

VENTILCONVETTORE
FAN COIL
VENTILO-CONVECTEURS
GEBLÄSEKONVEKTOR

VEC



IVECLJ 1009 - 5074550_04

Sostituisce il • Replace • Remplace le n° • Ersetzt • Sustituye a: 5074550_03 / 0906

OSSERVAZIONI

Conservare i manuali in luogo asciutto, per evitare il deterioramento, per almeno 10 anni per eventuali riferimenti futuri. **Leggere attentamente e completamente tutte le informazioni contenute in questo manuale. Prestare particolare attenzione alle norme d'uso accompagnate dalle scritte "PERICOLO" o "ATTENZIONE" in quanto, se non osservate, possono causare danno alla macchina e/o a persone e cose.** Per anomalie non contemplate da questo manuale, interpellare tempestivamente il Servizio Assistenza di zona. **L'apparecchio deve essere installato in maniera tale da rendere**

le possibili operazioni di manutenzione e/o riparazione.

La garanzia dell'apparecchio non copre in ogni caso i costi dovuti ad autoscale, ponteggi o altri sistemi di elevazione che si rendessero necessari per effettuare gli interventi in garanzia. AERMEC S.p.A. declina ogni responsabilità per qualsiasi danno dovuto ad un uso improprio della macchina, ad una lettura parziale o superficiale delle informazioni contenute in questo manuale.

Il numero di pagine di questo manuale è: 40

REMARKS

Store the manuals in a dry location to avoid deterioration, as they must be kept for at least 10 years for any future reference. **Carefully and thoroughly read all the information referred to in this manual. Pay particular attention to the instructions for use accompanied by the words "DANGER" or "WARNING" because, if they are not complied with, the machine/property can be damaged and/or people can be injured.** If any kind of malfunction is not included in this manual, contact the local After Sales Service immediately. **The device must be installed in such a way that maintenance**

and/or repair operations are possible.

The device warranty does not in any case cover costs resulting from the use of automatic ladders, scaffolding or any other lifting system necessary for carrying out repairs under warranty. AERMEC S.p.A. declines all liability for any damage due to improper use of the machine, or the partial or superficial reading of the information contained in this manual.

This manual contains the following number of pages: 40

REMARQUES

Conservier les manuels dans un endroit sec, afin d'éviter leur détérioration, pendant au moins 10 ans, pour toutes éventuelles consultations futures. **Lire attentivement et entièrement toutes les informations contenues dans ce manuel. Prêter une attention particulière aux normes d'utilisation signalées par les inscriptions "DANGER" ou "ATTENTION", car leur non observance pourrait causer un dommage à l'appareil et/ou aux personnes et objets.** Pour toute anomalie non mentionnée dans ce manuel, contactez aussitôt le service après-vente de votre secteur. **Lors de l'installation de l'appareil, il faut prévoir l'espace**

nécessaire pour les opérations d'entretien et/ou de réparation.

La garantie de l'appareil ne couvre pas les coûts dérivant de l'utilisation de voitures avec échelle mécanique, d'échafaudages ou d'autres systèmes de levée employés pour effectuer des interventions en garantie.

AERMEC S.p.A. décline toute responsabilité pour tout dommage dû à une utilisation impropre de l'appareil et à une lecture partielle ou superficielle des informations contenues dans ce manuel.

Ce manuel se compose de pages: 40.

HINWEISE

Die Handbücher an einem trockenen Ort aufbewahren, damit es mindestens weitere 10 Jahre für eventuelle Informationen einsehbar ist. **Alle in diesem Handbuch enthaltenen Informationen aufmerksam und vollständig lesen. Achten Sie insbesondere auf die Benutzungsanweisungen mit den Hinweisen "VORSICHT" oder "ACHTUNG", da deren Nichtbeachtung Schäden am Gerät bzw. Sach- und Personenschäden zur Folge haben kann.** Bei Betriebsstörungen, die in dieser Gebrauchsanweisung nicht aufgeführt sind, wenden Sie sich umgehend an die zuständige Kundendienststelle.

Stellen Sie das Gerät so auf, dass Instandhaltungs- und/oder Reparaturarbeiten durchgeführt werden können.

Die Garantie des Gerätes deckt in keinem Fall Kosten für Feuerwehrleitern, Gerüste oder andere Hebesysteme ab, die sich für die Garantiearbeiten als erforderlich erweisen sollten.

Die AERMEC S.p.A. übernimmt keine Haftung für Schäden aus dem unsachgemäßen Gebrauch des Gerätes und der teilweisen oder oberflächlichen Lektüre der in diesem Handbuch enthaltenen Informationen.

Dieses Handbuch hat eine Seitenzahl von: 40

OBSERVACIONES

Guarde los manuales en un lugar seco para evitar su deterioro, al menos durante 10 años, para posibles consultas futuras. **Lea atentamente y por completo toda la información contenida en el presente manual. Preste particular atención a las normas de uso acompañadas de las indicaciones "PELIGRO" o "ATENCIÓN" puesto que, si no se cumplen, pueden causar daños a la máquina y/o a personas y cosas.** En caso de anomalías no contempladas en este manual, contacte inmediatamente el Servicio de Asistencia de su zona. **El aparato debe ser instalado de manera que puedan realizar-**

se las operaciones de mantenimiento y/o reparación.

En cualquier caso, la garantía del aparato no cubre los costes derivados del uso de escaleras automáticas, andamios u otros sistemas de elevación necesarios para efectuar las intervenciones en garantía.

AERMEC S.p.A. declina cualquier responsabilidad por cualquier daño debido a un uso impropio de la máquina, o bien a una lectura parcial o superficial de las informaciones contenidas en este manual.

El número de páginas de este manual es: 40

INDICE	
DICHIARAZIONE DI CONFORMITÀ	4
Trasporto • Simboli di sicurezza	5
Informazioni importanti • Manutenzione • Imballo • Utilizzo	6
Descrizione dell'unità • Limiti di funzionamento	7
Dati tecnici	8
Installazione dell'unità • Collegamenti elettrici	9
Accessori obbligatori	26
Manutenzione (Sostituzione filtro)	28
Dati dimensionali	29
Schemi elettrici	30
SOLUZIONE DEI PROBLEMI	31

TABLE OF CONTENTS	
DECLARATION OF CONFORMITY	4
Transport • Safety symbols	5
Important information • Maintenance • Package • Use	10
Description of the unit • Operating limits	11
Technical data	12
Installing the unit • Electrical wirings	13
Mandatory accessory	26
Maintenance (Filter replacement)	28
Dimensions	29
Electrical layouts	30
TROUBLESHOOTING	31

INDEX	
CERTIFICAT DE CONFORMITE	4
Transport • Simboles de securite	5
Informations importantes • Entretien • Emballage • Utilisation	14
Versions • Limites de fonctionnement	15
Donnes techniques	16
Installation de l'unité • Raccordements électriques	17
Accessoire obligatoire	26
Entretien (remplacement du filtre a air)	28
Dimensions	29
Schemas electriques	30
SOLUTION DES PROBLEMES	31

INHALTSVERZEICHNIS	
KONFORMITÄTSERKLÄRUNG	4
Transport • Sicherheitssymbole	5
Wichtige Hinweise • Wartung • Verpackung • Gebrauch	18
Beschreibung der Einheit • Betriebsgrenzen	19
Technische Daten	20
Installation des Gerätes • Stromanschlüsse	21
Obligatorischen Zubehörs	26
Wartung (Wechsel des Filters)	28
Abmessungen	29
Elektrische Schaltpläne	30
LÖSUNG VON PROBLEMEN	31

ÍNDICE	
DECLARACIÓN DE CONFORMIDAD	4
Transporte • Símbolos de seguridad	5
Información importante • Mantenimiento • Embalaje • Uso	22
Descripción de la unidad • Límites de funcionamiento	23
Datos técnicos	24
Instalación de la unidad • Conexiones eléctricas	25
Accesorio obligatorio	26
Mantenimiento (Sustitución del filtro)	28
Dimensiones	29
Esquemas eléctricos	30
SOLUCIÓN DE PROBLEMAS	31

AERMEC S.p.A.

I-37040 Bevilacqua (VR) Italia – Via Roma, 996
Tel. (+39) 0442 633111
Telefax (+39) 0442 93730 – (+39) 0442 93566
www.aermec.com - info@aermec.com

DICHIARAZIONE DI CONFORMITÀ CE

Noi, firmatari della presente, dichiariamo sotto la nostra esclusiva responsabilità, che il prodotto:

VENTILCONVETTORE

serie VEC

al quale questa dichiarazione si riferisce è conforme alle seguenti norme armonizzate:

- CEI EN 60335-2-40
- CEI EN 55014-1
- CEI EN 55014-2
- CEI EN 61000-6-1
- CEI EN 61000-6-3

soddisfando così i requisiti essenziali delle seguenti direttive:

- Direttiva LVD 2006/95/CE
- Direttiva compatibilità elettromagnetica 2004/108/CE

VEC APC CON ACCESSORI

E' fatto divieto di mettere in servizio il prodotto dotato di accessori non di fornitura Aermec.

CERTIFICAT DE CONFORMITÉ CE

Nous soussignés déclarons sous notre exclusive responsabilité que le produit:

VENTILO-CONVECTEURS

série VEC

auquel cette déclaration fait référence, est conforme aux normes harmonisées suivantes:

- EN 60335-2-40
- EN 55014-1
- EN 55014-2
- EN 61000-6-1
- EN 61000-6-3

satisfaisant ainsi aux conditions essentielles des directives suivantes:

- Directive LVD 2006/95/CE
- Directive compatibilité électromagnétique 2004/108/CE

VEC APC PLUS ACCESSOIRES

Il est interdit de faire fonctionner l'appareil avec des accessoires qui ne sont pas fournis de Aermec.

DECLARACIÓN DE CONFORMIDAD CE

Los que suscriben la presente declaran bajo la propia y exclusiva responsabilidad que el conjunto en objeto, definido como sigue:

FAN COIL

serie VEC

al que esta declaración se refiere, está en conformidad a las siguientes normas armonizadas:

- EN 60335-2-40
- EN 55014-1
- EN 55014-2
- EN 61000-6-1
- EN 61000-6-3

al que esta declaración se refiere, está en conformidad a las siguientes normas armonizadas:

- Directiva LVD 2006/95/CE
- Directiva compatibilidad electromagnético 2004/108/CE

VEC APC CON ACCESORIOS

Está prohibido poner en marcha el producto con accesorios no suministrados por Aermec.

Bevilacqua, 02/03/2009

CE CONFORMITY DECLARATION

We the undersigned declare, under our own exclusive responsibility, that the product:

FAN COIL

VEC series

to which this declaration refers, complies with the following standardised regulations:

- EN 60335-2-40
- EN 55014-1
- EN 55014-2
- EN 61000-6-1
- EN 61000-6-3

thus meeting the essential requisites of the following directives:

- Directive LVD 2006/95/CE
- EMC Electromagnetic Compatibility Directive 2004/108/CE

VEC APC WITH ACCESSORIES

It is not allowed to use the unit equipped with accessories not supplied by Aermec.

CE KONFORMITÄTSERKLÄRUNG

Wir, die hier Unterzeichnenden, erklären auf unsere ausschließliche Verantwortung, dass das Produkt:

GEBLÄSEKONVEKTOR

der Serie VEC

auf das sich diese Erklärung bezieht, den folgenden harmonisierten Normen entspricht:

- EN 60335-2-40
- EN 55014-1
- EN 55014-2
- EN 61000-6-1
- EN 61000-6-3

womit die grundlegenden Anforderungen folgender Richtlinien erfüllt werden:

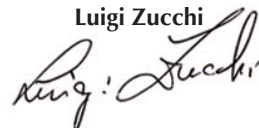
- Richtlinie LVD 2006/95/CE
- Richtlinie zur elektromagnetischen Verträglichkeit 2004/108/CE

VEC APC + ZUBEHÖR

Falls das Gerät mit Zubehörteilen ausgerüstet wird, die nicht von Aermec geliefert werden, ist dessen Inbetriebnahme solange untersagt.

La Direzione Commerciale – Sales and Marketing Director

Luigi Zucchi

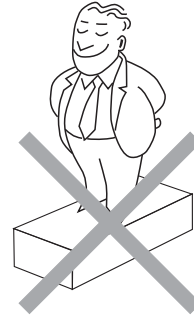


TRASPORTO • CARRIAGE • TRANSPORT • TRANSPORT • TRANSPORTE

NON bagnare • Do NOT wet
CRAINT l'humidité • Vor Nässe schützen
NO mojar



NON calpestare • Do NOT trample
NE PAS marcher sur cet emballage • Nicht betreten
NO pisar



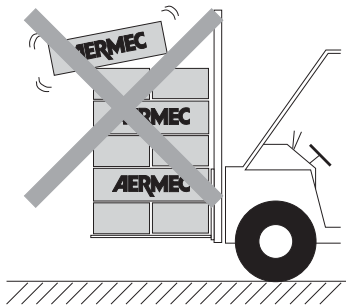
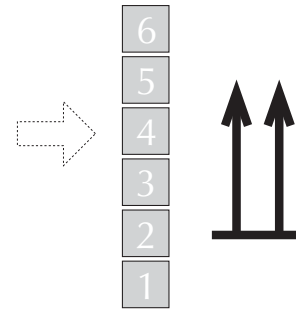
Sovrapponibilità: controllare sull'imballo la posizione della freccia per conoscere il numero di macchine impilabili.

Stacking: control the packing for the arrow position to know the number of machines that can be stacked.

Empilement: vérifier sur l'emballage la position de la flèche pour connaître le nombre d'appareils pouvant être empilés.

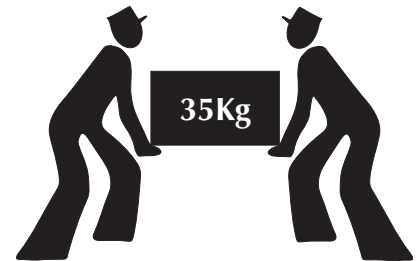
Stapelung: Anhand der Position des Pfeiles an der Verpackung kontrollieren, wieviele Geräte stapelbar sind.

Apilamiento: observe en el embalaje la posición de la flecha para saber cuántos equipos pueden apilarse.



NON lasciare gli imballi sciolti durante il trasporto.
Do NOT leave loose packages during transport.
ATTACHER les emballages pendant le transport.
Die Verpackungen nicht ungesichert transportieren.
NO lleve las cajas sueltas durante el transporte.

NON trasportare la macchina da soli se il suo peso supera i 35 Kg.
DO NOT handle the machine alone if its weight is over 35 Kg.
NE PAS transporter tout seul l'appareil si son poids dépasse 35 Kg.
Das Gerät NICHT alleine tragen, wenn sein Gewicht 35 Kg überschreitet.
NO maneje los equipos en solitario si pesan más de 35 kg.



