AERMEC
air conditioning

USE AND INSTALLATION MANUAL
MANUEL D'UTILISATION ET D'INSTALLATION

FAN COIL WITH INVERTER
VENTILO-CONVECTEUR AVEC INVERTER

INVERTER TECHNOLOGY

FCXI US

FCXI 20 / 220 US
FCXI 30 / 220 US
FCXI 40 / 220 US
FCXI 50 / 220 US
FCXI 80 / 220 US

FCXI 24 / 220 US
FCXI 34 / 220 US
FCXI 44 / 220 US
FCXI 54 / 220 US
FCXI 84 / 220 US

AERMEC
COMPANY QUALITY SYSTEM
ICIM
ISO 9001:2008 - Cert. n° 0128
CISQ IQNet
AERMEC S.P.A.

INTERTEK ETL CM LISTED C US

5383620_00

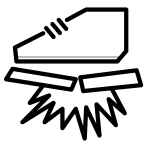
IFCXIUSLJ 1203 - 5383620_00

TABLE OF CONTENTS • TABLE DES MATIÈRES

CARRIAGE • TRANSPORT

Do NOT wet

CRAINT l'humidité



Do NOT step

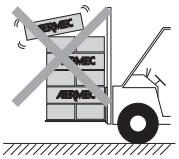
NE PAS marcher sur cet emballage

Stacking: control the packing to know the number of machines that can be stacked

Empilement: vérifier sur l'emballage pour connaître le nombre d'appareils pouvant être empilés

DO NOT handle the machine alone if its weight is over 55lb / 25Kg

NE PAS transporter tout seul l'appareil si son poids dépasse 55lb / 25Kg



Do NOT leave loose packages during transport

ATTACHER les emballages pendant le transport

Fragile, handle with care

Fragile, manipuler avec soin

Arrow: high

Flèche: haut

SAFETY SYMBOL • SIMBOLES DE SECURITE

Danger:
Power supply

Danger:
Tension

Danger:
Movings parts

Danger:
Organes en mouvement

Danger!!!

Danger!!!

Congratulations on your purchase of this Aermec FCXI fan coil.

Made with materials of superior quality in strict compliance with safety regulations, "FCXI" is easy to use and will have a long life.

Thanks to Aermec's FCXI range of inverter fan coils, brushless technology can now make inroads in the field of chilled water air conditioning, bringing notable energy savings along with the precise control of both air temperature and humidity in the air-conditioned rooms.

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.
The number of pages in this manual is : 28.

DESCRIPTION OF THE UNIT

MACHINE PURPOSE

The fan coil is a room air treatment terminal unit for both winter and summer operation.

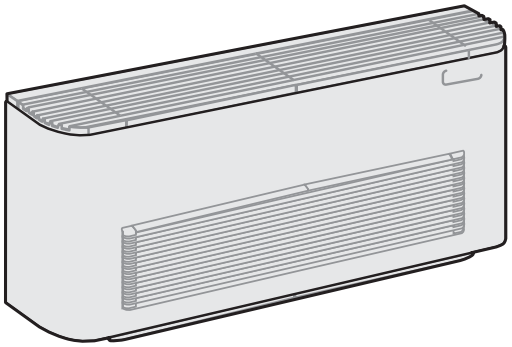
AVAILABLE SIZES

The FCXI_US fan coils are available in:

5 sizes 220V 60Hz
with 3-row coil
- **FCXI 20 / 220 US**
- **FCXI 30 / 220 US**
- **FCXI 40 / 220 US**
- **FCXI 50 / 220 US**
- **FCXI 80 / 220 US**

5 sizes 220V 60Hz
with 4-row coil
- **FCXI 24 / 220 US**
- **FCXI 34 / 220 US**
- **FCXI 44 / 220 US**
- **FCXI 54 / 220 US**
- **FCXI 84 / 220 US**

FCXI_US: without control panel and with Inverter motor, 3-rows or 4-rows heat exchanger, universal cabinet for vertical floor-standing installation or wall-mounting, varnished with anti-corrosion polyester powder, colour RAL 9002. The air delivery and suction grilles are made using plastic material in colour RAL 7044. Requires external control panel.



PACKAGING

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

USE

Consult control panel manual for use instructions.

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.

POWER THE FAN COIL ONLY WITH 220V, SINGLE-PHASE VOLTAGE

Any other type of power supply could permanently damage the fan coil.

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 44.6°F /7°C between the outdoor temperature and the temperature inside the room in summer.

In summer, a temperature that is too low causes higher electrical consumption.

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 fan coil use soft cloths or sponges dipped in water with a maximum temperature of 104°F / 40°C. Do not use chemical products or solvents for 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

Cleaning the filter frequently guarantees enhanced 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.

SUPPLEMENTARY CLEANING

The fact that the blades of examinable shrouds can be removed (operation done only by adequately skilled technicians) ensures a thorough cleaning of the internal components, which is particularly important when installing the unit in crowded areas or venues requiring high hygiene standards.

DURING OPERATION

Always leave the filter fitted on the fan coil during operation (otherwise dust in the air could soil the coil surface area).

WHAT IS NORMAL

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

In the heating operation, 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.

MALFUNCTIONING

In case of malfunction, cut off power to the unit, then energise it again and restart the device.

WARNING! Do not attempt to repair the unit alone, this is extremely dangerous!.

If the problem occurs again, call the local Aftersales Service immediately.

This section is reserved for the After Sales service only. There are 2 LEDs on the Inverter card (Alarm / Power) that indicate the unit's operating status. The table for the decoding of messages is found in Chapter Installation.

DO NOT TUG THE ELECTRIC CABLE

It is very dangerous to pull, tread on or crush the electric 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.

WARNING

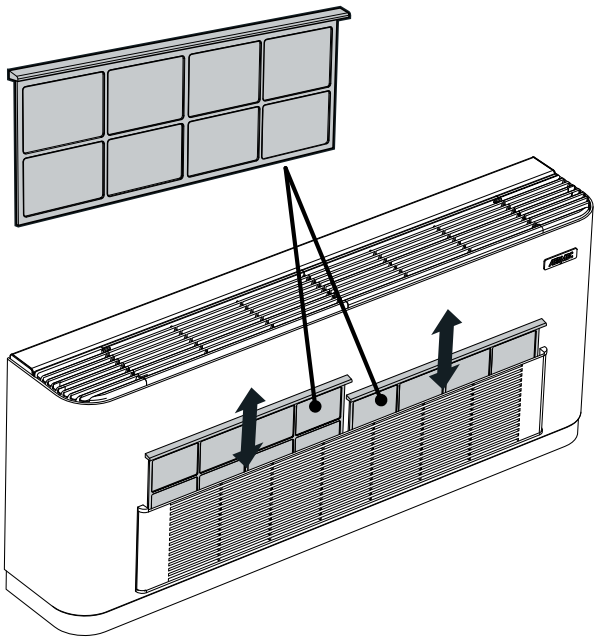
Avoid that the device is used by children or incompetent persons without appropriate supervision; also note that the unit should not be used by children as a game.

