MYCOND

OPEARION MANUAL

Energy-saving supply and exhaust unit

MVS700-DW
MVS900-DW
MVS1100-DW
MVS1400-DW
MVS1600-DW
MVS2200-DW
MVS2800-DW

15.12.2022EN - ver.1.0

CONTENTS

LIST OF THE PACKAGE

The package includes:

1. Supply and exhaust unit
2. Controller
3. User manual

ABOUT EQUIPMENT

The supply and exhaust unit with recuperation ensures the supply of fresh air to the room and the removal of stale air from it. Thanks to recuperation, the supply air is heated from the exhaust air without mixing the flows. Adjustment of the operating parameters of the supply and exhaust unit is carried with the control panel.

SAFETY PRECAUTIONS

Please read the following safety instructions before using the equipment. The supply and exhaust unit must be installed correctly by a specialized installation company.
Follow the safety instructions to avoid personal injury or damage to equipment or property. Please read the safety instructions below before installing the equipment, and make sure the unit is properly installed.

The symbols shown below indicate the potential degree of danger.

⚠	Warns about possible property damage, serious injury or even death in case of failure to observe the requirements.

The symbols shown below indicate safety regulations that must be followed.

⊘	Warns about forbidden actions	ⓘ	Warns about necessary actions

SAFETY REQUIREMENTS

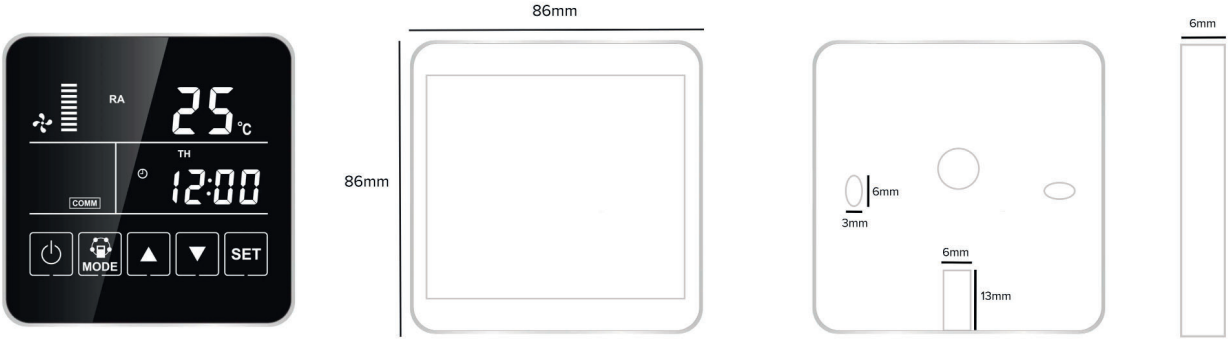
⚠ CAUTION!

!	Installation and maintenance should only be performed by qualified personnel. Users must not install and move the equipment themselves	!	Bird nets or ventilation grilles must be installed on external ventilation openings. Make sure there are no blockages
!	Before maintenance, repair of the equipment and in case of an emergency, it is necessary to turn off the electrical supply to avoid fire, equipment failure or electric shock	!	The method of application of the supply and exhaust unit and the correct selection must be determined in accordance with the design documentation developed by certified personnel
⊘	The supply and exhaust unit and the control panel cannot be washed with water or other detergents	!	In case of emergency situations that cannot be resolved with the help of this manual, you should contact a specialized service company
⊘	Do not use the equipment if the supply voltage deviates by more than 10% from the specified in the table of technical characteristics.	⊘	Do not use the equipment if it has been flooded with water or if it is in a damp room with a risk of condensation
⊘	Children under the age of 12 are not allowed to operate the equipment on their own	⊘	Do not use the equipment in the event of emergency situations that cannot be resolved with the help of this manual
⊘	Do not put your hands through the nozzles of the supply and exhaust unit	!	There should be no sources of high temperature and fire near the supply and exhaust unit

