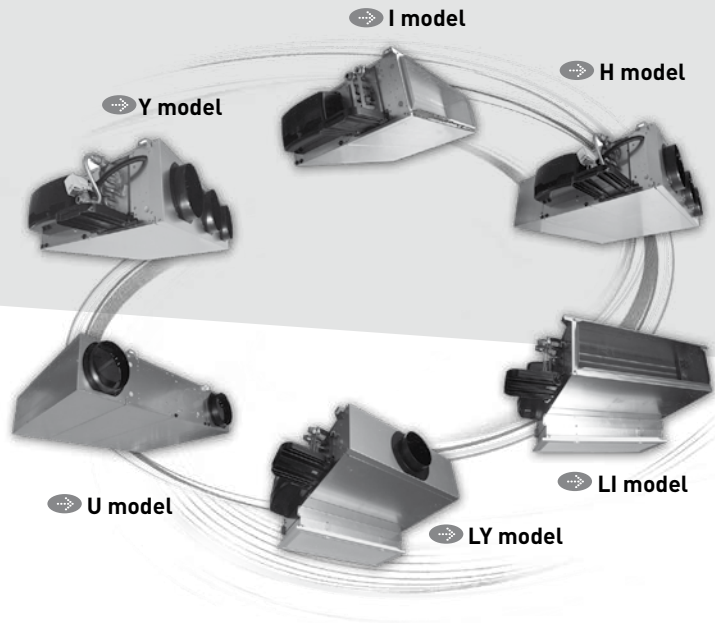


## COMFORT LINE

Comfort units  
Ductable

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 7 frame sizes and comes in 4 thicknesses: 215, 240, 245, 280 and 375 mm, enabling perfect integration into all types of suspended ceilings.

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

In the HEE version (High Energy Efficiency), COMFORT LINE, not only provides energy savings of up to 85%, but also meets the strict requirements of thermal regulations such as RT 2012 in France. 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 µg/m<sup>3</sup>).

## RANGE

The COMFORT LINE range comprises 7 sizes covering a large scope of air flow rates, and comes in 10 models to provide great flexibility in terms of suspended ceiling configurations.

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.

## RANGE CONFIGURATION

### Linear concepts

#### I MODEL

- Smooth metal rectangular sleeve mounted on the air supply, except for size 0.
- Smooth metal rectangular sleeve on the intake (option).

#### Y MODEL

- Supply plenum with collars for circular duct
  - \*Size 0 and 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
- Smooth metal rectangular sleeve on the intake (option).

#### H MODEL

- Return plenum and supply plenum with collars for circular duct
  - \*Size 0 and 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

#### H COMPACT MODEL

- Versions without filter for sizes 0 to 4

#### U MODEL

- Return plenum and supply plenum with Ø 200 (size 0 to 3) or 250 mm (size 4) lateral collars.

#### U COMPACT MODEL

- Versions without filter for sizes 0 to 2

### L concepts

#### LI MODEL (sizes 1 to 4)

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

#### LIk MODEL (sizes 1 to 4)

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

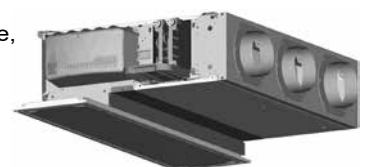
#### LY MODEL (sizes 1 to 4)

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

#### LYk MODEL (sizes 1 to 4)

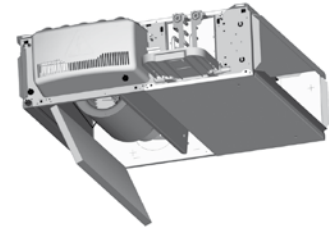
- Air recovery grille integrated with the unit and air supply via diffusion kit with supply grille, supply plenum with Ø160 collars and mandatory Ø160 mm flexible duct.

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



## INNOVATIVE DESIGN

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



## 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).
- Total flexibility and adaptability (assembly, water temperature, diffusion, filtration, etc.).
- Extensive capacity range.
- Wide selection of coils to adapt to various water temperatures
- Uses an ecological energy transfer fluid.
- Comfort unit with high available static pressure.
- Easy maintenance, simplified access.
- Environmentally-responsible product.

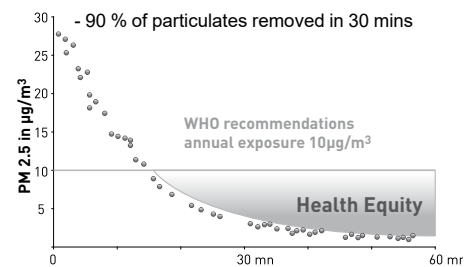
## FUNCTION



### Air quality

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

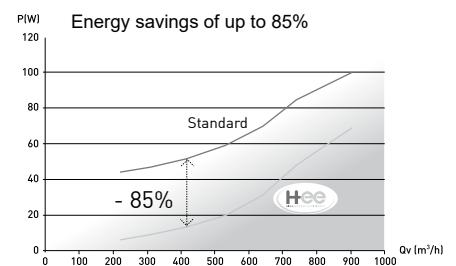
The Epure function (air purification system) is to exceed the WHO's recommendations on particle removal, reducing PM2.5 particulates to below 10 µg/m<sup>3</sup> in less than an hour. This is equivalent to a reduction of 50% to 90% in particulate matter.



## 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%.



## EASE OF INSTALLATION AND OPERATION

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

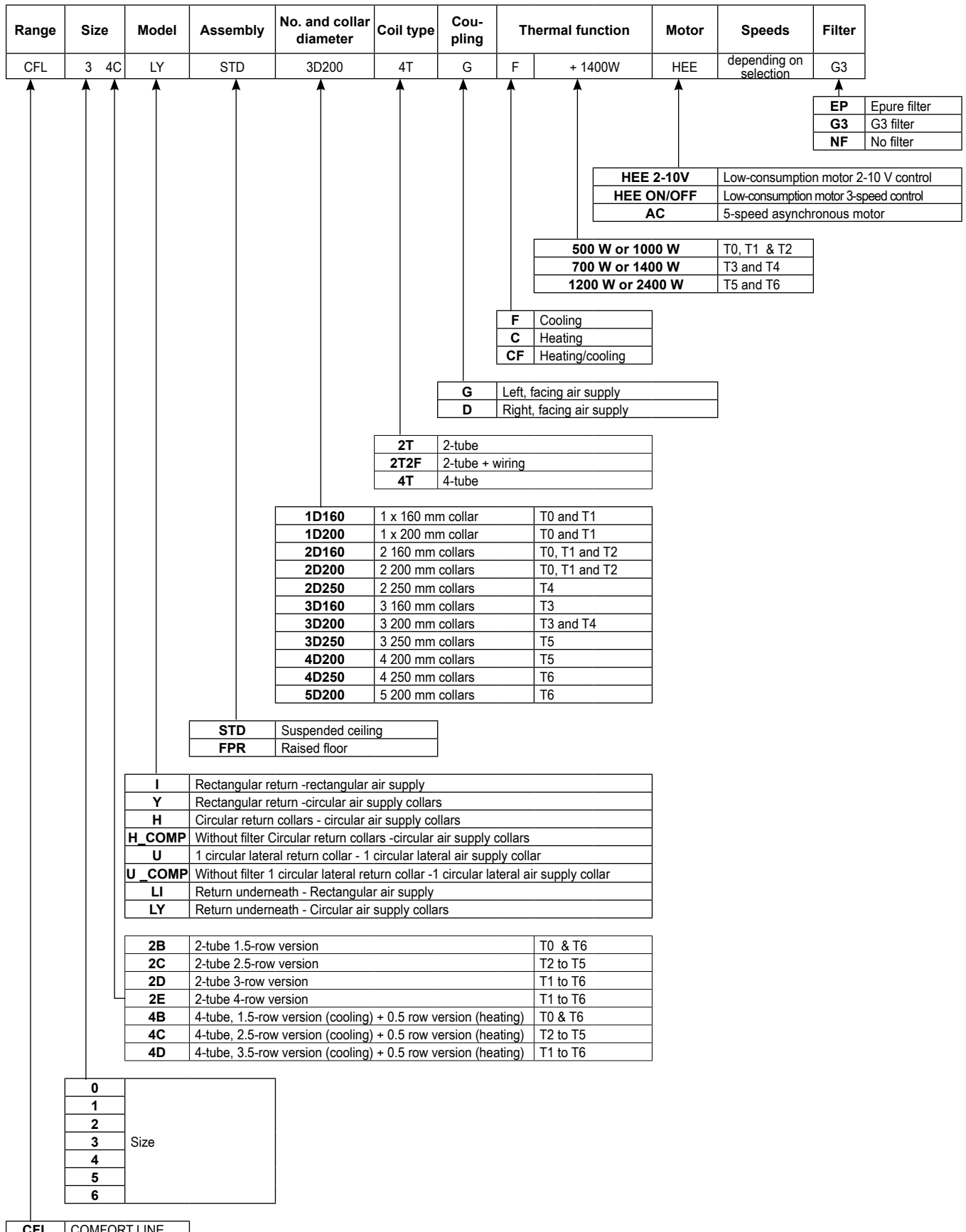
## ECO-DESIGN

COMFORT LINE has been fully designed using eco-design principles and falls within CIAT's sustainable development policy.

- Choice of supplier located close to the production plant,
- 94% recyclability rate,
- since 2013, CIAT has been working in partnership with ECOLOGIC for the collection and recovery of waste from our appliances at end of life, subject to the WEEE directive.



## MORPHO CODES - COMFORT LINE DESCRIPTION



## TECHNICAL DESCRIPTION

### Frame

■ Galvanised panelling, nickel-plated zinc-coated steel fastenings.

#### Size 0:

Polyester textile fibre insulation. M1 fire rating, thickness 10 mm

#### Size 1 to 6:

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 m<sup>3</sup>/h)

### Electrical heater (230V-1Ph-50Hz)

#### For Size 0:

Resistive wire type heater (230 V - 1-ph - 50 Hz)

The electrical heater has a double safety feature: Integrated self-hold safety thermostat with auto reset and thermal fuse

#### For sizes 1 to 6:

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

#### Size 0

Injected polypropylene drain pan insulated with 5 mm PE foam.

Drainage diameter: external Ø 16 mm

Class M1 fire rating

#### Size 1 to 6:

CIAT design (patent application no.1254978)

Recyclable thermoplastic drain pan, designed to reduce air leaks to outside the device on the one hand, and to prevent any air bypass around the coil on the other.

Its design also means that it retains only minimum condensates, while optimising the pump running time, and ensuring greater safety during any coil maintenance

Condensate drainage from the pan bottom, naturally inclined.

Drainage bushings manually reversible toward the rear or front of the device

Drainage diameter: Ø 22 mm

### Fan motor assembly size 0 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:

- Brushless technology
- Sealed, tropicalised, with protected shaft
- Gradual actuation with 0-10V control signal
- Internal normally closed series automatic heat protection on the winding.
- Supply 230V±10%/1-Ph/50-60 Hz.

##### Optional

- 3-speed on/off output motor actuation
- "DFS" motor fault output using a photocoupler for potential alarm feedback via a KNX protocol communication bus. (via V3000 controller)

**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,
- 230 V±10 %/1-ph/50-60 Hz supply,
- 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 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)

#### AC motor solution (not compliant with ErP2015):

##### Fan

2 aluminium impellers with forward-curved airfoil blades, dynamically balanced dual inlet with galvanised metal housings.

##### Asynchronous motor

Motor with 5 speeds connected to the terminal block (see description of AC motor 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 (excluding Compact U and H versions)

### ■ 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 or 4 bolts

Or

- Flexible filter medium made of regenerative polyester fibre.
- EN779 Efficiency Class: G3.
- Fire rating: M1.
- Rigid metal frame.
- Easy access via 2 or 4 bolts.

## Plenums

- Galvanised panelling, nickel-plated zinc-coated steel fastenings,
- ABS (HB) collars clipped onto the panelling,
- Supply plenum:

### Size 0:

insulated plenum: polyester textile fibre insulation. M1 fire rating, thickness 10 mm

### Size 1 to 6:

insulated plenum: melamine resin insulation, flexible open-cell foam, plus aluminium covering to prevent any dust build-up in the insulation and facilitate cleaning.

M1 fire rating, thickness 15 mm,

### ■ Return plenum:

- uninsulated plenum.

## Mounting the unit

- COMFORT LINE must be suspended from the ceiling using 4 or 6 threaded rods for size 6: 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

- RTR-E electromechanical wall-mounted thermostat range
- V30 and V300 electronic range,
- V3000 networked electronic range (KNX),
- Networked electronic range (LON): VLON2,
- Fresh air control:
  - Pack R1: fresh air managed via presence sensor,
  - Pack R+ : Fresh air managed by CO<sub>2</sub> sensor.

## Options (factory-fitted)

- Condensate drain pump
- Smooth metal rectangular supply air sleeve for Size 0
- Smooth metal rectangular return sleeve on all sizes
- Supply and/or return plenums for Y, H and U' assembly
- Unit without electrics box or DIN rail ("bare wire option")
- Hydraulic coil with protected fins for harmful/corrosive atmospheres (coastal locations, or areas close to chemical industries)

## Accessories (supplied separately)

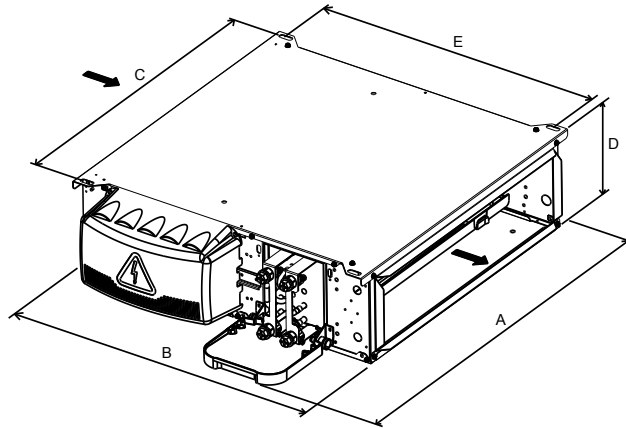
- Ø100 mm or 125 mm smooth collar,
- Ø100 mm or 125 mm self-adjustable fresh air module kit:
  - flow rate 15/30/45 m<sup>3</sup>/h,
  - flow rate 60/75/90 m<sup>3</sup>/h,
- Resilient mounts,
- Ø 125 mm self-adjustable fresh air module kit for flow rates of 120/150/180 m<sup>3</sup>/h
- Ø160 mm circular duct accessory for air distribution kit,
- Condensate pan expansions, except for size 0,
- Flexible connection kit, length 300 mm, with or without 9-mm insulation.

## Specific options (on request)

- Return plenum insulation
- Plenums with collar configurations (diameter and position) in addition to the standard offer
- Electrical and hydraulic connections on opposite sides

## LINEAR CONCEPTS

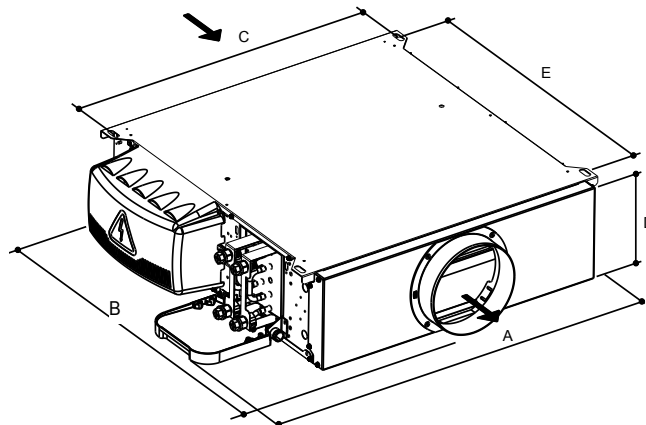
### I MODEL



	A	B	C	D	E	Supply	Suction
<b>T0 *</b>	708	590	485	240	538	430 x 210	430 x 210
<b>T1</b>	898	720	692	215	649	620 x 170	609 x 170
<b>T2</b>				245		620 x 200	609 x 200
<b>T3</b>	1198		992	280		920 x 200	909 x 200
<b>T4</b>	1498	860	1292	375		920 x 235	900 x 235
<b>T5</b>				1220 x 235		1209 x 235	
<b>T6</b>		1220 x 330	1200 x 330				

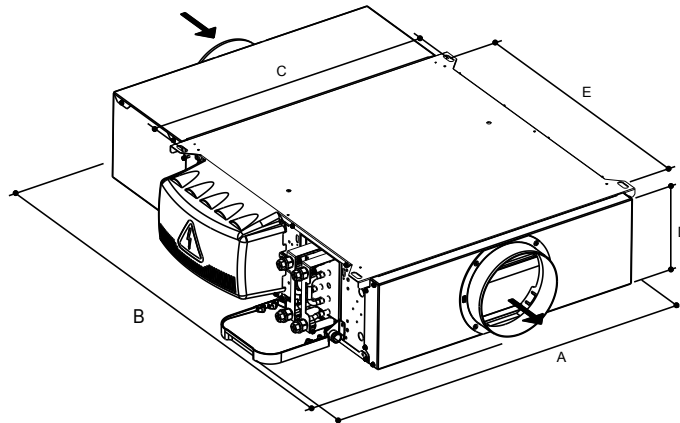
\* devices without supply air sleeve

### Y MODEL



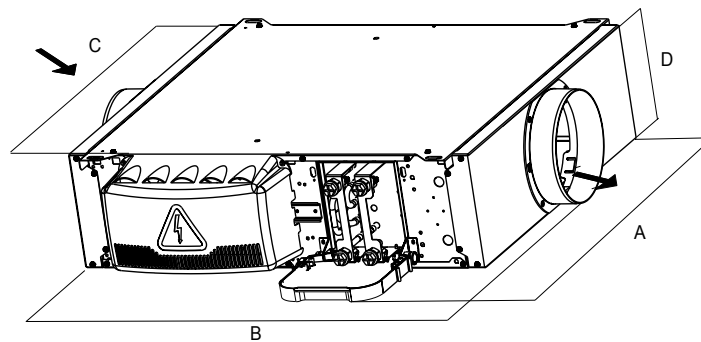
	A	B	C	D	E	Supply	Suction
<b>T0</b>	708	642	485	240	538	1 or 2 x Ø 160 or 200 mm	430 x 210
<b>T1</b>	898	786	692	215	649	1 or 2 x Ø 160 or 200 mm	609 x 170
<b>T2</b>				245		2 x Ø 160 or 200 mm	609 x 200
<b>T3</b>	1198		992	280		3 x Ø 160 or 200 mm	909 x 200
<b>T4</b>	1498	926	1292	375		3 x Ø 200 or 2 x Ø 250 mm	900 x 235
<b>T5</b>				4 x Ø 200 or 3 x Ø 250 mm		1209 x 235	
<b>T6</b>		5 x Ø 200 or 4 x Ø 250 mm	1200 x 330				

