

*Installation and maintenance manual
Manuel d'installation et de maintenance
Installations- und Wartungshandbuch
Manuale di installazione e di manutenzione
Manual de instalación y de mantenimiento*

K 9 OG

K 12 OG

K 18 OG



English

Français

Deutsch

Italiano

Español

**CHILLED OR HOT WATER CASSETTE
CASSETTE EAU GLACEE OU EAU CHAUDE
KALTWASSER ODER GEHEIZTESWASSER -KASSETTE
CASSSETTA ACQUA GHIACCIATA O RISCALDATA
CASETE AGUA HELADA O CALENTADA**

IOM KOG 01-N-3ALL

Part number / Code / Teil Nummer / Codice / Código : **3990393**
Supersedes / Annule et remplace / Annuliert und ersetzt /
Annulla e sostituisce / Anula y sustituye : **IOM KOG 01-N-2ALL**



INSTALLATION INSTRUCTION

NOTICE D'INSTALLATION

INSTALLATIONSHANDBUCH

ISTRUZIONI INSTALLAZIONE

INSTRUCCIONES DE INSTALACIÓN

English

Français

Deutsch

Italiano

Español

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1

SAFETY PRECAUTIONS



**ELECTRICAL POWER MUST BE SWITCHED OFF BEFORE
STARTING ANY WORK ON CONTROL BOXES**

The aim of this manual is to provide cassette users with instructions for installation, commissioning, operation and maintenance.

It does not contain the complete description of all the maintenance operations guaranteeing the unit's long life and reliability. Only the services of a qualified technician can guarantee the unit's safe operation over a long service life.

WARNING !

The installation, commissioning and maintenance of these units should be performed by qualified personnel having a good knowledge of standards and local regulations, as well as experience of this type of equipment.

Take care !

The unit should be handled using lifting and handling equipment appropriate to the unit's size and weight.

WARNING !

Any wiring produced on site must comply with local electrical regulations.

Take care !

It is forbidden to start any work on the electrical components without switching off the electrical supply to the unit.

WARNING !

Ensure that the electrical supply corresponds to the specification indicated on the unit's maker's plate before proceeding with the connection in accordance with the wiring diagram supplied.

Take care !

A device to disconnect all the power conductors with an approved minimum opening distance must be included in the mains power supply according to best installation practices.

WARNING !

The unit must be EARTHED to avoid any risks caused by insulation defects.

Take care !

It is forbidden to start any work on the electrical components if water or high humidity is present on the installation site.

WARNING !

No wiring must come in contact with the heat source or the fan rotating parts.

Take care !

When the unit is being connected, ensure that no impurities are introduced into the pipe work and the water circuits.

**THE MANUFACTURER'S WARRANTY WILL NOT APPLY IF THE INSTALLATION
RECOMMENDATIONS LISTED IN THIS MANUAL ARE NOT FOLLOWED.**

NOTE: PLEASE REFER TO THE TECHNICAL MANUAL FOR THE LIMITATIONS OF USE AND TECHNICAL CHARACTERISTICS.

CHILLED WATER CASSETTE

2

DESCRIPTION

2.1 PACKAGE CONTENTS

1	Cassette	1	Documentation bag
2	Angle attachment fittings	1	Fascia assembly
1	Fastener bag: Angle brackets + screws		
	Rubber shock absorbing pads		
	Treated air distribution frame screws		
	Fascia clips		

2.2 2 PIPES CASSETTE DIMENSIONS

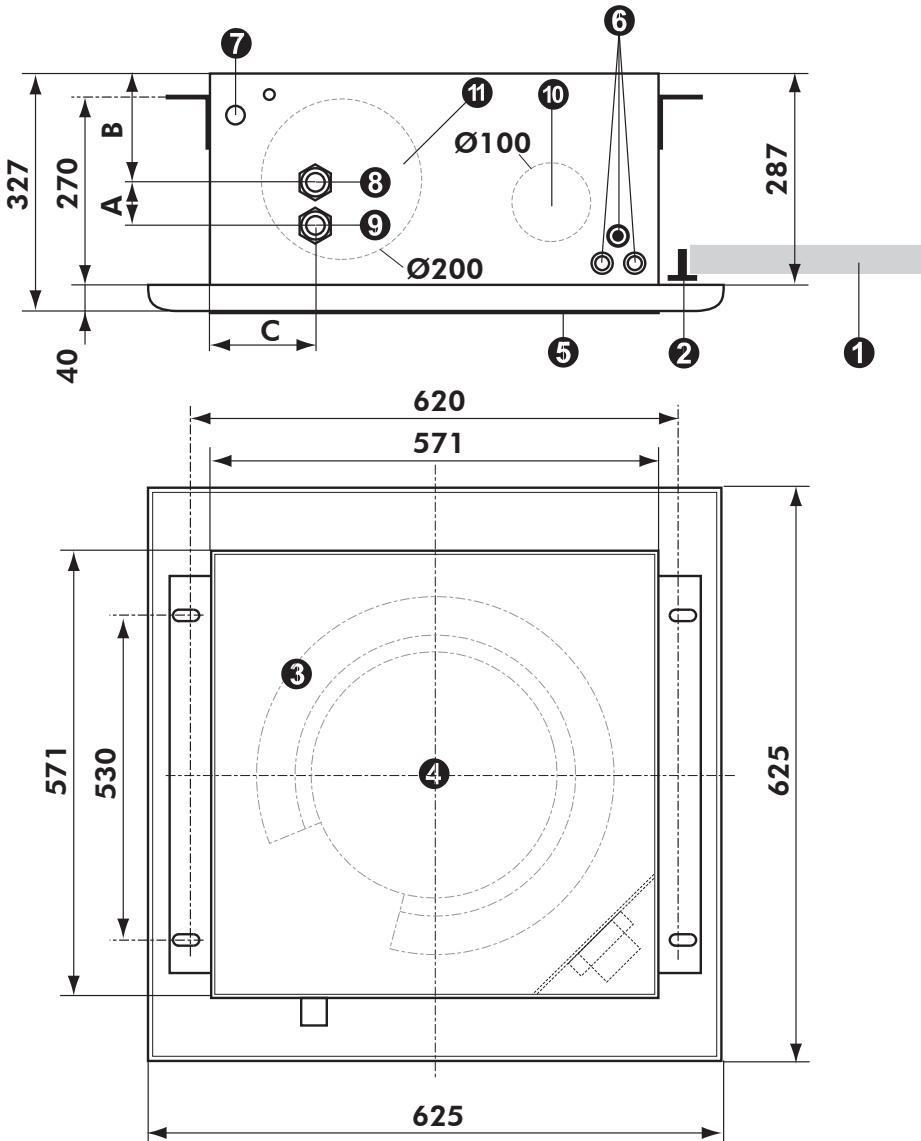
- 1 Suspended ceiling
- 2 T bar (suspended ceiling)
- 3 Evaporator
- 4 Fan
- 5 Intake grille
- 6 Electrical connection
- 7 Condensate evacuation $\varnothing 15$
- 8 Water outlet
Mod 9 - 12: **G1/2"**
Mod 18: **G3/4"**
- 9 Water intake
Mod 9 - 12: **G1/2"**
Mod 18: **G3/4"**
- 10 Port for fresh air suction (ready to punch out)
- 11 Opening for ducted air distribution into the adjacent room (ready to punch out)

	9	12	18
A	39	39	50
B	119	119	130
C	126.5	126.5	106.5

Dimensions in mm

2.3 WEIGHTS

MODELS	9	12	18
WEIGHTS (kg)	26	28	29



2

DESCRIPTION CONTINUED

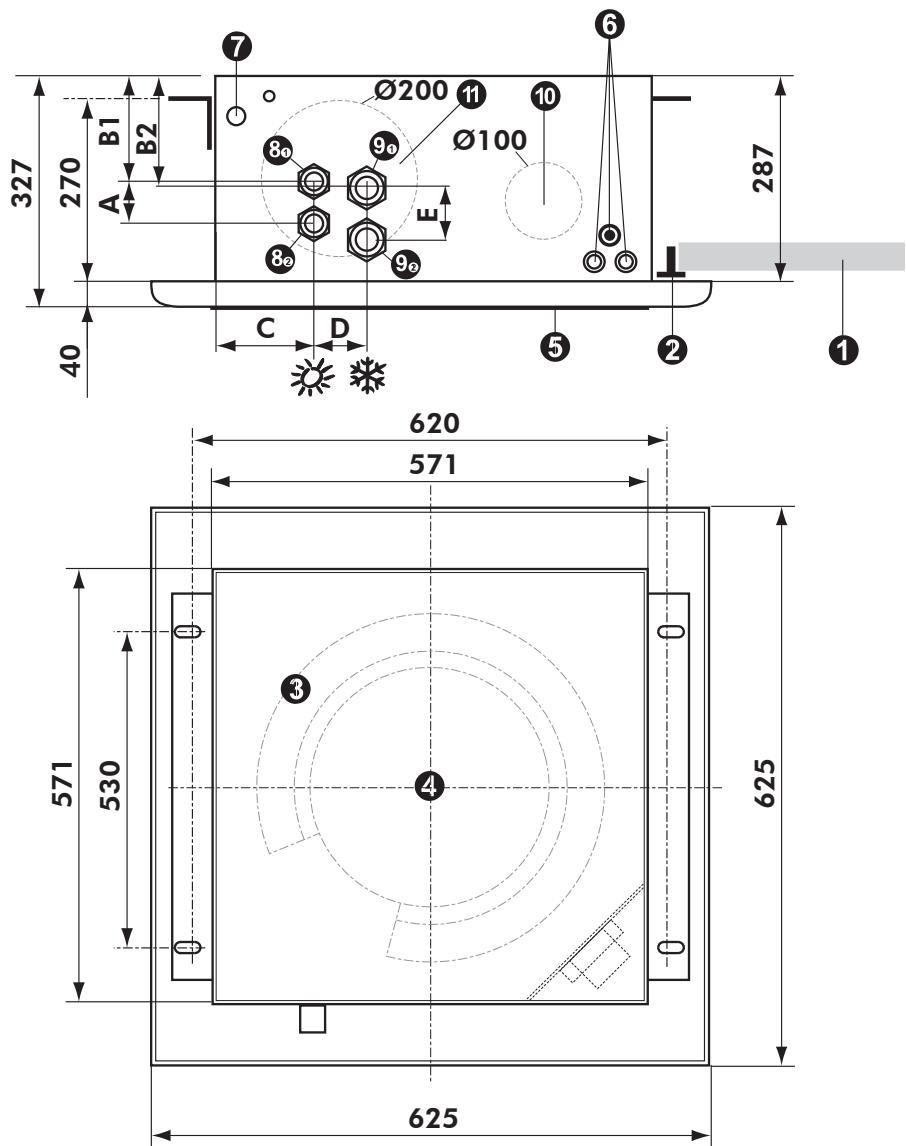
2.4 4 PIPES CASSETTE DIMENSIONS

- 1 Suspended ceiling
- 2 T bar (suspended ceiling)
- 3 Evaporator
- 4 Fan
- 5 Intake grille
- 6 Electrical connection
- 7 Condensate evacuation **Ø 15**
- 8 Hot water outlet
Mod 9 - 12 - 18: **G1/2"**
- 82 Hot water intake
Mod 9 - 12 - 18: **G1/2"**
- 91 Cold water outlet
Mod 9 - 12: **G1/2"**
Mod 18: **G3/4"**
- 92 Cold water intake
Mod 9 - 12: **G1/2"**
Mod 18: **G3/4"**
- 10 Port for fresh air suction (ready to punch out)
- 11 Opening for ducted air distribution into the adjacent room (ready to punch out)

	9	12	18
A	39	39	39
B1	119	119	130
B2	119	119	132
C	76.5	76.5	85.5
D	50	50	50
E	39	39	50

2.5 WEIGHTS

MODELS	9	12	18
WEIGHTS (kg)	27	28	29



Dimensions in mm

3.1 ELECTRICAL SPECIFICATION

Models	9 2P		12 2P		18 2P	
	with heating	without heating	with heating	without heating	with heating	without heating
Nominal current	A	7.5	0.3	10.2	0.36	12.3
Maximal current	A	9	0.36	11.4	0.51	13.7
Fuse rating aM **	A	10	1	12	1	16
Fuse rating ASE / VDE	A	10	1	16	2	16
Power supply		~ 230V-50 Hz	~ 230V-50 Hz	~ 230V-50 Hz	~ 230V-50 Hz	~ 230V-50 Hz
Cable section mini*	mm ²	3G1	3G1	3G1.5	3G1	3G1.5
Electric heating capacity	W	1650		2250		2600

Models	9 4P	12 4P	18 4P
Nominal current	A	0.3	0.36
Maximal current	A	0.36	0.51
Fuse rating aM **	A	1	1
Fuse rating ASE / VDE	A	2	2
Power supply		~ 230V-50 Hz	~ 230V-50 Hz
Cable section mini*	mm ²	3G1	3G1

* Minimum cable diameter to be determined in accordance with installation conditions and local standards.

