



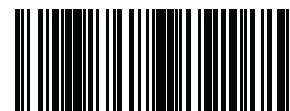
Variable Multi Flow®

VMF

**MANUALE D'USO E INSTALLAZIONE
USE AND INSTALLATION MANUAL
MANUEL D'UTILISATION ET D'INSTALLATION
BEDIENUNGS-UND
INSTALLATIONSANLEITUNG
MANUAL DE INSTRUCCIONES E INSTALACIÓN**



FCZ A
230V ~ 50Hz



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

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.

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. **All the information in this manual must be carefully read and understood. Pay particular attention to the operating standards with "DANGER" or "WARNING" signals as failure to comply with them can cause damage to the machine and/or persons or objects.**

If any malfunctions are not included in this manual, contact the local After-sales Service immediately.

The apparatus must be installed in such a way that maintenance and/or repair operations are possible.

The apparatus's warranty does not in any case cover costs due to automatic ladders, scaffolding or other lifting systems necessary for carrying out repairs under guarantee.

AERMEC S.p.A. declines all responsibility for any damage whatsoever caused by improper use of the machine, and a partial or superficial acquaintance with the information contained in this manual.

REMARQUES

Conserver 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, contacter 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.

HINWEISE

Bewahren Sie die Gebrauchsanleitungen mindestens 10 Jahre für eventuelles zukünftiges Nachschlagen an einem trockenen Ort auf.

Alle in diesem Handbuch enthaltenen Informationen aufmerksam und vollständig lesen. Insbesondere auf die Benutzungsanweisungen mit den Hinweisen "VORSICHT" oder "ACHTUNG" achten, 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.

Das Gerät so aufstellen, 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.

OBSERVACIONES

Guarde los manuales en un lugar seco para evitar su deterioro, al menos durante 10 años, por si fuera posible consultarlos en el futuro.

Leer atenta y completamente todas las informaciones contenidas en este manual. Preste particular atención a las normas de uso acompañadas de las indicaciones "PELIGRO" o "ATENCIÓN" puesto que, si no se cumplen, pueden causar el deterioro de la máquina y/o daños personales y materiales.

En caso de anomalías no contempladas en este manual, contacte inmediatamente con el Servicio de Asistencia de su zona.

El aparato debe ser instalado de manera que haga posibles 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.

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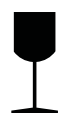
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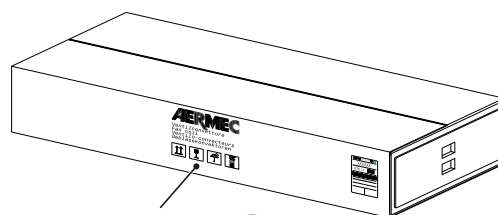
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TRASPORTO • TRANSPORT • TRANSPORT • TRANSPORT • TRANSPORTE

	NON bagnare. Tenere al riparo dalla pioggia.	KEEP DRY. Keep out of the rain.	NE PAS mouiller. Tenir à l'abri de la pluie.	NICHT nass machen. Vor Regen geschützt anbringen	NO mojar. Conservar protegido de la lluvia.
	NON calpestare.	DO NOT step on unit.	NE PAS marcher sur l'appareil.	NICHT betreten .	NO pisar.
	Sovrapponibilità: controllare sull'imballo per conoscere il numero di macchine impilabili.	Stackability: check the package to know the number of stackable machines.	Empilement : vérifier sur l'emballage le nombre d'appareils empilables.	Stapelbarkeit: Auf der Verpackung nachsehen, wie die Anzahl der stapelbaren Geräte lautet.	Superponibilidad: observar en el embalaje la cantidad de máquinas que pueden apilarse.
	NON trasportare la macchina da soli se il suo peso supera i 25Kg.	DO NOT carry the equipment alone if weight exceeds 25Kg.	NE PAS faire transporter l'appareil par une seule personne si son poids est supérieur à 25kg.	NICHT das Gerät allein transportieren, wenn sein Gewicht die 25kg übersteigt.	NO transportar la máquina solos si su peso es superior a los 25Kg.
	NON lasciare gli imballi sciolti durante il trasporto. Non rovesciare.	DO NOT leave boxes unsecured during transportation. Do not overturn.	NE PAS laisser les emballages sans attaches durant le transport. Ne pas renverser.	NICHT die Verpackungen während des Transports geöffnet lassen. Nicht stürzen.	NO dejar los embalajes sin sujetar durante el transporte. No invertir.
	Fragile, maneggiare con cura.	Fragile, handle with care.	Fragile, manipuler avec soin.	Zerbrechlich, sorgfältig handhaben.	Frágil, manipular con cuidado.

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!!!
	Imballo: indicazioni per trasporto e stoccaggio	Packing: indications for transport and storage	Emballage: indications pour le transport et le stockage	Verpackung: Anweisungen für Transport und Lagerung	Embalaje: indicaciones para el transporte y el almacenamiento



AERMEC

Ventilconvettore
Fan coil
Ventilo-convecteurs
Gebläsekonvektoren



IDENTIFICAZIONE DEL PRODOTTO - PRODUCT IDENTIFICATION - IDENTIFICATION DU PRODUIT - KENNZEICHNUNG DES PRODUKTES - IDENTIFICACIÓN DEL PRODUCTO

IT

I ventilconvettori sono identificabili attraverso:

ETICHETTA IMBALLO

Posta sull'imballo, riporta i dati identificativi del prodotto.

TARGHETTA TECNICA

Posta all'interno dell'unità, riporta i dati identificativi e tecnici del prodotto.

ATTENZIONE: La manomissione, l'asportazione, la mancanza della targhetta di identificazione o quant'altro non permetta la sicura identificazione del prodotto, rende difficoltosa qualsiasi operazione di installazione e manutenzione.

EN

The fan coils can be identified through:

PACKAGING LABEL

Located on the packaging, it indicates the product identification data.

TECHNICAL PLATE

Located inside the unit, it indicates the identification and technical data of the product.

ATTENTION: Tampering, removal, the lack of the identification plate does not allow the product to be safely identified and will complicate any installation or maintenance operations.

FR

Les ventilo-convecteurs peuvent être identifiés par :

L'ÉTIQUETTE D'EMBALLAGE

Elle se trouve sur l'emballage et reporte les données d'identification du produit.

LA PLAQUE TECHNIQUE

Elle se trouve à l'intérieur de l'unité et reporte les données d'identification et les caractéristiques techniques du produit.

ATTENTION : L'altération, l'enlèvement, l'absence de la plaque d'identification ou de tout autre élément ne permettant pas d'identifier clairement le produit, complique toute opération d'installation et de maintenance.

DE

Die Gebläsekonvektoren sind gekennzeichnet durch:

VERPACKUNGSETIKETT Auf der Verpackung angebracht, enthält die Kenndaten des Produktes.

TYPENSCHILD Im Inneren der Einheit angebracht, enthält die Kenndaten und die technischen Merkmale des Produktes.

ACHTUNG: Die Veränderung, das Entfernen oder das Fehlen des Typenschildes oder anderer Elemente, welche die sichere Identifizierung des Produktes ermöglichen, erschweren die Installations- und Wartungsarbeiten.

ES

Los ventiloconvectores se pueden identificar a través de:

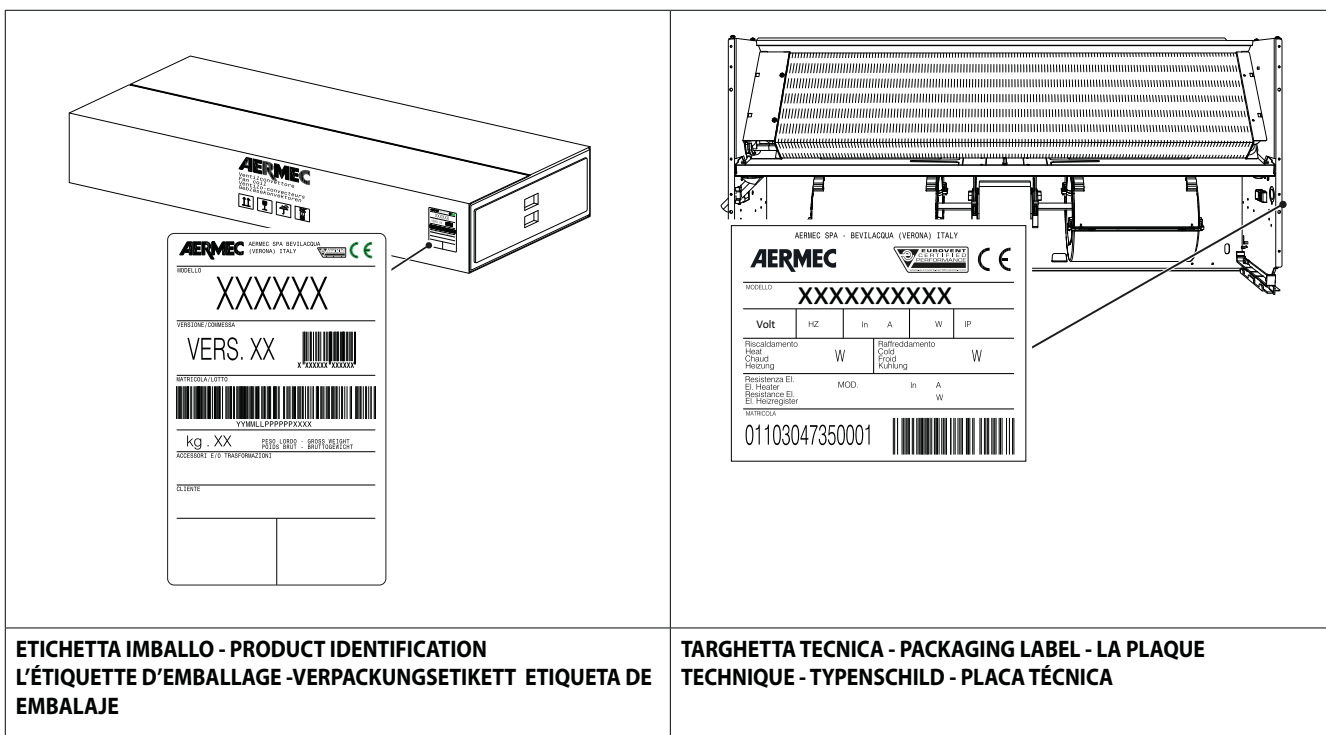
ETIQUETA DE EMBALAJE

Colocada en el embalaje, muestra los datos de identificación del producto.