## H MODEL



	A	B	C	D	E	Supply	Suction
T0	708	694	485	240	538	1 or 2 x Ø 160 or 200 mm	1 or 2 x Ø 160 or 200 mm
T1	898	1095	692	215	649	1 or 2 x Ø 160 or 200 mm	1 or 2 x Ø 160 or 200 mm
T2				245		2 x Ø 160 or 200 mm	2 x Ø 160 or 200 mm
T3	992		3 x Ø 160 or 200 mm	3 x Ø 160 or 200 mm			
T4	1198	280	3 x Ø 200 or 2 x Ø 250 mm	3 x Ø 200 or 2 x Ø 250 mm			
T5	1498	1232	1292	375		4 x Ø 200 or 3 x Ø 250 mm	4 x Ø 200 or 3 x Ø 250 mm
T6				5 x Ø 200 or 4 x Ø 250 mm	5 x Ø 200 or 4 x Ø 250 mm		

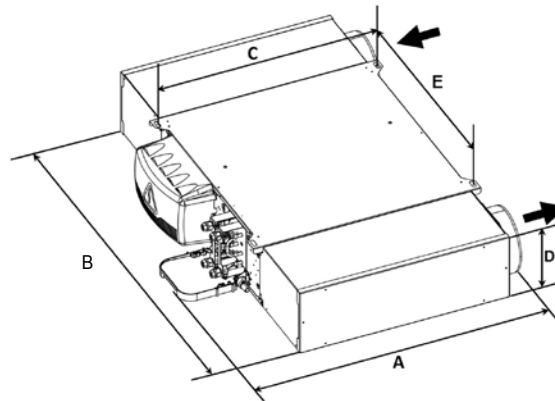
## H COMPACT MODEL



	A	B	C	D	E	Supply	Suction
T0	708	694	485	240	538	1 or 2 x Ø 160 or 200 mm	1 or 2 x Ø 160 or 200 mm
T1	898	872	692	215	649	1 or 2 x Ø 160 or 200 mm	1 or 2 x Ø 160 or 200 mm
T2				245		2 x Ø 160 or 200 mm	2 x Ø 160 or 200 mm
T3	992		3 x Ø 160 or 200 mm	3 x Ø 160 or 200 mm			
T4	1198	280	3 x Ø 200 or 2 x Ø 250 mm	3 x Ø 200 or 2 x Ø 250 mm			
			3 x Ø 200 or 2 x Ø 250 mm	3 x Ø 200 or 2 x Ø 250 mm			

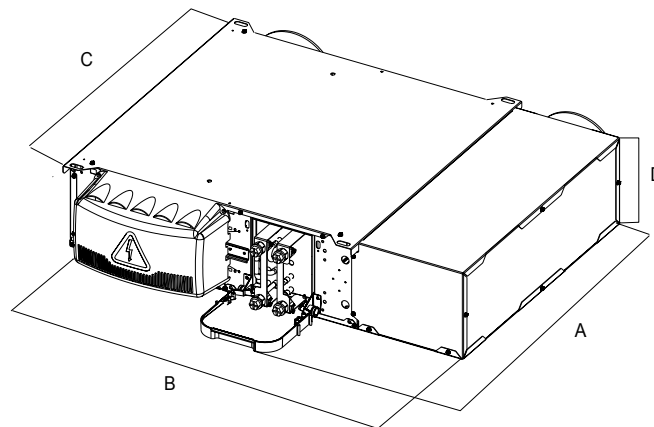


## U MODEL



	A	B	C	D	E	Supply	Suction
T0	730	1060	485	240	538	1 x Ø 200 mm or Ø 160 mm	1 x Ø 200 mm or Ø 160 mm
T1	920	1213	692	215	649	1 x Ø 200 mm or Ø 160 mm	1 x Ø 200 mm or Ø 160 mm
T2				245		1 x Ø 200 mm or Ø 160 mm	1 x Ø 200 mm or Ø 160 mm
T3	1120	1313	992	280		1 x Ø 200 mm	1 x Ø 200 mm
T4				1 x Ø 250 mm	1 x Ø 250 mm		

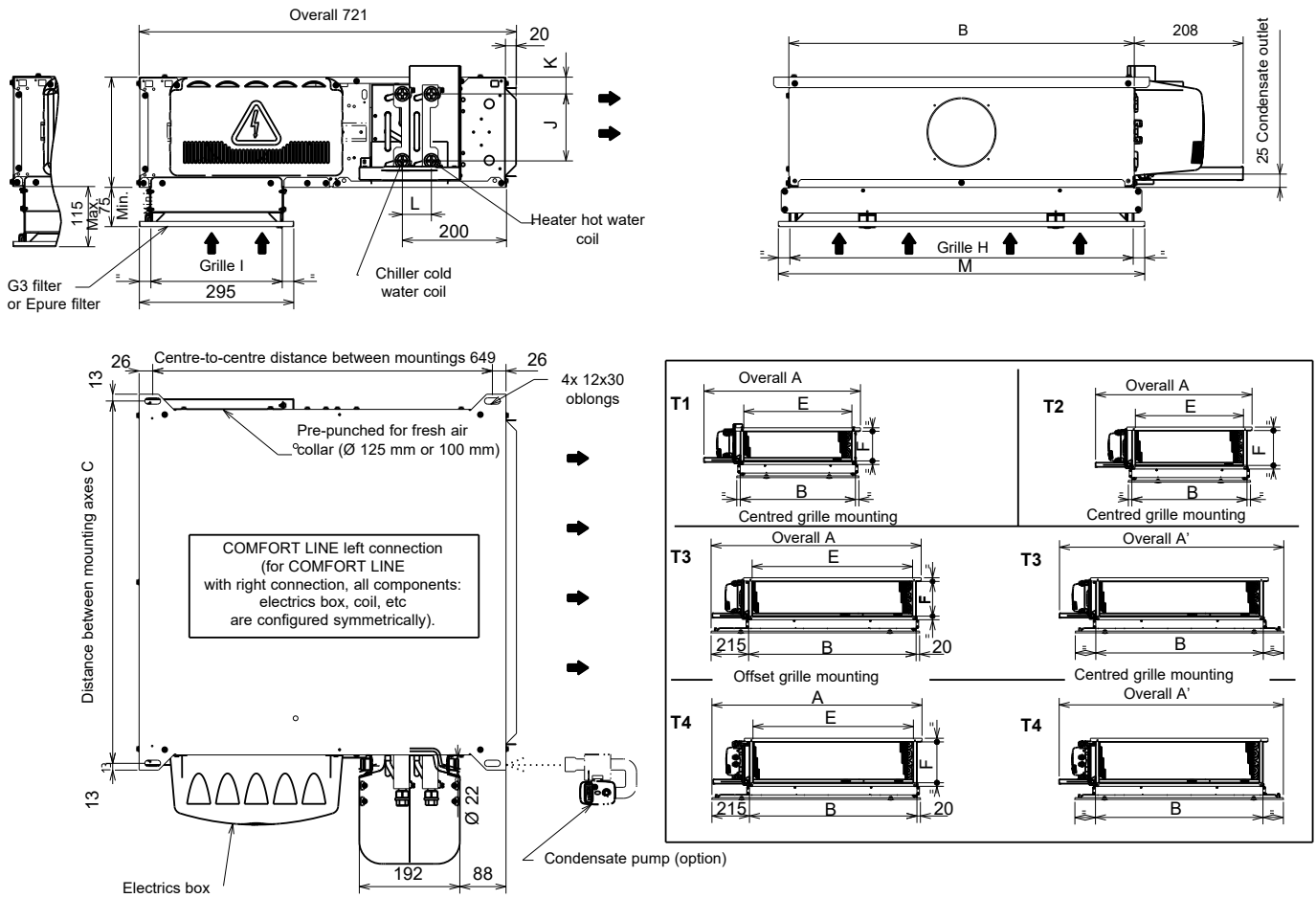
## U Compact MODEL



	A	B	C	D	E	Supply	Suction
T0	730	825	485	240	538	1 x Ø 200 mm or Ø 160 mm	1 x Ø 200 mm or Ø 160 mm
T1	920	956	692	215	649	1 x Ø 200 mm or Ø 160 mm	1 x Ø 200 mm or Ø 160 mm
T2				245		1 x Ø 200 mm or Ø 160 mm	1 x Ø 200 mm or Ø 160 mm

## L CONCEPTS

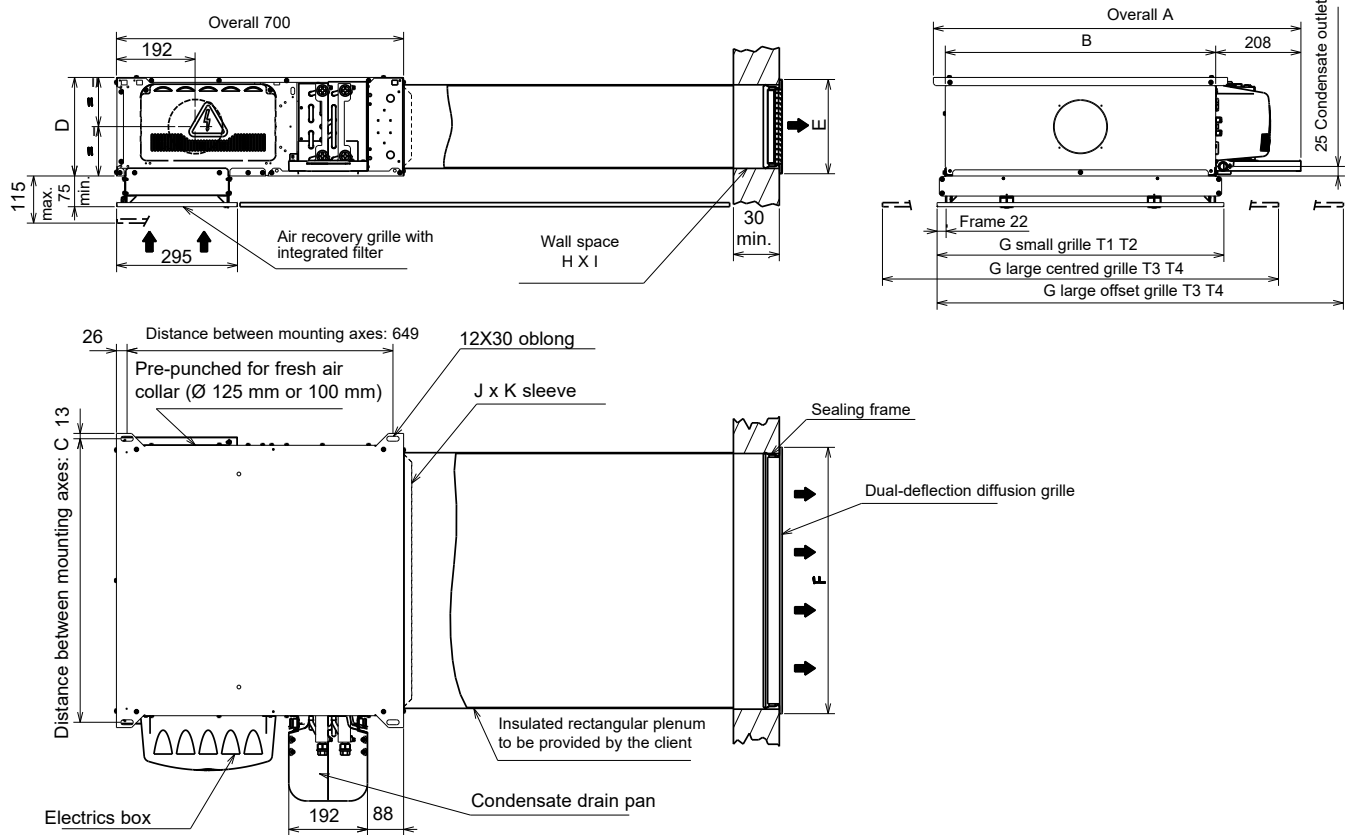
### LI MODEL



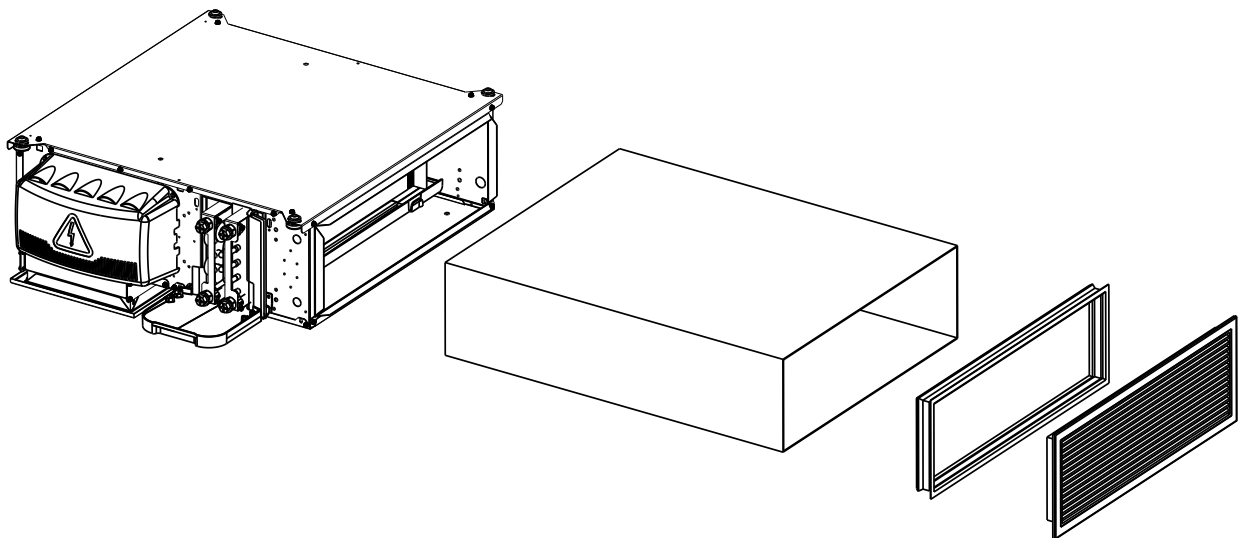
Note: 1200-mm long grille optional for sizes 1 & 2. Consult us

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

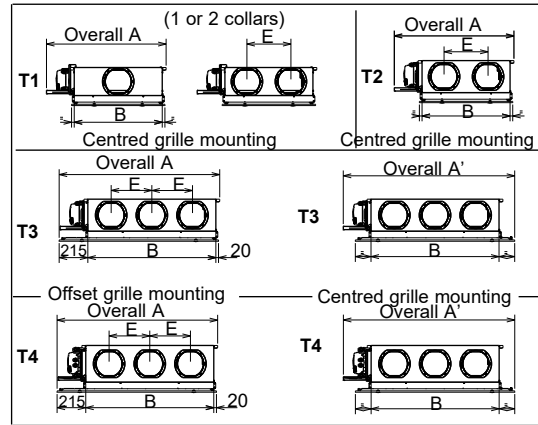
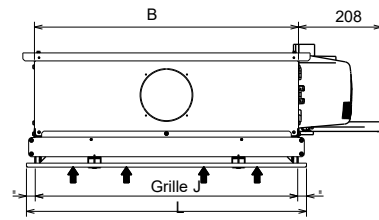
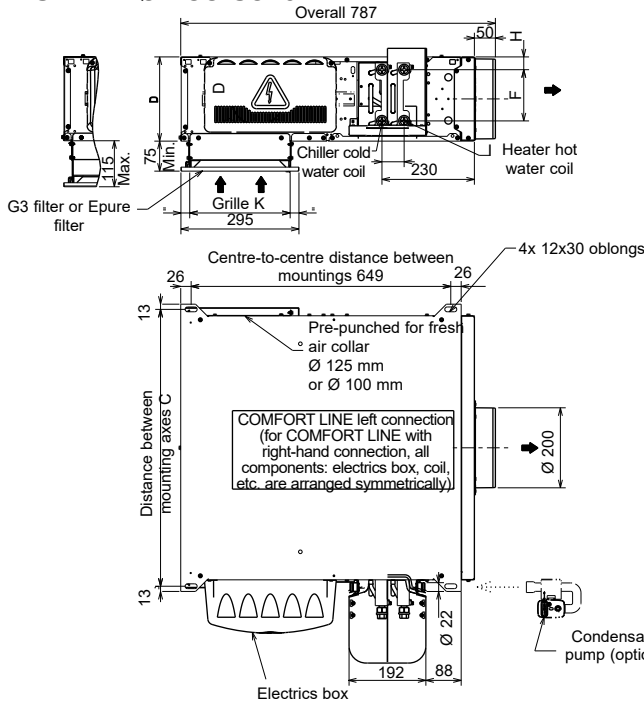
## LIK MODEL