°C= (°F-32)/1.8

°F=(°Cx1.8)+32

1mm = 0.03937 inch

1inch = 25.4 mm



OPERATING LIMITS

FCXI	20 /220US	30 /220US	40 /220US	50 /220US	80 /220US
	24 /220US	34 /220US	44 /220US	54 /220US	80 /220US
Maximum water inlet temperature	176°F / 80°C				
Maximum recommended water inlet temperature	149°F / 65°C				
Maximum operating pressure	115psi / 8bar /				
Room temperature limits (Ta)	32°F < Ta < 113°F / 0°C < Ta < 45°C				
Relative humidity limits in the room (R.H.)	U.R. < 85%				
Power supply	220V (±10%) ~ 60Hz				

Performance values refer to the following conditions:
- at the maximum motor speed;
- the total input power is determined by adding the input power for the unit and the input power for the accessories connected and declared in the corresponding manuals.

English

Water temperature

In order to prevent air stratification in the room, and therefore to achieve improved mixing, it is advisable not to supply the fan coil with water at a temperature over 149°F / 65°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 continuous cooling mode in an environment where the relative humidity is high, condensate might form on the air delivery and on the outside of the device. 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 3-way valve accessory.**

MINIMUM AVERAGE WATER TEMPERATURE [°F/°C]		Dry bulb ambient air temperature					
		70/21	73/23	77/25	80/27	84/29	88/31
Wet bulb ambient air temperature	59 / 15	37.4/3	37.4/3	37.4/3	37.4/3	37.4/3	37.4/3
	62.6 / 17	37.4/3	37.4/3	37.4/3	37.4/3	37.4/3	37.4/3
	66.2 / 19	37.4/3	37.4/3	37.4/3	37.4/3	37.4/3	37.4/3
	69.8/21	48.2/6	41/5	39.2/4	37.4/3	37.4/3	37.4/3
	73.4/23	-	46.4/8	44.6/7	48.2/6	41/5	41/5

Water flow limits for 3-row coil						
FCXI		20 /220US	30 /220US	40 /220US	50 /220US	80 /220US
Minimum water flow	l/h	100	100	150	150	300
	gpm	0.44	0.44	0.66	0.66	1.32
Maximum water flow	l/h	750	750	1100	1100	2200
	gpm	3.3	3.3	4.84	4.84	9.68

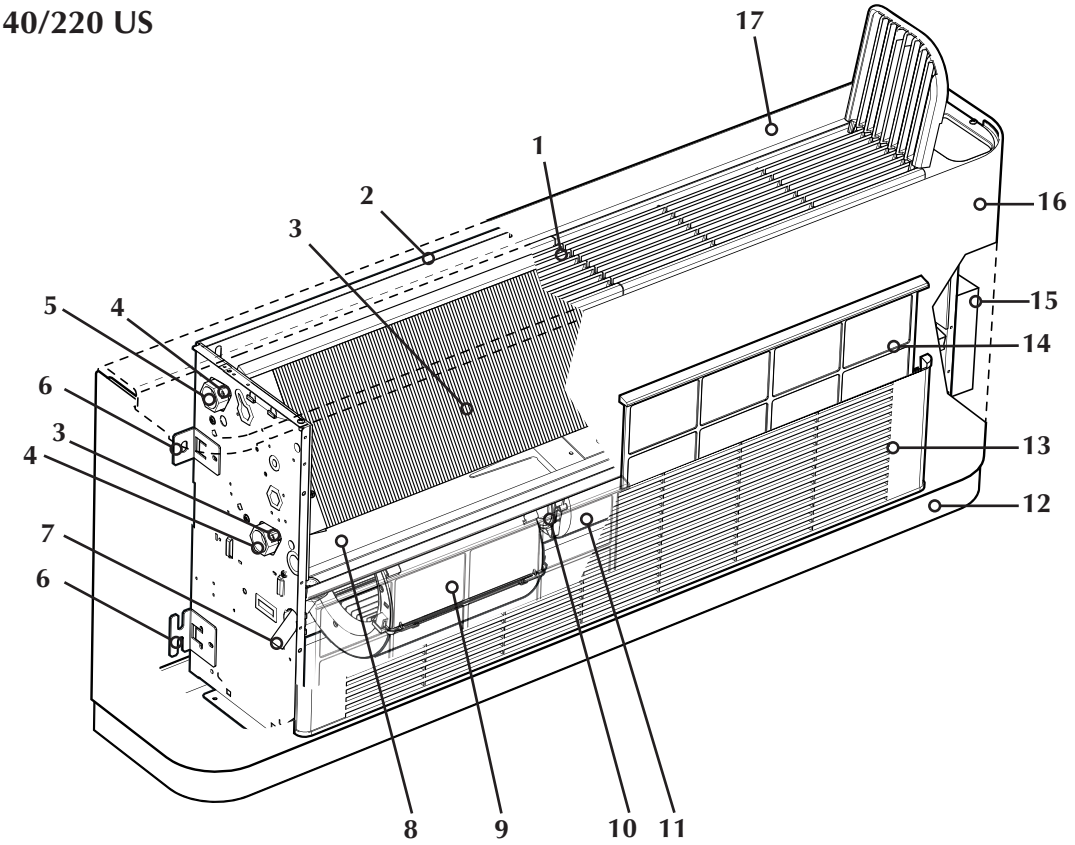
Water flow limits for 1-row coil						
FCXI		20 /220US	30 /220US	40 /220US	50 /220US	80 /220US
Minimum water flow	l/h	50	50	50	50	100
	gpm	0.22	0.22	0.22	0.22	0.44
Maximum water flow	l/h	400	400	400	400	900
	gpm	1.76	1.76	1.76	1.76	3.96

Water flow limits for 4-row coil						
FCXI		24 /220US	34 /220US	44 /220US	54 /220US	84 /220US
Minimum water flow	l/h	150	150	150	150	300
	gpm	0.66	0.66	0.66	0.66	1.32
Maximum water flow	l/h	1100	1100	1100	1100	2200
	gpm	4.84	4.84	4.84	4.84	9.68

MAIN COMPONENTS

1 Air delivery with fins (RAL7044)
2 Load-bearing structure
3 Heat exchange coil
4 Air vents on the coil
5 Plumbing connections
6 Bracket for mounting
7 Condensate discharge
8 Tray
9 Fan
10 Control Inverter device
11 Electric motor
12 Lower closure (RAL7044)
13 Intake grille (RAL7044)
14 Air filter (suction)
15 Electric box (electrical wiring)
16 Cabinet (RAL9002)
17 Covering cabinet (RAL9002)

FCXI 40/220 US



DESCRIPTION

SYSTEM TYPES

The fan coils are designed for systems with 2 and 4 pipes, in the versions:
- 3-Rows: without valve;
- 3-Rows: with valve;
- 3-Rows: with 1-Row hot water coil (BV) and 2 valves;
- 4-Rows: without valve;
- 4-Rows: with valve.

HEAT EXCHANGE COIL

Coil with copper pipe and aluminium fins blocked by means of the mechanical expansion of the pipes. The collectors are fitted with female connections and air vents in the upper part of the coil.

FILTERING SECTION

Filter in filtering class G2, self-extinguishing B1 (DIN 4102). Easily removable and made from regenerable materials. May be cleaned by washing.

