



User Manual

VMF E6







6795778_00

Dear customer,

Thank you for choosing an AERMEC product. It's the result of many years of experience and dedicated design studies, and was built using first-class materials and highly advanced technologies. The quality level is being constantly monitored, so AERMEC products are synonymous with Safety, Quality and Reliability.

The data are subject to any modifications considered necessary to improve the product, at any time and without prior notice.

Thank you again. AERMEC S.p.A.



This marking indicates that this product should not be disposed with other household wastes in the entire EU. To prevent any harm to the environment or human health caused by incorrect disposal of Waste Electrical and Electronic Equipment (WEEE), please return the device using suitable collection systems, or contacting the retailer where the product was purchased. For further information please contact the appropriate local authority. The incorrect disposal of the product by the user will lead to the application of the administrative sanctions envisaged by the laws in force.

All specifications are subject to modification without prior notice. Although every effort has been made to ensure accuracy, Aermec cannot be held liable for any possible errors or omissions.

CONTENTS

DESCRIPTION OF THE ACCESSORY VMF E6	1
INTRODUCTION TO THE SYSTEM	1
STRUCTURE OF THE USER MENUS	1
TIME AND DATE	1
FANCOILS	1
DHW	2
TIMES PROGRAMS	2
OUTDOOR UNITS	2
ALARM LOG	2
MZC	2
INSTALLER MENU (PASSWORD 404)	2
TIME AND DATE MENU	3
TIME SETTING	3
DATE SETTING	3
FANCOIL MENU	3
VIEW SINGLE ZONE STATUS	3
MODIFY SINGLE ZONE STATUS	4
MODIFYING THE NAME ASSOCIATED WITH THE ZONE	4
DHW MENU	5
VIEW DHW STATUS	5
MODIFY DHW STATUS	5
DHW TIMED PROGRAM SETTING	6
ALARM LOG MENU	6
VIEW ALARM LOG	6
TIMED PROGRAMMED MENU	7
SETTING A TIMED PROGRAM	7
SETTING THE SETPOINT OF THE TIMED PROGRAM	7
MZC MENU	8
VIEW SINGLE ZONE STATUS	8
MODIFY SINGLE ZONE STATUS	8
MODIFYING THE NAME ASSOCIATED WITH THE ZONE (MZC)	9
OUTDOOR UNIT MENU	9
VIEW OUTDOOR UNIT STATUS	9
MODIFY OUTDOOR UNIT STATUS	.10
SETTING COMPENSATION WITH EXTERNAL AIR	10
SET TIMED PROGRAM FOR OUTDOOR UNIT	11

DESCRIPTION OF THE ACCESSORY VMF E6

The accessory VMF-E6 is the user interface of Aermec VMF systems. Thanks to this 4.3 inch touchscreen panel, the user can set and manage the entire VMF system, made up of:

- up to 64 fancoils
- up to 5 MZC
- up to 4 heat pumps belonging to the following ranges:
- ANL / ANLi / ANK / ANKi / CL / NRL / NRK / NLC / NRB / NYB / NRV

INTRODUCTION TO THE SYSTEM

The VMF-E6 panel is used to control a VMF hydronic system made up of various elements. Using the graphic interface of the VMF-E6 panel, you can easily set the parameters and see all the information relating to the status of each system component.

To make daily use even easier, the information and functions available are grouped into a number of simple, user-friendly menus where you can find the required function or data. To access the menu selection page, just press the the key in the bottom right-hand corner of the main page, as shown in the figures alongside.

STRUCTURE OF THE USER MENUS

Each user menu contains one function or more, which in turn are arranged over several "pages" to make the search for the required function much faster. After accessing the menu selection page, just click on the relative icon to see the required menu:

TIME and DATE:

This menu contains the functions for setting the active time and date on the system. The pages of this menu are:



FANCOILS:

This menu contains the functions for viewing the current status of the zones (each zone represents one of the fancoils installed on the system) and modifying the fancoil operating parameters. The pages of this menu are:



- 2 VMF-CRPs for DHW and boiler, replacing the system (control of 4+4 valves, electric heater, system boiler)
- 8 VMF-REBs for fancoil zones
- 4 VMF-REBs for MZC zones
- 1 VMF-CRP for managing 4 heat recovery units
- 3 VMF-CRPs for managing circulators (max 12)
- 1 VMF-CRP for managing digital/analogue I/Os



aliano

DHW:

