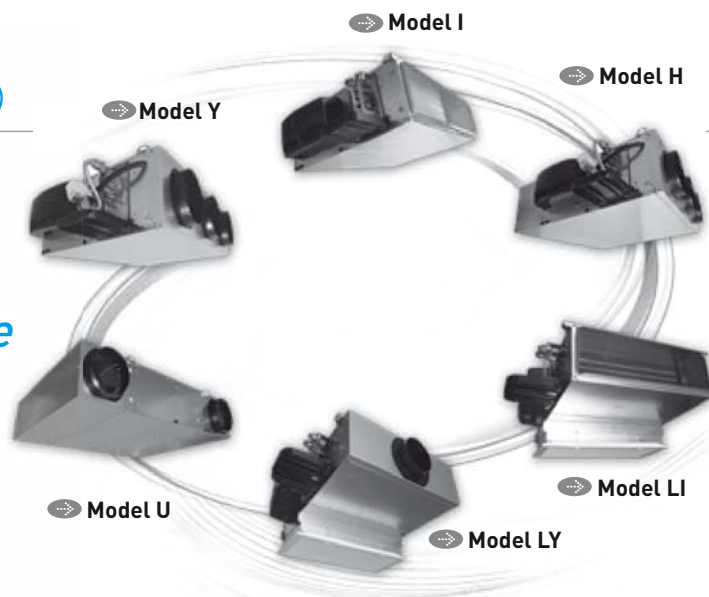


Size 6 available
1st quarter 2015

“
Comfort unit with **high**
available static pressure
Modular air
discharge configurations
Flexible installation
Excellent **acoustic**
comfort”



COMFORT LINE

With the new ductable type comfort unit, CIAT is strengthening its strategy of sustainable development and providing solutions that meet the latest requirements in terms of comfort, energy optimisation and quality for interior environments.

Integrating the latest technical developments, **COMFORT LINE** is the customisable solution designed to provide summer and winter comfort for occupants of new and renovated buildings.

Easy to install, COMFORT LINE is available in 6 frame sizes and comes in 4 thicknesses: 215, 245, 280 and 375 mm, allowing it to be integrated into all types of suspended ceilings.

For total flexibility and adaptability, COMFORT LINE is available in several assembly versions: I, Y, H, U, LI and LY.

In the HEE (High Energy Efficiency) version, COMFORT LINE not only provides energy savings of up to 85%, but also meets the strict requirements of thermal regulations. Furthermore, COMFORT LINE complies with the ErP 2015 directive.

In conjunction with Epure technology, COMFORT LINE treats particle pollution. The EPURE solution guarantees excellent indoor air quality and ensures a PM2.5 particulate concentration below the limit recommended by the WHO ($10 \mu\text{g}/\text{m}^3$).

ECO-DESIGN

COMFORT LINE has been fully designed using eco-design principles and is integrated into CIAT's sustainable development policy.

- Choice of supplier located close to the production plant,
- 94% recyclability rate,
- gain of 13% on the LCA,

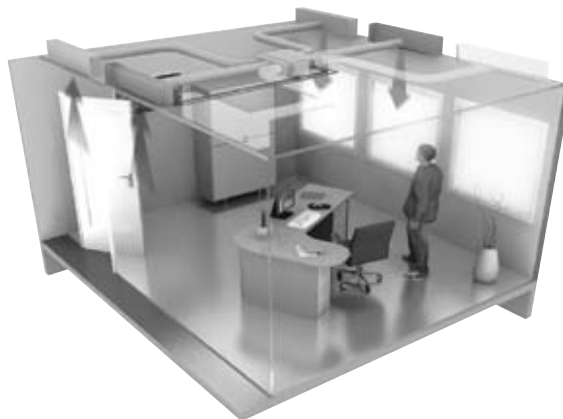


SYSTEM SOLUTION

COMFORT LINE Office



COMFORT LINE Office is adapted to the specific needs of each tertiary sector project, whether this be a new construction including strict compliance with thermal regulations, or a renovation project aiming to improve energy performance.



COMFORT LINE Hotel/Senior,



COMFORT LINE Hotel/Senior is designed to meet the needs of hotels and healthcare establishments.

The range offers well-being for occupants and peace of mind for managers. Thanks to the Epure function, COMFORT LINE perfectly controls the indoor air quality and eliminates any possible bio-effluents.



COMFORT LINE Home



Far beyond simple heating, COMFORT LINE Home provides residents with clean, filtered air during all seasons thanks to the Epure function, therefore reducing allergens and other respiratory discomfort.

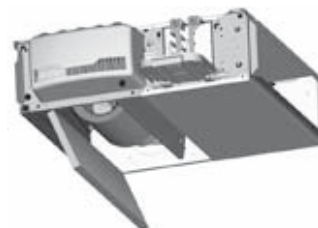
Combined with the V3000 controller, it gives the user simple and responsive control.

COMFORT LINE Home is located in the entrance hall. It uses ducts to discreetly diffuse the ideal temperature into each room.



INNOVATIVE DESIGN

- Modular, scalable, functional frame,
- simplified maintenance (fan motor assembly + filter accessed via 2 or 4 quick locks),
- no rivets used in its construction so it can be dismantled at the end of its service life,
- multiple configurations depending on customer requirements.



RANGE

The COMFORT LINE range includes 6 sizes that cover a large scope of flow rates and comes in 8 design models to provide a wide range of configurations within a suspended ceiling.

COMFORT LINE is available as:

- A 2-tube system, with heating or cooling mode.
- A 2-tube + 2-wire system, with cooling + electric mode or heating/cooling + electric mode.
- A 4-tube system, with heating and cooling mode.

Linear concepts

MODEL I

- Smooth metal rectangular sleeve mounted on the air supply.
- Smooth metal rectangular sleeve on the intake (option).



MODEL Y

- Isolated supply plenum with collars for circular duct
 - *Size 1: 1 Ø 200 collar or 1 Ø160 collar, or 2 Ø200 collars or 2 Ø160 collars
 - *Size 2: 2 Ø200 collars or 2 Ø160 collars
 - *Size 3: 3 Ø200 collars or 3 Ø160 collars
 - *Size 4: 3 Ø200 collars or 2 Ø250 collars
 - *Size 5: 4 Ø200 collars or 3 Ø250 collars
 - *Size 6: 5 Ø200 collars or 4 Ø250 collars
- Smooth metal rectangular sleeve on the intake (option).



MODEL H

- Return plenum and supply plenum with collars for circular duct
 - *Size 1: 1 Ø200 collar or 1 Ø160 collar, or 2 Ø200 collars or 2 Ø160 collars
 - *Size 2: 2 Ø200 collars or 2 Ø160 collars
 - *Size 3: 3 Ø200 collars or 3 Ø160 collars
 - *Size 4: 3 Ø200 collars or 2 Ø250 collars
 - *Size 5: 4 Ø200 collars or 3 Ø250 collars
 - *Size 6: 5 Ø200 collars or 4 Ø250 collars



MODEL U

- Return plenum and supply plenum with Ø200 (size 1 to 3) or 250 mm (size 4) lateral collars.



L concepts

MODEL LI (sizes 1 to 4)

- Air recovery grille integrated into the unit, with air supply via rectangular sleeve

MODEL LIk (sizes 1 to 4)

- Air recovery grille integrated into the unit, with air supply via air distribution kit: grille + counter frame

MODEL LY (sizes 1 to 4)

- Air recovery grille integrated into the device, with air supply via Ø160 mm or Ø200 mm circular collars.

MODEL LYk (sizes 1 to 4)

- Air recovery grille integrated with the unit and air supply via diffusion kit with supply grille, supply plenum with Ø160 collars and mandatory Ø160 mm flexible duct.

NOTE: For COMFORT LINE LY Ø160, sizes 3 and 4, speed 5 must not be selected (air flow too high for Ø160 collars).



ADVANTAGES

- Minimal dimensions in the suspended ceilings.
- Integration of the latest technical developments with a very low consumption HEE motor and the Epure function for high indoor air quality (IAQ).
- Available in 3 versions:
 - ✓ COMFORT LINE Premium (HEE motor and Epure function)
 - ✓ COMFORT LINE Standard (HEE motor and G3 filter)
 - ✓ COMFORT LINE Basic (5-speed AC motor and G3 filter)
- Total flexibility and adaptability (assembly, water temperature, diffusion, filtration, etc.).
- Extensive capacity range.
- Uses an ecological energy transfer fluid.
- Comfort unit with high available static pressure.
- Easy maintenance, simplified access.
- Environmentally-responsible product.

GREATER COMFORT

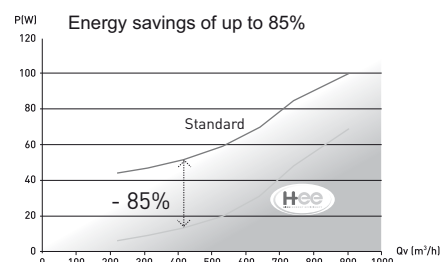
- Thermal and aeraulic comfort thanks to our air diffusion offer.
- Epure function filter for unique optimum air quality.
- High energy efficiency motor (option), for energy savings of up to 85%.



COMPLIANCE WITH ENERGY CONSERVATION REQUIREMENTS

High Energy Efficiency performance

In order to promote energy efficiency in buildings, COMFORT LINE is equipped with an HEE motor which reduces the unit's electricity consumption by up to 85%.



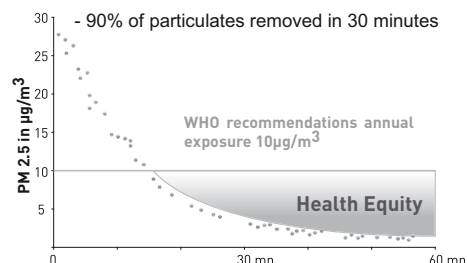
FUNCTION



Air quality

The air we breathe is full of fine particles which enter the respiratory system to varying degrees.

The Epure function (air purification system) is to exceed the WHO's recommendations on particle removal, reducing PM2.5 particulates to below 10 $\mu\text{g}/\text{m}^3$ in less than an hour. This is equivalent to a reduction of 50% to 90% in particulate matter.



OPERATING RANGE

Capacities covered by COMFORT LINE in Eurovent operation:

- 2-tube cooling capacity (27°C, WB19, 7/12°C): 0.8 to 8 kW.
- 2-tube heating capacity (20°C air, 50°C water): 1.3 to 10 kW.
- 4-tube cooling capacity (27°C, WB19, 7/12°C): 0.7 to 16 kW.
- 4-tube heating capacity (20°C air, 70/60°C water): 1.7 to 21.9 kW.

EASY TO INSTALL AND OPERATE

- Easy maintenance, with no need to remove the device, easy access to the fan motor assembly, air filter, hydraulic coil.
- Reduced thickness of the smallest unit (215 mm), to allow installation in suspended ceilings with less space.
- Flexible installation.

MORPHO CODES - COMFORT LINE DESCRIPTION

Range	Size	Model	Assembly	No. and collar diameter	Coil type	Coupling	Thermal function	Motor	Speeds	Filter																													
CFL	3 4C	LY	STD	3D200	4T	G	F	+ 1400W	HEE	Depending on selection																													
										<table><tr><td>EP</td><td>Epure filter</td></tr><tr><td>G3</td><td>G3 filter</td></tr><tr><td>SF</td><td>Without filter</td></tr></table>	EP	Epure filter	G3	G3 filter	SF	Without filter																							
EP	Epure filter																																						
G3	G3 filter																																						
SF	Without filter																																						
									<table><tr><td>HEE 2-10V</td><td>Energy efficient motor 2-10V management</td></tr><tr><td>HEE ON/OFF</td><td>Energy efficient motor 3-speed management</td></tr><tr><td>AC</td><td>5-speed asynchronous motor</td></tr></table>	HEE 2-10V	Energy efficient motor 2-10V management	HEE ON/OFF	Energy efficient motor 3-speed management	AC	5-speed asynchronous motor																								
HEE 2-10V	Energy efficient motor 2-10V management																																						
HEE ON/OFF	Energy efficient motor 3-speed management																																						
AC	5-speed asynchronous motor																																						
								<table><tr><td>500 W or 1000 W</td><td>for T1</td></tr><tr><td>500 W or 1000 W</td><td>for T2</td></tr><tr><td>700 W or 1400 W</td><td>for T3</td></tr><tr><td>700W or 1400 W</td><td>for T4</td></tr><tr><td>1200 W or 2400 W</td><td>for T5</td></tr><tr><td>1200 W or 2400 W</td><td>for T6</td></tr></table>	500 W or 1000 W	for T1	500 W or 1000 W	for T2	700 W or 1400 W	for T3	700W or 1400 W	for T4	1200 W or 2400 W	for T5	1200 W or 2400 W	for T6																			
500 W or 1000 W	for T1																																						
500 W or 1000 W	for T2																																						
700 W or 1400 W	for T3																																						
700W or 1400 W	for T4																																						
1200 W or 2400 W	for T5																																						
1200 W or 2400 W	for T6																																						
						<table><tr><td>F</td><td>Cooling</td></tr><tr><td>C</td><td>Heating</td></tr><tr><td>CF</td><td>Heating/cooling</td></tr></table>	F	Cooling	C	Heating	CF	Heating/cooling																											
F	Cooling																																						
C	Heating																																						
CF	Heating/cooling																																						
						<table><tr><td>G</td><td>Left, facing air supply</td></tr><tr><td>D</td><td>Right, facing air supply</td></tr></table>	G	Left, facing air supply	D	Right, facing air supply																													
G	Left, facing air supply																																						
D	Right, facing air supply																																						
					<table><tr><td>2T</td><td>2 pipes</td></tr><tr><td>2T2F</td><td>2-tube + wiring</td></tr><tr><td>4T</td><td>4 pipes</td></tr></table>	2T	2 pipes	2T2F	2-tube + wiring	4T	4 pipes																												
2T	2 pipes																																						
2T2F	2-tube + wiring																																						
4T	4 pipes																																						
				<table><tr><td>1D160</td><td>1 160 mm collar</td><td>T1</td></tr><tr><td>1D200</td><td>1 200 mm collar</td><td>T1</td></tr><tr><td>2D160</td><td>2 160 mm collars</td><td>T1 and T2</td></tr><tr><td>2D200</td><td>2 200 mm collars</td><td>T1 and T2</td></tr><tr><td>2D250</td><td>2 250 mm collars</td><td>T4</td></tr><tr><td>3D160</td><td>3 160 mm collars</td><td>T3</td></tr><tr><td>3D200</td><td>3 200 mm collars</td><td>T3 and T4</td></tr><tr><td>3D250</td><td>3 250 mm collars</td><td>T5</td></tr><tr><td>4D200</td><td>4 200 mm collars</td><td>T5</td></tr><tr><td>4D250</td><td>4 250 mm collars</td><td>T6</td></tr><tr><td>5D200</td><td>5 200 mm collars</td><td>T6</td></tr></table>	1D160	1 160 mm collar	T1	1D200	1 200 mm collar	T1	2D160	2 160 mm collars	T1 and T2	2D200	2 200 mm collars	T1 and T2	2D250	2 250 mm collars	T4	3D160	3 160 mm collars	T3	3D200	3 200 mm collars	T3 and T4	3D250	3 250 mm collars	T5	4D200	4 200 mm collars	T5	4D250	4 250 mm collars	T6	5D200	5 200 mm collars	T6		
1D160	1 160 mm collar	T1																																					
1D200	1 200 mm collar	T1																																					
2D160	2 160 mm collars	T1 and T2																																					
2D200	2 200 mm collars	T1 and T2																																					
2D250	2 250 mm collars	T4																																					
3D160	3 160 mm collars	T3																																					
3D200	3 200 mm collars	T3 and T4																																					
3D250	3 250 mm collars	T5																																					
4D200	4 200 mm collars	T5																																					
4D250	4 250 mm collars	T6																																					
5D200	5 200 mm collars	T6																																					
			<table><tr><td>STD</td><td>Suspended ceiling</td></tr><tr><td>FPR</td><td>Raised floor</td></tr></table>	STD	Suspended ceiling	FPR	Raised floor																																
STD	Suspended ceiling																																						
FPR	Raised floor																																						
		<table><tr><td>I</td><td>Rectangular return - rectangular air supply</td></tr><tr><td>Y</td><td>Rectangular return - circular air supply collars</td></tr><tr><td>H</td><td>Circular return collars - circular air supply collars</td></tr><tr><td>U</td><td>1 circular lateral return collar - 1 circular lateral air supply collar</td></tr><tr><td>LI</td><td>Return underneath - rectangular air supply</td></tr><tr><td>LY</td><td>Return underneath - circular air supply collars</td></tr></table>	I	Rectangular return - rectangular air supply	Y	Rectangular return - circular air supply collars	H	Circular return collars - circular air supply collars	U	1 circular lateral return collar - 1 circular lateral air supply collar	LI	Return underneath - rectangular air supply	LY	Return underneath - circular air supply collars																									
I	Rectangular return - rectangular air supply																																						
Y	Rectangular return - circular air supply collars																																						
H	Circular return collars - circular air supply collars																																						
U	1 circular lateral return collar - 1 circular lateral air supply collar																																						
LI	Return underneath - rectangular air supply																																						
LY	Return underneath - circular air supply collars																																						
		<table><tr><td>2B</td><td>2 tube 1.5 row version (for T1 and T6)</td></tr><tr><td>2C</td><td>2 tube 2.5 row version (for T2 and T5)</td></tr><tr><td>2D</td><td>2 tube 3 row version (for T1 and T6)</td></tr><tr><td>2E</td><td>2 tube 4 row version (for T1 and T6)</td></tr><tr><td>4B</td><td>4-tube, 1.5-row version (cooling) + 0.5 row version (heating)</td></tr><tr><td>4C</td><td>4-tube, 2.5-row version (cooling) + 0.5 row version (heating)</td></tr><tr><td>4D</td><td>4-tube, 3.5-row version (cooling) + 0.5 row version (heating)</td></tr></table>	2B	2 tube 1.5 row version (for T1 and T6)	2C	2 tube 2.5 row version (for T2 and T5)	2D	2 tube 3 row version (for T1 and T6)	2E	2 tube 4 row version (for T1 and T6)	4B	4-tube, 1.5-row version (cooling) + 0.5 row version (heating)	4C	4-tube, 2.5-row version (cooling) + 0.5 row version (heating)	4D	4-tube, 3.5-row version (cooling) + 0.5 row version (heating)																							
2B	2 tube 1.5 row version (for T1 and T6)																																						
2C	2 tube 2.5 row version (for T2 and T5)																																						
2D	2 tube 3 row version (for T1 and T6)																																						
2E	2 tube 4 row version (for T1 and T6)																																						
4B	4-tube, 1.5-row version (cooling) + 0.5 row version (heating)																																						
4C	4-tube, 2.5-row version (cooling) + 0.5 row version (heating)																																						
4D	4-tube, 3.5-row version (cooling) + 0.5 row version (heating)																																						
	<table><tr><td>1</td><td rowspan="6">Size</td></tr><tr><td>2</td></tr><tr><td>3</td></tr><tr><td>4</td></tr><tr><td>5</td></tr><tr><td>6</td></tr></table>	1	Size	2	3	4	5	6																															
1	Size																																						
2																																							
3																																							
4																																							
5																																							
6																																							
CFL	COMFORT LINE																																						

TECHNICAL DESCRIPTION

Frame

■ Galvanised panelling, zinc-nickel plated steel fastenings.
Melamine resin insulation, springy open-cell foam, plus aluminium shield to prevent any dust build-up in the insulation and facilitate cleaning.
M1 fire rating, thickness 15 mm.

Water coil

- 1 hot water or cold water circuit (2-tube system)
- 1 hot water + 1 cold water circuit (4-tube system)
- Internally threaded rotating "female" couplings with flat face (diameter G $\frac{1}{2}$ " and G $\frac{3}{4}$ " according to size) and O-ring gasket.
- Copper tubes, continuous aluminium fins
- Draining and air bleed valve
- 16 Bar nominal service pressure (at 20°C), 24 Bar test pressure
- Maximum hot water inlet temperature:
 - 4-tube application: 90°C
 - 2-tube application: 90°C
 - 2T/2-wire application: 55°C (min. air flow rate: 200 m³/h)

Electrical heater (230V- 50Hz)

- Shielded single-tube heating element, pin-mounted on the hydraulic coil outlet and providing excellent supply air temperature distribution.
- 1 capillary tube temperature limiter with manual reset and 1 capsule temperature limiter with automatic reset.

Condensate drain pan

- CIAT design (patent application no.1254978)
- Recyclable thermoplastic drain pan with no water retention, designed to prevent any leaks or bypass.
- Drainage bushings manually reversible toward the rear or front of the device.
- 4 drainage diameters: Ø 15, 16, 22 or 28 mm as standard.

Fan motor assembly size 1 to 5

1 fan motor assembly fitted with:

■ Fan

1 or 2 HEE impeller(s), with CIAT exclusive High Energy Efficiency airfoil blades in self-extinguishable ABS (HB) with galvanised metal housing.

■ HEE motor

High energy efficiency motor enabling a reduction of up to 85% in electricity consumption.

HEE motor description:

- BLAC (Brushless Alternating Current) brushless technology offering more linear torque progression and a lower operating sound level than BLDC (Brushless Direct Current) technology,
- sealed, tropicalised, with protected shaft,
- 3-speed gradual operation by 0-10V or on/off control signal, without expansion board,
- internal automatic overload protection as standard on winding,
- "DFS" motor fault output using a photocoupler for potential alarm feedback via a Konnex protocol communication bus. (via V3000 controller),

- Mounted on anti-vibration mounts,
- Supply 230V $\pm$ 10%/1-Ph/50-60 Hz.

Note: The minimum voltage required for start-up of the motor is 2V.

Or

■ Asynchronous motor:

5-speed motor connected to terminal block

Asynchronous motor description:

- Sealed, tropicalised, with protected shaft,
- permanent capacitor,
- ball bearings,
- internal automatic overload protection as standard on winding,
- resilient mounts,
- 230V $\pm$ 10%/1-Ph/50-60 Hz feed.
- high efficiency and power factor.

Size 6 fan motor assembly

HEE solution:

2 fan motor assemblies fitted with:

■ Fan

Aluminium single impeller with forward-curved self-extinguishable airfoil blades, dynamically balanced dual inlet with galvanised metal housing.

■ HEE motor

High energy efficiency motor enabling a reduction of up to 85% in electricity consumption (see HEE motor description for sizes 1 to 5).

Electrics box

- Hydraulic connection side,
- large ABS electrics box, 2-screw closure,
- protection rating IP20,
- terminal block on DIN rail in accordance with EN 50022, depth 7.5 mm,
- cable routing for customer electrical connections.

Filtration available

■ Epure function

- A protected air stream which prevents particles from being drawn into suspended ceilings.
- Local filtration using a high efficiency folded filter medium effective for PM of 2.5 microns:
 - Filter area: 10 times the intake surface area.
 - Low energy impact.
 - Improved service life.
 - M1 fire rating.
 - Easy access via 2 quick locks.

Or

- Flexible filter medium made of regenerative polyester fibre.
- EN779 Efficiency Class: G3.
- Fire rating: M1.
- Rigid metal frame.
- Easily accessible via 2 quick locks.

Plenums

- Galvanised panelling, zinc-nickel plated steel fastenings,
- ABS (HB) collars clipped to the panelling,
- supply plenum:
 - insulated plenum: melamine resin insulation, flexible open-cell foam, plus aluminium shield to prevent any dust build-up in the insulation and facilitate cleaning. M1 fire rating, thickness 15 mm,
- return plenum:
 - uninsulated plenum.