ELECTRIC FAN UNIT

This consists of double suction centrifugal fans with lengthways blades to obtain a high air flow with a low number of revs. The fans are directly coupled with the shaft of the "brushless" electric motor.

The "brushless" electric motor is cushioned with elastic supports.

The "brushless" electric motor is the result of combining the most sophisticated technologies from the fields of mechanics and electronics.

The "brushless" electric motor has no sliding contacts between the rotor and the stator. With the special inverter device, it is possible to control the speed and torque of the rotor continuously, just by means of the stator currents.

Compared with the traditional alternate current motors, the "brushless" electric motor offers huge advantages:
- Reduced wear and tear
- The possibility to regulate the rotation speed in a precise, continuous manner (0-100%)
- Higher energy yields
- Longer life and greater reliability

LOAD-BEARING STRUCTURE

Made of galvanised sheet iron of a suitable thickness. There are holes on the back for fixing the device to the wall. The fan unit is closed at the front with a metal panel. Every device is equipped with condensate collection trays (for both vertical and horizontal installation).

CONDENSATE DRAIN

Every device is equipped with condensate collection trays, with a connection for draining the condensate produced by the unit in cooling mode.

WATER CONNECTIONS

The connections, located on the left hand side, are female. The coil may also be rotated.

CABINET

Casing in RAL9002

The casing is made of galvanised steel, varnished with polyester powders to guarantee high resistance to rust and corrosion.

CONTROL PANEL

Use a control panel with thermostat and ventilation speed control, with 0-10V outputs.

English

INSTALLATION INFORMATION

WARNING: check that the power supply is disconnected before carrying out any procedures on the unit.

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

WARNING: the device must be installed in compliance with the national plant engineering rules.

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 electric plug so you can fully disconnect the device from the power supply.

WARNING: Consult all documentation before starting the installation.

The essential indications to install the device correctly 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.

The water, condensate discharge and electrical circuit ducts must be provided for.

The fan coil must be installed in such a position that the air can be distributed throughout the room and so that there are no obstacles (curtains or objects) to the passage of the air from the suction louvers.

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

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.

If a three-way valve is installed, the minimum water temperature sensor can be installed in two locations:

- in its housing in the coil, MANDATORY if the thermostat is connected to a system with centralised control or monitoring device;
- on the delivery pipe up stream of the valve.

Check the thermostat manual before choosing the location of the minimum water temperature sensor, according to the preferred control logic. The thermostat may need the settings of the dip-switches changed.

WARNING: After completing the installation check the operation of the condensate discharge system, the seal of the hydraulic fittings, insulation of ducts and pipes. Then perform a functional test.

In the event of malfunction consult the Alarm Codes Table to interpret the alarms indicated by the 2 LEDs (Alarm / Power) that indicate the status of the unit.

The inverter card is located inside the unit and requires dismantling.

DANGER! Only qualified service personnel can access it.

ALARM CODES

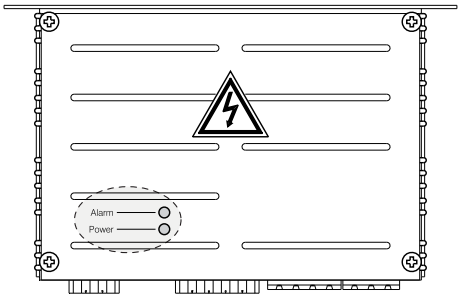
This section is reserved for the After Sales service only.

The card is located inside the unit and requires dismantling.

DANGER! Only qualified service personnel can access it.

There are 2 LEDs on the Inverter card (Alarm / Power) that indicate the unit's operating status.

The table below shows how to decode the messages.



ALARM TYPE	INDICATIONS	IRREGULARITY	Notes
High temperature	ALARM LED flashes 3sec ON 0.5sec OFF The LED if permanently ON after 1.5min	Motor off	Auto-Restart Alarm. If the conditions persist after 1.5min, the alarm becomes permanent, the Alarm LED stays on, the system turns off.
Overvoltage			
Undervoltage			
Overcurrent			
Overload	ALARM LED flashes 0.5sec ON 0.5sec OFF	Speed reduction	Power limitation
Safety control			Temperature limitation
STOP	Alarm LED permanently on	Motor off	For alarms reset: Set 0V ON INPUT (turn the power off and then on again)

INSTALLATION

INSTALLING THE UNIT

To install the unit, proceed as follows:
- Remove the covering cabinet
- Use wall plugs (not supplied) for wall-mounted installations
- Apply any accessories.

Make the water connections as described in the relative chapter.

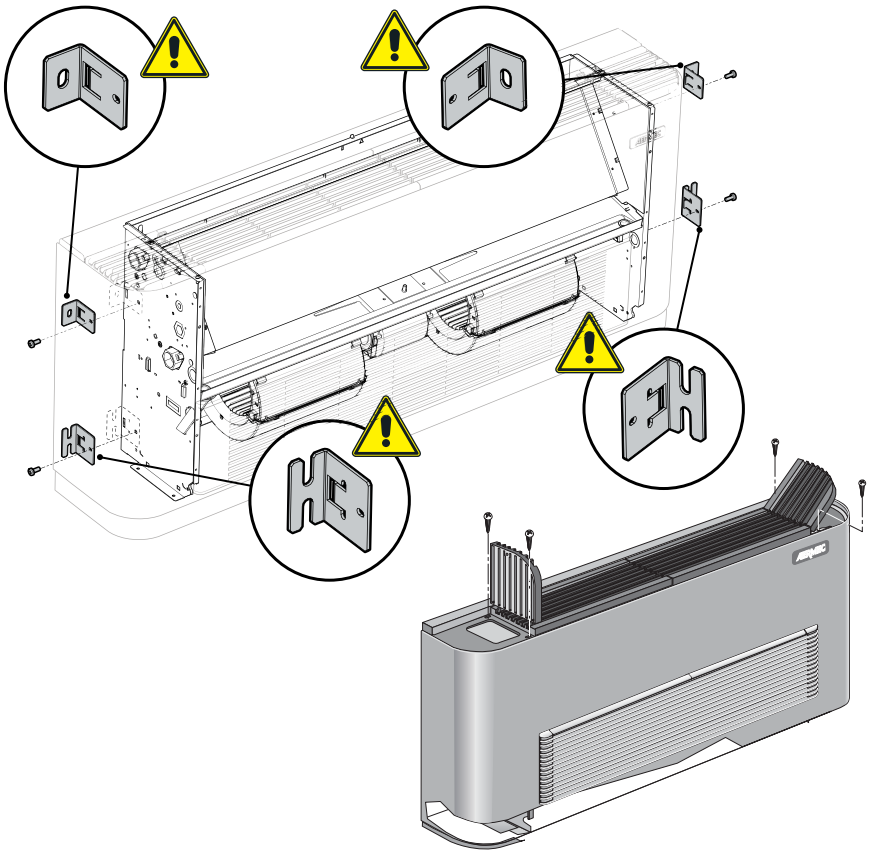
Make the condensate discharge connection as described in the relative chapter. The fan coils that work in heat mode only do not require condensate discharge.

Make the electrical wiring as shown in the relative chapter and in the wiring diagrams.

Install and connect any accessories.

Complete the installation by reassembling the casing and air filter.

Start up the fan coil and check all the components and functions are operating correctly.



