

MAJOR LINE

Comfort units



NCH model



CV model

Versatile

unit meeting all building-specific constraints

Energy and ecodesign performance.

*Improved occupant comfort,
very low sound level*

Innovative design ensuring easy installation
and simplified maintenance

New coils with patented fins,
new size designations.



MAJOR LINE

Designed for heating and cooling, **MAJOR LINE** is available in 4 models (cased or uncased, horizontal or vertical).

The versatility of MAJOR LINE, thanks to its different assembly options and range of accessories, means it can be adapted to any type of installation.

In Europe, it has become a benchmark solution for renovations of large office blocks and hotel chains and restoration of buildings, etc.

Modern aesthetic lines, excellent sound levels and optimised thermal performance. With MAJOR LINE, CIAT offers a comfort solution which is both economical and quick to set up.

INNOVATIVE DESIGN

A true stylistic evolution, MAJOR LINE has distinguished lines with a slim and elegant shape. Its attractive and modern design will blend perfectly with all types of interior.



VERSATILITY OF THE MODELS

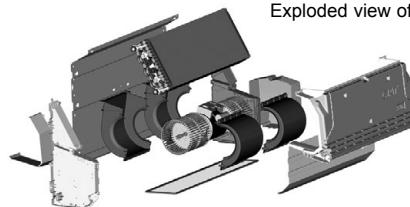
- Two versions:
- Cased (visible)
 - Uncased (flush-mounted)
- The same product reference for both applications: CV (Cased Vertical)/CH (Cased Horizontal).
- The same product reference for both applications: NCV (Uncased Vertical)/NCH (Uncased Horizontal).
- Units with left/right hydraulic connections available for easier adaptation to refurbished buildings.
- Cased or Uncased models available with classic air return (assemblies 1, 41, 1V and 41V) and front mounted air return (assemblies 1D, 41D, 1VD and 41VD).
- A large selection of accessories available in:
- Fresh air and mixed
 - Diffusion and return air
- For NCH, the hydraulic and electrical connections can be supplied on the same side making the unit more compact and simplifying installation.
- Unit operates with 50 and 60 Hz supply.

INNOVATIVE DESIGN

- New shaped ABS volute designed to optimise output and performance.
- 160 mm HEE (High Energy Efficiency) impeller, with CIAT exclusive airfoil blades in self-extinguishable HB ABS.
- Hydraulic coil with total frontal surface increased from 5 to 15% (according to the size and in relation to the units of previous ranges) for improved performance and output .



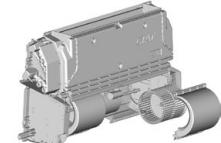
Shaped ABS volute



Exploded view of NCV model

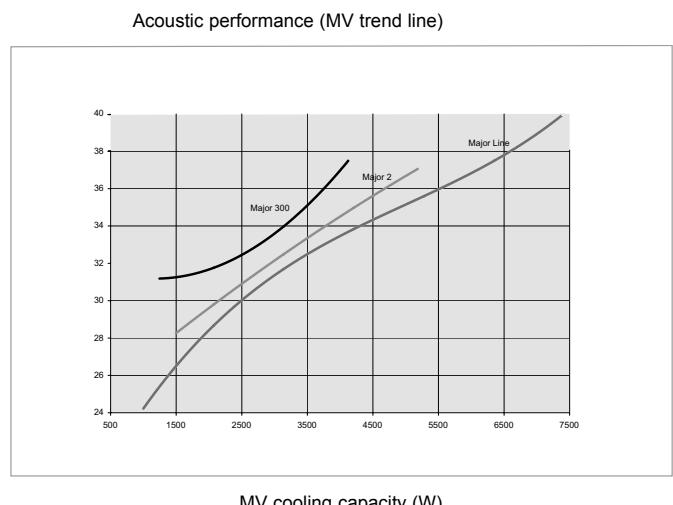
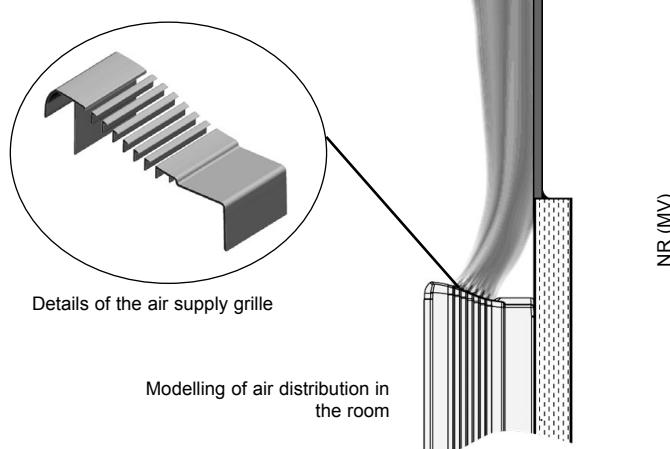
SIMPLE TO INSTALL AND MAINTAIN

- Filter easily accessible.
- Single unit casing easily removed with two screws in the lower part of the unit.
- Option of replacing only the faulty component on the fan motor assembly: only the motor or the impeller.
- All the speeds are connected to the electrical terminal of the unit and are easily accessible on site for customised adjustment.
- No plastic moving parts on the casing (hinged access hatch for example) for increased durability of the unit over time.