Standard wiring diagram without control

- 2-tube application: 7349011.
- 2-tube + electric application: 7349014.
- 4-tube application: 7349012.

Securing the device

- COMFORT LINE must be suspended from the ceiling using 4 threaded rods: with CIAT resilient mounts min. diameter 6 mm and max. diameter 8 mm, or without CIAT suspension diameter 8 mm to 10 mm.

Packaging

- Delivered on pallet and protected by stretch wrap film.

Control

- Wall-mounted electromechanical thermostat range,
- V30 and V300 electronic range,
- V3000 networked electronic range (KNX),
- Communicating electronic range (LON): VLON,
- fresh air control:
 - R1: Fresh air managed by presence sensor,
 - R+: Fresh air managed by CO₂ sensor.

Accessories

■ Factory fitted:

- Condensate drain pump,
- smooth metal rectangular return sleeve.

■ Delivered separately:

- Ø100 mm smooth collar,
- self-adjustable Ø100 mm fresh air module kit:
 - flow rate 15/30/45 m³/h,
 - flow rate 60/75/90 m³/h,
- resilient mounts,

- Ø160 mm circular duct accessory for diffusion kit,
- condensate pan extensions,
- flexible connections.

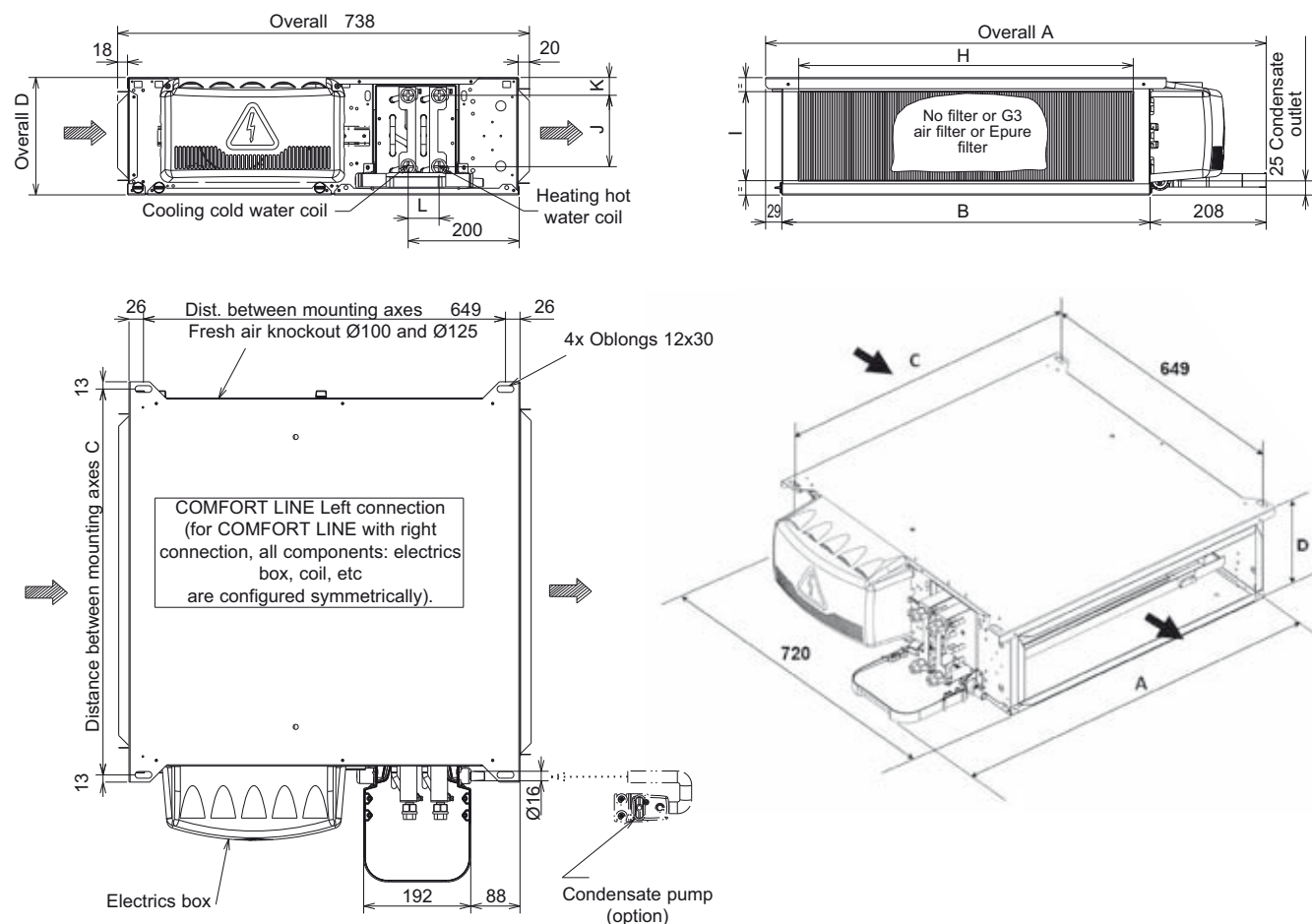
Options (contact us)

- Electrical and hydraulic connections on opposite sides.
- Hydraulic coil with blades protected for harmful/corrosive atmospheres (coastal locations or areas close to chemical industries).
- Return plenum insulation.

LINEAR CONCEPTS

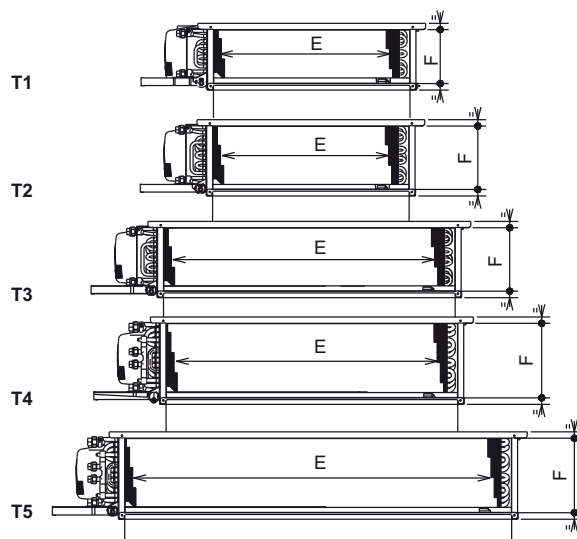
Dimensions of sizes 1 to 5 units

MODEL I

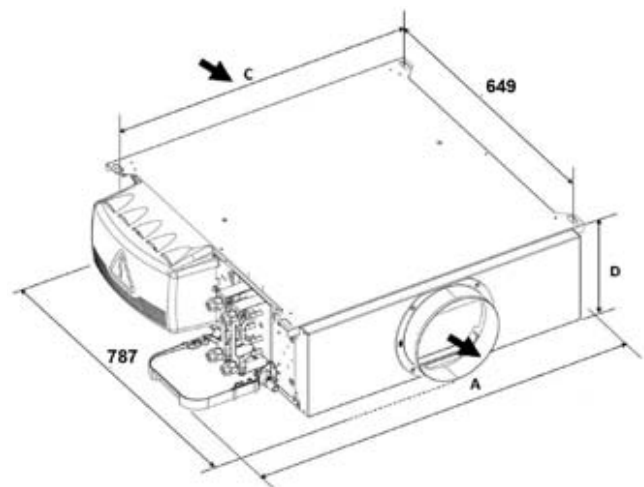
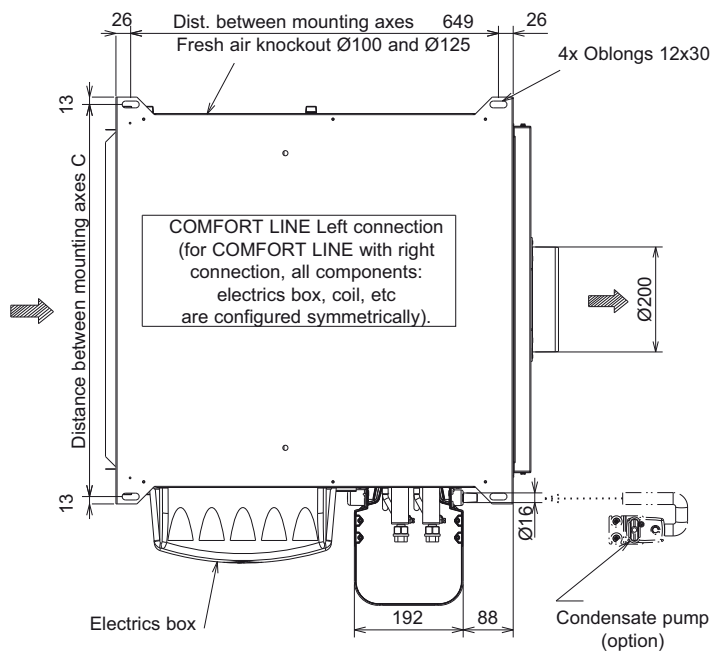
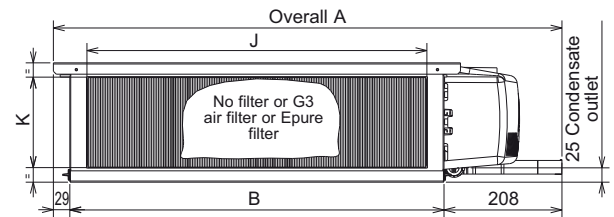
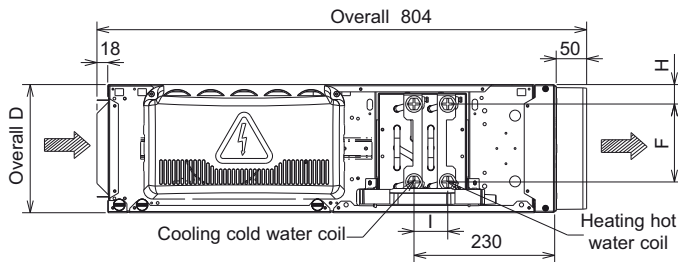


Air supply frontal view

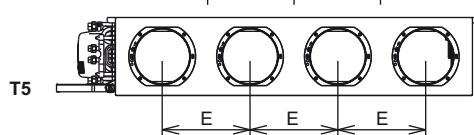
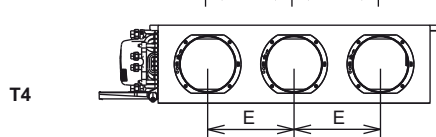
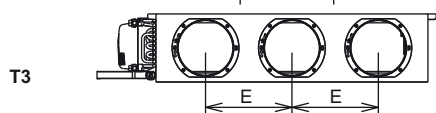
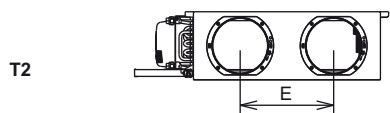
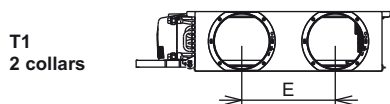
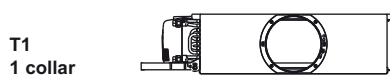
	A	B	C	D	E	F	G		H	I	J		K		L (4T)	
					Air Supply	Air Supply	C. Coil	H. Coil	Air Intake	Air Intake	C. Coil	H. Coil	C. Coil	H. Coil	3 rows	4 rows
T1				215	620	170	1/2"	1/2"	600	160	128	128	35	35	55	
T2	898	660	692	245		200			190	160	160					
T3	1198	960	992	280	920	235	3/4"	900	225	192	40	110				62
T4					1220			1200								
T5	1498	1260	1292													



MODEL Y - Collar Ø200 mm

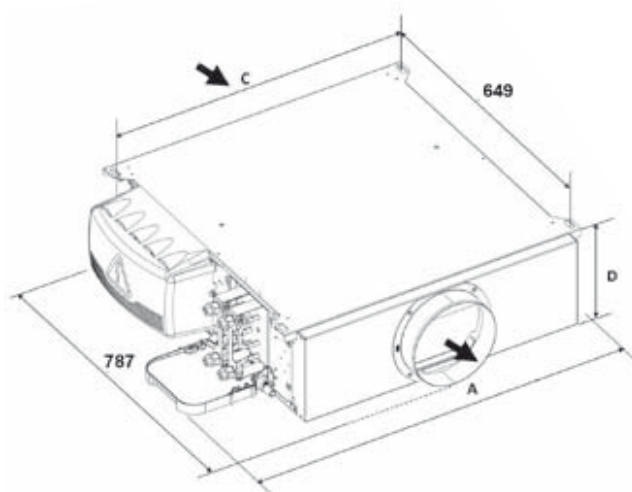
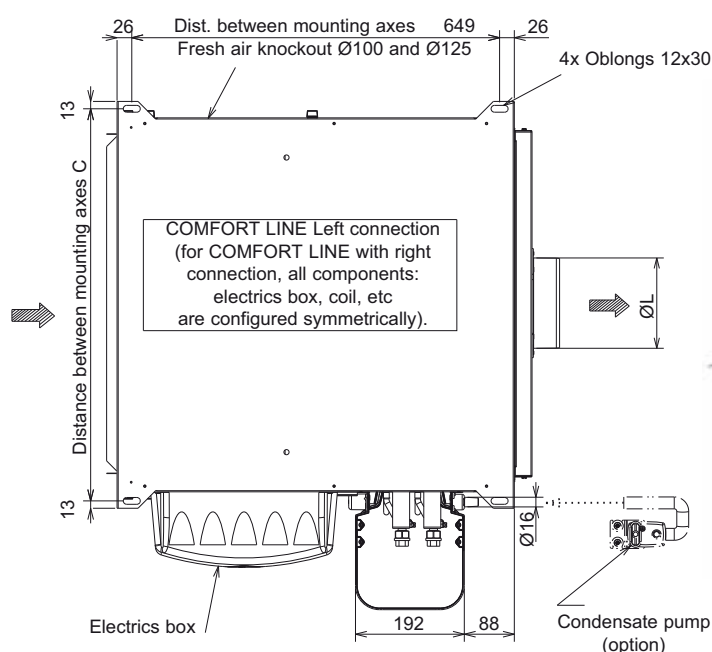
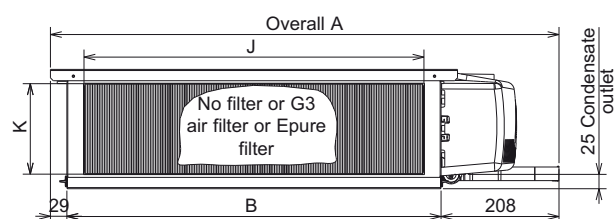
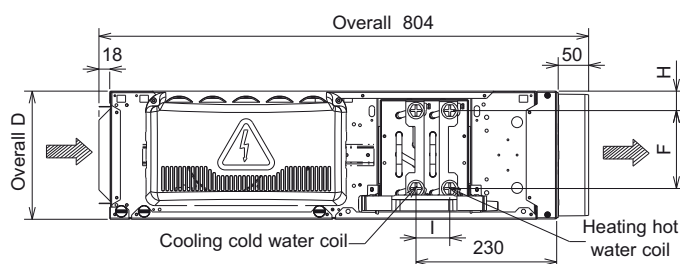


Air supply frontal view

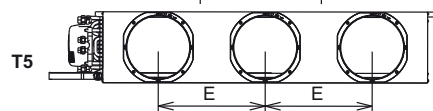
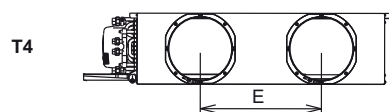
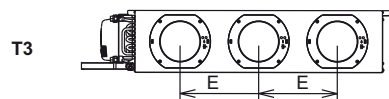
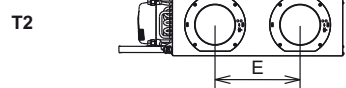
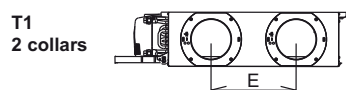


	A	B	C	D	E	F		G		H		I (4T)		Qty
						C. Coil	H. Coil	C. Coil	H. Coil	C. Coil	H. Coil	3 rows	4 rows	collars
T1 (1V)				215	-	128	128							1
T1 (2V)	898	660	692		330			1/2"		35			55	2
T2				245		160	160		1/2"	35		55		3
T3	1198	960	992		305									3
T4				280		192	40	3/4"		110			62	4
T5	1498	1260	1292		310									4

MODEL Y - Collar Ø160 or 250 mm

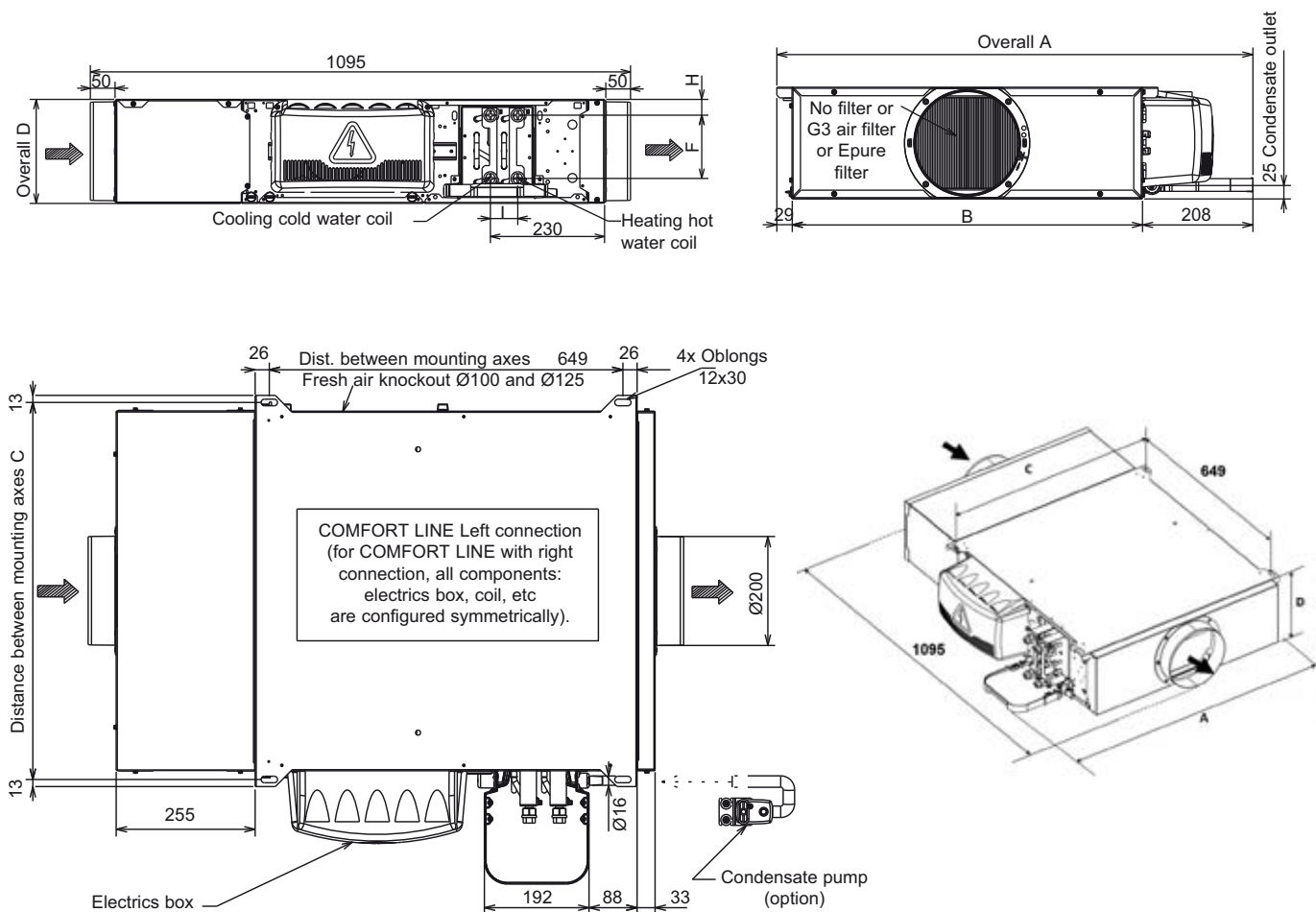


Air supply frontal view

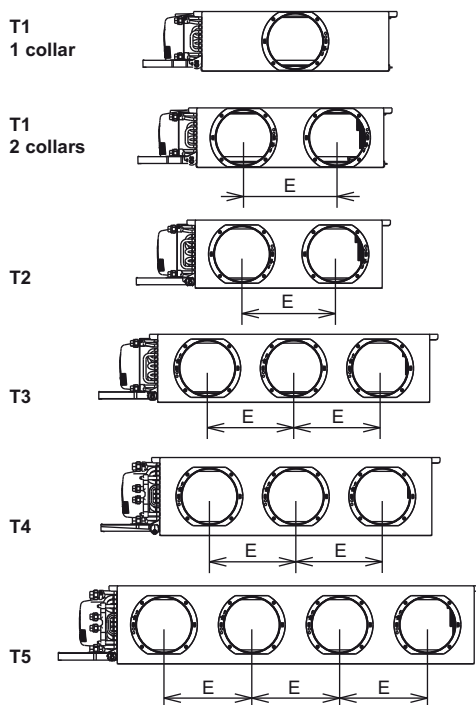


	A	B	C	D	E	F		G		H		I (4T)		J	K	Ø L	Qty					
						C. Coil	H. Coil	C. Coil	H. Coil	C. Coil	H. Coil	3 rows	4 rows				collars					
T1 (1V)	898	660	692	215	-	128	128	1/2"	1/2"	35	55	55	55	600	160	160	1					
T1 (2V)					330												2					
T2					245												3					
T3					305												160	160	900	225	250	2
T4					470												192	40	110	62	1200	3
T5	1498	1260	1292	280	415	192	40	3/4"														