	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											



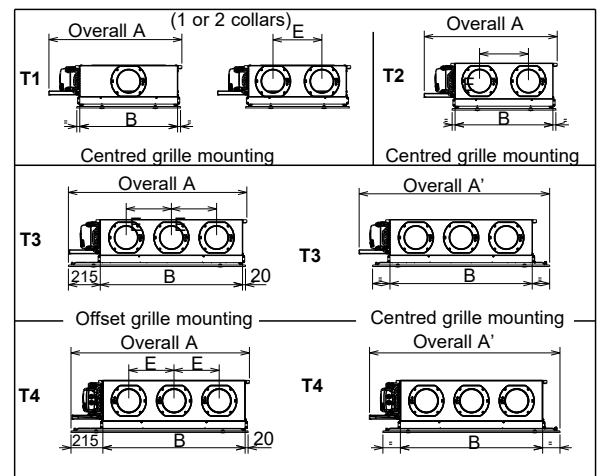
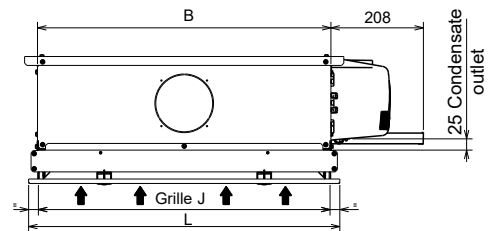
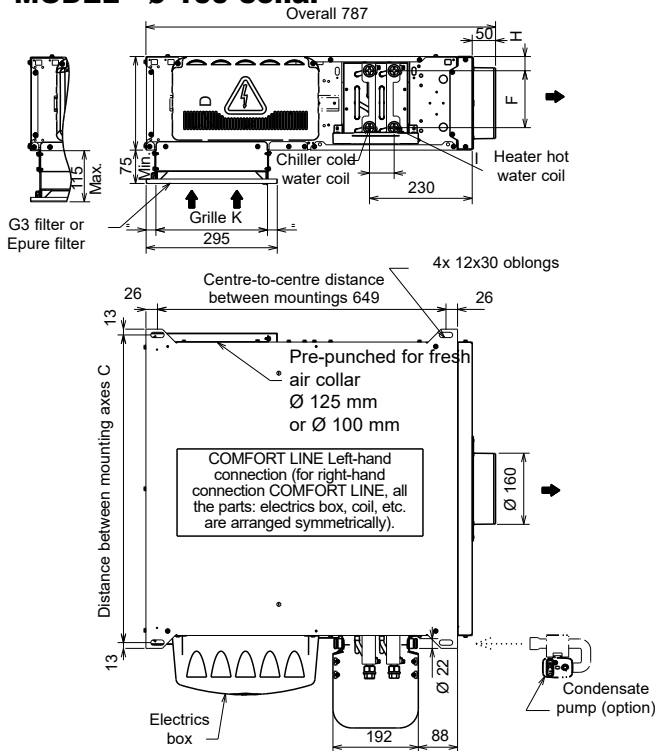
## LY MODEL - ø 200 collar



Note: 1200-mm long grille optional for sizes 1 & 2. Consult us

	A	A'	B	C	D	E	F		G		H		I (4T)		J	K	L
							Coil C	Coil H	Coil C	Coil H	Coil C	Coil H	3 rows	4 rows			
T1 (1V)	898		660	692	215	330	128	128	1/2"	1/2"	35	35	55	55	655	250	700
T1 (2V)					245		160	160									
T2																	
T3	1205	1285	960	992	280	305	192	192	3/4"			110		62	1150		1195
T4					280												

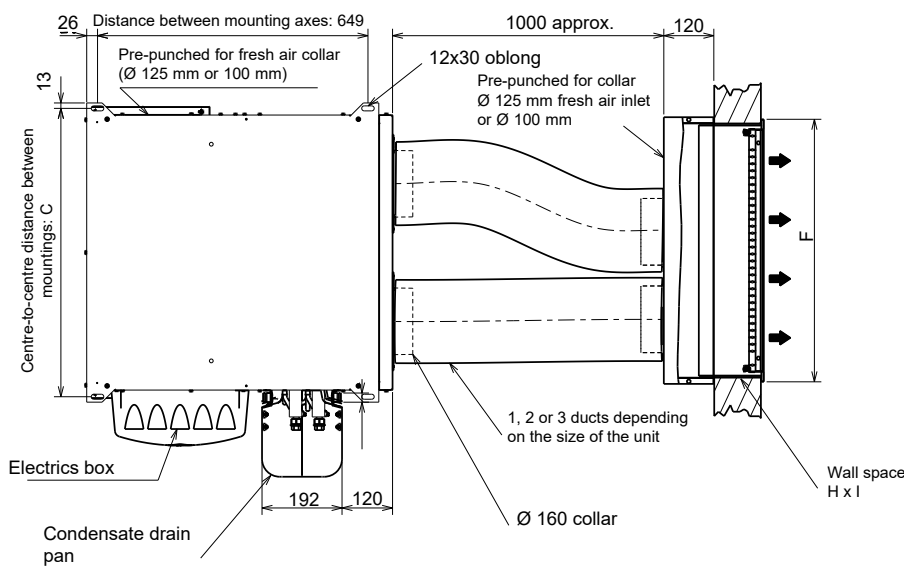
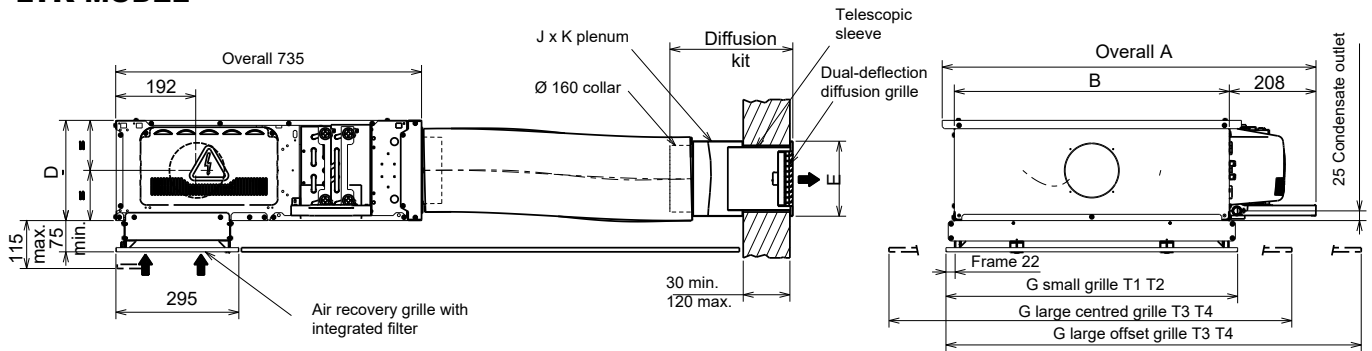
## LY MODEL - ø 160 collar



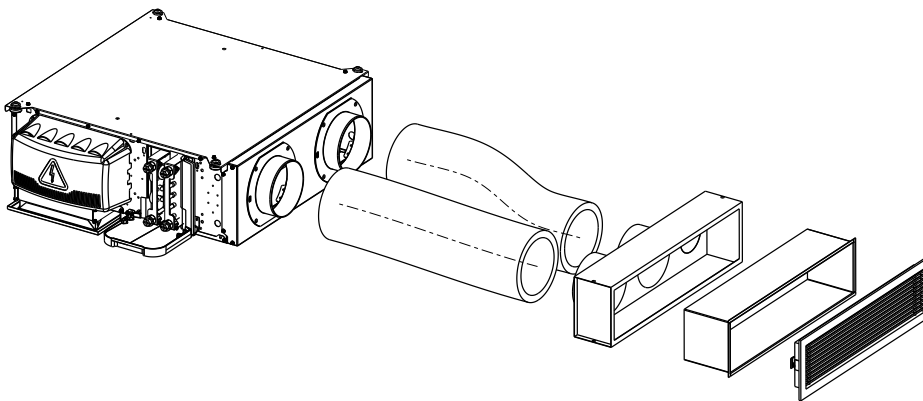
Note: 1200-mm long grille optional for sizes 1 & 2. Consult us

	A	A'	B	C	D	E	F		G		H		I (4T)		J	K	L
							Coil C	Coil H	Coil C	Coil H	Coil C	Coil H	3 rows	4 rows			
T1 (1V)	898		660	692	215	330	128	128	1/2"	1/2"	35	35	55	55	655	250	700
T1 (2V)					245		160	160									
T2																	
T3	1205	1285	960	992	280	305	192	192	3/4"			110		62	1150		1195
T4					280												

## LYK MODEL



	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	180	640	2
T2 (2V)				245	230			205			840	3
T3 (3V)	1205	960	992			950	1195		925			
T4 (3V)				280	265			240				



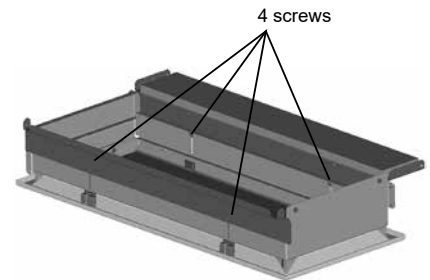
NOTE: For COMFORT LINE LY Ø160, sizes 3 and 4, speed 5 must not be selected (air flow too high for Ø160 collars).

## Return grille adjustment

Sizes 1 and 2 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.

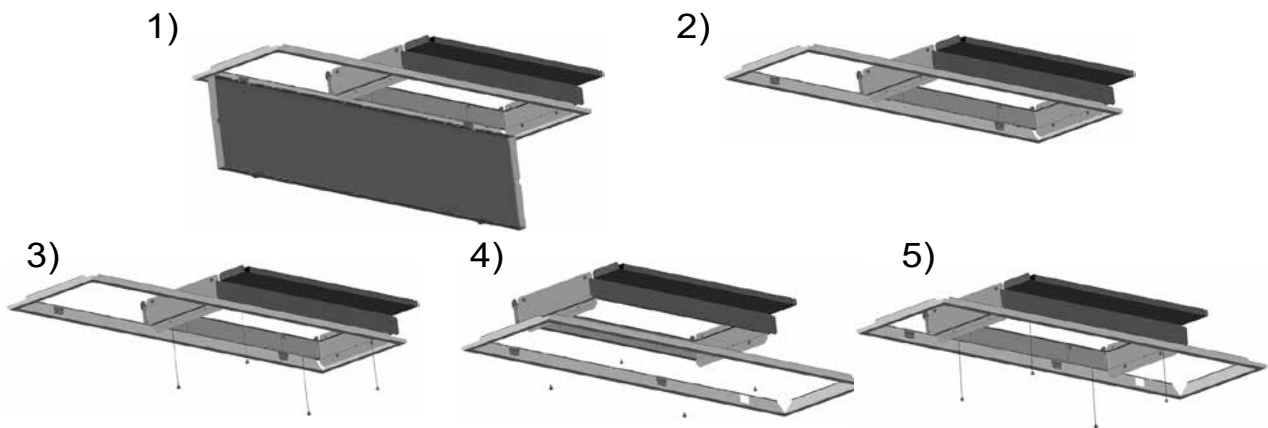


Sizes 1 and 2 700 grille on 1200 frame

### 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, H COMPACT\* AND LY

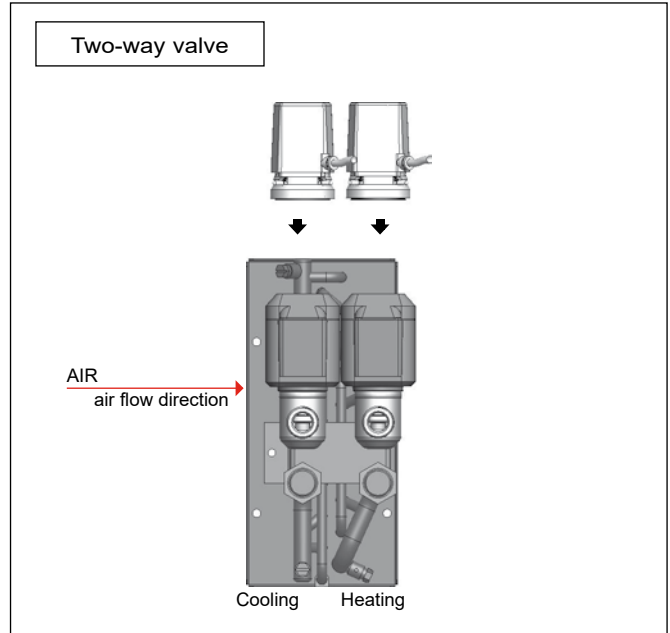
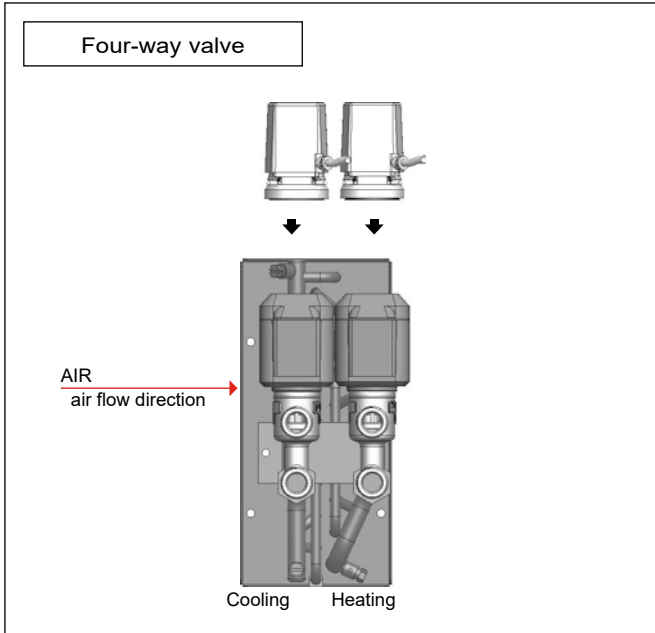
Size	Collar (s) Ø 160	Collar (s) Ø 200	Collar (s) Ø 250
T0 and T1	or	or	
T2			
T3			
T4			
T5			
T6			

\* Sizes 0 to 4 only

**HYDRAULIC CONNECTIONS WITH FITTED VALVES**

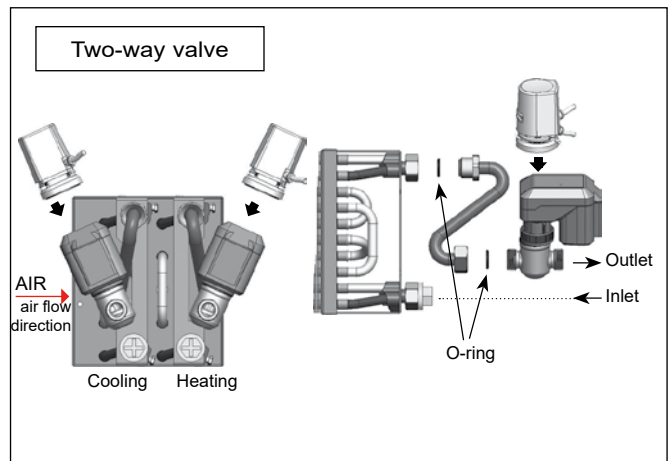
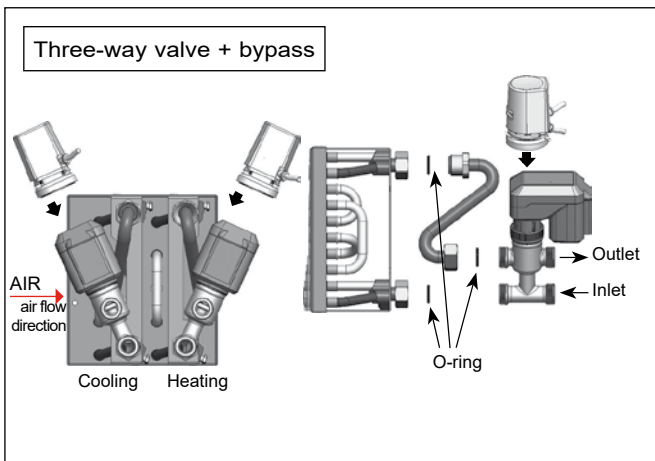
**Heating/cooling assembly for valves with 3-point or thermal actuators**

**Sizes :0**



Note: view showing left-hand accessories opposite the air supply. For right-hand accessories, heating circuit before cooling circuit.

**Sizes 1 - 2 - 3**

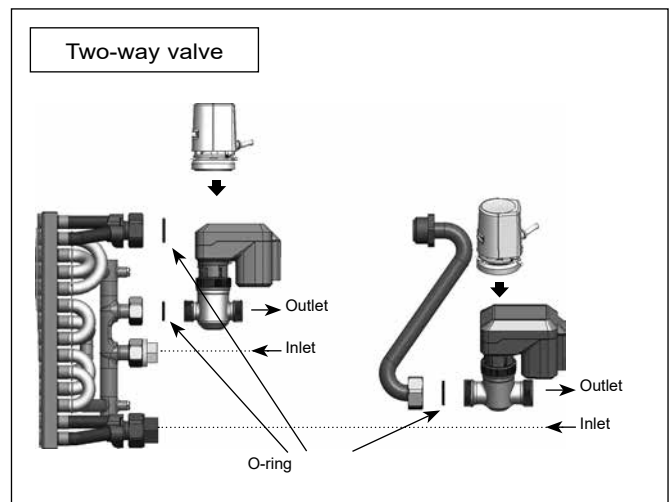
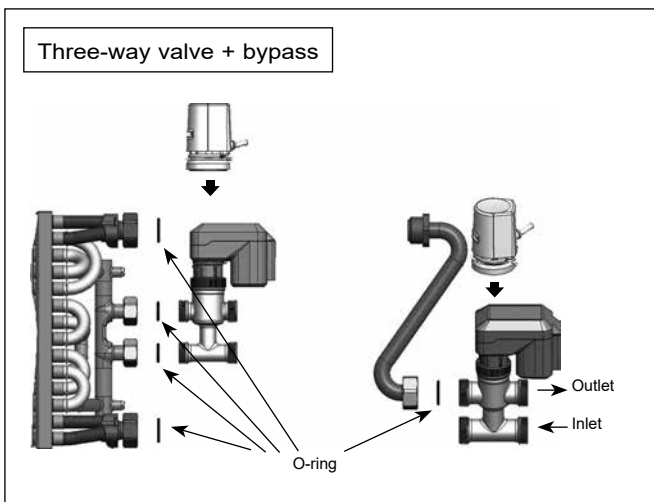
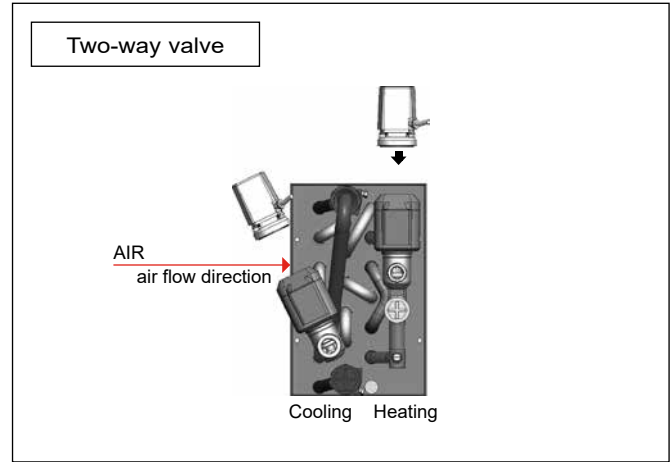
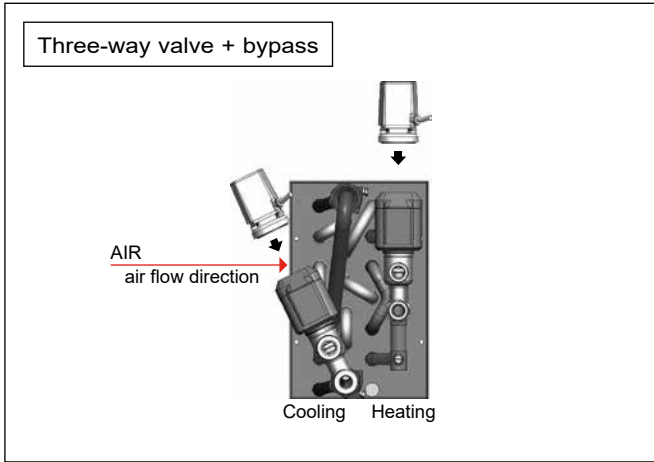


Note: view showing left-hand accessories opposite the air supply. For right-hand accessories, symmetrical view.

