

Application guide



COMFAIR
440 - 860 m³/h

HD High wall fan coil unit



COMFAIR HD

High wall fan coil units

APPLICATION GUIDE

Ref : COMFAIR HD-AGU-1107-E

HIGH WALL FAN COIL UNITS - HD

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*Our company is a member of the Eurovent Certification Program.
The COMFAIR HD LENNOX fan coil units are tested and rated in accordance with Eurovent certification program.*



Our products comply with the European standards.



Product designed and manufactured under a quality management system certified ISO 9001.

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HIGH WALL FAN COIL UNITS - HD

Comfair HD fan coil units are similar in design and use to the widely used DX high-wall mini-split systems. With a maximum width of only 210mm, the casing is manufactured from high quality plastic and is of an aesthetically pleasing design to compliment almost every environment.



«A BREATH OF FRESH AIR»

The fan is of a Tangential type running at low speed to guarantee low noise levels. The concept of air discharge from the unit allows efficient distribution of the treated air for maximum comfort, and simplicity of use. HD units are equipped with a system of automatic horizontal air deflection through an arc of 35° in cooling operation (10° in heating operation), which avoids stratification of the airstreams. When the unit stops, the deflector blades close automatically, which serves not only to protect the internal components against dust but also preserves the neat aesthetic appearance of the unit.



FILTRATION AND AIR QUALITY

The Comfair HD units not only control the temperature of the air but also the air quality in the conditioned space. Each unit is fitted with a filter and an Ioniser which produces negatively charged ions which attracts the positively charged dust particles and neutralises harmful microbes present in the atmosphere. The Ioniser comprises of a small generator, which transmits an intermittent high voltage to carbon fibres situated in the airstream.

COILS

Each unit contains a chilled and hot water coil manufactured from copper tubes with aluminium fins. Water connections are female gas 1/2" and each coil is fitted with an air vent. A water temperature sensor prevents low temperature discharge.

REMOTE CONTROLLER

The infra-red remote controller offers the same functions as a DX split system. It includes an LCD display which indicates the status and set points of the unit. Sixteen buttons allow fast and easy control of the operation of all functions of the unit.



All data are at Eurovent conditions.
<http://www.eurovent-certification.com/>

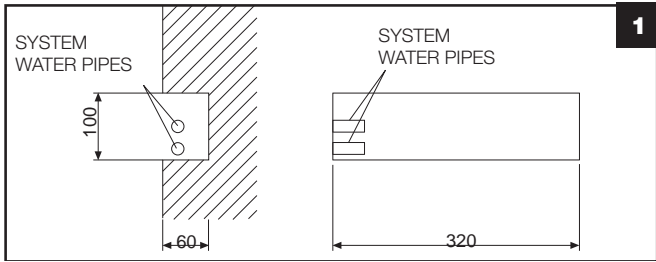
PROGRAM: FC-2-H

COMFAIR		HD	1	2	3
Sensible cooling capacity	kW	Min	1,2	1,55	2,89
		Med	1,45	1,7	3,32
		Max	1,7	1,99	3,44
Total cooling capacity	kW	Min	1,45	1,87	3,71
		Med	1,73	2	4,2
		Max	2,04	2,46	4,42
Heating capacity	kW	Min	1,81	2,21	4,51
		Med	2,22	2,42	5,24
		Max	2,59	3,32	5,64
Water pressure drops in cooling	kPa	Min	9,1	16	48,1
		Med	13	18	61,4
		Max	18	20	68,1
Water pressure drops in heating	kPa	Min	8,4	14	42,2
		Med	12	16	54
		Max	16,7	17	59,8
Fan electrical power	kW	Min	0,02	0,02	0,05
		Med	0,03	0,03	0,05
		Max	0,03	0,03	0,06
Voltage	V/Ph/Hz	-	230/1/50		
Sound power level	dB(A)	Min	49	46	50
		Med	52	50	57
		Max	54	54	61

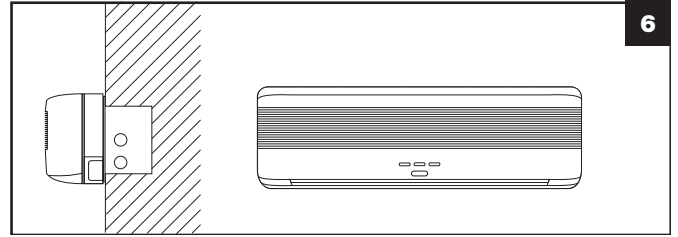
INSTALLATION WITH SIMPLE MOUNTING PLATE

The method of installing the wall-mounted water-filled fan coil of the HD range is shown below. Take into account the following:

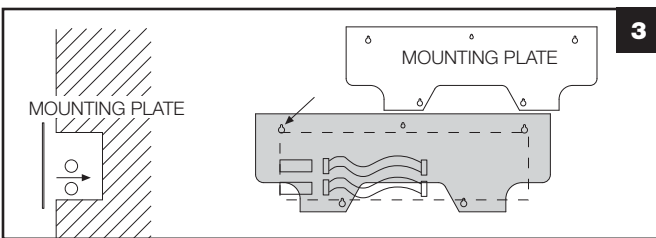
- Looking at the unit from the front, the supply pipes go from right to left.
- The system pipes must come from the left.



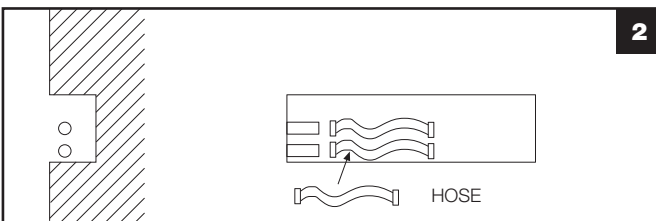
Make sufficient large hole in the wall for the system water pipes to pass through.



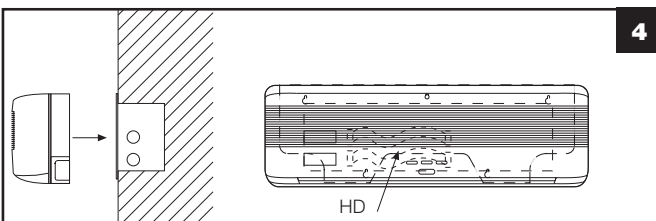
Put the fan coil back to its position of operation



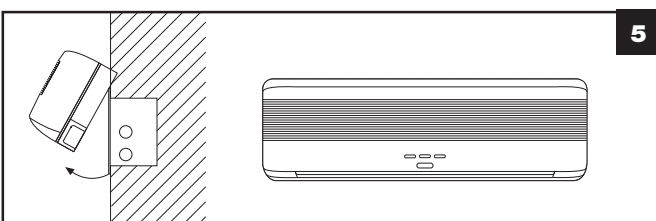
Fix the fan coil mounting plate to the wall.



Take two hoses with 1/2" fitting and connect to the systems pipes. These pipes must be lagged.

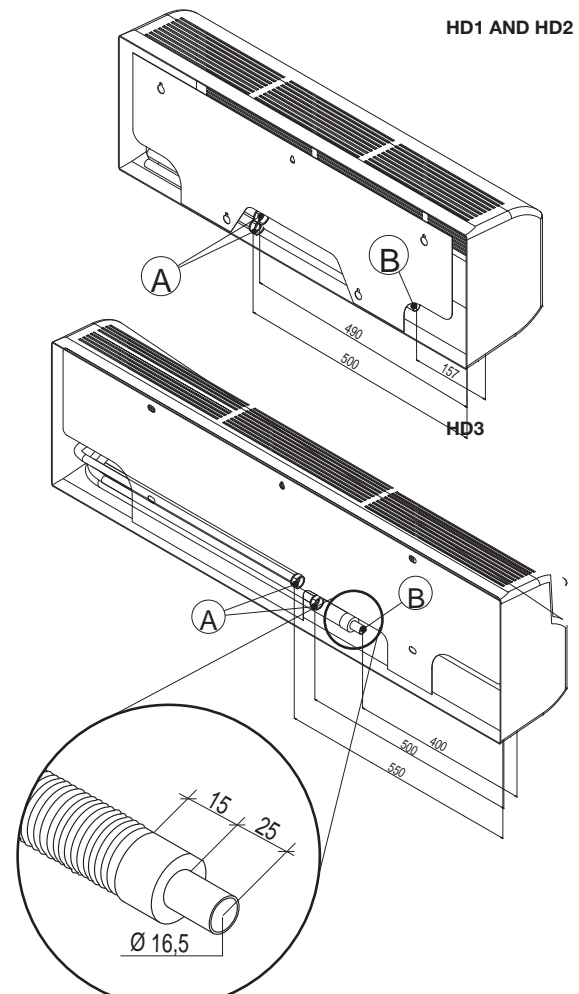


Anchor the fan coil to the mounting plate



Tilt the fan coil and insert the relative polystyrene foam spacer and then carry out the water connections