MODEL H - Collar Ø200 mm

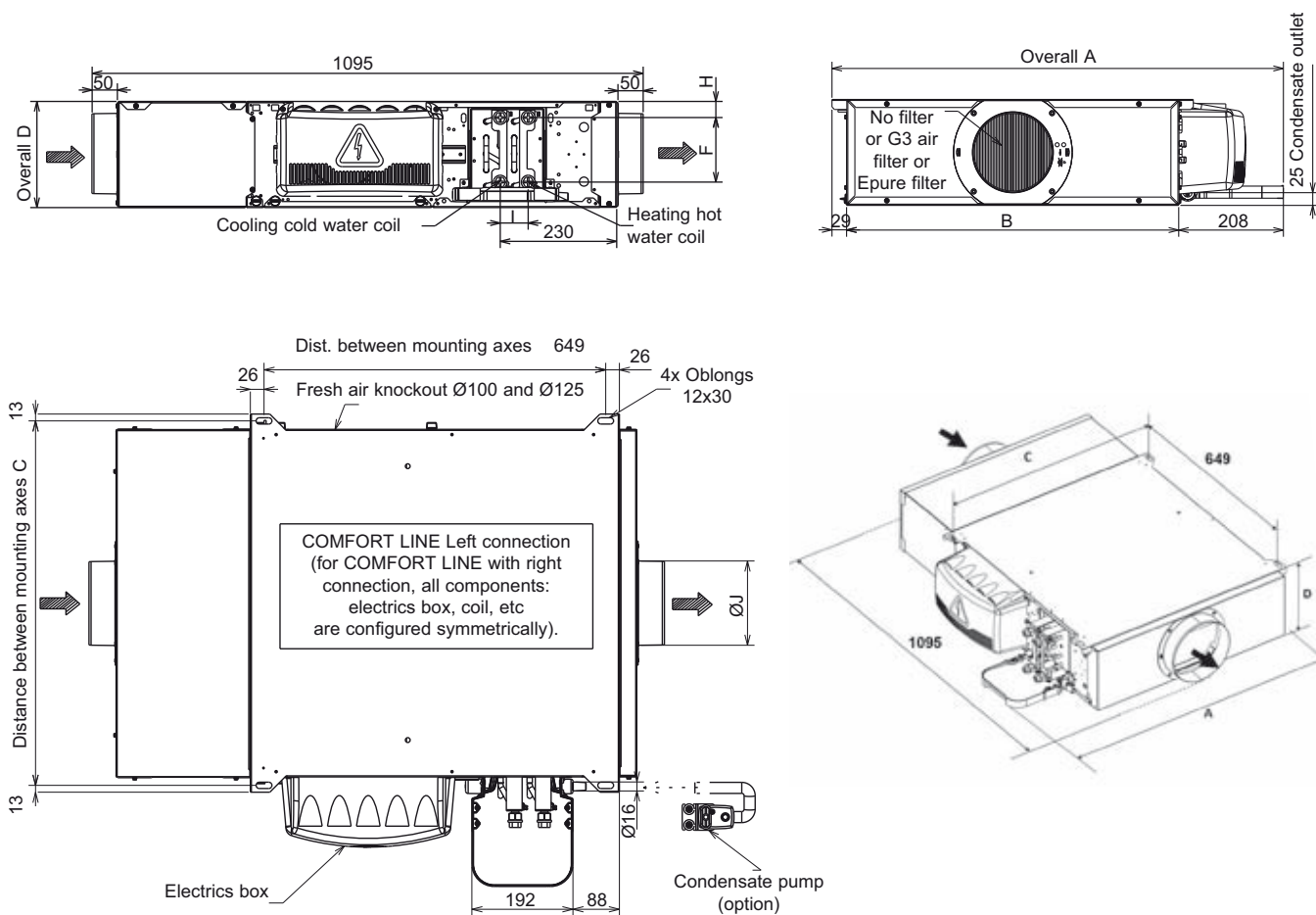


Air supply frontal view

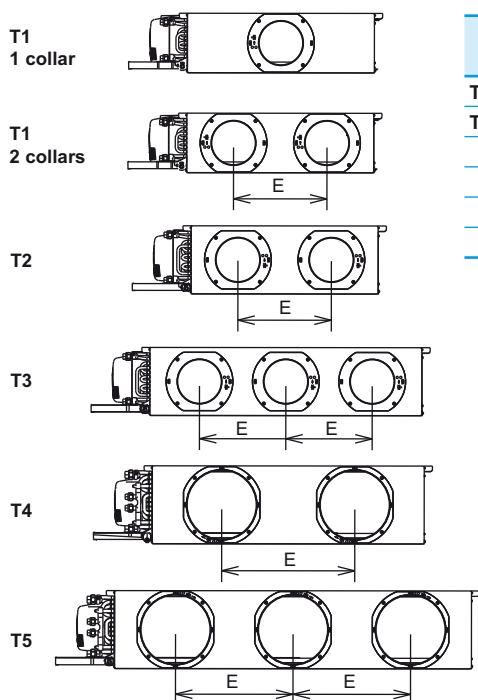


	A	B	C	D	E	F		G		H		I (4T)		Qty
						C. Coil	H. Coil	C. Coil	H. Coil	C. Coil	H. Coil	3 rows	4 rows	collars
T1 (1V)					-	128	128							1
T1 (2V)	898	660	692	215	330			1/2"		35	35		55	2
T2				245		160	160		1/2"			55		3
T3	1198	960	992	305										3
T4				280		192	40	3/4"		110			62	4
T5	1498	1260	1292	310										4

MODEL H - Collar Ø160 or 250 mm

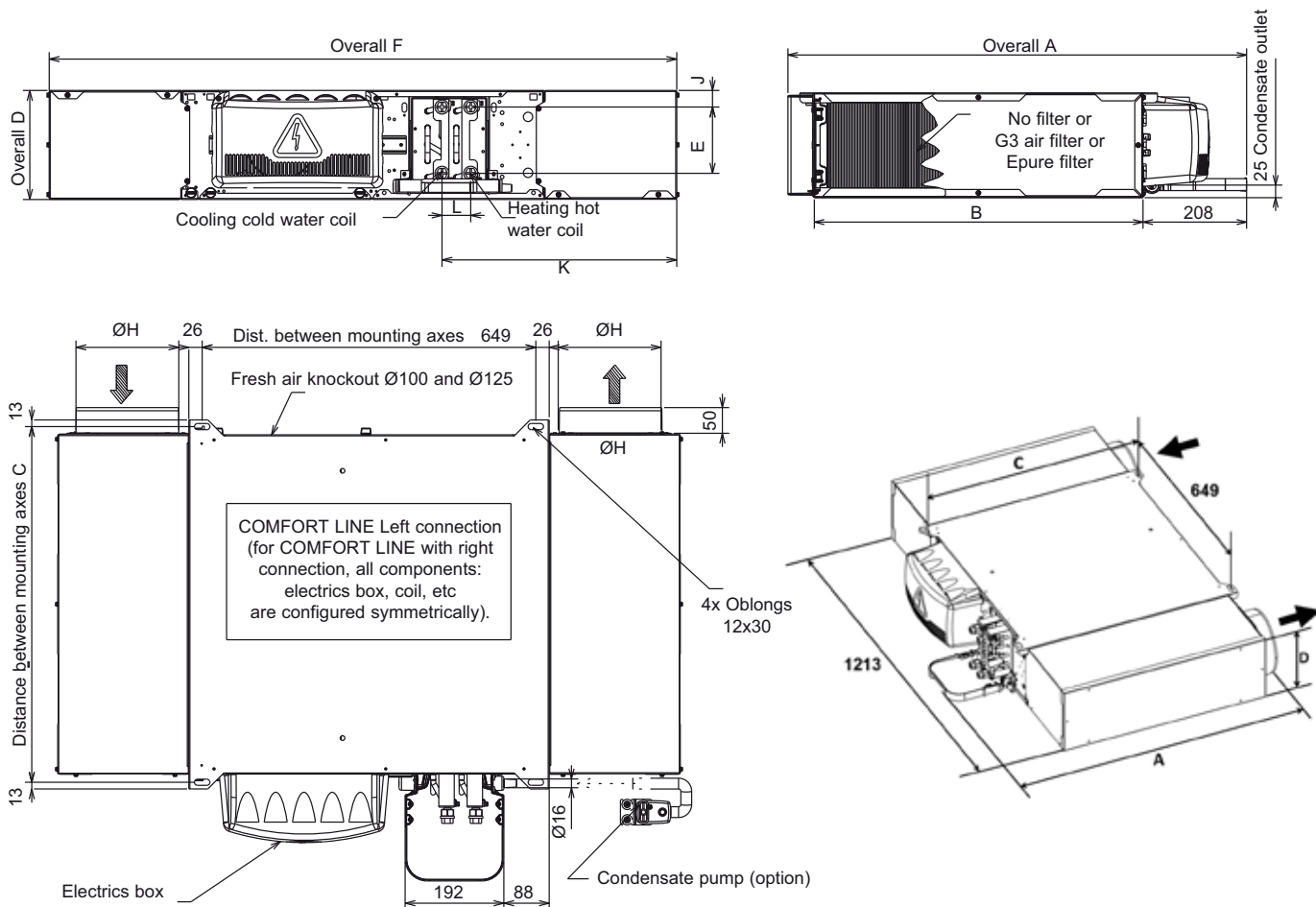


Air supply frontal view



	A	B	C	D	E	F		G		H		I (4T)		Ø J	Qty	
						C. Coil	H. Coil	C. Coil	H. Coil	C. Coil	H. Coil	3 rows	4 rows		collars	
T1 (1V)	898	660	692	215	-	128	128	1/2"		35	1/2"	35		55	160	1
T1 (2V)				330	160	160	2									
T2				245	305	3										
T3				1198	960	992	470									2
T4				1498	1260	1292	280									415

MODEL U - Collar Ø200 or 250 mm

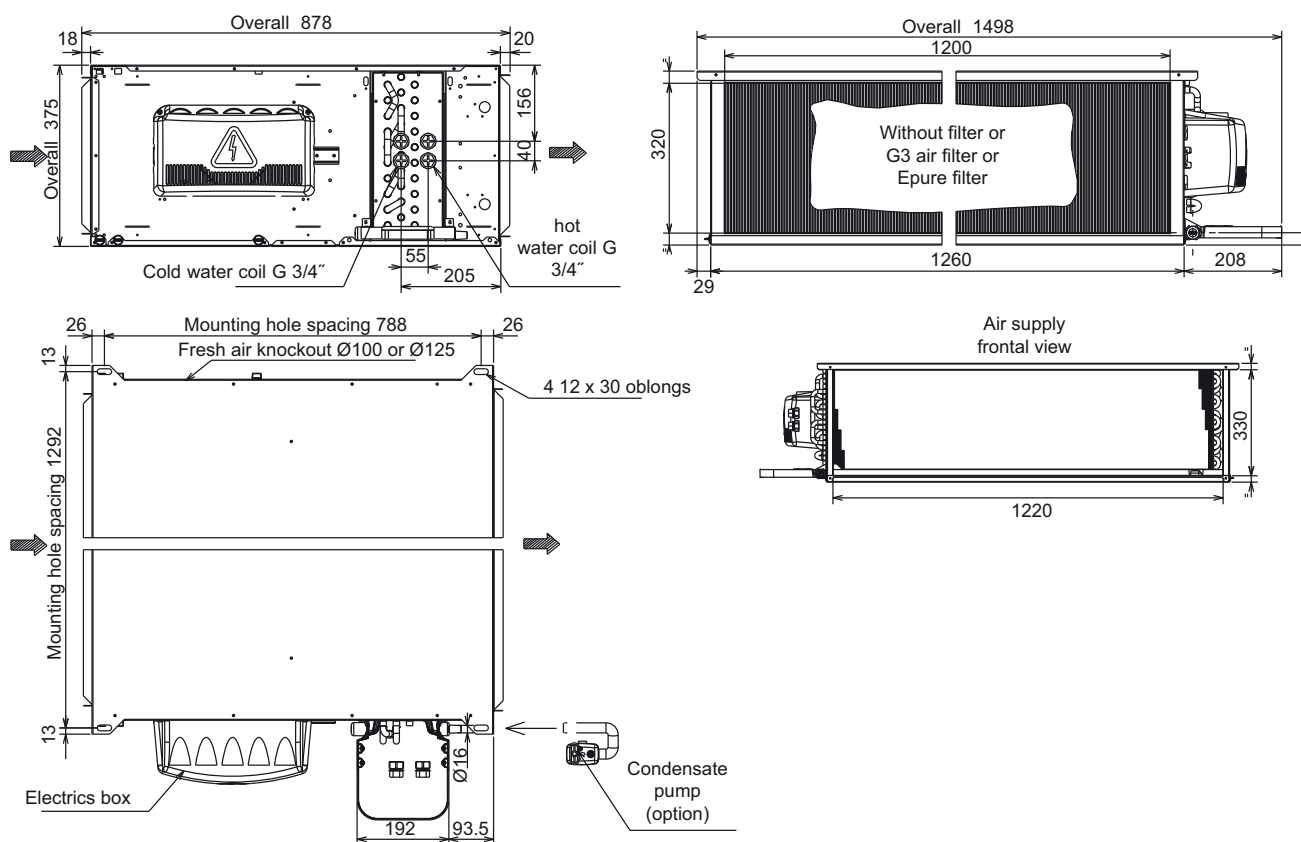


	A	B	C	D	E		F	G		Ø H	I	J		K	L (4T)	
					C. Coil	H. Coil		C. Coil	H. Coil			C. Coil	H. Coil	H. Coil	3 rows	4 rows
T1	920	660	692	215	128	128	1213	1/2"	1/2"	200	956	35	35	455	55	55
T2				245	160	160										
T3	1220	960	992	280	192	40	1313	3/4"		250	1006		110	505		62
T4																

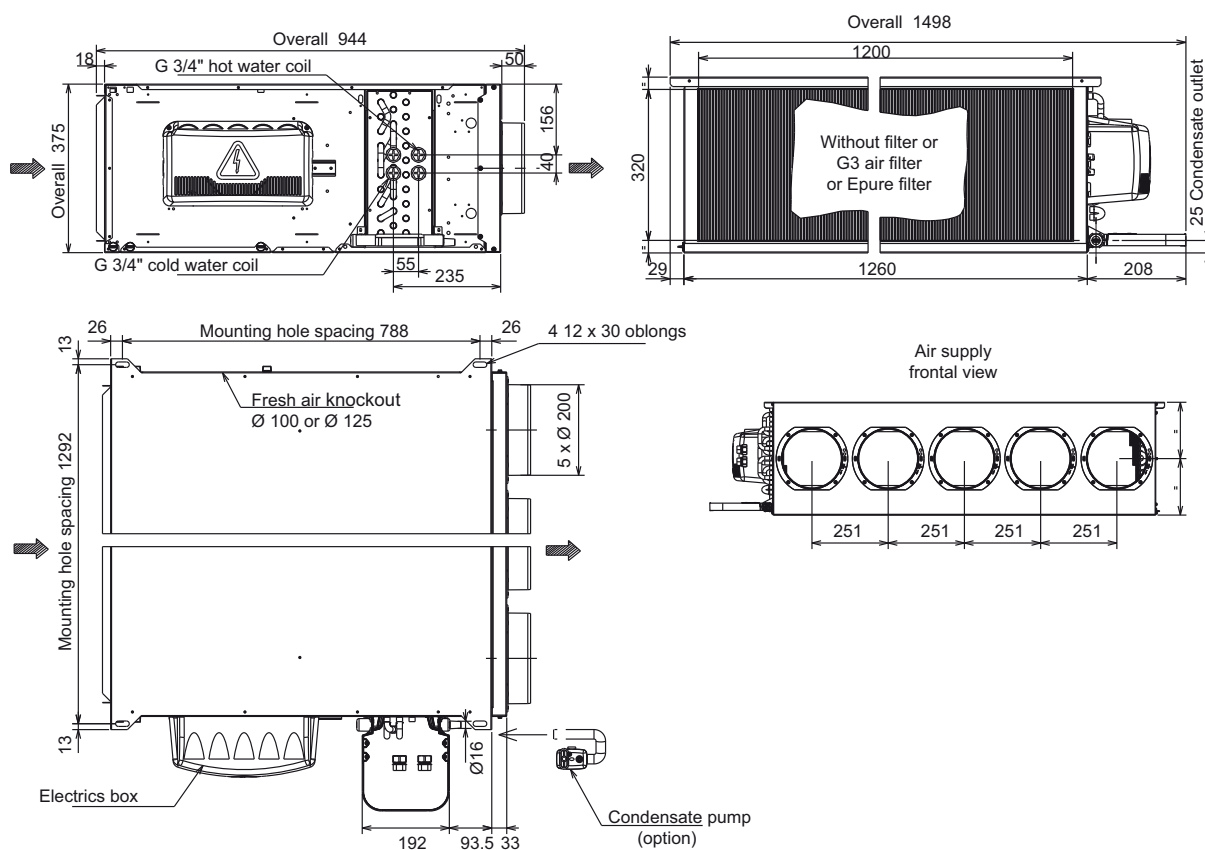
Dimensions of size 6 units

MODEL I

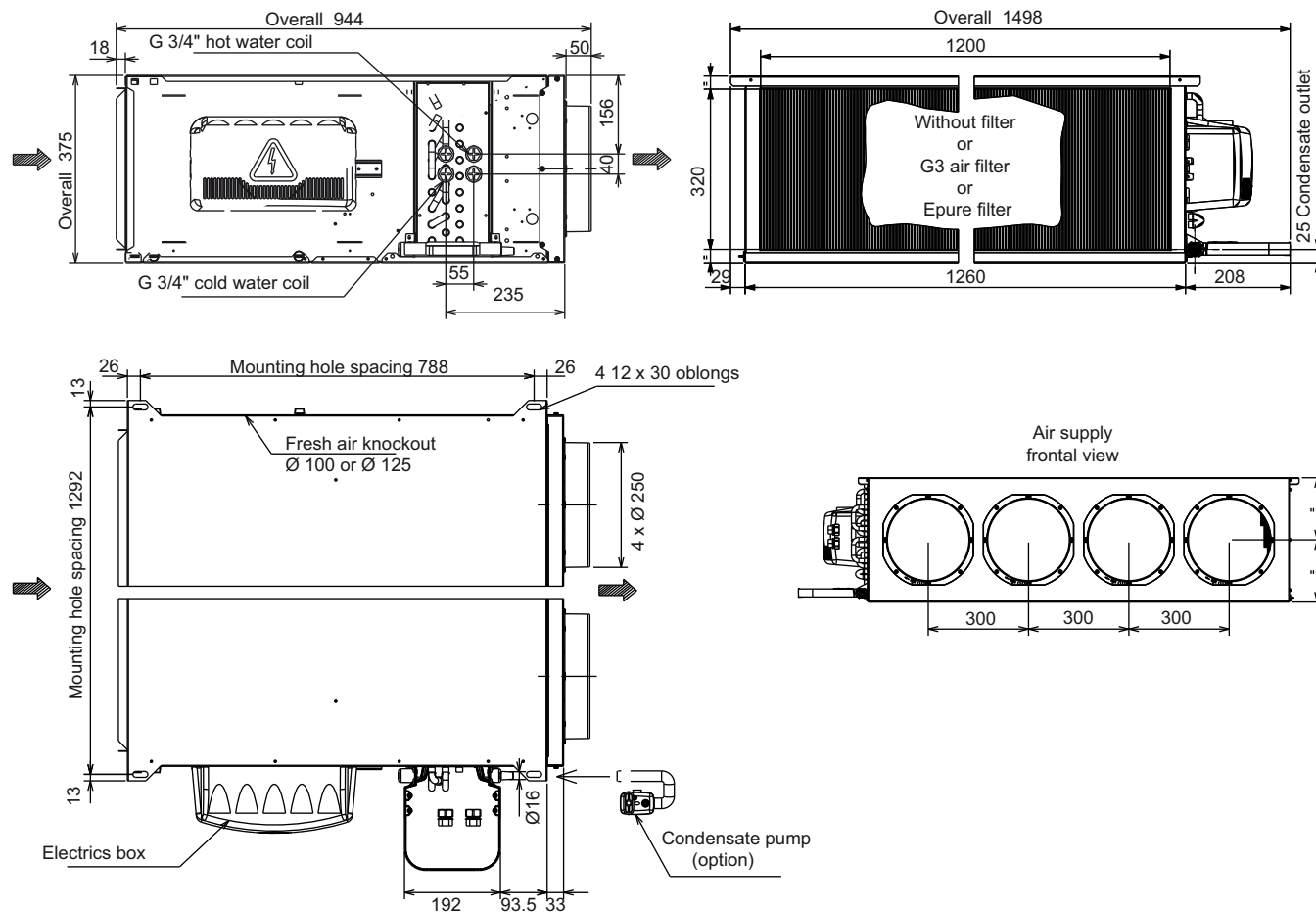
Size 6 available
1st quarter 2015



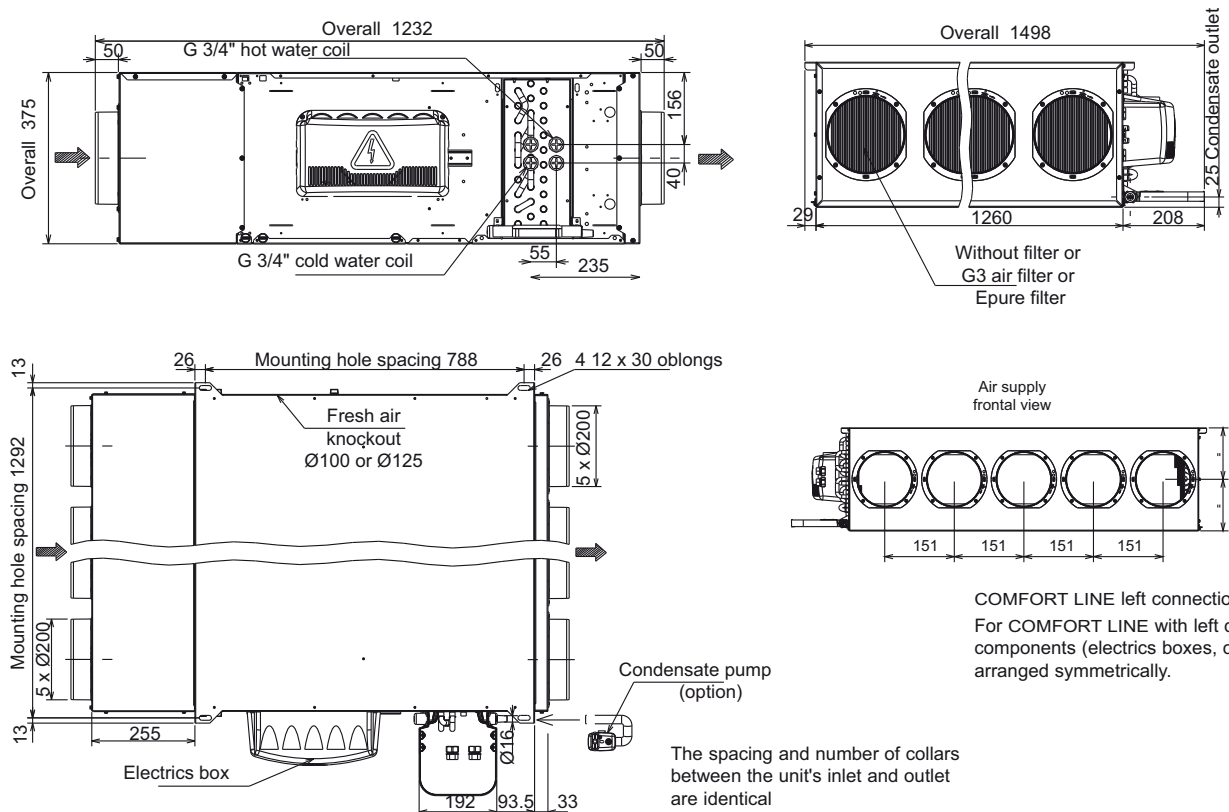
MODEL Y - Collar Ø200 mm



MODEL Y - Collar 250 mm



MODEL H - Collar Ø 200 mm

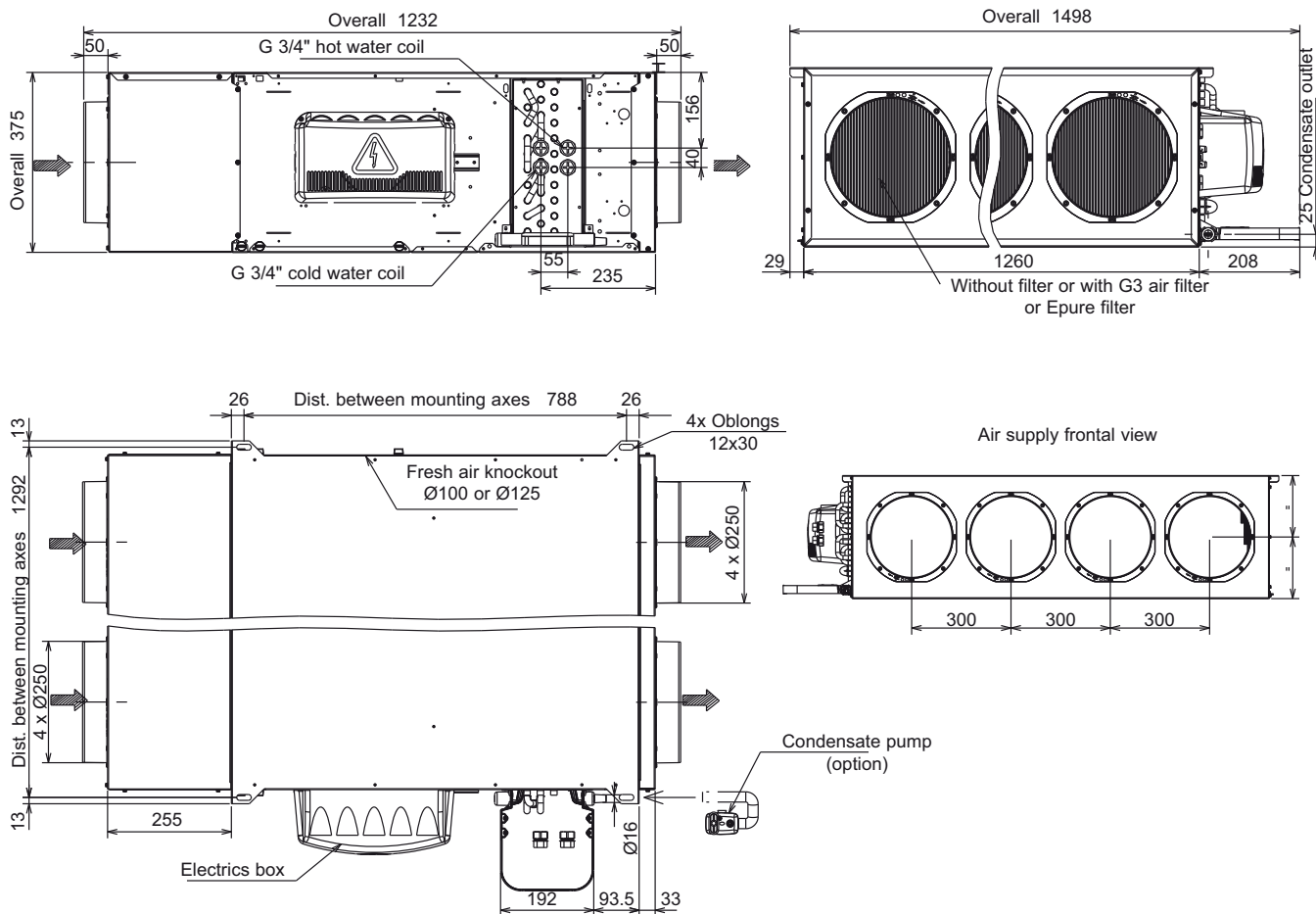


COMFORT LINE left connection.