PLACA TÉCNICA

Colocada dentro de la unidad, muestra los datos de identificación y técnicos del producto.

ATENCIÓN: La alteración, extracción, falta de la placa de identificación técnica o todo lo que no permita la identificación segura del producto, vuelve dificultosa cualquier operación de instalación y mantenimiento.



**ETICHETTA IMBALLO - PRODUCT IDENTIFICATION
L'ÉTIQUETTE D'EMBALLAGE - VERPACKUNGSETIKETT ETIQUETA DE EMBALAJE**

TARGHETTA TECNICA - PACKAGING LABEL - LA PLAQUE TECHNIQUE - TYPENSCHILD - PLACA TÉCNICA

GENERAL WARNINGS

- WARNINGS REGARDING SAFETY AND INSTALLATION STANDARDS
- Follow the indications below to install the equipment correctly. The completion of all operations, according to specific requirements, is left to the experience of the installer.
- Do not modify or tamper with the units, as dangerous situations can occur. The manufacturer will not be liable for any damage caused. The validity of the warranty shall be void in the event of failure to comply with the indications mentioned in this manual.
- Before starting any operations, READ THESE INSTRUCTIONS CAREFULLY AND CARRY OUT THE SAFETY CHECKS TO AVOID ALL RISKS.
- All the staff involved must have thorough knowledge of the operations and any danger that may arise when the installation operations are carried out.
- The unit must be installed to facilitate routine (filter cleaning) and special maintenance operations.
- ⚠ ATTENTION: the fan coil is connected to the power supply and the hydraulic circuit. Operations performed by persons who do not have the required technical skills can lead to personal injury to the operator or damage the unit and the surrounding environment.
- ⚠ ATTENTION: The unit must be installed in compliance with national regulations.
- ⚠ ATTENTION: make sure that the power supply has been disconnected before carrying out any interventions.
- ⚠ ATTENTION: Install a device, master switch or electric plug that allows the unit's power supply to be completely disconnected.
- ⚠ ATTENTION: In order to protect the unit against short circuits, mount a magnet circuit breaker omnipolar switch on the power supply line. In order to avoid any danger due to the accidental rearming of the thermal cut-out device, this appliance must not be powered with an external switching device, such as a timer, or be connected to a circuit that is regularly powered or disconnected from the service.
- ⚠ ATTENTION! DANGER! Any use other than what is indicated by Aermec is prohibited.
- ⚠ Supply the fan coil only with the voltage value indicated in the data plate
- The fan coil may be permanently damaged if a different electric power supply is used.
- ⚠ OPERATION ANOMALIES
- In the event of operation anomalies, power off the unit and then power it back on and re-start the unit.
- Do not try to repair the unit on your own, as it may be very dangerous!
- If the problem persists, call the Area After-sales Service immediately.
- ⚠ Do not pull the electric cable
- It is very dangerous to pull, step on or crush the power supply cable or secure it using nails or staples.
- The damaged cable can cause short circuits and injury to persons.
- ⚠ Electric power supply cable
- If the power supply cable is damaged, it must be replaced with a new cable of adequate section. Have the repair made by "Qualified personnel", in order to prevent any risk.
- Do not repair damaged cables.
- For the electric power supply, use integral cables with suitable section for the load.
- ⚠ Do not introduce objects into air vents
- Do not introduce any objects into the air outlet slots.
- This could cause injury to persons or damage the fan.

INFORMATION

- The FCZ AERMEC units are constructed according to the recognised technical standards and safety regulations. They have been designed and must be used for air conditioning and heating purposes, in accordance with their technical features.
- Any contractual or extra-contractual liability of the Company is excluded for injury/damage to persons, animals or objects owing to installation, regulation and maintenance errors or improper use. All uses not expressly indicated in this manual are prohibited.
- Use suitable Personal Protective Equipment (PPE) during installation, maintenance, and cleaning stages.
- Do not use the unit as storage for equipment or spare parts. Any use other than that indicated in this manual is prohibited as it can generate dangerous situations.
- ATTENTION: the electric and hydraulic connections, together with installation of the fan coils and their accessories must only be performed by technicians who have the technical-professional requisites for installation, transformation, extension and maintenance of the systems and who can verify these functions in terms of safety and functionality (in accordance with the national laws in force in the country of installation). In this manual they will be also identified as: experienced and qualified technician with specific technical knowledge.
- Aermec will not be liable for damage due to failure to follow these instructions.
- Make sure the unit has not been damaged during transport before installation.
- using a damaged machine could be dangerous.
- the support surface must withstand the weight of the unit.
- **Note:**
- **Always indicate the serial number for future reference and for any communication with AERMEC S.p.A.**
- **STORING THE DOCUMENTATION**
- Hand over the instructions with all the related documentation to the system user, who must store the instructions so that they are always available in case of necessity.

TRANSPORT

- Refer to the weight indications on the data plate to transport the unit safely.
- Take the following measures during transport:
- The unit and the accessories must not undergo violent impacts in order not to affect the integrity of the structure and of the internal components;
- during transportation, the unit and any accessories must be protected in order to prevent impacts, for this reason they must be properly secured on the transportation floor with ropes or any other means that prevent their movement;
- during transport and storage, the unit and the accessories must always be protected against bad weather.

VERIFICATIONS UPON RECEPTION

- Visually check the unit upon reception to make sure that:
- the order corresponds with what is indicated in the transport documents;
- packaging is intact;
- the unit is intact;
- all the components have been provided.
- Indicate any damage or missing components on the transport document.

HANDLING

- ATTENTION! : Wear proper personal protective equipment (PPE) during handling operations.
- Fully remove the unit and the components from the packaging before installation and use.

INSTALLATION

- Read this sheet carefully; the execution of all works must be performed by experienced and qualified staff with specific technical skills, according to Standards in force on this subject in the installation country.
- Comply with the installation instructions provided in the following paragraphs. The paragraphs follow a chronological order to facilitate installation.
- Retrieve the documents (manuals and declarations of conformity) and the components required to complete installation from inside the unit.
- Aermec accessories are supplied complete with a manual for installation and use.
- Aermec accessories are designed to be integrated into Aermec units both for functional aspects and safety. Our units are designed to be integrated with Aermec additional heating accessories and if properly fitted they have no effect on the surrounding environment, the technical spaces are unchanged with respect to the basic unit.
- **Before installation, check the technical spaces required:**
 - for installation;
 - for connection to the hydraulic circuits and to any valve;
 - for connection to the power supply;
 - for connection of an external panel flush to the unit (when provided for);
 - for the setup of the flow and intake ducts (for models requiring it);
 - for correct and sufficient both intake and supply air flow,
 - for draining condensation;
 - for cleaning the filters;
- for cleaning internal components and for maintenance.

from inside the device, due to the heat expansion of the elements (plastic and metal). However, this does not mean there is a malfunction and it does not damage the unit as long as the inlet water temperature remains within the operating limits.

WARNINGS ON USE

- **⚠ ATTENTION:** The appliance can be used by children over the age of 8 and by people with reduced physical, sensory or mental capabilities or without experience or necessary knowledge, as long as they are supervised or have been instructed on the safe use. Of the appliance and on the understanding of the dangers inherent to it. Children must not play with the appliance. The cleaning and maintenance to be carried out by the user must not be carried out by children without supervision.
- **⚠ Do not use the FAN COIL improperly**
- The fan coil must not be used to breed, deliver and raise animals.
- **⚠ AIR OUT THE ROOM**
- Periodically air out the room in which the fan coil has been installed; this is particularly important if the room is occupied by many people, or if there are gas appliances or sources of odours.
- **⚠ ADJUST THE TEMPERATURE CORRECTLY**
- Ambient temperature should be regulated to ensure maximum comfort, particularly for the elderly, infants and invalids. Prevent temperature fluctuations between indoors and outdoors greater than 7°C during summer. Excessively low temperatures during summer involve higher electrical consumption.
- **⚠ DIRECT THE AIR FLOW CORRECTLY**
- Air delivered by the fan coil must not be directed onto people. Even if the air temperature is higher than the ambient temperature, it can cause a cold sensation and, therefore, discomfort.
- **⚠ DURING OPERATION**
- During operation, always leave the filter mounted on the fan coil; otherwise the dust in the air will dirty the coil surface.
- **⚠ IT IS NORMAL**
- When in cooling mode, water vapour can come out of the fan coil air flow.
- When in heating mode, a slight hissing sound can be heard near the fan coil. The fan coil may sometimes emit unpleasant odours due to the accumulation of substances present in the environment (clean the filter more often, especially if the room is not aired out regularly).
- During operation, noise and/or a creaking sound may be heard

PRODUCT DESCRIPTION

- FCZ A fan coil with a three-speed ventilation switch, tall cabinet for vertical installation, varnished with corrosion-resistant polyester powder, RAL 9003. The delivery grille is in RAL 7047 and the feet for floor-standing solutions (ZXZ accessory) are made of plastic and in RAL 7044.
- The FCZ A fan coil concentrates high technological and functional characteristics that make it the ideal climate control unit for all types of rooms.
- The supply of climate controlled air is immediate and distributed throughout the room; FCZ A generates heat if included in a heating system with boiler or heat pump but may also be used in summer as an air conditioner if the heating system has a water chiller.
- The response to the controls is immediate.
- The removable drip tray and fan volute ensure thorough cleaning of the unit (by specifically trained personnel), essential for installations in venues subject to crowding or in those with special hygiene requirements.
- The control panel is on the head, it allows changing the fan speed manually and switching it on-off.
- The **FCZ A** fan coil has been designed to meet all system requirements thanks to its extensive range of accessories.
- **Easy installation with reversible hydraulic connections during installation.**
- Full respect for accident prevention regulations.
- Routine maintenance is reduced to periodic air filter cleaning with a vacuum cleaner.