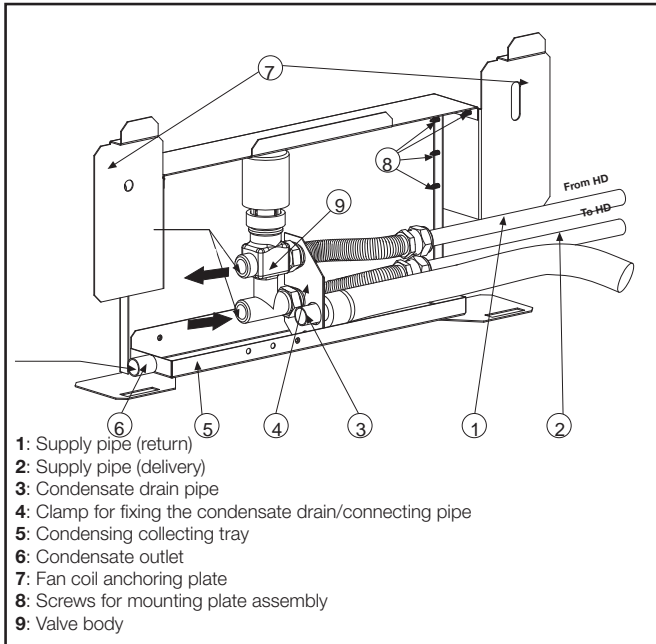
SIZE OF WATER AND CONDENSATE DRAIN FITTINGS



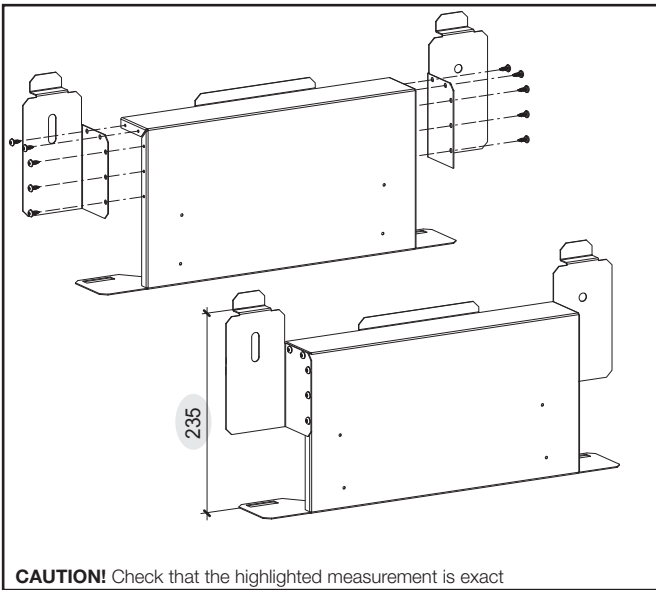
A: Hoses for water connection Ø 1/2"
B: Condensate drain pipe Ø 16,5 mm

INSTALLATION WITH BUILT-IN VALVES

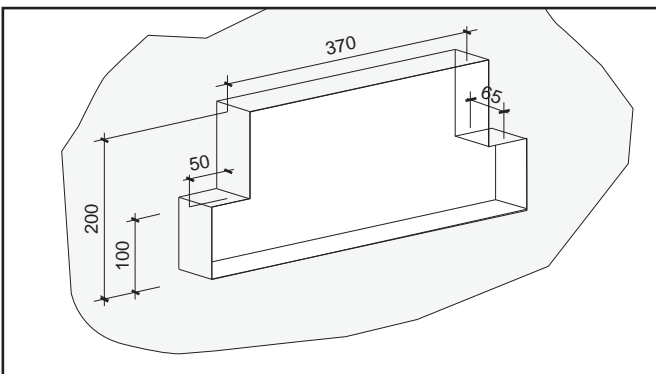
Important! It is recommended that wall-mounted water-filled fan coils are installed with ON/OFF devices.



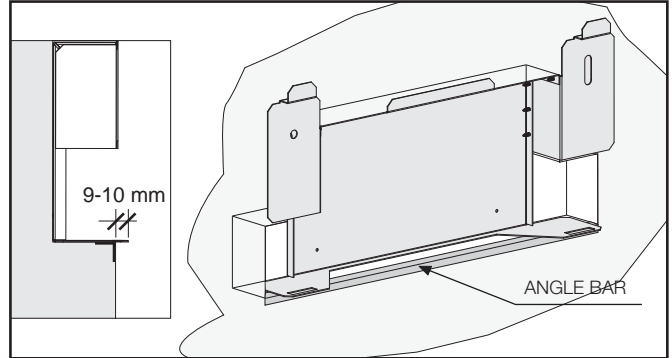
Proceed as shown below to assemble the mounting plate.