For COMFORT LINE with left connection all components (electrics boxes, coils, etc.) are arranged symmetrically.

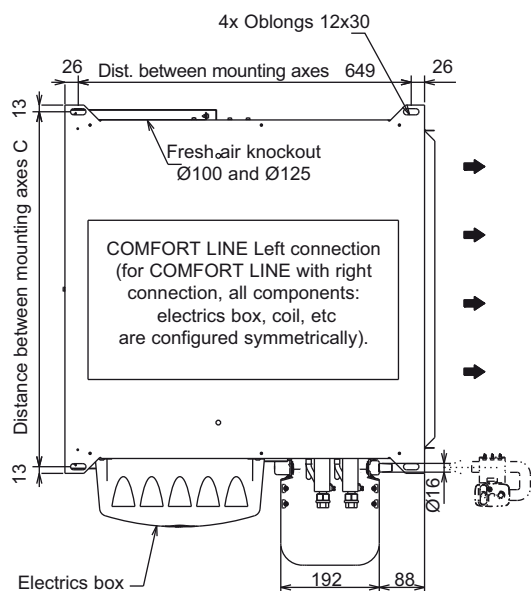
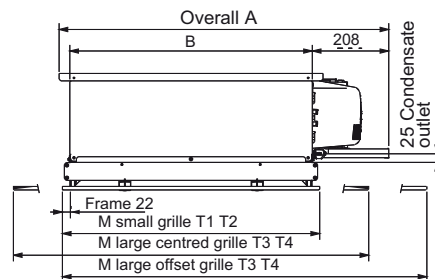
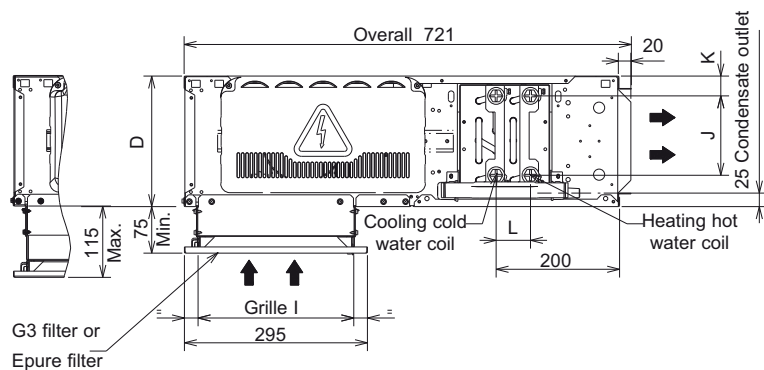
The spacing and number of collars between the unit's inlet and outlet are identical

MODEL H - Collar Ø 250 mm



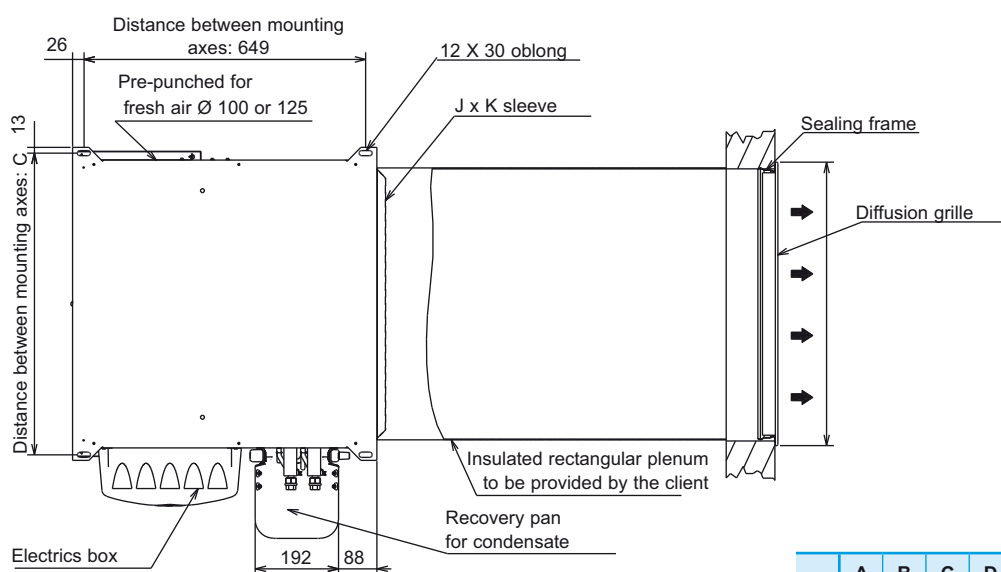
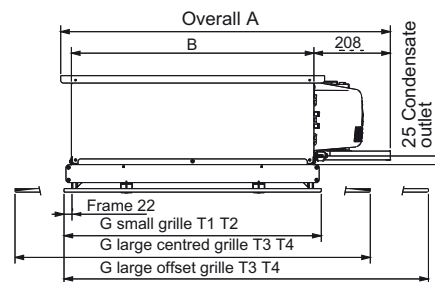
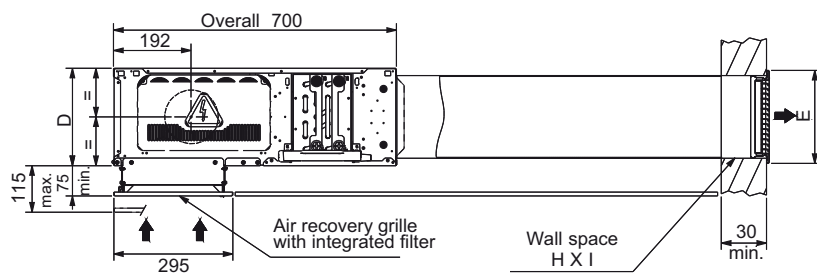
L CONCEPTS

MODEL LI

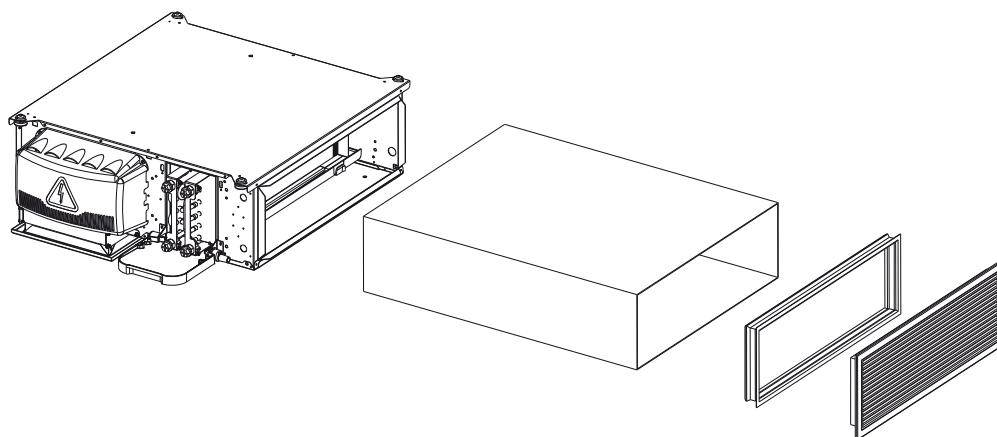


	A	A'	B	C	D	E Air supply	F Air supply	G C. Coil H. Coil		I	J C. Coil H. Coil		K C. Coil H. Coil		L (4T) 3 rows 4 rows		M
T1	898		660	692	215	620	170	1/2"	1/2"	250	128	128	35	35	35	62	700
T2					245		200				160	160					
T3	1205	1285	960	992	280	920	235				192	40					
T4								3/4"					110				1195

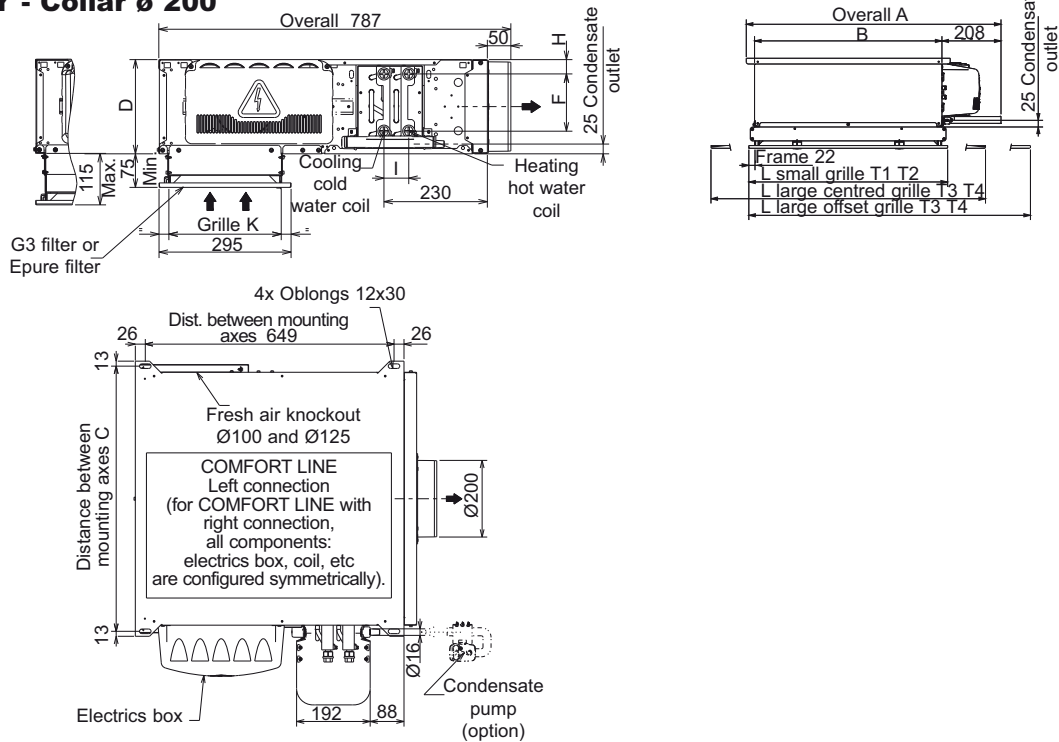
MODEL LIK



	A	B	C	D	E	F	G	H	I	J	K
T1	898	660	692	215	200	650	700	175	625	620	170
T2				245	230			205			200
T3	1205	960	992	280	265	950	1195	240	925	920	235
T4											

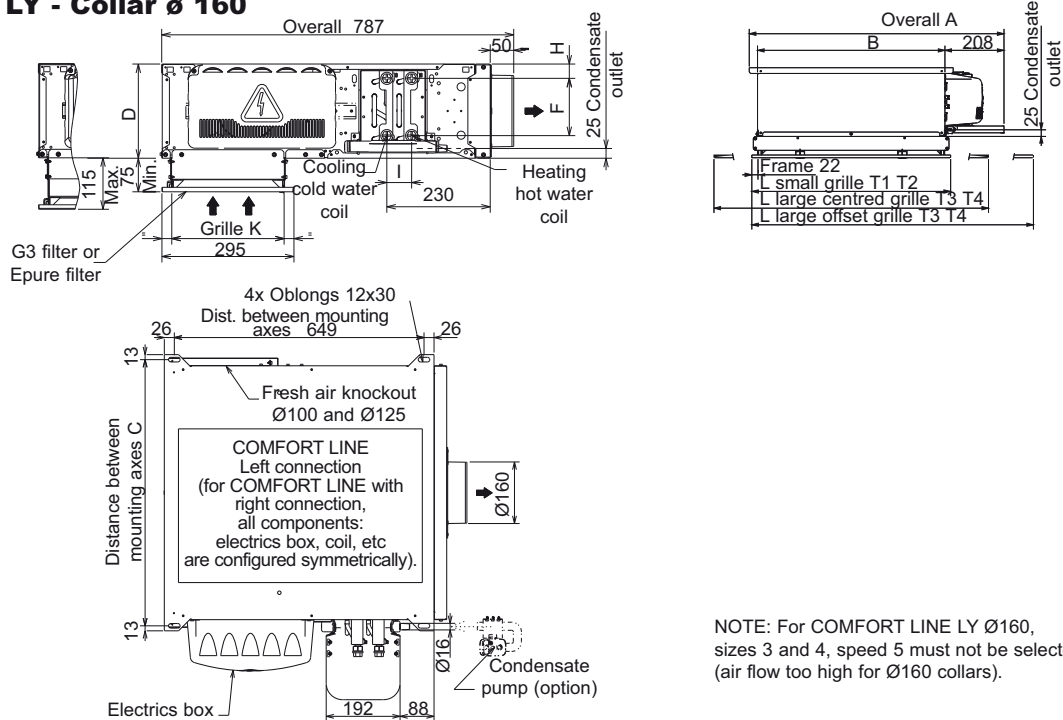


MODEL LY - Collar ø 200



	A	A'	B	C	D	E	F		G		H		I (4T)		K	L
							C. Coil	H. Coil	C. Coil	H. Coil	C. Coil	H. Coil	3 rows	4 rows		
T1 (1V)					215		128	128								
T1 (2V)	898		660	692		330			1/2"	1/2"	35	35	55	55	250	700
T2					245		160	160								
T3	1205	1285	960	992		305			3/4"			110		62		1195
T4					280		192	192								

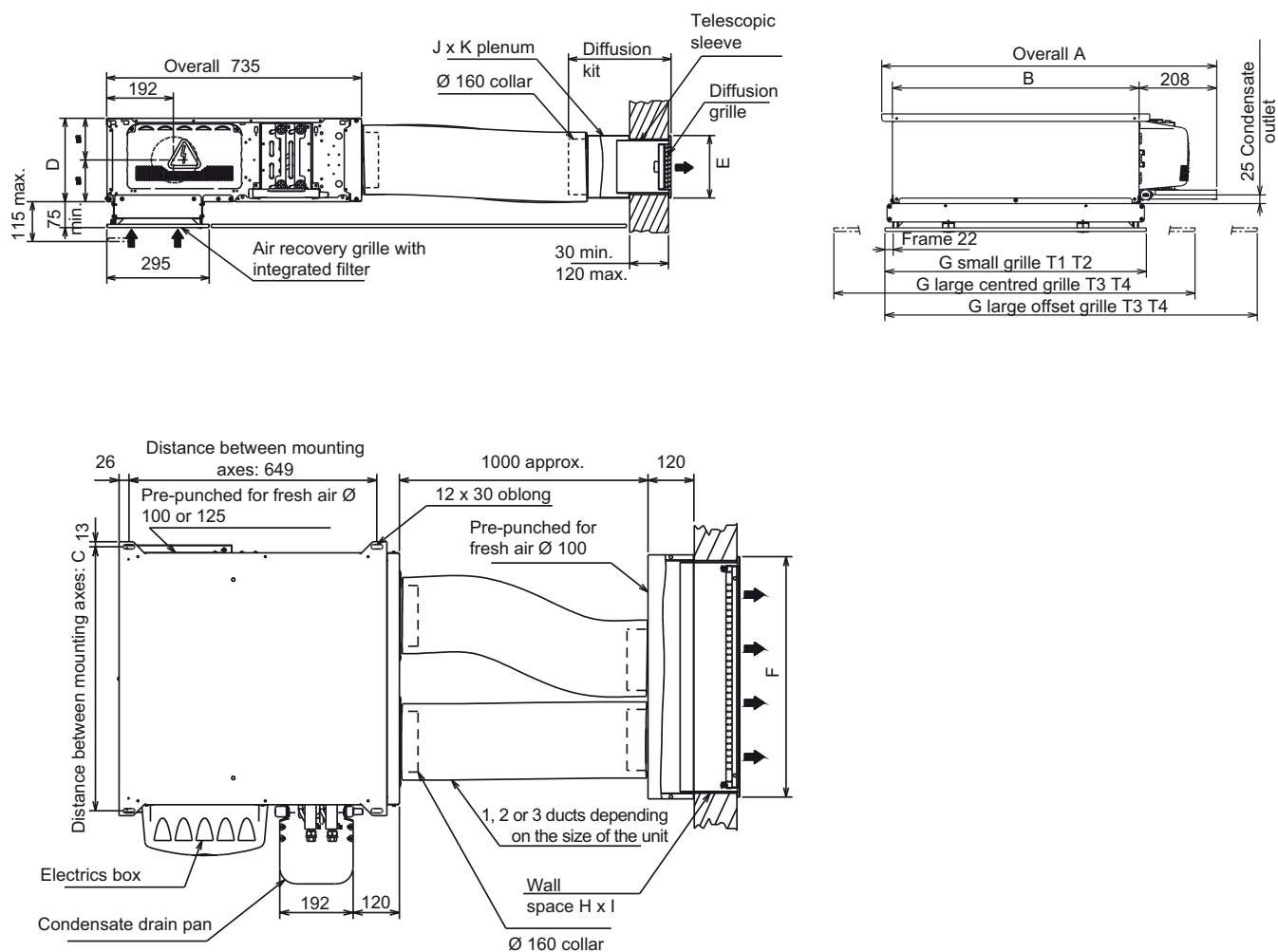
MODEL LY - Collar ø 160



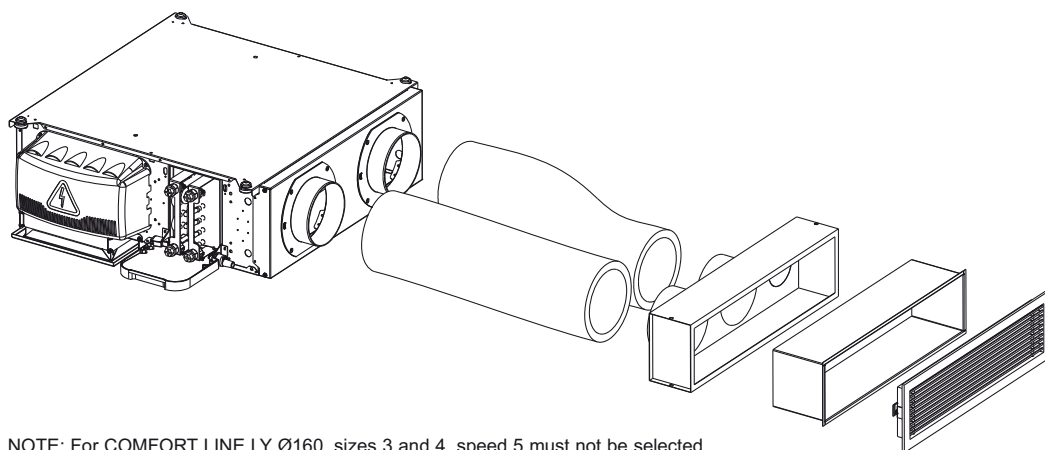
NOTE: For COMFORT LINE LY Ø160, sizes 3 and 4, speed 5 must not be selected (air flow too high for Ø160 collars).

	A	A'	B	C	D	E	F		G		H		I (4T)		K	L
							C. Coil	H. Coil	C. Coil	H. Coil	C. Coil	H. Coil	3 rows	4 rows		
T1 (1V)					215		128	128								
T1 (2V)	898		660	692		330			1/2"	1/2"	35	35	55	55	250	700
T2					245		160	160								
T3	1205	1285	960	992		305			3/4"			110		62		1195
T4					280		192	192								

MODEL LYK



	A	B	C	D	E	F	G	H	I	J	K	No. of ducts
T1 (1V)				215	200			175			440	1
T1 (2V)	898	660	692			650	700		625			
T2 (2V)				245	230			205		180	640	2
T3 (3V)	1205	960	992			950	1195		925		840	
T4 (3V)				280	265			240				3



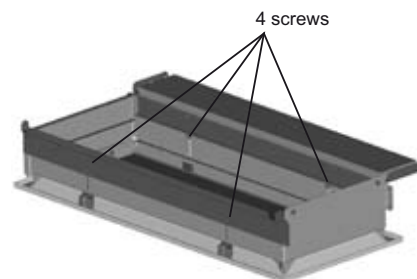
NOTE: For COMFORT LINE LY Ø160, sizes 3 and 4, speed 5 must not be selected (air flow too high for Ø160 collars).

Return grille adjustment

Sizes 1 and 2: 700 grille on 700 frame
Sizes 3 and 4: grille on 1200 frame

Vertical adjustment only:

- 1) Open the grille fully using the 2 clips.
- 2) Remove the grille + the filter completely.
- 3) Unscrew the 4 screws (see the view below) then adjust the height with the adjustment holes, then refit the screws.
- 4) Cover over the adjustment holes with aluminium tape.

