the user service menu:

• Press the **Up** and **Down** buttons simultaneously through the panel while the device is energized.
• On  the  screen you see, use the **Up** and **Down** buttons to enter the service password and press the **Mode/OK** button.
• If the password is entered correctly, enter the parameter number you want to change on the display and press the **Mode/OK** button.
• After changing the parameter you want to change, register by pressing the **Mode/OK** button and go to the main menu with the **On/Off** button.
• For Modbus ID, the "PR" parameter is reached 111, and using the desired Modbus ID **Up** and **Down** buttons, set "ST" and press the **Mode/OK** button.
• For Modbus ID, the "PR" parameter is reached 112, and using the desired Modbus baudrate **Up** and **Down** buttons, set "ST" and press the **Mode/OK** button.
• Press the **On/Off** button to exit the service menu.

> 0: 1200 Bps
> 1: 2400 Bps
> 2: 4800 Bps
> 3: 9600 Bps
> 4: 19200 Bps
> 5: 38400 Bps
> 6: 57600 Bps

**Note 1:** All Modbus parameters are Holding register.
**Note 2:** All Modbus parameters are Signed Integer 16.

| PLC Register | | | | |
|---|---|---|---|---|
| 40001 | 0 | Device Open / Close Variable | 0…1 | 0: Off 1: On |
| 40002 | 1 | Device Set Temperature | 0…999 | 280 value means 28 ºC. |
| 40003 | 2 | Device Air Conditioning Mode | 0…5 | 0: Fan Mode<br>1: Man. Heating<br>2: Man. Cooling<br>3: Auto Heating<br>4: Auto Cooling 5: Full Automatic Mode |
| 40004 | 3 | Aspirator Fan Manuel Speed Value | 0…6 | |
| 40005 | 4 | Ventilator Fan Manual Speed Value | 0…6 | |
| 40007 | 6 | Panel Ambient Temperature Value | -400…999 | It is the Temperature Value on the Panel. |
| 40008 | 7 | Device Fresh Air Temperature Value | -400…999 | It shows the temperature of the air drawn in the space. |
| 40009 | 8 | Device Supply Air Temperature Value | -400…999 | If there is no temperature value available on the device, the temperature value is seen as "32767". |
| 40010 | 9 | Outdoor Temperature Value | -400…999 | |
| 40011 | 10 | Water Coil Temperature Value | -400…999 | |
| 40015 | 14 | Bms Input | 0…1 | 0: Device Operates Normally.,<br>1: The device is turned off. |
| 40016 | 15 | Boost Input | 0…1 | 0: It works normally.,<br>1: Fans are working fully. |
| 40017 | 16 | Aspirator Fan Air Flow Information | 0…1 | Aspirator Fan Air Flow Switch information. |
| 40018 | 17 | Ventilator Fan Air Flow Information | 0…1 | Ventilator Fan Air Flow Switch information. |
| 40019 | 18 | Filter 1 Dirty Information | 0…1 | Filter 1 DPS State |
| 40021 | 20 | E. Heater Safety Thermostat Information | 0…1 | Safety Thermostat Information |
| 40022 | 21 | Aspirator Fan Thermal Fault Information | 0…1 | Aspirator Fan Fault Information |
| 40023 | 22 | Ventilator Fan Thermal Fault Information | 0…1 | Ventilator Fan Fault Information |
| 40024 | 23 | Emergency Stop Button Information | 0…1 | Emergency Stop Button Information |
| 40025 | 24 | Low Pressure Inlet Information | 0…1 | Low Pressure Input |
| 40026 | 25 | High Pressure Information | 0…1 | High Pressure Input |
| 40027 | 26 | Fire Information | 0…1 | Fire Entry |
| 40028 | 27 | Freezing Thermostat Information | 0…1 | Freezing Thermostat Information (In Water Coil application, the valve opens completely and the fans are completely turned off.) |
| 40029 | 28 | Compressor Thermal Failure Information | 0…1 | Compressor Thermic (If there is a compressor, the compressor turns off.) |