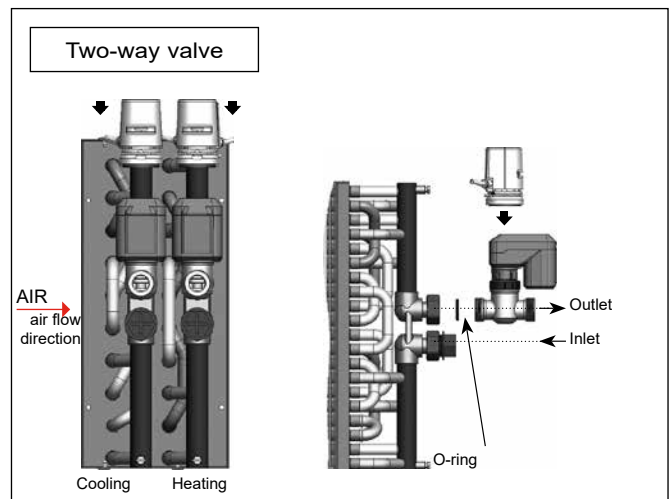
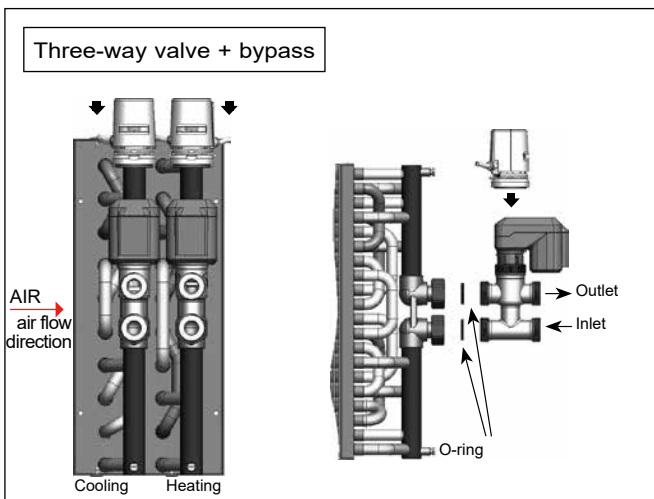
## HYDRAULIC CONNECTIONS WITH FITTED VALVES

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

#### Sizes 4 - 5



#### Size 6



Note: view showing left-hand accessories opposite the air supply. For right-hand accessories, symmetrical view.



### Motor electrical data notes

	Motor speed	AC asynchronous motor							HEE brushless motor						
		T0	T1	T2	T3	T4	T5*	T6 *	T0	T1	T2	T3	T4	T5	T6 *
Max. power input (W)	V5	71	74	119	166	180	223	611	48	37	72	113	97	172	343
	V4	48	48	104	124	125	192	523	26	22	54	47	38	117	330
	V3	34	42	88	111	110	163	455	13	14	36	27	22	67	307
	V2	21	36	67	96	95	149	391	6	8	14	14	13	36	178
	V1	14	34	51	93	90	129	333	4	5	6	9	8	17	110
Max. input current (A)	V5	0,31	0,32	0,53	0,7	0,77	0,95	2,68	0,37	0,25	0,47	0,69	0,61	1,06	2,59
	V4	0,20	0,22	0,45	0,52	0,53	0,81	2,32	0,20	0,16	0,36	0,3	0,25	0,73	2,36
	V3	0,15	0,2	0,38	0,47	0,48	0,69	2,02	0,12	0,11	0,25	0,18	0,15	0,43	2,22
	V2	0,09	0,18	0,29	0,42	0,42	0,64	1,73	0,07	0,07	0,11	0,1	0,1	0,24	1,32
	V1	0,07	0,18	0,22	0,41	0,4	0,57	1,48	0,06	0,06	0,06	0,07	0,07	0,12	0,75

**NB:** Specifications given for a 230V +/-10% - 50 Hz power supply. Values with outlet open  
 For operation at 60 Hz, the power input and rotation speed values are generally higher.  
 Motor operating range: min. return T°C: 0°C, max. return T°C: 40°C

### Coil contents

	Cooling coil	Heating coil	
		2T	4T
02B	0,35	0,35	
04B	0,38		0,15
12B/14B	0,47	0,47	0,18
12D/14D	0,64	0,64	0,26
12E	0,89		
22C/24C	0,65	0,65	0,18
22D/24D	0,82	0,82	0,26
22E	1,07		
32C/34C	0,91	0,91	0,25
32D/34D	1,15	1,15	0,37
32E	1,51		
42C/44C	1,9	1,9	0,46
42D/44D	2,34	2,34	0,46
42E	3,22		
52C/54C	2,43	2,43	0,59
52D/54D	3	3	0,59
52E	4,15		
62B/64B	3,07	3,07	1,64
62D/64D	4,5	4,5	1,65
62E	5,93		

### Coil coupling diameters

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

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

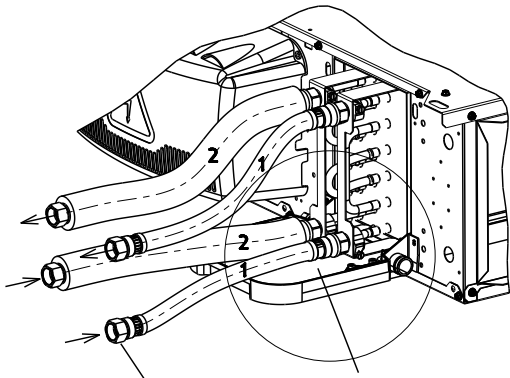
		T0	T1	T2	T3	T4	T5	T6
2-tube system	Hot or cold water coil	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G3/4"	G3/4"	G3/4"
	Cold water coil	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G3/4"	G3/4"	G3/4"
4-tube system	Hot water coil	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G3/4"

### Weight

	Weight (kg)						
	T0	T1	T2	T3	T4	T5	T6
I	15	25	27	36	39	47	65
Y	15,5	27	29	39	42	51	69
H compact	16	29	31	42	45	-	-
H		34	34	46	49	60	78
U	21	35	38	51	57	-	-
U compact	18	30	32	-	-	-	-
LI	-	31	33	44	47	-	-
LY	-	33	35	47	50	-	-

## ASSEMBLY OF FLEXIBLE HOSES (ACCESSORIES SUPPLIED IN KIT) WITH OR WITHOUT VALVES

### Assembly without valves



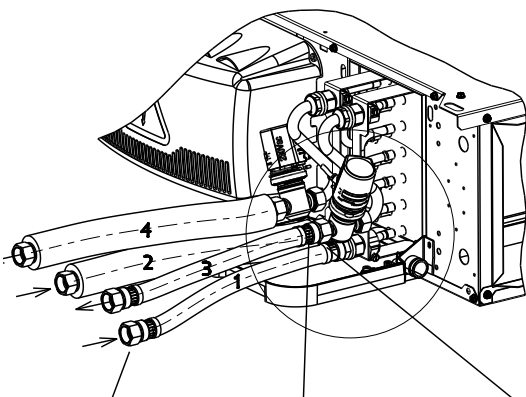
Female rotary couplings with flat face (G1/2" or G3/4"), customer side

Male cylindrical couplings with flat face (G1/2" or G3/4"), unit side

#### TECHNICAL DESCRIPTION OF FLEXIBLE HOSES

- 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 + duct.
  - Only on insulated cooling hoses
    - 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 at 110°C: 10 bar

### Assembly with 2-way valves

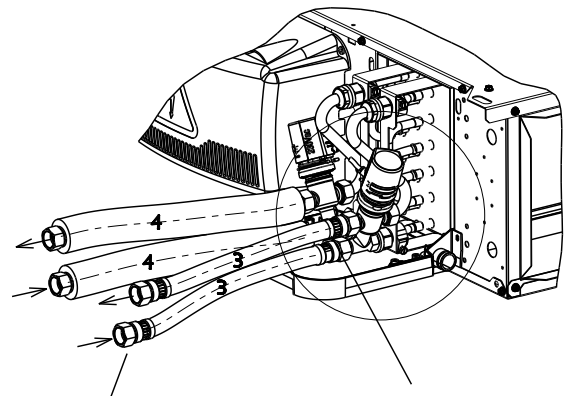


Female rotary couplings with flat face (G1/2" or G3/4"), customer side

Female rotary couplings with flat face (G1/2" or G3/4"), customer side (on valves)

Male cylindrical fixed couplings with flat face (G1/2" or G3/4"), unit side (on coil connections)

### Assembly with 3-way valves + by-pass



Female rotary couplings with flat face (G1/2" or G3/4"), customer side

Female rotary couplings with flat face (G1/2" or G3/4"), customer side (on valves)

No	Type of flexible connection	Circuit	G1/2" connection	G3/4" connection
1	Rotary female/Fixed male	Heating	7247868	7401828
2	Rotary female/Fixed male, heat insulated	Cooling	5202288	7247867
3	Rotary female/Rotary female	Heating	7247837	7387851
4	Rotary female/Rotary female, heat insulated	Cooling	5202289	5202298

NB: flexible connection length = 300 mm

## TECHNICAL CHARACTERISTICS

### Condensate drain pump

	Size 0 to 5	Size 6
Maximum flow rate	10.4 l/h	20 l/h
Max. discharge height	7 m (flow rate = 4 l/h)	10 m (flow rate = 4l/h)
Maximum pressure	10 m (flow rate = 0 l/h)	14 m (flow rate = 0l/h)
4 metres	7	6
Sound level at 1 m as per EN ISO 3744 and 4871 (Measurement taken at LNE, pump in water, outside of application)	20.2 dBA	23 dBA
Sound level during application at 1 m: (measurements taken at the Sauermann acoustic lab, pump in water)		< or = 28 dBA
Power supply	230 V +10%/-15% - 50/60 Hz – 19 W	230 V - 50/60 Hz - 14 W
Electrical insulation class	Class 1	Double insulation
Detection levels	ON: 14.7 mm, OFF: 10.7 mm, AL: 17 mm	ON: 18 mm, OFF: 12 mm AL: 21 mm
Safety switch	BS: 5A resistive – 250V Contacts made from AgNI 90/10, gold-plated	BS 8 A resistance - 250 V
Heat protection (overheating)	70°C (automatic restart)	90°C (automatic restart)
Operating cycle (duty factor)	100%	30%: 3s ON - 7s OFF
Protection (as per BS EN 60529)	IP64	IP54
Safety standard	CE	CE
RoHS directive	Compliant	Compliant
WEEE directive	Compliant	Compliant

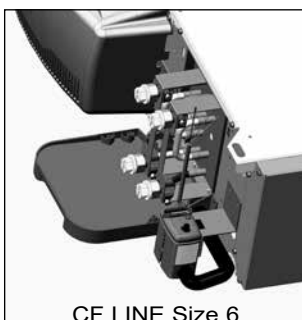
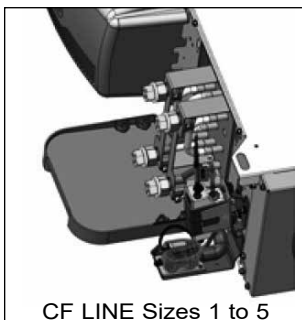


Table of actual pump flow rates with Ø 6 mm PVC tube:

- Comfort Line sizes 0 to 5: Maximum flow rate of 10.4 l/h for a pumping height of 1 metres and a horizontal pipe length of 5 metres.

Sizes 0 to 5: Water flow rate in litres per hour (-15% / +20%)				
Discharge height	Horizontal length of the discharge pipe			
	5 metres	10 metres	20 metres	30 metres
1 metre	10.4	9.1	8.3	7.3
2 metres	8.5	7.8	7	6.4
3 metres	7.9	7.1	6.3	5.8
4 metres	7	6	5.3	4.9

- Comfort Line size 6: Maximum flow rate of 20 l/h for a pumping height of 0 metres and a maximum pipe length of 5 metres.

Size 6: Water flow rate in litres per hour (-15% / +20%)				
Discharge height	Horizontal length of the discharge pipe			
	5 metres	10 metres	20 metres	30 metres
0 metre	20	19	18	17
2 metres	16	15	14	13.5
4 metres	11.5	11	10.5	10
6 metres	-	8.5	7.5	6.5
8 metres	-	6	5	4
10 metres	-	4	3.5	2.5

Operating limit:

Drainage: ➔ 6 mm int. flexible pipe, ➔ 8.8 mm end piece. This accessory must be paired with a valve control to allow the upper safety limit to control the valve's closure (stop condensate).

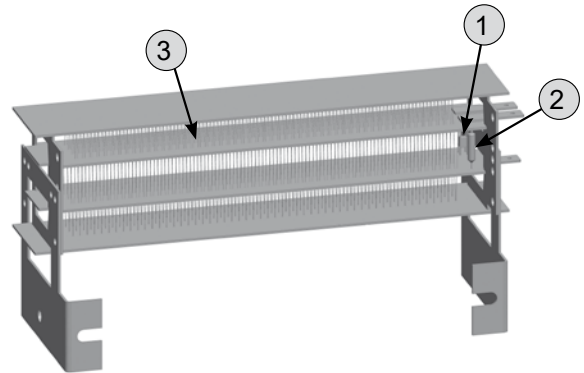
Condensate flow rate (l/h) =  $\frac{P \text{ total} - P \text{ sensible}}{680}$  (W)

680

## TECHNICAL CHARACTERISTICS

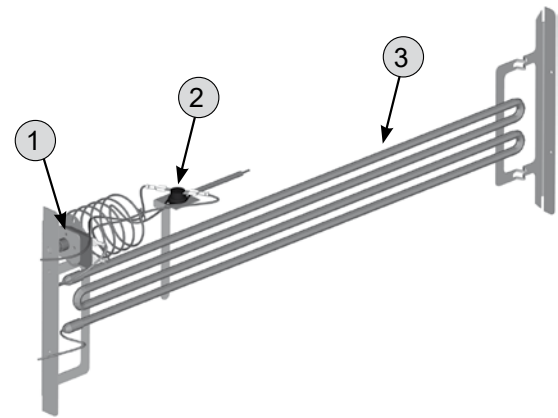
### Electrical heater for sizes 0

- ① Self-holding automatically reset integrated safety thermostat.
- ② A thermal fuse.
- ③ Resistive wire heater unit



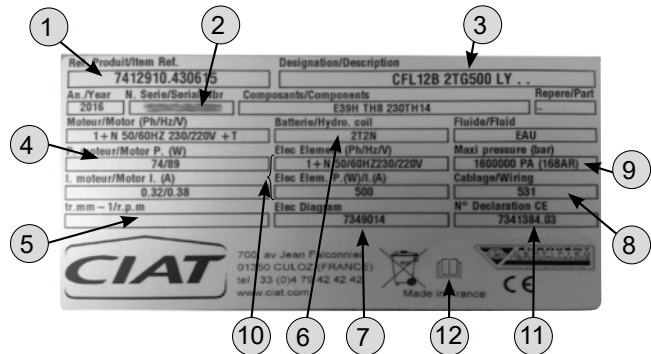
### Electrical heater for sizes 1 to 6

- ① 1 capillary tube temperature limiter with manual reset .
- ② 1 capsule temperature limiter with automatic reset.
- ③ Shielded single-tube heating element

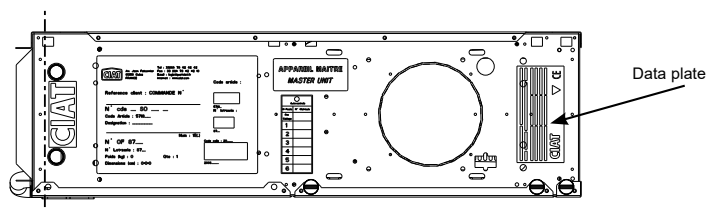


### Unit information plate

- ① Code,
- ② serial number,
- ③ device name,
- ④ motor nominal capacity,
- 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).
- ⑪ EC declaration no.
- ⑫ refer to the installation instructions



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 electric box.