This menu contains the functions for viewing the current status of the DHW circuit and modifying the DHW production parameters. The pages of this menu are:



TIMED PROGRAMS:

This menu contains the functions for setting the timed programs to be associated with the zones (fancoils and MZCs), and for setting the setpoint values to be used for heating and cooling. The pages of this menu are:



ALARM LOG:

This menu contains information about the last 20 alarms recorded on the system, and allows you to reset the alarm log. The pages of this menu are:



MZC:

This menu contains the functions for viewing the current status of the zones (where MZC units are installed), and for modifying the unit operating parameters. The pages of this menu are:



OUTDOOR UNITS:

This menu contains the functions for setting the parameters of the outdoor units controlled by the VMF system. The pages of this menu are:



INSTALLER MENU (password 404):

This menu contains all the settings needed by the installer during the VMF system installation and maintenance phases. The pages of this menu are protected by a password to prevent accidental access to the unit operating parameters.

WARNING: an incorrect modification of the parameters in this menu may lead to errors or system malfunctioning, so modifications must only be made by personal trained in VMF system installation or maintenance.

For more information about the installer parameters, refer to the "VMF System Guide" on the website, or download it directly using the following QR code:



TIME SETTING

The first page of the time and date menu is for setting the time on the system. To modify the hour and minute values, press the \bigwedge (increase) and \bigvee (decrease) keys. After entering the correct values, press Enter to confirm.

To move on to the next page, press []. To return to the previous page, press []. The homepage will be restored automatically if 5 minutes elapse with no interventions.

12 :	10	
\bigtriangledown	\bigtriangledown	Enter

Date setting

The second page is for setting the date on the system. To modify the day of the week, day of the month, month or year, press (increase) and () (decrease) keys to select the required value. After entering the correct values, press Enter to confirm.

To return to the previous page, press the L key. The homepage will be restored automatically if 5 minutes elapse with no interventions.

VIEW SINGLE ZONE STATUS

In the FANCOIL menu, you can view or set the data for each single zone. The information available for each fancoil is as follows:

A Fancoil status:

- : (green) fancoil enabled for operation
- : (grey) fancoil OFF
- : (red) fancoil in alarm mode
- B Fancoil indicator (between 1 and 64)
- C Label assigned to the fancoil (max 10 characters)
- Active season for the selected fancoil:
- 🏶 : summer (cooling)
- 🔆 : winter (heating) • Fancoil thermostat request
- Ambient air temperature detected by the selected fancoil
- G Temperature of the water entering the selected fancoil
- H Active setpoint on the selected fancoil
- Operating mode of the selected fancoil:
- OFF: fancoil deactivated
- AUTO: fancoil in automatic mode
- V1~V3: fancoil active at speed V1~V3
- AUX: auxiliary command active on the selected fancoil
- Type of setpoint active on the selected fancoil:
- LOCAL SET: setpoint set by the fancoil thermostat
- PRG OFF: fancoil deactivated via the timed program
- PRG SET 1: setpoint 1 activated on the basis of the timed program
- PRG SET 2: setpoint 2 activated on the basis of the timed program
- Timed program active on the selected fancoil:
- NO PRG: no timed program active on the selected fancoil
- PRG 1~5: timed program 1~5 active on the selected fancoil

The keys along the bottom of the window have various functions:

Navigating between the fancoils of the system: to select a different fancoil, press the (next) and (previous) keys. There is also a quick search function: press $\$ to access an indicator search window.

Accessing the settings page for the selected fancoil: to access the page, press

Activating or deactivating the selected fancoil: press

To return to the previous page, press the L key. The homepage will be restored automatically if 5 minutes elapse with no interventions.