** or C curve trip switch

 1 thermostat for each cassette or installation with the 7ACEL1207 kit for a MAXIMUM of 4 Cassettes.

3.2 INSPECTION AND HANDLING

In the event of shipping damage, write precise details of the damage on the shipper's delivery note and send a registered letter with acknowledgement of receipt to the shipper within 48 hours, clearly stating the damage caused. Forward a copy of the letter to the manufacturer or their representative.

N.B. Writing "subject to unpacking" on the delivery note is not sufficient for the shipper's insurance company.

It is recommended to place the cassette as near as possible to the final installation site before unpacking.

Avoid placing heavy tools or weights on top of the packed cassette.

On opening the carton, check that all the accessories required for installation are present.

Keep the fascia grille in its packaging until it is to be finally installed.

WARNING !

The sharp edges and surfaces of the coils can cause injury. Avoid contact with them.

DO NOT LIFT THE CASSETTE BY THE CONDENSATE EVACUATION TUBE

4**INSTALLATION****4.1 INSTALLATION LOCATION**

Do not install the cassette in a room where gasses, acids or inflammable products are stored, in order to avoid damage to the aluminium and copper evaporators and the internal plastic parts.

Do not install the cassette in a workshop or a kitchen. Oil vapour attracted by the treated air could form deposits on the cassette evaporators and modify their performance or damage the cassette's internal plastic parts.

Do not install the cassette in a laundry, or a room where steam is produced.

The cassette is designed to be built into a suspended ceiling with panels dimensions of 60 x 60 cm, or multiples thereof.

Installing the cassette will be easier with the use of a fork lift truck. Use the packing base by placing it between the cassette and the truck forks.

It is recommended to install the cassette, as far as is possible, in the centre of the room, in order to optimise treated air distribution.

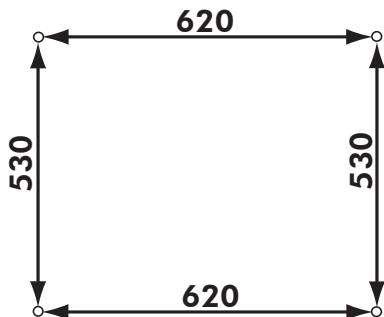
For the chosen location, check that the distribution grilles can be removed and that there is sufficient space available for access for maintenance and repairs.

Take care !

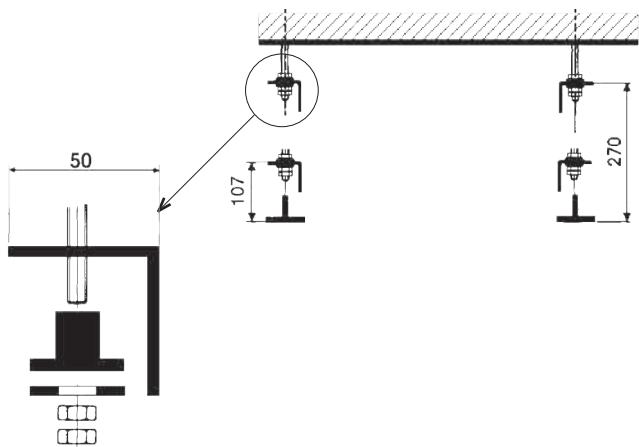
The cassettes must not be positioned above electrical equipment in order to avoid exposure to water leaks which may occur under extreme conditions.

4.2 CEILING MOUNTING

Mark the position of each support rod.

Refer to Chapter 2 "Dimensions"

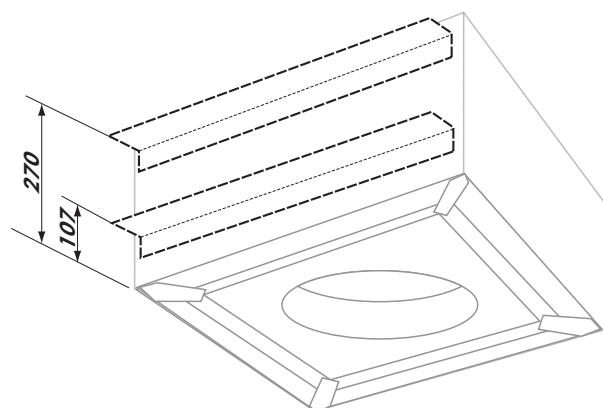
Fit the angle attachment fittings supplied with the cassette onto the threaded rods (not supplied). Recommended Ø 6 mm maximum Ø 8 mm. Take care to distance them from the suspended ceiling by 270 mm or 107 mm.



When fitting the angle attachment fittings in the low position, remove the insulating foam from around the mounting nuts.

The possibility of fitting the angle attachment fittings at different heights, leaves the installer the choice of mounting them on the cassette in the high or low position. Mounting them in the low position provides for more flexible installation.

Do not tighten the nuts or lock nuts. This will be done only after having set the cassette in its final horizontal position, when all the connections have been completed.



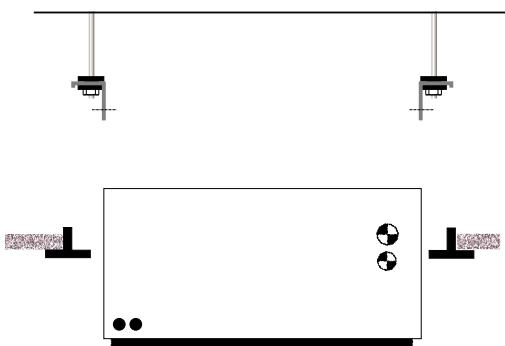
WARNING !

If it is intended to install ducting to an adjacent room, refer to § 4.4 for removal of the pre-punched panel before installing the cassette.

4.3 CASSETTE FITTING

Place the cassette into its final position.

Fix the screws to fix the corner irons



Position the cassette on the suspended ceiling support rods, and start by tightening the side mounting bolts, then the threaded rods nuts and lock nuts, after having set the cassette level, maintaining a gap of around 10 mm between the metal chassis and the suspended ceiling.

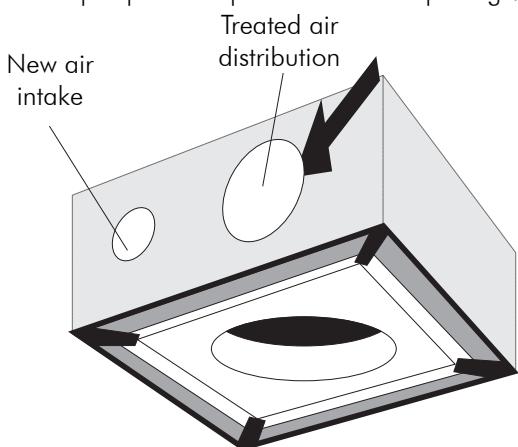


In the event that the suspended ceiling is 300 mm from the ceiling (minimum permitted height), it might be necessary to temporarily remove some of the suspended ceiling T supports.

4.4 CASSETTE INSTALLATION

Side openings are provided for installing separate ducts for outside air intake and treated air distribution to an adjacent room.

Use a punch to remove the condensation protection insulation and the pre-punched panels from the openings.



TAKE CARE not to damage the heat exchanger coil located behind the openings.

Plug the gaps between the ducts and the opening edge with anti-condensation insulation.

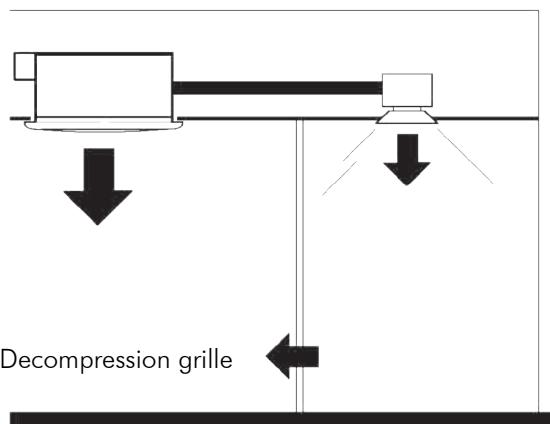
Use material which can withstand a continuous operating temperature of 60° C. The ducts can be of the flexible type with a spring core or of corrugated aluminium, covered inside with an insulating material (12 to 25 mm thick glass fibre).

When the installation is finished, all the surfaces of the non-insulated ducts must be covered with anti-condensation insulation material (6 mm thick expanded polystyrene or expanded neoprene). Fireproofing classification: M1)

IF THE ABOVE INSTRUCTIONS ARE NOT FOLLOWED, CONDENSATE LEAKS MAY OCCUR.

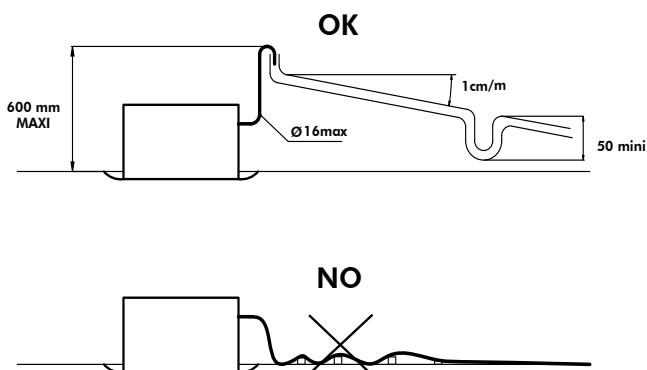
Distributing air to an adjacent room requires one or two of the corresponding ducts' air distribution flaps to be closed.

A decompression grille must be fitted in the partition between the air conditioned room (where the cassette is installed) and the adjacent room.



5**CONNECTIONS****5.1 CONDENSATE EVACUATION**

To ensure effective condensate evacuation, the downward slope must be 1 cm per metre without any restricted or ascending section.



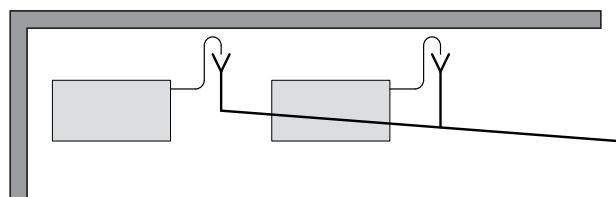
The condensate extraction height is limited to a maximum of 0.60 metre.

For heights above 0.60 m, an auxiliary condensate pump with a level regulator should be installed.

Furthermore, a siphon with a height of at least 50 mm must be provided to avoid any unpleasant odours in the room.

The condensate evacuation pipe must be heat insulated to a thickness of 5 to 10 mm with insulating material such as polyurethane, propylene or neoprene (Fireproofing classification: M1) to prevent condensation.

If several cassettes are installed in the room, the evacuation system can be designed as illustrated below.

**WARNING !**

THE CASSETTE MUST ALWAYS REMAIN CONNECTED TO ELECTRICAL SUPPLY TO ALLOW THE DRAINAGE OF WATER CONDENSATS.

5.2 HYDRAULIC CONNECTIONS

The connection must not be over tightened.

WARNING !

For the system to operate in complete safety, regulating valves must be fitted, if they are not already fitted at the factory.

The regulation valves are installed inside the cassettes. A lock spanner must be used for tightening the pipe work.



For connecting the coils the use of stop cock valves with flexible pipes is recommended.

It is imperative to envisage a support of these pipings independently of the cassette.

The hot water coil air purge must be done through the water outlet connection (8₁).

It should be noted that over tightening the connections can cause excessive material constraints during high temperature operation.

WARNING !

The first time the cassettes are filled with water to check the tightness of the circuits, they can be filled on a temporary basis, without power being connected to the unit. If, on the other hand, continuous water circulation is planned, the units must be connected to the power supply to ensure condensate drainage by the draining pump and to avoid the condensate tray overflowing.

6.1 ELECTRICAL CONNECTION

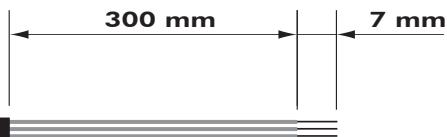
Take care !

