

# BSK NOTUS HV



## 4" Touch Display User Guide



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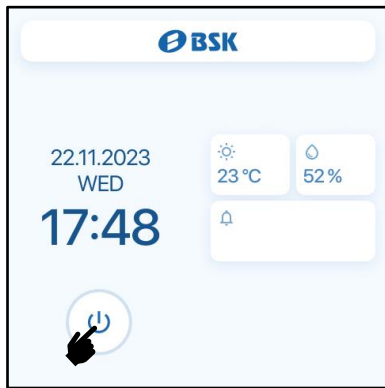
## **Preface**

Thank you for selecting the BSK Heat Recovery Devices. This manual is designed to provide comprehensive information to users regarding the components, functionalities, and maintenance of the BSK 4" Touch Display.

The BSK Heat Recovery Devices excels in delivering superior indoor air quality while optimizing energy consumption. Our commitment to user-friendly experiences is reflected in the straightforward assembly, operation, and maintenance of these devices. The incorporation of advanced controls and a range of accessory options empowers users to tailor the system to their specific requirements.

By choosing BSK units, you are investing in a solution that seamlessly combines efficiency and ease of use, offering you unparalleled control over your indoor environment.

## Standby Screen



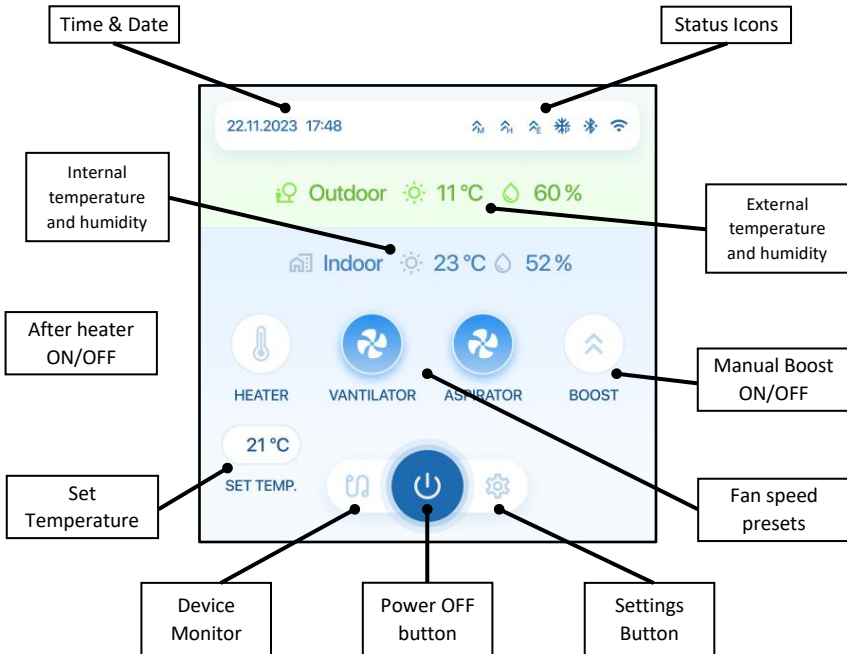
**Standby Screen:** When the unit is turned off, the standby screen is displayed.

**Powering On:** To turn on the device, press the power button located on the bottom left corner of the screen.







**Time & Date Display:** The current time and date are prominently displayed on the left side of the screen for your convenience.

**Indoor Environment Monitoring:** On the right side of the screen, you can view real-time indoor temperature and humidity values, providing you with essential information at a glance.







# Home Screen



## Connection Icons

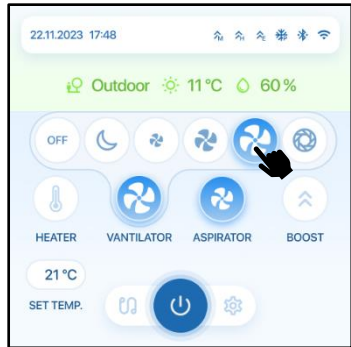
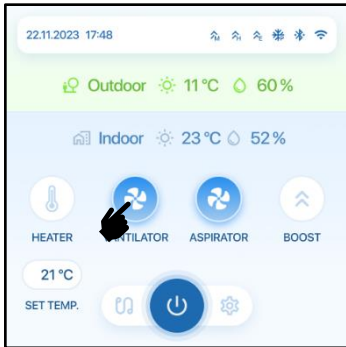
	No WiFi connection
	WiFi Connected (Signal Strength)
	WiFi Connected, No Internet (Signal Strength)
	Bluetooth Active
	Mesh Connection Successful
	Mesh Connected, No Internet

