

# **Decorative Units**





# Your projects, challenges and requirements are our focus. We have a dedicated team that can engineer tailored solutions for your commercial HVAC application.

Oceania Solutions Group is an Australian owned business that focuses on providing engineered HVAC solutions. We value the importance of relationships with our clients and partners. Our team enjoy collaborating and solving complex 'design and construct' projects for your business with our product solutions.

Oceania Solutions Group are proud of our extensive portfolio and experience within HVAC industry. From industrial applications through to commercial air conditioning installations for tropical and high humidity environments.

Operating throughout Australia, New Zealand and the South Pacific Islands, we provide engineered technical data and commercial support for a wide range of HVAC solutions.

Our experienced team of HVAC professionals work hand-in-hand with market leading suppliers of HVAC solutions and equipment.

With international accreditation from Eurovent, CTI, AHRI, TÜV and AMCA, our products are rigorously tested and certified, meeting Australian and New Zealand standards and regulations.

Partnering with trusted international suppliers, we are available to provide an engineered solution for your next project.

# **Contents**

Company overview	04
Product technical data and dimensions	05
General information	06
Important notes	07
Installation	08
Electrical connections general rules	11
Dimensional drawings - under ceiling unit	13
Dimensional drawings - floor mounted unit	14
Connections	15



# Better air since 1963

Euroclima is a company with extensive international operations, four manufacturing facilities in Italy, Austria and India and more than 34,000 m<sup>2</sup> of production and offices. Euroclima specialise in the manufacturing and worldwide distribution of air handling units and fan coil units.

Euroclima has a well distributed network of sales and service across Europe, Asia, Middle East and Northern Africa. Our partners in various countries assume a surface covering responsibility for marketing, local servicing and optimal assistance



# The #1 partner for fan coil units

Euroclima offers a wide range of standardised and customised terminal units for residential and commercial buildings: hotels, offices, schools, stores and hospitals to name a few.

From simple, cost effective products for comfort applications, to specialised equipment such as double skin fan coils for marine or medical applications. Euroclima can provide you the right terminal units to meet your exact needs. Specialised products can be designed for individual projects with components such as EC motors or UVC lamps. All Euroclima terminals can be equipped with factory mounted controls.



### **Decorative unit**

The Euroclima chilled water decorative unit is the optimal solution for under ceiling and floor mounted projects. From heritage buildings to hotels, classrooms and office buildings for summer cooling and winter heating.

The units are equipped with either an elegant ABS case or a powder coated metal case, adjustable blades for optimal air distribution, high efficiency heat exchanger, drain pan, 3 speed fan, HLI digital or analogue controls, manual switch, easily removable air filter.

# **Product warranty**

The Euroclima ducted fan coil units chilled and hot water units are supplied with a parts warranty for either 12 months from start-up or 16 months from invoice date, whichever is to occur first.

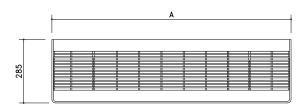
A parts and labour warranty can be obtained at the time of purchasing the units. Please contact your local Oceania Solutions Group representative for further details.