| PLC Register | | | | |
|---|---|---|---|---|
| 40030 | 29 | Phase Fail Information | 0...1 | Phase Failure Information (The device is completely turned off.) |
| 40031 | 30 | Heat Exchanger Freezing Thermostat | 0...1 | |
| 40034 | 33 | Humidity Value | 0...1000 | This value is adjusted according to the analog input calibration parameter between 321 and 340. |
| 40035 | 34 | Air Quality Value | 0...1000 | |
| 40036 | 35 | $CO_2$ Value | 0...1000 | |
| 40037 | 36 | Return Pressure Value | 0...1000 | |
| 40038 | 37 | Blowing Pressure Value | 0...1000 | |
| 40039 | 38 | Analog 1 Set Value | | |
| 40040 | 39 | Analog 2 Set Value | | |
| 40044 | 43 | Fresh Air / Suction Damper Motor | 0...1 | 0: Off 1: On |
| 40045 | 44 | By-pass Damper Motor | 0...1 | 0: Off 1: On |
| 40046 | 45 | Heating / Cooling Coil Valve Output | 0...1 | 0: Off 1: On |
| 40047 | 46 | Heating Battery Open / Close Output | 0...1 | 0: Off 1: On |
| 40048 | 47 | Cooling On / Off Battery Outlet | 0...1 | 0: Off 1: On |
| 40049 | 48 | Compressor Output | 0...1 | 0: Off 1: On |
| 40050 | 49 | Compressor 4 Way Valve Output | 0...1 | 0: Off 1: On |
| 40051 | 50 | Device Operation Information Output | 0...1 | 0: Off 1: On |
| 40052 | 51 | Device Fault Information Output | 0...1 | 0: Off 1: On |
| 40053 | 52 | Device Warning Information Output | 0...1 | 0: Off 1: On |
| 40054 | 53 | Aspirator Fan Run Output | 0...1 | 0: Off 1: On |
| 40055 | 54 | Ventilator Fan Run Output | 0...1 | 0: Off 1: On |
| 40059 | 58 | Rotary Outlet | 0...1 | 0: Off 1: On |
| 40061 | 60 | Instant Aspirator Fan Output Value | 0...6 | Fan electric heater shows the instantaneous step value. |
| 40062 | 61 | Instant Ventilator Fan Output Value | 0...6 | |
| 40063 | 62 | Instant Electric Heater Value | 0...3 | |
| 40064 | 63 | Instant Pre Electric Heater Value | 0...3 | |
| 40065 | 64 | Aspirator Fan Analog Output Value | 0...100 | It shows the proportional output values. |
| 40066 | 65 | Ventilator Fan Analog Output Value | 0...100 | |
| 40067 | 66 | Proportional Heating Valve Output Value | 0...100 | |
| 40068 | 67 | Proportional Cooling Valve Output Value | 0...100 | |
| 40069 | 68 | Proportional Heating / Cooling Valve Output Value | 0...100 | |
| 40070 | 69 | Proportional By-pass Damper Output Value | | |