LATEST GENERATION OF COMFORT

- Improved control of the supply air temperature to reduce discomfort.
- Diffusion grille optimised in our Research & Innovation Centre for increased overall comfort in accordance with the most demanding standards.



MORPHO CODES - MAJOR LINE DESCRIPTION

Range	Size	Model	Installation	Coil type	Connector	Thermal function	Motor	Speeds	Filter
MJL	10 2A	CV	1	2T2F	G	F	+ 500W HEE	depending on selection	G3

HEE 2-10V	Energy efficient motor, 2-10 V control
HEE ON/OFF	Energy efficient motor, 3-speed control
AC	5-speed asynchronous motor

10	300 W or 600 W
20	500 W or 1000 W
30	800 W or 1600 W
40	1200 W or 2400 W
50	1600 W or 3200 W
60	Not available

F	Cooling
C	Heating
CF	Heating/Cooling

G	Left, facing air supply
D	Right, facing air supply

2T	2 pipes
2T2F	2-pipe + wiring
4T	4 pipes

1	Return underneath CV
1D	Front-mounted return CV
41	Rear-mounted return CH
41D	Return underneath CH
1V	Return underneath NCV
1VD	Front-mounted return NCV
41V	Rear-mounted return NCH
41VD	Return underneath NCH

CV	Cased Vertical model
CH	Cased Horizontal model
NCV	Uncased Vertical model
NCH	Uncased Horizontal model
NCH Y	Y Uncased Horizontal model with supply plenum (plenum delivered not fitted)
NCH H	Horizontal uncased model with supply & return plenum
NCH U	Horizontal uncased model with supply & return plenum

2J	2-pipe 1.5-row version (+ possible wiring)
2K	2-pipe 2-row version
2M	2-pipe 2.5-row version (+ possible wiring)
2N	2-pipe 3-row version
4P	4-pipe, 2.5-row version (cooling) +0.5 row version (heating)
4R	4-pipe, 1-row version (cooling) + 2 row version (heating)

10	
20	
30	
40	
50	
60	

Size

TECHNICAL DESCRIPTION

Casing

- Single-unit casing and side members in ABS
- Front/rear panel in galvanised steel with mounting holes for easy fixing.

Casing for CV/CH model

Bi-material casing in two colours:

- Flange, side member and supply air grille in RAL 7035 grey ABS
- Front pressed metal panel painted RAL 9010 white and front mounted return air grille (1D, 41D) in RAL 7035 grey
- Central access point for housing the built-in thermostats

Water coil

- High performance coil concept
- Coil casing in galvanised panels.
- Copper pipes, aluminium louvre or non-louvre fins, patented.
- Water coil tap on the left or right of the unit from the front of the supply air (to be specified when ordering).
- 2 or 4-pipe main coil fitted with $\frac{1}{2}$ " or $\frac{3}{4}$ " rotary couplings with air purge and drain screw.
- Additional coil for 4 pipes fitted with $\frac{1}{2}$ " rotary couplings with 40 mm centre-to-centre distance.
- Nominal pressure of 16 bar (at 20°C)
- Test pressure 18 bar.
- Maximum hot water inlet temperature:
 - 4-pipe application: 90°C
 - 2-pipe application: 90°C
 - 2-pipe/2-wire application: 55°C (min. air flow: 200 m³/h)

Electric heater

- Single pipe 230V single phase 50/60 Hz electrical elements inserted into the aluminium housing.
- Two capillary tube temperature limiters with manual and automatic reset inserted in the aluminium housing.

Condensate drain pan

- Pan in ABS PC 10% fibreglass with M1 class reinforced EPS insulation (20 mm thick).
- Reinforced insulation for all climates, M1 class EPS panel (20 mm thick).
- ABS auxiliary pan.
- 22 mm external Ø raised condensate outlet.

Fan motor assembly

■ Fan(s)

Impeller(s) in ABS in split units for total accessibility of the different parts of the fan motor assembly.
160 mm HEE impeller(s), with CIAT exclusive airfoil blades in self-extinguishable HB ABS.

■ HEE motor

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

- Brushless technology.
- Sealed type, tropicalised with protected shaft.
- Progressive control with 0-10V control signal.
- Internal normally closed series automatic overload protection on the windings.
- Mounted on anti-vibration mounts.
- Supply 230V \pm 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 to start up the motor is 2V.