USE

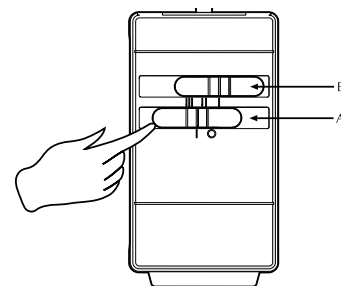
Starting

- Switch on or turn off the fan coil with the switch (A):

| On

○ Switched off

Caution: before starting the fan coil make sure that the fins are open, some models only come with the open fins.



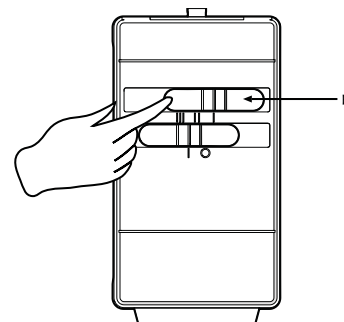
Selecting the ventilation speed

- Select the ventilation speed with the selector (B):

| Minimum speed

|| Average speed

||| Maximum speed



IMPORTANT MAINTENANCE INFORMATION

WARNING: The fancoil is connected to the power supply and a 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.

POWER THE FANCOIL WITH SINGLE-PHASE 230 V ONLY

- Use of other power supplies could cause permanent damage to the fancoil.

NEVER USE THE FANCOIL FOR APPLICATIONS FOR WHICH IT WAS NOT DESIGNED

- Do not use the fancoil in husbandry applications (e.g. incubation).

AIR THE ROOM

- Periodically air the room in which the fancoil 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.

CORRECTLY ADJUST THE TEMPERATURE

- Room temperature should be regulated to ensure maximum comfort to persons present, particularly in the case of the elderly, infants and invalids. Prevent temperature fluctuations between indoors and outdoors greater than 7 °C during summer.
- Note that very low temperatures during summer will lead to greater electricity consumption.

ORIENT AIR FLOW CORRECTLY

- Air delivered by the fancoil should not be oriented directly at people; even if air temperature is greater than room temperature, it can cause a cold sensation and consequently discomfort.

DO NOT USE HOT WATER

- When cleaning the indoor unit, use rags or soft sponges soaked in warm water (no higher than 40°C).
- Do not use chemical products or solvents to clean any part of the fancoil.
- Do not splash water on interior or exterior surfaces of the fancoil; danger of short circuit.

PERIODICALLY CLEAN THE FILTER

- Frequent cleaning of the filter will ensure more efficient unit operation.

- Check whether the filter requires cleaning; if it is particularly dirty, clean it more often.
- Clean the filter frequently. Use a vacuum cleaner to remove built up dust. Avoid water or detergents if possible since they greatly accelerate loss of the filter's electrostatic charge.
- After cleaning and drying the filter, fit it on the fancoil by following the removal procedure in reverse order.

SPECIAL CLEANING

- The removable drip tray and fan volute ensure thorough cleaning of the unit (by specifically trained personnel), essential for installations in venues subject to crowding or in those with special hygiene requirements (**Chapter " Drawings" Fig.1).**

DURING UNIT OPERATION

- Always leave the filter on the fancoil during operation (otherwise dust in the air could soil the surface of the coil).

IT IS NORMAL

- During cooling, water vapour may be present in the air delivery of the fan coil.
- In the heating function it might be possible to hear a slight hiss around the fan coil. Sometimes the fan coil might give off unpleasant smells due to the accumulation of dirt in the air of the environment (especially if the room is not ventilated regularly, clean the filter more often).
- During the operation, there could be noises and creaks inside the device, due to the various heat expansions of the elements (plastic and metallic), but this does not indicate any malfunctioning and does not cause damage to the unit unless the maximum input water temperature is exceeded.

WARNING

- Avoid that the device is used by children or incompetent persons without appropriate supervision; also note that the unit should not be used by children as a game.

ATTENTION

In the case of installation in very dusty environments, clean the dust accumulated in the metal clips inserted into the filter guides with a vacuum cleaner; perform a visual inspection in order to verify the contact between clips and filter.

Every anomaly must be communicated to the After-sales Service (Chapter " Drawings Fig.2).

ATTENTION

Take out the ambient probe, taking care not to wrench out the cable connected to the control board. Replace the probe and connect the cable in the same position (Chapter " Drawings Fig.3).

PACKING

- The units are shipped in cardboard box standard packing and polystyrene shells.

UNIT INSTALLATION

WARNING: check that the power supply is disconnected before performing operations on the unit.

WARNING: the electrical connections, the 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 plants, and who is able to check the plants for the purposes of safety and correct operation.

The fancoil should be installed in such a way as to facilitate routine (filter cleaning) and special maintenance operations, as well as access to the air breather valve on the side of the unit frame (connector side).

The assembly site must be chosen in such a way that the maximum and minimum ambient temperature limits are respected 0÷45°C (<85% U.R.).

To install the unit, proceed as follows :

- Remove the air filter (Chapter "Drawings" Fig.4).
- Undo the screws and remove the housing (Chapter "Drawings" Fig.5).
- In case of wall-mounted FCZ-A unit, keep a minimum clearance of 80 mm from the floor. In the case of floor-mounted units on feet, refer

to the instructions supplied with the accessory.

- Use expansion plugs (not supplied) to secure the unit to the wall (Chapter Drawings Fig.6).
- Make hydraulic connections (Chapter Drawings Fig.7). Refer to the dimensional data for the position and diameter of the hydraulic connections. Insulate water lines adequately. The condensate drain system should be of an adequate size and be positioned to favour runoff (min. 1% slope). If condensate is drained into the sewage system, install a siphon to prevent return of unpleasant odour into the room.
- Make the electrical wirings as shown in the wiring diagrams (Chapter Drawings Fig.8).
- Refit the air filter.

ELECTRICAL CONNECTIONS

WARNING: check that the power supply is disconnected before performing operations on the unit.

WARNING: the electrical connections, the 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 plants, and who is able to check the plants for the purposes of safety and correct operation.

CONNECTION CABLES SPECIFICATIONS

Use H05V-K or N07V-K type cables with 300/500 V 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 stretch or twist. They must be protected from weather conditions.

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

When making the connections, follow the wiring diagrams supplied with the equipment and shown in this document.

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

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

Each control panel can control a single fan coil.

The control panels only comprise electric circuits connected to a power supply of 230V;

ROTATING THE COIL

ROTATION BATTERY

If for reasons of water connections, it was to turn the battery, proceed as follows:

Remove:

1. the cloak
2. the small control panel and related connections to the terminal block
3. the battery cover
4. battery
5. the partially cut or the plastic plugs of the right side dedicated to water connections, the terminal block and jumper grounding
6. the partially cut or the plastic plugs of the left side dedicated to the grommet
7. the condensate drain from the bath

Turn the battery following the direction of rotation indicated in the figure depending on the model in possession

Reassemble in sequence:

- battery
- the battery cover
- the plastic plugs supplied with, the holes left to water connection
- the condensate drain pan and slide it on the opposite side
- the plastic plugs of the condensate drain pan
- moving the grommet on the opposite side
- the terminal, the jumper grounding
- The control panel on the left side of the cape, and restore the electrical connections.