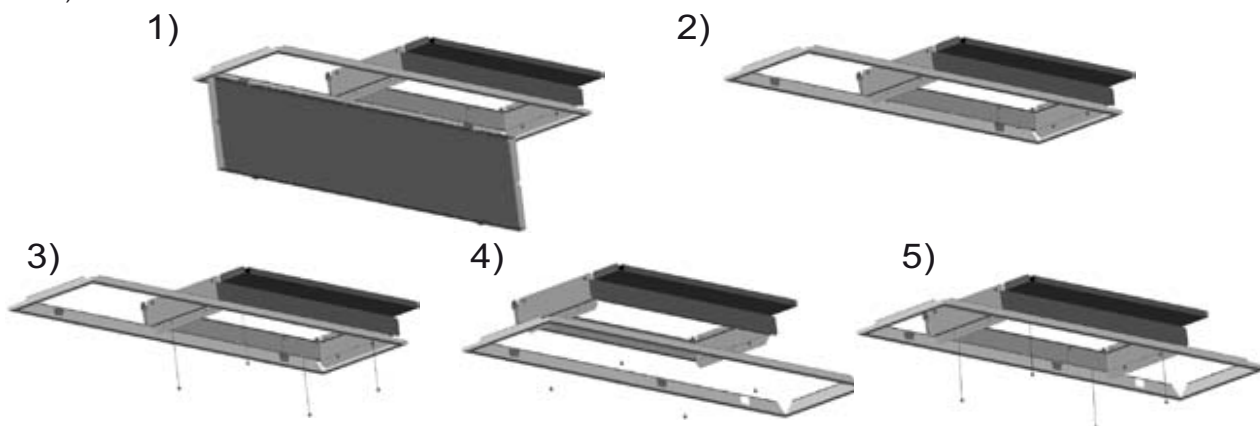


Sizes 1 and 2: 700 grille on 1200 frame

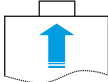
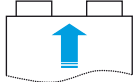
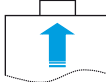
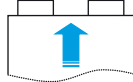
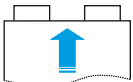
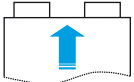
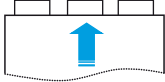
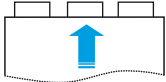
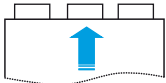
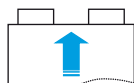
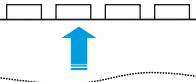
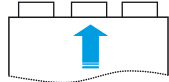
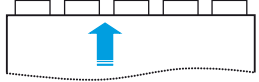
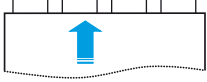
Vertical adjustment (see above)

Horizontal adjustment:

- 1) Open the grille using the 2 clips.
- 2) Remove the grille + the filter completely.
- 3) Undo the 4 screws.
- 4) Move the support panel.
- 5) Refit the 4 screws.



SUMMARY OF COLLAR NUMBERS FOR MODELS Y, H AND LY

Size	Collar(s) Ø 160	Collar(s) Ø 200	Collar(s) Ø 250
T1	 or 	 or 	
T2			
T3			
T4			
T5			
T6			

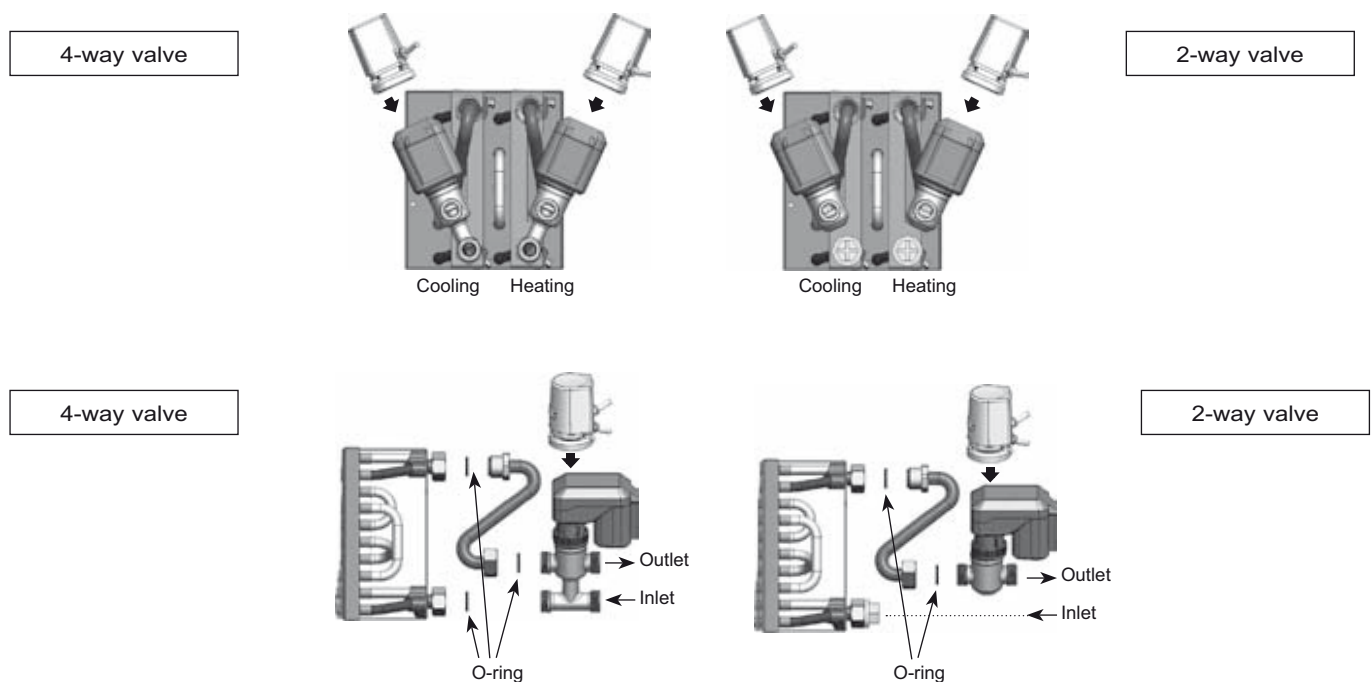
WEIGHT

COMFORT LINE	Weight (kg)					
	T1	T2	T3	T4	T5	T6
I	25	27	36	39	47	65
Y	27	29	39	42	51	69
H	34	34	46	49	60	78
U	35	38	51	57	-	-
LI	31	33	44	47	-	-
LY	33	35	47	50	-	-

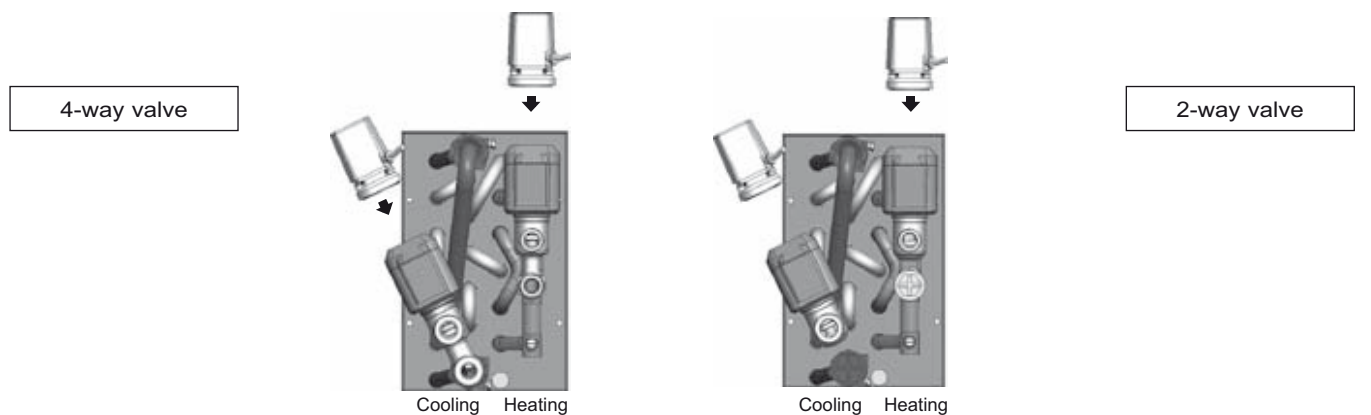
HYDRAULIC CONNECTIONS WITH FITTED VALVES

Heating/cooling assembly for valves with 3-point or thermal actuators

Sizes 1 - 2 - 3

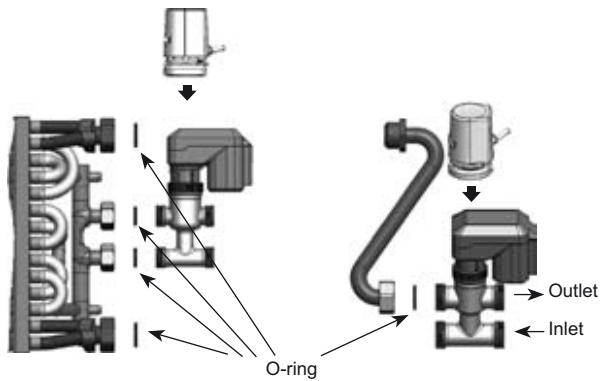


Sizes 4 - 5

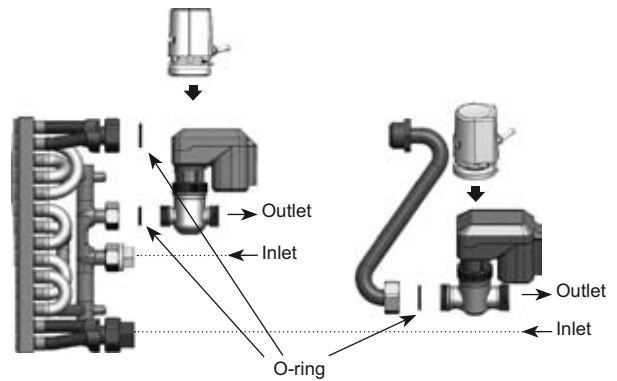


COMFORT LINE

4-way valve

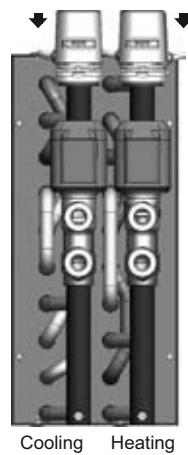


2-way valve

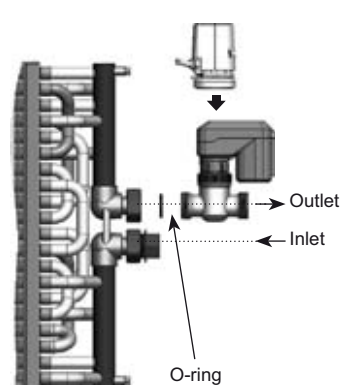
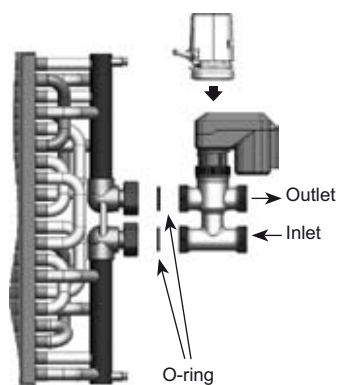
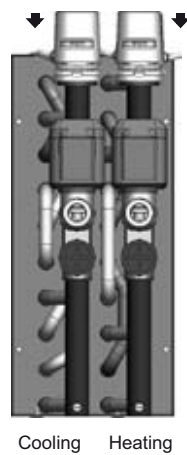


Size 6

4-way valve

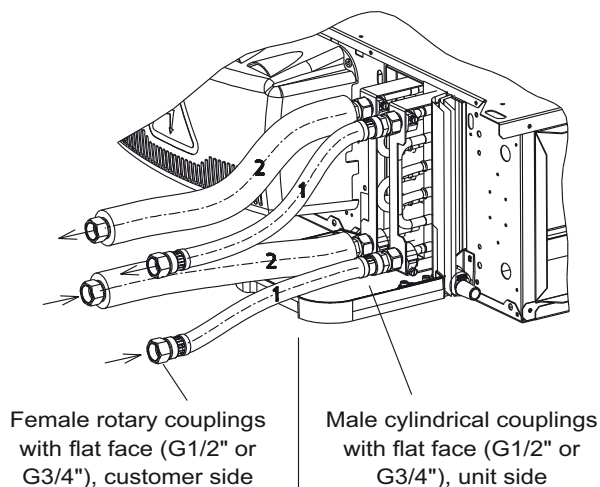


2-way valve



FLEXIBLE COUPLING KIT (OPTIONAL) WITH VALVES OR ON THE UNIT

ASSEMBLY WITHOUT VALVES



TECHNICAL DESCRIPTION

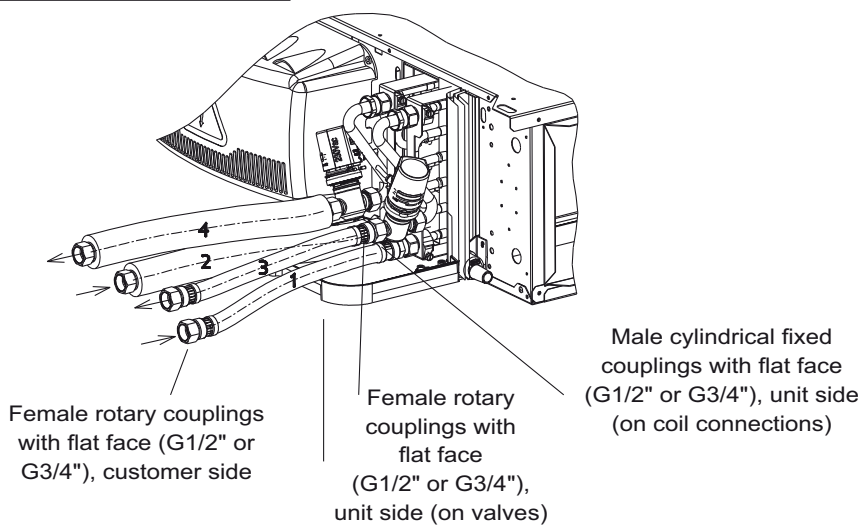
- Machined brass coupling unless otherwise specified
- Thread and internal thread in line with standards NFE 03-004 and NFE 03-005.
- Pipe in EPDM elastomer in line with EN 684-1 and AISI 304 stainless steel sheath.
- Stainless steel crimped bush between coupling and tube + sheath.

Only on cold insulated flexible couplings

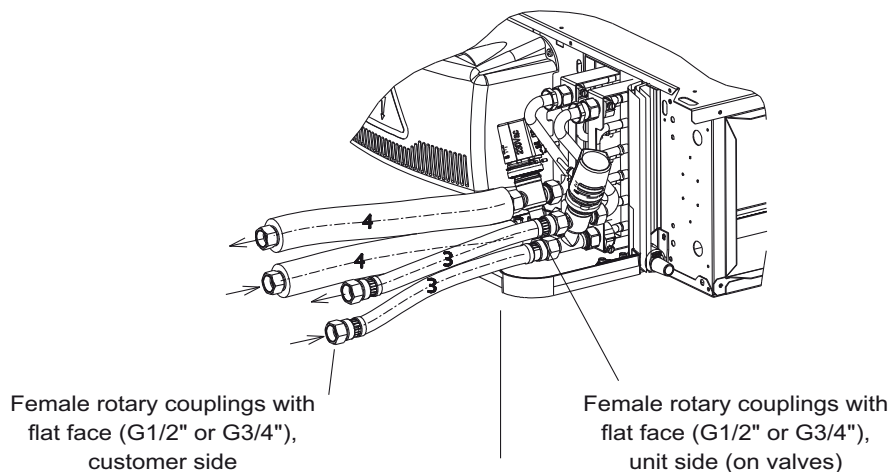
- Heat insulating sheath in M1 cellular foam (9 mm thick) glued at each end to the crimping bush.
- Protective end-piece glued at each end to the heat insulating sheath.

- DN corresponds to the pipe's internal diameter.
- Min./max. operating temperature = 6°C to 110°C.
- Max. operating pressure 110°C.

ASSEMBLY WITH 2-WAY VALVES

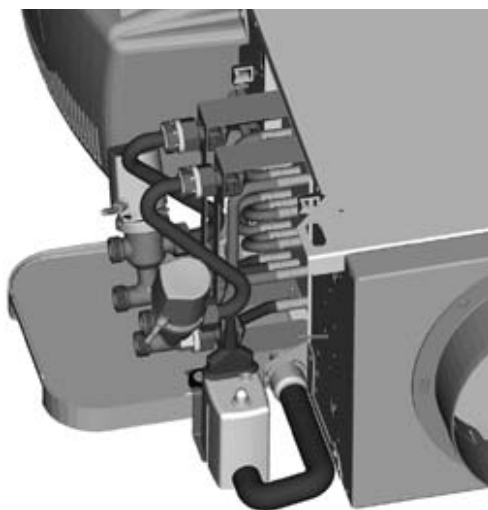


ASSEMBLY WITH 4-WAY VALVES



TECHNICAL CHARACTERISTICS

Condensate drain pump



Technical specifications:

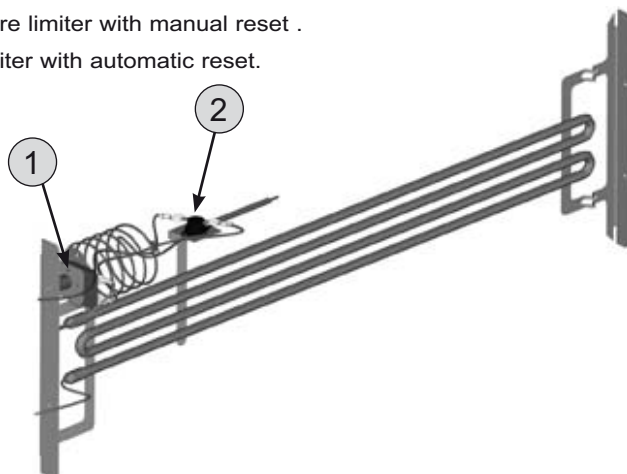
- Maximum flow rate of 20l/h for a pumping height of 0 metres and a maximum pipe length of 5 metres.
- Maximum flow rate of 19l/h for a pumping height of 0 metres and a maximum pipe length of 10 metres.

Table of actual pump flow rates with Ø 6 mm PVC tube:

Discharge height	Total pipe length (internal Ø 6mm)			
	5 m (l/h)	10 m (l/h)	20 m (l/h)	30 m (l/h)
0 m	20	19	18	17
2 m	16	15	14	13.5
4 m	11.5	11	10.5	10
6 m		8.5	7.5	6.5
8 m		6	5	4
10 m		4	3.5	2.5

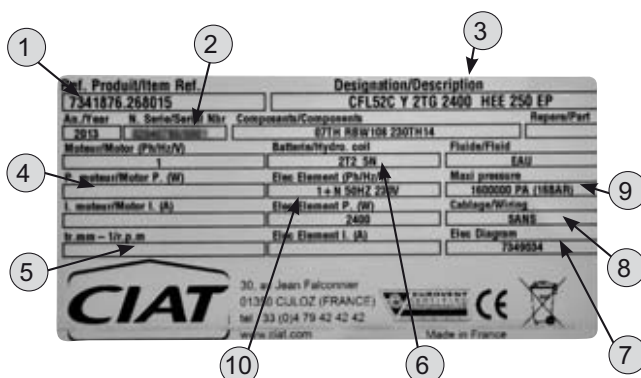
Electrical heater

- 1 capillary tube temperature limiter with manual reset .
- 2 capsule temperature limiter with automatic reset.

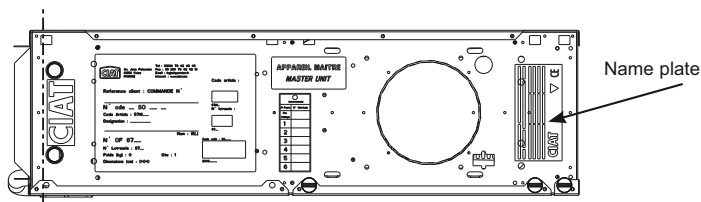


Name plate of the unit

- 1- Code,
- 2- serial number,
- 3- unit designation,
- 4- rated motor output,
- 5- motor rotation speed,
- 6- coil type,
- 7- wiring diagram reference,
- 8- motor speed wiring,
- 9- maximum operating pressure,
- 10- electric heater specifications (if fitted).



The name plate contains all the information required to identify the unit and its configuration. This plate is always mounted on the face opposite the electrics box.



Motor electrical specifications

COMFORT LINE	Motor speed	AC asynchronous motor					HEE Brushless motor					
		T1	T2	T3	T4	T5	T1	T2	T3	T4	T5	T6
Power input (W)	V5	74	119	166	180	223	37	72	113	97	172	343
	V4	48	104	124	125	192	22	54	47	38	117	330
	V3	42	88	111	110	163	14	36	27	22	67	307
	V2	36	67	96	95	149	8	14	14	13	36	178
	V1	34	51	93	90	129	5	6	9	8	17	110
Input current (A)	V5	0.32	0.53	0.7	0.77	0.95	0.25	0.47	0.69	0.61	1.06	2.59
	V4	0.22	0.45	0.52	0.53	0.81	0.16	0.36	0.3	0.25	0.73	2.36
	V3	0.2	0.38	0.47	0.48	0.69	0.11	0.25	0.18	0.15	0.43	2.22
	V2	0.18	0.29	0.42	0.42	0.64	0.07	0.11	0.1	0.1	0.24	1.32
	V1	0.18	0.22	0.41	0.4	0.57	0.06	0.06	0.07	0.07	0.12	0.75

CONDITIONS:

Maximum values with outlet open.

Supply voltage 230V ± 10% / 50-60Hz.