■ Asynchronous motor

- 5 factory-fitted wired speeds (connected and available at the terminal) for customised adjustment.
- Sealed, tropicalised type, class F with protected shaft.
- Permanent capacitor.
- Ball bearings.
- Automatic overload protection as standard on winding.
- Resilient mounts.
- 230V single-phase 50/60 Hz power supply, reduced consumption.

Electrics box

- Box incorporated on the side of the base opposite the hydraulics.
- Fully encased in an enclosure in PP 20% Talc.
- Electrical connection terminal on DIN rail in compliance with EN 50022, 7.5 mm deep.
- Wire clamps for customer connection.

Air filter

- Flexible filter medium made of regenerative polyester fibre, on rigid frame.
- Efficiency class EN 779: G3.
- Fire rating: M1.
- Mounted on pivoting runners for easy maintenance

Packaging

- Delivered in individual boxes on pallets protected by stretch wrap film.

Controls

- RTR-E electromechanical thermostat range.
- V30 electronic range.
- V300 electronic range.
- Networked electronic range (KNX): V3000.
- Networked electronic range (LON): V-LON2.

Factory-fitted options

- Condensate drain pump.
- Rectangular supply air sleeve for direct distribution in soffit.
- Supply and return air plenum for H and U assembly (contact us) for sizes 2 to 4.
- Electrics box on hydraulic side for NCH models only.
- Hydraulic coil with blades protected for use in harmful/corrosive atmospheres (coastal locations, or areas close to chemical industries).
- Unit without electrics box, or DIN Rail ("bare wire option")

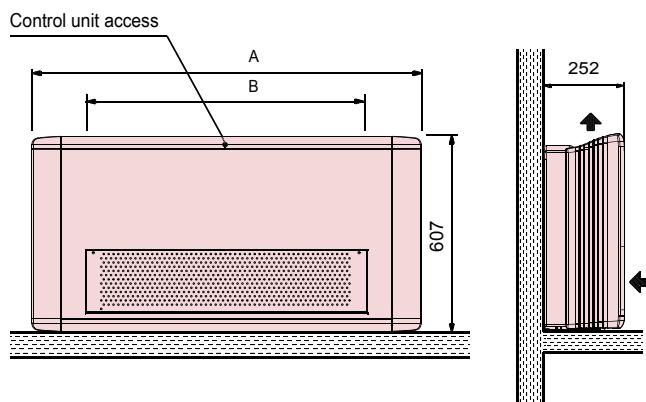
Accessories supplied separately

- Support feet or base
- Return air grille between feet
- Rear skirting support and rear painted panel
- Internal/external air recovery unit
- Single- or dual-deflection diffusion grille
- Diffusion kit with round duct
- Supply air plenum kit for sizes 1 to 6
- Condensate drain pump kit
- Elastic bushings
- Smooth sleeve or Ø 100 mm MR Module
- Hose or tube kit with or without insulation
- 2-way or 3-way valve kit with 230V on/off bypass

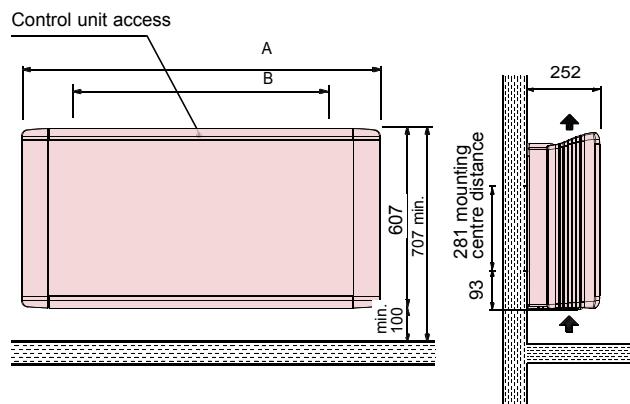
Note: refer to the technical manual and the instruction manual for more information.

ASSEMBLY AND DIMENSIONS – CV MODEL (CASED VERTICAL)

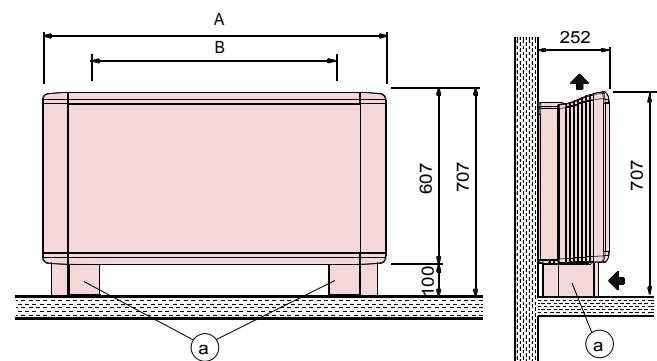
→ **Assembly 1D:** Unit with return on front