## Status Icons

	Free Cooling Mode Active
	External Boost Mode Active
	Humidity Boost Mode Active
	Manual Boost Mode Active
	Defrost Mode Active
	Pre-heater Activated



## Fan speeds



**Access Fan Speed Options:** Navigate to the home screen and tap either the VNT or ASP fan speed icon.

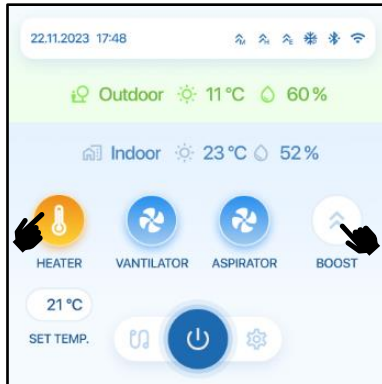
**Select Fan Level:** A pop-up menu will appear. Choose your desired fan speed from the available presets: Sleep, Low, Mid, High, or Boost.

**Customize Speed Settings:** If you prefer a specific fan speed percentage, access the settings menu for further customization. Refer to page 18-19 for detailed instructions.

**Turning Off the Fan:** To turn off the fan, select the OFF button.

By following these steps, you have full control over the fan speed settings, allowing you to tailor the device's operation to your comfort and preferences.

## Manual Boost & Heater



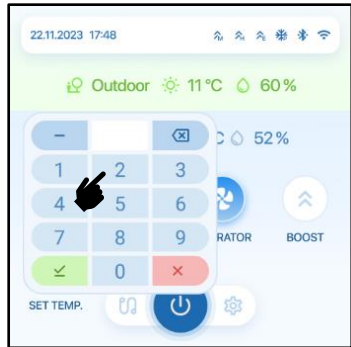
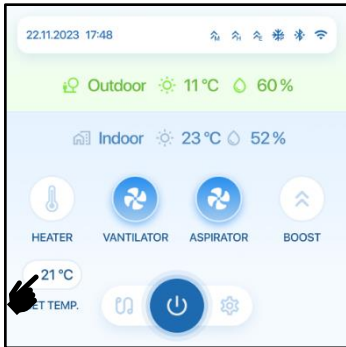
**Activate Manual Boost:** Turn manual boost mode ON or OFF by using the dedicated "BOOST" button on the home page.

**Customize Settings:** Fine-tune your experience by adjusting fan speeds and boost time. Refer to page 12 for detailed instructions.

**After Heater Control:** After Heater Accessory: If a BSK electrical or water after heater accessory is installed and connected to the unit:

**Toggle After Heater:** Use the "HEATER" button on the home page to switch the after heater ON or OFF.

## Set Temperature



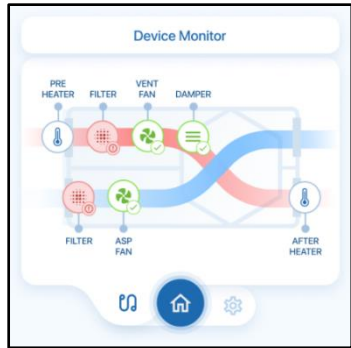
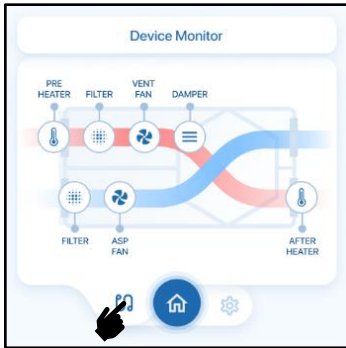
**Access Set Temperature:** Use the "SET TEMP." button to initiate the set temperature adjustment.

**Enter Desired Temperature:** Upon clicking, a numpad will appear, allowing you to enter your desired temperature within the range of 15-35°C.

**Automatic Free-Cooling Mode:** In AUTO free-cooling mode, if the set temperature is within  $\pm 2^{\circ}\text{C}$  of the outside temperature, the device will automatically engage free-cooling mode by opening the bypass damper.