Modify single zone status

In the window for modifying the operating parameters of a zone (always identified by its indicator (3) and the name assigned to the zone (3), you can modify the following settings:

- . (block open): the system allows the user to modify the setpoint (+/- 3°C or +/-6°C) via the zone thermostat
- . (i) (lock closed): the system does not allow modifications to the setpoint via the zone thermostat

Set the cooling setpoint: press the (increase) and (decrease) keys on the same line as the setpoint you want to change. By pressing b, you can also choose whether to make the setpoint modification available via the zone thermostat (VMF-E2 or VMF-E4), as follows:

- . (lock open): the system allows the user to modify the setpoint (+/- 3°C or +/-6°C) via the zone thermostat
- . (a) (lock closed): the system does not allow modifications to the setpoint via the zone thermostat

Operating mode: use the **(match)** key to choose whether to make the thermostat work with the settings given directly by the user interface associated with it (this option is activated with "LOCAL"), or force operation in one of the other modes ("AUTO", "V1", "V2", "V3" or "AUX")

G Type of heating: press the key to choose which type of heating to activate in the selected zone (this option is only available in the case of a radiant system and with correctly wired VMF-REB expansions):

- (=): zone heating with the fancoil only
- zone heating with the fancoil and radiant floor
- () zone heating with the radiant floor only

WARNING: in cooling mode, the system will only activate the fancoil!

• The timed program active on the selected fancoil: to modify the timed program, press the (increase) and (decrease) keys on the same line as the setpoint you want to change. By pressing (), you can also choose whether to unlock a possible OFF in the timed program, as follows:

- . (lock open): if the fancoil is OFF according to the timed program, but is modified by the user (setpoint or operating mode, directly via the incorporated thermostat), the fancoil will abandon the timed program control for 45 minutes (function only available with VMF-E19/E19I thermostats or GLFxN/M grilles)
- . (lock closed): the system does not allow the fancoil to abandon the timed program

By pressing the (E) key on the lower part of the screen, you can copy the settings of the page in ALL the system zones (a drop-down window will appear, asking for confirmation of the operation).

To move on to the next page, press []. To return to the previous page, press []. The homepage will be restored automatically if 5 minutes elapse with no interventions.



Modifying the name associated with the zone

In the window for modifying the name of a fancoil (always identified by its indicator (a)), you can modify the string identifying the zone (b). To return to the previous page, press the key. The homepage will be restored automatically if 5 minutes elapse with no interventions.



View DHW status

In the DHW menu, you can view or set the data for DHW production (if envisaged, and if the DHW management expansion has been correctly installed). The information available is as follows:

A Temperature in the DHW storage tank

- B DHW setpoint
- C The timed program active on DHW:
 - NO PRG: no timed program active on DHW
 - PRG 1~5: timed program 1~5 active on DHW
- Current status of the loads relating to DHW production. This status is indicated by the colours of the icon components:
 - IDHW request satisfied and/or not active
 - 2 : DHW active, using the heat pump only
 - ③ : DHW active, using the heat pump and the additional heat source (RAS, boiler, etc.)
 - IDHW active, using the additional heat source only (RAS, boiler, etc.)
- 5 : anti-legionella cycle in progress



The keys along the bottom of the window have various functions:

Enabling or disabling DHW: press the **U** key (green = enabled; red = disabled)

Accessing the DHW settings page: to access the page, press

To return to the previous page, press the L key. The homepage will be restored automatically if 5 minutes elapse with no interventions.

Modify DHW status

In the DHW modification window, you can make the following settings:

DHW setpoint: press the () (increase) and () (decrease) keys on the same line as the setpoint you want to change.

The timed program active on DHW: press the ((increase) and ((decrease) keys on the same line as the setpoint you want to change.

G Activate the heat pump for DHW production: press to choose whether to activate or deactivate the heat pump for DHW production
 O Activate the additional heat source (RAS, boiler, etc.) for DHW pro-

duction: press to choose whether to activate or deactivate the additional heat source (RAS, boiler, etc.) for DHW production.

To move on to the next page, press . To return to the previous page, press . The homepage will be restored automatically if 5 minutes elapse with no interventions.





DHW timed program setting

In the DHW timed program setting window, you can make the following settings:

The status to be assigned to each hour of the day: the DHW timed program is weekly, which means it can be set by specifying a different profile for each day of the week (check the label at the top right of the screen ¹ to see which day of the week you are setting). Each daily program is sub-divided into 24 bands (one for every hour) in which you can define the required DHW status by clicking on the key for the relative hour. Every time you press the same key, you will move on to the next status. The cycle follows this order:



(*) the anti-legionella cycle can be enabled no more than once for each day of the week, but remember that it MUST BE ENABLED to prevent any possible health risks.