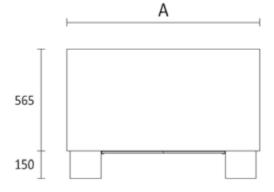
# **Technical data**

	Unit	Model	Speeds	Flow (l/s)	Total (kW)	Sensible (kW)	T in (°C)	T Out (°C)	Air On (DB °C)	Air On (WB °C)	Face Velocity m/s	Air Off (DB °C)	Lw dbA	Lp dbA
	CKO/I	09-3R	3	197	4.21	2.82	6.0	12.0	27.0	19.5	2.0	14.7	60.0	51.0
3	CKO/I	11-3R	3	275	6.88	4.35	6.0	12.0	27.0	19.5	1.6	13.4	64.4	55.4
0	CKO/I	17-3R	3	405	9.25	5.95	6.0	12.0	27.0	19.5	2.0	14.4	58.8	49.8
2	CKO/I	20-3R	3	430	10.31	6.65	6.0	12.0	27.0	19.5	1.7	13.7	62.7	53.7
m	CKO/I	23-3R	3	595	13.71	8.77	6.0	12.0	27.0	19.5	2.0	14.3	64.7	55.7
	CKO/I	32-3R	3	730	17.92	11.44	6.0	12.0	27.0	19.5	1.7	13.5	67.4	58.4
	CKO/I	09-4R	3	197	5.06	3.35	6.0	12.0	27.0	19.5	2.0	12.4	60.0	51.0
3	CKO/I	11-4R	3	275	7.38	4.77	6.0	12.0	27.0	19.5	1.8	12.1	64.4	55.4
0	CKO/I	17-4R	3	405	10.78	6.92	6.0	12.0	27.0	19.5	2.0	12.3	58.8	49.8
œ	CKO/I	20-4R	3	430	11.91	7.67	6.0	12.0	27.0	19.5	1.7	11.7	62.7	53.7
4	CKO/I	23-4R	3	595	15.99	13.26	6.0	12.0	27.0	19.5	2.0	12.2	64.7	55.7
	CKO/I	32-4R	3	730	21.08	13.28	6.0	12.0	27.0	19.5	1.7	11.3	67.4	58.4

## **Dimensional data**



СКО/І	A	
09	840	
11	1040	
17	1240	
20	1440	
23	1640	
32	2040	



## **General Information**

Perfectly suited for use in all air conditioning systems, namely heritage listed projects, hotels, offices, hospital, schools and universities. The decorative units are easy to install in most locations, features clean simple sleek design cabinet, quiet operation and filters air and fresh air makeup to all spaces. The range of units includes numerous models and incorporates six sizes with air volumes between 160 and 730 l/s. There is the ability to include high efficiency germicide lamps inside the cabinet. These lamps can avoid risk of contamination and also permit relevant energy saving (approximately 15%) maintaining perfectly clean fins on the coil.

Decorative units are ideally installed where floor space is at a premium and where units can be ceiling mounted. If required to be installed with its back against a wall, the air intake being located on the underneath side. The basic G3 filter is located in the return grill and is easily accessible and removable. The standard supply air grilles are painted colour RAL 7047 clear grey. The cabinet is constructed from a heavy metal galvanized steel epoxy painted and baked at 180°C. Standard colour RAL 9010 and on request any RAL colour a architect or client request can be supplied at a small additional cost.

#### Finned coil

Tubes are manufactured from 9,5 mm (3/8") OD copper and are staggered for greater heat transfer. High efficiency louvered aluminum fins are bonded onto the tubes which terminate with high quality brass headers. These have female gas connections and drain and vent tapping. Standard 2-pipe coils (3R & 4R), and 4-pipe coils (3R + 1R) are available from stock. Automatic air vents are also available. Units are supplied as standard with pipe connections on the right when viewed from the front. Left sided connections are available, but it is also possible to reverse the handling on site by turning the heat exchanger. Water coils are pressure tested at the following points: working 14.4 Bar – test 16 Bar. Temperature: working 80°C – max 100°C.

#### **Drain Trays**

Provided to collect and drain away condensate, they are manufactured from galvanized sheet steel with an epoxy paint finish on both sides. The drain pan is fully insulated with 5 mm closed cell politene foam which has a class "1" European std fire proof. Alternative insulation types and stainless steel drain trays are also available on request. following points: working 14.4 Bar – test 16 Bar. Temperature: working 80°C – max 100°C.

#### **Electric Motors**

Standard motors (PSC/AOM) are suitable for a V230/1Ph/50Hz with 5 speeds (factory wired 3 only) supply and have a permanently coupled capacitor. They have sealed for life synchronised bearings and a cast aluminium enclosure rated to IP20. Insulation is to class "B" with built in thermal overload protection.

#### **Filters Frames**

Available when return air is to be ducted to chassis fan coils. Available for rear or bottom inlet. Filter EU3-G3-M1

#### Fan coil

The chassis is manufactured from heavy gauge, galvanized steel. It supports the fan coil components and is easily dismantled. Fan decks consist of one or two centrifugal fans. They are fitted with galvanized scrolls and aluminium impellers which provide a spark free application in case of accidental contact between fan and scroll. Fans are statically and dynamically balanced. Fan decks can be easily removed for maintenance.