→ **Assembly 1:** Basic unit with return underneath

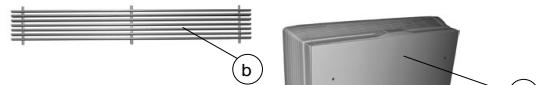


→ **Assembly 2:** Basic unit with feet



Options available with assembly 2:

- Base mounted grille - Rear painted panel



- Rear skirting support



Accessories for assembly configurations (supplied separately)

- a: Support feet
- b: Aluminium return air grille between feet
- c: Painted rear skirting support
- j: Rear painted panel RAL 7035

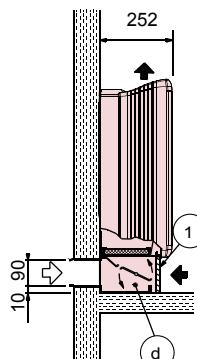
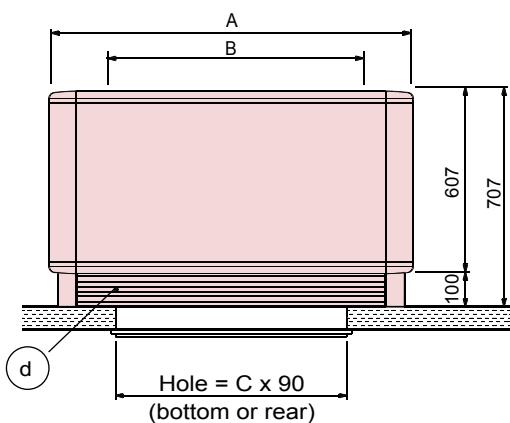
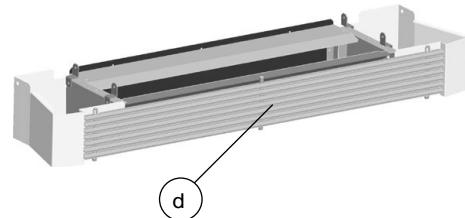
Sizes MAJOR LINE	A	B mounting centre distance	Weight (kg) *	
			Assembly 1/ 1D	Assembly 2
10	840	505	20	21
20	1000	665	23	24
30	1200	865	28	29
40	1400	1065	34	35
50	1600	1265	39	40
60	1800	1465	44	45

* Weight of the unit in 4-pipe version (without valves)

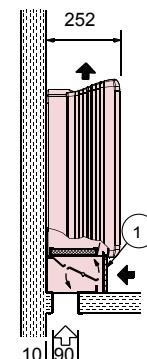
ASSEMBLY AND DIMENSIONS – CV MODEL (CASED VERTICAL)

→ Assemblies 5 and 6:

Basic unit equipped with a manual pretreated air/recycled air mixing unit with a return air grille and a damper regulating the pretreated air intake.



Assembly 5



Assembly 6

⇒ Air pretreated by an air handling unit

Accessories for assembly configurations (supplied separately)

d: Manually controlled int./ext. air recovery unit with return air grille ① for filter removal

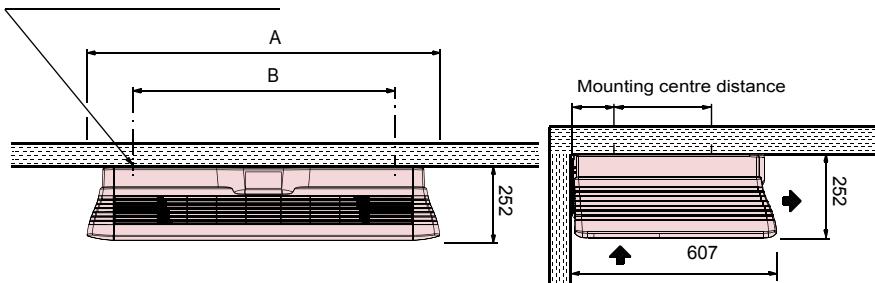
Sizes MAJOR LINE	A	B mounting centre distance	C hole space	Weight (kg) *
10	840	505	430	24
20	1000	665	430	28
30	1200	865	780	32
40	1400	1065	780	40
50	1600	1265	1180	45
60	1800	1465	1180	50

* Weight of the unit in 4-pipe version (without valves)

ASSEMBLY AND DIMENSIONS – CH MODEL (CASED HORIZONTAL)

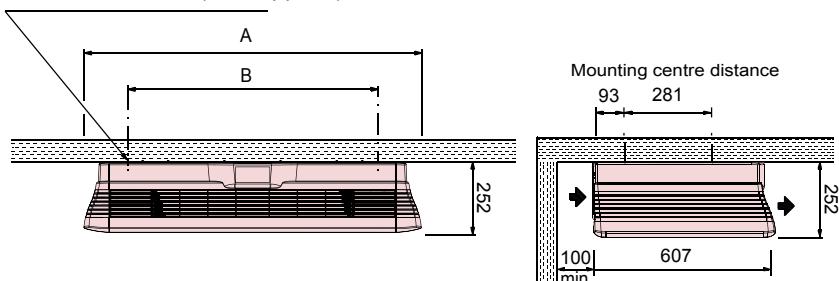
→ Assembly 41D: Unit with return on front