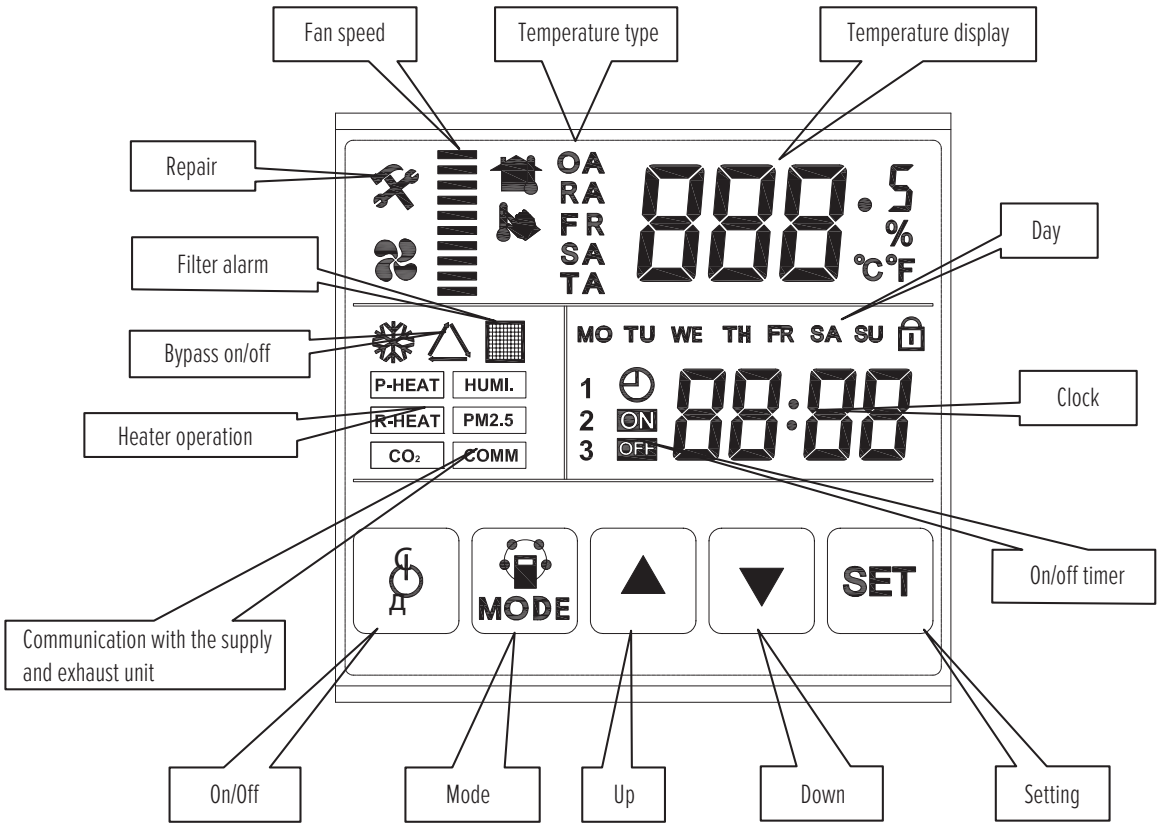
SMART TOUCH-SCREEN CONTROLLER

CONTROL PANEL

The smart controller in the form of an LCD touch screen is mounted on the outside.