## PERFORMANCE

### I MODEL

**Cooling temperature:** water temperature: 7/12°C, air intake temperature: 27°C - 19°C (WB)

**Heating temperature (2T):** water temperature: 45/40°C, air intake temperature: 20°C

**Heating temperature (4T):** water temperature: 65/55°C, air intake temperature: 20°C

COMFORT LINE Model I	AC motor speeds	HEE motor voltage (V)	Air flow in m <sup>3</sup> /h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Power input		Overall 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		AC Motor W	HEE motor W			500W	1000W
02B/10B HEE	V5	8.4	505	10	2 500	2 120	3 000	68	46	60	43	3.0	5.8
	V4	6.7	400		2 170	1 800	2 560	46	25	54	37	3.7	7.4
	V3	5.4	310		1 850	1 490	2 130	33	14	48	31	4.8	9.5
	V2	3.7	220		1 410	1 090	1 570	20	7	40	23	6.8	13.4
	V1	2.6	145		1 170	824	1 150	14	4	32	15	10.1	20.3
04B/04D HEE	V5	8.4	505	10	2 460	2 150	2 990	68	46	60	43		
	V4	6.7	400		2 100	1 790	2 670	46	25	54	37		
	V3	5.4	310		1 700	1 430	2 320	33	14	48	31		
	V2	3.7	220		1 250	1 030	1 820	20	7	40	23		
	V1	2.6	145		1 030	766	1 590	14	4	32	15		
12B/12B HEE	V5	8.2	455	10	1 762	1 664	2 447	72	35	59	44	3.3	6.5
	V4	6.9	375		1 535	1 427	2 145	47	22	54	38	4.0	7.9
	V3	5.8	310		1 336	1 225	1 870	41	15	49	33	4.8	9.6
	V2	4.5	230		1 055	956	1 517	35	9	42	25	6.5	12.9
	V1	3.4	165		799	713	1 141	34	6	35	18	9.0	18.0
12D/12D HEE	V5	8.2	455	10	2 268	1 945	2 769	72	35	59	44	3.3	6.5
	V4	6.9	375		1 969	1 652	2 392	47	22	54	38	4.0	7.9
	V3	5.8	310		1 710	1 409	2 059	41	15	49	33	4.8	9.6
	V2	4.5	230		1 355	1 091	1 633	35	9	42	25	6.5	12.9
	V1	3.4	165		1 005	798	1 203	34	6	35	18	9.0	18.0
12E/12E HEE	V5	8.2	455	10	2 753	2 176	3 019	72	35	59	44	3.3	6.5
	V4	6.9	375		2 369	1 835	2 575	47	22	54	38	4.0	7.9
	V3	5.8	310		2 040	1 554	2 189	41	15	49	33	4.8	9.6
	V2	4.5	230		1 604	1 197	1 700	35	9	42	25	6.5	12.9
	V1	3.4	165		1 191	875	1 231	34	6	35	18	9.0	18.0
14B/14B HEE	V5	8.2	455	10	1 762	1 664	2 617	72	35	59	44		
	V4	6.9	375		1 535	1 427	2 383	47	22	54	38		
	V3	5.8	310		1 336	1 225	2 152	41	15	49	33		
	V2	4.5	230		1 055	956	1 817	35	9	42	25		
	V1	3.4	165		799	713	1 456	34	6	35	18		
14D/14D HEE	V5	8.2	455	10	2 326	1 971	3 772	72	35	59	44		
	V4	6.9	375		2 007	1 668	3 328	47	22	54	38		
	V3	5.8	310		1 735	1 418	2 912	41	15	49	33		
	V2	4.5	230		1 369	1 096	2 343	35	9	42	25		
	V1	3.4	165		1 012	801	1 783	34	6	35	18		
22C/22C HEE	V5	7.9	730	10	3 390	3 107	4 385	115	71	62	46	2.0	4.1
	V4	7.3	670		3 192	2 881	4 101	100	54	59	43	2.2	4.4
	V3	6.4	580		2 883	2 557	3 685	86	38	56	40	2.6	5.1
	V2	4.5	395		2 149	1 809	2 667	66	15	47	30	3.8	7.5
	V1	2.6	230		1 364	1 093	1 634	51	6	34	18	6.5	12.9
22D/22D HEE	V5	7.9	730	10	3 931	3 337	4 722	115	71	62	46	2.0	4.1
	V4	7.3	670		3 688	3 084	4 387	100	54	59	43	2.2	4.4
	V3	6.4	580		3 323	2 729	3 903	86	38	56	40	2.6	5.1
	V2	4.5	395		2 438	1 926	2 752	66	15	47	30	3.8	7.5
	V1	2.6	230		1 530	1 169	1 637	51	6	34	18	6.5	12.9
22E/22E HEE	V5	7.9	730	10	4 279	3 473	4 880	115	71	62	46	2.0	4.1
	V4	7.3	670		4 003	3 209	4 533	100	54	59	43	2.2	4.4
	V3	6.4	580		3 599	2 839	4 030	86	38	56	40	2.6	5.1
	V2	4.5	395		2 638	2 007	2 844	66	15	47	30	3.8	7.5
	V1	2.6	230		1 656	1 219	1 701	51	6	34	18	6.5	12.9
24C/24C HEE	V5	7.9	730	10	3 390	3 107	3 150	115	71	62	46		
	V4	7.3	670		3 192	2 881	3 043	100	54	59	43		
	V3	6.4	580		2 883	2 557	2 875	86	38	56	40		
	V2	4.5	395		2 149	1 809	2 396	66	15	47	30		
	V1	2.6	230		1 364	1 093	1 752	51	6	34	18		
24D/24D HEE	V5	7.9	730	10	4 036	3 377	4 339	115	71	62	46		
	V4	7.3	670		3 767	3 115	4 172	100	54	59	43		
	V3	6.4	580		3 384	2 753	3 913	86	38	56	40		
	V2	4.5	395		2 463	1 936	3 192	66	15	47	30		
	V1	2.6	230		1 533	1 171	2 266	51	6	34	18		
32C/32C HEE	V5	8.2	1145	10	5 227	4 604	7 200	156	110	64	47	1.8	3.6
	V4	6.4	875		4 468	3 787	5 703	118	51	58	41	2.4	4.8
	V3	5.3	710		3 924	3 237	4 721	108	30	54	37	2.9	5.9
	V2	4.1	525		3 154	2 516	3 544	95	16	48	32	4.0	7.9
	V1	3.3	400		2 594	2 021	2 754	92	10	43	27	5.2	10.4
32D/32D HEE	V5	8.2	1145	10	5 851	4 973	7 759	156	110	64	47	1.8	3.6
	V4	6.4	875		4 890	4 016	6 103	118	51	58	41	2.4	4.8
	V3	5.3	710		4 222	3 386	5 024	108	30	54	37	2.9	5.9
	V2	4.1	525		3 355	2 608	3 746	95	16	48	32	4.0	7.9
	V1	3.3	400		2 726	2 075	2 899	92	10	43	27	5.2	10.4
32E/32E HEE	V5	8.2	1145	10	6 107	5 049	7 806	156	110	64	47	1.8	3.6
	V4	6.4	875		5 088	4 078	6 107	118	51	58	41	2.4	4.8
	V3	5.3	710		4 366	3 431	5 008	108	30	54	37	2.9	5.9
	V2	4.1	525		3 449	2 640	3 717	95	16	48	32	4.0	7.9
	V1	3.3	400		2 797	2 105	2 865	92	10	43	27	5.2	10.4
34C/34C HEE	V5	8.2	1145	10	5 227	4 604	5 070	156	110	64	47		
	V4	6.4	875		4 468	3 787	4 502	118	51	58	41		
	V3	5.3	710		3 924	3 237	4 060	108	30	54	37		
	V2	4.1	525		3 154	2 516	3 434	95	16	48	32		
	V1	3.3	400		2 594	2 021	2 928	92	10	43	27		
34D/34D HEE	V5	8.2	1145	10	6 021	5 052	6 875	156	110	64	47		
	V4	6.4	875		4 993	4 059	6 019	118	51	58	41		
	V3	5.3	710		4 287	3 411	5 369	108	30	54	37		
	V2	4.1	525		3 391	2 621	4 470	95	16	48	32		
	V1	3.3	400		2 753	2 086	3 761	92	10	43	27		

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

(2) Warning: the air supply temperature must not exceed 65°C (CIAT recommendation)

I model sound level:

Values given as a guideline for devices with non-ducted return and with ducted discharge, and for room and installation attenuation of 12 dB (sizes 0 to 3), 14 dB (sizes 4 & 5) and 16 dB (size 6).



**I MODEL (continued)**

COMFORT LINE Model I	AC motor speeds	HEE motor voltage (V)	Air flow in m <sup>3</sup> /h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Power input		Overall sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (2)	
					Total	Sensible		AC Motor W	HEE motor W			700W	1400W
42C/42C HEE	V5	7.8	1 160		6 021	5 171	7 377	167	103	63	45	1.7	3.4
	V4	5.9	850		4 923	4 005	5 688	120	44	57	38	2.4	4.7
	V3	4.8	690	10	4 245	3 359	4 728	109	26	52	34	2.9	5.9
	V2	3.7	515		3 387	2 601	3 625	94	14	47	29	3.9	7.8
	V1	2.9	390		2 711	2 037	2 797	89	9	43	25	5.2	10.4
42D/42D HEE	V5	7.8	1 160		6 974	5 573	7 881	167	103	63	45	1.7	3.4
	V4	5.9	850		5 593	4 286	6 004	120	44	57	38	2.4	4.7
	V3	4.8	690	10	4 759	3 576	4 956	109	26	52	34	2.9	5.9
	V2	3.7	515		3 751	2 758	3 765	94	14	47	29	3.9	7.8
	V1	2.9	390		2 977	2 156	2 885	89	9	43	25	5.2	10.4
42E/42E HEE	V5	7.8	1 160		7 425	5 750	8 063	167	103	63	45	1.7	3.4
	V4	5.9	850		5 888	4 406	6 100	120	44	57	38	2.4	4.7
	V3	4.8	690	10	4 992	3 672	5 016	109	26	52	34	2.9	5.9
	V2	3.7	515		3 913	2 826	3 794	94	14	47	29	3.9	7.8
	V1	2.9	390		3 092	2 204	2 899	89	9	43	25	5.2	10.4
44C/44C HEE	V5	7.8	1 160		6 021	5 171	5 525	167	103	63	45		
	V4	5.9	850		4 923	4 005	4 793	120	44	57	38		
	V3	4.8	690	10	4 245	3 359	4 305	109	26	52	34		
	V2	3.7	515		3 387	2 601	3 651	94	14	47	29		
	V1	2.9	390		2 711	2 037	3 070	89	9	43	25		
44D/44D HEE	V5	7.8	1 160		7 106	5 626	5 498	167	103	63	45		
	V4	5.9	850		5 668	4 316	4 749	120	44	57	38		
	V3	4.8	690	10	4 809	3 596	4 256	109	26	52	34		
	V2	3.7	515		3 787	2 774	3 599	94	14	47	29		
	V1	2.9	390		2 997	2 167	3 021	89	9	43	25		
52C/52C HEE	V5	8.1	1 595		8 156	6 848	9 634	217	163	68	43	2.2	4.5
	V4	7.4	1 440		7 645	6 320	8 919	186	115	66	40	2.5	5.0
	V3	6.3	1 240	10	6 924	5 603	7 933	159	69	62	36	2.9	5.7
	V2	5.1	1 010		6 033	4 747	6 690	146	38	57	32	3.5	7.1
	V1	3.7	720		4 727	3 592	5 017	127	18	51	26	5.0	9.9
52D/52D HEE	V5	8.1	1 595		8 758	7 193	10 273	217	163	68	43	2.2	4.5
	V4	7.4	1 440		8 176	6 616	9 478	186	115	66	40	2.5	5.0
	V3	6.3	1 240	10	7 350	5 838	8 379	159	69	62	36	2.9	5.7
	V2	5.1	1 010		6 314	4 908	7 020	146	38	57	32	3.5	7.1
	V1	3.7	720		4 870	3 679	5 219	127	18	51	26	5.0	9.9
52E/52E HEE	V5	8.1	1 595		10 136	7 807	10 989	217	163	68	43	2.2	4.5
	V4	7.4	1 440		9 402	7 155	10 077	186	115	66	40	2.5	5.0
	V3	6.3	1 240	10	8 389	6 288	8 838	159	69	62	36	2.9	5.7
	V2	5.1	1 010		7 128	5 257	7 331	146	38	57	32	3.5	7.1
	V1	3.7	720		5 414	3 913	5 379	127	18	51	26	5.0	9.9
54C/54C HEE	V5	8.1	1 595		8 156	6 848	7 390	217	163	68	43		
	V4	7.4	1 440		7 645	6 320	7 092	186	115	66	40		
	V3	6.3	1 240	10	6 924	5 603	6 649	159	69	62	36		
	V2	5.1	1 010		6 033	4 747	6 031	146	38	57	32		
	V1	3.7	720		4 727	3 592	5 056	127	18	51	26		
54D/54D HEE	V5	8.1	1 595		9 054	7 334	7 356	217	163	68	43		
	V4	7.4	1 440		8 439	6 738	7 048	186	115	66	40		
	V3	6.3	1 240	10	7 572	5 937	6 593	159	69	62	36		
	V2	5.1	1 010		6 487	4 984	5 964	146	38	57	32		
	V1	3.7	720		4 981	3 730	4 984	127	18	51	26		
62B/62B HEE	V5	8	3 005		11 988	10 434	14 366	590	351	76	57	1.2	2.4
	V4	6.9	2 910		11 212	9 674	13 333	504	339	73	53	1.2	2.5
	V3	6.4	2 740	10	10 419	8 900	12 247	445	300	71	51	1.3	2.6
	V2	5.3	2 255		9 603	8 102	11 106	387	172	67	47	1.6	3.2
	V1	4.6	1 900		8 700	7 246	9 947	329	108	63	44	1.9	3.8
62D/62D HEE	V5	8	3 005		14 774	12 047	16 434	590	351	76	57	1.2	2.4
	V4	6.9	2 910		13 715	11 064	15 120	504	339	73	53	1.2	2.5
	V3	6.4	2 740	10	12 660	10 089	13 757	445	300	71	51	1.3	2.6
	V2	5.3	2 255		11 518	9 065	12 352	387	172	67	47	1.6	3.2
	V1	4.6	1 900		10 345	8 032	10 945	329	108	63	44	1.9	3.8
62E/62E HEE	V5	8	3 005		17 159	13 299	18 091	590	351	76	57	1.2	2.4
	V4	6.9	2 910		15 822	12 130	16 523	504	339	73	53	1.2	2.5
	V3	6.4	2 740	10	14 446	10 960	14 911	445	300	71	51	1.3	2.6
	V2	5.3	2 255		13 022	9 771	13 277	387	172	67	47	1.6	3.2
	V1	4.6	1 900		11 550	8 577	11 667	329	108	63	44	1.9	3.8
64B/64B HEE	V5	8	3 005		11 988	10 434	17 920	590	351	76	57		
	V4	6.9	2 910		11 212	9 674	16 925	504	339	73	53		
	V3	6.4	2 740	10	10 419	8 900	15 846	445	300	71	51		
	V2	5.3	2 255		9 603	8 102	14 676	387	172	67	47		
	V1	4.6	1 900		8 700	7 246	13 449	329	108	63	44		
64D/64D HEE	V5	8	3 005		15 178	12 275	17 885	590	351	76	57		
	V4	6.9	2 910		14 082	11 263	16 865	504	339	73	53		
	V3	6.4	2 740	10	12 971	10 252	15 763	445	300	71	51		
	V2	5.3	2 255		11 798	9 204	14 573	387	172	67	47		
	V1	4.6	1 900		10 555	8 131	13 332	329	108	63	44		

(1) Static pressures given for information purposes. For higher available static pressures, consult our sales office  
 (2) Warning: the air supply temperature must not exceed 65°C (CIAT recommendation)

**I model sound level:**

Values given as a guideline for devices with non-ducted return and with ducted discharge, and for room and installation attenuation of 12 dB (sizes 0 to 3), 14 dB (sizes 4 & 5) and 16 dB (size 6).



### Y MODEL

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

Heating temperature (2T): water temperature: 45/40°C, air intake temperature: 20°C

Heating temperature (4T): water temperature: 65/55°C, air intake temperature: 20°C