SIMBOLI DI SICUREZZA • SAFETY SYMBOL • SIMBOLES DE SECURITE SICHERHEITSSYMBOL • SÍMBOLOS DE SEGURIDAD



Pericolo:
Tensione
Danger:
Power supply
Danger:
Tension
Gefahr !
Spannung
Peligro:
Tensión



Pericolo:
Organi in movimento
Danger:
Movings parts
Danger:
Organes en mouvement
Gefahr !
Rotierende Teile
Peligro:
Elementos en movimiento



Pericolo!!!
Danger!!!
Danger!!!
Gefahr!!!
Peligro!!!

IMPORTANT INFORMATION

WARNING: electrical wirings, installation of the fan coils and relevant accessories should be performed by a technician who has the necessary technical and professional expertise to install, modify, extend and maintain systems, and who is able to check the systems for the purposes of safety and correct operation.

WARNING: the fan coil is connected to power supply and water circuit. Operations performed by persons without the required technical skills can lead to personal injury to the operator or damage to the unit and surrounding objects.

WARNING: before carrying out any work, put the proper individual protection equipment on.

WARNING: The appliance must be fitted according to the national regulations on process plant engineering.

WARNING: before carrying out any work, make sure the power supply is disconnected.

WARNING: Install a device, main switch or plug which allows to completely cut off the power supply from the unit.

WARNING! DANGER! Any use of the unit not expressly indicated by Aermec is strictly prohibited.

MALFUNCTION

In case of malfunction, cut off power to the unit, then energise it again and restart the device. If the problem occurs again, call the local After-Sales Service immediately.

POWER THE FAN COIL ONLY WITH 230 VOLT, SINGLE PHASE, 50 Hz

Use of other power supplies could cause permanent damage to the fan coil.

DO NOT TUG THE ELECTRICAL CABLE

It is very dangerous to pull, tread on or crush the electrical power cable or fix it with nails or drawing pins.

A damaged power cable can cause short circuits and injure people.

DO NOT OBSTRUCT THE AIR OUTLETS BY PLACING OBJECTS INTO THEM

Do not put anything in the air outlet slots.

This could injure people and damage the fan.

DO NOT USE THE FAN COIL IMPROPERLY

Do not use the fan coil for animal husbandry applications (e.g. incubation).

AIR THE ROOM

Periodically air the room in which the fan coil has been installed; this is particularly important if the room is occupied by many people, or if gas appliances or sources of odours are present.

ADJUST TEMPERATURE ADEQUATELY

The room temperature should be adjusted in order to provide maximum comfort to the people in the room, especially if they are elderly, children or sick people; avoid differences over 7°C between the outdoor temperature and the temperature inside the room in summer.

Carefully choose the room temperature so as to save energy.

CORRECTLY ADJUST THE AIR JET

Air coming out from the fan coil must not reach people directly; in fact, even if the air is warmer than the room temperature, it could cause a cold sensation and result in discomfort.

DO NOT USE EXCESSIVELY HOT WATER

To clean the indoor unit, use soft cloths or sponges that are wet with water at a maximum of 40 °C. Do not use chemical products or solvents to clean any part of the fan coil. Do not spray water on the outer or inner surfaces of the fan coil (this might cause short circuits).

CLEAN THE FILTER PERIODICALLY

Frequently cleaning the filter guarantees greater operating efficiency.

Check whether the filter is very dirty: in this case, clean it more often.

Clean frequently. Remove the accumulated dust with a vacuum cleaner.

Once the filter is clean, refit it on the fan coil following the removal instructions but in reverse order.

The normal wear and tear of germicidal lamps and filter is not covered by the warranty.

EXTRAORDINARY CLEANING

The possibility to remove the basin and the shrouds of the examinable fans (done only by suitably trained and qualified personnel) allows to thoroughly clean even the internal parts - an essential condition when the unit is installed in very crowded areas or places requiring high standards of hygiene.

WHAT IS NORMAL

In the cooling function, water vapour may be present in the air delivery of the fan coil.

In the heating function, a slight hiss might be heard close to the fan coil.

Sometimes the fan coil might give off unpleasant smells due to the accumulation of substances present in the air of the room (clean the filter more often, especially if the room is not ventilated regularly).

While the unit is functioning, there could be noises and creaks inside the device due to the various thermal expansions of the elements (plastic and metal), but this does not indicate any malfunction and does not damage the unit unless the maximum input water temperature is exceeded.

PACKAGE

The fan coils are shipped in standard package which consists of expanded polystyrene foam and cardboard shells.

USE

Consult control panel manual for installation and use instructions.

DESCRIPTION OF THE UNIT

The fan coil is a room air treatment terminal unit for mainly summer operation. Install the unit on the suspended ceiling.

AVAILABLE VERSIONS AND SIZES

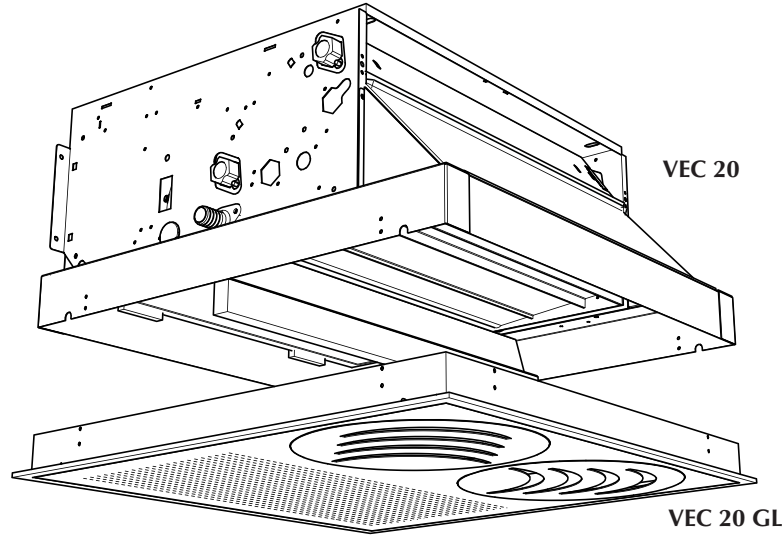
VEC fan coils are available in:

4 sizes with a 3-row coil

VEC 20
VEC 30
VEC 40
VEC 50

compulsory accessory

VEC 20 GL
VEC 30 GL
VEC 40 GL
VEC 40 GL



OPERATING LIMITS

Maximum water input temperature 50°C
Maximum operating pressure 8 bar
Operating voltage 230V(±10%) ~ 50Hz
Room temperature 0-40°C
Air humidity <85% U.R.

Output limits (3-row coil):

MOD.	VEC	20	30	40	50
Minimum output	[l/h]	100	100	150	150
Maximum output	[l/h]	750	750	1100	1100

Water temperature

In order to prevent air stratification in the room, and therefore to achieve improved mixing, it is obligatory not to supply the fan coil with water at a

temperature over 50°C. The use of water at high temperatures could cause squeaking due to the different thermal expansions of the

elements (plastic and metal), this does not however cause damage to the unit if the maximum operating temperature is not exceeded.

Minimum average water temperature

If the fan coil is working in cold continuous mode inside an environment where the relative humidity is high, condensate might form on the air delivery. This condensate might be deposited on any objects underneath and on the floor.

To avoid condensate on the external structure of the device while the fan is

functioning, the average temperature of the water must not be lower than the limits shown in the table below, that depend on the thermo-hygrometric conditions of the air in the room.

The limits mentioned above refer to operation while the fan is set to its minimum speed level.

In the event of prolonged fan inactivity

and with cold water passing through the coil, condensate may form on the external case of the unit. **As a result, we recommend including the three-way valve accessory.**

MINIMUM AVERAGE WATER TEMPERATURE

	Temperature of the air in the room with dry bulb °C					
	21	23	25	27	29	31
15	3	3	3	3	3	3
17	3	3	3	3	3	3
19	3	3	3	3	3	3
21	6	5	4	3	3	3
23	-	8	7	6	5	5

TECHNICAL DATA

VEC with a 3-row coil

English

Mod.		VEC 20	VEC 30	VEC 40	VEC 50
Heating					
Heating capacity	W (max.)	1835	2770	3745	4285
	W (med.)	1505	2340	3105	3785
	W (min.)	1105	1950	2505	2840
Electric heater heating capacity	W	950	1300	1650	1950
Cooling					
Total cooling capacity	W (max.)	1320	1950	2985	3610
	W (med.)	1085	1645	2470	3170
	W (min.)	805	1370	1985	2350
Sensible cooling capacity	W (max.)	1085	1535	2410	2595
	W (med.)	885	1285	1980	2275
	W (min.)	640	1055	1580	1680
Water flow rate	l/h	227	335	514	621
Water pressure drops	kPa	4,6	13,3	11,3	14,8
Air flow rate	m ³ /h (max.)	247	383	511	613
	m ³ /h (med.)	194	309	406	529
	m ³ /h (min.)	130	241	306	371
Number of fans		1	2	2	2
♪ Sound power	dB (A) (max.)	39,5	36,5	40,0	44,5
	dB (A) (med.)	33,5	31,5	34,5	41,5
	dB (A) (min.)	26,5	26,5	29,5	34,5
Sound power	dB (A) (max.)	48,0	45,0	48,5	53,0
	dB (A) (med.)	42,0	40,0	43,0	50,0
	dB (A) (min.)	35,0	35,0	38,0	43,0
Water content	l	0,79	1,11	1,48	1,48
Max. motor power	W	25	44	57	67
Max. input current	A	0,12	0,21	0,28	0,35
Max. motor power with electric heater	W	975	1344	1707	2017
Input current with electric heater	A	4,25	5,86	7,45	8,83
3R coil connections	∅	1/2"	1/2"	3/4"	3/4"
1R coil connections	∅	1/2"	1/2"	1/2"	1/2"
Power supply		230V ~ 50Hz			

Performance values refer to the following conditions:

♪ Sound pressure measured in semi-reverberating chamber, 85m³, and with reverberation time Tr = 0.5s.

Cooling:

- room air temperature 27°C D.B., 19°C W.B.;
- maximum speed:
 - water inlet temperature 7°C; Δt water 5°C.
- medium and minimum speed:
 - water inlet temperature 7°C;
 - water flow rate as at maximum speed.

Heating:

- room air temperature 20°C D.B.;
- maximum speed:
 - water inlet temperature 50°C; Δt water 10°C.
 - water flow rate as for cooling operation.
- medium and minimum speed:
 - water inlet temperature 50°C;
 - water flow rate as at maximum speed.

INSTALLATION

WARNING: before carrying out any intervention, check the power supply is disconnected.

WARNING: before carrying out any work, put the proper individual protection equipment on.

WARNING: the appliance must be fitted according to the national regulations on process plant engineering.

WARNING: electrical wirings, installation of the fan coils and relevant accessories should be performed by a technician who has the necessary technical and professional expertise to install, modify, extend and maintain systems, and who is able to check the

systems for the purposes of safety and correct operation.

WARNING: install a device, main switch or plug which allows to completely cut off the power supply from the unit.

Instructions which are essential for the proper installation of the equipment are given here.

The completion of all the operations in accordance with the specific requirements is however left to the experience of the installation engineer.

Do not install units in rooms where there are inflammable gases or acid or alkaline substances that could

irretrievably damage the aluminium-copper heat exchanger or the internal plastic parts.

Do not install the unit in workshops or kitchens where the oil vapours mixed with the treated air can be deposited on the exchange coils, reducing their performance, or on the parts inside the unit, damaging the plastic parts.

Choose a position at the centre of the room whenever possible; adjusting the air output allows air to be distributed optimally within the room. **Do not install at a height above three metres.**

INSTALLING THE UNIT

- Choose the place where to install the unit according to the layout of the room, the number of units to be installed and any limitations imposed by the architecture. Check that the chosen place facilitates installing and servicing the unit.
- Install four M8 threaded rods into the ceiling to hold the frame.

VEC allows 2 installation options thanks to the grill prepared to be fixed in two positions:

A) for suspended ceiling installation with reduced space that requires units with small dimensions.

B) allows (increasing total height) to increase the difference in level between condensate drain and suspended ceiling by a further 30 mm, to make the realisation of the condensate drain ducting even easier, in order to prevent, in most cases, the necessity for a condensate drain pump.

To install the VEC unit, proceed as follows:

- open the cardboard box
 - if necessary, mount any accessory before installing the unit on the ceiling
- WARNING:** consult the relevant manuals of the accessories
- lift the unit carefully and, keeping it

slightly inclined, attach it to the 4 threaded bars using 8 nuts, 4 of which are self-locking. Operate the nuts to adjust height; finally, check that the unit is installed in a horizontal position

- lay the hydraulic pipes through the suspended ceiling to the attachment plate on the unit

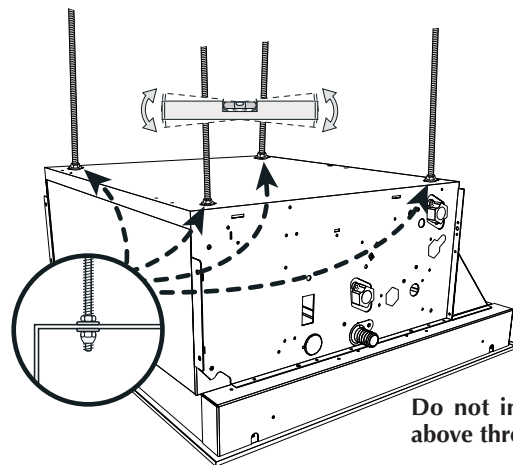
- make the hydraulic connections as described in the relative chapter

- bring the condensate discharge pipe so that it matches the relative fitting on the condensate discharge device

- drain the system via the drain valve
- bring the power supply and the control cables close to the electrical box

- adjust the position of the unit from the support bracket by means of the nuts so that the unit is level and the frame rests slightly on the suspended ceiling

- start the fan coil unit and carry out an operation test; the functions are described in the User Manual



Do not install at a height above three metres.

ELECTRICAL WIRINGS

The unit must be connected directly to an electrical outlet or to an independent circuit.

To protect the unit against short circuits, fit an omnipolar thermal-magnetic trip 2A 250V (IG) to the power line with a minimum contact opening distance of 3mm.

CHARACTERISTICS OF THE CONNECTION CABLES

Use H05V-K or N07V-K type cables with 300/500V with insulation, piped or ducted.

All the cables must be piped or ducted until they are inside the fan coil.

The cables coming out of the pipe or duct must not be subject to stretching or twisting. They must be protected from

external agents.

Stranded wires can only be used with terminating sleeves. Make sure that the strands of the wires are inserted properly.

Wiring diagrams are constantly updated. It is therefore compulsory to refer to the ones supplied with the unit.

The control panel may not be fitted on a metal wall unless this is permanently connected to an earthed outlet.

The control panels consist simply of electric circuits connected at the mains voltage of 230V; all the inputs for the probes and controls must therefore be correspondingly insulated for this voltage.