**Automatic Heater Control:** The set temperature value determines automatic heater control. If the set temperature is higher than the indoor temperature and the heater is set to automatic, it will activate.

## Device Monitor



**Navigate to Device Monitor:** Click on the bottom-left button to access the Device Monitor page.





















**View Sub-System Status:** On the Device Monitor page, you can check the real-time status of your unit's sub-systems.

**Troubleshooting and Validation:** Utilize this page for troubleshooting and ensuring the proper functioning of your device.

**Refresh Option:** To update the displayed information, press the page button again for a quick refresh.

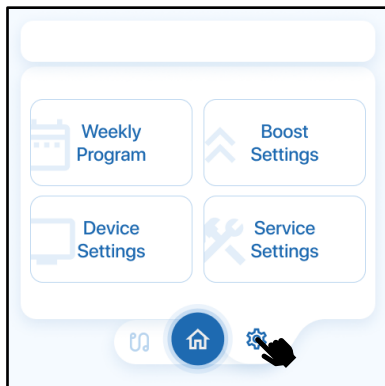
## Device Monitor Icons

The meaning of several device monitor icons are as follows;

	Filters	Fans	Damper	Heaters
Unavailable				
Default				
OK				
Warning				
Error				

These icons help users quickly assess the status of different components, making troubleshooting and system monitoring more intuitive.

## Settings Page

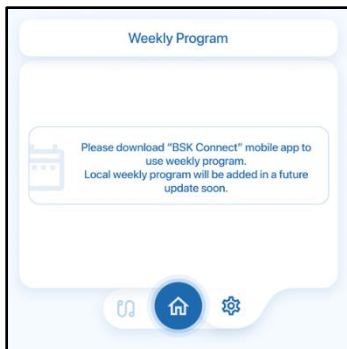
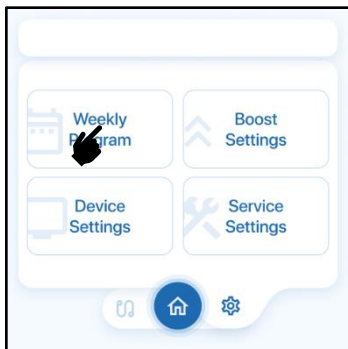


**Navigate to Settings:** Click the bottom-left button to enter the Settings page.

**Select Setting Groups:** Within the Settings page, choose the specific group of settings you want to configure.

**Return to Home Page:** Press the Home button in the middle to easily return to the main home page.

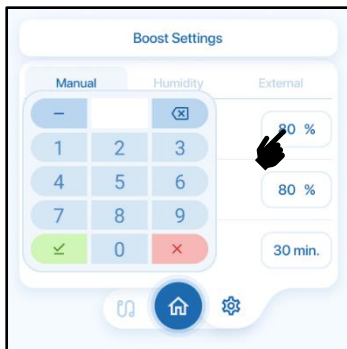
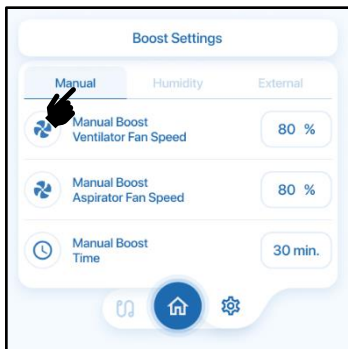
## Weekly Program



**Navigate to Weekly Program:** Click on the top-left button within the Settings page to enter the Weekly Program settings.

**Future Update for Local Weekly Program:** Please note that the local weekly program feature will be added in a future update. To set your Weekly Programs on your mobile device, download and use the "BSK Connect" app.

## Manual Boost



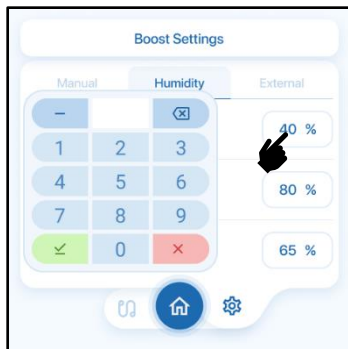
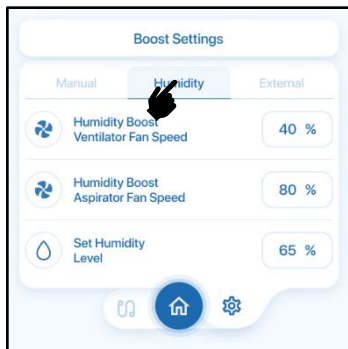
**Adjust Fan Speeds:** On the Manual Boost Settings page, modify the VNT and ASP fan speeds to your preference when the device enters Manual Boost Mode.