COMFORT LINE Model Y	AC motor speeds	HEE motor voltage (V)	Air flow in m³/h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Power input		Overall 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		AC Motor W	HEE motor W			500W	1000W
02B/10B HEE	V5	8.5	440		2 330	1 950	2 740	66	44	60	41	3.4	6.7
	V4	7.0	360		2 040	1 670	2 360	44	25	55	36	4.1	8.2
	V3	5.7	285	20	1 750	1 390	1 980	32	15	49	30	5.2	10.4
	V2	3.9	200		1 330	1 020	1 470	20	8	41	22	7.4	14.7
	V1	2.7	136		1 100	773	1 070	14	4	33	P<15	10.8	21.6
04B/04D HEE	V5	8.5	440		2 270	1 960	2 810	66	44	60	41		
	V4	7.0	360		1 950	1 650	2 520	44	25	55	36		
	V3	5.7	285	20	1 590	1 330	2 200	32	15	49	30		
	V2	3.9	200		1 170	959	1 720	20	8	41	22		
	V1	2.7	136		956	715	1 490	14	4	33	P<15		
12B/12B HEE	V5	8.5	380		1 564	1 454	2 132	70	34	59	42	3.9	7.8
	V4	7.2	320		1 372	1 261	1 906	45	23	54	37	4.6	9.3
	V3	6.2	270	20	1 202	1 094	1 699	39	16	50	32	5.5	11.0
	V2	4.8	210		960	870	1 395	35	9	44	24	7.1	14.1
	V1	3.6	150		762	669	1 057	34	6	37	18	9.9	19.8
12D/12D HEE	V5	8.5	380		1 997	1 679	2 379	70	34	59	42	3.9	7.8
	V4	7.2	320		1 756	1 451	2 105	45	23	54	37	4.6	9.3
	V3	6.2	270	20	1 535	1 251	1 849	39	16	50	32	5.5	11.0
	V2	4.8	210		1 239	992	1 490	35	9	44	24	7.1	14.1
	V1	3.6	150		926	735	1 110	34	6	37	18	9.9	19.8
12E/12E HEE	V5	8.5	380		2 398	1 863	2 561	70	34	59	42	3.9	7.8
	V4	7.2	320		2 098	1 603	2 243	45	23	54	37	4.6	9.3
	V3	6.2	270	20	1 823	1 375	1 946	39	16	50	32	5.5	11.0
	V2	4.8	210		1 464	1 086	1 541	35	9	44	24	7.1	14.1
	V1	3.6	150		1 101	808	1 132	34	6	37	18	9.9	19.8
14B/14B HEE	V5	8.5	380		1 564	1 454	2 375	70	34	59	42		
	V4	7.2	320		1 372	1 261	2 188	45	23	54	37		
	V3	6.2	270	20	1 202	1 094	1 988	39	16	50	32		
	V2	4.8	210		960	870	1 700	35	9	44	24		
	V1	3.6	150		762	669	1 371	34	6	37	18		
14D/14D HEE	V5	8.5	380		2 035	1 695	3 319	70	34	59	42		
	V4	7.2	320		1 783	1 462	2 977	45	23	54	37		
	V3	6.2	270	20	1 555	1 258	2 629	39	16	50	32		
	V2	4.8	210		1 251	996	2 157	35	9	44	24		
	V1	3.6	150		932	738	1 659	34	6	37	18		
22C/22C HEE	V5	8.1	675		3 218	2 908	4 113	112	70	61	43	2.2	4.4
	V4	7.5	620		3 027	2 707	3 869	97	55	59	41	2.4	4.8
	V3	6.7	545	20	2 751	2 419	3 497	84	39	56	38	2.7	5.4
	V2	4.7	380		2 074	1 738	2 567	65	16	47	28	3.9	7.8
	V1	2.7	220		1 317	1 054	1 573	51	6	35	16	6.8	13.5
22D/22D HEE	V5	8.1	675		3 717	3 113	4 402	112	70	61	43	2.2	4.4
	V4	7.5	620		3 490	2 892	4 117	97	55	59	41	2.4	4.8
	V3	6.7	545	20	3 160	2 578	3 689	84	39	56	38	2.7	5.4
	V2	4.7	380		2 350	1 851	2 641	65	16	47	28	3.9	7.8
	V1	2.7	220		1 477	1 127	1 573	51	6	35	16	6.8	13.5
22E/22E HEE	V5	8.1	675		4 033	3 238	4 549	112	70	61	43	2.2	4.4
	V4	7.5	620		3 787	3 010	4 252	97	55	59	41	2.4	4.8
	V3	6.7	545	20	3 422	2 683	3 809	84	39	56	38	2.7	5.4
	V2	4.7	380		2 544	1 929	2 730	65	16	47	28	3.9	7.8
	V1	2.7	220		1 599	1 175	1 636	51	6	35	16	6.8	13.5
24C/24C HEE	V5	8.1	675		3 218	2 908	3 047	112	70	61	43		
	V4	7.5	620		3 027	2 707	2 951	97	55	59	41		
	V3	6.7	545	20	2 751	2 419	2 795	84	39	56	38		
	V2	4.7	380		2 074	1 738	2 342	65	16	47	28		
	V1	2.7	220		1 317	1 054	1 707	51	6	35	16		
24D/24D HEE	V5	8.1	675		3 797	3 144	4 179	112	70	61	43		
	V4	7.5	620		3 562	2 920	4 030	97	55	59	41		
	V3	6.7	545	20	3 215	2 600	3 792	84	39	56	38		
	V2	4.7	380		2 374	1 860	3 112	65	16	47	28		
	V1	2.7	220		1 479	1 128	2 203	51	6	35	16		
32C/32C HEE	V5	8.4	1030		4 927	4 274	6 561	147	107	64	45	2.0	4.0
	V4	6.8	815		4 281	3 590	5 338	113	55	58	39	2.6	5.1
	V3	5.7	670	20	3 772	3 091	4 478	105	34	54	35	3.1	6.2
	V2	4.3	500		3 045	2 417	3 386	94	17	48	30	4.2	8.3
	V1	3.5	385		2 506	1 944	2 635	91	11	43	25	5.4	10.8
32D/32D HEE	V5	8.4	1030		5 472	4 585	7 052	147	107	64	45	2.0	4.0
	V4	6.8	815		4 651	3 784	5 702	113	55	58	39	2.6	5.1
	V3	5.7	670	20	4 046	3 225	4 758	105	34	54	35	3.1	6.2
	V2	4.3	500		3 230	2 500	3 577	94	17	48	30	4.2	8.3
	V1	3.5	385		2 623	1 992	2 771	91	11	43	25	5.4	10.8
32E/32E HEE	V5	8.4	1030		5 695	4 650	7 079	147	107	64	45	2.0	4.0
	V4	6.8	815		4 819	3 836	5 698	113	55	58	39	2.6	5.1
	V3	5.7	670	20	4 183	3 269	4 739	105	34	54	35	3.1	6.2
	V2	4.3	500		3 321	2 533	3 546	94	17	48	30	4.2	8.3
	V1	3.5	385		2 695	2 022	2 737	91	11	43	25	5.4	10.8
34C/34C HEE	V5	8.4	1030		4 927	4 274	4 839	147	107	64	45		
	V4	6.8	815		4 281	3 590	4 344	113	55	58	39		
	V3	5.7	670	20	3 772	3 091	3 940	105	34	54	35		
	V2	4.3	500		3 045	2 417	3 339	94	17	48	30		
	V1	3.5	385		2 506	1 944	2 845	91	11	43	25		
34D/34D HEE	V5	8.4	1030		5 607	4 645	6 526	147	107	64	45		
	V4	6.8	815		4 733	3 817	5 785	113	55	58	39		
	V3	5.7	670	20	4 105	3 247	5 194	105	34	54	35		
	V2	4.3	500		3 264	2 514	4 334	94	17	48	30		
	V1	3.5	385		2 651	2 004	3 646	91	11	43	25		

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

(2) Warning: the air supply temperature must not exceed 65°C (CIAT recommendation)

#### Y model sound level:

Values given as a guideline for devices with non-ducted return and with ducted discharge, and for room and installation attenuation of 14 dB (sizes 0 to 3), 16 dB (sizes 4 & 5) and 18 dB (size 6)

## Y MODEL (continued)

COMFORT LINE Model Y	AC motor speeds	HEE motor voltage (V)	Air flow in m <sup>3</sup> /h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Power input		Overall sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (2)	
					Total	Sensible		AC Motor W	HEE motor W			700W	1400W
42C/42C HEE	V5	8.2	1025	20	5 594	4 688	6 647	156	103	63	43	1.9	3.7
	V4	6.4	780		4 642	3 732	5 280	115	48	57	36	2.5	5.0
	V3	5.3	645		4 042	3 173	4 449	107	29	53	33	3.1	6.1
	V2	4	485		3 221	2 461	3 418	94	16	47	27	4.1	8.2
	V1	3.1	370		2 588	1 937	2 649	89	10	43	23	5.4	10.8
42D/42D HEE	V5	8.2	1025	20	6 407	5 030	7 064	156	103	63	43	1.9	3.7
	V4	6.4	780		5 246	3 985	5 557	115	48	57	36	2.5	5.0
	V3	5.3	645		4 511	3 371	4 652	107	29	53	33	3.1	6.1
	V2	4	485		3 560	2 608	3 543	94	16	47	27	4.1	8.2
	V1	3.1	370		2 834	2 048	2 729	89	10	43	23	5.4	10.8
42E/42E HEE	V5	8.2	1025	20	6 788	5 182	7 206	156	103	63	43	1.9	3.7
	V4	6.4	780		5 516	4 096	5 637	115	48	57	36	2.5	5.0
	V3	5.3	645		4 726	3 460	4 704	107	29	53	33	3.1	6.1
	V2	4	485		3 710	2 670	3 568	94	16	47	27	4.1	8.2
	V1	3.1	370		2 943	2 093	2 742	89	10	43	23	5.4	10.8
44C/44C HEE	V5	8.2	1025	20	5 594	4 688	5 224	156	103	63	43		
	V4	6.4	780		4 642	3 732	4 594	115	48	57	36		
	V3	5.3	645		4 042	3 173	4 150	107	29	53	33		
	V2	4	485		3 221	2 461	3 513	94	16	47	27		
	V1	3.1	370		2 588	1 937	2 956	89	10	43	23		
44D/44D HEE	V5	8.2	1025	20	6 502	5 068	5 190	156	103	63	43		
	V4	6.4	780		5 311	4 011	4 547	115	48	57	36		
	V3	5.3	645		4 557	3 390	4 100	107	29	53	33		
	V2	4	485		3 591	2 622	3 462	94	16	47	27		
	V1	3.1	370		2 854	2 059	2 909	89	10	43	23		
52C/52C HEE	V5	8.2	1495	20	7 839	6 519	9 164	211	157	66	45	2.4	4.8
	V4	7.6	1360		7 362	6 039	8 528	180	113	64	43	2.6	5.2
	V3	6.6	1180		6 704	5 389	7 624	154	71	61	39	3.0	6.0
	V2	5.4	970		5 881	4 608	6 493	143	40	56	35	3.7	7.3
	V1	4	700		4 631	3 511	4 901	125	19	50	30	5.1	10.2
52D/52D HEE	V5	8.2	1495	20	8 401	6 835	9 748	211	157	66	45	2.4	4.8
	V4	7.6	1360		7 860	6 313	9 038	180	113	64	43	2.6	5.2
	V3	6.6	1180		7 092	5 603	8 041	154	71	61	39	3.0	6.0
	V2	5.4	970		6 144	4 759	6 806	143	40	56	35	3.7	7.3
	V1	4	700		4 766	3 593	5 095	125	19	50	30	5.1	10.2
52E/52E HEE	V5	8.2	1495	20	9 674	7 398	10 387	211	157	66	45	2.4	4.8
	V4	7.6	1360		9 004	6 814	9 583	180	113	64	43	2.6	5.2
	V3	6.6	1180		8 079	6 030	8 461	154	71	61	39	3.0	6.0
	V2	5.4	970		6 924	5 094	7 095	143	40	56	35	3.7	7.3
	V1	4	700		5 294	3 820	5 248	125	19	50	30	5.1	10.2
54C/54C HEE	V5	8.2	1495	20	7 839	6 519	7 194	211	157	66	45		
	V4	7.6	1360		7 362	6 039	6 920	180	113	64	43		
	V3	6.6	1180		6 704	5 389	6 504	154	71	61	39		
	V2	5.4	970		5 881	4 608	5 925	143	40	56	35		
	V1	4	700		4 631	3 511	4 981	125	19	50	30		
54D/54D HEE	V5	8.2	1495	20	8 677	6 965	7 154	211	157	66	45		
	V4	7.6	1360		8 110	6 427	6 871	180	113	64	43		
	V3	6.6	1180		7 305	5 697	6 445	154	71	61	39		
	V2	5.4	970		6 308	4 831	5 857	143	40	56	35		
	V1	4	700		4 872	3 642	4 909	125	19	50	30		
62B/62B HEE	V5	8	2910	20	11 717	10 165	13 953	570	357	73	52	1.2	2.4
	V4	6.9	2740		10 978	9 448	13 023	487	339	71	49	1.3	2.6
	V3	6.4	2555		10 264	8 751	12 043	433	287	69	47	1.4	2.8
	V2	5.3	2080		9 507	8 011	10 981	381	163	66	44	1.7	3.4
	V1	4.6	1765		8 652	7 190	9 854	325	105	63	41	2.0	4.0
62D/62D HEE	V5	8	2910	20	14 373	11 675	15 914	570	357	76	49	1.2	2.4
	V4	6.9	2740		13 406	10 780	14 728	487	339	73	46	1.3	2.6
	V3	6.4	2555		12 456	9 904	13 504	433	287	71	44	1.4	2.8
	V2	5.3	2080		11 392	8 953	12 199	381	163	66	40	1.7	3.4
	V1	4.6	1765		10 248	7 949	10 832	325	105	63	37	2.0	4.0
62E/62E HEE	V5	8	2910	20	16 657	12 858	17 466	570	357	76	49	1.2	2.4
	V4	6.9	2740		15 432	11 794	16 059	487	339	73	46	1.3	2.6
	V3	6.4	2555		14 193	10 745	14 614	433	287	71	44	1.4	2.8
	V2	5.3	2080		12 863	9 640	13 101	381	163	66	40	1.7	3.4
	V1	4.6	1765		11 432	8 482	11 539	325	105	63	37	2.0	4.0
64B/64B HEE	V5	8	2910	20	11 717	10 165	17 534	570	357	76	49		
	V4	6.9	2740		10 978	9 448	16 619	487	339	73	46		
	V3	6.4	2555		10 264	8 751	15 641	433	287	71	44		
	V2	5.3	2080		9 507	8 011	14 545	381	163	66	40		
	V1	4.6	1765		8 652	7 190	13 348	325	105	63	37		
64D/64D HEE	V5	8	2765	20	14 785	11 905	17 489	570	357	75	48		
	V4	6.9	2740		13 754	10 966	16 552	487	339	73	46		
	V3	6.4	2555		12 756	10 059	15 554	433	287	71	44		
	V2	5.3	2080		11 666	9 089	14 440	381	163	66	40		
	V1	4.6	1765		10 454	8 044	13 230	325	105	63	37		

(1) Static pressures given for information purposes. For higher available static pressures, consult our sales office  
(2) Warning: the air supply temperature must not exceed 65°C (CIAT recommendation)

### Y model sound level:

Values given as a guideline for devices with non-ducted return and with ducted discharge, and for room and installation attenuation of 14 dB (sizes 0 to 3), 16 dB (sizes 4 & 5) and 18 dB (size 6)





**H and H Compact MODELS (H Compact sizes 0 to 3 only)**

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

Heating temperature (2T): water temperature: 45/40°C, air intake temperature: 20°C

Heating temperature (4T): water temperature: 65/55°C, air intake temperature: 20°C

COMFORT LINE H model	AC motor speeds	HEE motor voltage (V)	Air flow in m³/h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Power input		Overall 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		AC Motor W	HEE motor W			500W	1000W
02B/10B HEE	V5	8.0	315	40	1 900	1 530	2 120	62	31	58	35	1.7	9.3
	V4	6.8	270		1 690	1 340	1 880	42	21	54	31	5.4	10.9
	V3	5.7	225		1 460	1 140	1 620	31	13	49	26	6.5	13.1
	V2	4.0	160		1 110	837	1 200	20	7	41	18	9.2	18.4
	V1	2.7	110		898	634	875	14	4	32	<15	13.4	26.7
04B/04D HEE	V5	8.0	315	40	1 800	1 510	2 320	62	31	58	35		
	V4	6.8	270		1 580	1 300	2 110	42	21	54	31		
	V3	5.7	225		1 310	1 080	1 870	31	13	49	26		
	V2	4.0	160		950	774	1 450	20	7	41	18		
	V1	2.7	110		801	594	1 220	14	4	32	<15		
12B/12B HEE	V5	8.0	230	40	1 092	988	1 482	67	24	56	34	6.5	12.9
	V4	7.2	205		968	876	1 384	42	18	53	31	7.2	14.5
	V3	6.3	185		857	777	1 249	37	14	49	27	8.0	16.1
	V2	5.2	150		762	669	1 060	33	9	44	21	9.9	19.8
	V1	4.0	115		664	550	830	32	6	37	<15	12.9	25.8
12D/12D HEE	V5	8.0	230	40	1 387	1 121	1 596	67	24	56	34	6.5	12.9
	V4	7.2	205		1 245	997	1 478	42	18	53	31	7.2	14.5
	V3	6.3	185		1 109	883	1 323	37	14	49	27	8.0	16.1
	V2	5.2	150		927	736	1 113	33	9	44	21	9.9	19.8
	V1	4.0	115		759	589	864	32	6	37	<15	12.9	25.8
12E/12E HEE	V5	8.0	230	40	1 633	1 225	1 663	67	24	56	34	6.5	12.9
	V4	7.2	205		1 469	1 091	1 529	42	18	53	31	7.2	14.5
	V3	6.3	185		1 310	967	1 360	37	14	49	27	8.0	16.1
	V2	5.2	150		1 103	809	1 136	33	9	44	21	9.9	19.8
	V1	4.0	115		860	631	875	32	6	37	<15	12.9	25.8
14B/14B HEE	V5	8.0	230	40	1 092	988	1 792	67	24	56	34		
	V4	7.2	205		968	876	1 692	42	18	53	31		
	V3	6.3	185		857	777	1 561	37	14	49	27		
	V2	5.2	150		762	669	1 374	33	9	44	21		
	V1	4.0	115		664	550	1 132	32	6	37	<15		
14D/14D HEE	V5	8.0	230	40	1 401	1 126	2 311	67	24	56	34		
	V4	7.2	205		1 256	1 001	2 145	42	18	53	31		
	V3	6.3	185		1 118	887	1 941	37	14	49	27		
	V2	5.2	150		933	739	1 663	33	9	44	21		
	V1	4.0	115		761	589	1 325	32	6	37	<15		
22C/22C HEE	V5	7.7	540	40	2 740	2 408	3 435	105	52	58	36	2.8	5.5
	V4	7.2	505		2 607	2 271	3 274	91	43	57	34	2.9	5.9
	V3	6.6	455		2 399	2 061	3 004	79	33	54	32	3.3	6.5
	V2	4.7	325		1 842	1 519	2 250	63	14	46	23	4.6	9.1
	V1	2.7	190		1 160	923	1 374	50	6	33	<15	7.8	15.6
22D/22D HEE	V5	7.7	540	40	3 143	2 565	3 619	105	52	58	36	2.8	5.5
	V4	7.2	505		2 983	2 418	3 434	91	43	57	34	2.9	5.9
	V3	6.6	455		2 739	2 195	3 128	79	33	54	32	3.3	6.5
	V2	4.7	325		2 080	1 620	2 294	63	14	46	23	4.6	9.1
	V1	2.7	190		1 299	988	1 366	50	6	33	<15	7.8	15.6
22E/22E HEE	V5	7.7	540	40	3 402	2 669	3 738	105	52	58	36	2.8	5.5
	V4	7.2	505		3 236	2 519	3 547	91	43	57	34	2.9	5.9
	V3	6.6	455		2 971	2 288	3 232	79	33	54	32	3.3	6.5
	V2	4.7	325		2 248	1 688	2 374	63	14	46	23	4.6	9.1
	V1	2.7	190		1 411	1 032	1 423	50	6	33	<15	7.8	15.6
24C/24C HEE	V5	7.7	540	40	2 740	2 408	2 767	105	52	58	36		
	V4	7.2	505		2 607	2 271	2 695	91	43	57	34		
	V3	6.6	455		2 399	2 061	2 568	79	33	54	32		
	V2	4.7	325		1 842	1 519	2 160	63	14	46	23		
	V1	2.7	190		1 160	923	1 552	50	6	33	<15		
24D/24D HEE	V5	7.7	540	40	3 198	2 587	3 751	105	52	58	36		
	V4	7.2	505		3 034	2 438	3 642	91	43	57	34		
	V3	6.6	455		2 779	2 210	3 448	79	33	54	32		
	V2	4.7	325		2 095	1 626	2 847	63	14	46	23		
	V1	2.7	190		1 303	991	1 988	50	6	33	<15		
32C/32C HEE	V5	8.0	780	40	4 174	3 488	5 105	134	76	61	39	2.7	5.3
	V4	6.8	660		3 720	3 041	4 396	103	48	57	34	3.2	6.3
	V3	5.8	560		3 321	2 668	3 787	98	32	54	30	3.7	7.4
	V2	4.5	425		2 715	2 125	2 924	90	17	47	24	4.9	9.8
	V1	3.5	335		2 248	1 724	2 298	89	11	42	20	6.2	12.4
32D/32D HEE	V5	8.0	780	40	4 526	3 670	5 447	134	76	61	39	2.7	5.3
	V4	6.8	660		3 987	3 171	4 670	103	48	57	34	3.2	6.3
	V3	5.8	560		3 544	2 772	4 008	98	32	54	30	3.7	7.4
	V2	4.5	425		2 858	2 186	3 081	90	17	47	24	4.9	9.8
	V1	3.5	335		2 337	1 761	2 408	89	11	42	20	6.2	12.4
32E/32E HEE	V5	8.0	780	40	4 685	3 719	5 438	134	76	61	39	2.7	5.3
	V4	6.8	660		4 120	3 214	4 650	103	48	57	34	3.2	6.3
	V3	5.8	560		3 645	2 806	3 981	98	32	54	30	3.7	7.4
	V2	4.5	425		2 938	2 218	3 048	90	17	47	24	4.9	9.8
	V1	3.5	335		2 399	1 786	2 375	89	11	42	20	6.2	12.4
34C/34C HEE	V5	8.0	780	40	4 174	3 488	4 239	134	76	61	39		
	V4	6.8	660		3 720	3 041	3 900	103	48	57	34		
	V3	5.8	560		3 321	2 668	3 576	98	32	54	30		
	V2	4.5	425		2 715	2 125	3 044	90	17	47	24		
	V1	3.5	335		2 248	1 724	2 594	89	11	42	20		
34D/34D HEE	V5	8.0	780	40	4 605	3 701	5 633	134	76	61	39		
	V4	6.8	660		4 043	3 192	5 134	103	48	57	34		
	V3	5.8	560		3 585	2 787	4 668	98	32	54	30		
	V2	4.5	425		2 891	2 199	3 322	90	17	47	24		
	V1	3.5	335		2 358	1 769	3 300	89	11	42	20		