Coil contents

	2-tube coil (L)	4-tube coil (L)	
		Cold water coil	Hot water coil
12B	0.473		
12D	0.641		
12E	0.894		
14B		0.473	0.179
14D		0.641	0.264
22C	0.652		
22D	0.824		
22E	1.072		
24C		0.652	0.18
24D		0.82	0.264
32C	0.908		
32D	1.149		
32E	1.511		
34C		0.908	0.253
34D		1.149	0.373
42C	1.9		
42D	2.339		
42E	3.217		
44C		1.9	0.459
44D		2.339	0.459
52C	2.43		
52D	3.00		
52E	4.148		
54C		2.432	0.59
54D		3.00	0.59
62B	3.065		
62D	4.495		
62E	5.925		
64B		3.065	1.635
64D		4.495	1.635

Diameters of coil couplings

Coil coupling type: flat end swivel nuts with a female thread

Valve outlet coupling type: "male" threaded couplings to be used

COMFORT LINE		Size 1	Size 2	Size 3	Size 4	Size 5	Size 6
2-tubes system	Hot water or cold water coil	G1/2"	G1/2"	G1/2"	G3/4"	G3/4"	G3/4"
4-tubes system	Cold water coil	G1/2"	G1/2"	G1/2"	G3/4"	G3/4"	G3/4"
	Hot water coil	G1/2"	G1/2"	G1/2"	G1/2"	G1/2"	G3/4"

PERFORMANCE

MODEL I

Cold water temperature: 7/12°C, summer air temperature: 27°C - 19°C (WB)

Hot water temperature: 70/60°C, summer air temperature: 20°C - 50% (RH)

COMFORT LINE Model I	Motor code	Air flow in m³/h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (2) Auxiliary electric heater 230/1/50	
				Total	Sensible				500W	1000W
12B	V5	455	10	1 710	1 640	5 110	59	38	3.3	6.5
	V4	375		1 500	1 420	4 460	54	32	4.0	7.9
	V3	310		1 300	1 210	3 910	49	27	4.8	9.6
	V2	230		1 010	938	3 190	42	19	6.5	12.9
	V1	165		771	696	2 410	35	<15	9.0	18.0
12D	V5	455	10	2 220	1 930	5 750	59	38	3.3	6.5
	V4	375		1 930	1 650	4 950	54	32	4.0	7.9
	V3	310		1 670	1 400	4 270	49	27	4.8	9.6
	V2	230		1 310	1 070	3 400	42	19	6.5	12.9
	V1	165		958	775	2 520	35	<15	9.0	18.0
12E	V5	455	10	2 690	2 160	6 240	59	38	3.3	6.5
	V4	375		2 320	1 830	5 300	54	32	4.0	7.9
	V3	310		2 000	1 540	4 520	49	27	4.8	9.6
	V2	230		1 560	1 180	3 510	42	19	6.5	12.9
	V1	165		1 150	852	2 560	35	<15	9.0	18.0
14B	V5	455	10	1 710	1 640	3 040	59	38	3.3	6.5
	V4	375		1 500	1 420	2 760	54	32	4.0	7.9
	V3	310		1 300	1 210	2 500	49	27	4.8	9.6
	V2	230		1 010	939	2 110	42	19	6.5	12.9
	V1	165		771	697	1 700	35	<15	9.0	18.0
14D	V5	455	10	2 270	1 960	4 350	59	38	3.3	6.5
	V4	375		1 970	1 660	3 840	54	32	4.0	7.9
	V3	310		1 700	1 410	3 360	49	27	4.8	9.6
	V2	230		1 330	1 080	2 710	42	19	6.5	12.9
	V1	165		966	780	2 060	35	<15	9.0	18.0
									500W	1000W
22C	V5	730	10	3 340	3 100	9 100	62	40	2.0	4.1
	V4	670		3 130	2 870	8 500	60	37	2.2	4.4
	V3	580		2 830	2 540	7 640	56	34	2.6	5.1
	V2	395		2 080	1 780	5 550	47	24	3.8	7.5
	V1	230		1 300	1 060	3 420	35	<15	6.5	12.9
22D	V5	730	10	3 870	3 340	9 750	62	40	2.0	4.1
	V4	670		3 600	3 070	9 050	60	37	2.2	4.4
	V3	580		3 250	2 710	8 050	56	34	2.6	5.1
	V2	395		2 360	1 890	5 690	47	24	3.8	7.5
	V1	230		1 460	1 130	3 410	35	<15	6.5	12.9
22E	V5	730	10	4 190	3 460	10 000	62	40	2.0	4.1
	V4	670		3 920	3 200	9 330	60	37	2.2	4.4
	V3	580		3 530	2 820	8 300	56	34	2.6	5.1
	V2	395		2 570	1 980	5 880	47	24	3.8	7.5
	V1	230		1 600	1 180	3 540	35	<15	6.5	12.9
24C	V5	730	10	3 340	3 100	3 660	62	40	2.0	4.1
	V4	670		3 130	2 870	3 540	60	37	2.2	4.4
	V3	580		2 830	2 540	3 340	56	34	2.6	5.1
	V2	395		2 080	1 780	2 790	47	24	3.8	7.5
	V1	230		1 300	1 060	2 050	35	<15	6.5	12.9
24D	V5	730	10	3 960	3 380	5 000	62	40	2.0	4.1
	V4	670		3 700	3 120	4 810	60	37	2.2	4.4
	V3	580		3 310	2 740	4 520	56	34	2.6	5.1
	V2	395		2 400	1 910	3 700	47	24	3.8	7.5
	V1	230		1 470	1 140	2 630	35	<15	6.5	12.9
									700W	1400W
32C	V5	1 145	10	5 170	4 620	14 800	64	41	1.8	3.6
	V4	875		4 380	3 760	11 700	58	35	2.4	4.8
	V3	710		3 820	3 190	9 750	54	31	2.9	5.9
	V2	525		3 060	2 470	7 350	48	25	4.0	7.9
	V1	400		2 500	1 960	5 750	44	21	5.2	10.4
32D	V5	1 145	10	5 770	4 980	15 900	64	41	1.8	3.6
	V4	875		4 780	3 990	12 600	58	35	2.4	4.8
	V3	710		4 110	3 350	10 400	54	31	2.9	5.9
	V2	525		3 240	2 550	7 770	48	25	4.0	7.9
	V1	400		2 610	2 010	6 050	44	21	5.2	10.4
32E	V5	1 145	10	6 010	5 050	16 000	64	41	1.8	3.6
	V4	875		4 970	4 040	12 500	58	35	2.4	4.8
	V3	710		4 260	3 390	10 300	54	31	2.9	5.9
	V2	525		3 340	2 590	7 690	48	25	4.0	7.9
	V1	400		2 690	2 040	5 970	44	21	5.2	10.4
34C	V5	1 145	10	5 170	4 630	5 840	64	41	1.8	3.6
	V4	875		4 380	3 770	5 200	58	35	2.4	4.8
	V3	710		3 820	3 200	4 700	54	31	2.9	5.9
	V2	525		3 060	2 480	3 990	48	25	4.0	7.9
	V1	400		2 500	1 970	3 410	44	21	5.2	10.4
34D	V5	1 145	10	5 940	5 070	7 890	64	41	1.8	3.6
	V4	875		4 900	4 050	6 920	58	35	2.4	4.8
	V3	710		4 190	3 380	6 190	54	31	2.9	5.9
	V2	525		3 280	2 580	5 160	48	25	4.0	7.9
	V1	400		2 640	2 030	4 360	44	21	5.2	10.4

MODEL I

COMFORT LINE Model I	Motor code	Air flow in m³/h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Comfort level (ISO or NR)	Average air temperature rise in K (2) Auxiliary electric heater 230/1/50		
				Total	Sensible				700W	1400W	
42C	V5	1 210	10	6 090	5 360	15 800	64	39	1.7	3.4	
	V4	880		4 900	4 070	12 100	57	32	2.4	4.7	
	V3	710		4 180	3 370	10 000	53	28	2.9	5.9	
	V2	530		3 330	2 600	7 690	48	23	3.9	7.8	
	V1	400		2 650	2 010	5 950	43	19	5.2	10.4	
42D	V5	1 210	10	7 070	5 780	16 900	64	39	1.7	3.4	
	V4	880		5 610	4 370	12 700	57	32	2.4	4.7	
	V3	710		4 730	3 600	10 500	53	28	2.9	5.9	
	V2	530		3 710	2 760	7 970	48	23	3.9	7.8	
	V1	400		2 920	2 130	6 120	43	19	5.2	10.4	
42E	V5	1 210	10	7 550	5 970	17 200	64	39	1.7	3.4	
	V4	880		5 910	4 500	12 900	57	32	2.4	4.7	
	V3	710		4 970	3 700	10 600	53	28	2.9	5.9	
	V2	530		3 880	2 830	8 010	48	23	3.9	7.8	
	V1	400		3 040	2 180	6 150	43	19	5.2	10.4	
44C	V5	1 210	10	6 090	5 370	6 530	64	39	1.7	3.4	
	V4	880		4 900	4 080	5 650	57	32	2.4	4.7	
	V3	710		4 180	3 380	5 070	53	28	2.9	5.9	
	V2	530		3 330	2 610	4 310	48	23	3.9	7.8	
	V1	400		2 650	2 020	3 640	43	19	5.2	10.4	
44D	V5	1 210	10	7 180	5 840	6 510	64	39	1.7	3.4	
	V4	880		5 690	4 420	5 610	57	32	2.4	4.7	
	V3	710		4 790	3 640	5 010	53	28	2.9	5.9	
	V2	530		3 750	2 780	4 250	48	23	3.9	7.8	
	V1	400		2 940	2 150	3 580	43	19	5.2	10.4	
52C	V5	1 595	10	8 000	6 830	19 800	68	43	1200W	2400W	
	V4	1 440		7 490	6 300	18 400	66	40	2.2	4.5	
	V3	1 240		6 790	5 580	16 300	62	36	2.5	5.0	
	V2	1 010		5 890	4 700	13 800	57	32	2.9	5.7	
	V1	720		4 590	3 520	10 400	51	26	3.5	7.1	
52D	V5	1 595	10	8 620	7 200	21 200	68	43	5.0	9.9	
	V4	1 440		8 030	6 610	19 500	66	40	2.2	4.5	
	V3	1 240		7 190	5 800	17 300	62	36	2.5	5.0	
	V2	1 010		6 150	4 850	14 500	57	32	2.9	5.7	
	V1	720		4 710	3 600	10 800	51	26	3.5	7.1	
52E	V5	1 595	10	10 000	7 830	22 500	68	43	5.0	9.9	
	V4	1 440		9 270	7 160	20 700	66	40	2.2	4.5	
	V3	1 240		8 240	6 260	18 200	62	36	2.5	5.0	
	V2	1 010		6 970	5 200	15 100	57	32	2.9	5.7	
	V1	720		5 270	3 840	11 100	51	26	3.5	7.1	
54C	V5	1 595	10	8 000	6 840	8 510	68	43	5.0	9.9	
	V4	1 440		7 490	6 310	8 180	66	40	2.2	4.5	
	V3	1 240		6 790	5 590	7 680	62	36	2.5	5.0	
	V2	1 010		5 890	4 710	6 980	57	32	2.9	5.7	
	V1	720		4 590	3 530	5 870	51	26	3.5	7.1	
54D	V5	1 595	10	8 960	7 380	8 470	68	43	5.0	9.9	
	V4	1 440		8 960	7 380	8 470	68	43	2.2	4.5	
	V3	1 240		8 310	6 760	8 130	66	40	2.5	5.0	
	V2	1 010		7 430	5 930	7 610	62	36	2.9	5.7	
	V1	720		6 330	4 940	6 900	57	32	3.5	7.1	
62B	V5	3 005	10	4 830	3 670	5 790	51	26	5.0	9.9	
	V5	3 005		10	12 500	11 100	32 300	76	49	1200W	2400W
	V4	2 880			12 200	10 800	31 400	73	46	1.2	2.4
	V3	2 710			11 800	10 400	30 100	71	44	1.2	2.5
	V2	2 215			10 400	8 970	26 200	67	40	1.3	2.6
62D	V1	1 870	10		9 300	7 920	23 200	63	37	1.6	3.2
	V5	3 005		15 500	13 000	37 200	76	49	1.9	3.8	
	V4	2 880		15 100	12 500	36 000	73	46	1.2	2.4	
	V3	2 710		14 500	12 000	34 400	71	44	1.2	2.5	
	V2	2 215		12 600	10 200	29 500	67	40	1.3	2.6	
62E	V1	1 870	10	11 200	8 900	25 800	63	37	1.6	3.2	
	V5	3 005		18 200	14 400	41 200	76	49	1.9	3.8	
	V4	2 880		17 600	13 900	39 800	73	46	1.2	2.4	
	V3	2 710		16 900	13 200	37 800	71	44	1.2	2.5	
	V2	2 215		14 500	11 100	32 000	67	40	1.3	2.6	
64B	V1	1 870	10	12 700	9 600	27 600	63	37	1.6	3.2	
	V5	3 005		12 500	11 100	21 900	76	49	1.9	3.8	
	V4	2 880		12 200	10 800	21 500	73	46	1.2	2.4	
	V3	2 710		11 800	10 400	20 800	71	44	1.2	2.5	
	V2	2 215		10 400	8 990	18 700	67	40	1.3	2.6	
64D	V1	1 870	10	9 300	7 940	17 000	63	37	1.6	3.2	
	V5	3 005		16 000	13 300	21 900	76	49	1.9	3.8	
	V4	2 835		15 400	12 700	21 300	73	46	1.2	2.4	
	V3	2 710		14 900	12 200	20 800	71	44	1.3	2.5	
	V2	2 215		13 000	10 400	18 600	67	40	1.3	2.6	
64D	V1	1 870	10	11 500	9 060	16 900	63	37	1.6	3.2	
	V5	3 005		16 000	13 300	21 900	76	49	1.9	3.8	
	V4	2 835		15 400	12 700	21 300	73	46	1.2	2.4	
	V3	2 710		14 900	12 200	20 800	71	44	1.3	2.5	
	V2	2 215		13 000	10 400	18 600	67	40	1.3	2.6	

(1) Static pressures given for information purposes. For higher available static pressures, consult our sales office.

Model I sound level:

Table for devices with ducted intake and discharge, with room and installation attenuation of 18 dB (size 1 to 3) 20 dB (size 4 to 5) and 23 dB (size 6). If the device is not ducted on the intake, add 6 dB to the comfort levels above.

(2) Important: the temperature should not exceed 65°C (CIAT recommendation).

MODEL Y

Cold water temperature: 7/12°C, summer air temperature: 27°C - 19°C (WB)
Hot water temperature: 70/60°C, summer air temperature: 20°C - 50% (RH)

Size 6 available
1st quarter 2015

COMFORT LINE Model Y	Motor code	Air flow in m³/h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (2) Auxiliary electric heater 230/1/50	
				Total	Sensible				500W	1000W
12B	V5	380	20	1 520	1 430	4 460	59	38	3.9	7.8
	V4	320		1 340	1 250	3 980	54	33	4.6	9.3
	V3	270		1 170	1 080	3 560	50	28	5.5	11.0
	V2	210		917	851	2 930	44	20	7.1	14.1
	V1	150		737	653	2 240	37	<15	9.9	19.8
12D	V5	380	20	1 940	1 660	4 950	59	38	3.9	7.8
	V4	320		1 720	1 440	4 370	54	33	4.6	9.3
	V3	270		1 500	1 240	3 840	50	28	5.5	11.0
	V2	210		1 200	976	3 100	44	20	7.1	14.1
	V1	150		879	711	2 330	37	<15	9.9	19.8
12E	V5	380	20	2 340	1 840	5 300	59	38	3.9	7.8
	V4	320		2 060	1 590	4 630	54	33	4.6	9.3
	V3	270		1 790	1 370	4 020	50	28	5.5	11.0
	V2	210		1 420	1 070	3 190	44	20	7.1	14.1
	V1	150		1 060	785	2 360	37	<15	9.9	19.8
14B	V5	380	20	1 520	1 430	2 760	59	38	3.9	7.8
	V4	320		1 340	1 250	2 540	54	33	4.6	9.3
	V3	270		1 170	1 080	2 310	50	28	5.5	11.0
	V2	210		917	852	1 980	44	20	7.1	14.1
	V1	150		737	654	1 600	37	<15	9.9	19.8
14D	V5	380	20	1 980	1 680	3 840	59	38	3.9	7.8
	V4	320		1 750	1 460	3 430	54	33	4.6	9.3
	V3	270		1 520	1 250	3 030	50	28	5.5	11.0
	V2	210		1 210	982	2 490	44	20	7.1	14
	V1	150		886	716	1 920	37	<15	9.9	20
22C	V5	675	20	3 170	2 900	8 530	62	39	2.2	4.4
	V4	620		2 970	2 700	8 020	59	37	2.4	4.8
	V3	545		2 700	2 410	7 260	56	34	2.7	5.4
	V2	380		2 010	1 710	5 340	47	24	3.9	7.8
	V1	220		1 260	1 020	3 300	35	<15	6.8	13.5
22D	V5	675	20	3 640	3 110	9 090	62	39	2.2	4.4
	V4	620		3 410	2 880	8 490	59	37	2.4	4.8
	V3	545		3 090	2 560	7 610	56	34	2.7	5.4
	V2	380		2 280	1 820	5 470	47	24	3.9	7.8
	V1	220		1 410	1 090	3 280	35	<15	6.8	13.5
22E	V5	675	20	3 950	3 230	9 370	62	39	2.2	4.4
	V4	620		3 720	3 000	8 750	59	37	2.4	4.8
	V3	545		3 360	2 670	7 840	56	34	2.7	5.4
	V2	380		2 480	1 900	5 640	47	24	3.9	7.8
	V1	220		1 540	1 140	3 410	35	<15	6.8	13.5
24C	V5	675	20	3 170	2 910	3 540	62	39	2.2	4.4
	V4	620		2 970	2 700	3 430	59	37	2.4	4.8
	V3	545		2 700	2 410	3 250	56	34	2.7	5.4
	V2	380		2 010	1 710	2 730	47	24	3.9	7.8
	V1	220		1 260	1 020	2 000	35	<15	6.8	13.5
24D	V5	675	20	3 730	3 150	4 820	62	39	2.2	4.4
	V4	620		3 500	2 920	4 650	59	37	2.4	4.8
	V3	545		3 150	2 590	4 380	56	34	2.7	5.4
	V2	380		2 310	1 840	3 610	47	24	3.9	8
	V1	220		1 420	1 100	2 560	35	<15	6.8	14
32C	V5	1 030	20	4 860	4 280	13 500	64	41	2.0	4.0
	V4	815		4 200	3 570	11 000	59	35	2.6	5.1
	V3	670		3 690	3 060	9 250	54	31	3.1	6.2
	V2	500		2 950	2 370	7 030	48	25	4.2	8.3
	V1	385		2 410	1 890	5 510	43	21	5.4	10.8
32D	V5	1 030	20	5 380	4 580	14 500	64	41	2.0	4.0
	V4	815		4 560	3 770	11 700	59	35	2.6	5.1
	V3	670		3 950	3 190	9 820	54	31	3.1	6.2
	V2	500		3 120	2 450	7 420	48	25	4.2	8.3
	V1	385		2 510	1 930	5 790	43	21	5.4	10.8
32E	V5	1 030	20	5 600	4 650	14 500	64	41	2.0	4.0
	V4	815		4 720	3 810	11 700	59	35	2.6	5.1
	V3	670		4 080	3 230	9 760	54	31	3.1	6.2
	V2	500		3 220	2 480	7 340	48	25	4.2	8.3
	V1	385		2 590	1 960	5 710	43	21	5.4	10.8
34C	V5	1 030	20	4 860	4 290	5 570	64	41	2.0	4.0
	V4	815		4 200	3 580	5 010	59	35	2.6	5.1
	V3	670		3 690	3 070	4 560	54	31	3.1	6.2
	V2	500		2 950	2 380	3 880	48	25	4.2	8.3
	V1	385		2 410	1 890	3 320	43	21	5.4	10.8
34D	V5	1 030	20	5 540	4 670	7 480	64	41	2.0	4.0
	V4	815		4 650	3 820	6 650	59	35	2.6	5.1
	V3	670		4 010	3 220	5 990	54	31	3.1	6.2
	V2	500		3 160	2 470	5 010	48	25	4.2	8
	V1	385		2 540	1 950	4 230	43	21	5.4	11

MODEL Y

COMFORT LINE Model Y	Motor code	Air flow in m³/h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (2) Auxiliary electric heater 230/1/50	
				Total	Sensible				700W	1400W
42C	V5	1 115	20	5 800	5 020	14 700	63	39	1.9	3.7
	V4	830		4 700	3 870	11 500	57	32	2.5	5.0
	V3	680		4 050	3 240	9 600	53	28	3.1	6.1
	V2	505		3 220	2 500	7 390	47	23	4.1	8.2
	V1	385		2 560	1 940	5 740	43	19	5.4	10.8
42D	V5	1 115	20	6 680	5 390	15 600	63	39	1.9	3.7
	V4	830		5 370	4 160	12 100	57	32	2.5	5.0
	V3	680		4 560	3 460	10 000	53	28	3.1	6.1
	V2	505		3 580	2 660	7 650	47	23	4.1	8.2
	V1	385		2 820	2 060	5 900	43	19	5.4	10.8
42E	V5	1 115	20	7 110	5 560	15 900	63	39	1.9	3.7
	V4	830		5 660	4 280	12 200	57	32	2.5	5.0
	V3	680		4 790	3 560	10 100	53	28	3.1	6.1
	V2	505		3 740	2 720	7 690	47	23	4.1	8.2
	V1	385		2 940	2 110	5 920	43	19	5.4	10.8
44C	V5	1 115	20	5 800	5 020	6 290	63	39	1.9	3.7
	V4	830		4 700	3 880	5 490	57	32	2.5	5.0
	V3	680		4 050	3 250	4 950	53	28	3.1	6.1
	V2	505		3 220	2 510	4 200	47	23	4.1	8.2
	V1	385		2 560	1 950	3 550	43	19	5.4	10.8
44D	V5	1 115	20	6 780	5 450	6 260	63	41	1.9	3.7
	V4	830		5 440	4 200	5 440	57	34	2.5	5.0
	V3	680		4 620	3 500	4 890	53	30	3.1	6.1
	V2	505		3 620	2 680	4 140	47	25	4.1	8.2
	V1	385		2 840	2 080	3 490	43	21	5.4	10.8
52C	V5	1 495	20	7 690	6 510	18 900	66	41	2.4	4.8
	V4	1 360		7 240	6 030	17 600	64	39	2.6	5.2
	V3	1 180		6 580	5 370	15 700	61	35	3.0	6.0
	V2	970		5 750	4 560	13 400	56	31	3.7	7.3
	V1	700		4 490	3 440	10 200	50	25	5.1	10.2
52D	V5	1 495	20	8 270	6 840	20 100	66	41	2.4	4.8
	V4	1 360		7 720	6 300	18 600	64	39	2.6	5.2
	V3	1 180		6 940	5 570	16 600	61	35	3.0	6.0
	V2	970		5 990	4 700	14 100	56	31	3.7	7.3
	V1	700		4 620	3 520	10 600	50	25	5.1	10.2
52E	V5	1 495	20	9 550	7 420	21 300	66	41	2.4	4.8
	V4	1 360		8 870	6 820	19 700	64	39	2.6	5.2
	V3	1 180		7 930	6 000	17 400	61	35	3.0	6.0
	V2	970		6 770	5 040	14 600	56	31	3.7	7.3
	V1	700		5 150	3 750	10 900	50	25	5.1	10.2
54C	V5	1 495	20	7 690	6 520	8 290	66	41	2.4	4.8
	V4	1 360		7 240	6 050	7 980	64	39	2.6	5.2
	V3	1 180		6 580	5 380	7 510	61	35	3.0	6.0
	V2	970		5 750	4 570	6 860	56	31	3.7	7.3
	V1	700		4 490	3 460	5 780	50	25	5.1	10.2
54D	V5	1 495	20	8 560	7 000	8 240	66	41	2.4	4.8
	V4	1 360		7 990	6 450	7 920	64	39	2.6	5.2
	V3	1 180		7 170	5 690	7 440	61	35	3.0	6.0
	V2	970		6 160	4 790	6 780	56	31	3.7	7.3
	V1	700		4 730	3 580	5 700	50	25	5.1	10.2
62B	V5	2 910	20	12 300	10 900	31 600	76	49	1.2	2.4
	V4	2 740		11 900	10 500	30 300	73	46	1.3	2.6
	V3	2 555		11 400	9 940	28 900	71	44	1.4	2.8
	V2	2 080		9 980	8 580	25 100	66	40	1.7	3.4
	V1	1 765		8 950	7 590	22 200	63	37	2.0	4.0
62D	V5	2 910	20	15 200	12 700	36 300	76	49	1.2	2.4
	V4	2 740		14 600	12 100	34 700	73	46	1.3	2.6
	V3	2 555		13 900	11 400	32 900	71	44	1.4	2.8
	V2	2 080		12 100	9 710	28 100	66	40	1.7	3.4
	V1	1 765		10 700	8 490	24 600	63	37	2.0	4.0
62E	V5	2 910	20	17 800	14 100	40 100	76	49	1.2	2.4
	V4	2 740		17 000	13 400	38 100	73	46	1.3	2.6
	V3	2 555		16 100	12 600	36 000	71	44	1.4	2.8
	V2	2 080		13 800	10 600	30 300	66	40	1.7	3.4
	V1	1 765		12 100	9 120	26 200	63	37	2.0	4.0
64B	V5	2 910	20	12 300	10 900	21 600	76	49	1.2	2.4
	V4	2 740		11 900	10 500	20 900	73	46	1.3	2.6
	V3	2 555		11 400	9 960	20 200	71	44	1.4	2.8
	V2	2 080		9 980	8 600	18 100	66	40	1.7	3.4
	V1	1 765		8 950	7 610	16 500	63	37	2.0	4.0
64D	V5	2 765	20	15 200	12 500	21 000	75	48	1.3	2.6
	V4	2 740		15 100	12 400	20 900	73	46	1.3	2.6
	V3	2 555		14 300	11 700	20 100	71	44	1.4	2.8
	V2	2 080		12 400	9 910	18 000	66	40	1.7	3.4
	V1	1 765		11 000	8 640	16 300	63	37	2.0	4.0

(1) Static pressures given for information purposes. For higher available static pressures, consult our sales office.