**Set Timer:** Additionally, set the timer for the Manual Boost Mode. The device will operate at the adjusted fan speeds for the specified duration.

**Automatic Deactivation:** Once the set time elapses, Manual Boost Mode will automatically deactivate, and the unit will revert to its previous fan speeds.



## Humidity Boost

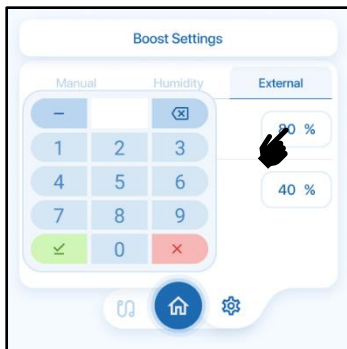
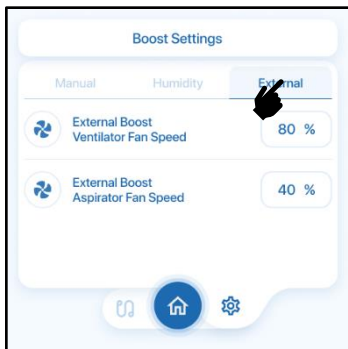


**Adjust Fan Speeds:** On the Humidity Boost Settings page, customize the VNT and ASP fan speeds for when the device enters Humidity Boost Mode.

**Set Humidity Level:** Specify the desired humidity level that triggers the activation of Humidity Boost Mode.

**Automatic Activation:** When the indoor relative humidity exceeds the set level, Humidity Boost Mode will activate automatically. It continues until the humidity level decreases below the specified value.

## External Boost

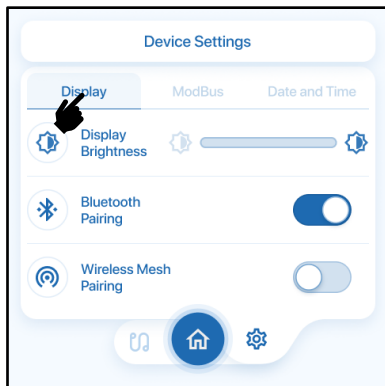


**Adjust Fan Speeds:** On the External Boost Settings page, customize the VNT and ASP fan speeds for when the device enters External Boost Mode.

**Activation Mechanism:** External Boost Mode is activated when the external boost port of the unit is connected to a switch, such as a kitchen hood or a simple wall switch.

**Connection Guidelines:** Ensure the boost port connection is a dry contact. It should not be directly connected to any power source; only link it to simple ON/OFF switches.

## Display Settings



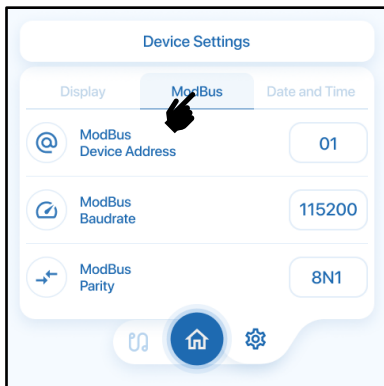
**Accessing Display Settings:** In the Device Settings page, navigate to the Display tab to modify settings related to your BSK Touch Display.

**Adjust Screen Brightness:** Use the display brightness slider to customize the screen brightness according to your preference.

**Bluetooth Pairing:** Toggle the Bluetooth Pairing switch to turn on Bluetooth pairing functionality.

**Wireless Mesh Pairing:** Toggle the Wireless Mesh Pairing switch to activate mesh pairing for enhanced connectivity.

## Modbus Settings



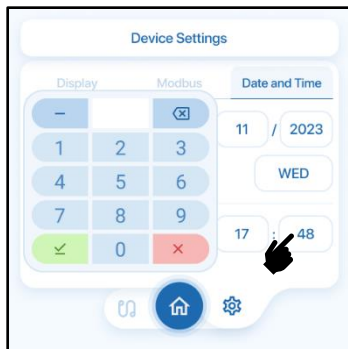
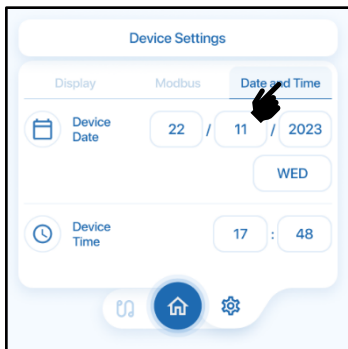
**Accessing Modbus Settings:** Navigate to the Device Settings page, and under the Modbus tab, customize various settings related to the Modbus connection.