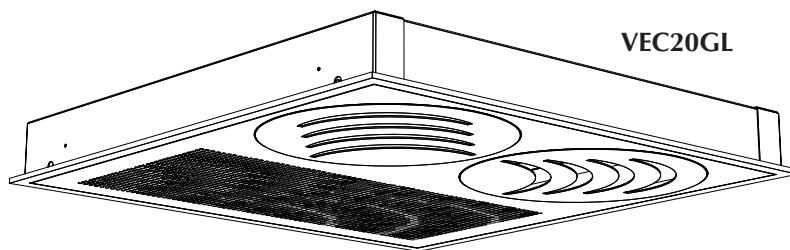
Multifunctional electronic thermostats

are provided ready for operation in the standard configuration but allow the installer to adjust them to the specific necessities of the system by modifying the internal dip-switch configuration.

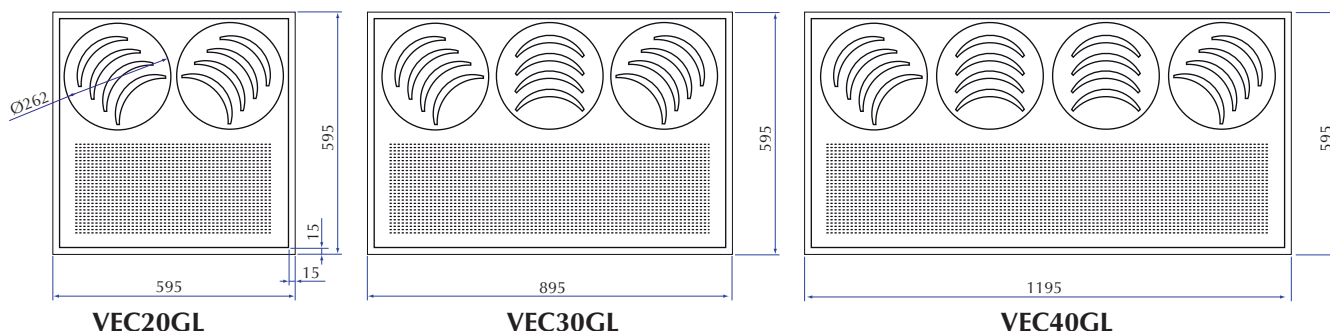
The functions that can be customised might vary from model to model, for this reason it is advisable to consult the relevant manuals.

WARNING: check whether the installation has been carried out correctly. FOLLOW THE CHECKING PROCEDURES indicated in the control panel manuals.

**ACCESSORI OBBLIGATORI
MANDATORY ACCESSORY
ACCESSOIRE OBLIGATOIRE
OBLIGATORISCHEN ZUBEHÖRS
ACCESORIO OBLIGATORIO**



VEC20GL



VEC20GL

VEC30GL

VEC40GL

VEC_GL consente 2 posizioni di installazione:

A) per installazione in controsoffitto con spazio ridotto, che richiede l'unità di dimensioni compatte.

B) consente (aumentando l'altezza complessiva) di incrementare il dislivello tra scarico condensata e controsoffitto di ulteriori 30 mm, per agevolare ancor più la realizzazione della canalizzazione di scarico condensata, in modo da evitare nella maggior parte dei casi la necessità della pompa di scarico condensata.

In questo caso è obbligatorio applicare al divisorio ferma filtro la guarnizione isolante (fornita a corredo) per evitare by-pass fra aspirazione e mandata. Inoltre dopo aver fissato con le 4 viti la cornice al ventilconvettore, applicare l'isolante adesivo (fornito a corredo) per l'intero perimetro scoperto della cornice.

ATTENZIONE: La mancata o non corretta installazione degli isolanti provoca la riduzione delle prestazioni e la formazione di condensa sulle superfici.

VEC_GL allows 2 installation positions:

A) for suspended ceiling installation with reduced space that requires units with small dimensions.

B) allows (increasing total height) to increase the difference in level between condensate drain and suspended ceiling by a further 30 mm, to make the realisation of the condensate drain ducting even easier, in order to prevent, in most cases, the necessity for a condensate drain pump. In this case it is mandatory to apply the insulating gasket to the filter retainer divider (supplied) to prevent by-pass between intake and flow. Moreover, after having fixed the frame to the fan coil using the 4 screws, apply the insulating tape (supplied) to the entire exposed perimeter of the frame.

WARNING: No or incorrect installation of the insulating products caused the reduction in performance and the formation of condensate on the surfaces.

VEC_GL permet 2 positions d'installation:

A) pour installation en faux-plafond avec espace réduit qui demande une unité aux dimensions réduites.

B) permet (en augmentant la hauteur totale) d'augmenter la dénivellation entre évacuation condensation et faux-plafond de 30mm supplémentaires, pour faciliter encore plus la réalisation de la canalisation d'évacuation condensation, de façon à éviter, dans la plupart des cas, d'avoir besoin de la pompe d'évacuation condensation. Dans ce cas, il est obligatoire d'appliquer à la division de blocage du filtre le joint isolant (fourni) pour éviter le by-pass entre aspiration et soufflage. En plus après avoir fixé le cadre au ventilconvecteur avec les 4 vis, appliquer l'isolant adhésif (fourni) sur tout le périmètre découvert du cadre.

ATTENTION: L'absence d'installation ou l'installation incorrecte des isolants provoque la diminution des prestations et la formation de condensation sur les superficies.

Mit **VEC_GL** sind 2 Installationspositionen möglich:

A) Für Installationen in Zwischendecken mit wenig Platz, wo Einheiten mit kompakten Abmessungen erforderlich sind.

B) Sie erlaubt, (bei Erhöhung der Gesamthöhe) den Höhenunterschied zwischen Kondensatablauf und Zwischendecke um weitere 30mm zu vergrößern, um die Erstellung des Kondensatabflusskanals weiter zu vereinfachen, so dass in den meisten Fällen eine Pumpe zur Kondensatableitung nicht erforderlich ist. In diesem Fall muss an der Filterhalter-Trennwand die (mitgelieferte) Dichtung eingesetzt werden, um Nebenströmungen zwischen Ansaugung und Luftaustritt zu vermeiden. Außerdem ist, nachdem der Rahmen mit den 4 Schrauben am Gebläsekonvektor befestigt wurde, die (mitgelieferte) selbstklebende Isolierung auf dem gesamten freiliegenden Umfang des Rahmens anzubringen.

ACHTUNG: Werden die Isolierungen nicht oder nicht richtig montiert, reduzieren sich die Leistungen und es bildet sich Kondenswasser auf den Oberflächen.

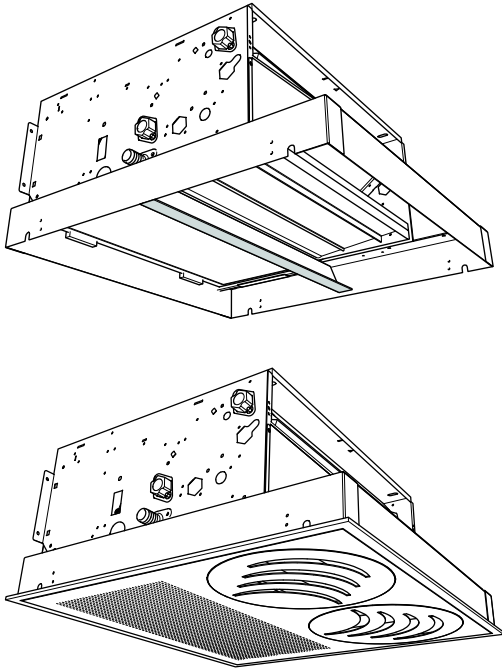
VEC_GL permite 2 posiciones de instalación:

A) para instalación en falso techo con espacio reducido que requiere unidades de dimensiones compactas.

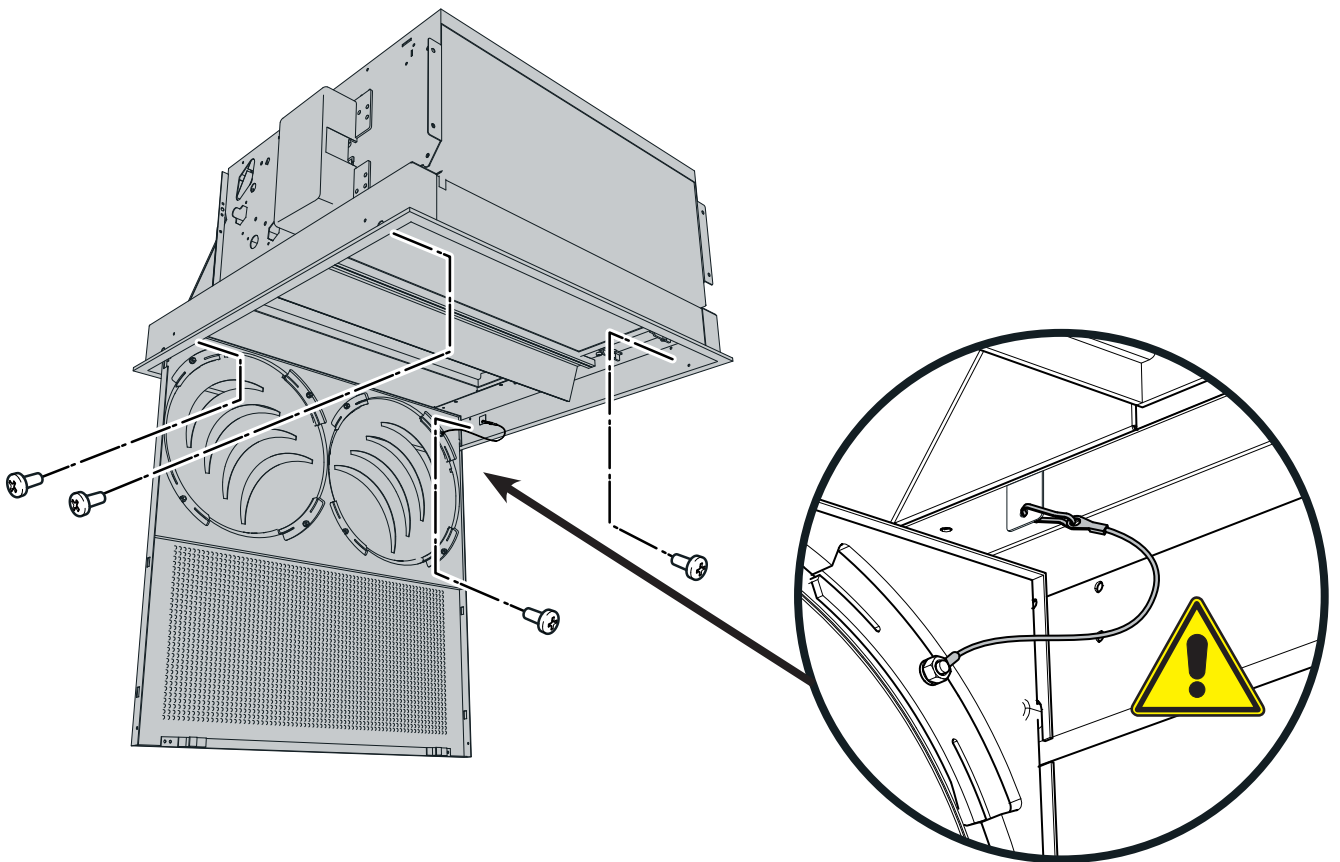
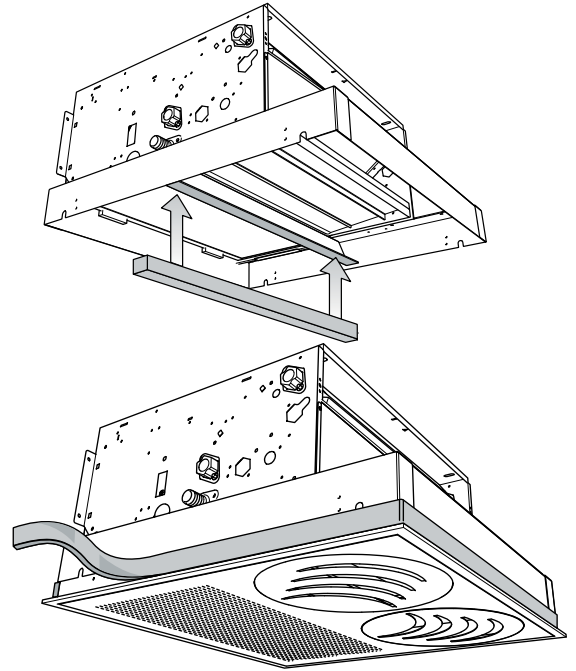
B) permite (aumentando la altura total) incrementar el desnivel entre descarga de condensación y falso techo de otros 30 mm, para facilitar aún más la realización de la canalización de descarga de la condensación, evitando así en la mayor parte de los casos la necesidad de la bomba de descarga de la condensación. En este caso es obligatorio aplicarle la junta aislante (proporcionada) al dispositivo divisor de sostén del filtro para evitar el desvío entre aspiración e impulsión. Además, después de fijar con los 4 tornillos el marco al ventilconvector, aplique el aislante adhesivo (proporcionado) sobre todo el perímetro descubierto del marco.

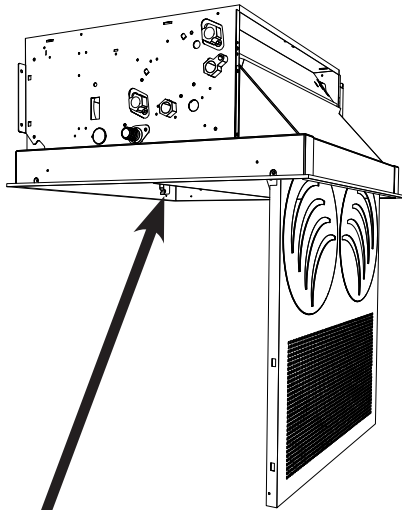
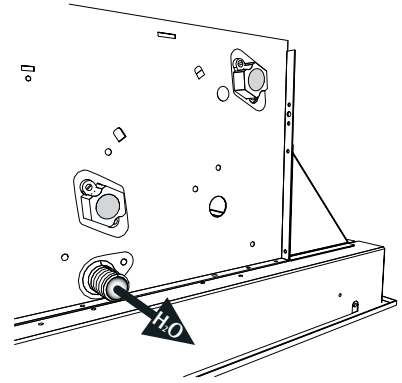
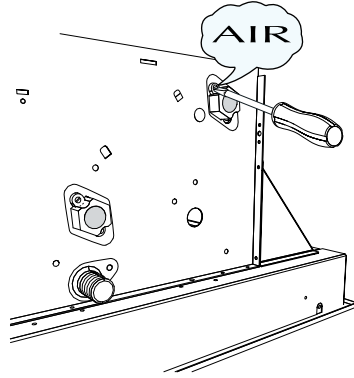
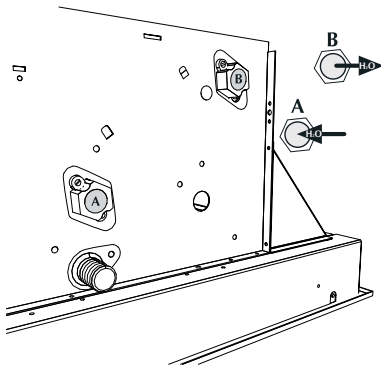
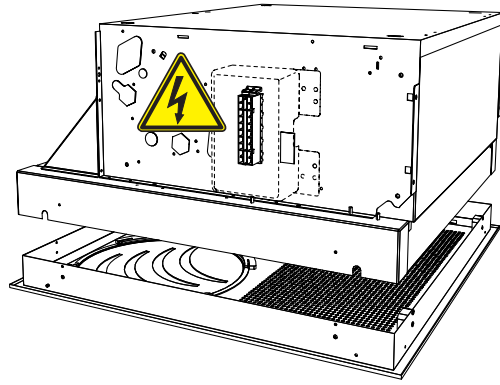
ATENCIÓN: La falta de instalación o la instalación incorrecta de los aislantes provoca la reducción de las prestaciones y la formación de condensación en las superficies.