Mounting: 4 sealed M6 shafts,
nuts and washers (not supplied)



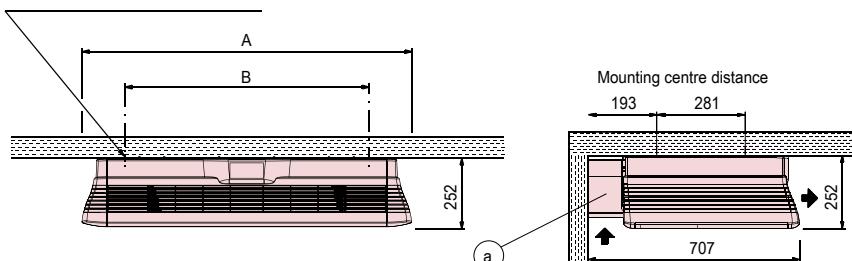
→ Assembly 41: Basic unit

Mounting: 4 sealed M6 shafts,
nuts and washers (not supplied)



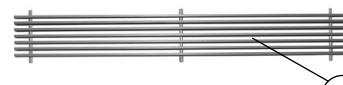
→ Assembly 42: Basic unit with feet

Mounting: 4 sealed M6 shafts, nuts
and washers (not supplied)



Option available on assembly 42:

- Base mounted grille



Accessories for assembly configurations (supplied separately)

a: Support feet

b: Aluminium internal return air grille between feet

Note: For assembly 42 the condensate drain pump must be used.

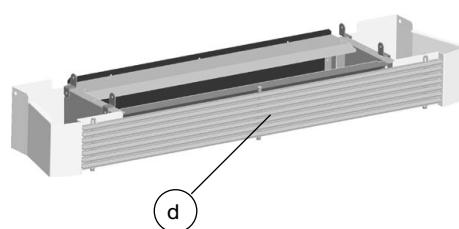
Sizes MAJOR LINE	A	B mounting centre distance	Weight (kg) *	
			Assembly 41D/ 41	Assembly 42
10	840	505	20	21
20	1000	665	23	24
30	1200	865	28	29
40	1400	1065	34	35
50	1600	1265	39	40
60	1800	1465	44	45

* Weight of heaviest unit in 4-pipe configuration

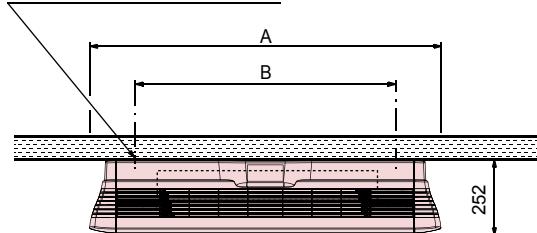
ASSEMBLY AND DIMENSIONS – CH MODEL (CASED HORIZONTAL)

→ Assemblies 45 and 46:

Basic unit equipped with a manual pretreated air/recycled air mixing unit with a return air grille and a damper regulating the pretreated air intake.

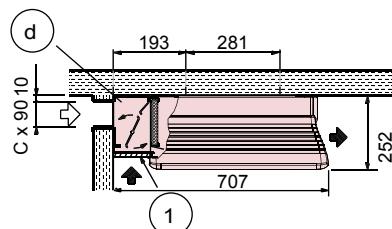


Mounting: 4 sealed M6 shafts, nuts and washers (not supplied)



→ Air pretreated by an air handling unit

Mounting centre distance



Assembly 46

Assembly 45:
identical with ceiling mounted pretreated air intake

Accessories for assembly configurations (supplied separately)

d Manually controlled int./ext. air recovery unit with return air grille ① for filter removal

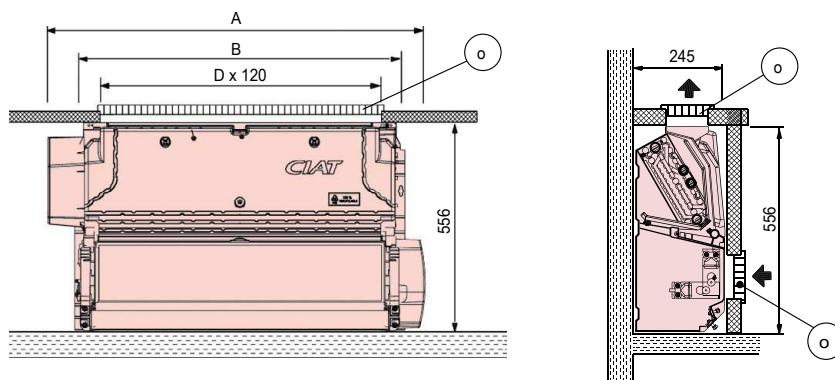
For assemblies 45-46 the condensate drain pump must be used.