Model Y sound level:

Table for devices with ducted intake and discharge, with room and installation attenuation of 18 dB (size 1 to 3) 20 dB (size 4 to 5) and 23 dB (size 6). If the device is not ducted on the intake, add 4 dB to the comfort levels above.

(2) Important: the temperature should not exceed 65°C (CIAT recommendation)

MODEL H

Cold water temperature: 7/12°C, summer air temperature: 27°C - 19°C (WB)
Hot water temperature: 70/60°C, summer air temperature: 20°C - 50% (RH)

Size 6 available
1st quarter 2015

COMFORT LINE Model H	Motor code	Air flow in m³/h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (2) Auxiliary electric heater 230/1/50	
				Total	Sensible				500W	1000W
12B	V5	230	40	1 030	952	3 160	56	34	6.5	12.9
	V4	205		927	859	2 910	53	31	7.2	14.5
	V3	185		828	763	2 630	49	27	8.0	16.1
	V2	150		741	657	2 240	44	21	9.9	19.8
	V1	115		639	533	1 760	37	<15	12.9	25.8
12D	V5	230	40	1 330	1 090	3 370	56	34	6.5	12.9
	V4	205		1 210	983	3 080	53	31	7.2	14.5
	V3	185		1 070	867	2 760	49	27	8.0	16.1
	V2	150		886	717	2 330	44	21	9.9	19.8
	V1	115		731	570	1 820	37	<15	12.9	25.8
12E	V5	230	40	1 570	1 190	3 480	56	34	6.5	12.9
	V4	205		1 430	1 080	3 170	53	31	7.2	14.5
	V3	185		1 270	952	2 820	49	27	8.0	16.1
	V2	150		1 060	790	2 360	44	21	9.9	19.8
	V1	115		826	610	1 830	37	<15	12.9	25.8
14B	V5	230	40	1 030	953	2 100	56	34	6.5	12.9
	V4	205		927	860	1 970	53	31	7.2	14.5
	V3	185		828	764	1 820	49	27	8.0	16.1
	V2	150		741	658	1 600	44	21	9.9	19.8
	V1	115		639	535	1 330	37	<15	12.9	25.8
14D	V5	230	40	1 340	1 100	2 680	56	34	6.5	12.9
	V4	205		1 220	989	2 480	53	31	7.2	14.5
	V3	185		1 080	873	2 240	49	27	8.0	16.1
	V2	150		893	721	1 920	44	21	9.9	19.8
	V1	115		733	573	1 540	37	<15	12.9	25.8
									500W	1000W
22C	V5	540	40	2 680	2 390	7 150	58	36	2.8	5.5
	V4	505		2 550	2 260	6 810	57	34	2.9	5.9
	V3	455		2 340	2 040	6 240	54	32	3.3	6.5
	V2	325		1 780	1 490	4 690	46	23	4.6	9.1
	V1	190		1 100	884	2 900	33	<15	7.8	15.6
22D	V5	540	40	3 070	2 540	7 500	58	36	2.8	5.5
	V4	505		2 910	2 400	7 100	57	34	2.9	5.9
	V3	455		2 670	2 170	6 470	54	32	3.3	6.5
	V2	325		2 010	1 590	4 760	46	23	4.6	9.1
	V1	190		1 230	949	2 860	33	<15	7.8	15.6
22E	V5	540	40	3 330	2 650	7 730	58	36	2.8	5.5
	V4	505		3 160	2 500	7 320	57	34	2.9	5.9
	V3	455		2 900	2 270	6 670	54	32	3.3	6.5
	V2	325		2 190	1 660	4 920	46	23	4.6	9.1
	V1	190		1 350	995	2 980	33	<15	7.8	15.6
24C	V5	540	40	2 680	2 390	3 220	58	36	2.8	5.5
	V4	505		2 550	2 260	3 140	57	34	2.9	5.9
	V3	455		2 340	2 050	2 990	54	32	3.3	6.5
	V2	325		1 780	1 490	2 520	46	23	4.6	9.1
	V1	190		1 100	887	1 820	33	<15	7.8	15.6
24D	V5	540	40	3 130	2 570	4 340	58	36	2.8	5.5
	V4	505		2 970	2 430	4 210	57	34	2.9	5.9
	V3	455		2 720	2 200	3 990	54	32	3.3	6.5
	V2	325		2 030	1 600	3 300	46	23	4.6	9.1
	V1	190		1 240	957	2 320	33	<15	7.8	15.6
									700W	1400W
32C	V5	780	40	4 090	3 470	10 500	61	39	2.7	5.3
	V4	660		3 650	3 020	9 060	57	34	3.2	6.3
	V3	560		3 240	2 640	7 830	54	30	3.7	7.4
	V2	425		2 630	2 080	6 080	47	24	4.9	9.8
	V1	335		2 150	1 660	4 820	42	20	6.2	12.4
32D	V5	780	40	4 430	3 650	11 200	61	39	2.7	5.3
	V4	660		3 900	3 150	9 630	57	34	3.2	6.3
	V3	560		3 440	2 730	8 290	54	30	3.7	7.4
	V2	425		2 760	2 130	6 410	47	24	4.9	9.8
	V1	335		2 220	1 690	5 060	42	20	6.2	12.4
32E	V5	780	40	4 590	3 690	11 200	61	39	2.7	5.3
	V4	660		4 030	3 190	9 560	57	34	3.2	6.3
	V3	560		3 550	2 770	8 210	54	30	3.7	7.4
	V2	425		2 840	2 170	6 320	47	24	4.9	9.8
	V1	335		2 300	1 720	4 980	42	20	6.2	12.4
34C	V5	780	40	4 090	3 470	4 900	61	39	2.7	5.3
	V4	660		3 650	3 030	4 510	57	34	3.2	6.3
	V3	560		3 240	2 640	4 140	54	30	3.7	7.4
	V2	425		2 630	2 080	3 540	47	24	4.9	9.8
	V1	335		2 150	1 670	3 030	42	20	6.2	12.4
34D	V5	780	40	4 520	3 700	6 480	61	39	2.7	5.3
	V4	660		3 970	3 180	5 910	57	34	3.2	6.3
	V3	560		3 490	2 760	5 380	54	30	3.7	7.4
	V2	425		2 790	2 150	4 540	47	24	4.9	9.8
	V1	335		2 250	1 710	3 840	42	20	6.2	12.4

MODEL H

COMFORT LINE Model H	Motor code	Air flow in m³/h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (2) Auxiliary electric heater 230/1/50	
				Total	Sensible				700W	1400W
42C	V5	885	40	4 960	4 130	12 100	61	36	2.3	4.7
	V4	700		4 160	3 350	9 880	55	30	3.0	5.9
	V3	585		3 630	2 860	8 430	51	27	3.6	7.1
	V2	440		2 880	2 210	6 510	46	21	4.7	9.5
	V1	340		2 300	1 720	5 100	41	17	6.1	12.2
42D	V5	885	40	5 670	4 430	12 800	61	36	2.3	4.7
	V4	700		4 700	3 580	10 300	55	30	3.0	5.9
	V3	585		4 060	3 040	8 760	51	27	3.6	7.1
	V2	440		3 190	2 340	6 720	46	21	4.7	9.5
	V1	340		2 520	1 830	5 230	41	17	6.1	12.2
42E	V5	885	40	5 980	4 560	13 000	61	36	2.3	4.7
	V4	700		4 940	3 680	10 400	55	30	3.0	5.9
	V3	585		4 250	3 120	8 830	51	27	3.6	7.1
	V2	440		3 320	2 400	6 750	46	21	4.7	9.5
	V1	340		2 630	1 870	5 240	41	17	6.1	12.2
44C	V5	885	40	4 960	4 140	5 660	61	36	2.3	4.7
	V4	700		4 160	3 360	5 030	55	30	3.0	5.9
	V3	585		3 630	2 870	4 570	51	27	3.6	7.1
	V2	440		2 880	2 210	3 870	46	21	4.7	9.5
	V1	340		2 300	1 730	3 260	41	17	6.1	12.2
44D	V5	885	40	5 750	4 480	5 610	61	36	2.3	4.7
	V4	700		4 760	3 620	4 980	55	30	3.0	5.9
	V3	585		4 100	3 070	4 510	51	27	3.6	7.1
	V2	440		3 210	2 360	3 810	46	21	4.7	9.5
	V1	340		2 540	1 850	3 210	41	17	6.1	12.2
52C	V5	1 240	40	6 820	5 600	16 300	62	37	2.9	5.7
	V4	1 145		6 470	5 260	15 300	61	35	3.1	6.2
	V3	1 015		5 930	4 740	13 900	58	33	3.5	7.0
	V2	855		5 230	4 090	12 000	54	29	4.2	8.3
	V1	630		4 130	3 130	9 240	48	24	5.7	11.3
52D	V5	1 240	40	7 210	5 830	17 200	62	37	2.9	5.7
	V4	1 145		6 810	5 450	16 200	61	35	3.1	6.2
	V3	1 015		6 190	4 890	14 600	58	33	3.5	7.0
	V2	855		5 410	4 200	12 600	54	29	4.2	8.3
	V1	630		4 220	3 190	9 580	48	24	5.7	11.3
52E	V5	1 240	40	8 270	6 290	18 100	62	37	2.9	5.7
	V4	1 145		7 770	5 870	16 900	61	35	3.1	6.2
	V3	1 015		7 020	5 240	15 200	58	33	3.5	7.0
	V2	855		6 080	4 480	13 000	54	29	4.2	8.3
	V1	630		4 690	3 390	9 810	48	24	5.7	11.3
54C	V5	1 240	40	6 820	5 620	7 650	62	37	2.9	5.7
	V4	1 145		6 470	5 270	7 400	61	35	3.1	6.2
	V3	1 015		5 930	4 750	6 990	58	33	3.5	7.0
	V2	855		5 230	4 100	6 420	54	29	4.2	8.3
	V1	630		4 130	3 140	5 430	48	24	5.7	11.3
54D	V5	1 240	40	7 460	5 960	7 590	62	37	2.9	5.7
	V4	1 145		7 030	5 570	7 330	61	35	3.1	6.2
	V3	1 015		6 370	4 980	6 910	58	33	3.5	7.0
	V2	855		5 560	4 280	6 340	54	29	4.2	8.3
	V1	630		4 320	3 250	5 350	48	24	5.7	11.3
62B	V5	2 410	40	11 000	9 630	27 700	73	46	1.5	3.0
	V4	2 180		10 300	8 950	25 800	70	43	1.6	3.3
	V3	2 000		9 790	8 390	24 300	68	42	1.8	3.6
	V2	1 660		8 660	7 300	21 200	64	38	2.1	4.3
	V1	1 415		7 760	6 440	18 700	61	34	2.5	5.0
62D	V5	2 410	40	13 500	11 000	31 400	73	46	1.5	3.0
	V4	2 180		12 600	10 200	29 000	70	43	1.6	3.3
	V3	2 000		11 800	9 460	27 100	68	42	1.8	3.6
	V2	1 660		10 300	8 100	23 300	64	38	2.1	4.3
	V1	1 415		9 080	7 050	20 400	61	34	2.5	5.0
62E	V5	2 410	40	15 600	12 100	34 200	73	46	1.5	3.0
	V4	2 180		14 400	11 100	31 400	70	43	1.6	3.3
	V3	2 000		13 400	10 200	29 200	68	42	1.8	3.6
	V2	1 660		11 500	8 670	24 800	64	38	2.1	4.3
	V1	1 415		10 100	7 490	21 500	61	34	2.5	5.0
64B	V5	2 410	40	11 000	9 650	19 500	73	46	1.5	3.0
	V4	2 180		10 300	8 970	18 500	70	43	1.6	3.3
	V3	2 000		9 790	8 410	17 600	68	42	1.8	3.6
	V2	1 660		8 660	7 310	15 800	64	38	2.1	4.3
	V1	1 415		7 760	6 450	14 400	61	34	2.5	5.0
64D	V5	2 410	40	13 800	11 200	19 400	73	46	1.5	3.0
	V4	2 180		12 900	10 400	18 400	70	43	1.6	3.3
	V3	2 000		12 100	9 650	17 500	68	42	1.8	3.6
	V2	1 660		10 500	8 240	15 700	64	38	2.1	4.3
	V1	1 415		9 270	7 160	14 200	61	34	2.5	5.0

(1) Static pressures given for information purposes. For higher available static pressures, consult our sales office.

Model H sound level:

Table for devices with ducted intake and discharge, with room and installation attenuation of 18 dB (size 1 to 3) 20 dB (size 4 to 5) and 23 dB (size 6).

(2) Important: the temperature should not exceed 65°C (CIAT recommendation).

MODEL U

Cold water temperature: 7/12°C, summer air temperature: 27°C - 19°C (WB)

Hot water temperature: 70/60°C, summer air temperature: 20°C - 50% (RH)

COMFORT LINE Model U	Motor code	Air flow in m ³ /h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (2) Auxiliary electric heater 230/1/50	
				Total	Sensible				500W	1000W
12B	V5	225		1 010	935	3 080	54	32	6.6	13.2
	V4	200		909	842	2 840	51	28	7.4	14.9
	V3	175	40	816	750	2 560	47	24	8.5	17.0
	V2	145		731	645	2 180	42	18	10.2	20.5
	V1	115		629	522	1 710	35	<15	12.9	25.8
12D	V5	225		1 300	1 070	3 280	54	32	6.6	13.2
	V4	200		1 180	962	3 000	51	28	7.4	14.9
	V3	175	40	1 050	847	2 680	47	24	8.5	17.0
	V2	145		864	699	2 260	42	18	10.2	20.5
	V1	115		718	558	1 770	35	<15	12.9	25.8
12E	V5	225		1 540	1 170	3 380	54	32	6.6	13.2
	V4	200		1 400	1 050	3 080	51	28	7.4	14.9
	V3	175	40	1 240	930	2 740	47	24	8.5	17.0
	V2	145		1 040	771	2 290	42	18	10.2	20.5
	V1	115		808	595	1 780	35	<15	12.9	25.8
14B	V5	225		1 010	936	2 050	54	32	6.6	13.2
	V4	200		909	843	1 930	51	28	7.4	14.9
	V3	175	40	816	750	1 780	47	24	8.5	17.0
	V2	145		731	646	1 570	42	18	10.2	20.5
	V1	115		629	523	1 300	35	<15	12.9	25.8
14D	V5	225		1 320	1 070	2 620	54	32	6.6	13.2
	V4	200		1 190	969	2 410	51	28	7.4	14.9
	V3	175	40	1 060	853	2 180	47	24	8.5	17.0
	V2	145		870	703	1 870	42	18	10.2	20.5
	V1	115		719	560	1 500	35	<15	12.9	25.8
									500W	1000W
22C	V5	525		2 640	2 340	6 960	54	30	2.8	5.7
	V4	490		2 510	2 210	6 630	53	28	3.0	6.1
	V3	440	40	2 300	2 000	6 080	50	25	3.4	6.8
	V2	315		1 730	1 440	4 570	42	17	4.7	9.4
	V1	185		1 070	860	2 820	30	<15	8.0	16.1
22D	V5	525		3 010	2 490	7 290	54	30	2.8	5.7
	V4	490		2 860	2 350	6 900	53	28	3.0	6.1
	V3	440	40	2 620	2 130	6 280	50	25	3.4	6.8
	V2	315		1 960	1 540	4 630	42	17	4.7	9.4
	V1	185		1 200	923	2 780	30	<15	8.0	16.1
22E	V5	525		3 270	2 590	7 510	54	30	2.8	5.7
	V4	490		3 100	2 450	7 120	53	28	3.0	6.1
	V3	440	40	2 840	2 220	6 480	50	25	3.4	6.8
	V2	315		2 130	1 610	4 790	42	17	4.7	9.4
	V1	185		1 320	968	2 900	30	<15	8.0	16.1
24C	V5	525		2 640	2 350	3 170	54	30	2.8	5.7
	V4	490		2 510	2 210	3 090	53	28	3.0	6.1
	V3	440	40	2 300	2 000	2 940	50	25	3.4	6.8
	V2	315		1 730	1 450	2 480	42	17	4.7	9.4
	V1	185		1 070	862	1 780	30	<15	8.0	16.1
24D	V5	525		3 070	2 520	4 260	54	30	2.8	5.7
	V4	490		2 910	2 380	4 140	53	28	3.0	6.1
	V3	440	40	2 660	2 150	3 920	50	25	3.4	6.8
	V2	315		1 980	1 550	3 250	42	17	4.7	9.4
	V1	185		1 210	930	2 270	30	<15	8.0	16.1

(1) Static pressures given for information purposes. For higher available static pressures, consult our sales office.

Model U sound level:

Table for devices with room and installation attenuation of 19 dB (Sizes 1 to 3) and 21 dB (Size 4)

(2) Important: the temperature should not exceed 65°C (CIAT recommendation).

MODEL U

Cold water temperature: 7/12°C, summer air temperature: 27°C - 19°C (WB)

Hot water temperature: 70/60°C, summer air temperature: 20°C - 50% (RH)

COMFORT LINE Model U	Motor code	Air flow in m ³ /h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (2) Auxiliary electric heater 230/1/50	
				Total	Sensible				700W	1400W
32C	V5	755		4 030	3 410	10 200	57	34	2.8	5.5
	V4	640		3 580	2 960	8 800	53	29	3.2	6.5
	V3	545	40	3 180	2 580	7 610	49	25	3.8	7.6
	V2	415		2 570	2 030	5 910	43	18	5.0	10.0
	V1	325		2 110	1 620	4 680	38	<15	6.4	12.8
32D	V5	755		4 360	3 590	10 900	57	34	2.8	5.5
	V4	640		3 830	3 080	9 350	53	29	3.2	6.5
	V3	545	40	3 370	2 670	8 050	49	25	3.8	7.6
	V2	415		2 690	2 080	6 220	43	18	5.0	10.0
	V1	325		2 170	1 650	4 910	38	<15	6.4	12.8
32E	V5	755		4 510	3 630	10 900	57	34	2.8	5.5
	V4	640		3 960	3 130	9 280	53	29	3.2	6.5
	V3	545	40	3 480	2 710	7 970	49	25	3.8	7.6
	V2	415		2 770	2 110	6 140	43	18	5.0	10.0
	V1	325		2 240	1 680	4 830	38	<15	6.4	12.8
34C	V5	755		4 030	3 420	4 810	57	34	2.8	5.5
	V4	640		3 580	2 970	4 430	53	29	3.2	6.5
	V3	545	40	3 180	2 590	4 070	49	25	3.8	7.6
	V2	415		2 570	2 040	3 470	43	18	5.0	10.0
	V1	325		2 110	1 630	2 970	38	<15	6.4	12.8
34D	V5	755		4 450	3 630	6 360	57	34	2.8	5.5
	V4	640		3 890	3 120	5 800	53	29	3.2	6.5
	V3	545	40	3 420	2 700	5 280	49	25	3.8	7.6
	V2	415		2 730	2 100	4 450	43	18	5.0	10.0
	V1	325		2 190	1 670	3 760	38	<15	6.4	12.8
									700W	1400W
42C	V5	860		5 250	4 160	11 800	55	29	2.4	4.8
	V4	680		4 350	3 370	9 610	51	24	3.1	6.1
	V3	570	40	3 750	2 860	8 200	47	21	3.6	7.3
	V2	430		2 920	2 190	6 340	42	15	4.8	9.7
	V1	330		2 290	1 710	4 960	37	<15	6.3	12.6
42D	V5	860		5 550	4 330	12 400	55	29	2.4	4.8
	V4	680		4 600	3 500	10 000	51	24	3.1	6.1
	V3	570	40	3 970	2 970	8 520	47	21	3.6	7.3
	V2	430		3 110	2 280	6 530	42	15	4.8	9.7
	V1	330		2 460	1 780	5 080	37	<15	6.3	12.6
42E	V5	860		5 860	4 450	12 600	55	29	2.4	4.8
	V4	680	40	4 830	3 590	10 100	51	24	3.1	6.1
	V3	570		4 150	3 050	8 580	47	21	3.6	7.3
	V2	430		3 240	2 340	6 560	42	15	4.8	9.7
	V1	330		2 560	1 820	5 100	37	<15	6.3	12.6
44C	V5	860		4 860	4 050	5 570	55	29	2.4	4.8
	V4	680		4 080	3 290	4 950	51	24	3.1	6.1
	V3	570	40	3 560	2 800	4 490	47	21	3.6	7.3
	V2	430		2 810	2 160	3 800	42	15	4.8	9.7
	V1	330		2 240	1 680	3 190	37	<15	6.3	12.6
44D	V5	860		5 630	4 380	5 520	55	29	2.4	4.8
	V4	680		4 660	3 540	4 890	51	24	3.1	6.1
	V3	570	40	4 010	3 000	4 430	47	21	3.6	7.3
	V2	430		3 140	2 300	3 740	42	15	4.8	9.7
	V1	330		2 480	1 800	3 140	37	<15	6.3	12.6

(1) Static pressures given for information purposes. For higher available static pressures, consult our sales office.

Model U sound level:

Table for devices with room and installation attenuation of 19 dB (Sizes 1 to 3) and 21 dB (Size 4)

(2) Important: the temperature should not exceed 65°C (CIAT recommendation).

MODEL LI / LY

Cold water temperature: 7/12°C, summer air temperature: 27°C - 19°C (WB)

Hot water temperature: 70/60°C, summer air temperature: 20°C - 50% (RH)

COMFORT LINE Model LI Model LY	Motor code	Air flow in m ³ /h	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (1) Auxiliary electric heater 230/1/50	
			Total	Sensible				500W	1000W
12B	V5	500	1 810	1 750	5 460	59	44	3.0	5.9
	V4	405	1 580	1 500	4 730	53	38	3.7	7.3
	V3	330	1 370	1 280	4 090	48	32	4.5	9.0
	V2	240	1 060	978	3 300	42	24	6.2	12.4
	V1	170	792	722	2 510	35	18	8.7	17.5
12D	V5	500	2 370	2 080	6 180	59	44	3.0	5.9
	V4	405	2 040	1 750	5 270	53	38	3.7	7.3
	V3	330	1 750	1 480	4 500	48	32	4.5	9.0
	V2	240	1 370	1 120	3 530	42	24	6.2	12.4
	V1	170	1 000	812	2 630	35	18	8.7	17.5
12E	V5	500	2 870	2 330	6 750	59	44	3.0	5.9
	V4	405	2 460	1 950	5 670	53	38	3.7	7.3
	V3	330	2 110	1 640	4 780	48	32	4.5	9.0
	V2	240	1 630	1 230	3 660	42	24	6.2	12.4
	V1	170	1 200	893	2 680	35	18	8.7	17.5
14B	V5	500	1 810	1 750	3 190	59	44	3.0	5.9
	V4	405	1 580	1 500	2 880	53	38	3.7	7.3
	V3	330	1 370	1 280	2 590	48	32	4.5	9.0
	V2	240	1 060	979	2 170	42	24	6.2	12.4
	V1	170	792	723	1 760	35	18	8.7	17.5
14D	V5	500	2 420	2 110	4 630	59	44	3.0	5.9
	V4	405	2 080	1 770	4 050	53	38	3.7	7.3
	V3	330	1 790	1 490	3 530	48	32	4.5	9.0
	V2	240	1 380	1 130	2 800	42	24	6.2	12.4
	V1	170	1 010	817	2 150	35	18	8.7	17.5
22C	V5	750	3 410	3 180	9 300	62	47	2.0	4.0
	V4	685	3 200	2 940	8 690	60	44	2.2	4.3
	V3	595	2 880	2 600	7 800	56	40	2.5	5.0
	V2	400	2 110	1 810	5 640	47	30	3.7	7.4
	V1	230	1 320	1 070	3 470	35	18	6.5	12.9
22D	V5	750	3 940	3 420	9 990	62	47	2.0	4.0
	V4	685	3 680	3 150	9 270	60	44	2.2	4.3
	V3	595	3 310	2 770	8 230	56	40	2.5	5.0
	V2	400	2 400	1 930	5 800	47	30	3.7	7.4
	V1	230	1 480	1 150	3 460	35	18	6.5	12.9
22E	V5	750	4 280	3 550	10 300	62	47	2.0	4.0
	V4	685	4 000	3 280	9 560	60	44	2.2	4.3
	V3	595	3 600	2 890	8 480	56	40	2.5	5.0
	V2	400	2 610	2 010	5 980	47	30	3.7	7.4
	V1	230	1 620	1 200	3 590	35	18	6.5	12.9
24C	V5	750	3 410	3 180	3 700	62	47	2.0	4.0
	V4	685	3 200	2 940	3 580	60	44	2.2	4.3
	V3	595	2 880	2 600	3 380	56	40	2.5	5.0
	V2	400	2 110	1 820	2 820	47	30	3.7	7.4
	V1	230	1 320	1 080	2 070	35	18	6.5	12.9
24D	V5	750	4 050	3 470	5 070	62	47	2.0	4.0
	V4	685	3 780	3 190	4 880	60	44	2.2	4.3
	V3	595	3 380	2 810	4 580	56	40	2.5	5.0
	V2	400	2 440	1 950	3 740	47	30	3.7	7.4
	V1	230	1 490	1 160	2 660	35	18	6.5	12.9

Model LI sound level:

Comfort level provided by the COMFORT LINE LI. Attenuation of 12 dB (Sizes 1 to 3) and 14 dB (Sizes 4 and 5) depending on the room, the sound absorbing duct and the isolated distribution plenum. Attenuation is identical for COMFORT LINE LI + diffusion kit.