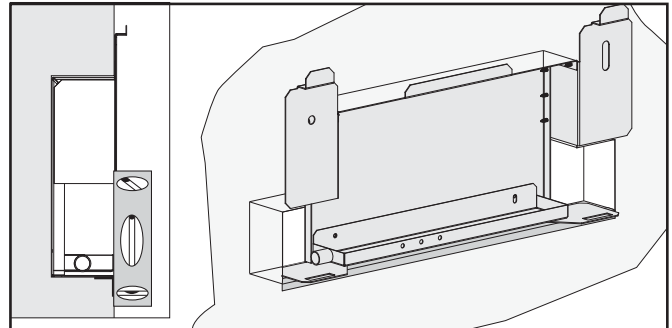
1. Identify the position on the wall where the fan coil is to be installed and create a niche with the dimensions shown below:



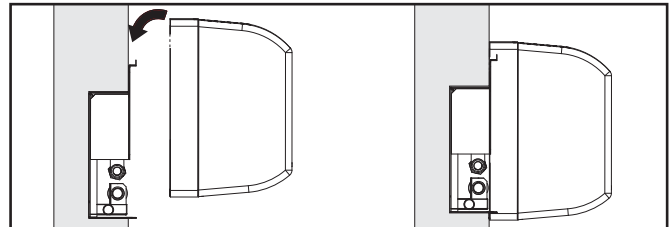
2. Cover the bottom edge of the niche with a steel angle bar (NOT supplied). Apply the mounting plate and fix it using four screws and four screw anchors in the relative holes:



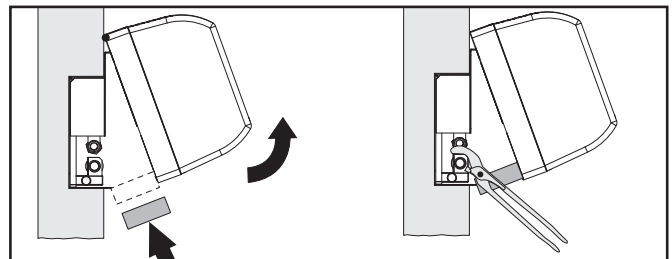
3. Fix the condensate collecting tray by inserting two self-tapping screws into the relative holes. The external surface of the tray must be flush with the wall:



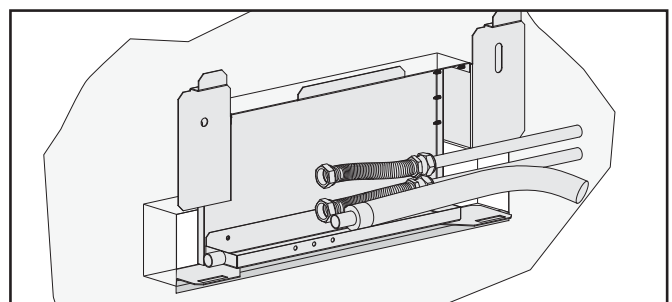
4. Position the fan coil on the mounting plate:



5. Tilt the fan coil and insert the relative polystyrene foam spacer so that the valves can be easily reached and connected to the appliance and to the mains water supply:

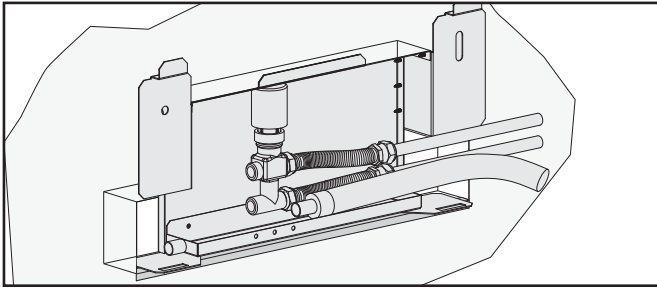


6. Connect the hoses to the fan coil supply pipes and the condensate drain hose:

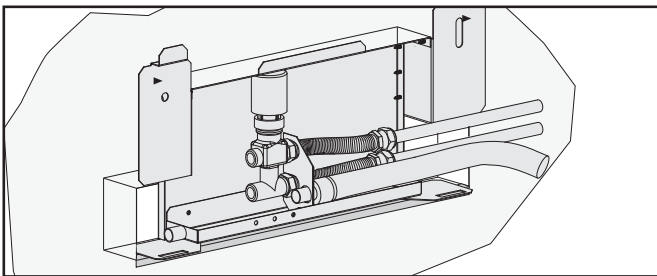


INSTALLATION WITH BUILT-IN VALVES - CONT'D

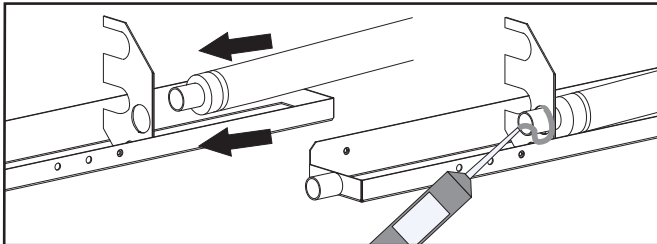
7. Connect the valve to the connecting hoses:



8. Fix the bracket for securing the condensate drain hose and the connecting hoses on the condensate collecting tray:

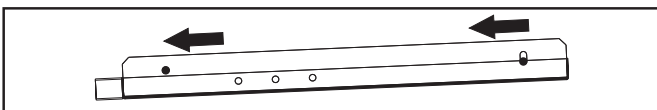


9. Fix the condensate drain hose with silicone:



10. Replace the fan coil in its original position.

CAUTION! The condensate collecting tray must be fixed so that it slopes gently downward towards the condensate drain outlet:



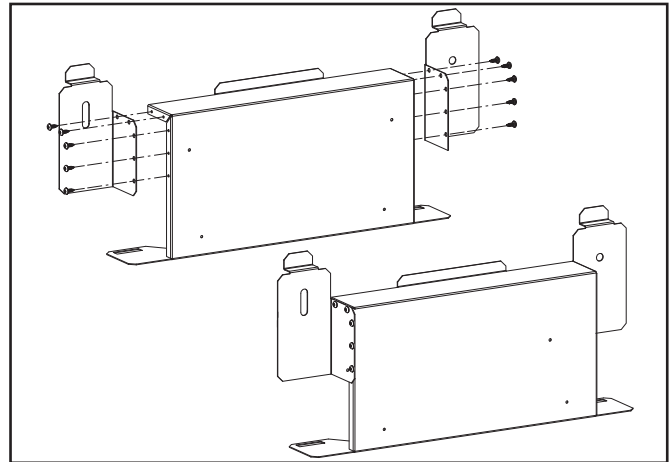
N.B.:

- Do not bend or damage the enclosed mounting plate
- Comply with the highlighted measurements (previous page)
- The base of the enclosed mounting plate must project by 9-10 mm from the wall
- The condensate collecting tray must always be flush with the wall.

INSTALLATION WITH VALVES AND OUTER FRAME

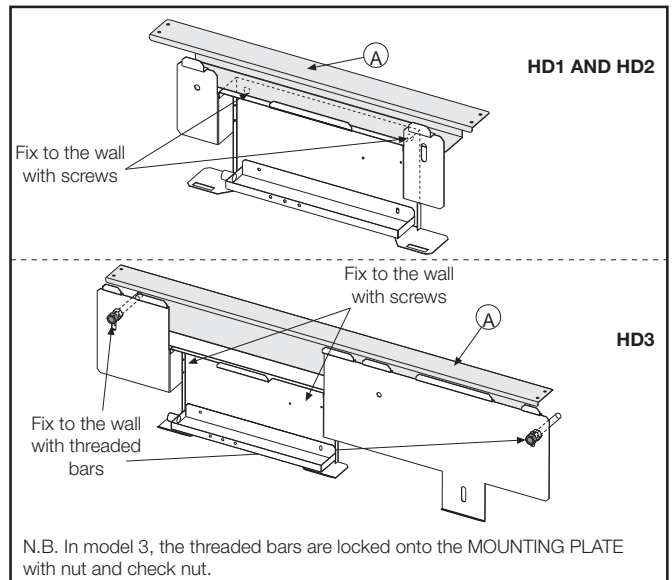
Proceed as shown below to assemble the mounting plate:

IMPORTANT! It is recommended that wall-mounted water-filled fan coils are installed with ON/OFF devices.