Before starting any electrical connection, check that the electrical supply corresponds to the specification indicated on the unit's maker's plate. Each cassette is equipped with a terminal block located inside the cassette cabinet.

Connection to the electrical network must comply with current electrical standards.

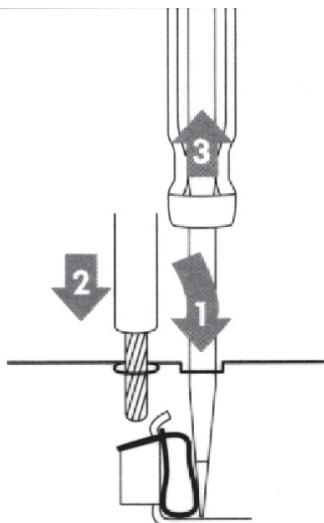
The unit must be earthed.

Rigid 3 x 1 or 1.5 power supply cable preparation



All the connections are made to screwless terminals. To thread in the conductor wires, use a 3.5 x 0.5 mm screwdriver blade as illustrated below.

The conductor wires should be stripped bare by 7 mm.



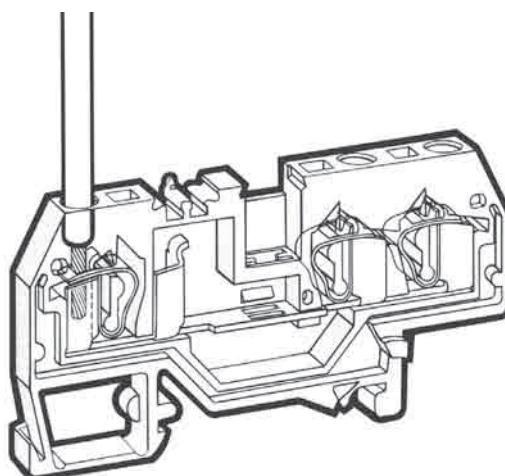
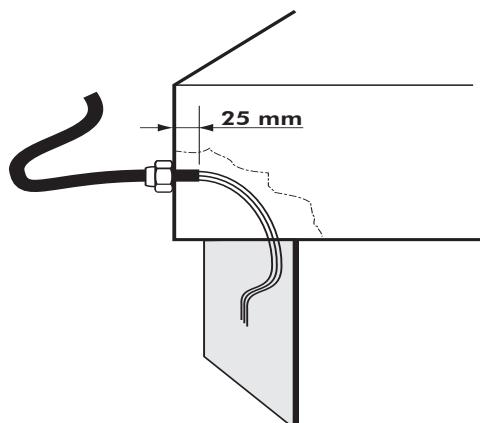
The manufacturer and their representatives decline all responsibility for any accidents caused by inadequate or non-existent earthing of the installation.

All the cassettes are intended to operate on a normal voltage of 230 V ± 10% / Single phase / 50 Hz + Earth.

The wiring diagram affixed to the unit illustrates the connections to be made.

Prepare and put in place the conductor wires ensuring provision for movement of the electrical box, without straining the existing wiring.

Proceed in the same way for the connection to the wall mounted controls.



6**ELECTRICAL CONNECTION**

CONTINUED

6.2 CHANGE OVER SENSOR CONNECTION (MODELS 2T)

Depending on the season, the cassette units are either supplied with hot water in winter or with chilled water in summer and during the mid season periods. **A 3-way valve must be installed on the water circuit supplying the unit.**

Summer and mid-season: The **3 way valve** is controlled by the thermostat to obtain cooling.

Winter: The **3 way valve** is controlled by the thermostat to obtain heating.

THERMOSTAT INSTALLATION**WARNING:**

The thermostat is already wired up at the factory.

1. Shut off the unit's electrical power supply.
2. Fit the thermostat on the water inlet pipe.
3. Cover the connection with a protective sheath.

WATER TEMPERATURE PROBE INSTALLATION

The SW probe supplied in the unit is to be located on the water inlet pipe.

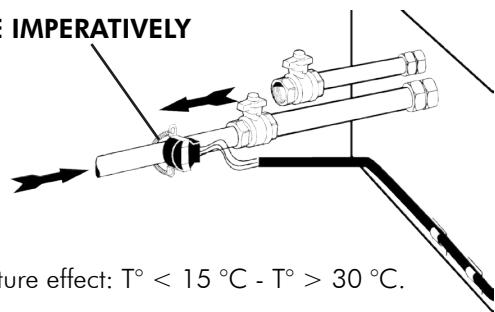
WARNING:

The SW probe is already wired at the factory.

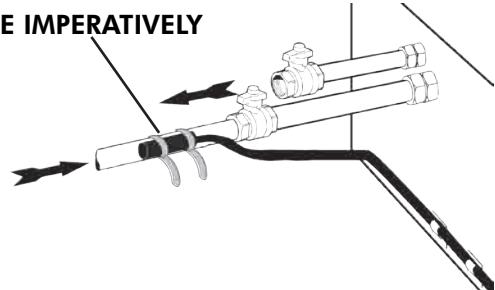
1. Cut the power supply to the unit.
2. Fit the probe onto the water inlet pipe.
3. Cover the connection with a protective sheath.

CHANGE OVER SENSOR

The change over sensor supplied in the unit is to be located on the water inlet pipe. It enables the thermostat action to be reversed in relation to water temperature.

INSULATE IMPERATIVELY

Temperature effect: $T^\circ < 15^\circ\text{C}$ - $T^\circ > 30^\circ\text{C}$.

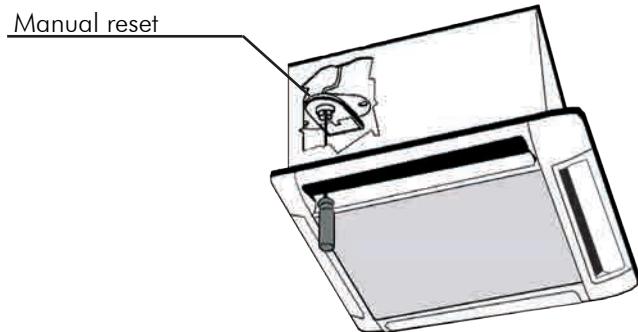
INSULATE IMPERATIVELY

6.3 ELECTRIC HEATING

The electric heating system is equipped with 2 SAFETY DEVICES. One is reset automatically, the other is manually reset. They cut off electrical supply to the heating resistances as soon as an operating anomaly is detected.

Take care !

The electrical coil must never operate without the fan turning.



6.4 FAULT WARNING REPEATER

When the upper water level is reached (SB2 detector), the pump electronic logic control shuts down ventilation, heating and the cooling valve with one of its wires connected to terminal 2.

A default relay (KD) or a warning light (I max 4A / 250 V) can be connected to terminal 6 (230 V NEUTRAL potential).

Provide electrical supply to the system on the same phase and coming from the same circuit protection device as the cassette.

6.6 WIRING DIAGRAM

SEE APPENDIX

6.5 VENTILATION SPEEDS

The cassettes are supplied with 3 fan speeds, wired according to the model. Depending on the application, it is possible to select from the 6 speeds, by connecting the motor wires on standby.

Take care !

The disconnected, unused wire must be isolated in accordance with best electrical wiring practices.

Take care !

This wiring diagram is correct at the time of publication. Manufacturing changes can lead to modifications. Always refer to the diagram supplied with the product.

7

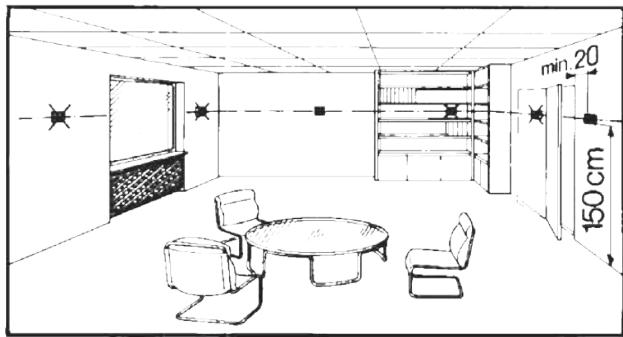
ELECTRICITY

7.1 THERMOSTAT LOCATION

The unit must be installed and fitted in accordance with current safety standards by a qualified technician.

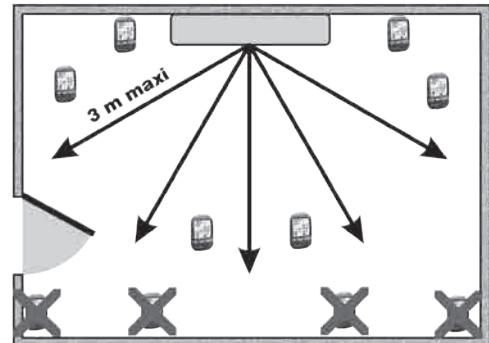
Fitting height: about 1.50 m above floor level.

Take care not to locate the thermostat in draughts created by doors and windows.



Also ensure that the thermostat is located in the room's normal thermal currents and that it is not located in shelving or covered by curtains.

Any source of parasitic heat negatively influences temperature regulation accuracy. Therefore, avoid the sun's rays or proximity to portable heating devices, electric lights, chimneys, televisions, etc...

**7.2 CONTROL****INFRA RED VERSION - INFRA RED REMOTE CONTROL****USE**

Three modes available:

- Cooling
- Heating
- Auto

For each of these modes, fan ventilation can be configured in LS, MS, HS and Auto Ventilation modes.

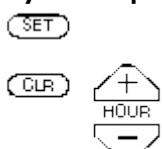




RESET FUNCTION:

1. Remove one battery
2. Simultaneously press these 4 keys until the symbols are no longer displayed
3. Reinstall the battery

The four keys to be pressed are:



NOTE :

Open the cover / flap to access the control keys.

- 1 ON / OFF key
- 2 Operating mode selection key for
COOLING
HEATING
AUTOMATIC COOLING / HEATING
REGULATION, FAN ONLY
- 3 I FEEL key: local detection of temperature
- 4 VENTILATION SPEED or AUTOMATIC
VENTILATION selection key
- 5 Set point increase key
- 6 Set point decrease key
- 7 SLEEP key (unoccupied mode)
- 8 "+" key: increases the operating time
- 9 "-" key: decreases the operating time
- 10 Liquid crystal diode display (BACK LIGHT
OPTIONAL)
- 11 I FEEL sensor
- 12 Infrared signal transmitter
- 13 ROOM key: display of the ambient temperature
- 14 LOCK key
- 15 SET key: Press for 5 seconds to set the time

The other buttons of the remote control are not active in this version.

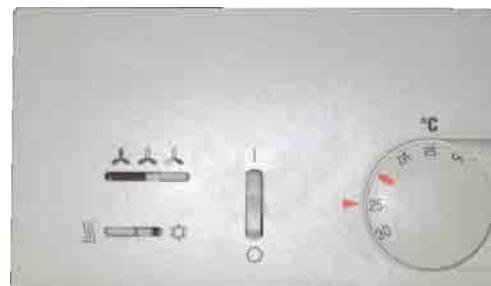
"Timer" function is available only in option with
remote control µBMS/RCW2

ROOM THERMOSTAT TRM-VP AND TRM-FA**USE**

The room thermostat of the air conditioner regulates the room temperature. It is designed for closed, dry rooms such as flats, offices, etc.

Maximum acceptable relative humidity of the air : 95%. This value should not be exceeded.

Avoid condensation.

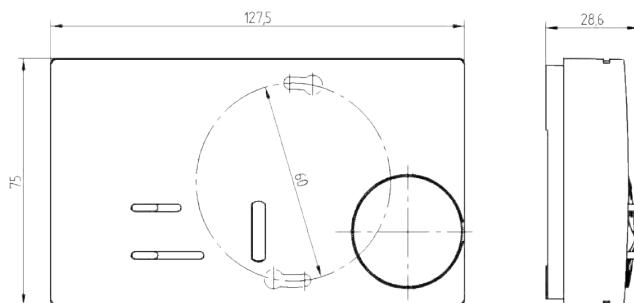
**SWITCHES**

Linear switch



Switch 0 - I

- ON "I"
- OFF "0"

DIMENSIONS**WALL MOUNTING**

- Remove the thermostat control knob, the screw and the cover.
- On a flat surface, mount the control panel using plugs and screws.
- Install the cover, the screw and the thermostat control knob.

Linear switch

- COOLING
- HEATING

ELECTRICAL CONNECTIONS

Connection of the thermostat **TRM-VP** and **TRM-FA**.