Size MAJOR LINE	A	B mounting centre distance	C hole space	Weight (kg) *
10	840	505	430	24
20	1000	665	430	28
30	1200	865	780	32
40	1400	1065	780	40
50	1600	1265	1180	45
60	1800	1465	1180	50

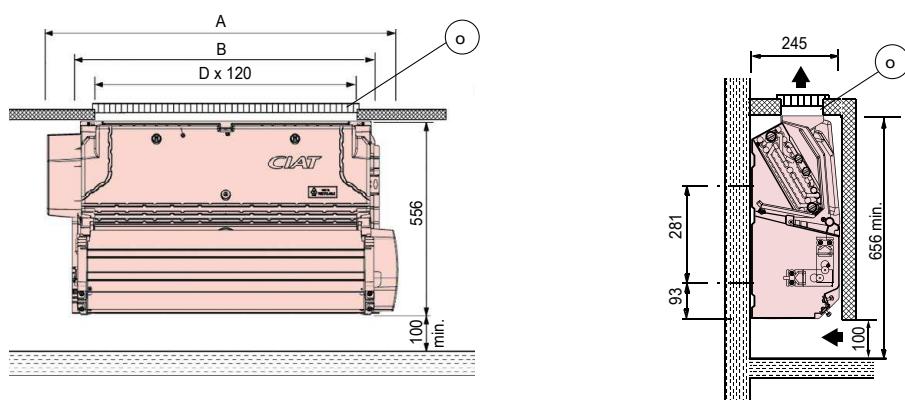
* Weight of the unit in 4-pipe version (without valves)

ASSEMBLY AND DIMENSIONS – NCV MODEL (UNCASED VERTICAL)

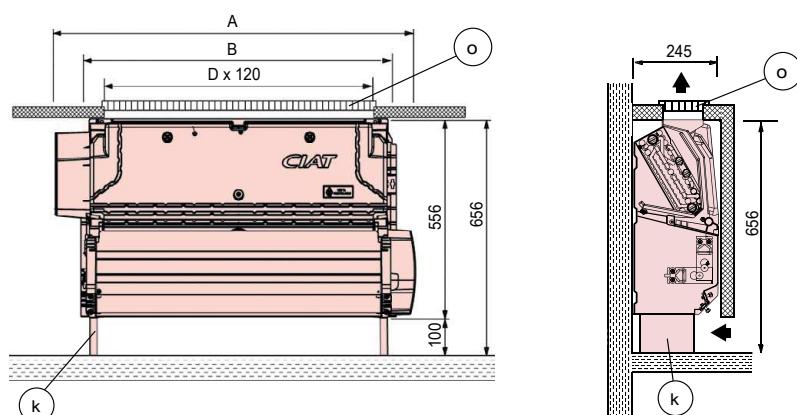
→ **Assembly 1VD:** Unit with return on front



→ **Assembly 1V:** Basic unit with bottom-mounted return



→ **Assembly 2V:** Basic unit with support base



Accessories for assembly configurations (supplied separately)



k Support base

o Aluminium single deflection diffusion or return air grille with sealing frame (without hatch).

Note: this grille can be used for both return and supply air.

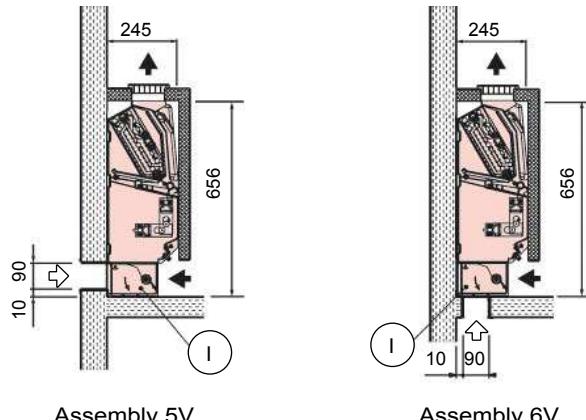
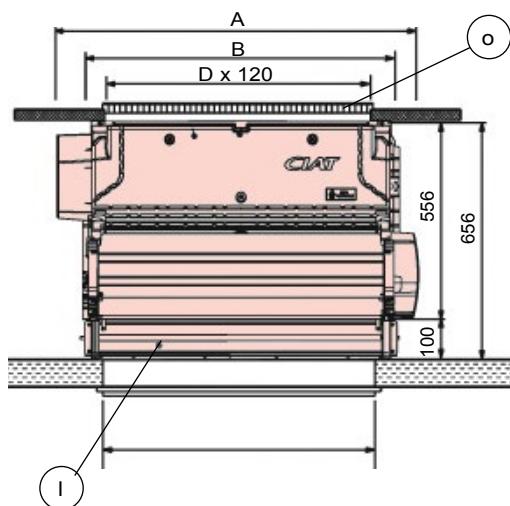
Sizes MAJOR LINE	A	B mounting centre distance	D grille space	Weight (kg) *
10	652	505	355	15
20	812	665	515	18
30	1012	865	715	22
40	1212	1065	915	28
50	1412	1265	1115	32
60	1612	1465	1315	36

* Weight of the unit in 4-pipe version (without valves)

ASSEMBLY AND DIMENSIONS – NCV MODEL (UNCASED VERTICAL)

→ Assemblies 5V and 6V:

Basic unit equipped with a manual pre-treated air/recycled air mixing unit with a damper regulating the pre-treated air intake.