LIMITI DI FUNZIONAMENTO - OPERATING LIMITS - LIMITES DE FONCTIONNEMENT - BETRIEBSGRENZEN - LÍMITES DE FUNCIONAMIENTO

		100	200	300	400	500	600	700	800	900	1000	
IT	Massima temperatura ingresso acqua (Tw)	°C	80									
EN	Maximum water inlet temperature (Tw)											
FR	Température maximale entrée eau (Tw)											
DE	Maximale Wassereingangstemperatur (Tw)											
ES	Máxima temperatura de entrada del agua (Tw)											
IT	Massima temperatura ingresso acqua consigliata (Tw)	°C	65									
EN	Maximum water inlet temperature recommended (Tw)											
FR	Température maximale entrée eau conseillée (Tw)											
DE	Empfohlene maximale Wassereingangstemperatur (Tw)											
ES	Máxima temperatura de entrada del agua aconsejada (Tw)											
IT	Massima pressione d'esercizio	kPa	800 kPa (8 bar)									
EN	Maximum operating pressure											
FR	Pression maximale d'exercice											
DE	Maximaler Betriebsdruck											
ES	Máxima presión de trabajo											
IT	Limiti di temperatura ambiente (Ta)*	°C	5° < Ta < 45°									
EN	Environment temperature limits (Ta)*											
FR	Limites de température ambiante (Ta)*											
DE	Grenzen der Raumtemperatur (Ta)*											
ES	Límites de temperatura ambiente (Ta)*											
IT	Limiti di umidità relativa nell'ambiente (U.R.)		U.R. < 85%									
EN	Relative humidity limits in the environment (U.R.)											
FR	Limites d'humidité relative dans l'environnement (U.R.)											
DE	Grenzen der relativen Luftfeuchtigkeit im Raum (U.R.)											
ES	Límites de humedad relativa en el ambiente (U.R.)											
IT	Alimentazione elettrica		230V (±10%) ~ 50Hz									
EN	Electric power supply											
FR	Alimentation électrique											
DE	Stromversorgung											
ES	Alimentación eléctrica											
FCZ			100	200	300	400	500	600	700	800	900	1000
IT	Minima portata d'acqua (Qw)	l/h	100	100	100	150	150	300	300	300	-	-
EN	Minimum water flow rate (Qw)											
FR	Débit minimal d'eau (Qw)											
DE	Mindestwasserdurchfluss (Qw)											
ES	Caudal mínimo de agua (Qw)											
IT	Massima portata d'acqua (Qw)	l/h	750	750	750	1100	1100	2200	2200	2200	-	-
EN	Maximum water flow rate (Qw)											
FR	Débit maximal d'eau (Qw)											
DE	Maximaler Wasserdurchfluss (Qw)											
ES	Caudal máximo de agua (Qw)											
FCZ			150	250	350	450	550	650	750	850	950	
IT	Minima portata d'acqua (Qw)	l/h	150	150	150	150	150	300	300	300	-	
EN	Minimum water flow rate (Qw)											
FR	Débit minimal d'eau (Qw)											
DE	Mindestwasserdurchfluss (Qw)											
ES	Caudal mínimo de agua (Qw)											
IT	Massima portata d'acqua (Qw)	l/h	1100	1100	1100	1100	1100	2200	2200	2200	-	
EN	Maximum water flow rate (Qw)											
FR	Débit maximal d'eau (Qw)											
DE	Maximaler Wasserdurchfluss (Qw)											
ES	Caudal máximo de agua (Qw)											
FCZ			101	201	301	401	501	601	701	801	901	1001
IT	Minima portata d'acqua (Qw)	l/h	50	50	50	50	50	100	100	100	-	-
EN	Minimum water flow rate (Qw)											
FR	Débit minimal d'eau (Qw)											
DE	Mindestwasserdurchfluss (Qw)											
ES	Caudal mínimo de agua (Qw)											
IT	Massima portata d'acqua (Qw)	l/h	400	400	400	400	400	900	900	900	-	-
EN	Maximum water flow rate (Qw)											
FR	Débit maximal d'eau (Qw)											
DE	Maximaler Wasserdurchfluss (Qw)											
ES	Caudal máximo de agua (Qw)											
FCZ			102	202	302	402	502	602	702	802		
IT	Minima portata d'acqua (Qw)	l/h	50	50	50	50	50	150	150	150		
EN	Minimum water flow rate (Qw)											
FR	Débit minimal d'eau (Qw)											
DE	Mindestwasserdurchfluss (Qw)											
ES	Caudal mínimo de agua (Qw)											
IT	Massima portata d'acqua (Qw)	l/h	700	700	700	700	700	1200	1200	1200		
EN	Maximum water flow rate (Qw)											
FR	Débit maximal d'eau (Qw)											
DE	Maximaler Wasserdurchfluss (Qw)											
ES	Caudal máximo de agua (Qw)											

*Per temperature inferiori contattare sede.

*For lower temperatures please contact headquarters.

*Pour des températures plus basses s'il vous plaît contacter le siège.

*Bei niedrigeren Temperaturen bitte Zentrale kontaktieren.

*Para temperaturas más bajas por favor, póngase en contacto con la sede.

MINIMA TEMPERATURA MEDIA DELL'ACQUA - MINIMUM AVERAGE WATER TEMPERATURE - TEMPÉRATURE MINIMALE MOYENNE DE L'EAU - MINIMALE DURCHSCHNITTSTEMPERATUR DES WASSERS - TEMPERATURA MÍNIMA MEDIA DEL AGUA

Ta b.s.	°C		21	23	25	27	29	31
Ta b.u.	°C	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
								Tw °C

Ta b.s.

Temperatura a bulbo secco dell'aria ambiente - Dry-bulb temperature of ambient air - Température de bulbe sec de l'air ambiant - Trockenkugel-Temperatur der Raumluft - Temperatura con bulbo seco del aire ambiente

Ta b.u.

Temperatura a bulbo umido dell'aria ambiente - Wet-bulb temperature of ambient air - Température de bulbe humide de l'air ambiant - Feuchtkugel-Temperatur der Raumluft - Temperatura con bulbo húmedo del aire ambiente

Tw °C

Minima Temperatura Media dell'Acqua - Minimum average water temperature - Température minimale moyenne de l'eau - Temperatura mínima media del agua

IT - TEMPERATURA DELL'ACQUA

Al fine di evitare stratificazioni di aria nell'ambiente, ed avere quindi una migliore miscelazione, si consiglia di non alimentare il ventilconvettore con acqua più calda di 65°C. L'uso di acqua con temperature elevate potrebbe provocare scricchiolii dovuti alle diverse dilatazioni termiche degli elementi (plastici e metallici), ciò comunque non provoca danni all'unità se non si supera la massima temperatura di esercizio.

MINIMA TEMPERATURA MEDIA DELL'ACQUA

Se il ventilconvettore funziona in modo continuativo in raffreddamento all'interno di un ambiente con elevata umidità relativa, si potrebbe avere formazione di condensa sulla mandata dell'aria. Tale condensa, potrebbe depositarsi sul pavimento e sugli eventuali oggetti sottostanti. Per evitare fenomeni di condensazione sulla struttura esterna dell'apparecchio con ventilatore in funzione, la temperatura media dell'acqua non deve essere inferiore ai limiti riportati nella tabella sottostante, che dipendono dalle condizioni termo-igrometriche dell'aria ambiente. I suddetti limiti si riferiscono al funzionamento con ventilatore in moto alla minima velocità.

In caso di prolungata situazione con ventilatore spento e passaggio di acqua fredda in batteria, è possibile la formazione di condensa all'esterno dell'apparecchio, pertanto si consiglia l'inserimento dell'accessorio valvola a tre vie.

EN - WATER TEMPERATURE

In order to prevent air stratification in the environment and thus, have better mixing, the fan coil should not be supplied with water that is hotter than 65 °C. Using water at a very high temperature can cause creaking due to the heat expansion of the elements (plastic and metal). However, this does not cause damage to the unit unless the maximum operating temperature is exceeded.

MINIMUM AVERAGE WATER TEMPERATURE

If the fan coil runs continuously in cooling mode in an environment with high relative humidity, condensate may form on the air flow. This condensate could drip onto the floor and onto any underlying objects. To prevent condensation phenomena on the external structure of the appliance with the fan running, the average water temperature must not drop below the limits indicated in the table. These limits depend on the temperature and humidity conditions of the room air. These limits refer to operation with the fan running at minimum speed.

Condensation may form in the event the fan is off for a prolonged period and cold water flows in the coil; therefore, we recommend installing the 3-way valve (accessory).

FR - TEMPÉRATURE DE L'EAU

Afin d'éviter les stratifications de l'air dans l'espace et par conséquent, pour obtenir une meilleure circulation de l'air, il est conseillé de ne pas alimenter le ventil-convecteur avec de l'eau à une température supérieure à 65 °C. L'utilisation d'eau à haute température pourrait provoquer des craquements dus aux diverses dilatations thermiques des éléments (plastiques et métalliques) ; ceci n'endommage pas pour autant l'unité si la température maximale d'exercice n'est pas dépassée.

TEMPÉRATURE MINIMUM MOYENNE DE L'EAU

Si le convecteur à ventilation fonctionne de manière continue en mode refroidissement dans un milieu caractérisé par une humidité relative élevée, de la condensation peut se former sur le refoulement de l'air. Cette conden-

sation peut se déposer sur le sol et sur les objets éventuellement situés en dessous. Pour éviter la condensation sur l'extérieur du convecteur à ventilation lorsque l'appareil est en marche, la température moyenne de l'eau ne doit pas être inférieure aux limites indiquées dans le tableau ci-dessous, qui dépendent des conditions thermiques et hygrométriques de l'air ambiant. Ces limites font référence au fonctionnement du convecteur à ventilation à la vitesse minimale.

Si le ventilateur est éteint pendant une longue période et que de l'eau froide passe dans la batterie, de la condensation peut se former à l'extérieur de l'appareil, il est donc conseillé d'installer l'accessoire vanne à trois voies.

DE - WASSERTEMPERATUR

Um Schichtenbildung in der Raumluft zu vermeiden und somit eine bessere Vermischung zu erreichen, sollte der Gebläsekonvektor nicht mit Wasser gespeist werden, das heißer als 65°C ist. Die Verwendung von Wasser mit höheren Temperaturen würde zu Geräuschen durch die unterschiedliche thermische Ausdehnung der Materialien (Kunststoffe und Metalle) führen, was jedoch nicht zu Schäden führt, wenn die maximale Betriebstemperatur nicht überschritten wird.

MINIMALE DURCHSCHNITTSTEMPERATUR DES WASSERS

Wird der Gebläsekonvektor ständig im Kühlbetrieb in einem Raum mit hoher relativer Luftfeuchtigkeit betrieben, kann es zu Kondenswasserbildung am Luftaustritt kommen. Dieses Kondenswasser könnte sich auf dem Fußboden oder auf unter dem Gerät befindlichen Gegenständen ansammeln. Um Kondensation auf der Außenseite des Geräts bei laufendem Gebläse zu vermeiden, darf die durchschnittliche Wassertemperatur nicht unter den in der Tabelle unten angegebenen Grenzwerten liegen, die von den thermo-hygrometrischen Bedingungen der Raumluft abhängig sind. Die genannten Grenzwerte beziehen sich auf den Betrieb mit minimaler Gebläsedrehzahl.

Im Fall eines längeren Gebläsestillstandes und Durchflusses von Kaltwasser durch das Register kann es zur Bildung von Kondenswasser an der Außenseite des Geräts kommen; daher wird empfohlen, das Zubehör 3-Wege-Ventil einzubauen.

ES - TEMPERATURA DEL AGUA

Para evitar estratificaciones de aire en el ambiente, y consiguientemente, tener una mejor mezcla, se recomienda no alimentar el ventilconvector con agua que supere los 65 °C. El uso de agua con temperaturas elevadas podría provocar chasquidos debidos a las dilataciones térmicas diferentes de los elementos (plásticos y metálicos), pero no provoca daños a la unidad si no se supera la máxima temperatura de trabajo.