| PLC Register | | | | |
|---|---|---|---|---|
| 40073 | 72 | Start on Sunday Hour: Minutes | 0...2359 | The device operates between the start and end timeswithin a dayand the device switches off outside these hours.<br><br>If the start and end times are equal, the device workscontinuouslyon that day.<br><br>If the start time is more than the end time,the device iscompletelyturned off on the dayset.<br><br>The set parameter is 1210 è Hour: Minute information is set as 12:10. |
| 40074 | 73 | Ending on Sunday Time: Minutes | 0...2359 | |
| 40075 | 74 | Start on Monday Hour: Minutes | 0...2359 | |
| 40076 | 75 | Ending on Monday Time: Minutes | 0...2359 | |
| 40077 | 76 | Start on Tuesday Hour: Minutes | 0...2359 | |
| 40078 | 77 | Ending on Tuesday Time: Minutes | 0...2359 | |
| 40079 | 78 | Start on Wednesday Hour: Minutes | 0...2359 | |
| 40080 | 79 | Ending on Wednesday Time: Minutes | 0...2359 | |
| 40081 | 80 | Start on Thursday Hour: Minutes | 0...2359 | |
| 40082 | 81 | Ending on Thursday Time: Minutes | 0...2359 | |
| 40083 | 82 | Start on Friday Hour: Minutes | 0...2359 | |
| 40084 | 83 | Ending on Friday Time: Minutes | 0...2359 | |
| 40085 | 84 | Start on Saturday Hour: Minutes | 0...2359 | |
| 40086 | 85 | Ending on Saturday Time: Minutes | 0...2359 | |
| 40087 | 86 | Instant Day | 1...31 | |
| 40088 | 87 | Instant Month | 1...12 | |
| 40089 | 88 | Instant Year | 0...99 | |
| 40090 | 89 | Instant Hour | 0...23 | |
| 40091 | 90 | Instant Minute | 0...59 | |
| 40092 | 91 | Instant Second | 0...59 | |
| 40093 | 92 | Instant Day of the Week | 1...7 | 1: Sunday 2: Monday 3: Tuesday 4: Wednesday 5: Thursday 6: Friday 7: Saturday |
| 40094 | 93 | Instant Weekly Program Status | 0...2 | 0: No Weekly Schedule 1: The device has a weekly program and the device is working. 2: The device isset up weekly weekly and the device is stopped. |
| 40096 | 95 | Alarm Value | 0...99 | |
| 40097 | 96 | Warning Value | 0...99 | |
| 40104 | 103 | Keylock | 0...1 | 0: Key Lock Off, 1: Key Lock On |
| 40105 | 104 | Major Fault Information | 0...1 | 0: No Fault, 1: The device has been completely shut down. |
| 40106 | 105 | Compressor Failure Information | 0...1 | 0: No fault in the compressor 1: There has been a fault that turns off the compressor. |

| PLC Register | | | | |
|---|---|---|---|---|
| 40109 | 108 | Fan Quantity | 1...2 | 1: Single Fan, 2: Double Fan |
| 40110 | 109 | Fan Step Value | 1...6 | |
| 40112 | 111 | Modbus ID | 1...254 | |
| 40113 | 112 | Modbus Baudrate | 0...7 | |
| 40114 | 113 | Monitoring Temperature Value | 0...3 | 0: Do not Show 1: Outdoor Temp. 2: Supply 3: Two Temp. |
| 40115 | 114 | Analog Input Value | 0...3 | 0: Do not Show 1: $CO_2$ 2: Air Quality 3: Humidity |
| 40116 | 115 | Filter Time Counter | 0-9999 Hour | This counter increases on an hourly basis as long as the Ventilator Fan is running. |
| 40117 | 116 | Device Operating Mode Information | 0-100 | 0: Device Off, 1: Damper Opens, 2: The Fan Turns On, 3: Main Loop, 4: Valve Closes 5: Fan Turns Off, 6: Freezing Condition 7: Defrost Status, 99: Fault Status (Waiting forReset) |
| 40118 | 117 | Activate Boost | 0-1 | 0: Deactivated, 1: Active |
| 40119 | 118 | Control Temperature Type | 0-3 | 0: Panel Temperature 1: According to the Return Air Temperature 2: According to the Supply Temperature 3: According to Outside Air Temperature |
| 40145 | 144 | Fire Scenrio | 0-3 | 0: Fans Off 1: ASP Full VNT Off 2: ASP Off VNT Full 3: 2 Fan Full On |
| 40146 | 145 | Heating Cooling Hysterezis | 0-999 | |
| 40149 | 148 | Boost Max. Operating Time | 0-999 Min. | Boost turns off automatically after this time. |
| 40150 | 149 | Limiting Variable of Heater According to Fan | 0-1 | |
| 40151 | 150 | Pre heater On Time | 1-999 Sec. | Pre-heater on delay time |
| 40152 | 151 | Pre heater Off Time | 1-999 Sec. | Pre-heater off delay time |
| 40153 | 152 | Pre-heater Hysterezis | 1...100 | E.g; A value of 100 means 10.0 ºC. |
| 40154 | 153 | Pre-heater Stage Ranges | | |
| 40155 | 154 | Number of Pre-heater Stages | 0-3 | |
| 40156 | 155 | Heater On Time | 1-999 Sec. | Heater on delay time |