#### **Supply and Return Air Plenums**

Supply air plenums incorporate circular discharge spigots with a maximum diameter of 250mm. The plenums are supplied as a monoblock assembly. The monoblock assembly adds strength to the unit and simplifies site installation. Return air plenums can also be supplied for fitting on site. All plenums can be internally insulated with closed cell self adhesive politene class "1" European standard fireproof insulation 5mm thickness.

#### Fresh Air Dampers

Fresh air dampers on the mixing box can be motorised up to 100% of fresh air and manufactured from heavy gauge galvanized steel and aluminum blades. When electric motors (V230/1) are included they are fitted with a spring return on power failure.

# **Optional Accessories**



Elec digital thermostats



Actuators 0-10v and on/off



2-3 way Chilled water valves and bypass



Condensate Pump

# **Important notes**

Warning: the manufacturer and supplier are not responsible for the incorrect installation of hydraulic and electrical connections.

Please carefully read this manual before installing and operating the HW series fan coil unit. It is recommended this manual is kept readily available and referred to for additional information about the unit, operation and maintenance.

- The unit must be installed following the local standard, safety codes and guidelines. Please contact the seller, installer or a qualified specialists.
- Follow the instructions below or incorrect and improper use during installation can cause the loss of the warranty or parts guarantee.
- Maintenance must only be performed by qualified specialists.
- Unplug or disconnect the power supply before maintenance or accessing the internal parts of the unit.
- Do not install or use a damaged device.
- In case of malfunction, switch off the unit, unplug the power supply and return to the seller or qualified specialists.
- Dispose of the packaging material following the local environmental regulations.

#### Unit acceptance, handling and storage.

- At the time of the delivery, please verify the correspondence between the order and the delivery docket.
- Verify the packaging integrity and, if inconsistencies with the order, damage or discrepancies are found, they must be reported on the delivery docket and promptly signaled to the supplier and manufacturing company.
- The unit must be stored in spaces protected from bad weather with a temperature between -10°C and 55°C.
- The handling and installation of the unit must be performed with the highest attention to prevent any damage of fragile parts; these operations can be facilitated with the help of the following manual.



### Installation

#### Identification of the appliance

Every unit is identified with a label that is inside the unit on the electric control side. The label shows the manufacturer's data and the unit type

#### Receiving the appliance

Check every unit before accepting it. Be sure the packaging is not damaged or bended or broken. In case of a damaged package, open it immediately and check the contents before accepting it; check the chassis and the panels of the fan coil, the heat exchanging coil, the condensate drain pan, the filters, the proper fan rotation, all the eventual accessories. Do not refuse the shipping: please write all the damages on the shipping document and take pictures of the damages

#### **General indications**

An electric connection 230V single-phase and an hydraulic connection to the water chiller/boiler are necessary to allow proper working of the appliance. The unit have been designed for installation in rooms where people live, and for heating and/or cooling of such rooms; the unit must be used only for that purpose. Each unit is checked and tested in the factory, and is delivered to the customer only if properly working. All repair/maintenance operation must be carried out by qualified specialists. Failure to observe the rules contained in this manual, or any unauthorized modification / tamper of the appliance can cause dangerous situations and will immediately invalidate the warranty of the appliance. The manufacturer is not responsible in case of damages caused by:

- $\cdot$  Unauthorized changes or modifications to the appliance,
- · Improper installation or improper use.

#### Mandatory safety rules during installation

The fan coil must not be installed: outdoor, in a too humid environment, in explosive or corrosive environment, in a very dusty environment. A bipolar safety switch must be installed, to disconnect the appliance from the electric power supply; the switch must: be properly sized, be easily accessible and close to the appliance, have a minimum 3mm distance between its contacts. The appliance must be properly connected to an electric earth.