Installazione "A"
Installation "A"
Instalación "A"

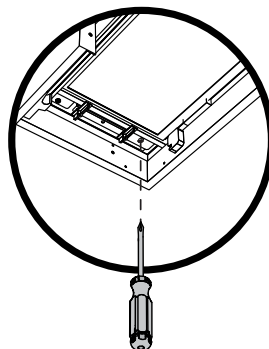
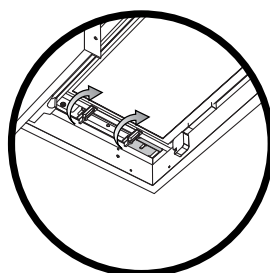
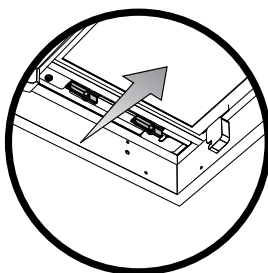
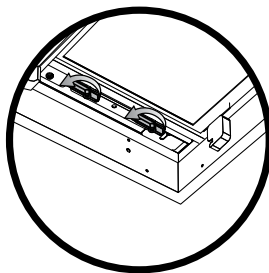
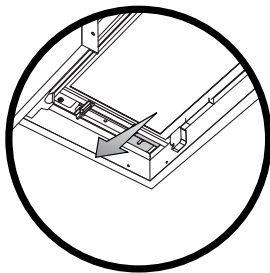
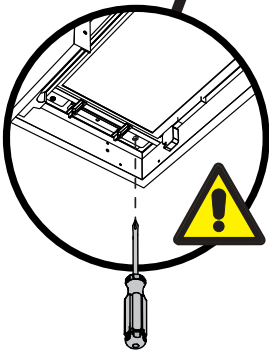


Installazione "B"
Installation "B"
Instalación "B"

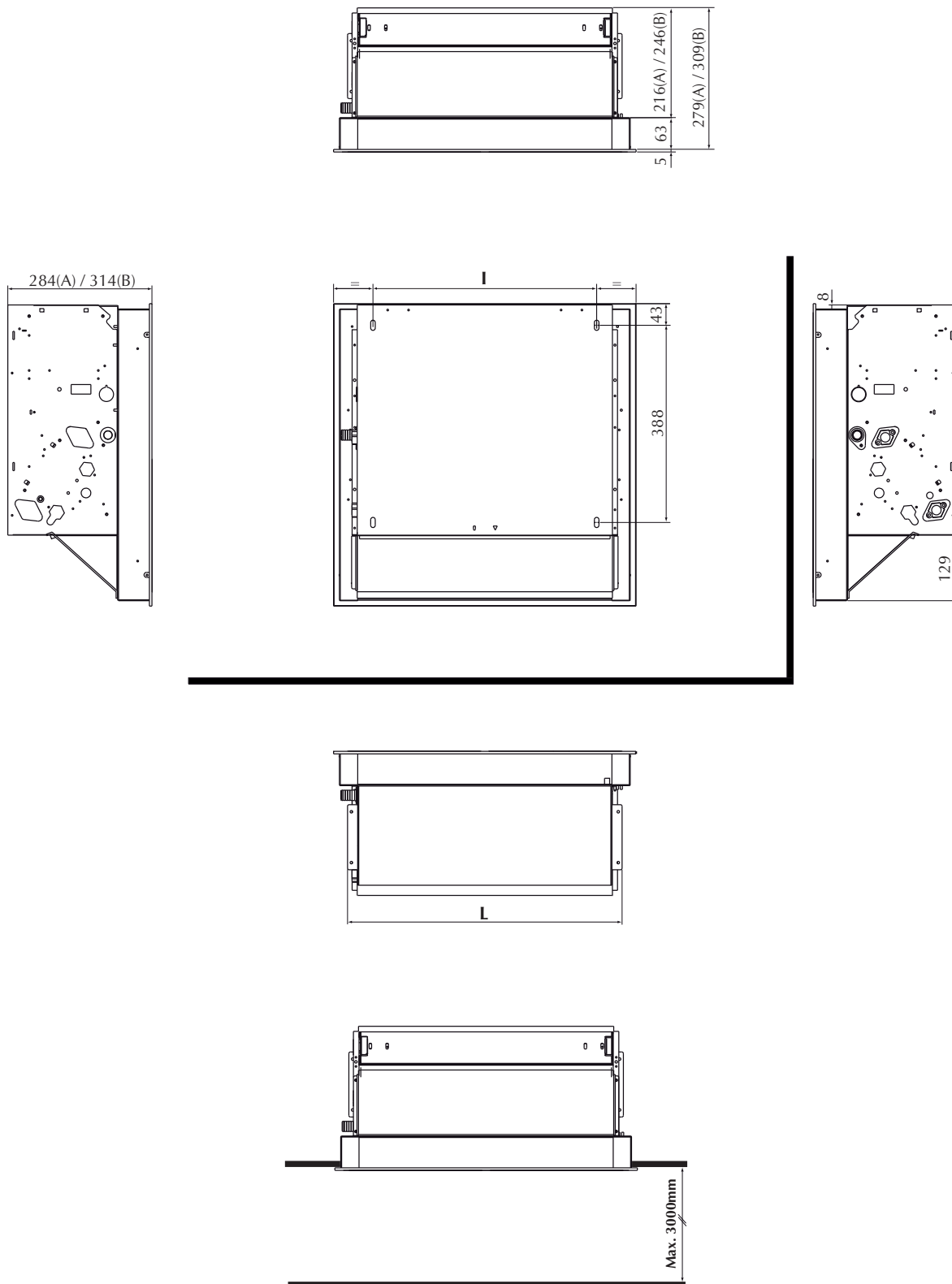




INSTALLAZIONE E SOSTITUZIONE DEL FILTRO ARIA
 INSTALLATION AND REPLACEMENT OF THE AIR FILTER
 INSTALLATION ET REMPLACEMENT DU FILTRE A AIR
 INSTALLATION UND AUSTAUCH DES LUFTFILTERS
 INSTALACIÓN Y SUSTITUCIÓN DEL FILTRO DE AIRE



DIMENSIONI [mm]
DIMENSIONS [mm]
DONNÉES DES LES DIMENSIONS [mm]
ABMESSUNGEN DATOS [mm]
DIMENSIONALES [mm]



VEC		20	30	40	50
	L [mm]	540	771	991	991
	I [mm]	440	671	891	891
Peso • Weight • Poids • Gewicht • Peso (VEC)	[kg]	15,5	20,6	24,7	24,7
Peso • Weight • Poids • Gewicht • Peso (VEC GL)	[kg]	3,7	5,7	7	7

LEGENDA • READING KEY • LEGENDE • LEGENDE • LEYENDA

F = Fusibile • Fuse • Fusible
Sicherung • Fusible

IG = Interruttore generale • Main switch
Interrupteur général • Hauptschalter
Interruptor general

M = Morsettiera • Terminal board
Boitier • Klemmleiste
Placa de bornes

MV = Motore ventilatore • Fan motor
Moteur ventilateur • Ventilatormotor
Motor del ventilador

PE = Collegamento a terra
Earth connection
Mise à terre
Erdanschluss
Toma de tierra
Sonda temperatura mínima del agua

VCF = Valvola solenoide • Solenoid valve
Vanne solenoide • Magnetventil
Válvula solenoide

SPC = Dispositivo scarico condensa
Condensate drainage device
Dispositif pour évacuation condensation
Kondensatablauf Einrichtung
Dispositivo para desagüe de condensación

= Componenti non forniti
Components not supplied
Composants non fournis
Nicht lieferbare Teile
Componentes no suministrados

⋯ = Componenti forniti optional
Optional components
Composants en option
Optionsteile
Componentes opcionales

- - - = Collegamenti da eseguire in loco
On-site wiring
Raccordements à effectuer in situ
Vor Ort auszuführende Anschlüsse
Cableado in situ

AR = Arancio • Orange • Orange • Orange • Naranja

BI = Bianco • White • Blanc • Weiss • Blanco

BL = Blu • Blue • Bleu • Blau • Azul

GR = Grigio • Grey • Gris • Gray • Gris

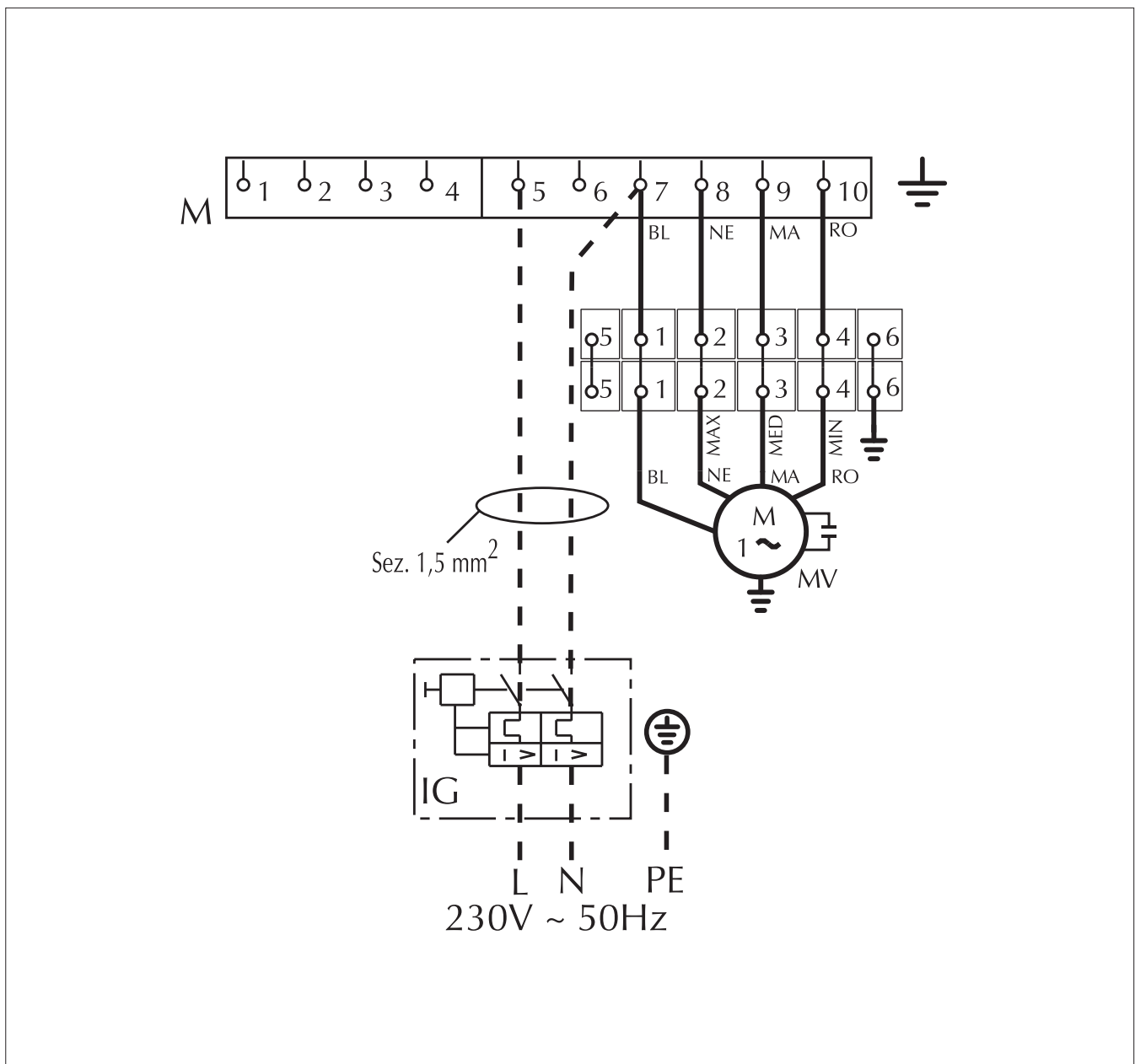
MA = Marrone • Brown • Marron • Braun • Marrón

NE = Nero • Black • Noir • Schwarz • Negro

RO = Rosso • Red • Rouge • Rot • Rojo

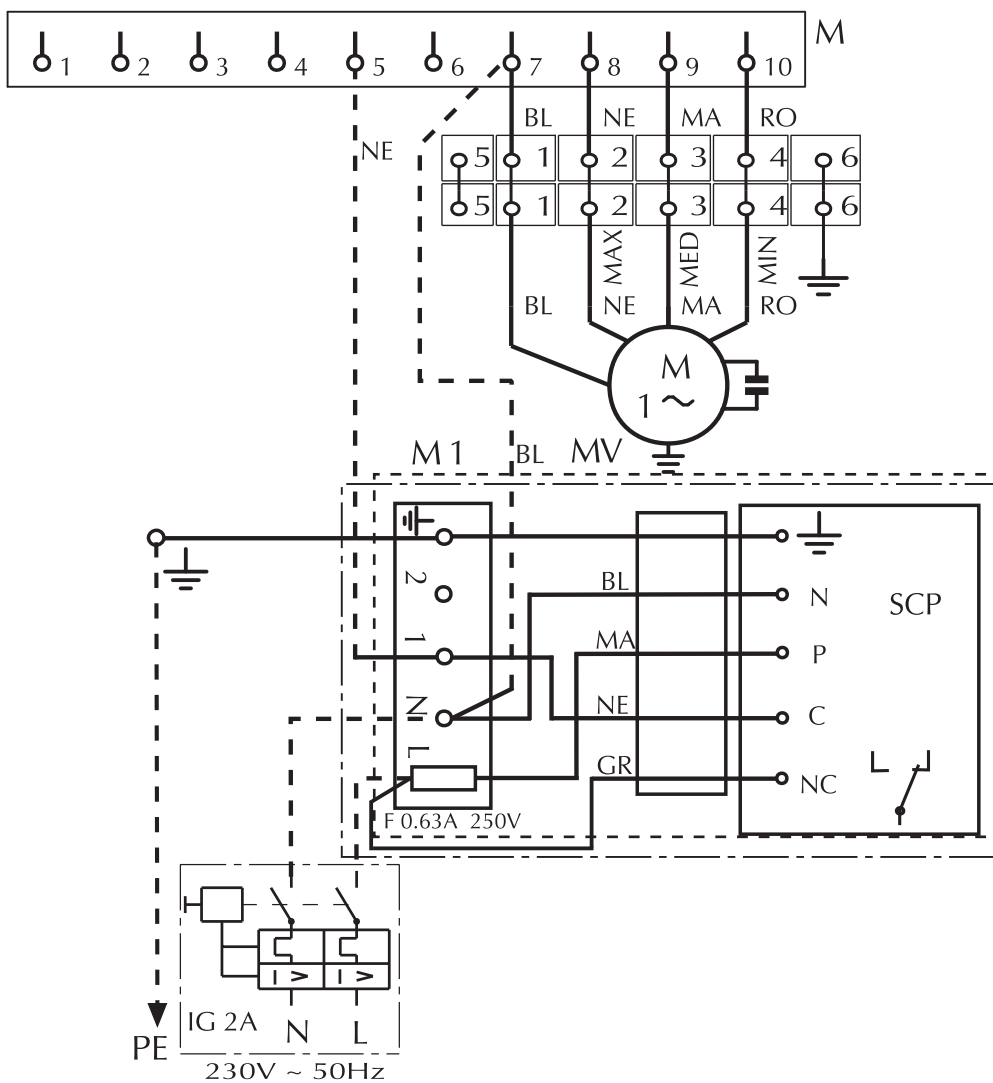
VE = Verde • Green • Vert • Grün • Verde