(1) Important: the temperature should not exceed 65°C (CIAT recommendation).

Model LY sound level:

Comfort level provided by the COMFORT LINE LY. Attenuation of 14 dB (Sizes 1 to 3) and 16 dB (Sizes 4 and 5) depending on the room, the sound absorbing duct and the isolated distribution plenum. Attenuation is identical for COMFORT LINE LY + diffusion kit.

(1) Important: the temperature should not exceed 65°C (CIAT recommendation).

NOTE: For COMFORT LINE LYK, sizes 3 and 4, speed 5 must not be selected (air flow too high for Ø160 collars).

MODEL LI / LY

Cold water temperature: 7/12°C, summer air temperature: 27°C - 19°C (WB)

Hot water temperature: 70/60°C, summer air temperature: 20°C - 50% (RH)

COMFORT LINE Model LI Model LY	Motor code	Air flow in m ³ /h	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (1) Auxiliary electric heater 230/1/50	
			Total	Sensible				700W	1400W
32C	V5	1 230	5 400	4 870	15 800	65	48	1.7	3.4
	V4	920	4 520	3 910	12 300	59	42	2.3	4.5
	V3	735	3 910	3 280	10 100	54	38	2.8	5.7
	V2	535	3 120	2 530	7 550	49	33	3.9	7.8
	V1	410	2 550	2 010	5 890	45	29	5.1	10.1
32D	V5	1230	6 020	5 250	17 000	65	48	1.7	3.4
	V4	920	4 950	4 150	13 200	59	42	2.3	4.5
	V3	735	4 220	3 450	10 700	54	38	2.8	5.7
	V2	535	3 310	2 620	7 980	49	33	3.9	7.8
	V1	410	2 660	2 060	6 200	45	29	5.1	10.1
32E	V5	1 230	6 300	5 340	17 100	65	48	1.7	3.4
	V4	920	5 150	4 210	13 100	59	42	2.3	4.5
	V3	735	4 370	3 490	10 700	54	38	2.8	5.7
	V2	535	3 420	2 650	7 900	49	33	3.9	7.8
	V1	410	2 750	2 090	6 120	45	29	5.1	10.1
34C	V5	1230	5 400	4 870	6 030	65	48	1.7	3.4
	V4	920	4 520	3 910	5 320	59	42	2.3	4.5
	V3	735	3 910	3 290	4 790	54	38	2.8	5.7
	V2	535	3 120	2 530	4 050	49	33	3.9	7.8
	V1	410	2 550	2 010	3 470	45	29	5.1	10.1
34D	V5	1 230	6 230	5 370	8 170	65	48	1.7	3.4
	V4	920	5 080	4 220	7 100	59	42	2.3	4.5
	V3	735	4 300	3 490	6 310	54	38	2.8	5.7
	V2	535	3 350	2 640	5 250	49	33	3.9	7.8
	V1	410	2 700	2 080	4 440	45	29	5.1	10.1
								700W	1400W
42C	V5	1 260	6 240	5 550	16 400	64	45	1.7	3.3
	V4	905	5 010	4 180	12 400	58	39	2.3	4.6
	V3	720	4 240	3 430	10 200	53	35	2.9	5.8
	V2	535	3 380	2 630	7 800	49	31	3.9	7.8
	V1	405	2 690	2 040	6 050	45	26	5.1	10.3
42D	V5	1 260	7 260	5 980	17 500	64	45	1.7	3.3
	V4	905	5 730	4 490	13 100	58	39	2.3	4.6
	V3	720	4 800	3 660	10 600	53	35	2.9	5.8
	V2	535	3 760	2 800	8 090	49	31	3.9	7.8
	V1	405	2 970	2 170	6 230	45	26	5.1	10.3
42E	V5	1 260	7 780	6 180	17 900	64	45	1.7	3.3
	V4	905	6 050	4 620	13 300	58	39	2.3	4.6
	V3	720	5 040	3 760	10 800	53	35	2.9	5.8
	V2	535	3 930	2 870	8 140	49	31	3.9	7.8
	V1	405	3 090	2 220	6 250	45	26	5.1	10.3
44C	V5	1260	6 240	5 550	6 650	64	45	1.7	3.3
	V4	905	5 010	4 190	5 740	58	39	2.3	4.6
	V3	720	4 240	3 430	5 120	53	35	2.9	5.8
	V2	535	3 380	2 640	4 350	49	31	3.9	7.8
	V1	405	2 690	2 050	3 680	45	26	5.1	10.3
44D	V5	1 260	7 390	6 050	6 630	64	45	1.7	3.3
	V4	905	5 820	4 530	5 690	58	39	2.3	4.6
	V3	720	4 860	3 700	5 070	53	35	2.9	5.8
	V2	535	3 790	2 820	4 290	49	31	3.9	7.8
	V1	405	2 980	2 190	3 620	45	26	5.1	10.3

Model LI sound level:

Comfort level provided by the COMFORT LINE LI. Attenuation of 12 dB (Sizes 1 to 3) and 14 dB (Sizes 4 and 5) depending on the room, the sound absorbing duct and the isolated distribution plenum. Attenuation is identical for COMFORT LINE LI + diffusion kit.

(1) Important: the temperature should not exceed 65°C (CIAT recommendation).

Model LY sound level:

Comfort level provided by the COMFORT LINE LY. Attenuation of 14 dB (Sizes 1 to 3) and 16 dB (Sizes 4 and 5) depending on the room, the sound absorbing duct and the isolated distribution plenum. Attenuation is identical for COMFORT LINE LY + diffusion kit.

(1) Important: the temperature should not exceed 65°C (CIAT recommendation).

Note: For COMFORT LINE LY Ø160, sizes 3 and 4, speed 5 must not be selected (air flow too high for Ø160 collars).

ACCESSORIES (FACTORY-FITTED)

Figures	Description	Figures	Description
	Condensate drain pump with high safety device (P26 specifications)		Smooth metal rectangular return sleeve (Only model I and Y)

ACCESSORIES (SUPPLIED SEPARATELY)

Figures	Description	Code		
	ø100 mm smooth collar	Code	7013442	
	ø125 mm smooth collar	Code	7013558	
	Self-adjustable fresh air module kit ø100 mm	Code	15/30/45 m ³ /h	7013440
		Code	60/75/90 m ³ /h	7013544
	Self-adjustable fresh air module kit ø125 mm	Code	15/30/45 m ³ /h	7013556
		Code	60/75/90 m ³ /h	7013556
	Resilient mounts (4 per unit)	Code	219453	
	Condensate pan extension for recovery of condensates underneath the spigots	Code	7158842	

Flexible connections for models I, Y, H, U and L

Assembly	Figures	Description	Code	Size 1, 2 and 3 Customer side coupling G1/2"	Size 4 and 5 Customer side coupling G3/4"	Size 6 Customer side coupling G3/4"
For 2-tube coils						
All without valve		2 M1 9 mm thick insulated flexible connections EPDM pipe + PN10 stainless steel braid length 300 mm Male coupling with flat end / Female rotary coupling on customer side	Code	2 x 5202288	2 x 7247867	2 x 7247867
All 4-way valve		2 M1 9 mm thick insulated flexible connections EPDM pipe + PN10 stainless steel braid length 300 mm Rotary female couplings on both sides	Code	2 x 5202289	2 x 5202298	2 x 5202298
All 2-way valve		2 M1 9 mm thick insulated flexible connections EPDM pipe + PN10 stainless steel braid length 300 mm Including: 1 with male coupling with flat end / Female rotary coupling on customer side 1 with female rotary coupling on both sides	Code	5202288 + 5202289	7247867 + 5202298	2 x 7247867 + 2 x 5202298
Assembly	Figures	Description	Code	Size 1, 2 and 3 Customer side coupling Heating G1/2" Cooling G1/2"	Size 4 and 5 Customer side coupling Heating G1/2" Cooling G3/4"	Size 6 Customer side coupling Heating G3/4" Cooling G3/4"
For 4-tube coils						
All without valve		EPDM pipe + PN10 stainless steel braid length 300 mm Male coupling with flat end / Female rotary coupling on customer side HEATING: 2 non-insulated COOLING: 2 M1 9 mm thick insulated connections	Code	HEATING: 2 x 7247868 COOLING: 2 x 5202288	HEATING: 2 x 7247868 COOLING: 2 x 7247867	HEATING: 2 x 7401828 COOLING: 2 x 7247867
All 4-way valve		EPDM pipe + PN10 stainless steel braid length 300 mm Rotary female couplings on both sides HEATING: 2 non-insulated COOLING: 2 M1 9 mm thick insulated connections	Code	HEATING: 2 x 7247837 COOLING: 2 x 5202289	HEATING: 2 x 7247837 COOLING: 2 x 5202298	HEATING: 2 x 7387851 COOLING: 2 x 5202298
All 2-way valve		4 EPDM pipe+PN10 stainless steel braid length 300 mm flexible connections, including: 2 with male coupling with flat end / Female rotary coupling on customer side 2 with female rotary coupling on both sides HEATING: 2 non-insulated COOLING: 2 M1 9 mm thick insulated connections	Code	HEATING: 7247868 + 7247837 COOLING: 5202288 + 5202289	HEATING: 7247868 + 7247837 COOLING: 7247867 + 5202298	HEATING: 1 x 7401828 + 1 x 7387851 COOLING: 1 x 7247867 + 1 x 5202298

SPECIFICATION TEXT

COMFORT LINE model H or U

Ductable comfort units are to comply with standards and regulations in force, in particular: EN ISO 7730 (thermal comfort), EN 779 (filters), EN 1216 (water coils), EN 50022 (DIN rails), NF C15-100 (electrical components), NF S90-351 (health, airborne contamination control) and the circular DGS n°97/311 (disinfection of air conditioning systems). Eco designed in accordance with standard EN 14062 and in compliance with environmental certification ISO 14001. They will be manufactured according to the quality assurance standard ISO 9001, EUROVENT and will have the CE mark.

The frame will be designed in galvanised steel sheet metal and assembled with zinc-nickel plated steel fastenings. No rivet fastenings can be accepted to allow disassembly at the end of the unit's service life. Acoustic and thermal **insulation** is provided by 15 mm thick melamine; a flexible open-cell foam with a layer of aluminium foil to protect it from dust and make it easier to clean. The fire rating will be M1. No erodible insulation or insulation without a protective covering may be used. **It is essential that fine particles are not released, to protect the health of individuals and to comply with future European directives.**

Intake will be through a grille or several return grilles via a plenum with circular nozzles that can be connected to flexible ducting (ø200 mm standard for all sizes and also available in ø160 for Sizes 1 to 3 and ø250 for Sizes 4 and 5) to prevent the intake of any non-ducted return air from within the suspended ceiling.

The air supply will come from a plenum with circular nozzles (collar diameters identical to the air supply diameters) ducted to one or more grilles that are correctly sized for optimised air distribution to ensure optimum comfort.

The EPURE function (air purification system) is to exceed the WHO's recommendations on particle removal, reducing PM2.5 particulates to below 10 µg/m³ in less than an hour.

The unit is to be fitted with an air filter made of polypropylene with an M1 fire rating, that will not release glass fibres. The filter should be a high energy efficiency multi-pleated filter with a filter area of at least 10 times the intake surface area.

Its high retention capacity ensures an increased service life (flat filters will not be permitted). In order to reduce waste at the end of the service life, it must be able to be completely incinerated with no sorting of materials necessary. No modification of the frame should be necessary to replace the filter.

The **water coil** will be made of copper tubes and continuous fins in seamed aluminium. The connections should have couplings with integrated swivel nut to reduce the number of intermediate couplings, thereby reducing the risk of leaks (direct assembly of valves).

The coils will be equipped with air bleed and draining valves. They will be tested under extreme conditions with a minimum test pressure of 24 bar. In order to reduce energy consumption and simplify commissioning, it will be possible to fit them with automatically adjusted differential pressure valves to ensure the water flow rate is maintained, once it has been set with the manual handle.

The condensate pan under the coil and under the valves must be a single unit (no leaks) and made from non-corrodible polymer with an M1 fire rating. The patented design does not require it to be tilted. The coil rests on a central part of the pan, completely horizontal, and therefore with no bypass area. Condensates are drained through 2 steep channels either side of the coil. The external part of the pan that collects condensate from the valves has an inverted slope to guide the condensate to the drain holes. This will eliminate any risk of spreading bacteria, which ensures perfect hygiene. The condensate outlet is to be raised (25 mm) to ensure a gravity drain. It must be possible to remove the pan from underneath the unit when required. As far as is possible, an installation without any condensate drain pumps is preferable (condensate gravity draining) to keep maintenance costs down. If a pump is required, **it must have a high security device slaved to a control valve.**

The additional electric heater running in 230V single-phase must be shielded with stainless steel. It should be placed in front of the water coil in order to save energy (for simultaneous hot water and auxiliary electric heater usage). The unit is to be fitted with safety limiters that comply with the applicable standards. All electric heaters with incandescent wires or sacrificial fuses will be prohibited.

The fan motor assembly, mounted on anti-vibration mounts, will be fitted with a low-consumption **HEE** motor with BLAC (BrushLess Alternate Current) technology, which offers more linear torque progression and a lower operating sound level than BLDC (Brushless Direct Current) technology. All BLDC motors will be prohibited. Single-phase 230V 50/60Hz, it may be controlled by a progressive control signal 0-10V or 3-speed ON/OFF with no need for an additional electronic board. It will be fitted with an automatic overload protection with alarm report via KNX bus. It will be fitted with 1 or 2 high energy efficiency **HEE** double inlet impellers with forward curved blades.

The fan motor assembly will be balanced on the production line to guarantee the G6.3 balance standard

An electrics box that is enclosed and of large dimensions, fitted with a DIN rail, will be able to accommodate and protect all the control components from dust. The safety of the electrical cables must be ensured using cable glands. The electrical and hydraulic feeds must both be on the same side to facilitate maintenance operations. Parallel control of 2 motors is prohibited. In order to ensure reliability, the control will be factory-fitted to eliminate any risks of leaks, for electrical safety and for the proper protection of components.

The clean fresh air inlet will be able to be ducted. It will be positioned, if possible, behind the discharge grille.

Resilient mounts will be placed between the unit's mountings and the threaded rods to prevent any transmission of noise.

Environmental report

An analysis of the life-cycle and the environmental implications will be available, in accordance with ISO 14040.

Eco-design should be a permanent consideration. The unit as a whole must be at least 94% recyclable. The unit must be easy to dismantle at end of life.

Guarantees

The manufacturer guarantees the equipment's performance, and will provide the documents attesting to the equipment's compliance with the attached specifications and with the STANDARDS, in particular the heating and cooling capacity (total and sensible), the air flow, the motor power input, the efficiency of the filters and the sound power spectrum.

Using a simulation tool, the manufacturer of the diffusion grilles must be able to give the relevant comfort indices or the values in compliance with the standard EN ISO 7730. The system start-up and maintenance guide for the unit must be in the language used in the country of installation. The manufacturer's technical specifications and the equipment's sound pressure must be given in the **documents to be appended to the submission**.

COMFORT LINE model LI or LY

Ductable comfort units must comply with standards and regulations in force, in particular: EN ISO 7730 (thermal comfort), EN 779 (filters), EN 1216 (water coils), EN 50022 (DIN rails), NF C15-100 (electrical components), NF S90-351 (health, airborne contamination control) and the circular DGS n°97/311 (disinfection of air conditioning systems). Eco-designed in accordance with standard EN 14062 and in compliance with environmental certification ISO 14001. They will be manufactured according to the quality assurance standard ISO 9001, EUROVENT and will have the CE mark.

The frame will be designed in galvanised steel sheet metal and assembled with zinc-nickel plated steel fastenings. No rivet fastenings can be accepted to allow disassembly at the end of the unit's service life. Acoustic and thermal **insulation** is provided by 15 mm thick melamine; a flexible open-cell foam with a layer of aluminium foil to protect it from dust and make it easier to clean. The fire rating will be M1. No erodible insulation or insulation without a protective covering may be used. **It is essential that fine particles are not released, to protect the health of individuals and to comply with future European directives.**

Intake will be via a return panel with a micro perforated return grille integrated with the unit by an adjustable sleeve. Adjustment from 0 to 40 mm will be possible (no foul air from the suspended ceiling, improved hygiene, clean air). Non-ducted return within the suspended ceiling is prohibited. It must be possible to provide access in less than 3 seconds to the filter via the RAL 9010 white return grille (opened with a tool for secure access) to ensure low maintenance costs. It must also be possible to remove the fan motor assembly without having to remove the unit.

For sizes 1 and 2, there are two possible grille dimensions:

- Standard panel 700 x 300 mm
- Optional panel 1200 x 300 mm with the unit centred or offset in relation to the panel

For sizes 3 and 4:

- Standard panel 1200 x 300 mm with the unit centred or offset in relation to the panel

The air supply will come via a double-deflection grille with Coanda effect, correctly sized by the manufacturer for optimum air diffusion for guaranteed comfort.

Depending on the case, the connection to this grille is either via a rectangular duct (LI assembly), or via a circular duct ø160 mm (LY assembly)

The EPURE function (air purification system) is to exceed the WHO's recommendations on particle removal, reducing PM2.5 particulates to below 10 µg/m³ in less than an hour.

The unit is to be fitted with an air filter made of polypropylene with an M1 fire rating, that will not release glass fibres. The filter should be a high energy efficiency multi-pleated filter with a filter area of at least 10 times the intake surface area.

Its high retention capacity ensures an increased service life (flat filters will not be permitted). In order to reduce waste at the end of the service life, it must be able to be completely incinerated with no sorting of materials necessary. No modification of the frame should be necessary to replace the filter.

The water coil will be made of copper tubes and continuous fins in seamed aluminium. The connections should have couplings with integrated swivel nut to reduce the number of intermediate couplings, thereby reducing the risk of leaks (direct assembly of valves).

The coils will be equipped with air bleed and draining valves. They will be tested under extreme conditions with a minimum test pressure of 24 bar. In order to reduce energy consumption and simplify commissioning, it will be possible to fit them with automatically adjusted differential pressure valves to ensure the water flow rate is maintained, once it has been set with the manual handle.

The condensate pan under the coil and under the valves must be a single unit (no leaks) and made from non-corrodible polymer with an M1 fire rating. The patented design does not require it to be tilted. The coil rests on a central part of the pan, completely horizontal, and therefore with no bypass area. Condensates are drained through 2 steep channels either side of the coil. The external part of the pan that collects condensate from the valves has an inverted slope to guide the condensate to the drain holes. This will eliminate any risk of spreading bacteria, which ensures perfect hygiene. The condensate outlet is to be raised (25 mm) to ensure a gravity drain. It must be possible to remove the pan from underneath the unit when required. As far as is possible, an installation without any condensate drain pumps is preferable (condensate gravity draining) to keep maintenance costs down. If a pump is required, **it must have a high security device slaved to a control valve.**

The additional electric heater running in 230V single-phase must be shielded with **stainless steel**. It should be placed in front of the water coil in order to save energy (for simultaneous hot water and auxiliary electric heater usage). The unit is to be fitted with safety limiters that comply with the applicable standards. All electric heaters with incandescent wires or sacrificial fuses will be prohibited.

The fan motor assembly, mounted on anti-vibration mounts, will be fitted with a low-consumption **HEE** motor with BLAC (BrushLess Alternate Current) technology, which offers more linear torque progression and a lower operating sound level than BLDC (Brushless Direct Current) technology. All BLDC motors will be prohibited. Single-phase 230V 50/60Hz, it may be controlled by a progressive control signal 0-10V or 3-speed ON/OFF with no need for an additional electronic board. It will be fitted with an automatic overload protection with alarm report via KNX bus. It will be fitted with 1 or 2 high energy efficiency HEE double inlet impellers with forward curved blades.

The fan motor assembly will be balanced on the production line to guarantee the G6.3 balance standard

An electrics box that is enclosed and of large dimensions, fitted with a DIN rail, will be able to accommodate and protect all the control components from dust. The safety of the electrical cables must be ensured using cable glands. The electrical and hydraulic feeds must both be on the same side to facilitate maintenance operations. Parallel control of 2 motors is prohibited. In order to ensure reliability, the control will be factory-fitted to eliminate any risks of leaks, for electrical safety and for the proper protection of components.

The clean fresh air inlet will be ducted. It will be positioned, if possible, behind the discharge grille.

Resilient mounts will be placed between the unit's mountings and the threaded rods to prevent any transmission of noise.

Guarantees

The manufacturer guarantees the equipment's performance, and will provide the documents attesting to the equipment's compliance with the attached specifications and with the STANDARDS, in particular the heating and cooling capacity (total and sensible), the air flow, the motor power input, the efficiency of the filters and the sound power spectrum. Using a simulation tool, the manufacturer of the terminal units must be able to give the relevant comfort indices or the values in compliance with the standard EN ISO 7730. The system start-up and maintenance guide for the unit must be in the language used in the country of installation. The manufacturer's technical specifications and the equipment's sound pressure must be given in **the documents to be appended to the submission**.

Document non contractuel. Dans le souci constant d'améliorer son matériel, CIAT se réserve le droit de procéder sans préavis à toutes modifications techniques.

Siège social

Avenue Jean Falconnier - B.P. 14
01350 - Culoz - France
Tel. : +33(0)4 79 42 42 42
Fax : +33(0)4 79 42 42 10
info@ciat.fr - www.ciat.com



CIAT Service

Tel. : 08 11 65 98 98 (0,15 € / mn)
Fax : 08 26 10 13 63 (0,15 € / mn)



Compagnie Industrielle d'Applications Thermiques - S.A. au capital de 26 728 480 € - R.C.S. Bourg-en-Bresse B 545 620 114