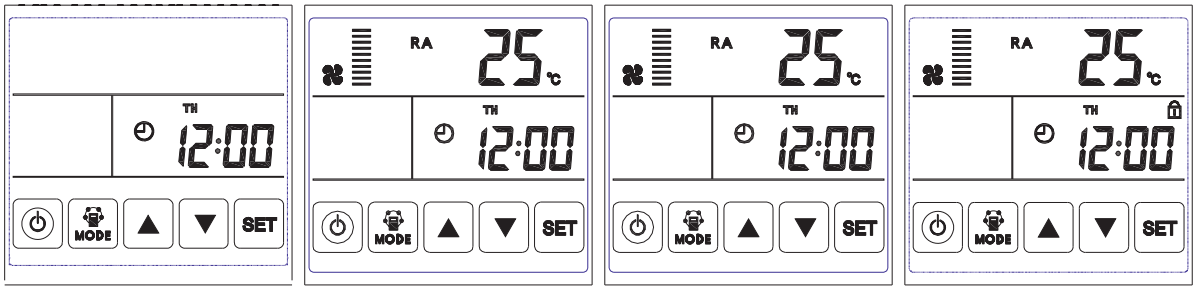


DESCRIPTION OF THE CONTROL PANEL



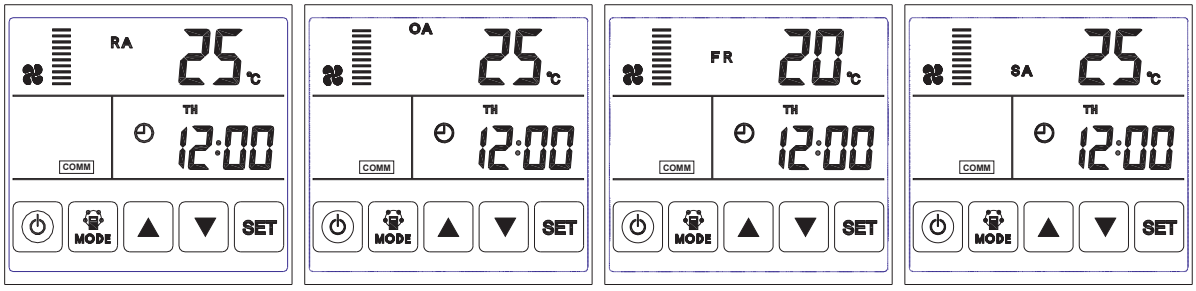
OPERATING INSTRUCTION

1. **On/Off:** Press On/Off once to switch the unit on, and press this key again to switch the unit off. Backlighting of the LCD screen goes on when the unit switches on, and goes off when the unit switches off. The backlighting will also go off, if there are no operations with the keypad for 30 seconds. Press and hold On/Off for 6 seconds to enable or disable the keypad lock.

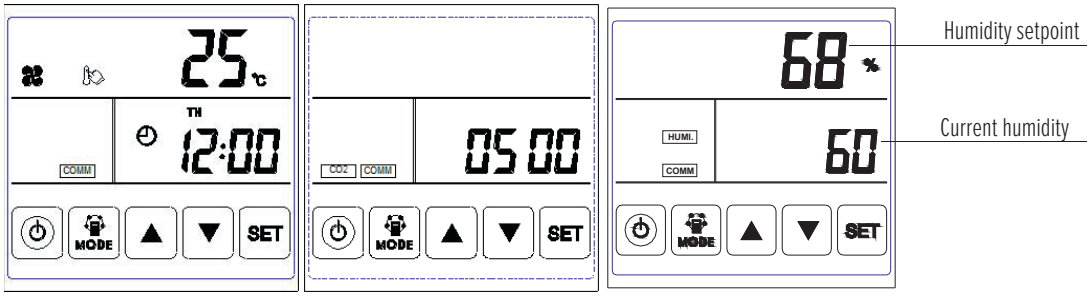


Off | On | Keypad lock enabled | Keypad lock disabled

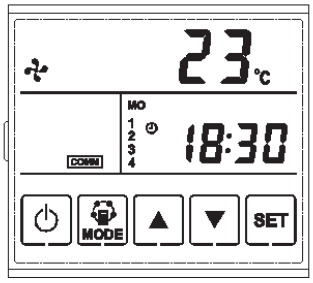
2. **Mode change:** Press MODE to display RA-OA-FR (EA)-SA modes (that is, return / outdoor / exhaust / supply air temperature settings), CO2 content, or humidity control (if the sensors are connected).