MÍNIMA TEMPERATURA MEDIA DEL AGUA

Si el ventilconvector funciona constantemente en enfriamiento dentro de un ambiente con elevada humedad relativa, se podría crear condensación en la impulsión del aire. Dicha condensación se podría depositar en el suelo y sobre los objetos que se encuentren en una posición baja. Con el objetivo de evitar fenómenos de condensación en la estructura externa del aparato con el ventilador en funcionamiento, la temperatura promedio del agua no debe ser inferior a los límites que se presentan en la tabla que se indica a continuación; éstos dependen de las condiciones termo-higrométricas del aire ambiente. Dichos límites se refieren al funcionamiento con el ventilador en movimiento a la mínima velocidad.

En el caso de prolongada situación con ventilador apagado y pasaje de agua fría en batería, es posible que se verifique la formación de condensación en el exterior del aparato; por ello es aconsejable introducir el accesorio válvula con tres vías.

IT - AVVERTENZE PER LA QUALITÀ DELL'ACQUA CIRCOLANTE NELLE BATTERIE

Si consiglia di fare eseguire un'analisi dell'acqua circolante nella batteria focalizzata sulla ricerca dell'eventuale presenza di batteri (rilevamento dei ferrobatteri e dei microrganismi che possono produrre H₂S o ridurre chimicamente i solfati) e sulla composizione chimica dell'acqua stessa in modo da prevenire fenomeni di corrosione e incrostazione all'interno dei tubi. Il circuito dell'acqua deve essere alimentato e reintegrato con acqua trattata che non superi i livelli di soglia indicati (**vedi tabella**).

EN - WARNINGS FOR THE QUALITY OF THE WATER CIRCULATING IN THE COILS

It is recommended to perform an analysis of the water circulating in the coil focusing on the research of the possible presence of bacteria (detection of iron bacteria and micro-organisms that can produce H₂S or chemically reduce sulphates) and on the chemical composition of the water, to prevent corrosion and fouling inside the tubes.

The water circuit must be supplied and replenished with treated water that does not exceed the threshold levels indicated (**vedi tabella**).

FR - AVERTISSEMENTS POUR LA QUALITÉ DE L'EAU QUI CIRCULE DANS LES BATTERIES

Il est recommandé de faire réaliser une analyse de l'eau qui circule dans la batterie destinée à détecter la présence éventuelle de bactéries (détection des ferrobactéries et des microorganismes qui peuvent produire H₂S ou réduire chimiquement les sulfates) et à déterminer la composition chimique de l'eau de façon à prévenir des phénomènes de corrosion et d'incrustation

	IT	EN	FR	DE	ES	
mmol/l	Durezza totale	Total hardness	Dureté totale	Gesamthärte	Dureza total	l < mmol/l < 1,5
CL ⁻	Cloruri	Chlorides	Chlorures	Chloride	Cloruros	< 10 mg/litro
SO ₄ ²⁻	Solfati	Sulphates	Sulfates	Sulfate	Sulfatos	< 30 mg/l
NO ₃ ⁻	Nitrati	Nitrates	Nitrates	Nitrate	Nitratos	= 0 mg/l
	Ferro Dissolto	Dissolved iron	Fer dissous	Gelöstes Eisen	Hierro disuelto	< 0,5 mg/l
	Ossigeno Dissolto	Dissolved oxygen	Oxygène dissous	Gelöster Sauerstoff	Oxígeno disuelto	4 < [O ₂] < 9 mg/l
CO ₂	Anidride Carbonica	Carbon dioxide	Anhydre carbonique	Kohlendioxid	Anhidrido carbónico	< 30 mg/l
	Resistività	Resistivity	Resistività	Widerstandskoeffizient	Resistividad	20 Ohm·m < Resistivity < 50 Ohm·m
	pH	pH	pH	pH	pH	6,9 < pH < 8

IT - AMBIENTE DI FUNZIONAMENTO

Le unità sono state progettate per installazione in ambienti chiusi in condizioni di atmosfera 'urbana' non marina ed avente caratteristiche di non corrosività e di non polverosità. **Per nessun motivo devono essere superate le concentrazioni di fattori inquinanti nell'aria in cui l'unità deve operare (vedi tabella).**

L'unità non deve venire installata in posizioni caratterizzate dalla presenza di gas infiammabili o di sostanze a carattere acido o alcalino. In caso contrario le batterie ed i componenti interni degli apparecchi potrebbero subire gravi ed irreparabili danni di corrosione.

UK - OPERATING ENVIRONMENT

The units are designed for installation in closed environments in conditions of 'urban', non-marine atmosphere with non-corrosive and non-dusty characteristics.

Under no circumstances the concentrations of pollutants in the air, in which the unit must operate, shall be exceeded (**vedi tabella**).

The unit should not be installed in locations characterized by the presence of flammable gases or acidic or alkaline substances.

Otherwise the coils and the internal components of the equipment could suffer serious and irreparable damage from corrosion.

FR - ENVIRONNEMENT DE FONCTIONNEMENT

Les unités ont été conçues pour être installées dans des locaux fermés possédant les conditions d'une atmosphère « urbaine » et non pas littorale, sans être corrosifs ni poussiéreux.

Les concentrations suivantes des facteurs polluants ne doivent jamais être dépassées dans l'air où l'unité doit fonctionner (**vedi tabella**).

L'unité ne doit pas être installée dans des locaux caractérisés par la présence de gaz inflammables ou de substances acides ou alcalines.

à l'intérieur des tubes.

Le circuit de l'eau doit être alimenté et rempli avec de l'eau traitée qui ne dépasse pas les seuils indiqués ci-dessous (**vedi tabella**).

DE - HINWEISE FÜR DIE QUALITÄT DES ZIRKULIERENDEN WASSERS IN DEN WÄRMETAUSCHERN

Es wird empfohlen, eine Analyse des Wassers, das in dem Wärmetauscher zirkuliert, durchzuführen und sich dabei auf die Suche nach möglichen Bakterien (Erkennen von Eisenbakterien und Mikroorganismen, die H₂S produzieren oder Sulfat chemisch reduzieren können) sowie auf die chemische Zusammensetzung des Wassers zu fokussieren, um Korrosion und Verkrustung in den Rohren zu vermeiden.

Der Wasserkreislauf muss versorgt und mit behandeltem Wasser wieder aufgefüllt werden, das die folgenden Schwellenwerte nicht überschreitet (**vedi tabella**).

ES - ADVERTENCIAS SOBRE LA CALIDAD DEL AGUA QUE CIRCULA EN LAS BATERÍAS

Se aconseja efectuar un análisis del agua que circula en la batería apuntando a la presencia de bacterias (detección de bacterias del hierro y de microorganismos que pueden producir H₂S o reducir químicamente los sulfatos) y a la composición química del agua para prevenir fenómenos de corrosión e incrustaciones dentro de los tubos.

El circuito del agua debe ser alimentado y renovado con agua tratada que no supere los niveles límite que se indican a continuación (**vedi tabella**).

Dans le cas contraire, les batteries et les composants internes des appareils pourraient subir des dommages graves et irréparables de corrosion.

DE - EINSATZORT

Die Geräte wurden für die Installation in geschlossenen Räumen unter "städtischen", nicht-marinen Bedingungen und mit nicht-ätzenden und nicht-staubenden Eigenschaften entworfen.

Die folgenden Konzentrationen von Schadstoffen in der Luft, in der das Gerät arbeiten muss, dürfen unter keinen Umständen überschritten werden (**vedi tabella**).

Das Gerät darf nicht an Orten installiert werden, wo brennbare Gase oder säurehaltige oder alkalische Substanzen vorhanden sind.

Andernfalls könnten die Wärmetauscher und die internen Bestandteile der Geräte schwere und irreparable Korrosionsschäden erleiden.

ES - AMBIENTE DE FUNCIONAMIENTO

Las unidades están diseñadas para ser instaladas en ambientes cerrados, con atmósfera 'urbana' no marina, donde no haya corrosión ni polvo.