⇒ Air pretreated by an air handling unit

Accessories for assembly configurations (supplied separately)

I: Internal/external manually controlled air return unit

o: Aluminium single deflection diffusion or return air grille with sealing frame (without hatch).

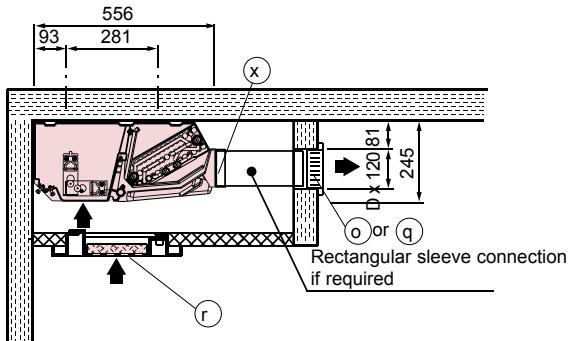
For other applications, please consult us.

MAJOR LINE size	A	B mounting centre distance	C hole space	D grille space	Weight (kg)*
10	652	505	430	355	16,5
20	812	665	430	515	20
30	1012	865	780	715	25
40	1212	1065	780	915	32
50	1412	1265	1180	1115	37
60	1612	1465	1180	1315	42

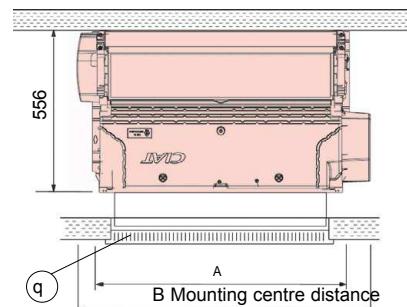
* Weight of heaviest unit in 4-pipe configuration

ASSEMBLY AND DIMENSIONS – NCH MODEL (UNCASED HORIZONTAL)

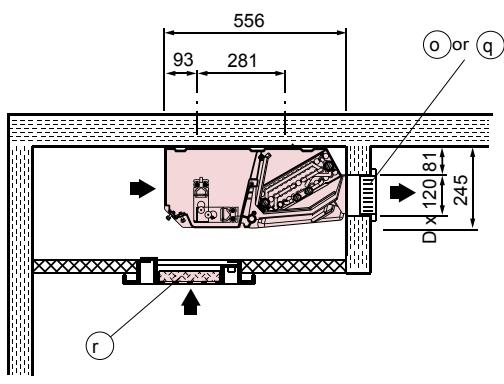
→ **Assembly 41VD:** Unit with return on front



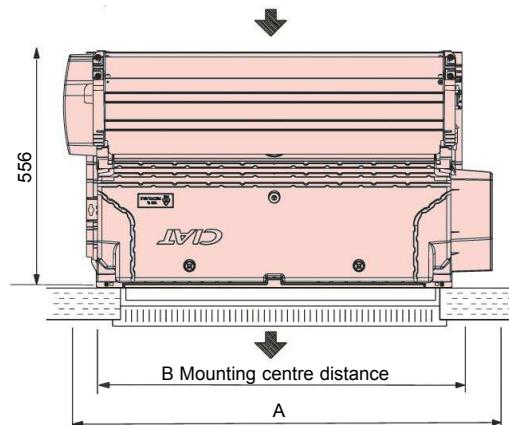
View from beneath



→ **Assembly 41VD:** Unit with return on front

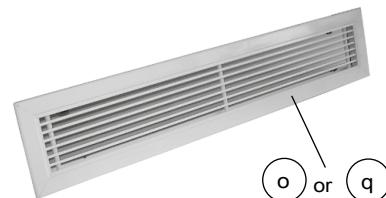


View from beneath

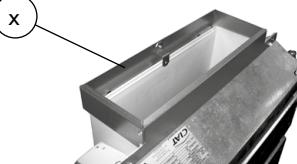


Option available
on assemblies 41VD, 41V and 42V:

- Aluminium single (o) or double (q) deflection diffusion grille with sealing frame



- Metal sleeve for connection to air discharge



Accessories for assembly configurations (supplied separately)