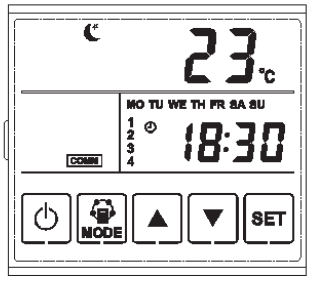
RA (Return air) temperature | OA (Outdoor air) temperature | FR (EA – Exhaust air) temperature | SA (Supply air) temperature



Supply air temperature setpoint | CO_2 concentration | Humidity control



Mode on/off time

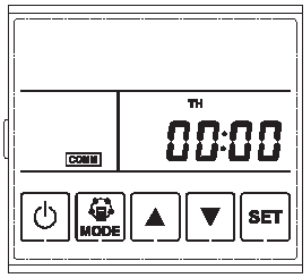


Sleep mode

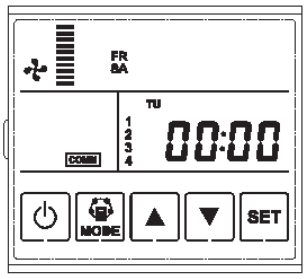
3. Fan speed setting:

A. Manual fan speed setting: press arrow keys ▲ and ▼ on the SA (supply air) or FR (EA – exhaust air) temperature display to set the fan speed. The exhaust fan speed can be set in the FR interface, while the supply fan speed can be set in the SA interface. There are 3 speeds in the AC controller, while the DC controller supports 10 speeds.

B. Automatic fan speed setting: four-interval timer. You can set 4 intervals per day, 7 days per week, with an individual fan speed setting for each time interval. After that, when the fan enters the specified time interval, the fan speed automatically changes according to the settings.



Time setting



Timer setting

4. Time setting: Press and hold SET in the timer setting interface to enter the time setting. The time indicator will light up. Press Up and Down to set the Hours; once the hours are set, briefly press SET again to set the Minutes and Days of the Week; then press Mode or On/Off to exit the setting.

5. **Timer setting:** Briefly press SET in the timer mode interface to enter the timer setting.
   Now, you will set the Day of the Week. For that purpose, press UP and DOWN to select Days of the Week. Briefly press SET to set Hours of the first interval, and press UP and DOWN to select the hours. Briefly press SET to set the Minutes, and press UP and DOWN to select the minutes. Briefly press SET to set the SA (supply air) fan speed, and press UP and DOWN to select the fan speed.
   Briefly press SET to set the EA (exhaust air) fan speed, and press UP and DOWN to select the fan speed.

   Once you complete setting the first interval, settings of the second interval will change automatically. Once you complete setting all 4 intervals, the system will automatically go back to weekly setting. Repeat the setting as described above, and then press MODE or On/Off to exit the setting.

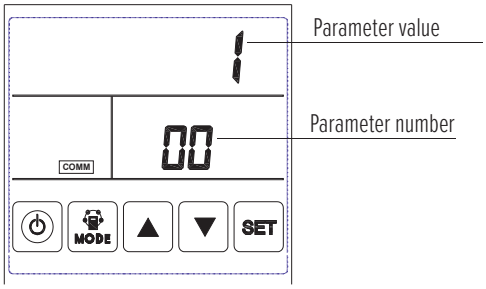
   Note: if there are no operations for more than 10 seconds, the system will automatically exit the setting.

6. **Bypass on/off setting:** Go to the list of parameters, where parameter No. 2 is used to switch between manual and automatic bypass functions. Value 0 = manual bypass, value 1 = automatic bypass
   A. Manual bypass on/off setting: to open the bypass, go to the OA temperature interface, and hold the arrow key ▲ for 6 seconds until the bypass icon lights up. To close the bypass, hold the arrow key ▼ for 6 seconds, until the bypass icon disappears.