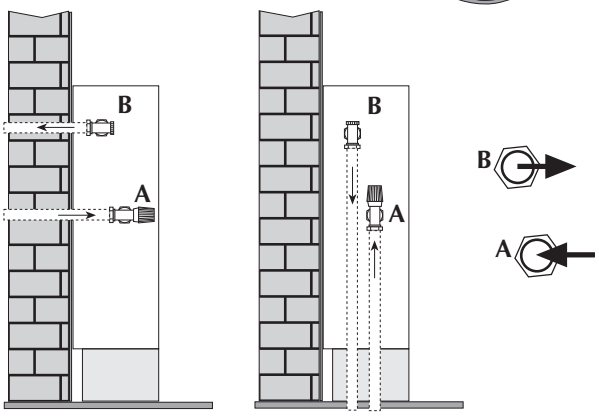
WATER CONNECTIONS

- Make the water connections.
- In the event of disassembly and reinstallation, use new gaskets.

Refer to the size data for the position, type and diameter of the water connections.

You are advised to adequately insulate water lines and/or fit the auxiliary condensate drain tray (available as an accessory), to prevent dripping during the cooling function.

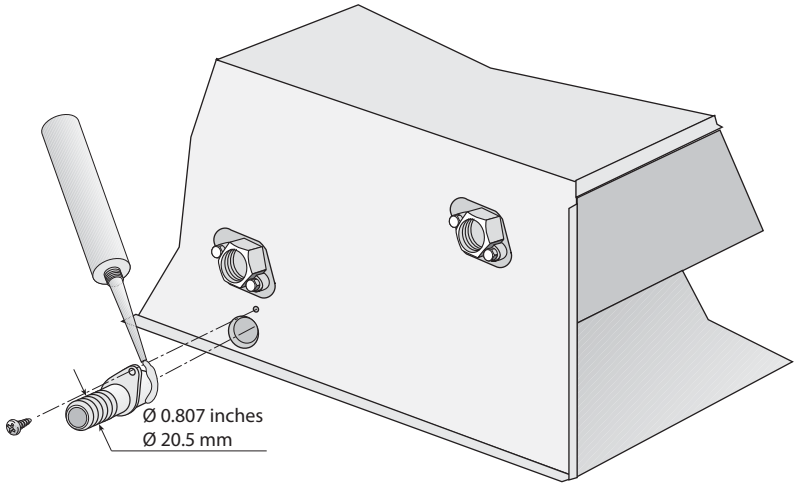
After installing, check the seal on the connections.



CONDENSATE DRAIN

In the event of horizontal installation, assemble the condensate discharge connection supplied. Make sure you seal the connection between the drip tray and the fitting with silicone. The condensate drain network must be properly scaled and the piping situated in such a way as to keep an adequate slope along the route (min. 1%). If condensate is discharged into the sewage system, install a siphon to prevent the return of unpleasant odours into the room.

Carry out a functioning and seal test of the condensate drain system by pouring water into the tray



English

ELECTRICAL WIRINGS

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

WARNING: it is compulsory to connect the power cables Phase (L) and Neutral (N) to the respective terminals, do not to reverse the connections, and observe the wiring diagram.

install a device, main switch, or electric plug so you can fully disconnect the device from the power supply.

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 0.12inch / 3mm .

The use of B-type circuit breakers is recommended.

For installations with three-phase power supply, the following precautions should be considered:

1. In the presence of breakers or thermomagnetic switches 3P + N, the triggering current must be at least 170% of the total load absorbed by the fan coils for each phase.
2. The section of the neutral wire must be of a dimension taking into consideration the operating current equal to 170% of the total load absorbed by the fan coils for each phase.

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 leaving the pipe or raceway must be so positioned that they are not pulled or twisted and are anyway protected from outside agents.

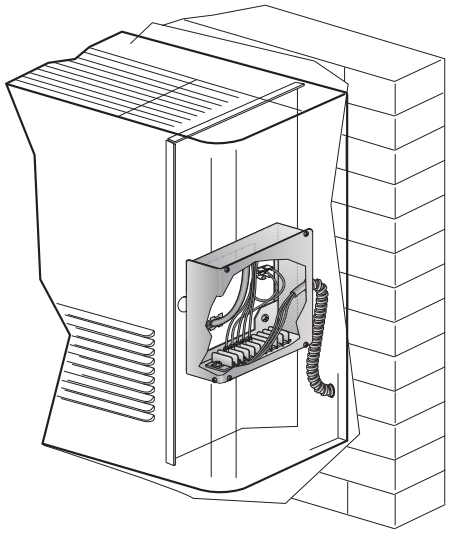
Stranded cables can only be used with crimping terminals. Check the wire strands are well inserted.

The wiring diagrams are subject to continuous updates, so it is essential to use those on the machine as your reference.

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

When using remote control panels, the relative wiring diagram must be respected. Before installing the control panel, read the instructions carefully and configure the panel if necessary.

Connect the valve and sensor to the control board, in the positions indicated in the wiring diagram.

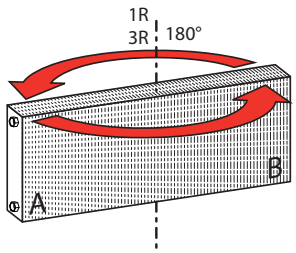


ROTATING THE COIL

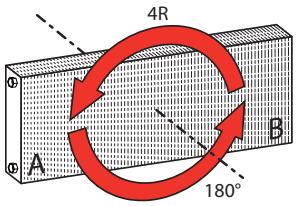
If the hydraulic connections require the rotation of the coil, remove the front closure panel and proceed as follows:

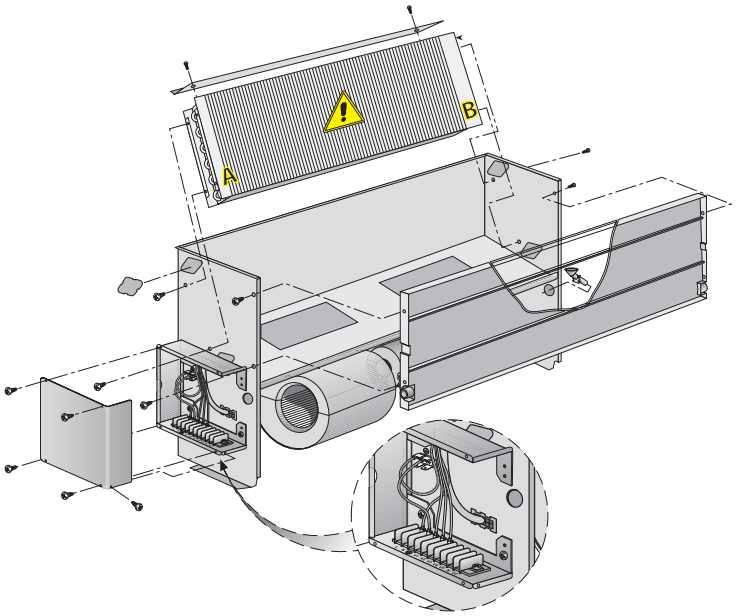
- Remove the condensate drip tray;
- Undo the screws and remove the coil cover;
- Remove the screws securing the coil, then remove the coil;
- Remove the push-outs on the right-hand side;
- Rotate the coil and secure it with the previously removed screws;
- Reassemble the cover and fix it with the screws;
- Reassemble the plastic plugs (supplied) in the holes left free by the water connections;
- All the trays can be used to collect condensate on both sides. In case of vertical installation, to discharge condensate on the right side, position the drain connection to the right.
- Slide out the electrical wirings from the right-hand side, remove the push-out and move the cable grommet from the right to the left side;
- Transfer the electrical wirings to the left side through the cable grommet;
- Move the control board, the earthing u-bolt and any electric devices to the left-hand side.ro