- $\cdot$  Do not place flammable / dusty goods close to the appliance.
- · Do not remove the labels from the inside of the appliance

# Mandatory safety rules during use, maintenance, repair

It is dangerous: to touch the fan coil with wet parts of the body and bare feet; to modify or tamper the settings of the safety devices; to spray water or flammable liquids/gas onto the fan coil; to introduce foreign objects or the hands through the air intake and discharge grills; to introduce foreign objects or the hands into the fans. Do not bend, pull, detach the electric wires out-coming the fan coil, even if it is disconnected from the power supply.

#### Before any maintenance / repair:

- Disconnect electrical power source and secure in disconnected position;
- Close the water valves;
- Wait until the water is at the.

Before any maintenance be sure that: the unit is disconnected from the electric power source; the water valves are closed; the water temperature is not dangerous (too hot or too cold).same temperature of the room wear safety gloves. In case of replacement of components, use only spare parts supplied by the manufacturer. If the fan coil is installed in very cold climates, and a long inoperative period is forecast, the hydraulic circuit must be completely emptied, in order to avoid risk of ice inside the tubes; ice will cause big damages. If a damper for external air is installed, the cold air can cause ice inside the tubes of the coil, and ice will break the tubes. If necessary, some glycol must be mixed with the water of the hydraulic circuit. The coils are tested up to 3000 kPa (30 bar). In case the air filter has to be cleaned or changed be sure it is fitted again in the appliance before restarting the unit.

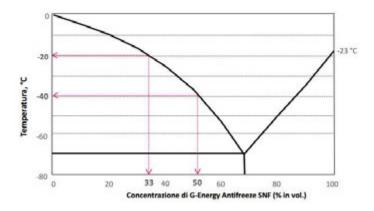
#### **Operating limits**

- Electric power supply: V230/1/50Hz or V400/3/50Hz ±6%
- Minimum temperature of the cooling water (without glycol): 5°C
- Maximum temperature of the heating fluid: 120°C
- Maximum allowed operating pressure: 24 bar Working pressure: 10 bar

#### **Ethylene glycol**

In case of installations where the temperature can drop below  $0^{\circ}$ C, it is necessary to add glycol to the water according the table. Ethylene glycol is used to protect the circuit from freezing, and to prevent the tubes to be broken. The following table gives the percentage of glycol to add in order to obtain a specific freezing temperature.

The mix of water and glycol has a specific mass and viscosity which varies depending on the temperature and concentration; consequently this affects the capacity of the fan coil. Glycol is generally used as an inhibitor of corrosion, so it is necessary to measure its concentration at least once a year



Glycol		Freezing	Specific r KG/DM3		Specific HEAT K		Increase
In weight	In volume	Temperature	50°C	100°C	50°C	100°C	0 > 100°C
0%	0%	0°C	0,9888	0,958	4,18	4,20 KJ/kgK	4,33 %
10%	9,6	-4°C	1,000	0,970	4,10	4,12	5,00
20%	19,4	-10°C	1,012	0,980	3,95	4,05	5,40
30%	27,4	-17°C	1,025	0,991	3,81	3,92	5,60
34%	33,4	-21°C	1,030	0,994	3,73	3,86	5,85
40%	39,6	-25°C	1,037	1,000	3,60	3,78	6,20
44%	43,7	-30°C	1,041	1,004	3,00	3,73	6,32
50%	49,5	-37°C	1,047	1,010	3,45	3,65	6,50
52% max	51,6	-40°C	1,050	1,012	3,42	3,62	6,51

#### Waste disposal

Packaging, consumables, replaced parts must be disposed according to the local safety laws and environmental protection laws.

Size	ско/скі	09	11	17	20	23	32
Motor absorption	Ain	0,78	0,84	1,61	1,62	2,35	2,62
Motor Power	Win	166	184	340	350	500	560
Minimum cable section	$mm^2$	1,5	1,5	1,5	1,5	1,5	1,5

Data shown in the following tables are valid only for the fan motor and do not include any accessory, i.e. valves or electric heaters.

- The cross sections of the wires that are shown in the following tables are: the minimum required to connect the fan coil to the electric supply, valid for wires maximum 10 m long, valid for a maximum current load 5 A/mm2, valid only for the fan motor and DO NOT include any accessory (valves, electric heaters, pumps, controls, etc.), valid only for copper wires.
- The voltage drop between operating and non-operating unit must remain below 3%; if the voltage drop is greater than 3%, a bigger wire is required.
- Minimum cross section of the wires 1.5 mm2.