| PLC Register | | | | |
|---|---|---|---|---|
| 40157 | 156 | Heater Off Time | 1-999 Sec. | Heater off delay time |
| 40158 | 157 | Heater Hysterezis | 1...100 | E.g; A value of 100 means 10.0 ºC. |
| 40159 | 158 | Heater Stage Intervals | | |
| 40160 | 159 | Number of Heater Stages | | |
| 40161 | 160 | Pre-heater Set Temperature Value | -400...999 | |
| 40162 | 161 | By-pass Hysterezis | 1...999 | |
| 40163 | 162 | Rotary Hysterezis | 1...999 | |
| 40164 | 163 | P Value for Valve PI control | | |
| 40165 | 164 | I Value for Valve PI control | | |
| 40174 | 173 | Heating Coil Freeze Protection Minimum Temperature Value | -400...999 | Battery temperature in the Heating Coil If the sensor is below this temperature value it goes into freeze protection mode. |
| 40175 | 174 | Heating Coil Freeze Protection Maximum Temperature Value | -400...999 | Battery temperature in the Heating Coil sensor during freeze protection if this freezing above the temperature value exits the protection mode. |
| 40176 | 175 | Heat Exchanger Freeze Protection Minimum Temperature Value | -400...999 | Heat exchanger temperature sensor on the heat exchanger if it goes below this temperature value, the heat exchanger enters the frost protection mode with the bypass damper. |
| 40177 | 176 | Heat Exchanger Freeze Protection Maximum Temperature Value | -400...999 | Heat exchanger temperature sensor on the heat exchanger While in frost protection mode, if the temperature rises above this value, the heat exchanger exits the frost protection mode. |
| 40178 | 177 | Filter protection warning time limit | 1...9999 | If the filter counter time exceeds this value gives a filter warning on the screen. |
| 40182 | 181 | 1 Universal input status | -400...999 | If one of the device's universal input digital inputs is selected, 0 or 1 appears in the register. 0: On 1: Off |
| 40183 | 182 | 2 Universal input status | -400...999 | |
| 40184 | 183 | 3 Universal input status | -400...999 | |
| 40185 | 184 | 4 Universal input status | -400...999 | |
| 40186 | 185 | 5 Universal input status | -400...999 | If one of the device's universal input digital inputs is selected, 0 or 1 appears in the register. 0: On 1: Off |
| 40187 | 186 | 6 Universal input status | -400...999 | |
| 40188 | 187 | 7 Universal input status | -400...999 | |
| 40189 | 188 | 8 Universal input status | -400...999 | |
| 40202 | 201 | 1 Digital output status | 0...1 | |