3-Rows and 1-Row coil
FCXI 20 / 220 US
FCXI 30 / 220 US
FCXI 40 / 220 US
FCXI 50 / 220 US
FCXI 80 / 220 US



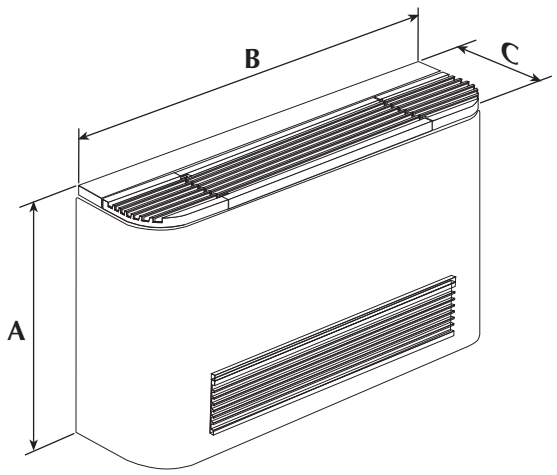
4-Row coil
FCXI 24 / 220 US
FCXI 34 / 220 US
FCXI 44 / 220 US
FCXI 54 / 220 US
FCXI 84 / 220 US





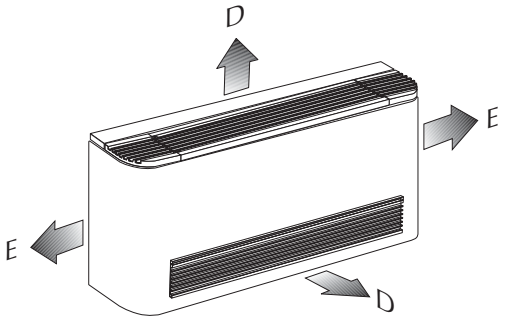
DIMENSIONS

FCXI _ /220US



FCXI		20 /220US 24 /220US	30 /220US 34 /220US	40 /220US 44 /220US	50 /220US 54 /220US	80 /220US 84 /220US
US measure system • Systéme de mesure US						
A	[inches]	19.17	19.17	19.17	19.17	23.23
B	[inches]	29.53	38.58	47.24	47.24	51.97
C	[inches]	8.66	8.66	8.66	8.66	8.66
D	[inches]	3.94	3.94	3.94	3.94	3.94
E	[inches]	1.97	1.97	1.97	1.97	1.97
Weight • Poids	[lbs]	33.07 34.17	44.09 45.19	52.91 54.01	52.91 54.01	74.96 75.06
Metric system • Systéme métrique						
A	[mm]	487	487	487	487	590
B	[mm]	750	980	1200	1200	1320
C	[mm]	220	220	220	220	220
D	[mm]	100	100	100	100	100
E	[mm]	50	50	50	50	50
Weight • Poids	[Kg]	15 15.5	20 20.5	24 24.5	24 24.5	34 34.5

MINIMUM TECHNICAL SPACE • ESPACE TECHNIQUES MINIMUS



COIL CONNECTIONS (FEMALE) • RACCORDS BATTERIE (FEMELLE)

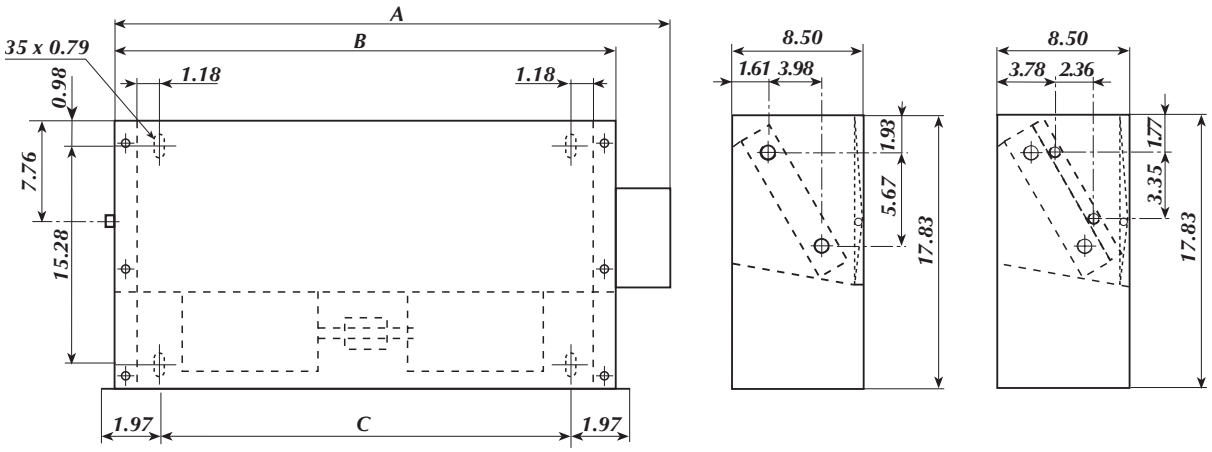
FCXI		20 /220US	30 /220US	40 /220US	50 /220US	80 /220US
US measure system • Systéme de mesure US						
3 R	[inches]	1/2" F	1/2" F	3/4" F	3/4" F	3/4" F
FCXI		**24 /220US**	**34 /220US**	**44 /220US**	**54 /220US**	**84 /220US**
Metric system • Systéme métrique						
4 R	[inches]	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F

DIMENSIONS WITHOUT EXTERNAL CASING • DIMENSIONS SANS MEUBLE EXTERIEUR

US measure system • Systéme de mesure US

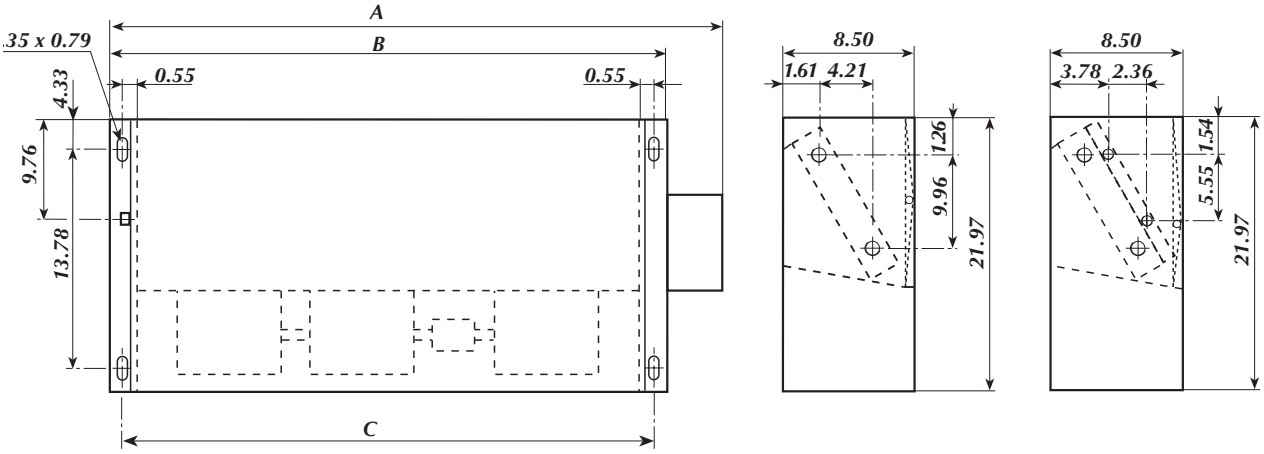
FCXI 20 - 30 - 40 - 50 /220US
FCXI 24 - 34 - 44 - 54 /220US