Connections should be made according to the diagram (SEE APPENDIX).

Max. cross-sectional area of wires : 2,5 mm²

TECHNICAL CHARACTERISTICS

Operating voltage	230 V 50
Contact configuration	SPDT
Temperature range	5 to 30°C
Switching current at 230V AC	6A ($\cos \varphi=1$) / 3A ($\cos \varphi=0.6$)
Switching differential	approx. 0,5 K
Sensor system	bimetal
Switches	ON / OFF
	mode of operation
	fan speed

FINAL OPERATIONS

ADJUSTMENT OF THE TEMPERATURE RANGE

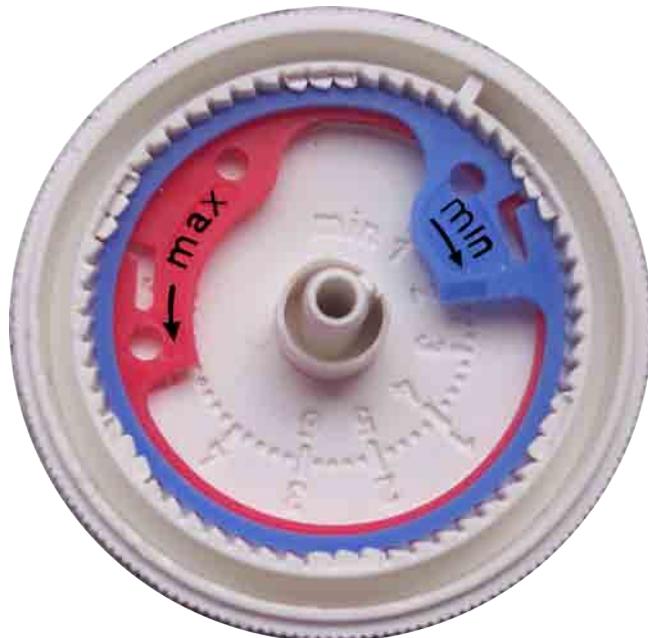
The room thermostat is set in the factory for a minimum temperature of +5°C and a max. temperature of +30°C.

Two rings are provided inside the knob for reducing the temperature range.

➤ Example: 12°C to 25°C.

ADJUSTMENT PROCEDURE

1. Setting the temperature range e.g. max. 25°C, min. 12°C.
2. Remove the control knob.
3. Use a pointed object to align the mark on the red ring (max. value) with the desired maximum temperature (25°C), turning the red index opposite the outside numbers counterclockwise.
4. Use a pointed object to align the mark on the blue ring (min. value) with the desired minimum temperature (12°C), turning the blue index opposite the inside numbers clockwise.
5. Install the control knob.



The temperature ranges can be graduated in:

- degrees Celsius °C
from 5°C to 30°C
- number 1 to 6
1=5°C
2=10°C
3=15°C
4=20°C
5=25°C
6=30°C

TAE20 ROOM THERMOSTAT**FIELDS OF APPLICATION**

- Regulating ambient temperature in rooms heated or cooled.
- Opening and closing the valve.
- Cutting in and out the electric heating.
- Controlling the three speed fan.

**DESCRIPTION**

The unit comprises two parts:

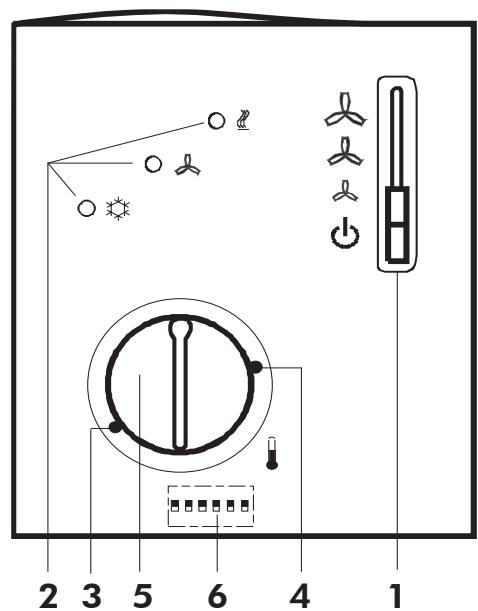
- A plastic case, housing the electronics, the controls and an internal ambience sensor.
- A mounting plate.

The case is hooked onto the fitted mounting plate, then click fastened.

The screw terminal connections are located on the mounting plate, with the DIP switches on the back of the case.

ADJUSTMENT AND CONTROL ELEMENTS

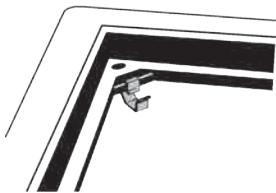
- 1 Operating mode switch "ON-OFF" and manual fan speed selection).
- 2 Electro-luminescent diodes for displaying the heating and cooling modes and the fan.
- 3 Minimum temperature setting limiter (adjustable by increments of 1 K). Mechanical stop accessible by removing the button 5.
- 4 Maximum temperature setting limiter (adjustable by increments of 1 K). Mechanical stop accessible by removing the button 5.
- 5 Ambient temperature setting adjustment button.
- 6 Set of DIP switches.



REFER TO SPECIAL TAE 20 ROOM THERMOSTAT MANUAL

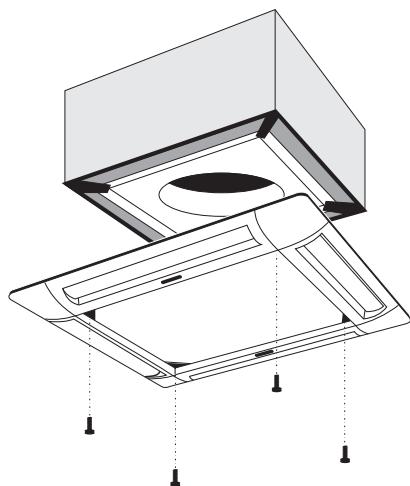
8.1 AIR DISTRIBUTION MODULE FITTING

Carefully unpack the module and fit the clips in the frame corners.



For infra red models, connect the flat cable from the receiver.

Present the frame to the unit, and apply pressure so that the clips engage. Then screw it in place.

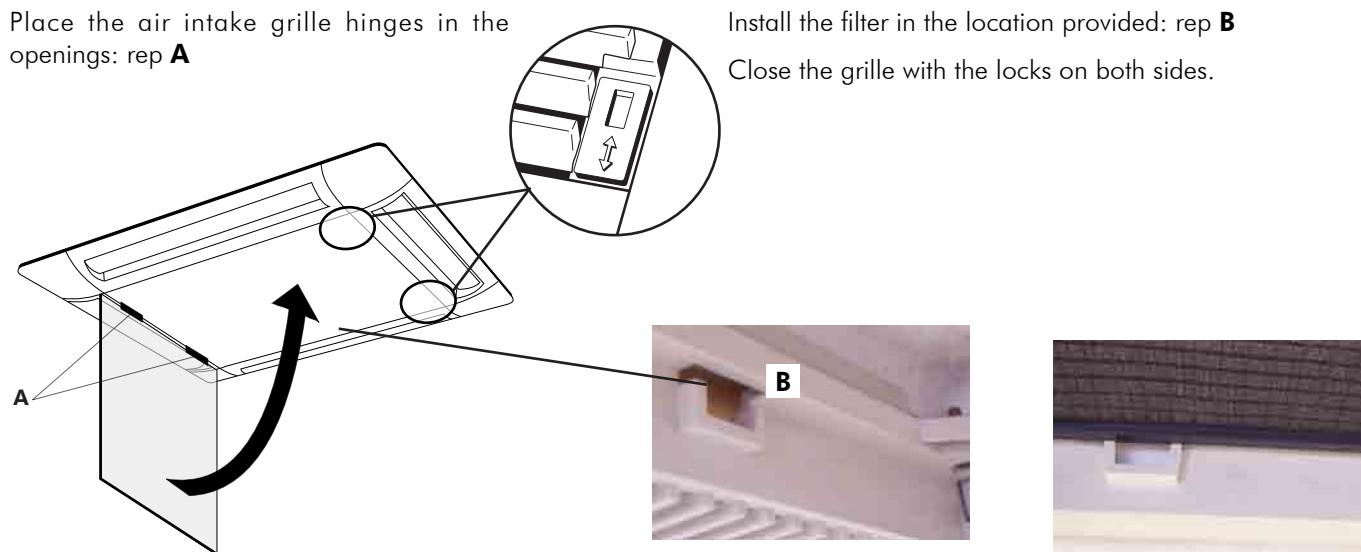


8.2 FILTER INSTALLATION

Place the air intake grille hinges in the openings: rep **A**

Install the filter in the location provided: rep **B**

Close the grille with the locks on both sides.



9**COMMISSIONING****9.1 CHECKS BEFORE COMMISSIONING**

Ensure that the installation pipe work has been cleaned and bled of any air, before commissioning the unit.

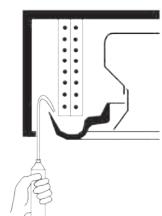
Check that the condensate evacuation pipe is connected and provides effective condensate drainage.

Check that the filter is clean and correctly installed.

Check that the fan rotates freely.

Check that all hydraulic and electrical connections are correctly tightened.

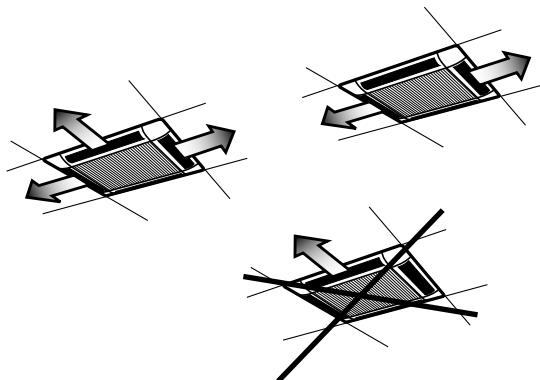
Check free flow by pouring water into the indoors tray.



Check the connections seals and, if required, insulate the evacuation pipes to protect against frost or condensation.

Take care !

Follow the directions for treated air distribution.



Check that the air distribution flaps are open.

9.2 GENERAL INSTALLATION

Carry out a visual inspection of the installation in operation.

Check the overall cleanliness of the installation and check that the condensate evacuation is not blocked, particularly that of the evaporator coil.

Check the condition of the condensate tray.

For the installation to operate correctly, it is imperative that the air filter, located on the air intake of the treated air coil, is cleaned regularly.

Cleaning intervals vary depending on the amount of impurities in the air to be conditioned. It is recommended that the filter is replaced at regular intervals.

A dirty filter creates a decrease in air flow across the heat exchanger, which decreases the installation's output and hinders fan motor cooling.

Check the state of cleanliness of the indoors coil.

9.3 ELECTRICAL ELEMENTS

Check that the mains supply cable is free from any damage which might effect insulation.

Check the tightness of the electrical connections.

Check the earth connection.

This list is not comprehensive. Other checks can be carried out, in relation to the environment and the unit's operating conditions.

CHILLED WATER CASSETTE

**APPENDIX
ANNEXE
ANLAGE
ALLEGATO
ANEXO**

APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

WIRING DIAGRAM

SCHEMAS ELECTRIQUES

STROMLAUFPANS

SCHEMA ELETTRICO

ESQUEMA ELECTRICO

TAKE CARE!

These wiring diagrams are correct at the time of publication. Manufacturing changes can lead to modifications. Always refer to the diagram supplied with the product.

ATTENTION

Ces schémas sont corrects au moment de la publication. Les variantes en fabrication peuvent entraîner des modifications. Reportez-vous toujours au schéma livré avec le produit.

ACHTUNG!

Diese Stromlaufplans sind zum Zeitpunkt der Veröffentlichung gültig. In Herstellung befindliche Varianten können Änderungen mit sich bringen. In jedem Fall den mit dem Produkt gelieferten Stromlaufplan hinzuziehen.

ATTENZIONE !

Questi schemi sono corretti al momento della pubblicazione. Le varianti apportate nel corso della fabbricazione possono comportare modifiche. Far sempre riferimento allo schema fornito con il prodotto.

ATENCIÓN !

Esto esquemas son correctos en el momento de la publicación. Pero las variantes en la fabricación pueden ser motivo de modificaciones. Remítase siempre al esquema entregado con el producto.