#### Electric heathers V230/1/50-60Hz

Each power element	W (±5%)	700	1000	1200	1500	2000	2500	3000	4000	5000
Active length	L mm	350	350	550	750	750	950	1150	1350	1550
Current absorbed	А	3,1	4,5	5,5	6,6	9,0	11,0	13,0	18,0	21,7
Thermic charge	W/cm <sup>2</sup>	4,3	6,0	4,4	4,0	5,3	5,1	5,0	5,7	6,2

#### Mechanical installation

Choose an area that can allow a proper circulation of the air, both incoming to and out-coming from the fan coil. Do not place any curtain or any object that can obstruct the unit air outlet and return. Adequate clearances around the fan coil are necessary to allow easy access for maintenance and cleaning operations. The fan coil must be mounted level, to assure proper operation and drainage. Level the fan coil by adjusting the supporting feet or the hanging rods; level the unit by checking on the unit casing. Do not use the coil or drain pan for leveling, as they are pitched to provide proper drainage. Use shock absorbers supports, to avoid transmission of noise and vibrations through the walls. Put shock absorbers between the unit and the air ducts (both return and supply sides), to avoid transmission of noise and vibrations through the ducts. Don not install the fan coil where water dripping inside the appliance may happen. Before installation, be sure that electrical and hydraulic connections are on opposite sides of the appliance.



#### **Hydraulic connections**

Proper hydraulic connections and proper circulation of the water inside the circuit assure: good operation and long life of the appliance, limited energy consumption. The piping must be: properly sized (proper diameter); properly insulated, to avoid condensate dripping and heat dissipation. In general, the water inlet is in the lower part of the coil; the water outlet is in the upper part of the coil. When valves and/or stop valves are mounted, due to space constraints it may be necessary to put the water inlet in the upper side and the water outlet is in the lower side of the coil. Allowed materials for the condensate drain piping are: PVC or steel. In any case, after the piping has been connected to the unit, tape sealant must be used to prevent water leakages.

Before installing the fan coil, read carefully the warnings and the safety rules be sure the water inside the circuit is: filtered, free from scale or iron oxides, that can damage the heat exchanging coil and the valves if necessary, water must be treated with chemical agents, in order to prevent: creation of scale, corrosion, growth of algae, creation of sludge. To connect the heat exchanging coil to the water circuit: always use two spanners; be careful and avoid any damage to the copper tubes of the coil. Always fit two gate valves on the water circuit: one valve on the water inlet of the fan coil, and one valve on the water outlet. The motorized water valves require proper space to be removed and must not be mounted upside down. Condensate drain piping: create a drain trap; create a minimum slope 50 mm/m; do not create counter slopes; do not flatten or kink the pipe; check the connection. By pouring water into the drain pan . Check the circuit: give hydrostatic pressure, air vent the coil of the unit, be sure that no dripping occurs. Do not check the circuit just before a holiday: big troubles may occur if qualified control personnel is not on duty.

#### Drain pan discharge: general note

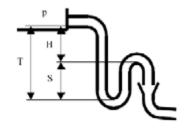
- It is indispensable to install a siphon on the drain line to prevent
  the fan sucking obnoxious odors or bacteria from the drain
  system, creating ideal condition inside the air handling unit for
  the proliferation of pathogenic germs and micro organisms, also
  favouring the diffusion of "Legionella Pneumophila" responsible
  for "Legionnairs' disease"
- A drain connection without a siphon, or with an incorrectly installed siphon, allows air to be sucked into the unit, the condensate cannot drain and is carried over into the next section of the unit and the condensate will spill out of the unit, flooding the surrounding area, when the fan is shut down.
- The siphon must not be hermetically connected to the drain line to permit air locks to be broken.
- A siphon in positive pressure must never be connected to another in negative pressure
- The drain line downstream of the siphon must have sufficient slope to carry away the condensate and its' diameter should be at least the same as the unit drain connection
- The drain piping can be in various materials: steel, copper, PVC.
- If the drain line is improperly supported it may deform, create air locks and prevent proper drainage of the condensate.
- It is good practice to insulate the siphon and drain line to prevent the formation of condensate on the outside of the piping. In winter antifreeze should be added to the water in the siphon.
- Beware of evaporation of the water in the siphon during shut down periods. The maintenance personnel should ensure that the siphons are always full.
- The siphon should be equipped with an inspection plug in an easily accessed position.
- The condensate drain pan should be cleaned periodically to avoid stagnant condensate, formation of algae, and encrustations.