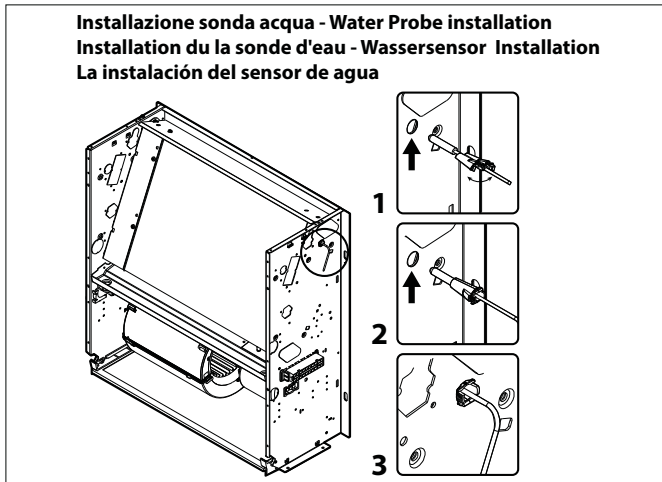
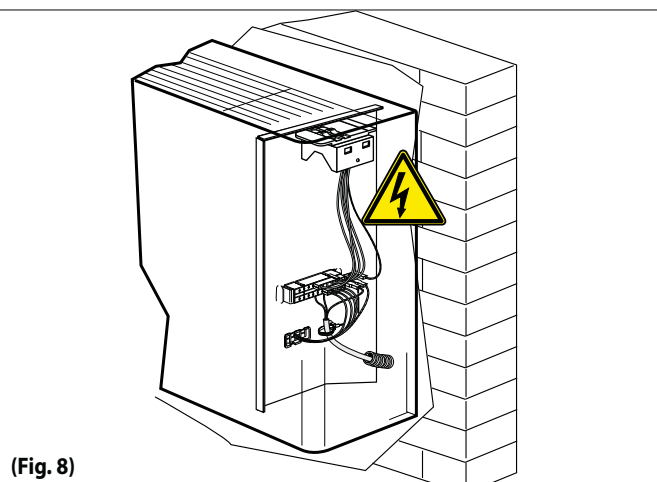
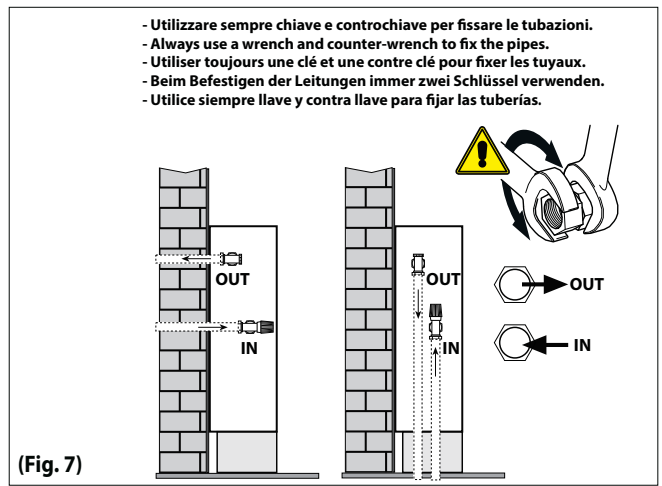
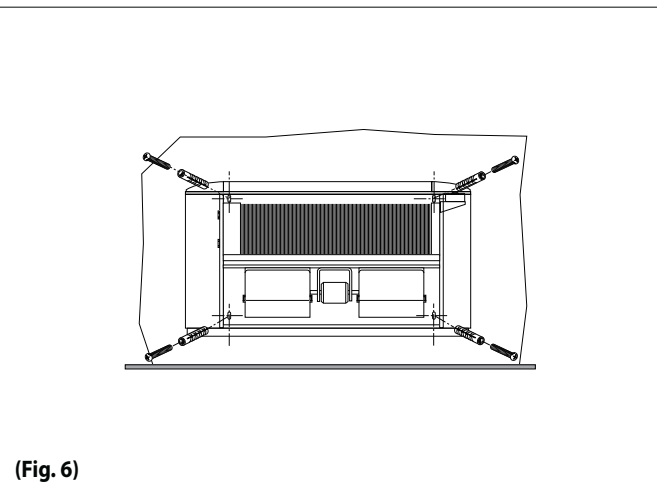
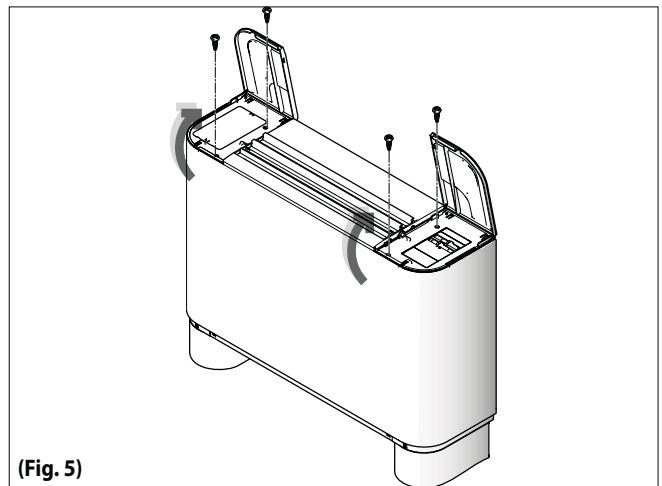
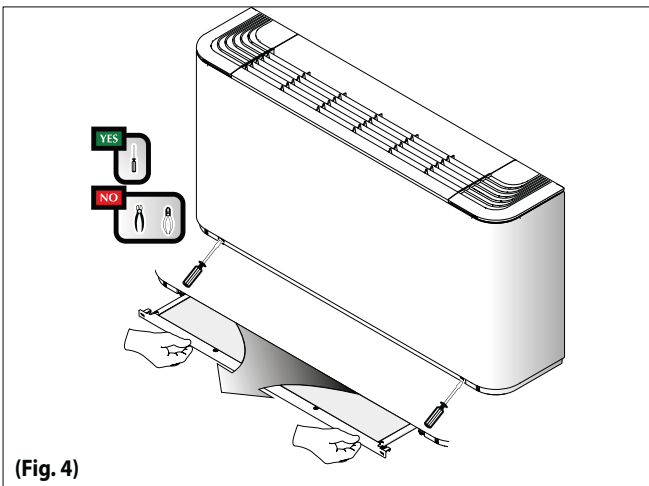
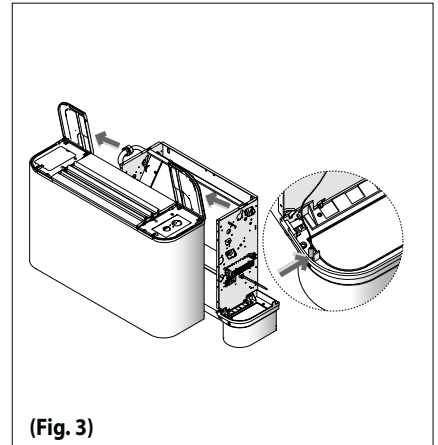
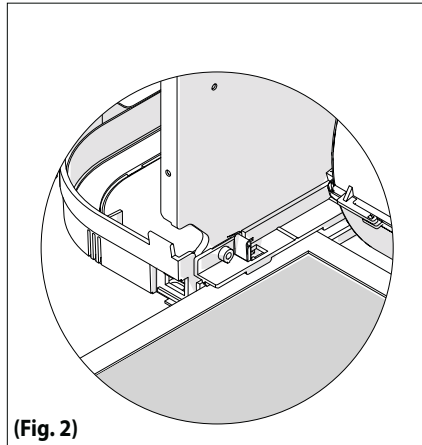
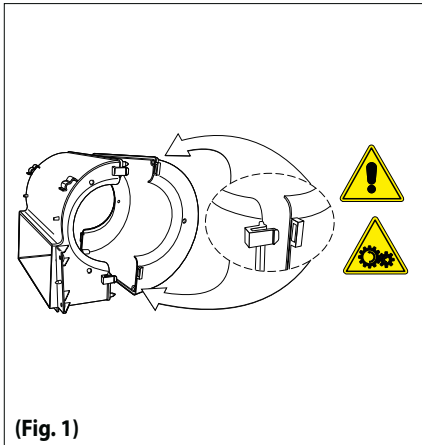
Nunca se deben superar las siguientes concentraciones de factores contaminantes en el aire donde debe funcionar la unidad (**vedi tabella**).

La unidad no se debe instalar en lugares donde hay gases inflamables o sustancias de tipo ácido o alcalino.

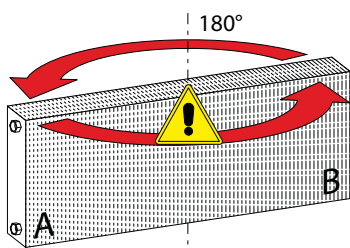
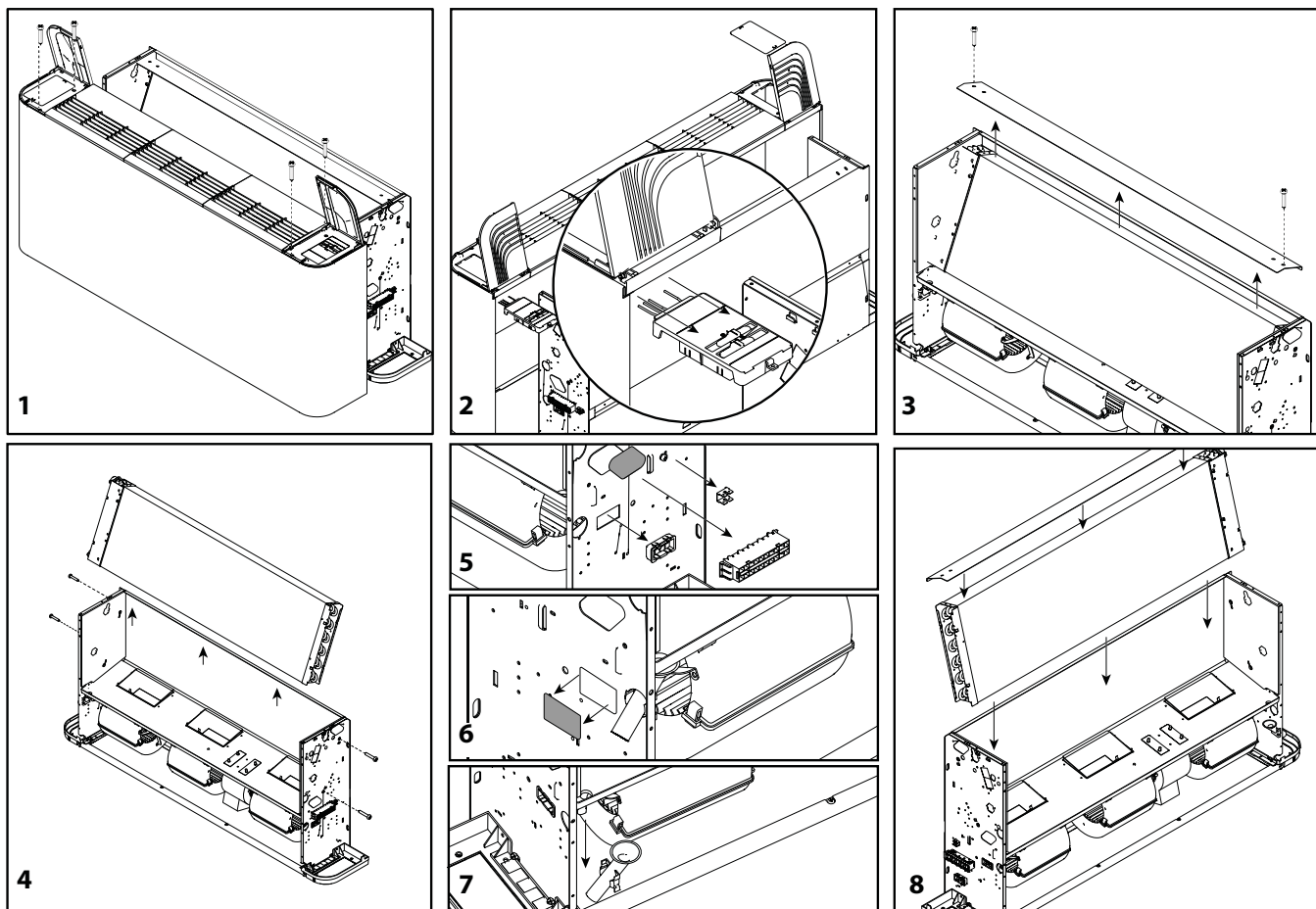
De lo contrario, las baterías y los componentes internos de los aparatos podrían sufrir daños de corrosión graves e irreparables.