**POWER SUPPLY MUST BE SWITCHED OFF BEFORE STARTING TO
WORK IN THE ELECTRIC CONTROL BOXES!**

**MISE HORS TENSION OBLIGATOIRE AVANT TOUTE INTERVENTION
DANS LES BOITIERS ELECTRIQUES.**



**VOR JEDEM EINGRIFF AN DEN ANSCHLUßKÄSTEN UNBEDINGT
DAS GERÄT ABSCHALTEN!**

**PRIMA DI OGNI INTERVENTO SULLE CASSETTE ELETTRICHE
ESCLUDERE TASSATIVAMENTE L'ALIMENTAZIONE !**

**PUESTA FUERA DE TNESIÓN OBLIGATORIA ANTES DE CUALQUIER
INTERVENCIÓN EN LAS CAJAS ELÉCTRICAS!**

APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

9 2T - 12 2T - 18 2T - 9 4T - 12 4T - 18 4T

"CASSETTE" EAU GLACEE 2 TUBES/4 TUBES
 "CHILLED WATER" "CASSETTE" 2 PIPE/4 PIPE
 KAL TWASSER "DECKENKASSETTEN" 2 ROHREN/4 ROHREN
 "CASSETTE" AGUA HELADA 2 TUBOS/4 TUBOS
 "CASSETTA" ACQUA GHIACCIAITA 2 TUBI/4 TUBI

Le chauffage doit être asservis à la ventilation
Heater must run with fanmotor
WÄRMEERGEBUNG MUSS MIT LUFTFÖRDERMOTOR ARBEITEN
LA CALEFACCION DEBE FUNCIONAR CON EL VENTILADOR EN MODO DE VENTILACIÓN
VENTILATORAUSSENANLAGE DÜRFTE FÜR DIE WÄRMEERGEBUNG AUFGEZOGEN WERDEN

"CASSETTE" EAU GLACEE 2 TUBES/4 TUBES
CHILLED WATER "CASSETTE" 2 PIPE/4 PIPE
KAL TWASSER "DECKENKASSETTEN" 2 ROHREN/4 ROHREN

OPTION / OPTIONAL /

OPTIONAL / OPZIONE

CONNECTION WITH ROOM THERMOSTAT:
SEE NOTICE

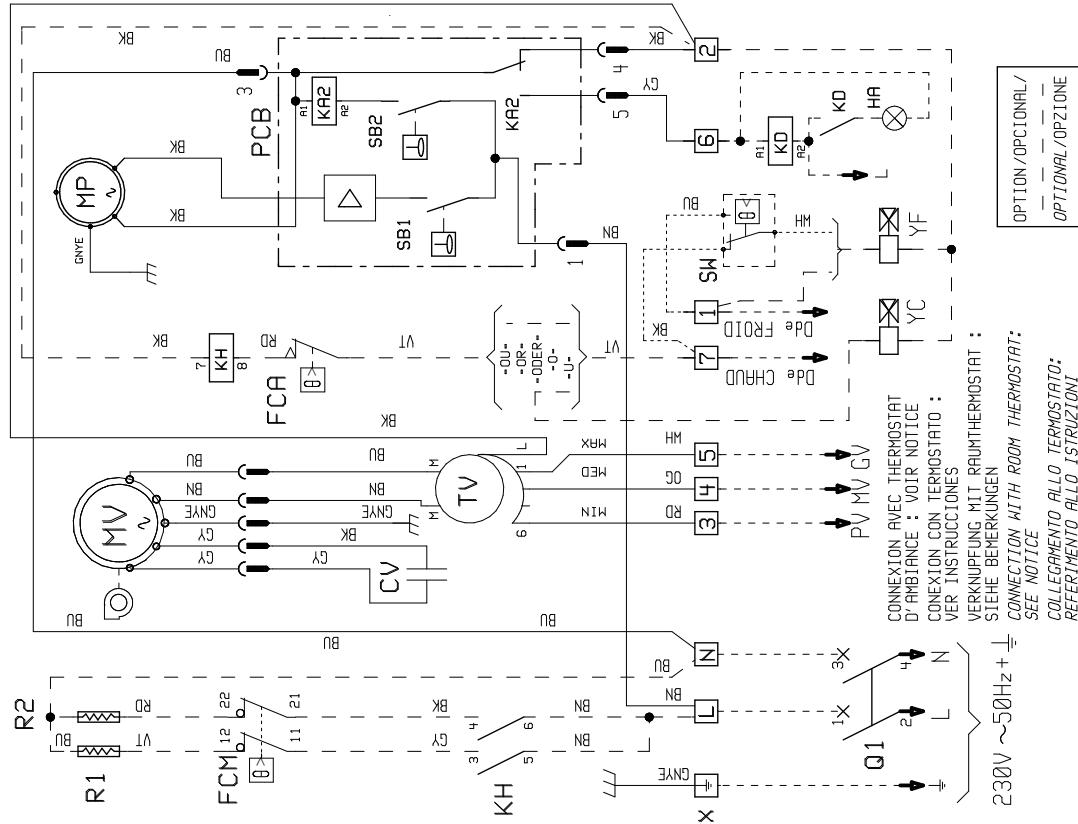
CONNECTION AVEC THERMOSTAT D'AMBANCE :
VOIR NOTICE

CONEXION CON TERMOSTATO :
VER INSTRUCCIONES

VERKNUPFUNG MIT RAUMTHERMOSTAT :
SEHEN BEMERKUNGEN

COLLEGAMENTO ALLO TERMOSTATO:
REFERIMENTO ALLO ISCRITTO

230V ~50Hz +



*OPTIONAL /
— — — —
OPTIONAL /OPZIONE*

**CONNECTION WITH ROOM THERMOSTAT:
EE NOTICE**

**COLLEGAMENTO ALLO TERMOSTATO:
EFERIMENTO ALLA ISTRUZIONI**

C S C R

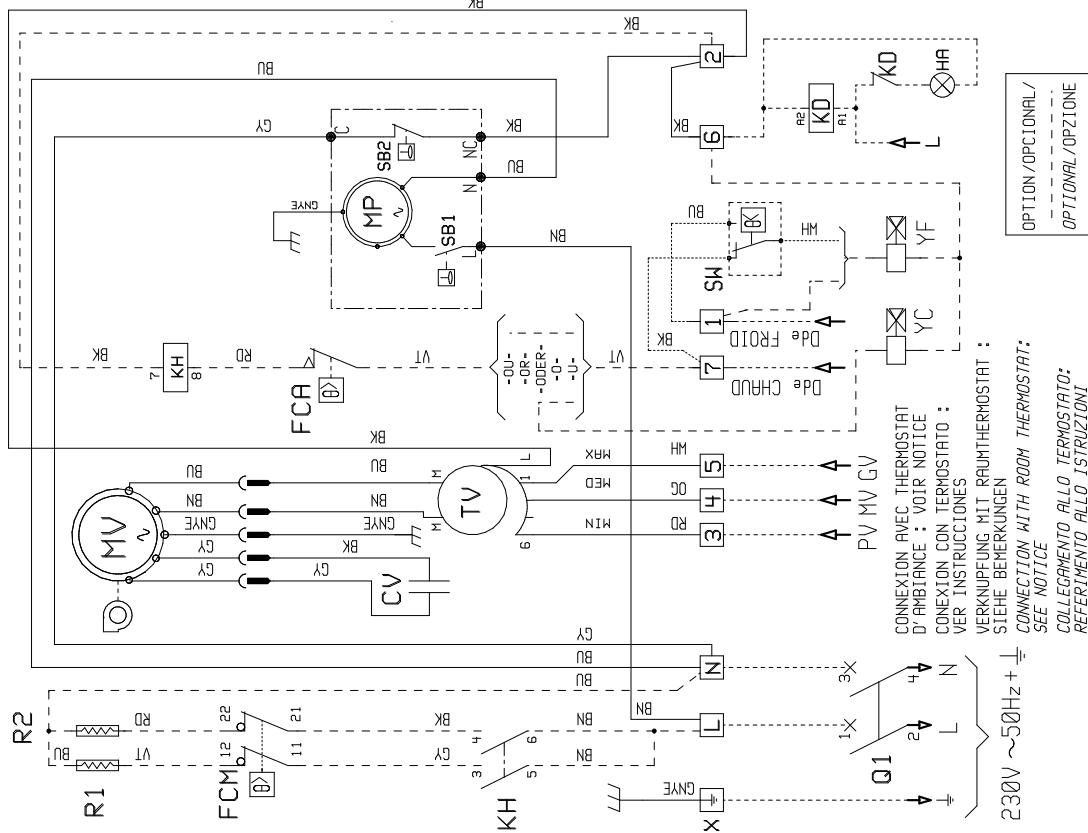
IV

APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

Le CHAUFFAGE DOIT ETRE ASSERVI A LA VENTILATION
 Heater must run WITH FAN MOTOR
 LA CALEFACTION DEBE FUNCIONAR CON EL VENTILADOR EN MARCHA
 RISCALDAMENTO DOVRE FUORZIONARE CON LE VENTILATORE

230V ~	50 Hz
CODE: 399893	SE 3480

"CASSETTE" EAU GLACEE 2 TUBES/4 TUBES
 "CHILLED WATER" "CASSETTE" 2 PIPE/4 PIPE
 KALTWAESSER "DECKENKASSETTEN" 2 ROHREN/4 ROHREN
 "CASSETTE" AGUA HELADA 2 TUBOS/4 TUBOS
 "CASSETTE" ACQUA GHIACCIAIA 2 TUBI/4 TUBI