3 R / 4 R **3 R + 1 R**



FCXI 80 US
FCXI 84 US

3 R / 4 R **3 R + 1 R**



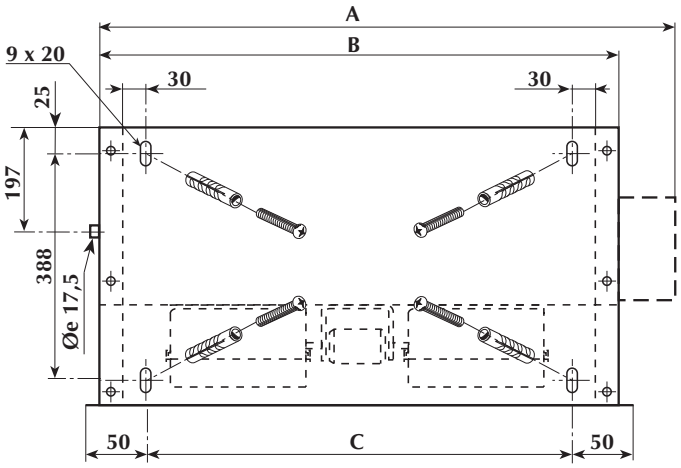
FCXI		20 /220US	30 /220US	40 /220US	50 /220US	80 /220US
A	[inches]	22.56	31.65	40.31	40.31	45.60
B	[inches]	20.55	29.65	38.31	38.31	44.17
C	[inches]	17.32	26.42	35.08	35.08	43.39

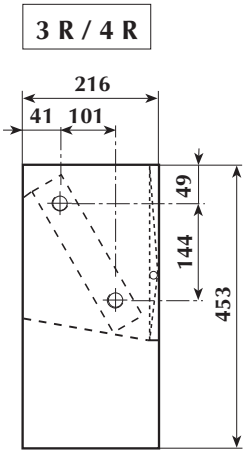
FCXI		24 /220US	34 /220US	44 /220US	54 /220US	84 /220US
A	[inches]	22.56	31.65	40.31	40.31	45.60
B	[inches]	20.55	29.65	38.31	38.31	44.17
C	[inches]	17.32	26.42	35.08	35.08	43.39

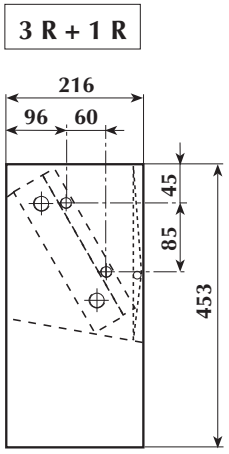
DIMENSIONS WITHOUT EXTERNAL CASING • DIMENSIONS SANS MEUBLE EXTERIEUR

Metric system • Systéme métrique

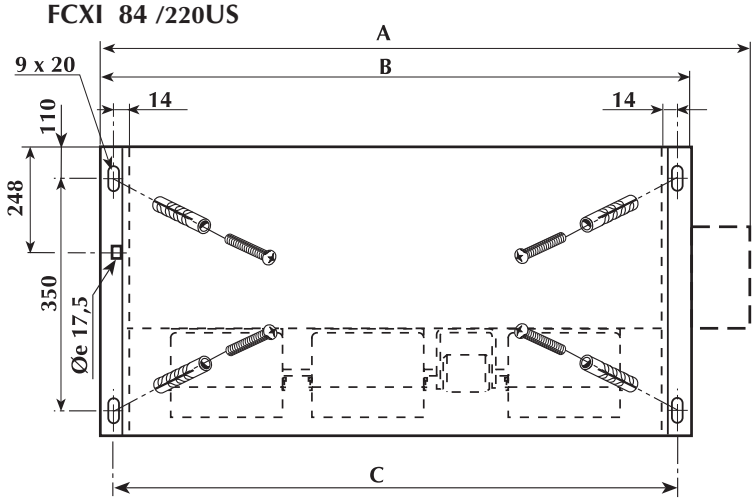
FCXI 20 - 30 - 40 - 50 /220US
FCXI 24 - 34 - 44 - 54 /220US

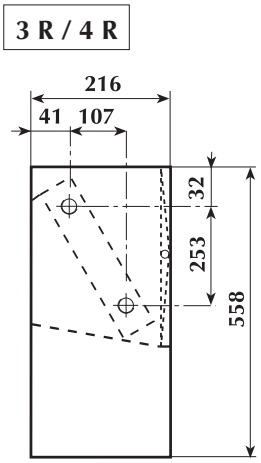


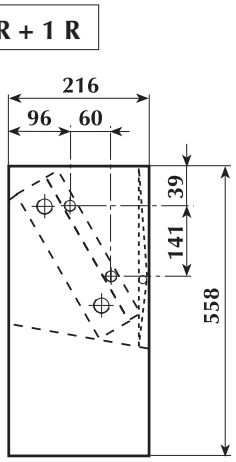




FCXI 80 /220US
FCXI 84 /220US



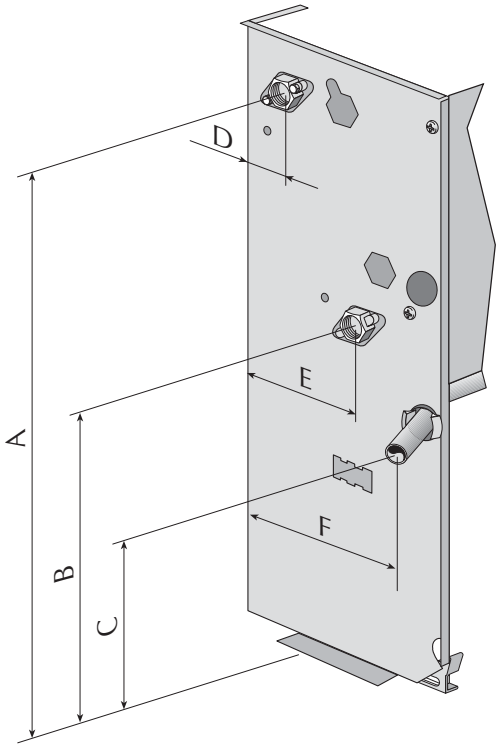




FCXI		20 /220US	30 /220US	40 /220US	50 /220US	80 /220US
A	[mm]	573	804	1024	1024	1158
B	[mm]	522	753	973	1122	1122
C	[mm]	440	671	891	891	1102