SO ₂	<0,02 ppm
H ₂ S	<0,02 ppm
NO,NO ₂	<1 ppm
NH ₃	<6 ppm
N ₂ O	<0,25 ppm

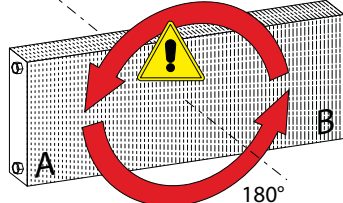
DISEGNI - DRAWINGS - DESSINS - ZEICHNUNGEN - DIBUJOS



ROTAZIONE BATTERIA - ROTATING THE COIL - ROTATION DE LA BATTERIE - DREHEN DER BATTERIE - ROTACIÓN DE LA BATERÍA

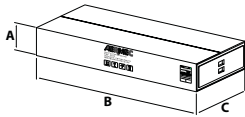


FCZ100-200-300-400-500
600-700-800-900-1000

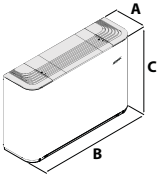


FCZ 150-250-350-450-550
650-750-850-950

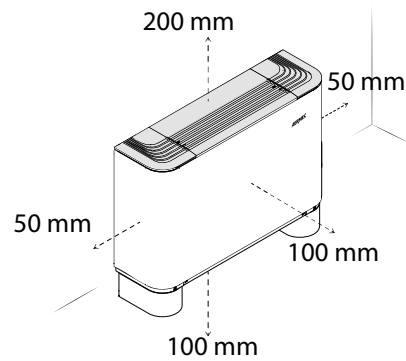
**SPAZI TECNICI MINIMI - MINIMUM TECHNICAL SPACES - ESPACES TECHNIQUES MINIMUM
TECHNISCHE MINDESTABSTÄNDE - ESPACIOS TÉCNICOS MÍNIMOS**



FCZ	100	200	300	400	500	600	700	800	900	1000
A (mm)	275	275	275	275	275	280	280	280	280	280
B (mm)	710	820	1050	1270	1270	1405	1405	1405	1415	1415
C (mm)	590	590	590	590	590	595	595	595	665	665

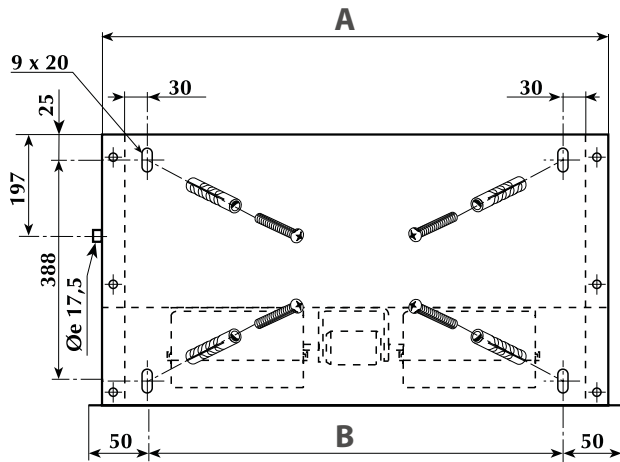


FCZ	100	200	300	400	500	600	700	800	900	1000
A (mm)	220	220	220	220	220	220	220	220	220	220
B (mm)	640	750	980	1200	1200	1320	1320	1320	1320	1320
C (mm)	486	486	486	486	486	486	486	486	591	591

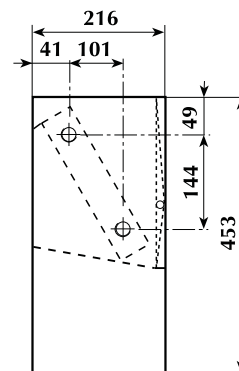


DATI DIMENSIONALI • DIMENSIONS • DIMENSIONS • ABMESSUNGEN • DIMENSIONES [MM]

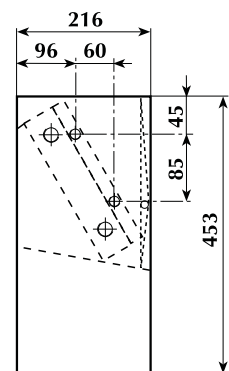
FCZ A
100 ÷ 500 / 150 ÷ 550 / 101 ÷ 501 / 102 ÷ 502



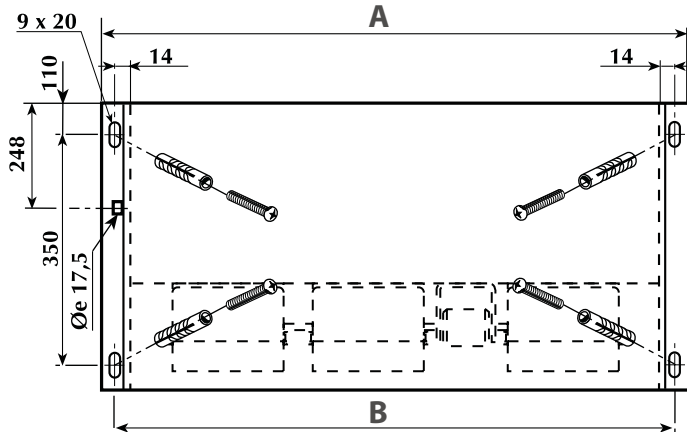
FCZ A
100 ÷ 800 / 150 ÷ 850



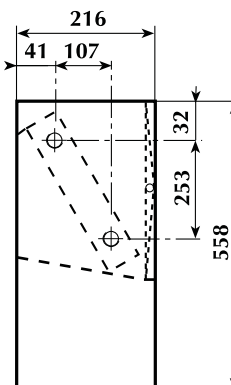
FCZ A
101 ÷ 801 / 102 ÷ 802



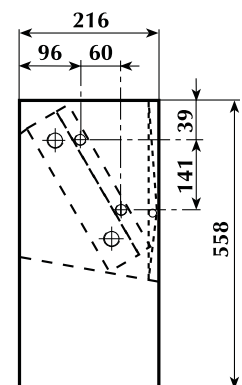
FCZ A
600 ÷ 1000 / 650 ÷ 950 / 601 ÷ 1001 / 602 ÷ 802