| PLC Register | | | | |
|---|---|---|---|---|
| 40203 | 202 | 2 Digital output status | 0...1 | |
| 40204 | 203 | 3 Digital output status | 0...1 | |
| 40205 | 204 | 4 Digital output status | 0...1 | |
| 40206 | 205 | 5 Digital output status | 0...1 | |
| 40207 | 206 | 6 Digital output status | 0...1 | |
| 40208 | 207 | 7 Digital output status | 0...1 | |
| 40209 | 208 | 8 Digital output status | 0...1 | |
| 40222 | 221 | Analog Input 1 status | -9999...9999 | |
| 40232 | 231 | Analog Output 1 status | -9999...9999 | |
| 40233 | 232 | Analog Output 2 status | -9999...9999 | |
| 40234 | 233 | Analog Output 3 status | -9999...9999 | |
| 40235 | 234 | Analog Output 4 status | -9999...9999 | |
| 40262 | 261 | Din 1Input Normally Open/Closed Selection | | |
| 40263 | 262 | Din 2 Input Normally Open/Closed Selection | | |
| 40264 | 263 | Din 3 Input Normally Open/Closed Selection | | |
| 40265 | 264 | Din 4 Input Normally Open/Closed Selection | 0...1 | Universal inputs should be checked from the project and which input is used for what purpose. |
| 40266 | 265 | Din 5 Input Normally Open/Closed Selection | | |
| 40267 | 266 | Din 6 Input Normally Open/Closed Selection | | |
| 40268 | 267 | Din 7 Input Normally Open/Closed Selection | | |
| 40269 | 268 | Din 8 Input Normally Open/Closed Selection | | |
| 40302 | 301 | Din 1 Output Normally Open/Closed Selection | | |
| 40303 | 302 | Din 2 Output Normally Open/Closed Selection | | |
| 40304 | 303 | Din 3 Output Normally Open/Closed Selection | | |
| 40305 | 304 | Din 4 Output Normally Open/Closed Selection | 0...1 | Digital outputs should be checked from the project and which input is used for what purpose. |
| 40306 | 305 | Din 5 Output Normally Open/Closed Selection | | |
| 40307 | 306 | Din 6 Output Normally Open/Closed Selection | | |
| 40308 | 307 | Din 7 Output Normally Open/Closed Selection | | |
| 40309 | 308 | Din 8 Output Normally Open/Closed Selection | | |
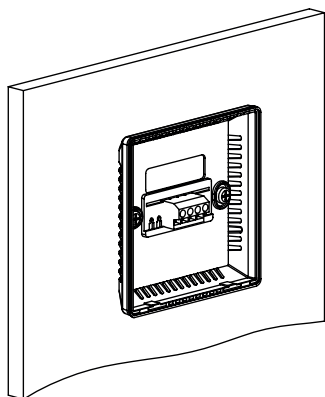
- With the help of a screwdriver, the back side is removed by pushing the tabs at the bottom of the panel.
- It is fixed to the wall with screws from the gaps on the plate.
- Bolts in Ø4X30 sizes and plastic dowels in Ø6 sizes should be used.
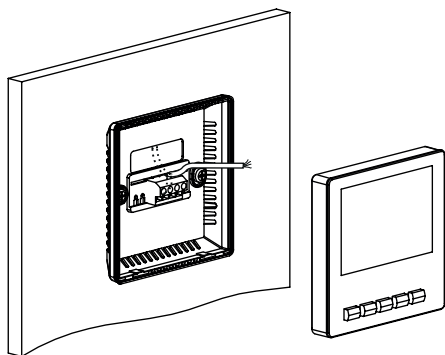


- The cable carried through the wall is passed through the cable gap on the back.
- Terminal connections related to the cable passed are made.
- First, the upper tabs on the front are replaced on the back.
- Afterwards, pressure is applied to the front of the panel so that the lower tabs on the front face are inserted into their places on the back.
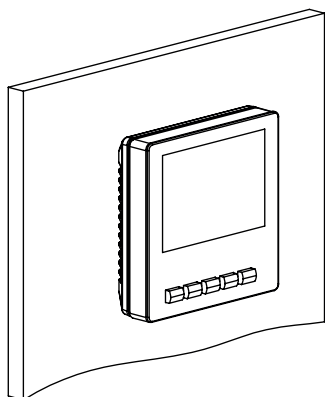


- The panel will be energized while the device is operating. Otherwise, the cable connections should be checked.

EN

If the device can capable to change direction device will be right to left or left to right by changing connection on the controller.
The cable that is connected to the input and output connection points below will be switched.
- UI5 with UI6
- UI7 with UI8
- AO1 with AO2

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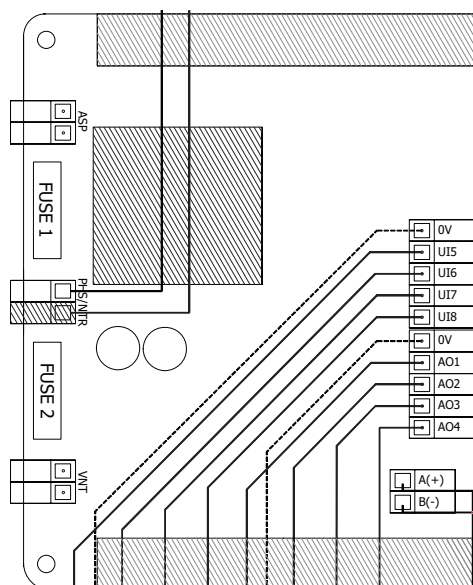
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