FCXI		24 /220US	34 /220US	44 /220US	54 /220US	84 /220US
A	[mm]	573	804	1024	1024	1158
B	[mm]	522	753	973	1122	1122
C	[mm]	440	671	891	891	1102

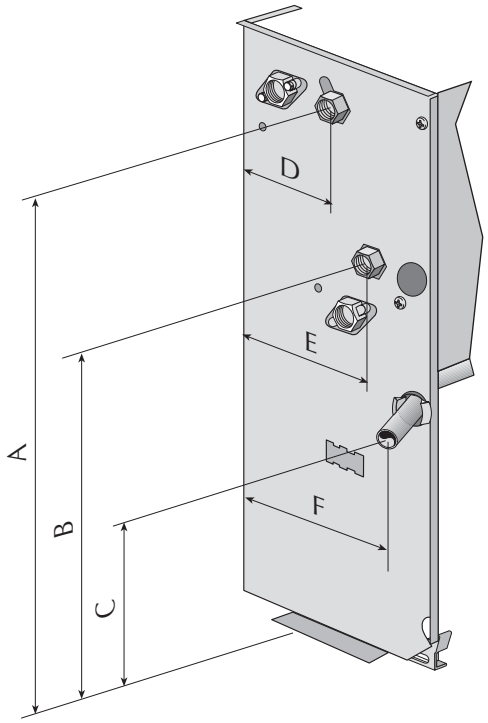
3 AND 4 ROW COIL • BATTERIE A 3 ET 4 RANGS



FCXI	20 /220US 24 /220US	30 /220US 34 /220US	40 /220US 44 /220US	50 /220US 54 /220US	80 /220US 84 /220US
US measure system • Systéme de mesure US [inches]					
A	15.91	15.91	15.91	15.91	20.71
B	10.24	10.24	10.24	10.24	10.75
C	6.02	6.02	6.02	6.02	6.69
D	1.61	1.61	1.61	1.61	1.61
E	5.59	5.59	5.59	5.59	5.83
F	7.64	7.64	7.64	7.64	7.64
Metric system • Metric system [mm]					
A	404	404	404	404	526
B	260	260	260	260	273
C	153	153	153	153	170
D	41	41	41	41	41
E	142	142	142	142	148
F	194	194	194	194	194

FCXI	20 /220US	30 /220US	40 /220US	50 /220US	80 /220US
Coil connections (female) • Raccords batterie (femelle)	1/2″F	1/2″F	3/4″F	3/4″F	3/4″F
FCXI	**24 /220US**	**34 /220US**	**44 /220US**	**54 /220US**	**84 /220US**
Coil connections (female) • Raccords batterie (femelle)	3/4″F	3/4″F	3/4″F	3/4″F	3/4″F

BV HEATING COIL (Accessory) • BATTERIE DE CHAUFFAGE (Accessories)



	20 /220US	30 /220US	40 /220US	50 /220US	80 /220US
	BV1	BV1	BV1	BV1	BV1
US measure system • Systéme de mesure US [inches]					
A	16.06	16.06	16.06	16.06	20.43
B	12.72	12.72	12.72	12.72	14.88
C	6.02	6.02	6.02	6.02	6.69
D	3.78	3.78	3.78	3.78	3.78
E	6.10	6.10	6.10	6.10	6.14
F	7.64	7.64	7.64	7.64	7.64
Metric system • Metric system [mm]					
A	408	408	408	408	519
B	323	323	323	323	378
C	153	153	153	153	170
D	96	96	96	96	96
E	155	155	155	155	156
F	194	194	194	194	194

FCXI	20 US	30 US	40 US	50 US	80 US
Coil connections (female) • Raccords batterie (femelle)	1/2″F	1/2″F	1/2″F	1/2″F	1/2″F