**Modify Modbus Device Address:** Adjust the Modbus Device Address to suit your configuration requirements.

**Baud Rate Configuration:** Change the connection baud rate to optimize the Modbus connection speed.

**Bits and Parity Settings:** Select your preferred bits and parity settings for seamless communication within the Modbus network.

## Date&Time Settings

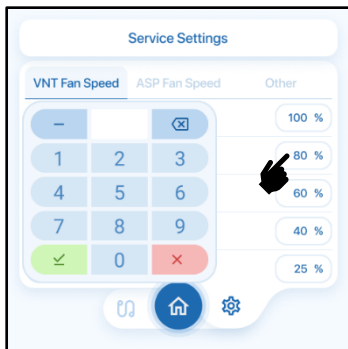
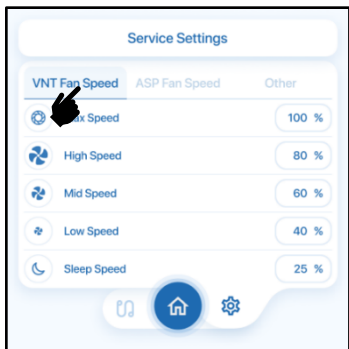


**Accessing Date & Time Settings:** Visit the Device Settings page, and under the Date & Time tab, adjust the clock and calendar settings for your device.

**Modify Date:** Change the DAY / MONTH / YEAR to update the device's date.

**Modify Time:** Adjust the HOUR : MINUTE to set the accurate time for your device.

## VNT Fan Speeds

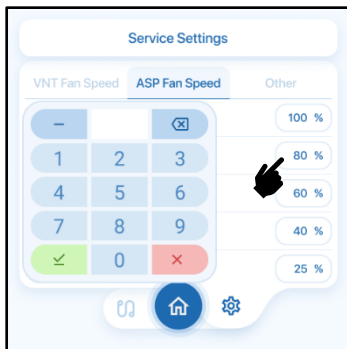
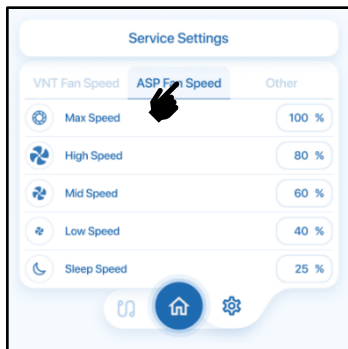


**Accessing VNT Fan Speed Settings:** In the Service Settings page, navigate to the VNT Fan Speed tab to modify the 5 preset fan speed values for the ventilator fan.

**Adjusting Fan Speed:** To change the default ventilator fan speed settings, select the desired fan level. Enter your new fan speed % value using the number pad.

**Setting Guidelines:** Ensure not to enter a higher % value than the setting before it to maintain a logical and consistent fan speed progression.

## ASP Fan Speeds

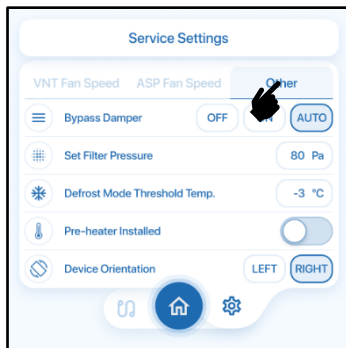


**Accessing ASP Fan Speed Settings:** In the Service Settings page, navigate to the ASP Fan Speed tab to modify the 5 preset fan speed values for the ventilator fan.

**Adjusting Fan Speed:** To change the default ventilator fan speed settings, select the desired fan level. Enter your new fan speed % value using the number pad.

**Setting Guidelines:** Ensure not to enter a higher % value than the setting before it to maintain a logical and consistent fan speed progression.