VI = Viola • Violet • Violet • Violet • Violeta



Gli schemi elettrici sono soggetti ad un continuo aggiornamento, è obbligatorio quindi fare riferimento a quelli a bordo macchina. All wiring diagrams are constantly updated. Please refer to the ones supplied with the unit. Nos schémas électriques étant constamment mis à jour, il faut absolument se référer à ceux fournis à bord de nos appareils. Die Schaltpläne werden ständig aktualisiert, deswegen muss man sich stets auf das mit dem Gerät gelieferte Schaltschema beziehen. El cableado de las máquinas es sometido a actualizaciones constantes. Por favor, para cada unidad hagan referencia a los esquemas suministrados con la misma.

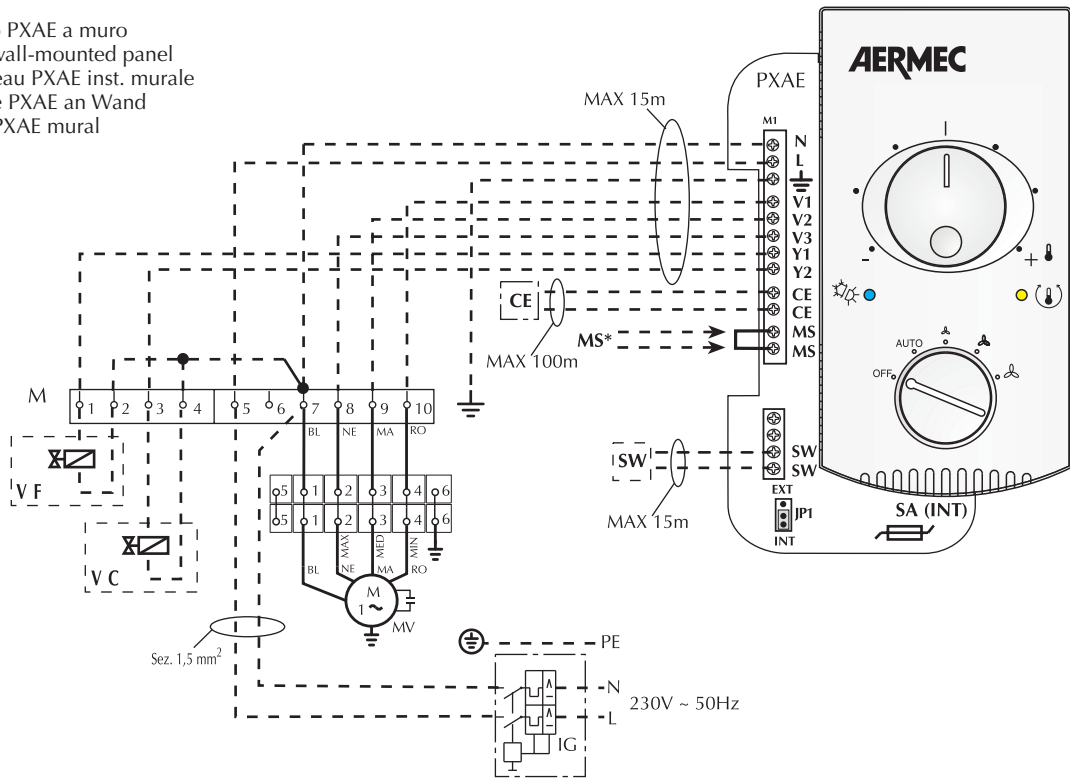
VEC
DSC



Gli schemi elettrici sono soggetti ad un continuo aggiornamento, è obbligatorio quindi fare riferimento a quelli a bordo macchina.
 All wiring diagrams are constantly updated. Please refer to the ones supplied with the unit.
 Nos schémas électriques étant constamment mis à jour, il faut absolument se référer à ceux fournis à bord de nos appareils.
 Die Schaltpläne werden ständig aktualisiert, deswegen muss man sich stets auf das mit dem Gerät gelieferte Schaltschema beziehen.
 El cableado de las máquinas es sometido a actualizaciones constantes. Por favor, para cada unidad hagan referencia a los esquemas suministrados con la misma.

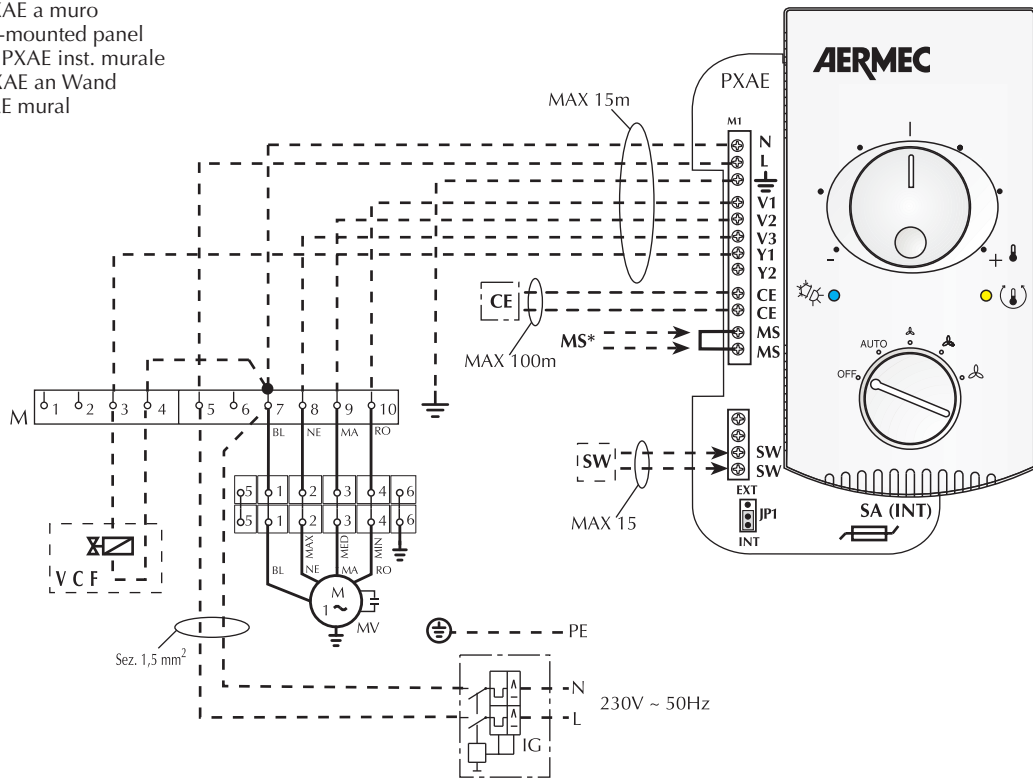
**VEC
PXAE + VC + VF**

- 4 tubi pannello PXAE a muro
- 4 tubes PXAE wall-mounted panel
- 4 tuyaux panneau PXAE inst. murale
- 4 Röhren Platte PXAE an Wand
- 4 tubos panel PXAE mural



**VEC
PXAE + VCF**

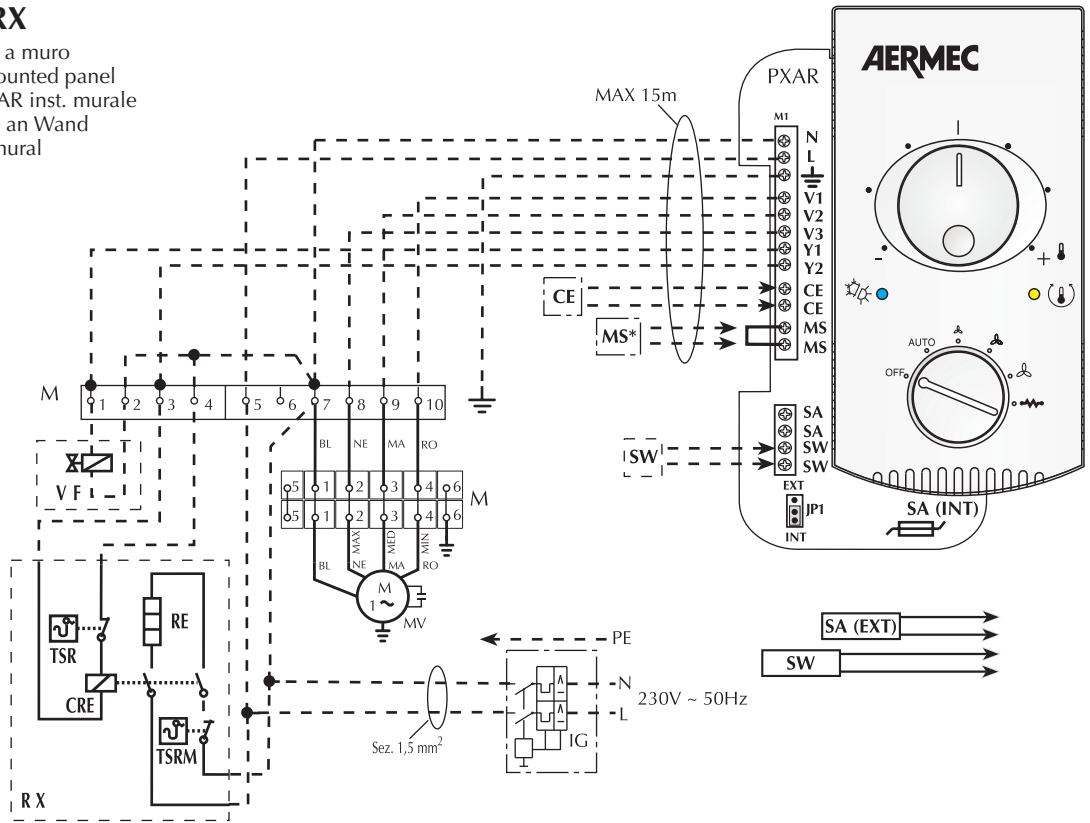
- 2 tubi pannello PXAE a muro
- 2 tubes PXAE wall-mounted panel
- 2 tuyaux panneau PXAE inst. murale
- 2 Röhren Platte PXAE an Wand
- 2 tubos panel PXAE mural



Gli schemi elettrici sono soggetti ad un continuo aggiornamento, è obbligatorio quindi fare riferimento a quelli a bordo macchina. All wiring diagrams are constantly updated. Please refer to the ones supplied with the unit. Nos schémas électriques étant constamment mis à jour, il faut absolument se référer à ceux fournis à bord de nos appareils. Die Schaltpläne werden ständig aktualisiert, deswegen muss man sich stets auf das mit dem Gerät gelieferte Schaltschema beziehen. El cableado de las máquinas es sometido a actualizaciones constantes. Por favor, para cada unidad hagan referencia a los esquemas suministrados con la misma.

VEC
PXAR + VF + RX

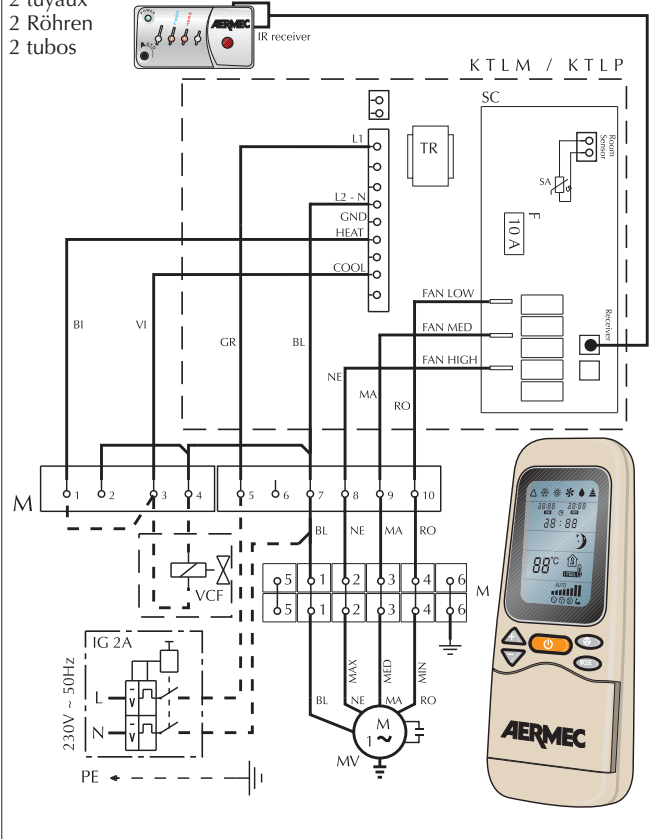
- 2 tubi pannello PXAR a muro
- 2 tubes PXAR wall-mounted panel
- 2 tuyaux panneau PXAR inst. murale
- 2 Röhren Platte PXAR an Wand
- 2 tubos panel PXAR mural



Gli schemi elettrici sono soggetti ad un continuo aggiornamento, è obbligatorio quindi fare riferimento a quelli a bordo macchina.
 All wiring diagrams are constantly updated. Please refer to the ones supplied with the unit.
 Nos schémas électriques étant constamment mis à jour, il faut absolument se référer à ceux fournis à bord de nos appareils.
 Die Schaltpläne werden ständig aktualisiert, deswegen muss man sich stets auf das mit dem Gerät gelieferte Schaltschema beziehen.
 El cableado de las máquinas es sometido a actualizaciones constantes. Por favor, para cada unidad hagan referencia a los esquemas suministrados con la misma.