#### **Drain in positive pressure**

T = 2 p S = T /2 H = T - S Example P = 400Pa = 40 mmwc T = 80 mm - S = 40 mm - H = 40 mm

#### **Drain in negative pressure**

T = - 2 p S= T /2 H = T - S Example P =- 250Pa=- 25 mmwc T = 50 mm - S=25mm - H=25 mm



# **Electrical connections general rules**

Before installing the fan coil, read carefully the warnings and the safety rules. Electrical connections must be made only by qualified personnel, and must accomplish the local electrical and safety codes and ordinances. A bipolar safety switch must be installed, to disconnect the appliance from the electric power supply; the switch must: be properly sized, be easily accessible and close to the appliance have a minimum 3mm distance between its contacts. All electrical connections are to be made in accordance with local electrical and safety codes. The fan coil must be properly earthed; make earth connection prior to any other electrical connection. For wiring and installation, refer to the wiring diagram of the fan coil, that are fitted on each unit and shown in this manual. Accessories that are not described in this manual require separate power supply; all power supplies must be properly protected with switches and fuses.

Be sure the voltage is inside the allowed limits: see "Operating Limits" and "Technical Characteristics". Be sure the electrical circuit upstream the appliance is properly sized to carry the current that is necessary to operate the fan coil (see "Technical Characteristics") and all the other devices already installed or forecast. Minimum cross section of the wires 1.5 mm². Wires to the auxiliary circuits (switches, controls, interlocks, etc.) must have 1.5 mm² minimum cross section. Choice proper cross section of the wires: current must be limited to 5 A/mm²; voltage drop between not-operating and operating unit must be limited to 3%.

#### **Motor wiring**

The fan coil has a terminal block that is mounted on the internal side panel on the opposite side to the hydraulic connections. The terminal block is ready to be connected to the fan speed selector switch or to the thermostats. Both the fan speed selector switch and the thermostats are supplied as accessories, and their connection to the unit is shown in the installation instructions supplied with them. After the wires have been inserted in the terminal block, tighten the screws on each terminal, to assure a good electric contact. Failure to accomplish this requirement may

#### Start-up

Installation or after each maintenance, make the following checks before starting the unit

Water pressure inside operating limits
Adequate cross section of electrical wires
Electrical connections completed and tightened
Power supply voltage inside the operating limits
Duct connections completed (ducted units only)
Filter is free of construction debris
Air return flow is free of obstacles and obstructions
Air delivery flow is free of obstacles and obstructions
Fan rotates freely
Condensate drain pan free of construction debris
Drain lines clean and operating
Drain lines with proper slope, without counter slope and restrictions
Condensate drain water evacuates properly
Adequate cross section of water nines

Piping connections completed

Air vent completed



#### **Filter**

The function of the air filter is to remove foreign matter such as dirt, soot, pollen, and other impurities from the air passing through it. Said impurities may enter into the fan coil and damage it. The filter should be replaced once a year; the filter should be replaced more frequently if the fan coil is used in a very dirty or dusty environment.

Between one replacement and the next one, the filter has to be kept clean. A dirty filter does not filter the air passing through it, and: impairs the operating efficiency of the unit by restricting the air flow over the coil; encourages the growth of bacteria that may be dangerous to the health. To clean the filter, please operate as follows: remove the filter from its operating position, clean the filter using a vacuum cleaner, if the filter is too dirty and it's impossible to clean it, the filter must be replaced with a new one. AFTER CLEANING THE FILTER, PLACE THE FILTER BACK IN ITS OPERATING POSITION

#### Condensate drain pan

The condensate drain pan must be checked before the beginning of the cooling season. The condensate drain pan and the discharge hole may clog with scale; remove scale with proper chemical products. The condensate drain pan may collect dirt that falls from that coil and, in case of vertical installation, may contain foreign materials that fall into the fan coil passing through the air delivery grill. Dirt and scale that are cumulated in that drain pan may impair the evacuation of condensate water, so causing water coming out from the unit. To clean the condensate drain pan, operate as follows: remove the drain pan from its operating position, clean the drain pan with fresh water, wipe the drain pan carefully, place the drain pan back in its operating position.