   B. To set the automatic bypass function, use parameters No. 3 and No. 4 in the list of parameters. The bypass is open, when the fresh air temperature is between X and X + Y. That is, if X = 19, Y = 3, the bypass will be open when the fresh air temperature is between 19 and 22 °C, and closed when the fresh air is cooler than 19 °C or hotter than 22 °C.

7. **Temperature setting:** Press arrow keys ▲ and ▼ in the temperature setting interface to adjust the set temperature between 15 and 30 °C. If the supply air temperature exceeds the set temperature, the electric heater will stop, while p-heat and r-heat icons will disappear. If the supply air temperature is equal to or below the set temperature (and the temperature difference is within 5 °C), the first-stage electric heater will start, and the p-heat icon will light up. If the supply air temperature is lower than the set temperature by more than 5 °C, the first- and second-stage electric heaters will start simultaneously, and both p-heat and r-heat icons will be displayed. Once the supply air temperature is 2 °C below the set temperature, the second-stage heater will stop, and if the supply air temperature exceeds the set temperature, both heater stages will stop. Please note that this function is only available when the electric heater is connected to the circuit board. To enable this function, set parameter No. 5 (heater function) to 1.

8. **Parameter setting:** Press MODE for more than 6 seconds to enter the parameter setting interface.



Then, increase the parameter number with a long press on the SET key. Once you select the required parameter number, press arrow keys ▲ and ▼ to adjust the parameter value. When all the settings are completed, press SET to go to the next step.

⚠ CAUTION!

1. After the parameters have been set, it will take about 15 seconds to record them in memory. During this time, the power supply shall remain on.
2. Please see the table of available parameters below to set the appropriate parameters for different demands.

⚠ CAUTION!

1. After the parameters have been set, it will take about 15 seconds to record them in memory. During this time, the power supply shall remain on.
2. For the list of available parameters, see the table below.

№	Content	Range	Default	Unit of measurement	Input position
1	Automatic restart	«no» -disabled,, «yes»-enabled	«yes»		Main control panel
2	Automatic bypass	0 - disabled, 1-enabled	0		Main control panel
3	Bypass opening temperature X	5-30	19	°C	Main control panel
4	Bypass opening temperature range Y	2-15	3	°C	Main control panel
5	Electric heating setting	0 = electric heating is off, 1 = electric heating is on	0		Main control panel
6	Normal defrosting	0 - disabled, 1-enabled	1		Main control panel
7	Defrosting interval	15-99	30	minutes	Main control panel
8	Inlet temperature defrosting	+5~-9	- 1	°C	Main control panel
9	Defrosting duration	2-20	10	minutes	Main control panel
10	CO2 display (enabled / disabled)	0 - disabled, 1-enabled	0		
11	CO2 sensor function	CO_2 concentration	1500	800-2000	
12	Humidity display	0 - disabled, 1-enabled	0		
13	Humidity sensor function	humidity setting	70	50-100	
14	MODBUS address	1-66	1		
15	Fan speed adjustment	1 - 3 speeds (AC) 2 - 10 speeds (BLDC)	1		
16	DC fan speed selection	0 = air flow rate 150 m3/h 1 = air flow rate 250 m3/h 2 = air flow rate 350 m3/h 3 = air flow rate 200 m3/h 4 = air flow rate 300 m3/h 5 = air flow rate 400 m3/h 6 = air flow rate 600 m3/h 7 = air flow rate 800/1500 m3/h 8 = air flow rate 1000/2000 m3/h 9 = air flow rate 1300/2600 m3/h	0		
17	Filter signal	0 - free 1 - filter cleaning alarm and reset time	0		
18	Filter signal setting	0:45 days 1:60 days 2:90 days 3: 180 days	0		
19	Differential pressure function	0 - disabled, 1-enabled	0		
20	Резервний				