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

(2) Warning: the air supply temperature must not exceed 65°C (CIAT recommendation)

**H model sound level:**

Values given as a guideline for devices with non-ducted return and with ducted discharge, and for room and installation attenuation of 18 dB (sizes 0 to 3), 20 dB (sizes 4 & 5) and 23 dB (size 6)



**H and H Compact MODELS (H Compact size 4 only) (continued)**

COMFORT LINE H model	AC motor speeds	HEE motor voltage (V)	Air flow in m <sup>3</sup> /h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Power input		Overall sound power LW dB(A)	Comfort level ISO or NR	Average air temperature rise in K (2)	
					Total	Sensible		AC Motor W	HEE motor W			700W	1400W
42C/42C HEE	V5	7.9	755	40	4 537	3 637	5 079	141	73	61	36	2.3	4.7
	V4	6.5	625		3 932	3 076	4 306	106	43	56	31	3.0	5.9
	V3	5.6	535		3 484	2 685	3 732	101	29	53	28	3.6	7.1
	V2	4.3	405		2 797	2 108	2 897	91	16	47	23	4.7	9.5
	V1	3.3	315		2 258	1 673	2 264	87	10	42	18	6.1	12.2
42D/42D HEE	V5	7.9	755	40	5 118	3 881	5 337	141	73	61	36	2.3	4.7
	V4	6.5	625		4 383	3 267	4 497	106	43	56	31	3.0	5.9
	V3	5.6	535		3 862	2 847	3 880	101	29	53	28	3.6	7.1
	V2	4.3	405		3 074	2 231	2 990	91	16	47	23	4.7	9.5
	V1	3.3	315		2 464	1 771	2 326	87	10	42	18	6.1	12.2
42E/42E HEE	V5	7.9	755	40	5 376	3 987	5 411	141	73	61	36	2.3	4.7
	V4	6.5	625		4 589	3 352	4 544	106	43	56	31	3.0	5.9
	V3	5.6	535		4 030	2 917	3 912	101	29	53	28	3.6	7.1
	V2	4.3	405		3 196	2 282	3 006	91	16	47	23	4.7	9.5
	V1	3.3	315		2 558	1 809	2 336	87	10	42	18	6.1	12.2
44C/44C HEE	V5	7.9	755	40	4 537	3 637	4 490	141	73	61	36		
	V4	6.5	625		3 932	3 076	4 068	106	43	56	31		
	V3	5.6	535		3 484	2 685	3 720	101	29	53	28		
	V2	4.3	405		2 797	2 108	3 146	91	16	47	23		
	V1	3.3	315		2 258	1 673	2 643	87	10	42	18		
44D/44D HEE	V5	7.9	755	40	5 179	3 905	4 443	141	73	61	36		
	V4	6.5	625		4 430	3 286	4 017	106	43	56	31		
	V3	5.6	535		3 900	2 863	3 668	101	29	53	28		
	V2	4.3	405		3 097	2 243	3 097	91	16	47	23		
	V1	3.3	315		2 479	1 779	2 600	87	10	42	18		
52C/52C HEE	V5	7.8	1 240	40	6 947	5 630	7 888	198	109	62	37	2.9	5.7
	V4	7.2	1 145		6 588	5 278	7 433	167	85	60	35	3.1	6.2
	V3	6.4	1 015		6 052	4 765	6 722	144	59	58	33	3.5	7.0
	V2	5.3	855		5 360	4 138	5 808	136	36	54	29	4.2	8.3
	V1	4.0	630		4 259	3 201	4 447	121	19	48	24	5.7	11.3
52D/52D HEE	V5	7.8	1 240	40	7 376	5 866	8 331	198	109	62	37	2.9	5.7
	V4	7.2	1 145		6 956	5 481	7 832	167	85	60	35	3.1	6.2
	V3	6.4	1 015		6 336	4 927	7 054	144	59	58	33	3.5	7.0
	V2	5.3	855		5 563	4 257	6 067	136	36	54	29	4.2	8.3
	V1	4.0	630		4 364	3 266	4 613	121	19	48	24	5.7	11.3
52E/52E HEE	V5	7.8	1 240	40	8 413	6 316	8 788	198	109	62	37	2.9	5.7
	V4	7.2	1 145		7 911	5 894	8 229	167	85	60	35	3.1	6.2
	V3	6.4	1 015		7 155	5 278	7 368	144	59	58	33	3.5	7.0
	V2	5.3	855		6 225	4 541	6 289	136	36	54	29	4.2	8.3
	V1	4.0	630		4 830	3 467	4 737	121	19	48	24	5.7	11.3
54C/54C HEE	V5	7.8	1 240	40	6 947	5 630	6 627	198	109	62	37		
	V4	7.2	1 145		6 588	5 278	6 411	167	85	60	35		
	V3	6.4	1 015		6 052	4 765	6 047	144	59	58	33		
	V2	5.3	855		5 360	4 138	5 541	136	36	54	29		
	V1	4.0	630		4 259	3 201	4 676	121	19	48	24		
54D/54D HEE	V5	7.8	1 240	40	7 599	5 966	6 572	198	109	62	37		
	V4	7.2	1 145		7 161	5 572	6 351	167	85	60	35		
	V3	6.4	1 015		6 510	5 003	5 981	144	59	58	33		
	V2	5.3	855		5 705	4 320	5 470	136	36	54	29		
	V1	4.0	630		4 454	3 309	4 605	121	19	48	24		
62B/62B HEE	V5	7.3	2 410	40	11 075	9 544	13 078	533	356	73	46	1.5	3.0
	V4	6.3	2 180		10 479	8 964	12 346	454	315	71	44	1.6	3.3
	V3	5.8	2 000		9 880	8 383	11 528	409	250	69	42	1.8	3.6
	V2	4.8	1 660		9 243	7 759	10 629	366	143	66	39	2.1	4.3
	V1	4.2	1 415		8 463	7 008	9 594	315	94	64	36	2.5	5.0
62D/62D HEE	V5	7.3	2 410	40	13 526	10 896	14 803	533	356	73	46	1.5	3.0
	V4	6.3	2 180		12 764	10 184	13 881	454	315	71	44	1.6	3.3
	V3	5.8	2 000		11 941	9 444	12 873	409	250	69	42	1.8	3.6
	V2	4.8	1 660		11 042	8 644	11 771	366	143	66	39	2.1	4.3
	V1	4.2	1 415		9 979	7 719	10 520	315	94	64	36	2.5	5.0
62E/62E HEE	V5	7.3	2 410	40	15 578	11 927	16 152	533	356	73	46	1.5	3.0
	V4	6.3	2 180		14 577	11 072	15 057	454	315	71	44	1.6	3.3
	V3	5.8	2 000		13 561	10 214	13 877	409	250	69	42	1.8	3.6
	V2	4.8	1 660		12 421	9 281	12 610	366	143	66	39	2.1	4.3
	V1	4.2	1 415		11 110	8 221	11 186	315	94	64	36	2.5	5.0
64B/64B HEE	V5	7.3	2 410	40	11 075	9 544	16 682	533	356	73	46		
	V4	6.3	2 180		10 479	8 964	15 946	454	315	71	44		
	V3	5.8	2 000		9 880	8 383	15 112	409	250	69	42		
	V2	4.8	1 660		9 243	7 759	14 177	366	143	66	39		
	V1	4.2	1 415		8 463	7 008	13 066	315	94	64	36		
64D/64D HEE	V5	7.3	2 410	40	13 881	11 087	16 617	533	356	73	46		
	V4	6.3	2 180		13 082	10 351	15 865	454	315	71	44		
	V3	5.8	2 000		12 214	9 582	15 015	409	250	69	42		
	V2	4.8	1 660		11 298	8 768	14 067	366	143	66	39		
	V1	4.2	1 415		10 179	7 810	12 946	315	94	64	36		

(1) Static pressures given for information purposes. For higher available static pressures, consult our sales office  
(2) Warning: the air supply temperature must not exceed 65°C (CIAT recommendation)

**H model sound level:**

Values given as a guideline for devices with non-ducted return and with ducted discharge, and for room and installation attenuation of 18 dB (sizes 0 to 3), 20 dB (sizes 4 & 5) and 23 dB (size 6)

## U and U Compact MODELS (U Compact sizes 0 to 2 only)

**Cooling temperature:** water temperature: 7/12°C, air intake temperature: 27°C - 19°C (WB)

**Heating temperature (2T):** water temperature: 45/40°C, air intake temperature: 20°C

**Heating temperature (4T):** water temperature: 65/55°C, air intake temperature: 20°C

COMFORT LINE U model	AC motor speeds	HEE motor voltage (V)	Air flow in m <sup>3</sup> /h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Power input		Overall 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		AC Motor W	HEE motor W			500W	1000W
02B/02B HEE	V5	9,8	260		1 660	1 320	1 810	57	44	61	37	5,7	11,3
	V4	8	230		1 480	1 160	1 620	39	26	55	32	6,4	12,8
	V3	6,7	195	50	1 300	1 000	1 410	29	17	51	27	7,5	15,1
	V2	4,8	140		983	738	1 050	19	9	43	19	10,5	21,0
	V1	3,3	100		790	558	768	13	5	34	<15	14,7	29,4
04B/04D HEE	V5	9,8	260		1 550	1 280	2 050	57	29	61	35		
	V4	8	230		1 370	1 120	1 870	39	23	55	31		
	V3	6,7	195	50	1 150	938	1 670	29	18	51	27		
	V2	4,8	140		856	687	1 300	19	12	43	19		
	V1	3,3	100		729	533	1 080	13	8	34	<15		
12B/12B HEE	V5	9,3	170		832	761	1 140	63	29	53	31	8,7	17,3
	V4	8,5	155		774	696	1 080	39	23	50	28	9,5	19,0
	V3	7,6	140	50	727	638	984	34	18	47	25	10,5	21,0
	V2	6,4	120		665	563	852	30	12	43	20	12,3	24,5
	V1	5,1	95		582	470	674	30	8	37	<15	15,5	31,0
12D/12D HEE	V5	9,3	170		1 050	854	1 200	63	29	53	31	8,7	17,3
	V4	8,5	155		948	767	1 140	39	23	50	28	9,5	19,0
	V3	7,6	140	50	852	688	1 030	34	18	47	25	10,5	21,0
	V2	6,4	120		762	602	887	30	12	43	20	12,3	24,5
	V1	5,1	95		653	499	699	30	8	37	<15	15,5	31,0
12E/12E HEE	V5	9,3	170		1 240	930	1 230	63	29	53	31	8,7	17,3
	V4	8,5	155		1 120	840	1 160	39	23	50	28	9,5	19,0
	V3	7,6	140	50	1 010	753	1 050	34	18	47	25	10,5	21,0
	V2	6,4	120		867	646	899	30	12	43	20	12,3	24,5
	V1	5,1	95		721	528	706	30	8	37	<15	15,5	31,0
14B/14B HEE	V5	9,3	170		832	762	1 460	63	29	53	31		
	V4	8,5	155		774	697	1 400	39	23	50	28		
	V3	7,6	140	50	727	639	1 300	34	18	47	25		
	V2	6,4	120		665	565	1 150	30	12	43	20		
	V1	5,1	95		582	472	958	30	8	37	<15		
14D/14D HEE	V5	9,3	170		1 060	859	1 790	63	29	53	31		
	V4	8,5	155		955	722	1 700	39	23	50	28		
	V3	7,6	140	50	857	692	1 550	34	18	47	25		
	V2	6,4	120		765	605	1 360	30	12	43	20		
	V1	5,1	95		653	501	1 090	30	8	37	<15		
22C/22C HEE	V5	8,9	470		2 470	2 170	3 070	107	66	54	30	3,1	6,3
	V4	8,5	445		2 350	2 050	2 950	85	55	53	28	3,3	6,6
	V3	7,7	405	50	2 180	1 880	2 730	74	42	51	25	3,6	7,3
	V2	5,6	295		1 690	1 400	2 070	59	11	43	18	5,0	10,0
	V1	3,2	175		1 060	852	1 260	48	6	31	<15	8,4	16,8
22D/22D HEE	V5	8,9	470		2 800	2 300	3 200	107	66	54	30	3,1	6,3
	V4	8,5	445		2 670	2 180	3 070	85	55	53	28	3,3	6,6
	V3	7,7	405	50	2 470	2 000	2 830	74	42	51	25	3,6	7,3
	V2	5,6	295		1 890	1 500	2 100	59	11	43	18	5,0	10,0
	V1	3,2	175		1 170	910	1 250	48	6	31	<15	8,4	16,8
22E/22E HEE	V5	8,9	470		3 040	2 400	3 310	107	66	54	30	3,1	6,3
	V4	8,5	445		2 890	2 270	3 170	85	55	53	28	3,3	6,6
	V3	7,7	405	50	2 680	2 080	2 920	74	42	51	25	3,6	7,3
	V2	5,6	295		2 060	1 560	2 180	59	11	43	18	5,0	10,0
	V1	3,2	175		1 290	953	1 310	48	6	31	<15	8,4	16,8
24C/24C HEE	V5	8,9	470		2 470	2 180	2 600	107	66	54	30		
	V4	8,5	445		2 350	2 060	2 540	85	55	53	28		
	V3	7,7	405	50	2 180	1 890	2 430	74	42	51	25		
	V2	5,6	295		1 690	1 410	2 050	59	11	43	18		
	V1	3,2	175		1 060	854	1 460	48	6	31	<15		
24D/24D HEE	V5	8,9	470		2 860	2 330	3 500	107	66	54	30		
	V4	8,5	445		2 720	2 200	3 410	85	55	53	28		
	V3	7,7	405	50	2 510	2 020	3 240	74	42	51	25		
	V2	5,6	295		1 910	1 510	2 690	59	11	43	18		
	V1	3,2	175		1 190	919	1 860	48	6	31	<15		

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

(2) Warning: the air supply temperature must not exceed 65°C (CIAT recommendation)

**U model sound level:**

Values given as a guideline for devices with ducted return and discharge, and for room and installation attenuation of 19 dB (sizes 0 to 3), 21 dB (sizes 4)