#### Heat exchanging coil

If the air filter is properly cleaned, the coil does not need any maintenance. Use a vacuum cleaner in case that coil need to be cleaned. If the coil is very dirty, brush between fins with a stiff nylon brush. BE VERY CAREFUL, TO AVOID ANY DAMAGE TO THE FINS OF THE COIL IF THE COIL REMAINS DIRTY, OR MAKES A BAD SMELL, ASK A SPECIALIZED TECHNICIAN FOR PROPER CLEANING AND MAINTENANCE

#### Fan and fan motor

Maintenance of the fan and the fan motor must be carried out only by specially trained people. No attempt should be made to lubricate these permanently lubricated motors: the motor may be clogged by sludge. At least once a year the following operations must be carried out: remove dust and dirt from the inside of the scroll; be sure the fan is properly fixed to the motor and is well balanced. The fan motors do not require any maintenance, as they are permanently lubricated.

#### **Electrical connections**

At least one a year, be sure the screws of the terminals are well tightened.

The motor does not rotate at all, or does not rotate properly

- No electrical power coming to the fan coil.
- Electrical connections are wrong, are not according to the wiring diagrams.
- The fan speed selector switch (if installed) is in a wrong position.
- The seasonal changeover switch (if installed) is in a wrong position.
- The setting of the thermostat (if installed) is wrong.

#### THE FAN COIL DOES NOT COOL / HEAT PROPERLY

- No water coming to the fan coil.
- The filter is dirty / clogged.
- The heat exchanging coil is dirty / clogged.
- There is some air into the water circuit.
- The fan dos not rotate at all, or does not rotate properly

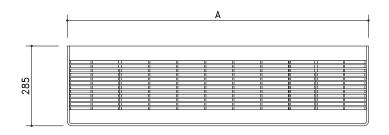
#### WATER COMES OUT FROM THE UNIT

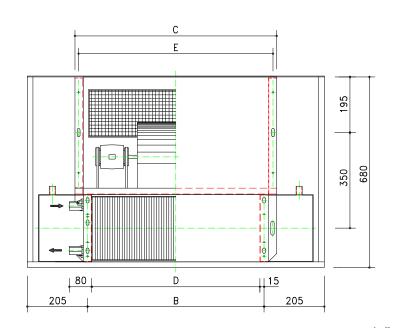
- The heat exchanging coil is broken.
- There are some leakages from the hydraulic connections
- The condensate drain pan is dirty, or the discharge hole is clogged.
- The condensate piping has a wrong slope, or the slope is not enough.
- The condensate piping is clogged.

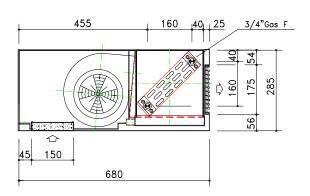


#### **Dimensional drawings**

# **Under ceiling unit**



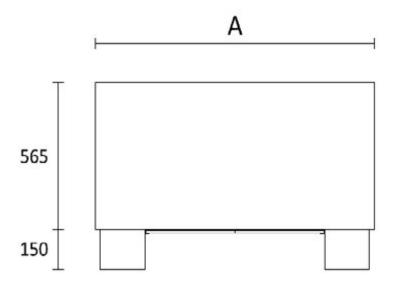


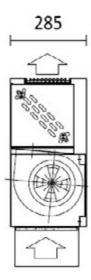


ско	СМ	A	В	С	D	E
09	09	840	430	520	400	500
11	11	1040	630	720	600	700
17	17	1240	830	920	800	900
20	20	1440	1030	1120	1000	1100
23	23	1640	1230	1320	1200	1300
32	32	2040	1630	1720	1600	1700