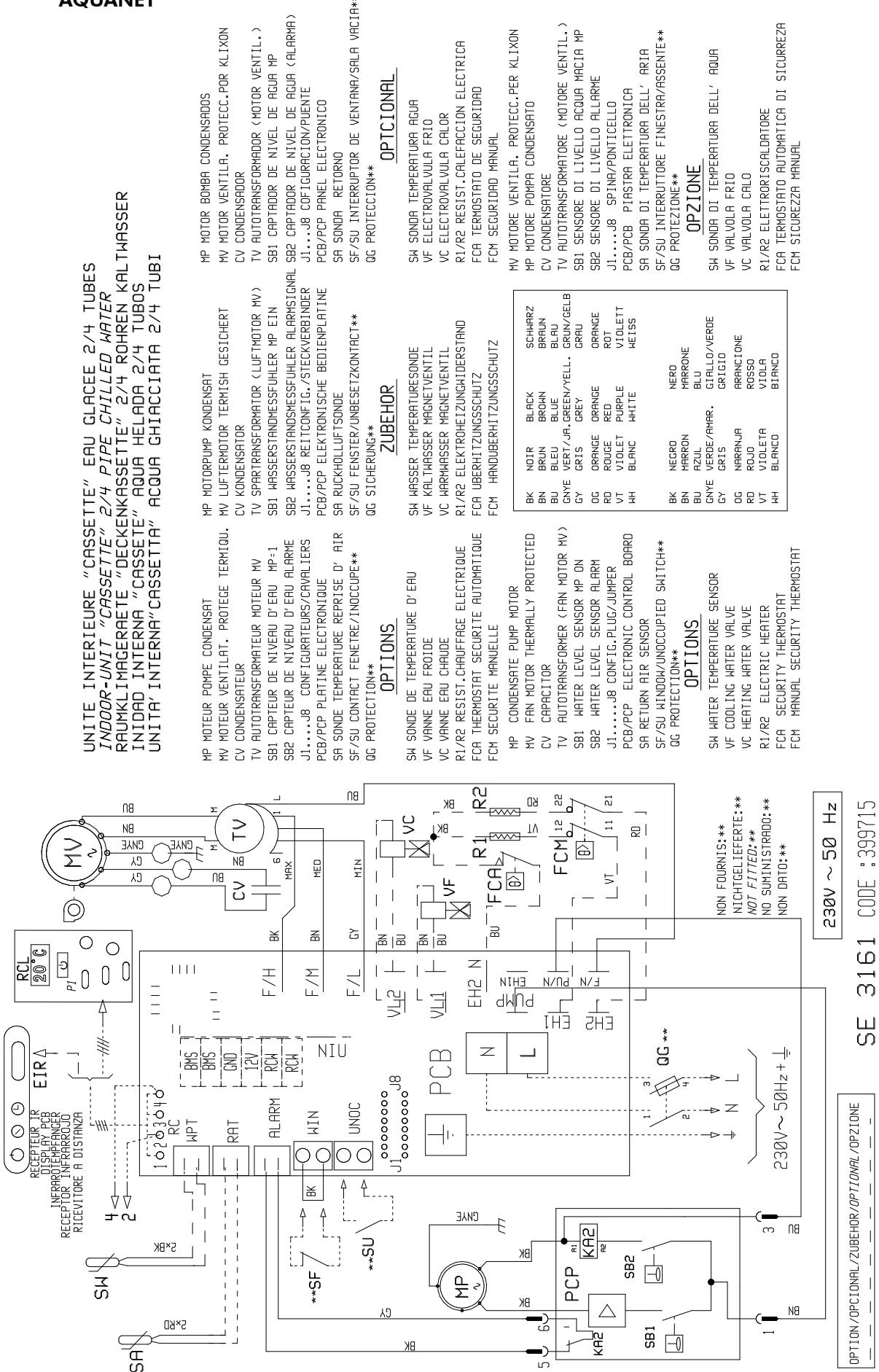
MP MOTEUR POMPE CONDENSAT	MP MOTORPUMP KONDENSAT	MV MOTOR VENTILA. PROJECC. POR KLIXON
NV MOTEUR VENTILAT. PROTEGE TERMIQUE	NV LUFTMOTOR TERMISH GESICHERT	MP MOTOR BOMBA CONDENSAZO
CV CONDENSATEUR	CV KONDENSATOR	CV CONDENSADOR
TV AUTOTRANSFORMATEUR MOTEUR MV	TV SPARTRANSFORMATOR (LUFTMOTOR MV)	TV AUTOTRANSFORMADOR (MOTOR VENTIL.)
SB1 CAPTEUR DE NIVEAU D'EAU MARCHE	SB1 WASSERSTANDMESSERHP EIN	SB1 CAPTADOR DE NIVEL DE AGUA MP
SB2 CAPTEUR DE NIVEAU D'EAU ALARME	SB2 " " ALARMSIGNAL	SB2 " " ALARME (ALARME)
YF VANNE 3 VOIES FROID (OPTION)	YF 3 WEG KALT WASSERSCHIEBER(KÄHL)	YF 3 WEG WARM WASSERSCHIEBER(KÄHL)
YC VANNE 3 VOIES CHAUD (OPTION)	YC 3 WEG WARM WASSERSCHIEBER(KÄHL)	YC 3 WEG CALOR(OPTION)
KD RELAIS REPORT DEFAUT (NON FOURNI)	KD ALARMDRELAIS (BAUSEITS)	KD RELE ALARME (NO SUMINISTRADO)
HA VOYANT DEFAUT (non fourni)	HA ALARMDRELAIS (BAUSEITS)	HA TESTIGO DE ALARMA
X BORNIER DE RACCORDEMENT	X KLEMMLEISTE	X BORNERA DE CONEXION
KH CONTACTEUR CHAUFFAGE ELECTRIQUE	KH ELEKTROHEIZUNGSCHUTZ	KH CONTACTOR CALEFACCION ELECTRICO
R1/R2 RESIST. CHAUFFAGE ELECT.	R1/R2 ELEKTR. HEIZUNGSDERSTAND	R1/R2 RESIST.CALEFACCION ELECTRICO
FCA THERMOSTAT SECURITE AUTO.	FCA UBERHEIZUNGSSCHUTZ	FCA THERMOSTATO DE SEGURIDAD
FCH SECURITE MANUELLE	FCH HANDÜBERHEIZUNGSSCHUTZ	FCH SEGURIDAD MANUAL
Q1 PROTECTION (NON FOURNIE)	Q1 VORSICHERUNG (BAUSEITS)	Q1 PROTECCION (NO SUMINISTRADO)

MV MOTORE VENTILA. PROTEZIONE TERMICA	MV MOTORE POMPA CONDENSAZO
MP MOTORE POMPA CONDENSAZO	MP MOTOR BOMBA CONDENSAZO
CV CONDENSATOR	CV CONDENSADOR
TV AUTOTRANSFORMATEUR (MOTOR VENTIL.)	TV AUTOTRANSFORMATOR (MOTOR VENTIL.)
SB1 SENSORE DI LIVELLO ACQUA MARCA MP	SB1 SENSORE DI LIVELLO ACQUA MARCA MP
SB2 SENSORE DI LIVEL. DE AGUA (ALARME)	SB2 SENSORE DI LIVEL. DE AGUA (ALARME)
YF VALVOLA 3 VIE FREDDO(OPTION)	YF VALVOLA 3 VIE CALDO(OPTION)
YC VALVOLA 3 VIE CALDO(OPTION)	YC VALVOLA 3 VIE CALDO(OPTION)
KD RELE ALLARME (NON FORNITO)	KD RELE ALLARME (NON FORNITO)
HA SPIA DIETTO (NON FORNITA)	HA SPIA DIETTO (NON FORNITA)
X MORSIELLETTA DI COLLEGAMENTO	X MORSIELLETTA DI COLLEGAMENTO
KH CONTATTORE RISCALDAMENTO ELETTRICO	KH CONTATTORE RISCALDAMENTO ELETTRICO
R1/R2 ELECTRIC HEATER	R1/R2 RESIST. RISCALDAMENTO ELETTRICO
FCA SAFETY THERMOSTAT	FCA THERMOSTATO DE SEGURIDAD
FCM MANUAL SAFETY THERMOSTAT	FCM SEGURIDAD MANUAL
Q1 CIRCUIT-BREAKER (NOT SUPPLIED)	Q1 PROTEZIONE (NON FORNITA)

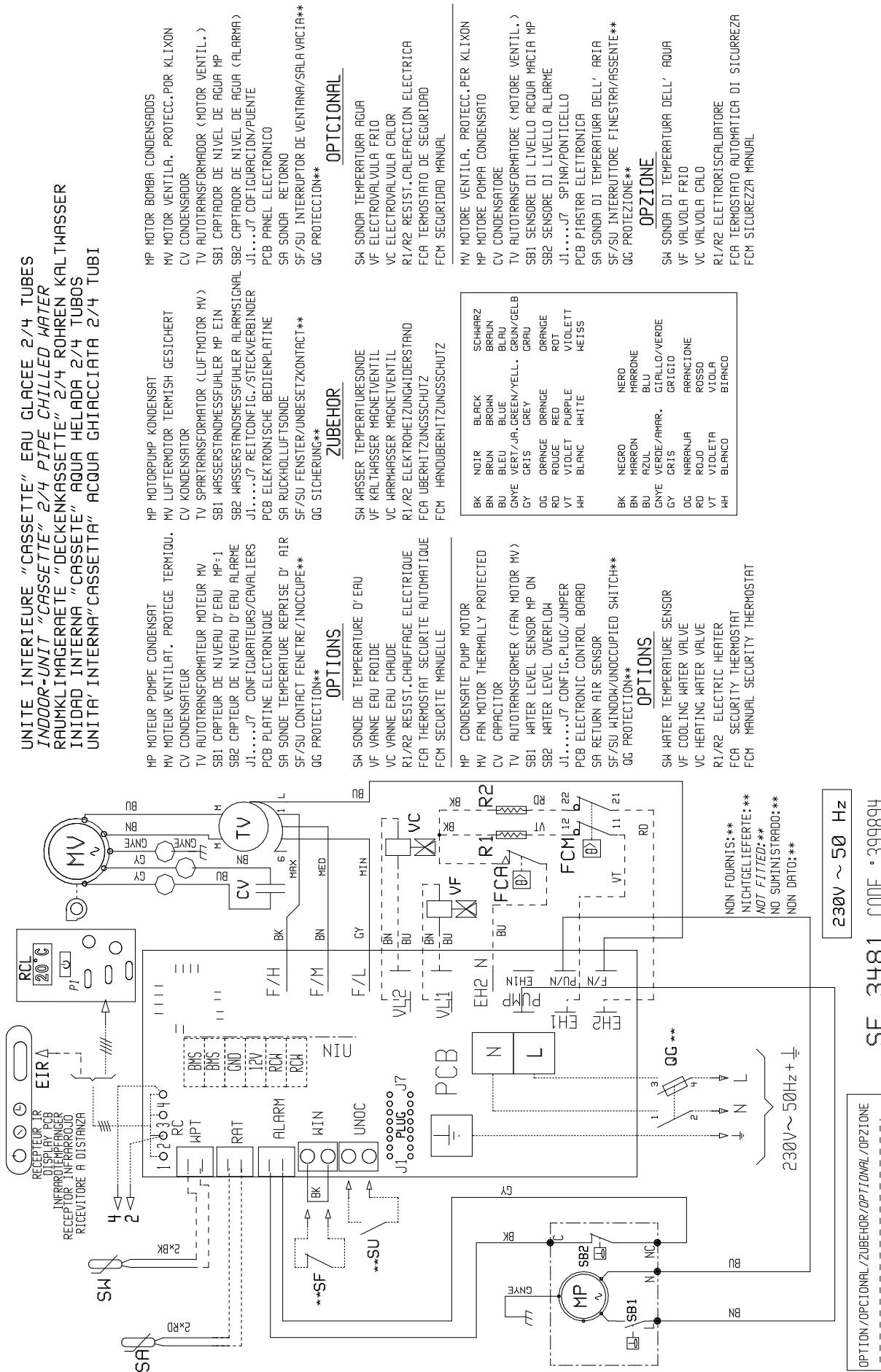
APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

9 2T - 12 2T - 18 2T - 9 4T - 12 4T - 18 4T

AQUANET



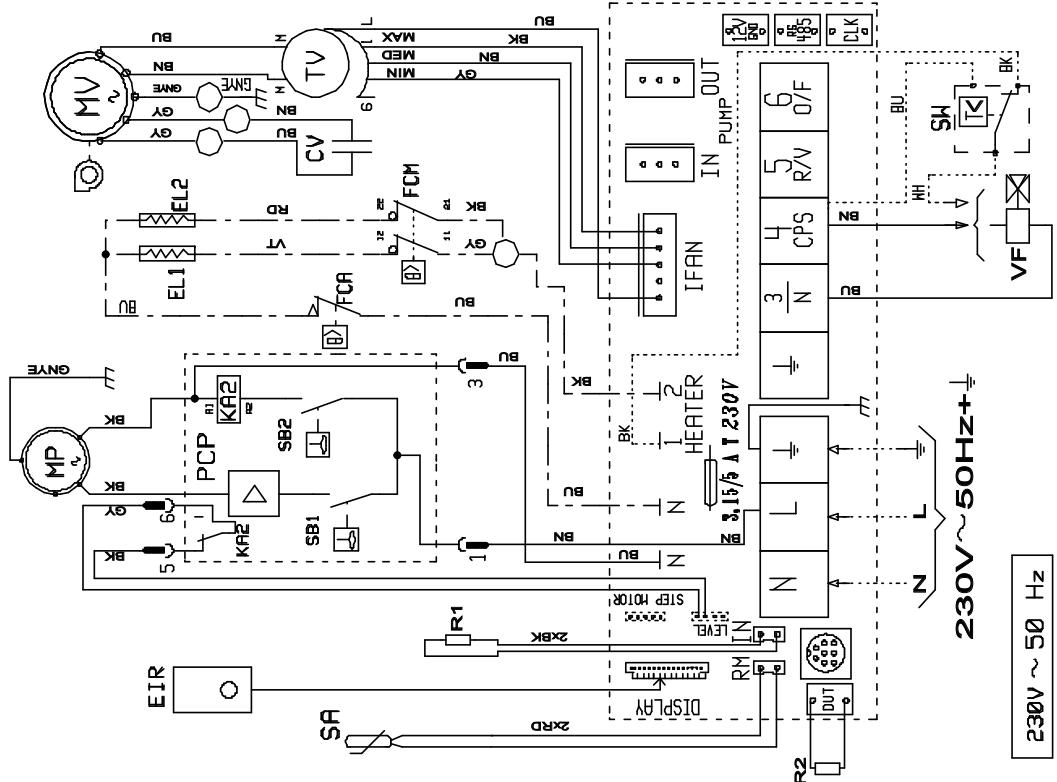
APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO



APPENDIX / ANEXE / ANLAGE / ALLEGATO / ANEXO

9 2T - 12 2T - 18 2T - 9 4T - 12 4T - 18 4T
STORM

"CASSETTE" EAU GLACEE 2 TUBES AVEC RECEPTEUR INFRA-ROUGE
 CHILLED WATER "CASSETTE" 2 PIPES WITH DISPLAY PCB
 KALTWASSER "DECKENKASSETTEN" 2 ROHREN INFRAROTEMPFANGER
 "CASSETTE" AGUA HELADA 2 TUBOS CON RECEPTOR INFRAROJO
 "CASSETTE" ACQUA GHIACCIAITA 2 TUBI CON RICEVITORE A DISTANZA