## Other Settings



### Bypass Damper:

**ON:** The bypass damper will permanently stay open, activating Free Cooling mode continuously.

**OFF:** The bypass damper will permanently stay closed, deactivating Free Cooling mode continuously.

**AUTO:** Free Cooling mode will be controlled automatically based on the set temperature.

**Free-cooling Mode:** Automatically activates in "Auto" mode when the set temperature is within +/- 2°C of the outside temperature.



**Set Filter Pressure:** Adjust this value to set the sensor trigger limit for the filter alarm, considering your air ductwork and fan speed.

**Defrost Mode Threshold Temperature:** Set the temperature threshold (between -10 to 0°C) below which the device enters Defrost mode or activates the Pre-heater if installed.

**Defrost Mode:** Activates when the outside temperature drops below 0°C to prevent ice formation inside the device. Periodically adjusts fans to melt potential frost, with aspirator fan speed set to high and ventilator fan speed set to low. Activates for 5 minutes every 1 hour.

**Pre-heater Installed Toggle:** If a BSK PFC Electrical heater is installed and connected, toggle ON to deactivate Defrost Mode and control the pre-heater automatically.

**Device Orientation:** Adjust this setting based on the setup of the Fresh Air Intake side.

## GENERAL WARNINGS

By adhering to these guidelines, you contribute to the safe and efficient operation of the Touch Screen Controller for the heat recovery device.



**Installation and Commissioning:** Ensure the installation and commissioning of the Touch Screen Controller are exclusively carried out by qualified personnel to guarantee optimal performance.

**Disassembly and Repair:** The Touch Screen Controller should never be disassembled by users. Only authorized service personnel are permitted to undertake disassembly and repairs to prevent electric shocks or injuries.

**Removal of Protective Materials:** Before powering on the device, remove all protective materials, inside and outside, used during transportation to avoid operational issues with the Touch Screen Controller.

**Operating Environment:** Do not expose the Touch Screen Controller to extreme environmental conditions such as heated swimming pools or cold storage rooms. Ensure it operates in environments with consistent humidity and temperature levels.

**Avoid Corrosive and Flammable Environments:** Do not use the Touch Screen Controller in corrosive environments (acids, oil mist, paint, toxic gases, etc.) or in flammable media containing explosive gases.

**Secure Fixing and Handling:** Securely fix the Touch Screen Controller, avoiding force on electrical connections and the control box during handling.

**Avoid Electrical Contact:** Ensure the Touch Screen Controller is not in electrical contact with air ducts and building steel constructions to prevent electrical leaks.

**Safety Precautions:** Switch off electrical connections before any interference with the appliance. Ensure proper safety precautions when dealing with the Touch Screen Controller.

## WARRANTY DETAILS

BSK stands firmly behind the quality of its Touch Screen Controllers, guaranteeing them free from structural flaws, material defects, or manufacturing problems, including faults in the touchscreen, control systems, or electronics. However, BSK does not assume responsibility for damages resulting from improper or irresponsible use conditions.

The warranty covers all touchscreen components, control systems, and electronic components for a period of 2 years from the date of the customer's invoice.

Damage resulting from unauthorized repairs, modifications, or replacement of parts without written permission from BSK or an authorized service is not covered by the warranty.

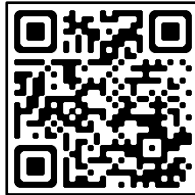
Failures related to structural flaws, material defects, or manufacturing problems, as well as faults in the touchscreen, control systems, or electronics, are eligible for repair or exchange during the warranty period.

Replacement of touchscreen components, not performed by BSK, falls outside the warranty scope.

BSK's warranty covers the replacement of spare parts for the touchscreen, control systems, and electronic components. If the defect is within the warranty coverage, all transportation and exchange costs, along with technical staff appointments, will be covered by the authorized service. Otherwise, these costs must be borne by the customer.

## BSK Connect Mobile Application

To enhance your overall experience, ensure ease of use, and receive seamless software updates, we recommend downloading our mobile app, BSK Connect. Simply pair it with your device for a unified and feature-rich user experience. Stay connected and enjoy the latest software updates through convenient over-the-air updates.





**For more information, visit our product website;**



**BSK Havalandırma Ekipmanları A.Ş.**

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**[www.bskhvac.com.tr](http://www.bskhvac.com.tr)**