FCZ A
900 ÷ 1000

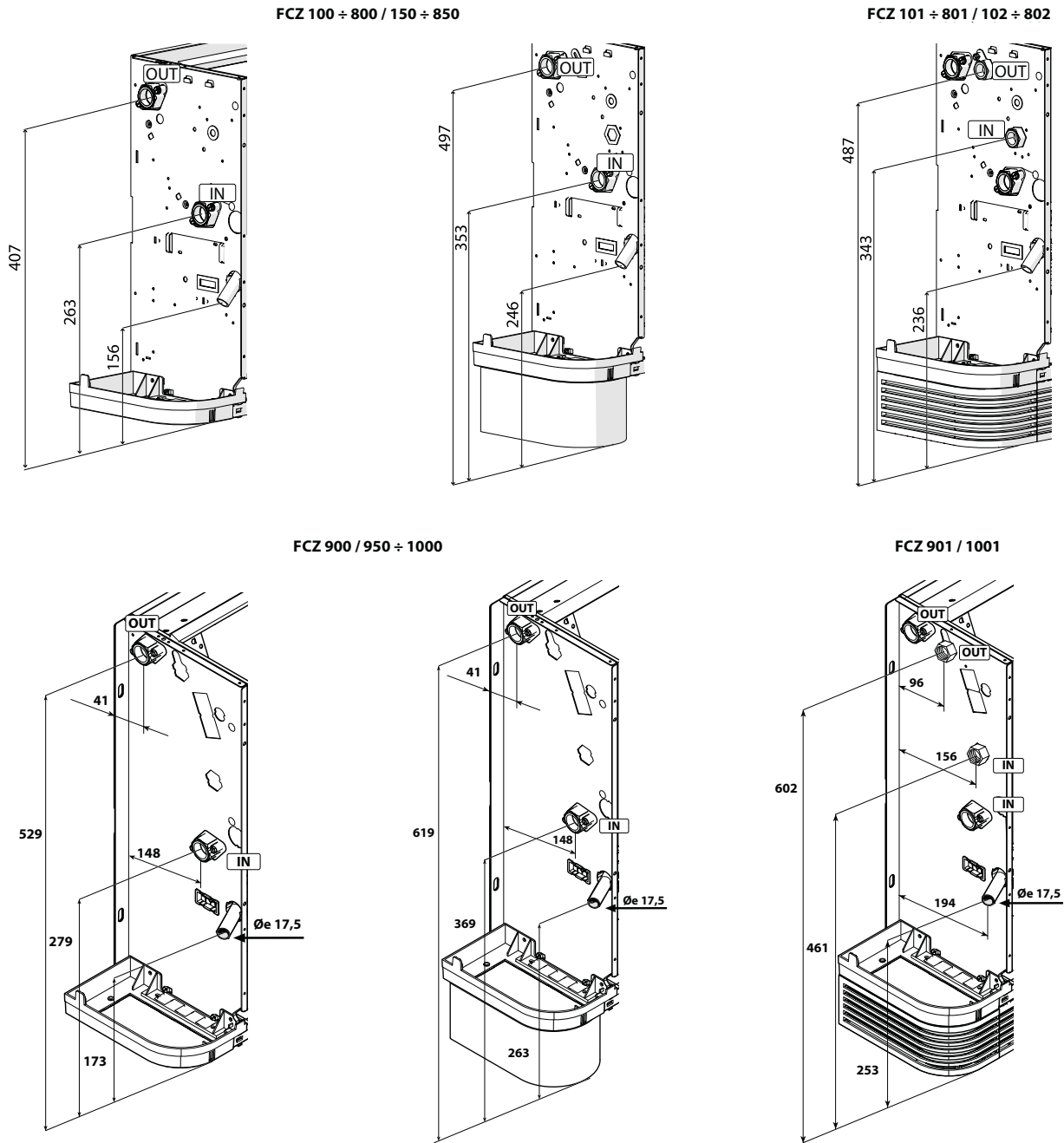


FCZ A
901 ÷ 1001



FCZ A		100	200	300	400	500	600	700	800	900	1000
		150	250	350	450	550	650	750	850	950	
		101	201	301	401	501	601	701	801	901	1001
		102	202	302	402	502	602	702	802		
A	mm	412	522	753	973	973	1122	1122	1122	1122	1122
B	mm	330	440	671	891	891	1102	1102	1102	1102	1102
Peso - Weight - Poids - Gewicht - Peso	kg	11	13	18	22	22	30	30	30	30	30

DIMENSIONI E POSIZIONE ATTACCHI IDRAULICI • DIMENSIONS AND POSITION OF HYDRAULIC CONNECTIONS • POSITION DES RACCORDS HYDRAULIQUES • ABMESSUNGEN UND HYDRAULISCHE ANSCHLÜSSE DIMENSIONES Y CONEXIONES DE AGUA






Collegamenti Idraulici (Femmina) - Hydraulic Connections (Female) - Raccords d'eau (Femelle) - Wasseranschlüsse (Innengewinde) - Conexiones de agua (Hembra)										
Batteria Principale Standard - Standard Main Coil - Batterie Principale Standard - Hauptstandardregister - Batería principal estándar										
FCZ	100	200	300	400	500	600	700	800	900	1000
Ø	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Batteria Principale Maggiorata - Larger Main Coil - Batterie Principale Amplifiée - Überdimensioniertes Hauptregister - Batería principal sobredimensionada										
FCZ	150	250	350	450	550	650	750	850	950	
Ø	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	
Batteria Principale + Batteria Solo Caldo - Main Coil + Standard Heat Only Coil - Batterie Principale + Batterie Seulement Chaud Standard - Hauptregister + Standard-Nur-Heizregister - Batería principal + batería solo caliente estándar										
FCZ	101	201	301	401	501	601	701	801	901	1001
Ø	1/2" - 1/2"	1/2" - 1/2"	3/4" - 1/2"	3/4" - 1/2"	3/4" - 1/2"	3/4" - 1/2"	3/4" - 1/2"	3/4" - 1/2"	3/4" - 1/2"	3/4" - 1/2"
Batteria Principale + Batteria Solo Caldo Maggiorata - Main Coil + Larger Heat Only Coil - Batterie Principale + Batterie Seulement Chaud Amplifiée - Hauptregister + Überdimensioniertes Nur-Heizregister - Batería principal + batería solo caliente sobredimensionada										
FCZ	102	202	302	402	502	602	702	802		
Ø	1/2" - 1/2"	1/2" - 1/2"	3/4" - 1/2"	3/4" - 1/2"	3/4" - 1/2"	3/4" - 1/2"	3/4" - 1/2"	3/4" - 1/2"		

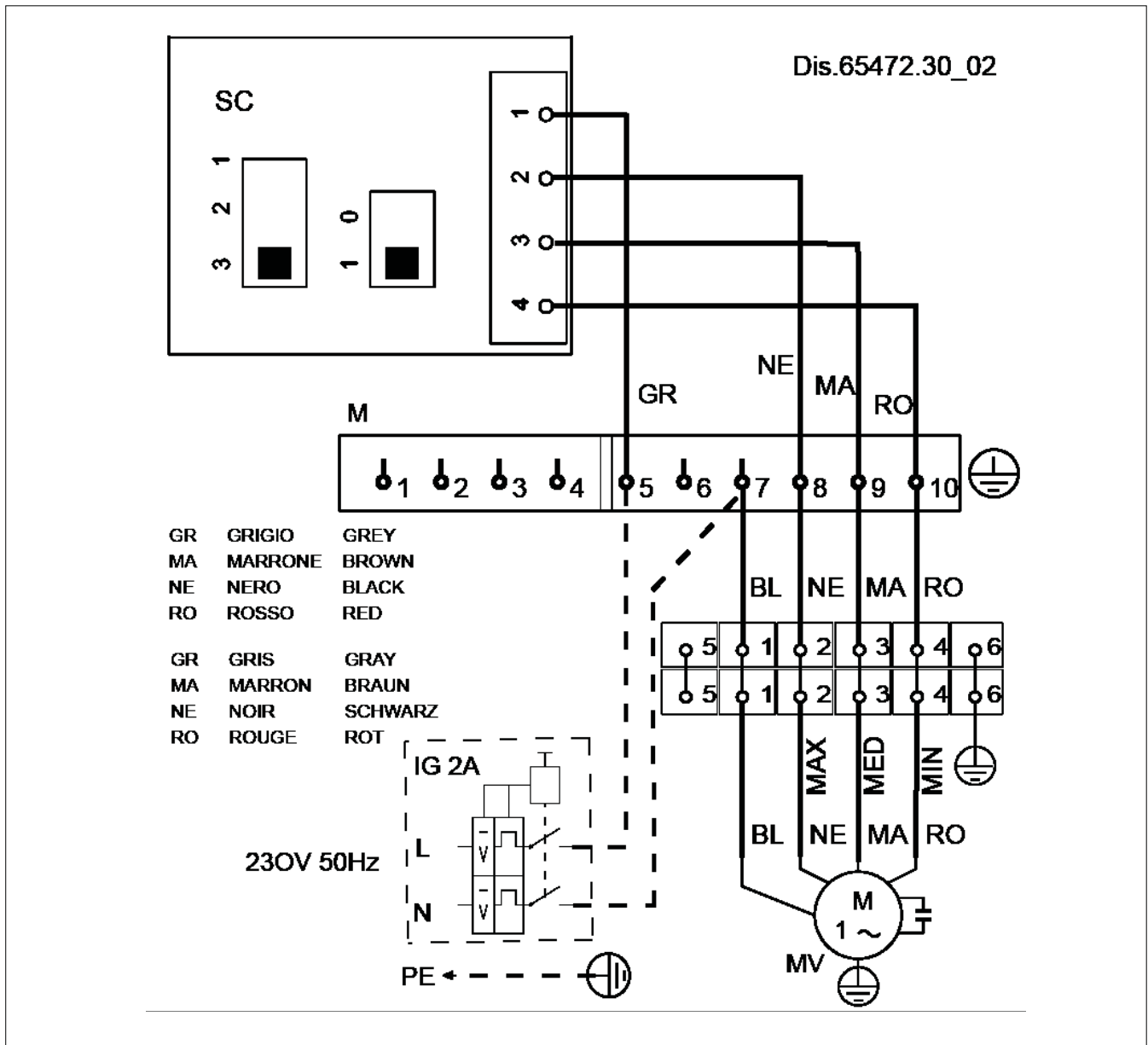
SCHEMI ELETTRICI • WIRING DIAGRAMS • SCHEMAS ELECTRIQUES • SCHALTPLÄNE • ESQUEMAS ELÉCTRICOS

LEGENDA • READING KEY • LEGENDE • LEGENDE • LEYENDA

- 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
Ventilatoromotor
Motor del ventilador
- PE** = Collegamento a terra
Earth connection
Mise à terre
Erdanschluss
Toma de tierra

- SC** = Scheda di controllo
Electronic control board
Platine de contrôle
Steuerschaltkreis
Tarjeta electrónica de control
-  = 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.

TROUBLE SHOOTING

PROBLEMA • PROBLEM PROBLEME • 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 préselection de la vitesse sur le panneau de commandes. Falsche Geschwindigkeitseinstellung am Bedienpaneel. Programación errada de la velocidad en el tablero de mandos. Filtro intasato. Blocked filter. Filtre encrassé. Filter verstopft. Filtro atascado.	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. 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 préselection 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. Préselectionner 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 préselection 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. Préselectionner 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. 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 "DURCHSCHNITTLICHE MINDEST - WASSERTEMPERATUR"). Se han alcanzado las condiciones límites de temperatura y humedad descritas en "MÍNIMA TEMPERATURA MEDIA DEL AGUA".	<u>Innalzare la temperatura dell'acqua oltre i limiti minimi descritti in "MINIMA TEMPERATURA MEDIA DELL'ACQUA".</u> Increase the water temperature beyond the minimum limits indicated in "MINIMUM AVERAGE WATER TEMPERATURE". Elever la température de l'eau au-delà des limites minimales indiquées dans "TEMPERATURE MINIMALE MOYENNE DE L'EAU". Wassertemperatur über die um Abschnitt "DURCHSCHNITTLICHE MINDEST - WASSERTEMPERATUR" angegebenen min. Werte erhöhen. 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.



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