		SCHWARZ	BLAU	GRÜN/GEHLB
BK	NDR	BLACK	BROWN	BLAU
	BN	BRUN	BLAU	BLAU
	BL	BLEU	BLAU	BLAU
	CNYE	YER / JA	GREEN/YELL.	GRUN
	GY	CRIS	GREY	GRAU
	DC	ORANGE	ORANGE	ORANGE
	RD	ROUGE	RED	ROT
	VT	VIOLET	PURPLE	VIOLETT
	BL	BLANC	WHITE	WEISS
	NH			
		NEGR	MARONE	MARONE
BK	BN	HARRON	BLU	CIALDO/VERDE
	BLU	PEUL	VERDE/MAHAR.	GRIGIO
	CNYE			FRANCIONE
	GY	CRIS		ROSSO
	DC	NAPOLIA		VIDELTA
	RD	ROJO		BLANCO
	VT			VIDELTA
	BL			BLANCO
	NH			VIDELTA

R1/R2 RESISTENZA
EIR RICEVITORE A DISTANZA
UF VALIGIOLA
UT VERSO IL TERRITORIO "CHANGE-OVER" (reversibile)
EL1/EL2 ELETROSCALATORE
EGC SICUREZZA AUTOMATICA

OPTION
EL1/EL2 = 1500W MAX

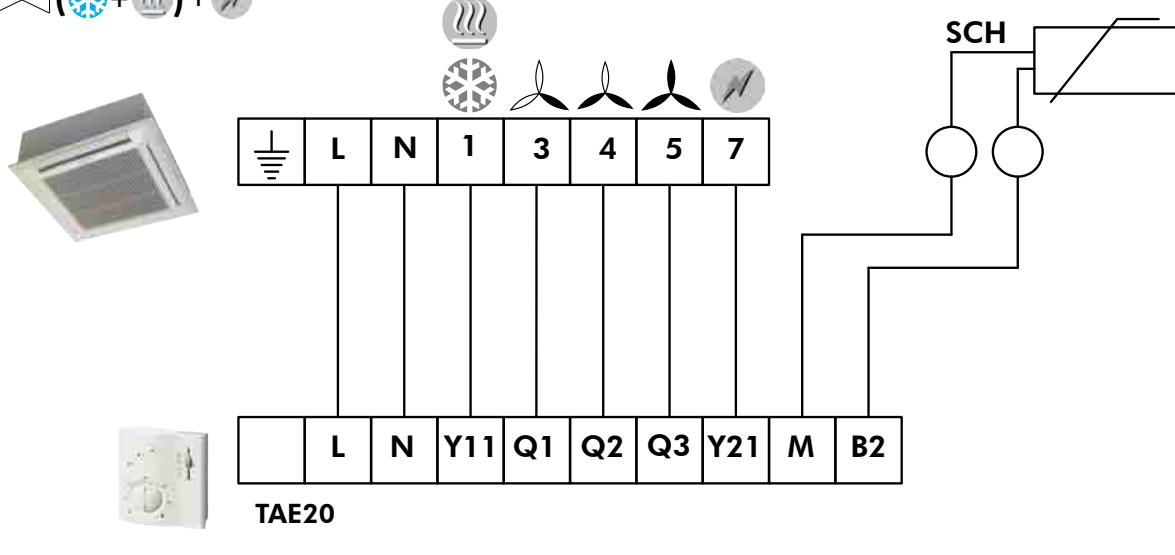
SE 3191B
CODE: 399745

APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

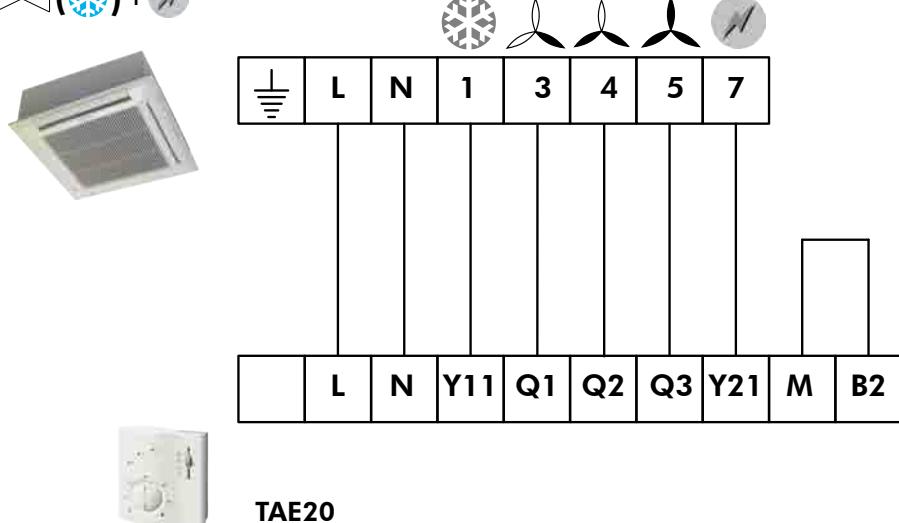
	2T	4T					
GB	2-PIPE COILS	4-PIPE COILS	COOLING	HEATING	LOW SPEED	MEDIUM SPEED	HIGH SPEED
F	BATTERIES 2 TUBES	BATTERIES 4 TUBES	FROID	CHAUD	PETITE VITESSE	VITESSE MOYENNE	GRANDE VITESSE
D	BATTERIEN 2 ROHREN	BATTERIEN 4 ROHREN	KÜHLUNG	HEIZUNG	KLEINE GESCHWINDIGKEIT	MITTLERE GESCHWINDIGKEIT	HOHE GESCHWINDIGKEIT
I	BATTERIE 2 TUBI	BATTERIE 4 TUBI	FREDDO	RISCALDO	BASSA VELOCITÀ	VELOCITÀ MEDIA	ALTA VELOCITÀ
E	BATERÍAS 2 TUBOS	BATERÍAS 4 TUBOS	FRIO	CALOR	VELOCIDAD BAJA	VELOCIDAD MEDIA	VELOCIDAD ALTA

			SCH	SW
GB	ELECTRIC HEATING	CONTROL VALVE	CHANGE OVER (TAE 20)	CHANGE OVER (TRM-FA TRM-VP)
F	CHAUFFAGE ELECTRIQUE	VANNE DE REGULATION	CHANGE OVER (TAE 20)	CHANGE OVER (TRM-FA TRM-VP)
D	ELEKTROHEIZUNG	REGELVENTIL	CHANGE OVER (TAE 20)	CHANGE OVER (TRM-FA TRM-VP)
I	RISCALDAMENTO ELETTRICO	VALVOLA DI REGOLAZIONE	CHANGE OVER (TAE 20)	CHANGE OVER (TRM-FA TRM-VP)
E	CALEFACCION ELECTRICA	VÁLVULA REGULADORA	CHANGE OVER (TAE 20)	CHANGE OVER (TRM-FA TRM-VP)

2T + (+) +

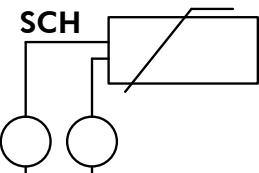
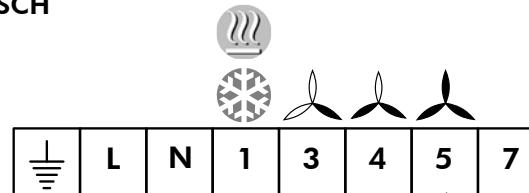


2T + () +



APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

2T+ (snowflake + ) + SCH



	L	N	Y11	Q1	Q2	Q1	Y21	M	B2
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TAE20

2T+ (snowflake)



	L	N	1	3	4	5	7
---	---	---	---	---	---	---	---

	L	N	Y11	Q1	Q2	Q3	Y21	M	B2
--	---	---	-----	----	----	----	-----	---	----

TAE20

2T+ ()



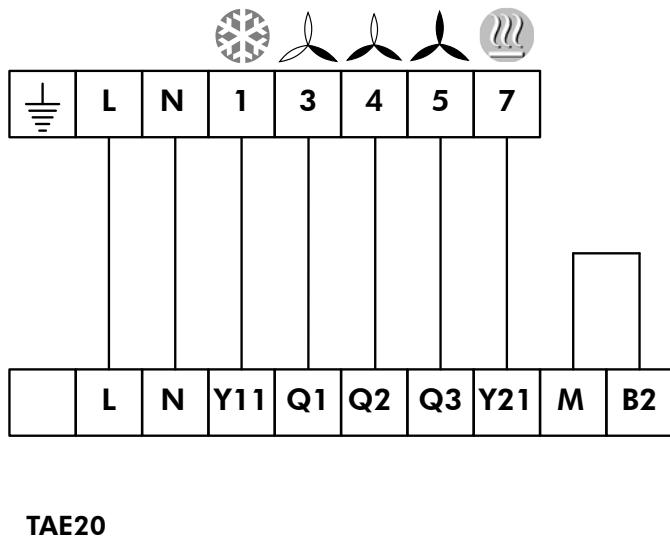
	L	N	1	3	4	5	7
---	---	---	---	---	---	---	---