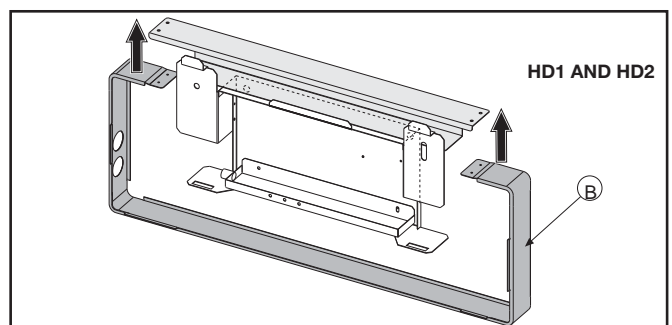


1. Mark the position on the wall where the fan coil is to be installed, then apply the mounting plate and **fix it with two screws and screws anchors in the relative holes.**

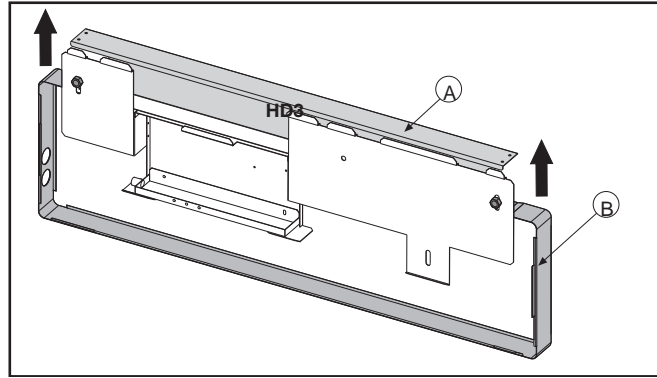
2. Position the cross rail of the frame (A) on top of the mounting plate previously fixed to the wall.



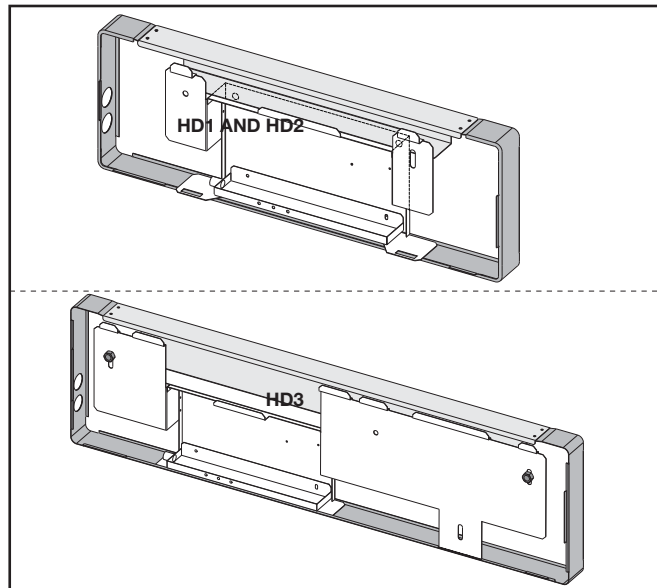
3. Fix the extension (B) to the cross rail with the 4 self-tapping screws provided in the kit:



INSTALLATION WITH VALVES AND OUTER FRAME - CONT'D



4. Final result:



5. Repeat points 4, 5, 6, 7, and 8 of the previous section (Installation with built-in valves)

GENERAL DESCRIPTION



CD2X6
 Wall mounted - 3 digits display
 On/Off - Heating/Cooling - 3 speeds
 Ambient temperature knob adjustment



RCE 10E
 Wall mounted
 On/Off - Heating/Cooling - 3 speeds
 Ambient temperature knob adjustment

	Wall mounted	
	CD2X6	RCE10E
Characteritics		
On/Off	◆	◆
Manual speed control	◆	◆
Automatic fan control	◆	◆
Manual Heating/Cooling control	◆	◆
Automatic Heating/Cooling control	◆	◆
Temperature setting knob	◆	◆
External centralised contact	◆	◆
Windows contact	◆	◆
Digital display	◆	
On/Off valve control	◆	◆
Modulating valve control	◆	◆
Available for		
2 pipes	◆	◆
2 pipes + electrical heater	◆	◆
4 pipes	◆	◆



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SALES OFFICES :

BELGIUM AND LUXEMBOURG

☎ + 32 3 633 3045

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OTHER COUNTRIES :

PORTUGAL

☎ +351 229 066 050

LENNOX DISTRIBUTION

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