Apparecchio: Ventilconvettori s	Versione 2016							
Particolare: <u>Dimensioni di in</u>	Particolare: Dimensioni di ingombro							
A D	Dis. PGM	Scala:						
	Verif.	Sostituisce il N.	Disegno   T   B   7   0   8   6					
euroclima	Approv.	Sostituito dal N.	Indice					
	Data: 01.04.2016	Finitura:	Indice					
PROPRIETA' RISERVATA: A termine di legge ci riserviamo l'esclusiva proprieta' di questo disegno, con divieto di copiarlo, riprodurlo o mostrarlo a terzi senza nostra autorizzazione scritta.								

# Floor mounted unit





СКІ	A	Kg
09	840	34
11	1040	38.5
17	1240	46
20	1440	52
23	1640	67
32	2040	80.5

Apparecchie: Ventilconvettori serie CKI Versione 2016 Particolare: Dimensioni di ingombro						
A 1	Dis. PGM	Scala:	Disegno T B 7 0 8 6			
	Verif.	Sostituisce il N.	Disegno     B   /   U   8   6			
euroclima	Approv.	Sostituito dal N.	Indice			
	Data: 01.04.2016	Finitura:	Indice			
PROPRIETA' RISERVATA: A termine di legge ci riserviamo l'esclusiva proprieta' di questo disegno, con divieto di copiario, riprodurio o mostrario a terzi senza nostra autorizzazione scritta.						

## **Connections**

Comun | Blue

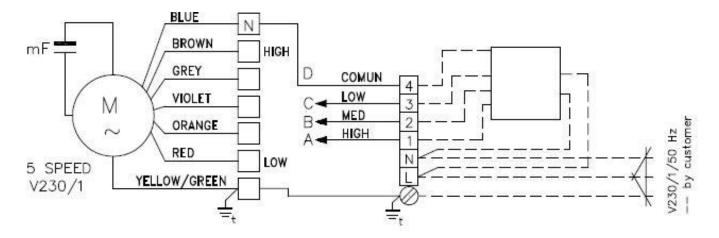
D

# Terminal Description C Low | Red B Medium | Brown A High | Black

FCU terminal black Bornier V.C.

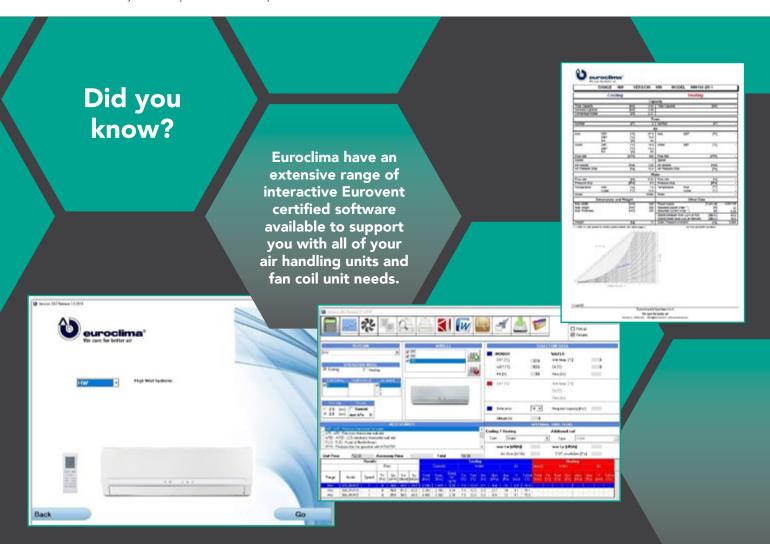
Morsettiera Fan

3 Speed switch



#### Do not connect in parallel different motors

Technical data shown in this booklet are not binding. Manufacturer shall have the right to introduce at any time whatever modifications deemed necessary to the improvement of the product. 01.01.2017







For more information on our latest projects, visit www.oceania-group.com

PO Box 429 Cannon Hill QLD 4170

info@oceania-group.com

www.oceania-group.com

Click to follow our socials