By pressing the (E) key on the lower part of the screen, you can copy the time settings of the current day in ALL the days of the week (a drop-down window will appear, asking for confirmation of the operation).

To select a different day of the week, press the 👜 key on the lower part of the screen.

To return to the previous page, press the \bigcirc key. The homepage will be restored automatically if 5 minutes elapse with no interventions.



ALARM LOG MENU

In the alarm log menu, you can see the last 20 alarms recorded on the system. Each alarm is identified by certain information:

- Alarm indicator: a number (from 1 to 20) that identifies the alarm
- **B** Date: the date when the alarm was triggered
- **G** Time: the time when the alarm was triggered
- **D** Origin: the component that triggered the alarm
- Type: description of the alarm

The keys along the bottom of the window allow you to:

Navigate the various alarms recorded: to select a different alarm, press the ((next) and (() (previous) keys.

Reset the alarm log: to completely reset the alarm log, press (the operation must then be confirmed in a drop-down window).

To return to the previous page, press the \bigcirc key. The homepage will be restored automatically if 5 minutes elapse with no interventions.



TIMED PROGRAMS MENU

Setting a timed program

The system can manage five different weekly timed programs for the fancoil zones, and for each one the user can set the daily operating mode hour by hour. In the timed program setting window, you can make the following settings:

The status to be assigned to each hour of the day: the selected timed program (3) is weekly, which means it can be set by specifying a different profile for each day of the week (check the label at the top right of the screen 3 to see which day of the week you are setting). Each daily program is sub-divided into 24 bands (one for every hour) in which you can define the required zone status by clicking on the key for the relative hour. Every time you press the same key, you will move on to the next status. The cycle follows this order:



The keys along the bottom of the window allow you to:

Copy the data of the current day on all the days of the timed program currently selected: by pressing the real key on the lower part of the screen, you can copy the time settings of the current day in ALL the days of the week (a drop-down window will appear, asking for confirmation of the operation).

Select a different timed program: by pressing () on the lower part of the screen, you can select another timed program.

Select a different day of the timed program: to select a different day of the week, press the () key on the lower part of the screen.

To move on to the next page, press []. To return to the previous page, press []. The homepage will be restored automatically if 5 minutes elapse with no interventions.

Setting the setpoint of the timed program

In the window for modifying the setpoints of a timed program (always identified by its indicator (3), you can set:

A Heating setpoint 1: press the (increase) and () (decrease) keys on the same line as the setpoint you want to change.

B Heating setpoint 2: press the () (increase) and () (decrease) keys on the same line as the setpoint you want to change.

G Cooling setpoint 1: press the (increase) and () (decrease) keys on the same line as the setpoint you want to change.

O Cooling setpoint 2: press the ◯ (increase) and ◯ (decrease) keys on the same line as the setpoint you want to change.

By pressing () on the lower part of the screen, you can select another timed program.

To return to the previous page, press the \bigcirc key. The homepage will be restored automatically if 5 minutes elapse with no interventions.





7

View single zone status (MZC sub-system)

In the MZC menu, you can view or set the data for each single zone of the MZC sub-system. The information available is as follows:

- A Zone status:
- : (green) zone enabled for operation
- _____: (grey) zone OFF
- 🔁 : (red) zone in alarm mode
- B Zone indicator (between 1 and 30)
- C Label assigned to the zone (max 10 characters)
- Active season for the selected zone:
 - 🏶 : summer (cooling)
- 🔆 🕂 🔆 : winter (heating)
- Single zone thermostat request
- Ambient air temperature detected in the selected zone
- G Temperature of the water entering the selected zone
- H Active setpoint on the selected zone
- Fancoil operating mode:
- ON: fancoil activated
- OFF: fancoil deactivated
- **L** Type of setpoint active on the selected fancoil:
- LOCAL SET: setpoint set in the zone
- PRG OFF: zone deactivated via the timed program
- PRG SET 1: setpoint 1 activated on the basis of the timed program
- PRG SET 2: setpoint 2 activated on the basis of the timed program
- Timed program active on the selected zone:
- NO PRG: no timed program active on the selected zone
- PRG 1~5: timed program 1~5 active on the selected zone

The keys along the bottom of the window have various functions:

Navigate the various zones of the MZC sub-system: to select a different zone, press the \bigwedge (next) and \bigvee (previous) keys. There is also a quick search function: press $^{\circ}$ to access an indicator search window.