WIRING DIAGRAMS • SCHEMAS ELECTRIQUES

READING KEY • LEGENDE

F = Fusibile • Fuse • Fusible

IG = Main switch
Interupteur général l

M = Terminal board
Boitier

MV = Fan motor
Moteur ventilateur

PE = Earth connection
Mise à terre

VC = Solenoid valve hot
Vanne magnétique chaud

VF = Solenoid valve cold
Vanne magnétique froid

= Components not supplied
Composants non fournis

= Optional components
Composants en option

= On-site wiring
Raccordements à effectuer in situ

AR = Orange • Orange

BI = White • Blanc

BL = Blue • Bleu

GI = Yellow • Jaune

GR = Grey • Gris

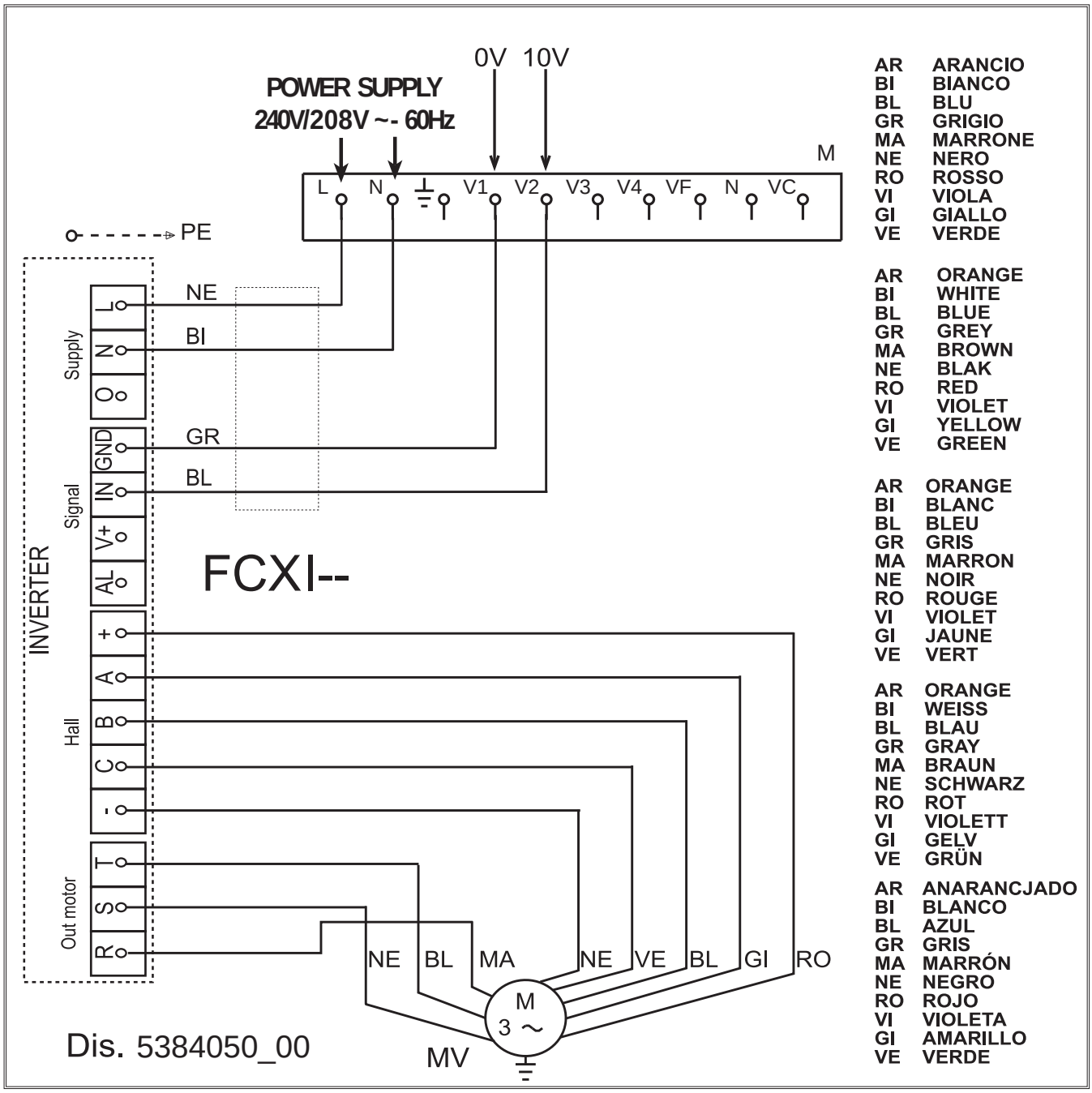
MA = Brown • Marron

NE = Black • Noir

RO = Red • Rouge

VE = Green • Vert

VI = Violet • Violet



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.

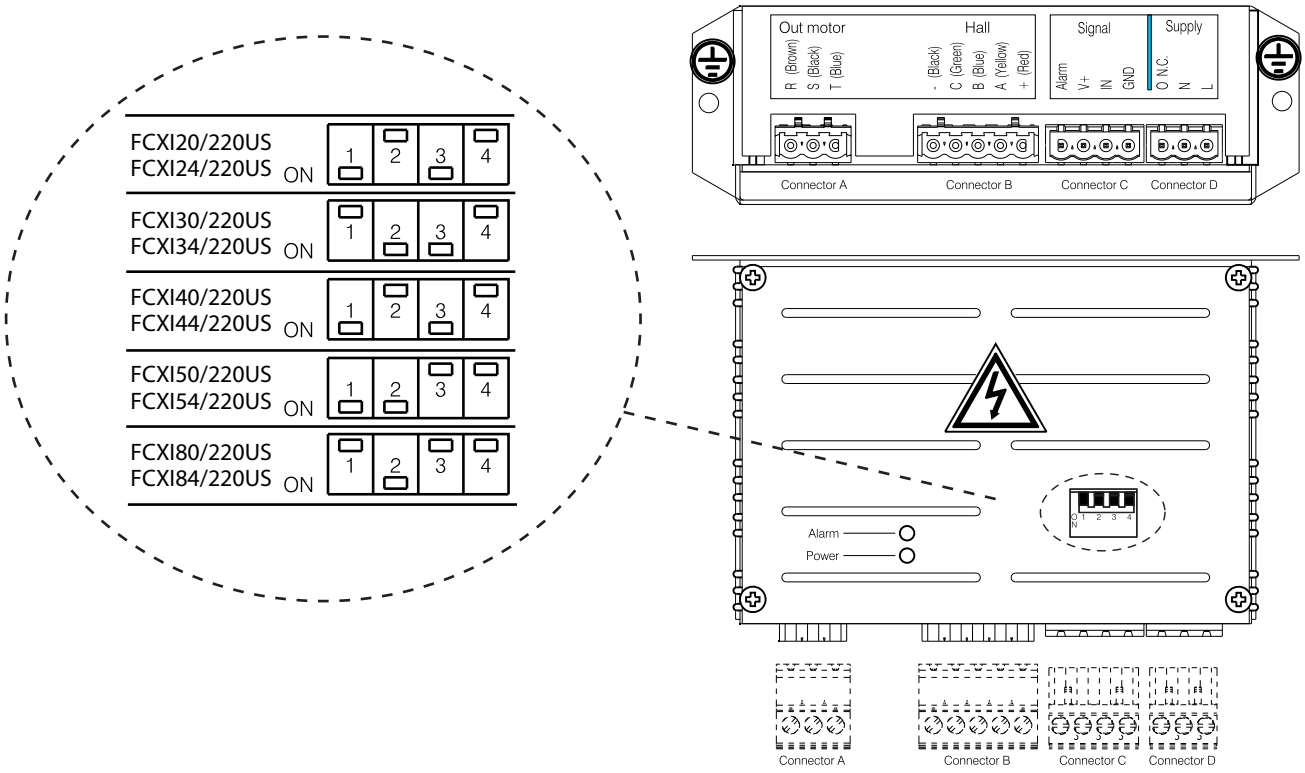
PROBLEM PROBLEME	PROBABLE CAUSE CAUSE PROBABLE	REMEDY SOLUTION
Feeble air discharge. Il y a peu d'air en sortie.	Wrong speed setting on the control panel. Mauvaise préselection de la vitesse sur le panneau de commandes.	Select the speed on the control panel. Choisir la vitesse sur la panneau de commandes.
It does not heat. Pas de chaleur.	Blocked filter. Filtre encrassé.	Clean the filter. Nettoyer le filtre.
	Obstruction of the air flow (inlet and/or outlet). Obstruction du flux d'air (entrée/sortie).	Remove the obstruction. Enlever l'objet faisant obstruction.
	Poor hot water supply. Il n'y a pas d'eau chaude.	Control the boiler. Verifier la chaudière.
It does not cool. Pas de froid.	Wrong setting on control panel. Mauvaise présélection sur le panneau de commandes.	See control panel settings. Présélectionner au panneau de commandes.
	Poor chilled water supply. Il n'y a pas d'eau froide.	Control the chiller. Vérifier le réfrigerateur.
The fan does not turn. Le ventilateur ne tourne pas.	Wrong setting on control panel. Mauvaise présélection sur le panneau de commandes.	See control panel settings. Présélectionner au panneau de commandes.
	No current. l n'y a pas de courant.	Control the power supply. Contrôler l'alimentation électrique.
	The water has not reached operating temperature. L'eau n'a pas atteint la température de service.	Please check up the boiler or the chiller. Check up the thermostat settings. Contrôler la chaudière ou le refroidisseur. Contrôler le réglage du thermostat.
Condensation on the unit cabinet. Phénomènes de condensation sur la structure exterieure de l'appareil.	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".	Increase the water temperature beyond the minimum limits indicated in "MINIMUM AVERAGE WATER TEMPERATURE". Elever la température de l'eau audelà des limites minimales indiquées dans "TEMPERATURE MINIMALE MOYENNE DE L'EAU".

For anomalies don't hesitate, contact the aftersales service immediately.
Pour toute anomalie non répertoriée, consulter le service après-vente.

INVERTER CARD FACTORY SETTINGS
RÉGLAGES EN USINE DE LA PLATINE INVERTER

WARNING: Do not modify the unit's settings.
Any change to the inverter card dip switch settings may cause damage to the unit. For this reason the diagram of the factory settings are indicated.

ATTENTION : Ne pas modifier les réglages de l'unité.
Toute modification des réglages des commutateurs DIP de la platine inverter peut endommager l'unité. Pour cette raison, on reporte le schéma avec les réglages en usine.



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