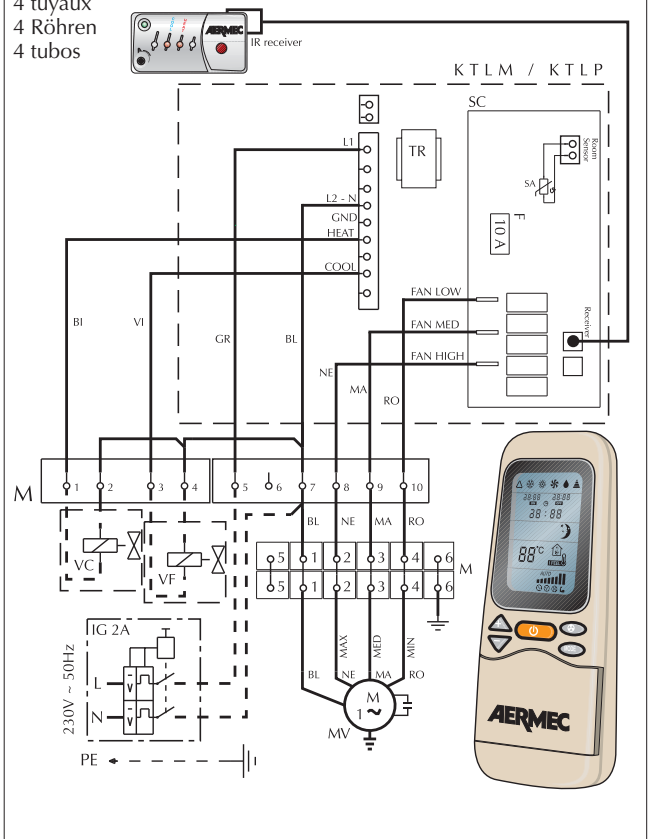
**VEC
KTLP + VCF**

- 2 tubi
- 2 tube
- 2 tuyaux
- 2 Röhren
- 2 tubos



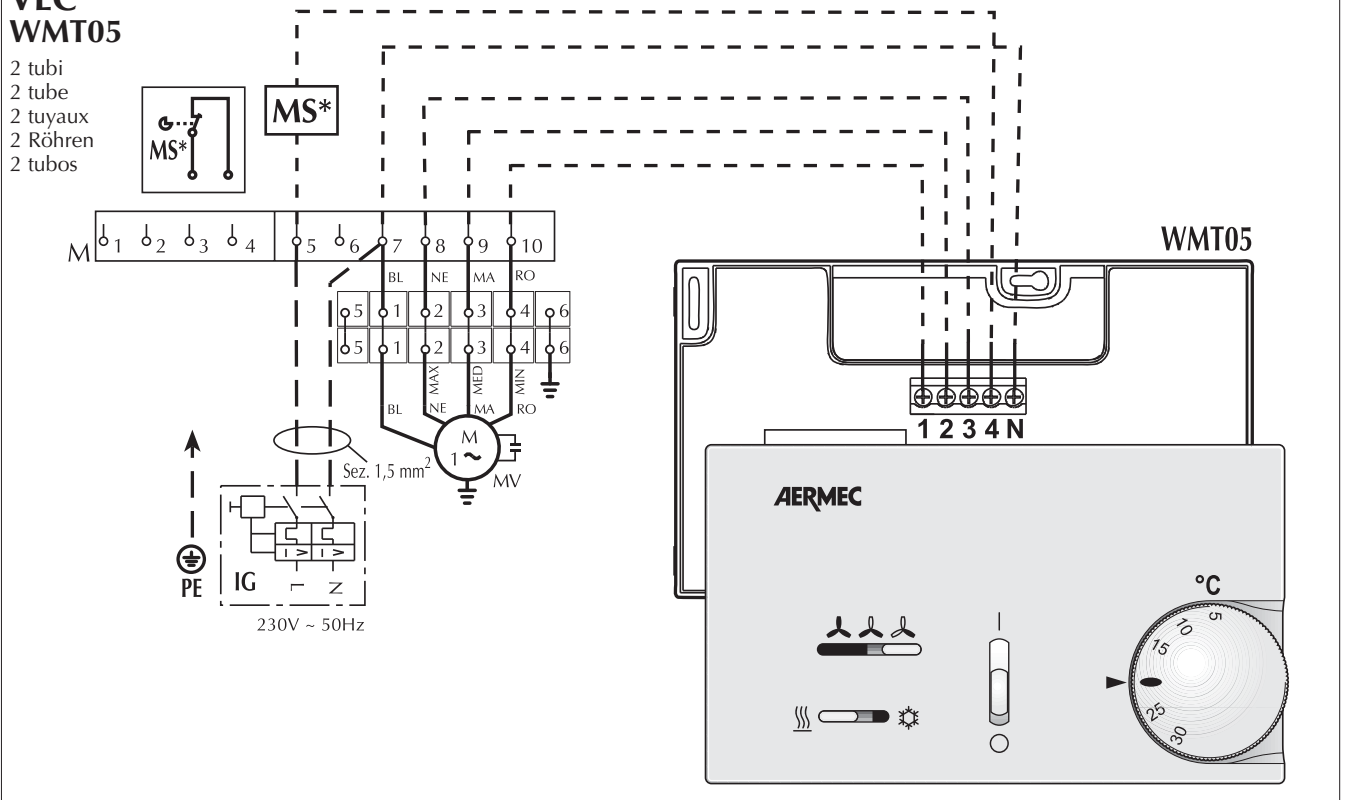
**VEC
KTLP + VC + VF**

- 4 tubi
- 4 tube
- 4 tuyaux
- 4 Röhren
- 4 tubos

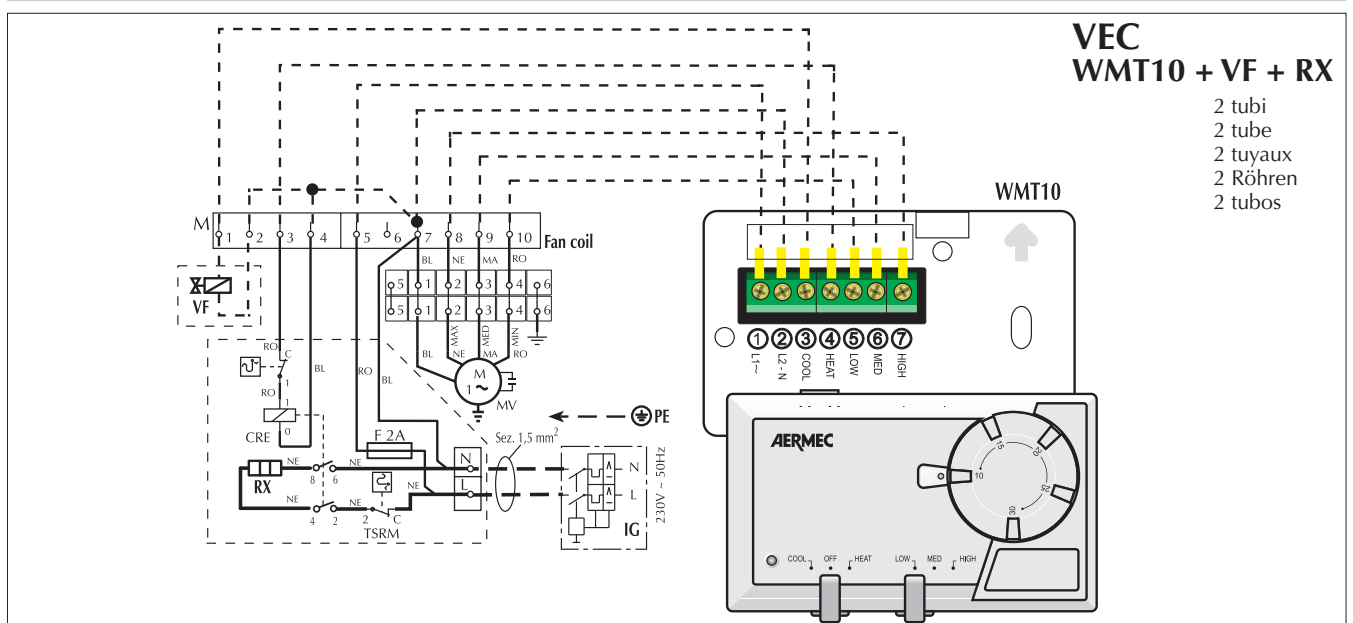
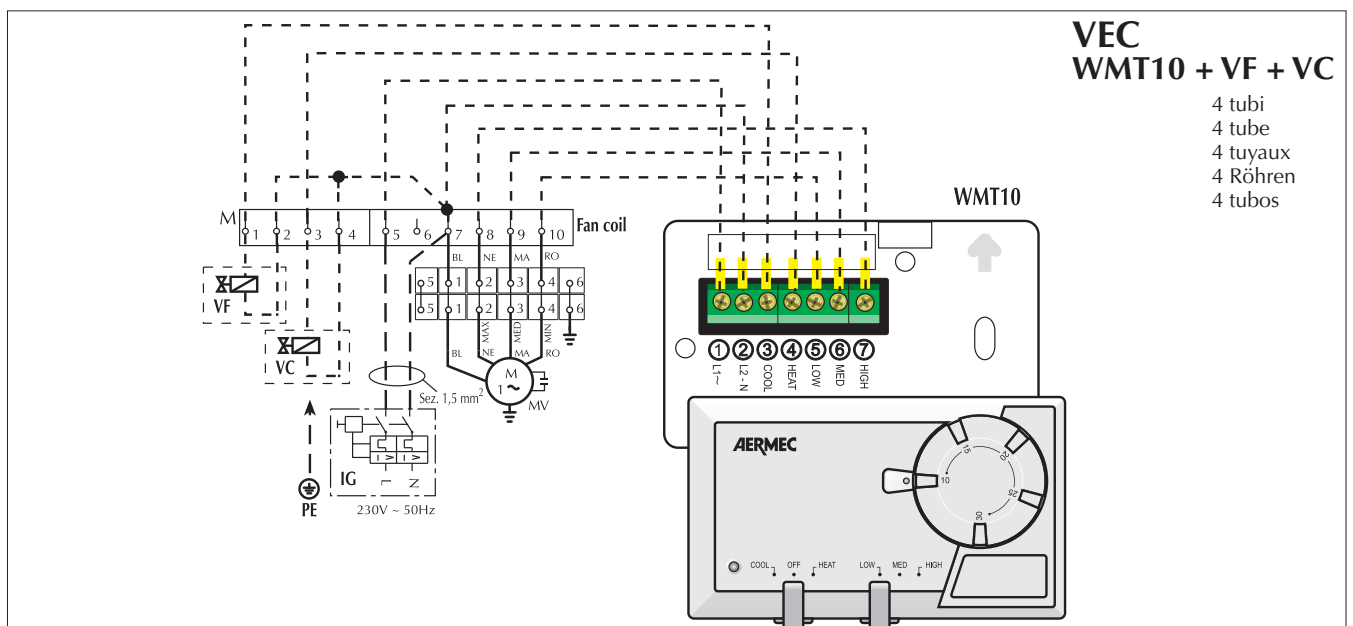
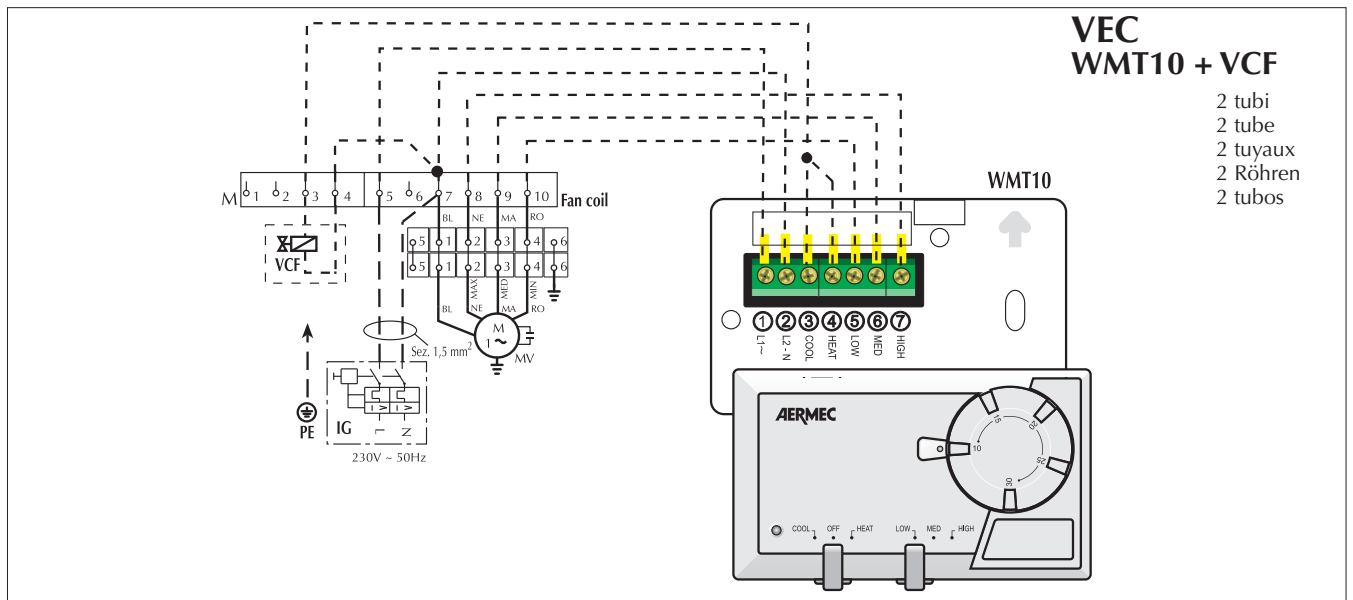