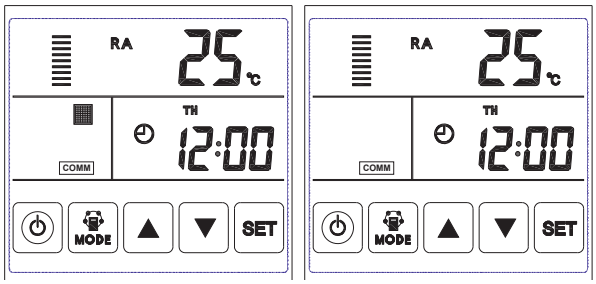
A. For the description of parameters 02, 03 and 04 (automatic bypass function), see parameters No. 3 and No. 4 in the list of parameters. The bypass is open, when the fresh air temperature is between X and X + Y, and closed if the fresh air temperature is below 19 °C or above 22 °C. That is, if you set X = 19, Y = 3, the bypass will be open when the fresh air temperature is between 19 and 22 °C, and the bypass will close when the fresh air becomes cooler than 19 °C or hotter than 22 °C.

B. Description of parameters 06, 07, 08 and 09 (normal defrosting). Normal defrosting: when EA (exhaust air) temperature is below the set defrosting temperature (1 °C by default) for 1 minute, and the defrosting interval (30 minutes by default) has expired, the supply fan will stop, and the exhaust fan will operate at high speed, until the EA (exhaust air) temperature becomes +15 °C. The unit will operate in the defrosting mode for a certain time (that is, defrosting duration, which is 10 minutes by default), after which the fan will return to the initial mode.

C. Description of parameters 10 and 11 (CO2 sensor function). When the fan operates in the standby mode or at any speed different from the highest one, and the CO2 sensor detects that CO2 concentration has been exceeding the set value for more than 5 seconds, the fan will automatically start running at high speed. The fan will only return to the initial mode, when CO2 concentration has been below the set value for more than 5 seconds.

D. Description of parameters 12 and 13 (humidity sensor function). When the fan operates in the standby mode or at any speed different from the highest one, and the humidity sensor detects that humidity has been exceeding the set value for more than 50 seconds, the fan will automatically start running at high speed. The fan will only return to the initial mode, when humidity has been below the set value for more than 5 seconds.

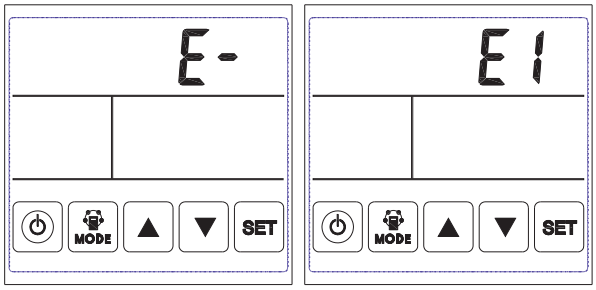
9. Filter signal, parameter 18 (used to set the filter alarm time): When the time of fan operation exceeds the set time, the filter icon will start flashing to warn the user that the filter must be cleaned. After cleaning the filter, reset the time by setting parameter 17 to 1.



Filter alarm on Filter alarm off

10. **Reset to factory settings:** When the unit is on, simultaneously press arrow keys▲ and ▼ for more than 6 seconds to restore factory settings of the parameters. Once the factory settings are restored, the fan will turn off.

11. **Checking the error code:** Briefly press SET in the main interface to check the fan error code using the table below. To exit the error display, press arrow keys▲ and ▼.



No error | Error alarm

Code	Error
E1	OA temperature sensor error
E2	Memory error
E3	RA temperature sensor error
E4	EA temperature sensor error
E5	Communication error
E6	SA temperature sensor error
E7	Fire alarm error

TROUBLESHOOTING

Before contacting the manufacturer, you can try to eliminate the faults on your own, following the instructions in the table.

Fault	Possible reason	Solution
Air flow rate through the air vents has notably decreased with time	The filter is clogged with dust and dirt that obstruct air passage	Replace or clean the filter
Noise from the air vents	Air vent joints are loosened	Tighten the air vent joints
The unit does not operate	1.There is no power supply 2.The protective breaker is switched off	1.Check the power supply 2.Close the breaker