Access the settings page for the selected zone: to access the page, press

Activate or deactivate the selected zone: press

To return to the previous page, press the L key. The homepage will be restored automatically if 5 minutes elapse with no interventions. In the window for modifying the operating parameters of a zone (always identified by its indicator (2) and the name assigned (3), you can modify the following settings:

Set the heating setpoint: press the (increase) and ((decrease) keys on the same line as the setpoint you want to change. By pressing (), you can also choose whether to make the setpoint modification available via the zone thermostat (MZC_UI), as follows:

- (lock open): the system allows the user to modify the setpoint (+/- 3° C or +/- 6° C) via the zone thermostat
- (lock closed): the system does not allow modifications to the setpoint via the zone thermostat

3 Set the cooling setpoint: press the (increase) and (v) (decrease) keys on the same line as the setpoint you want to change. By pressing (b), you can also choose whether to make the setpoint modification available via the zone thermostat (MZC_UI), as follows:

- (lock open): the system allows the user to modify the setpoint (+/- 3° C or +/- 6° C) via the zone thermostat
- (lock closed): the system does not allow modifications to the setpoint via the zone thermostat

G Operating mode: use the $\left(\frac{1}{1000}\right)$ key to choose whether to make the thermostat work with the settings of the user interface associated with it (this option is activated with "LOCAL"), or force operation in one of the other modes ("AUTO", "V1", "V2", "V3" or "AUX")

G Type of heating: press the experimentation between the selected zone (this option is only available in the case of a radiant system and with correctly wired VMF-REB expansions):

- : zone heating with the aeraulic system only
- : zone heating with the aeraulic system and radiant floor

WARNING: in cooling mode, the system will only activate the ducting!
 The timed program active on the selected zone: press the () (increase) and () (decrease) keys on the same line as the setpoint you want to change.

By pressing the result when the lower part of the screen, you can copy the settings of the page in ALL the system zones (a drop-down window will appear, asking for confirmation of the operation).

To move on to the next page, press . To return to the previous page, press . The homepage will be restored automatically if 5 minutes elapse with no interventions.





Modifying the name associated with the zone (MZC)

In the window for modifying the name of a zone (always identified by its indicator (A), you can modify the string identifying the zone (B). To return to the previous page, press the 🜔 key. The homepage will be restored automatically if 5 minutes elapse with no interventions.

OUTDOOR UNIT MENU

View outdoor unit status

In the outdoor unit menu, you can view or set the data for each single outdoor unit (the system can manage up to four). The information available for each outdoor unit is as follows:

A Outdoor unit status:

- : (green) enabled for operation
- 🖪 : (grey) OFF
- : (red) in alarm mode
- B Outdoor unit indicator (between 1 and 4)
- C Active season:
- : summer (cooling)
- 🔆 : winter (heating)

D In this position, you will see the icons relating to the operation of the selected outdoor unit:

- 🖤 outdoor unit off
- outdoor unit in standby
 outdoor unit with only the circulator active
- outdoor unit with the compressor and circulator both active
- outdoor unit in reserve status
- not door unit in defrosting phase
- ① outdoor unit in alarm mode
- Indicates that the outdoor unit is producing domestic hot water
- Indicates that the additional heater is active on the outdoor unit
- G Working power of the selected outdoor unit
- H Processed water temperature
- Setpoint active on the outdoor unit
- Temperature of the return water
- Outside air temperature;

The keys along the bottom of the window have various functions:

Navigate the various outdoor units: to select a different outdoor unit, press the \bigwedge (next) and \bigvee (previous) keys.

Access the outdoor unit settings page: to access the page, press

Switch the selected outdoor unit on or off: press the U key

To return to the previous page, press the - key. The homepage will be restored automatically if 5 minutes elapse with no interventions.