**VEC
WMT05**

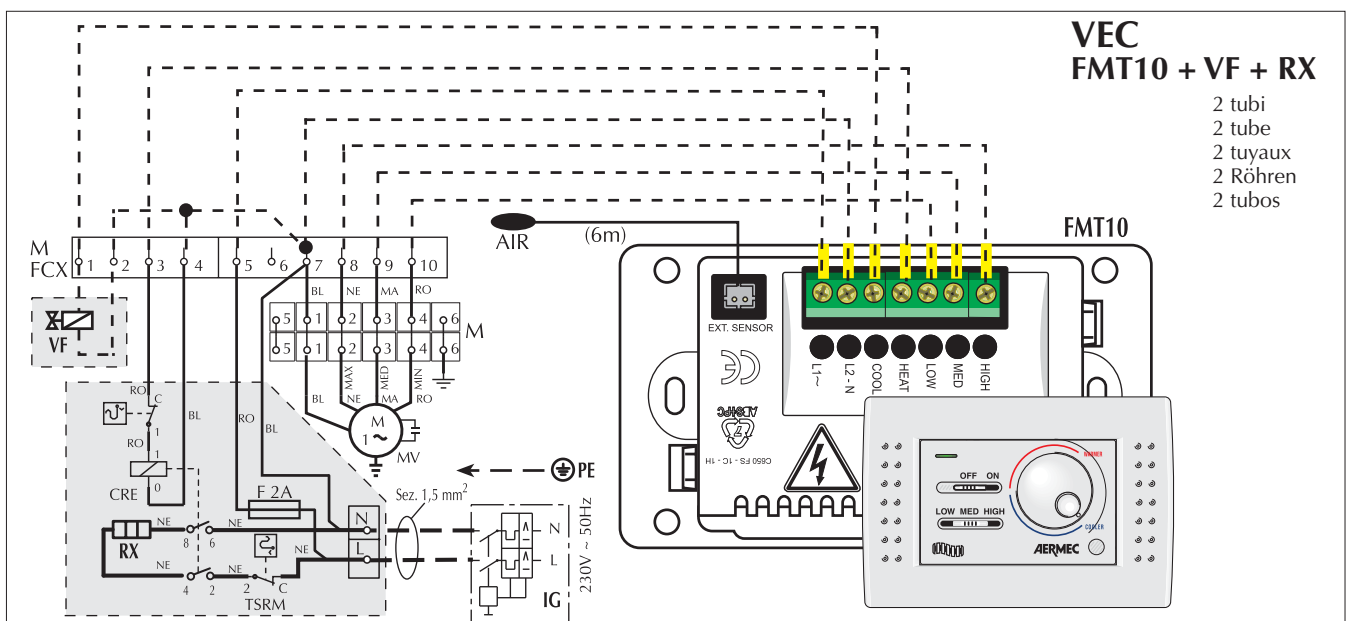
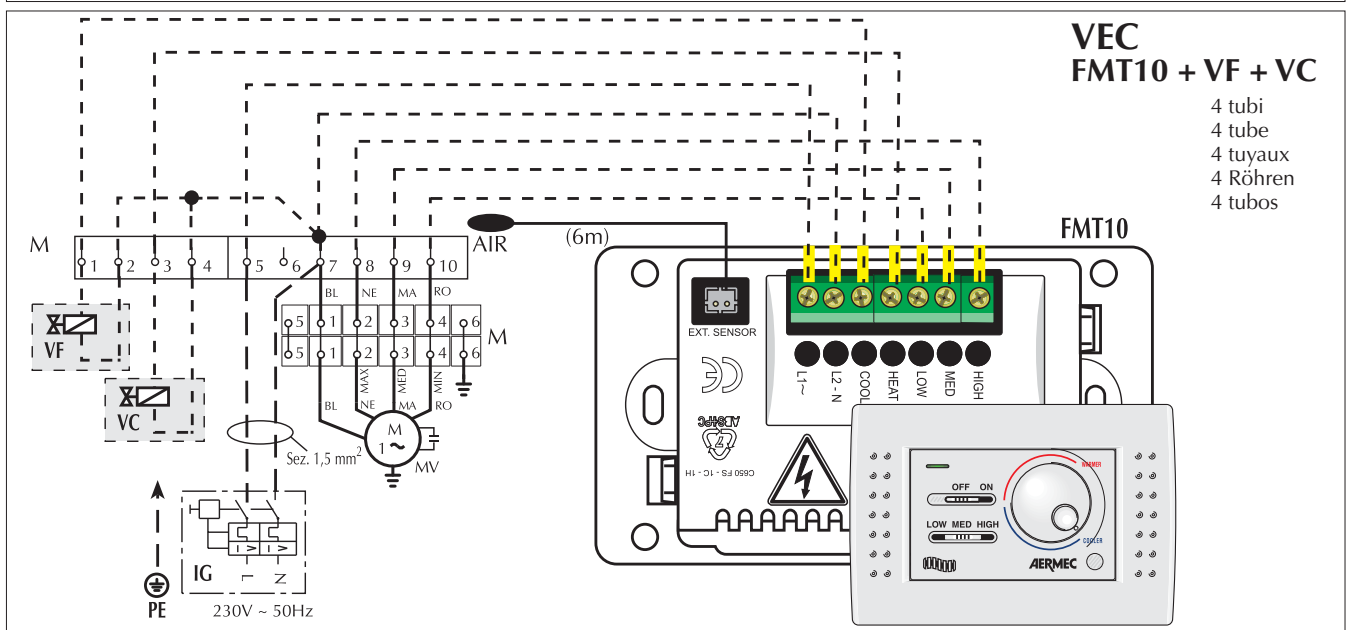
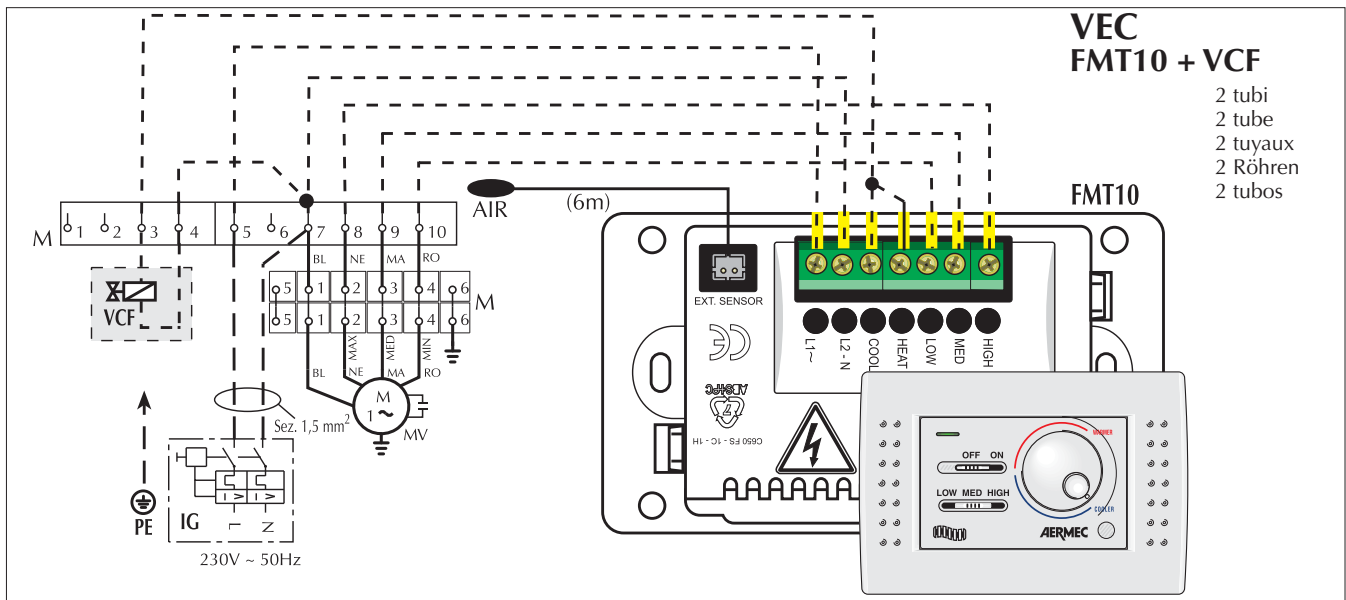
- 2 tubi
- 2 tube
- 2 tuyaux
- 2 Röhren
- 2 tubos



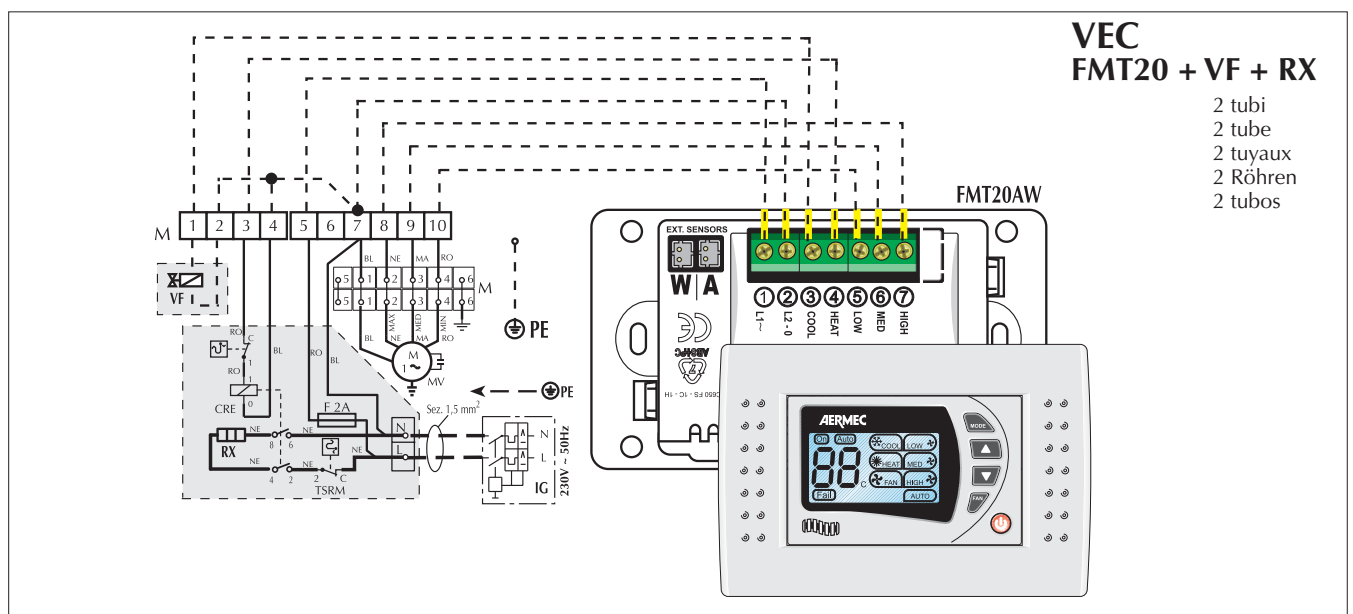
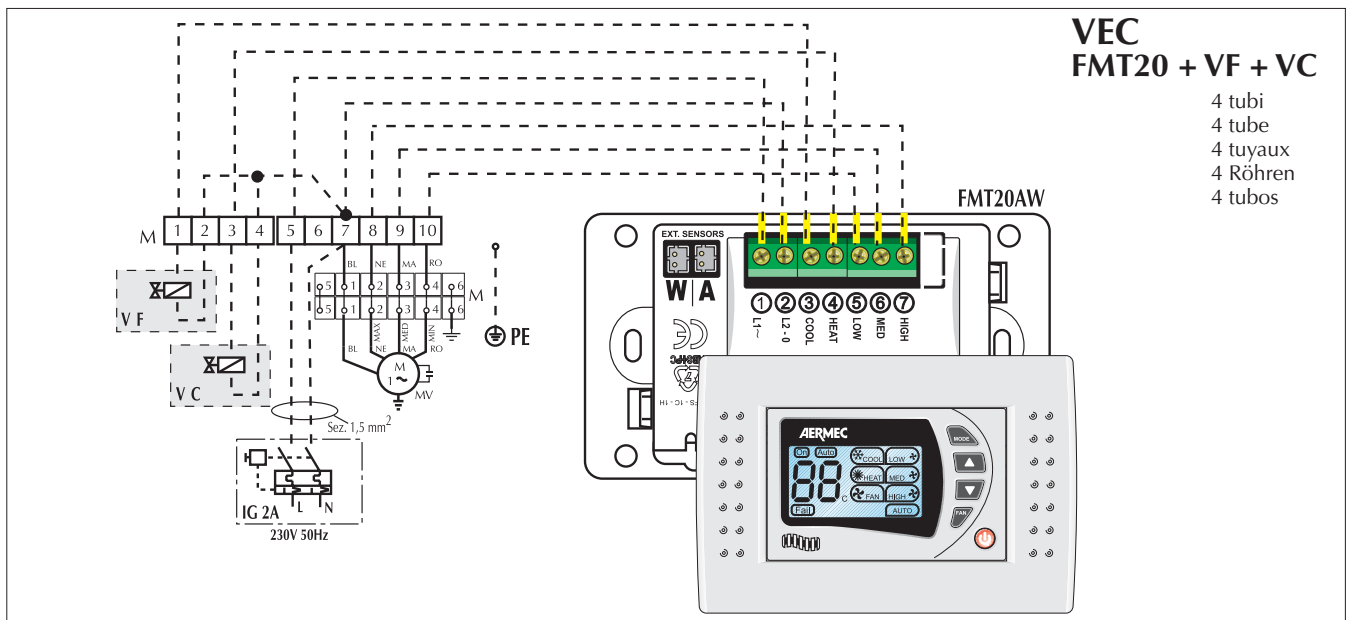
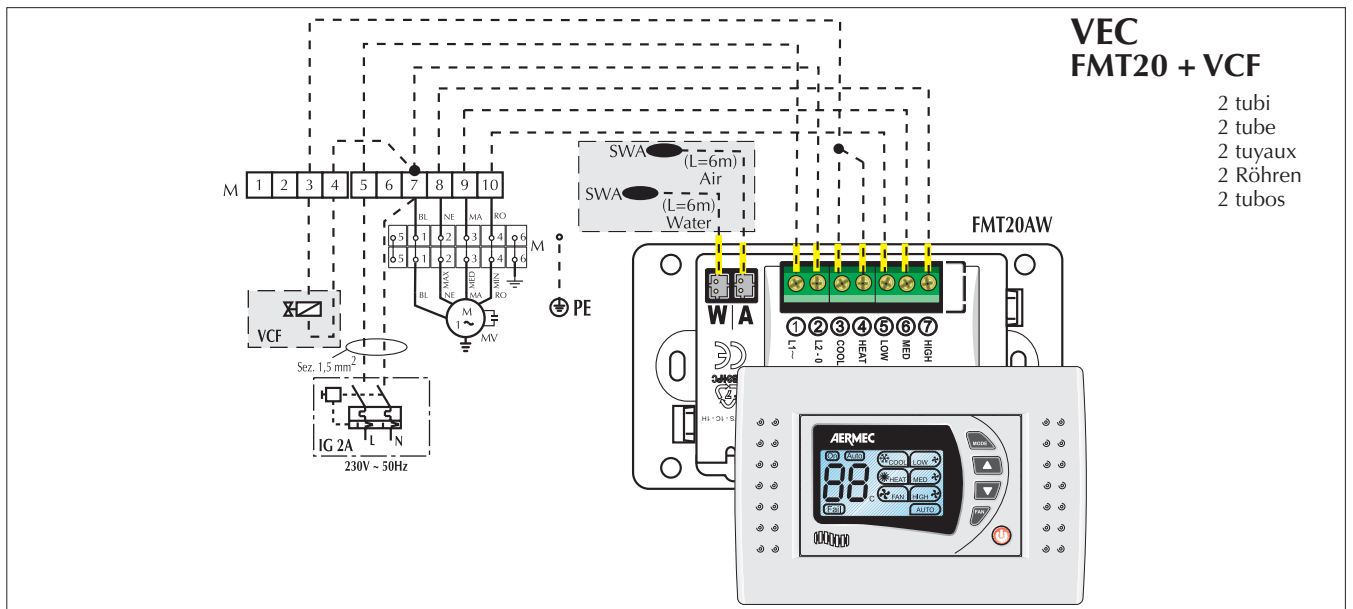
Gli schemi elettrici sono soggetti ad un continuo aggiornamento, è obbligatorio quindi fare riferimento a quelli a bordo macchina. All wiring diagrams are constantly updated. Please refer to the ones supplied with the unit. Nos schémas électriques étant constamment mis à jour, il faut absolument se référer à ceux fournis à bord de nos appareils. Die Schaltpläne werden ständig aktualisiert, deswegen muss man sich stets auf das mit dem Gerät gelieferte Schaltschema beziehen. El cableado de las máquinas es sometido a actualizaciones constantes. Por favor, para cada unidad hagan referencia a los esquemas suministrados con la misma.