	L	N	Y11	Q1	Q2	Q3	Y21	M	B2
--	---	---	-----	----	----	----	-----	---	----

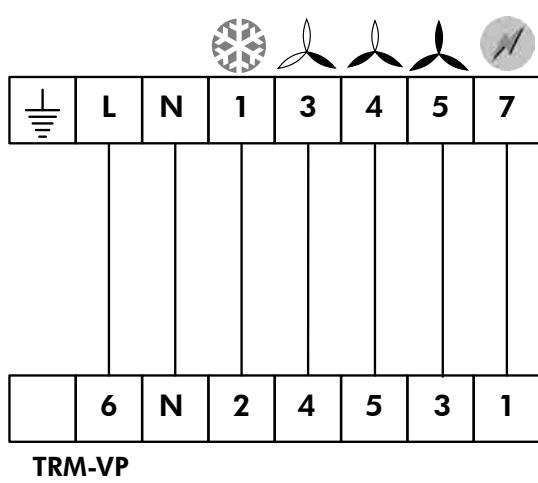
TAE20

APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

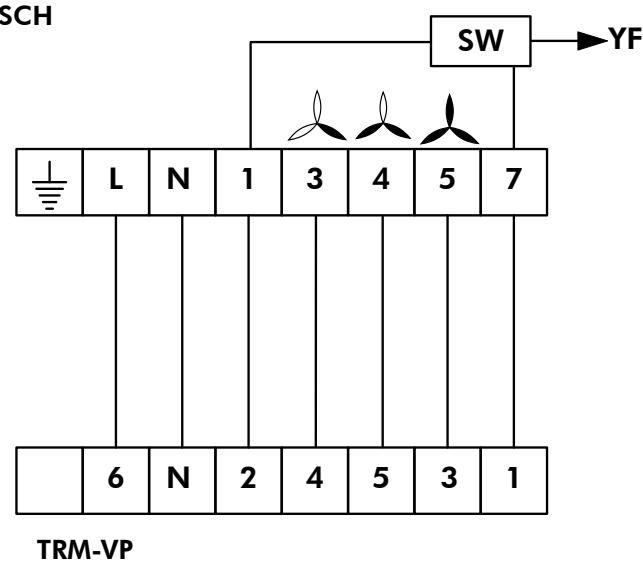
4T+



2T+ () +

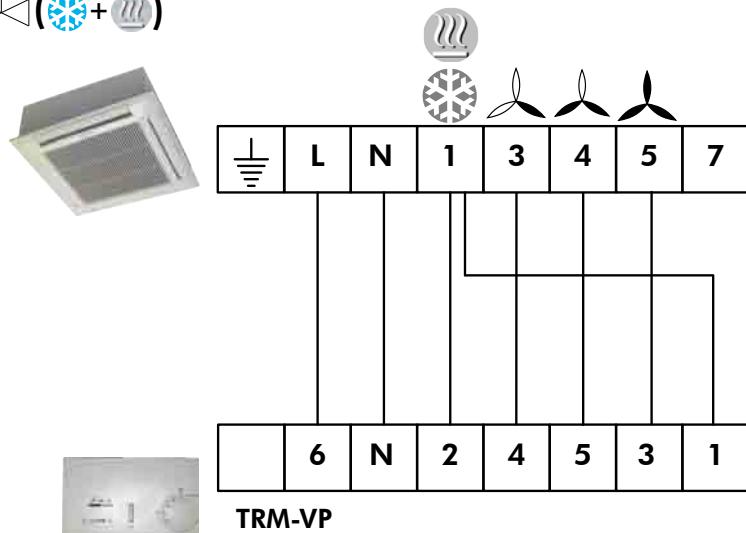


2T+ () + + SCH

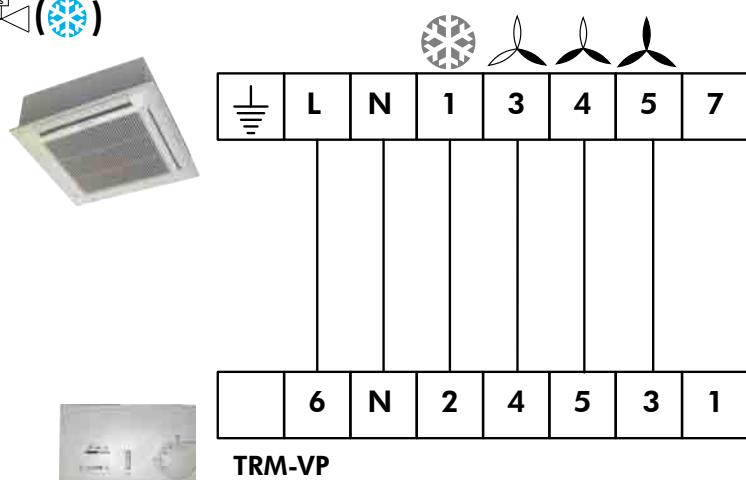


APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

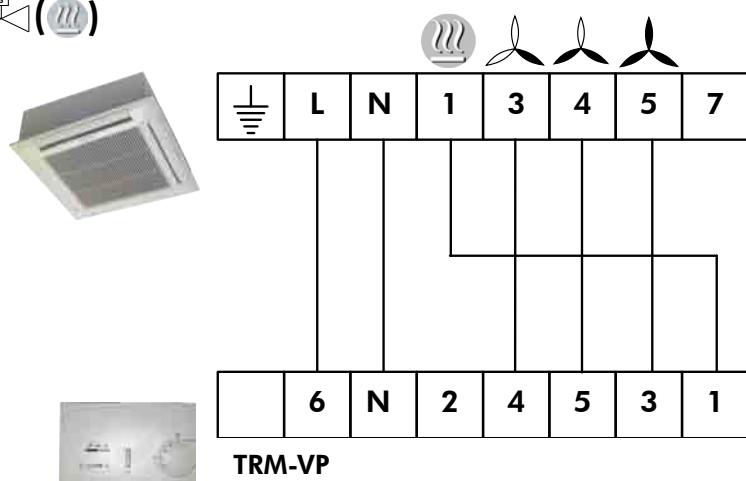
2T+ ( + )



2T+ ()

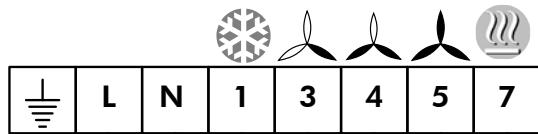


2T+ ()



APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

4T+



	6	N	2	4	5	3	1
--	---	---	---	---	---	---	---

TRM-VP

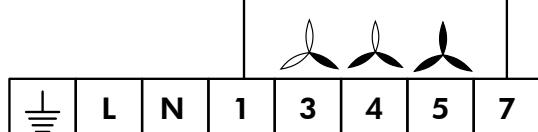
2T+ + +



	4	N	6	3	2	1	8	7
--	---	---	---	---	---	---	---	---

TRM-FA

2T+ + + + SW



SW

→YF

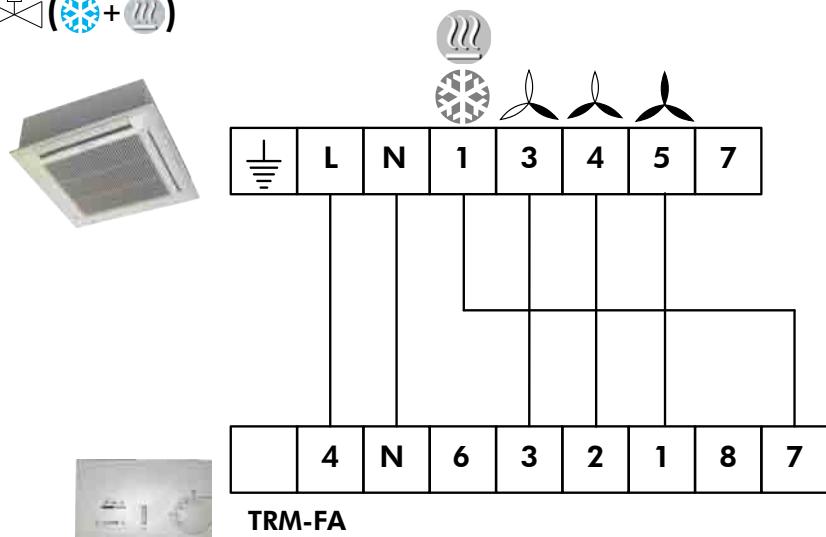


	4	N	6	3	2	1	8	7
--	---	---	---	---	---	---	---	---

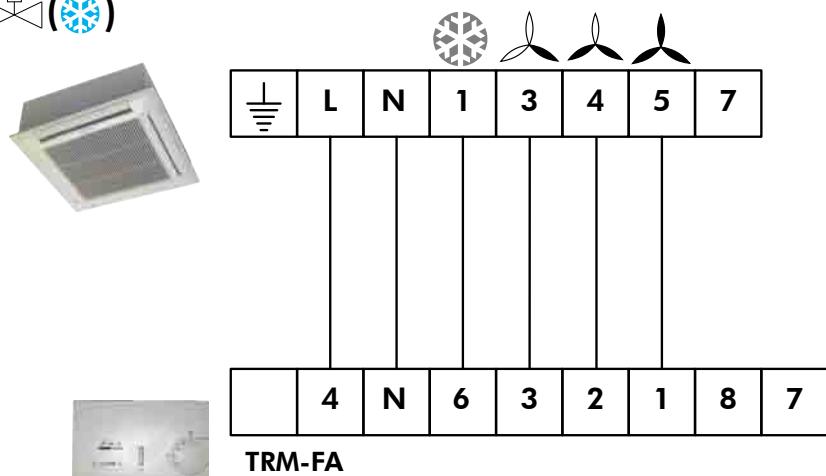
TRM-FA

APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

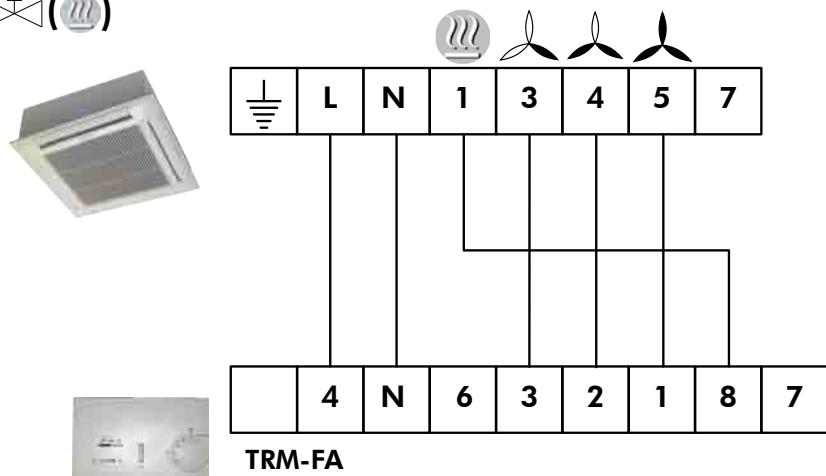
2T+ ( + )



2T+ ()



2T+ ()

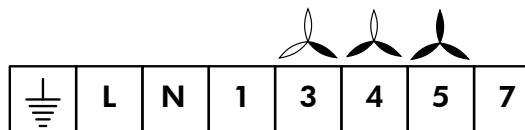


APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

2T+(+)

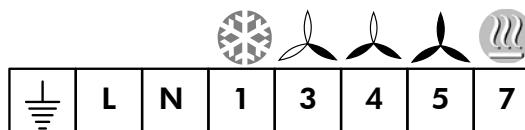
2T+ ()

2T+ ()



TRM-FA

4T+



TRM-FA

APPENDIX / ANNEXE / ANLAGE / ALLEGATO / ANEXO

EC Compliance declaration

Under our own responsibility, we declare that the product designated in this manual comply with the provisions of the EEC directives listed hereafter and with the national legislation into which these directives have been transposed.

Déclaration CE de conformité

Nous déclarons sous notre responsabilité que les produits désignés dans la présente notice sont conformes aux dispositions des directives CEE énoncées ci-après et aux législations nationales les transposant.

EG-Konformitätserklärung

Wir erklären in eigener Verantwortung, dass die in der vorliegenden Beschreibung angegebenen Produkte den Bestimmungen der nachstehend erwähnten EG-Richtlinien und den nationalen Gesetzesvorschriften entsprechen, in denen diese Richtlinien umgesetzt sind.

Dichiarazione CE di conformità

Dichiariamo, assumendone la responsabilità, che i prodotti descritti nel presente manuale sono conformi alle disposizioni delle direttive CEE di cui sopra e alle legislazioni nazionali che li recepiscono.

Declaración CE de conformidad

Declaramos, bajo nuestra responsabilidad, que los productos designados en este manual son conformes a las disposiciones de las directivas CEE enunciadas a continuación, así como a las legislaciones nacionales que las contemplan.

K 9 OG - K 12 OG - K 18 OG
REF: 7 OG 051...

LOW VOLTAGE DIRECTIVE (DBT) 2006 / 95 EEC
ELECTROMAGNETIC COMPATIBILITY DIRECTIVE 89 / 336 / EEC AMENDED BY DIRECTIVE 92 / 31 EEC AND 93 / 68 / EEC
PRESSURISE EQUIPMENT DIRECTIVE (DESP) 97 / 23 / EEC
SUB-MODULE A CATEGORY I

DIRECTIVE BASSE TENSION (DBT) 2006 / 95 C.E.E.
DIRECTIVE COMPATIBILITE ELECTROMAGNETIQUE 89 / 336 / C.E.E. AMENDEE PAR DIRECTIVE 92 / 31 CEE ET 93 / 68 / CEE
DIRECTIVE DES EQUIPEMENTS SOUS PRESSION (DESP) 97 / 23 C.E.E.
SOUS-MODULE A CATEGORIE I

RICHTLINIE NIEDERSpannung (DBT) 2006 / 95 EG
RICHTLINIE ELEKTROMAGNETISCHE VERTRÄGLICHKEIT 89 / 336 / EG ABGEÄNDERT DURCH DIE RICHTLINIE 92 / 31 / EG UND 93 / 68 / EG
RICHTLINIE FÜR AUSRÜSTUNGEN UNTER DRUCK (DESP) 97 / 23 / EG
UNTER MODUL A, KATEGORIE I

DIRETTIVA BASSA TENSIONE (DBT) 2006 / 95 CEE
DIRETTIVA COMPATIBILITA ELETTROMAGNETICA 89 / 336 / CEE EMENDATA DALLA DIRETTIVAV 92 / 31 CEE E 93 / 68 / CEE
DIRETTIVA DEGLI IMPIANTI SOTTO PRESSIONE (DESP) 97 / 23 / CEE
SOTTOMODULO A, CATEGORIA I

DIRECTIVA BAJA TENSION (DBT) 2006 / 95 CEE
DIRECTIVA COMPATIBILIDAD ELECTROMAGNETICA 89 / 336 / CEE ENMENDADA POR LA DIRECTIVA 92 / 31 CEE Y 93 / 68 / CEE
DIRECTIVA DE LOS EQUIPOS A PRESION (DESP) 97 / 23 / CEE
BAJA MODULO A, CATEGORIA I

And that the following paragraphs of the harmonised standards have been applied.
Et que les paragraphes suivants les normes harmonisées ont été appliqués.

Und dass die folgenden Paragraphen der vereinheitlichten Normen Angewandt wurden.
E che sono stati applicati i seguenti paragrafi delle norme armonizzate.
Y que se han aplicado los siguientes apartados de las normas armonizadas.

EN 60 335-1
EN 55 014-2

EN 60-335-2-40
EN 61 000-3-2

EN 55 014-1
EN 61 000-3-3


A Tillères Sur Avre
27570 - FRANCE
Le: 04/04/2007
Franck Baily
Quality Manager
ACE Industrie



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