MODIFY OUTDOOR UNIT STATUS

In the window for modifying the outdoor unit (always identified by its indicator (), you can:

Set the heating setpoint: press the (increase) and ((decrease) keys on the same line as the setpoint you want to change.

3 Set the cooling setpoint: press the (increase) and (v) (decrease) keys on the same line as the setpoint you want to change.

G Activate or deactivate the timed program on the outdoor unit: press the start key on the same line as the timed program. Each press on this key allows you to select one of the following options:

- Timed program off: no timed programs active on the outdoor units
- **Timed program on:** the specific timed program for outdoor units is active (set on the relative page of this menu)
- Timed program for indoor units: the outdoor units use the timed program active on the indoor units as their working reference

Activate or deactivate compensation on the outdoor unit: press the select key on the same line as the compensation function. Each press on this key allows you to select one of the following options:

- Compensation setpoint off: the setpoint compensation function is not active on the outdoor units
- Setpoint compensation VS external air: the setpoint compensation function is active on the basis of the external air temperature
- Setpoint compensation VS internal load: the setpoint compensation function is active on the basis of the calculation of the effective load on the indoor units (VMF algorithm)

By pressing the (E) key on the lower part of the screen, you can copy the settings of the outdoor unit shown in all the other outdoor units of the system (a drop-down window will appear, asking for confirmation of the operation).

If the outdoor unit is in alarm mode, the *neser* key will turn red and, if pressed, it sends a reset command to the specific outdoor unit.

To move on to the next page, press []. To return to the previous page, press []. The homepage will be restored automatically if 5 minutes elapse with no interventions.



In the window for compensation on the outdoor unit selected (always identified by its indicator (3), you can set:

▲ The minimum outside air temperature for compensation (TAE1): to modify this value, above which the compensation function is activated, press the (increase) and () (decrease) keys on the same line as the setpoint you want to change.

The operating setpoint 1 (SET1): to modify this temperature value (that the minimum outside air temperature will correspond to), press the () (increase) and () (decrease) keys on the same line as the setpoint you want to change.

The maximum outside air temperature for compensation (TAE2): to modify this value, above which the compensation function is activated, press the (increase) and () (decrease) keys on the same line as the setpoint you want to change.

The operating setpoint 2 (SET2): to modify this temperature value (that the maximum outside air temperature will correspond to), press the () (increase) and () (decrease) keys on the same line as the setpoint you want to change.

Compensation on the basis of the outdoor unit is available in both heating and cooling mode. To select the season, press the 🔅 🕸 key.

By pressing the (E) key on the lower part of the screen, you can copy the settings of the outdoor unit in all the other outdoor units of the system (a drop-down window will appear, asking for confirmation of the operation).

To move on to the next page, press , to return to the previous page, press . The homepage will be restored automatically if 5 minutes elapse with no interventions.

The compensation curves (one for each season) must be set by describing the two points A and B indicated in the diagram below:



[SET °C] SET1 / SET2 SET1 / SET2 TAE1 TAE2 [TAE°C]

WARNING: when choosing the compensation curve parameters, air temperature 1 (TAE1) must always be lower than outside air temperature 2 (TAE2). The operating setpoints SET1 and SET2 are not subject to any limits.



Set timed program for outdoor unit

In the timed program setting window for the outdoor units, you can make the following settings:

The daily profile: the timed program for the outdoor units is weekly, which means a different profile can be set for each day of the week (check the label at the top right of the screen ¹ to see which day of the week you are setting). Each daily program is sub-divided into 24 bands (one for every hour) in which you can define the required outdoor unit status by clicking on the key for the relative hour. Each press on this key changes the status of the time band portion, as explained below:



By pressing the (E) key on the lower part of the screen, you can copy the time settings of the current day in ALL the days of the week (a drop-down window will appear, asking for confirmation of the operation).

To select a different day of the week, press the 💼 key on the lower part of the screen.

To return to the previous page, press the L key. The homepage will be restored automatically if 5 minutes elapse with no interventions.





Aermec se reserva la facultad de aportar, en cualquier momento, todas las modificaciones consideradas necesarias para la mejora del producto. Aermec se reserva el derecho a efectuar cualquier modificación que estime necesaria para mejorar el producto en cualquier momento con la modificación de los datos técnicos.