Gli schemi elettrici sono soggetti ad un continuo aggiornamento, è obbligatorio quindi fare riferimento a quelli a bordo macchina.
 All wiring diagrams are constantly updated. Please refer to the ones supplied with the unit.
 Nos schémas électriques étant constamment mis à jour, il faut absolument se référer à ceux fournis à bord de nos appareils.
 Die Schaltpläne werden ständig aktualisiert, deswegen muss man sich stets auf das mit dem Gerät gelieferte Schaltschema beziehen.
 El cableado de las máquinas es sometido a actualizaciones constantes. Por favor, para cada unidad hagan referencia a los esquemas suministrados con la misma.

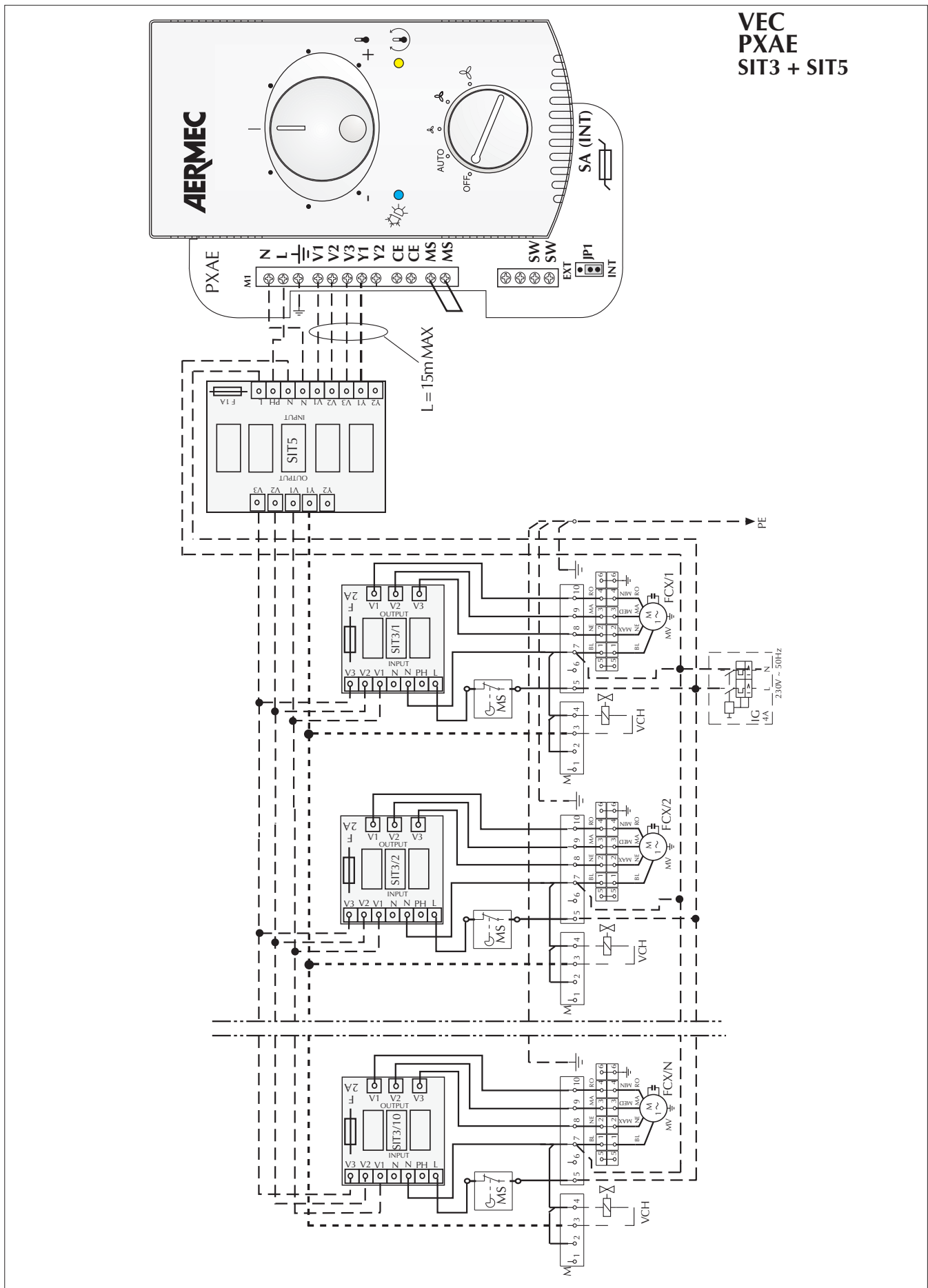


Gli schemi elettrici sono soggetti ad un continuo aggiornamento, è obbligatorio quindi fare riferimento a quelli a bordo macchina.
 All wiring diagrams are constantly updated. Please refer to the ones supplied with the unit.
 Nos schémas électriques étant constamment mis à jour, il faut absolument se référer à ceux fournis à bord de nos appareils.
 Die Schaltpläne werden ständig aktualisiert, deswegen muss man sich stets auf das mit dem Gerät gelieferte Schaltschema beziehen.
 El cableado de las máquinas es sometido a actualizaciones constantes. Por favor, para cada unidad hagan referencia a los esquemas suministrados con la misma.



Gli schemi elettrici sono soggetti ad un continuo aggiornamento, è obbligatorio quindi fare riferimento a quelli a bordo macchina.
 All wiring diagrams are constantly updated. Please refer to the ones supplied with the unit.
 Nos schémas électriques étant constamment mis à jour, il faut absolument se référer à ceux fournis à bord de nos appareils.
 Die Schaltpläne werden ständig aktualisiert, deswegen muss man sich stets auf das mit dem Gerät gelieferte Schaltschema beziehen.
 El cableado de las máquinas es sometido a actualizaciones constantes. Por favor, para cada unidad hagan referencia a los esquemas suministrados con la misma.

**VEC
PXAE
SIT3 + SIT5**



Gli schemi elettrici sono soggetti ad un continuo aggiornamento, è obbligatorio quindi fare riferimento a quelli a bordo macchina. All wiring diagrams are constantly updated. Please refer to the ones supplied with the unit. Nos schémas électriques étant constamment mis à jour, il faut absolument se référer à ceux fournis à bord de nos appareils. Die Schaltpläne werden ständig aktualisiert, deswegen muss man sich stets auf das mit dem Gerät gelieferte Schaltschema beziehen. El cableado de las máquinas es sometido a actualizaciones constantes. Por favor, para cada unidad hagan referencia a los esquemas suministrados con la misma.

SOLUZIONE DEI PROBLEMI • SOLUTION DES PROBLEMES

PROBLEMA • PROBLEM PROBLÈME • PROBLEM PROBLEMA	PROBABILE CAUSA • PROBABLE CAUSE CAUSE PROBABLE • MÖGLICHE URSACHE CAUSA PROBABLE	SOLUZIONE • REMEDY SOLUTION • ABHILFE SOLUCIÓN
Poca aria in uscita. Feeble air discharge. Il y a peu d'air en sortie. Schwacher Luftstrom am Austritt. Poco aire en salida.	Errata impostazione della velocità sul pannello comandi. Wrong speed setting on the control panel. Mauvaise présélection de la vitesse sur le panneau de commandes. Falsche Geschwindigkeitseinstellung am Bedienpaneel. Programación errada de la velocidad en el tablero de mandos.	Scegliere la velocità corretta sul pannello comandi. Select the speed on the control panel. Choisir la vitesse sur le panneau de commandes. Die Geschwindigkeit am Bedienpaneel wählen. Elegir la velocidad correcta en el tablero de mandos.
	Filtro intasato. Blocked filter. Filtre encrassé. Filter verstopft. Filtro atascado.	Pulire il filtro. Clean the filter. Nettoyer le filtre. Filter reinigen. Limpiar el filtro.
Non fa caldo. It does not heat. Pas de chaleur. Keine Heizung. No hace calor.	Ostruzione del flusso d'aria (entrata e/o uscita). Obstruction of the air flow (inlet and/or outlet). Obstruction du flux d'air (entrée/sortie). Luftstrom behindert (Eintritt bzw. Austritt). Obstrucción del chorro del aire (entrada y/o salida). Mancanza di acqua calda. Poor hot water supply. Il n'y a pas d'eau chaude. Kein Warmwasser. Falta de agua caliente.	Rimuovere l'ostruzione. Remove the obstruction. Enlever l'objet faisant obstruction. Verstopfung beseitigen. Quitar la obstrucción. Controllare la caldaia. Control the boiler. Vérifier la chaudière. Kaltwasserseitigen Wärmeaustauscher kontrollieren. Comprobar el calentador.
Non fa freddo. It does not cool. Pas de froid. Keine Kühlung. No hace frío.	Impostazione errata del pannello comandi. Wrong setting on control panel. Mauvaise présélection sur le panneau de commandes. Falsche Einstellung am Bedienpaneel. Programación errada del tablero de mandos. Mancanza di acqua fredda. Poor chilled water supply. Il n'y a pas d'eau froide. Kein Kaltwasser. Falta de agua fría.	Impostare il pannello comandi. See control panel settings. Présélectionner au panneau de commandes. Richtige Einstellung am Bedienpaneel vornehmen. Programar el tablero de mandos. Controllare il refrigeratore. Control the chiller. Vérifier le réfrigérateur. Kaltwasserseitigen Wärmeaustauscher kontrollieren. Comprobar el refrigerador.
Il ventilatore non gira. The fan does not turn. Le ventilateur ne tourne pas. Ventilator Arbeitet nicht. El ventilador no gira.	Impostazione errata del pannello comandi. Wrong setting on control panel. Mauvaise présélection sur le panneau de commandes. Falsche Einstellung am Bedienpaneel. Programación errada del tablero de mandos. Mancanza di corrente. No current. Il n'y a pas de courant. Kein Strom. Falta de corriente. L'acqua non ha raggiunto la temperatura d'esercizio. The water has not reached operating temperature. L'eau n'a pas atteint la température de service. Das Wasser hat die Betriebstemperatur nicht erreicht. El agua no ha alcanzado la temperatura de ejercicio.	Impostare il pannello comandi. See control panel settings. Présélectionner au panneau de commandes. Richtige Einstellung am Bedienpaneel vornehmen. Programar el tablero de mandos. Controllare la presenza di tensione elettrica. Control the power supply. Contrôler l'alimentation électrique. Kontrollieren, ob Spannung anliegt. Comprobar la presencia de tensión eléctrica. Controllare la caldaia o il refrigeratore. Controllare il settaggio del termostato. Please check up the boiler or the chiller. Check up the thermostat settings. Contrôler la chaudière ou le refroidisseur. Contrôler le réglage du thermostat. Das Heiz- oder Kühlaggregat überprüfen. Die Einstellungen des Temperaturreglers überprüfen. Comprobar el calentador o el refrigerador. Comprobar la programación del termostato.
Fenomeni di condensazione sulla struttura esterna dell'apparecchio. Condensation on the unit cabinet.	Sono state raggiunte le condizioni limite di temperatura e umidità descritte in "MINIMA TEMPERATURA MEDIA DELL'ACQUA". The limit conditions of temperature and humidity indicated in "MINIMUM AVERAGE WATER TEMPERATURE" have been reached.	Innalzare la temperatura dell'acqua oltre i limiti minimi descritti in "MINIMA TEMPERATURA MEDIA DELL'ACQUA". Increase the water temperature beyond the minimum limits indicated in "MINIMUM AVERAGE WATER TEMPERATURE".
Phénomènes de condensation sur la structure extérieure de l'appareil. Kondenswasserbildung am Gerät.	On a atteint les conditions limite de température et d'humidité indiquées dans "TEMPERATURE MINIMALE MOYENNE DE L'EAU". Erreichen der maximalen Temperatur- und Feuchtigkeitswerte (siehe Abschnitt "DURCHSCHNITTLLICHE MINDEST - WASSERTEMPERATUR").	Elever la température de l'eau au-delà des limites minimales indiquées dans "TEMPERATURE MINIMALE MOYENNE DE L'EAU". Wassertemperatur über die um Abschnitt "DURCHSCHNITTLLICHE MINDEST - WASSERTEMPERATUR" angegebenen min. Werte erhöhen.
Fenómenos de condensación en la estructura externa del aparato.	Se han alcanzado las condiciones límites de temperatura y humedad descritas en "MÍNIMA TEMPERATURA MEDIA DEL AGUA".	Aumentar la temperatura del agua por encima de los límites descritos en "Mínima temperatura media del agua".

Per anomalie non contemplate, interpellare tempestivamente il Servizio Assistenza.

For anomalies don't hesitate, contact the aftersales service immediately.

Pour toute anomalie non répertoriée, consulter le service après-vente.

Sich bei hier nicht aufgeführten Störungen umgehend an den Kundendienst wenden.

En el caso de anomalías no contempladas, ponerse en contacto de inmediato con el Servicio de Asistencia.

I dati tecnici riportati nella presente documentazione non sono impegnativi.

AERMEC S.p.A. si riserva la facoltà di apportare in qualsiasi momento tutte le modifiche ritenute necessarie per il miglioramento del prodotto.

Les données mentionnées dans ce manuel ne constituent aucun engagement de notre part. Aermec S.p.A. se réserve le droit de modifier à tous moments les données considérées nécessaires à l'amélioration du produit.

Technical data shown in this booklet are not binding.

Aermec S.p.A. shall have the right to introduce at any time whatever modifications deemed necessary to the improvement of the product.

Im Sinne des technischen Fortschrittes behält sich Aermec S.p.A. vor, in der Produktion Änderungen und Verbesserungen ohne Ankündigung durchzuführen.

Los datos técnicos indicados en la presente documentación no son vinculantes.

Aermec S.p.A. se reserva el derecho de realizar en cualquier momento las modificaciones que estime necesarias para mejorar el producto.

AERMEC S.p.A.

I-37040 Bevilacqua (VR) - Italia

Via Roma, 996 - Tel. (+39) 0442 633111

Telefax (+39) 0442 93730 - (+39) 0442 93566

www.aermec.com