## U MODEL

COMFORT LINE U model	AC motor speeds	HEE motor voltage (V)	Air flow in m <sup>3</sup> /h	Available static pressure (1)	Cooling cap. W		Heating capacity W	Power input		Overall 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		AC Motor W	HEE motor W			700W	1400W
32C/32C HEE	V5	9,3	660		3 720	3 110	4 380	149	96	57	34	3,1	6,2
	V4	8	575		3 350	2 740	3 890	94	63	54	30	3,6	7,2
	V3	7	500	50	3 020	2 440	3 410	90	43	50	26	4,1	8,2
	V2	5,5	390		2 500	1 970	2 680	85	23	44	19	5,3	10,6
	V1	4,4	305		2 080	1 610	2 120	85	14	39	<15	6,8	13,5
32D/32D HEE	V5	9,3	660		4 000	3 250	4 660	149	96	57	34	3,1	6,2
	V4	8	575		3 560	2 840	4 120	94	63	54	30	3,6	7,2
	V3	7	500	50	3 200	2 520	3 600	90	43	50	26	4,1	8,2
	V2	5,5	390		2 610	2 020	2 820	85	23	44	19	5,3	10,6
	V1	4,4	305		2 140	1 640	2 220	85	14	39	<15	6,8	13,5
32E/32E HEE	V5	9,3	660		4 130	3 290	4 640	149	96	57	34	3,1	6,2
	V4	8	575		3 670	2 880	4 090	94	63	54	30	3,6	7,2
	V3	7	500	50	3 290	2 550	3 570	90	43	50	26	4,1	8,2
	V2	5,5	390		2 680	2 050	2 780	85	23	44	19	5,3	10,6
	V1	4,4	305		2 200	1 660	2 190	85	14	39	<15	6,8	13,5
34C/34C HEE	V5	9,3	660		3 720	3 120	3 890	149	96	57	34		
	V4	8	575		3 350	2 750	3 630	94	63	54	30		
	V3	7	500	50	3 020	2 450	3 350	90	43	50	26		
	V2	5,5	390		2 500	1 980	2 880	85	23	44	19		
	V1	4,4	305		2 080	1 620	2 460	85	14	39	<15		
34D/34D HEE	V5	9,3	660		4 070	3 290	5 130	149	96	57	34		
	V4	8	575		3 610	2 870	4 750	94	63	54	30		
	V3	7	500	50	3 230	2 540	4 350	90	43	50	26		
	V2	5,5	390		2 650	2 040	3 690	85	23	44	19		
	V1	4,4	305		2 170	1 650	3 110	85	14	39	<15		
42C/42C HEE	V5	8,4	775		4 900	3 870	5 200	166	87	55	29	2,7	5,3
	V4	7,3	630		4 140	3 200	4 370	103	54	52	25	3,3	6,5
	V3	6,2	535	50	3 620	2 770	3 760	99	35	48	21	3,8	7,7
	V2	4,7	405		2 850	2 160	2 910	89	18	42	16	5,1	10,2
	V1	3,7	315		2 270	1 700	2 260	84	11	38	<15	6,5	13,1
42D/42D HEE	V5	8,4	775		5 200	4 030	5 470	166	87	55	29	2,7	5,3
	V4	7,3	630		4 390	3 330	4 570	103	54	52	25	3,3	6,5
	V3	6,2	535	50	3 840	2 880	3 910	99	35	48	21	3,8	7,7
	V2	4,7	405		3 040	2 240	3 000	89	18	42	16	5,1	10,2
	V1	3,7	315		2 430	1 770	2 320	84	11	38	<15	6,5	13,1
42E/42E HEE	V5	8,4	775		5 460	4 140	5 550	166	87	55	29	2,7	5,3
	V4	7,3	630		4 590	3 410	4 610	103	54	52	25	3,3	6,5
	V3	6,2	535	50	4 000	2 950	3 940	99	35	48	21	3,8	7,7
	V2	4,7	405		3 160	2 290	3 020	89	18	42	16	5,1	10,2
	V1	3,7	315		2 520	1 810	2 330	84	11	38	<15	6,5	13,1
44C/44C HEE	V5	8,4	775		4 570	3 770	4 550	166	87	55	29		
	V4	7,3	630		3 900	3 130	4 110	103	54	52	25		
	V3	6,2	535	50	3 450	2 720	3 740	99	35	48	21		
	V2	4,7	405		2 760	2 130	3 160	89	18	42	16		
	V1	3,7	315		2 220	1 680	2 640	84	11	38	<15		
44D/44D HEE	V5	8,4	775		5 270	4 070	4 500	166	87	55	29		
	V4	7,3	630		4 430	3 360	4 060	103	54	52	25		
	V3	6,2	535	50	3 870	2 900	3 690	99	35	48	21		
	V2	4,7	405		3 070	2 260	3 110	89	18	42	16		
	V1	3,7	315		2 450	1 790	2 600	84	11	38	<15		

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

(2) Warning: the air supply temperature must not exceed 65°C (CIAT recommendation)

**U model sound level:**

Values given as a guideline for devices with ducted return and discharge, and for room and installation attenuation of 19 dB (sizes 1 to 3), 21 dB (sizes 4)

## LIK/LYk MODELS

**Cooling temperature:** water temperature: 7/12°C, air intake temperature: 27°C - 19°C (WB)

**Heating temperature (2T):** water temperature: 45/40°C, air intake temperature: 20°C

**Heating temperature (4T):** water temperature: 65/55°C, air intake temperature: 20°C

Size	AC motor code	HEE motor voltage (V)	Air flow in m³/h	Available static pressure (1)	Cooling cap. W		Heating capacity W	AC motor power input W	HEE motor power input W	Sound power LW dB(A)	ISO or NR comfort level for LI	ISO or NR comfort level for LY	Average air temperature rise in K (2) Auxiliary electric heater 230/1/50	
					Total	Sensible							500W	1000W
12B/12B HEE	V5	8	520	10	1 894	1 809	2 675	73	36	59	43	41	2,8	5,7
	V4	6,6	420		1 653	1 550	2 326	48	22	53	37	35	3,5	7,0
	V3	5,6	340		1 438	1 328	2 011	41	14	48	32	30	4,3	8,7
	V2	4,3	250		1 134	1 028	1 617	35	9	42	24	22	5,9	11,8
	V1	3,2	175		835	755	1 218	34	5	35	18	16	8,4	16,8
12D/12D HEE	V5	8	520	10	2 465	2 142	3 056	73	36	59	43	41	2,8	5,7
	V4	6,6	420		2 126	1 804	2 614	48	22	53	37	35	3,5	7,0
	V3	5,6	340		1 843	1 533	2 229	41	14	48	32	30	4,3	8,7
	V2	4,3	250		1 449	1 174	1 752	35	9	42	24	22	5,9	11,8
	V1	3,2	175		1 075	856	1 288	34	5	35	18	16	8,4	16,8
12E/12E HEE	V5	8	520	10	3 008	2 409	3 362	73	36	59	43	41	2,8	5,7
	V4	6,6	420		2 572	2 012	2 834	48	22	53	37	35	3,5	7,0
	V3	5,6	340		2 211	1 697	2 386	41	14	48	32	30	4,3	8,7
	V2	4,3	250		1 718	1 289	1 833	35	9	42	24	22	5,9	11,8
	V1	3,2	175		1 272	937	1 322	34	5	35	18	16	8,4	16,8
14B/14B HEE	V5	8	520	10	1 894	1 809	2 784	73	36	59	43	41	2,8	5,7
	V4	6,6	420		1 653	1 550	2 522	48	22	53	37	35	3,5	7,0
	V3	5,6	340		1 438	1 328	2 276	41	14	48	32	30	4,3	8,7
	V2	4,3	250		1 134	1 028	1 910	35	9	42	24	22	5,9	11,8
	V1	3,2	175		835	755	1 531	34	5	35	18	16	8,4	16,8
14D/14D HEE	V5	8	520	10	2 465	2 142	4 095	73	36	59	43	41	2,8	5,7
	V4	6,6	420		2 126	1 804	3 588	48	22	53	37	35	3,5	7,0
	V3	5,6	340		1 843	1 533	3 132	41	14	48	32	30	4,3	8,7
	V2	4,3	250		1 449	1 174	2 498	35	9	42	24	22	5,9	11,8
	V1	3,2	175		1 075	856	1 894	34	5	35	18	16	8,4	16,8
22C/22C HEE	V5	7,8	775	10	3 535	3 267	4 597	117	72	62	47	45	1,9	3,8
	V4	7,1	705		3 319	3 019	4 287	102	54	60	44	42	2,1	4,2
	V3	6,3	610		2 994	2 673	3 845	87	37	56	40	38	2,4	4,8
	V2	4,3	410		2 225	1 883	2 773	66	15	47	30	28	3,6	7,2
	V1	2,5	235		1 415	1 137	1 703	51	6	34	18	16	6,3	12,5
22D/22D HEE	V5	7,8	775	10	4 221	3 560	4 972	117	72	62	47	45	1,9	3,8
	V4	7,1	705		3 930	3 272	4 606	102	54	60	44	42	2,1	4,2
	V3	6,3	610		3 523	2 883	4 088	87	37	56	40	38	2,4	4,8
	V2	4,3	410		2 555	2 015	2 869	66	15	47	30	28	3,6	7,2
	V1	2,5	235		1 594	1 218	1 709	51	6	34	18	16	6,3	12,5
22E/22E HEE	V5	7,8	775	10	4 459	3 654	5 139	117	72	62	47	45	1,9	3,8
	V4	7,1	705		4 170	3 367	4 758	102	54	60	44	42	2,1	4,2
	V3	6,3	610		3 747	2 972	4 222	87	37	56	40	38	2,4	4,8
	V2	4,3	410		2 736	2 089	2 965	66	15	47	30	28	3,6	7,2
	V1	2,5	235		1 717	1 267	1 774	51	6	34	18	16	6,3	12,5
24C/24C HEE	V5	7,8	775	10	3 535	3 267	3 227	117	72	62	47	45	1,9	3,8
	V4	7,1	705		3 319	3 019	3 114	102	54	60	44	42	2,1	4,2
	V3	6,3	610		2 994	2 673	2 942	87	37	56	40	38	2,4	4,8
	V2	4,3	410		2 225	1 883	2 452	66	15	47	30	28	3,6	7,2
	V1	2,5	235		1 415	1 137	1 802	51	6	34	18	16	6,3	12,5
24D/24D HEE	V5	7,8	775	10	4 221	3 560	4 460	117	72	62	47	45	1,9	3,8
	V4	7,1	705		3 930	3 272	4 282	102	54	60	44	42	2,1	4,2
	V3	6,3	610		3 523	2 883	4 015	87	37	56	40	38	2,4	4,8
	V2	4,3	410		2 555	2 015	3 274	66	15	47	30	28	3,6	7,2
	V1	2,5	235		1 594	1 218	2 335	51	6	34	18	16	6,3	12,5

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

**Model LI sound level:**

Values are given as a guideline for units with room and installation attenuation of 12 dB (Sizes 1 to 3) and 14 dB (Size 4).

**Model LY sound level:**

Values are given as a guideline for units with room and installation attenuation of 14 dB (Sizes 1 to 3) and 16 dB (Size 4).

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

## LIK / LYK MODELS

Size	AC motor code	HEE motor voltage (V)	Air flow in m <sup>3</sup> /h	Available static pressure (1)	Cooling cap. W		Heating capacity W	AC motor power input W	HEE motor power input W	Sound power LW dB(A)	ISO or NR comfort level for LI	ISO or NR comfort level for LY	Average air temperature rise in K (2) Auxiliary electric heater 230/1/50	
					Total	Sensible							700W	1400W
32C/32C HEE	V5	7,8	1265	10	5 549	4 953	7 868	162	113	65	48	46	1,6	3,3
	V4	6	945		4 674	4 005	6 114	121	49	58	42	40	2,2	4,4
	V3	5	755		4 085	3 398	5 006	110	28	54	38	36	2,7	5,5
	V2	3,8	550		3 293	2642	3 749	96	15	49	33	31	3,7	7,5
	V1	3,1	425		2712	2123	2 914	92	9	44	28	26	4,8	9,7
32D/32D HEE	V5	7,8	1265	10	6 237	5 371	8 507	162	113	65	48	46	1,6	3,3
	V4	6	945		5 162	4 277	6 555	121	49	58	42	40	2,2	4,4
	V3	5	755		4 422	3 570	5 336	110	28	54	38	36	2,7	5,5
	V2	3,8	550		3 512	2 744	3 968	96	15	49	33	31	3,7	7,5
	V1	3,1	425		2854	2183	3 071	92	9	44	28	26	4,8	9,7
32E/32E HEE	V5	7,8	1265	10	6 503	5 448	8 576	162	113	65	48	46	1,6	3,3
	V4	6	945		5 366	4 338	6 569	121	49	58	42	40	2,2	4,4
	V3	5	755		4 576	3 618	5 326	110	28	54	38	36	2,7	5,5
	V2	3,8	550		3 613	2 778	3 940	96	15	49	33	31	3,7	7,5
	V1	3,1	425		2 934	2215	3 037	92	9	44	28	26	4,8	9,7
34C/34C HEE	V5	7,8	1265	10	5 549	4 953	5 295	162	113	65	48	46	1,6	3,3
	V4	6	945		4 674	4 005	4 668	121	49	58	42	40	2,2	4,4
	V3	5	755		4 085	3 398	4 194	110	28	54	38	36	2,7	5,5
	V2	3,8	550		3 293	2642	3 555	96	15	49	33	31	3,7	7,5
	V1	3,1	425		2712	2123	3 038	92	9	44	28	26	4,8	9,7
34D/34D HEE	V5	7,8	1265	10	6 237	5 371	7 222	162	113	65	48	46	1,6	3,3
	V4	6	945		5 162	4 277	6 268	121	49	58	42	40	2,2	4,4
	V3	5	755		4 422	3 570	5 566	110	28	54	38	36	2,7	5,5
	V2	3,8	550		3 512	2 744	4 638	96	15	49	33	31	3,7	7,5
	V1	3,1	425		2854	2183	3 913	92	9	44	28	26	4,8	9,7
42C/42C HEE	V5	7,3	1300	10	6 462	5 682	8 136	176	101	64	45	43	1,6	3,2
	V4	5,4	930		7 006	6 342	9 082	123	40	57	39	37	2,2	4,4
	V3	4,4	745		4 469	3 570	5 052	110	24	53	35	33	2,8	5,5
	V2	3,4	555		3 584	2771	3 877	95	13	48	30	28	3,7	7,4
	V1	2,7	415		2863	2163	2 982	90	8	44	26	24	5,0	9,9
42D/42D HEE	V5	7,3	1300	10	7 552	6 142	8 731	176	101	64	45	43	1,6	3,2
	V4	5,4	930		5 973	4 624	6 513	123	40	57	39	37	2,2	4,4
	V3	4,4	745		5 041	3 811	5 307	110	24	53	35	33	2,8	5,5
	V2	3,4	555		3 980	2 940	4 035	95	13	48	30	28	3,7	7,4
	V1	2,7	415		3151	2290	3 080	90	8	44	26	24	5,0	9,9
42E/42E HEE	V5	7,3	1300	10	8 071	6 341	8 957	176	101	64	45	43	1,6	3,2
	V4	5,4	930		6 304	4 757	6 630	123	40	57	39	37	2,2	4,4
	V3	4,4	745		5 295	3 915	5 379	110	24	53	35	33	2,8	5,5
	V2	3,4	555		4 158	3 014	4 071	95	13	48	30	28	3,7	7,4
	V1	2,7	415		3 277	2342	3 098	90	8	44	26	24	5,0	9,9
44C/44C HEE	V5	7,3	1300	10	6 462	5 682	5 814	176	101	64	45	43	1,6	3,2
	V4	5,4	930		5 237	4 315	5 007	123	40	57	39	37	2,2	4,4
	V3	4,4	745		4 469	3 570	4 477	110	24	53	35	33	2,8	5,5
	V2	3,4	555		3 584	2771	3 811	95	13	48	30	28	3,7	7,4
	V1	2,7	415		2863	2163	3 210	90	8	44	26	24	5,0	9,9
44D/44D HEE	V5	7,3	1300	10	7 668	6 188	5 796	176	101	64	45	43	1,6	3,2
	V4	5,4	930		6 055	4 656	4 967	123	40	57	39	37	2,2	4,4
	V3	4,4	745		5 099	3 835	4 429	110	24	53	35	33	2,8	5,5
	V2	3,4	555		4 018	2 956	3 759	95	13	48	30	28	3,7	7,4
	V1	2,7	415		3176	2302	3 160	90	8	44	26	24	5,0	9,9

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

**Model LI sound level:**

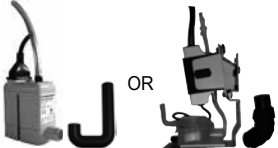

Values are given as a guideline for units with room and installation attenuation of 12 dB (Sizes 1 to 3) and 14 dB (Size 4).

**Model LY sound level:**





Values are given as a guideline for units with room and installation attenuation of 14 dB (Sizes 1 to 3) and 16 dB (Size 4).

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



**OPTIONS (FACTORY-FITTED)**

	Description	Figures	Description
 OR	Condensate drain pump with high safety device		- Rectangular smooth metal supply air sleeve for Size 0 - Smooth metal rectangular return sleeve on all sizes (models I and Y only)

**ACCESSORIES (SUPPLIED SEPARATELY)**

	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 m³/h	7013440
		Code	60/75/90 m³/h	7013544
	Self-adjustable fresh air module kit ø125 mm	Code	15/30/45 m³/h	7013555
		Code	60/75/90 m³/h	7013556
		Code	120/150/180 m³/h	7013557
	Resilient mounts (4 per unit)	Code	0219453	
	Condensate pan extension for recovery of condensates underneath the spigots except for size 0	Code	7158842	

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

Assembly		Description	Code	Size 1, 2 and 3	Size 4 and 5	Size 6
				<b>Customer side coupling G1/2"</b>	<b>Customer side coupling G3/4"</b>	<b>Customer side coupling G3/4"</b>
<b>For 2-tube coils</b>						
without valve		2 M1 9 mm thick insulated flexible connections EPDM pipe + PN10 stainless steel braid length 300 mm Male coupling with flat face/Female rotary coupling on customer side	Code	2 x 5202288	2 x 7247867	2 x 7247867
3-way valve + by-pass		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
two-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 face / 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
				<b>Customer side coupling Heating G1/2" Cooling G1/2"</b>	<b>Customer side coupling Heating G1/2" Cooling G3/4"</b>	<b>Customer side coupling Heating G3/4" Cooling G3/4"</b>
<b>For 4-tube coils</b>						
without valve		EPDM pipe + PN10 stainless steel braid length 300 mm Male coupling with flat face/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
3-way valve + by-pass		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
two-way valve		4 EPDM pipe+PN10 stainless steel braid length 300 mm flexible connections, including: 2 with male coupling with flat face / 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 H or U model

**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** will be provided on Size 0 by 10 mm of polyester textile fibre, and on Sizes 1 to 6 by 15 mm of melamine; a flexible open-cell foam with an aluminium covering to protect against dust build-up 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.**

**The intake** will be through one or more return grilles via a plenum with circular nozzles that can be connected to flexible ducting (ø200 mm as standard for all sizes, and also available in ø160 for Sizes 0 to 3 and ø250 for Sizes 4 and 5) to prevent any non-ducted return air 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/m<sup>3</sup> 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. On Sizes 1 to 6, its 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. On all Sizes, 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 necessary, **it must feature a high safety device enabling the cooling valve to be closed if high levels are detected.**

**The additional electric heater** running in 230V single-phase must be shielded with stainless steel. The unit is to be fitted with safety limiters that comply with the applicable standards.

**The fan motor assembly**, mounted on anti-vibration mounts, will be fitted with a Brushless technology low-consumption **HEE** motor. 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. Where possible, it shall be positioned in line with the air supply.



**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 sound-absorbing 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/m<sup>3</sup> 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 necessary, **it must feature a high safety device enabling the cooling valve to be closed if high levels are detected.**

**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. Where possible, it shall be positioned in line with the air supply.

**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**.



## COMFORT LINE

Comfort units  
Ductable

This document is not legally binding. As part of its continuous drive to improve its equipment, CIAT reserves the right to make any technical modifications without prior notice.  
Ref.: NA 18.715 B

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