- o: Aluminium single deflection diffusion grille with sealing frame.
- q: Aluminium double deflection diffusion grille with sealing frame
- r: 600 x 600 microperforated return air grille (see diffusion range)
- x: Metal sleeve connecting rectangular sleeve to supply air

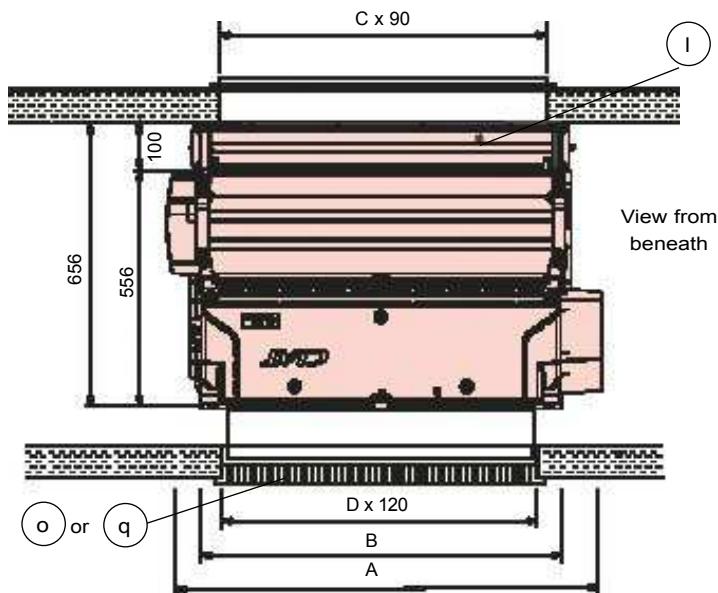
Size MAJOR LINE	A	B mounting centre distance	D grille space	Weight (kg) *
10	652	505	355	15
20	812	665	515	18
30	1012	865	715	22
40	1212	1065	915	28
50	1412	1265	1115	32
60	1612	1465	1315	36

* Weight of the unit in 4-pipe version (without valves)

ASSEMBLY AND DIMENSIONS – NCH MODEL (UNCASED HORIZONTAL)

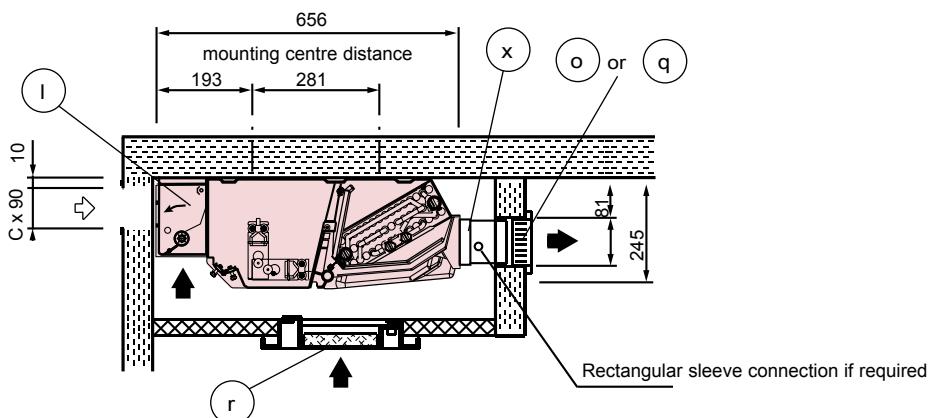
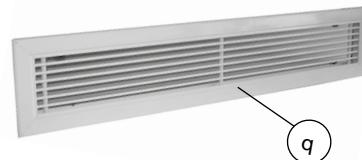
→ Assemblies 45V and 46V:

Basic unit equipped with a manual fresh air/recycled air mixing unit with a damper regulating the pre-treated air intake.



Option available
Assemblies 45V and 46V:

- Aluminium single or double deflection diffusion grille with sealing frame



⇒ Air pretreated by an air handling unit

Accessories for assembly configurations (supplied separately)

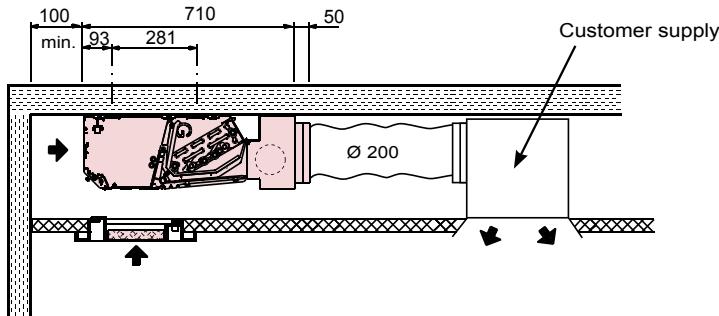
- | | |
|--------------------------------------------------------------------|----------------------------------------------------------------------|
| I: Internal/external manually controlled air return unit | r: 600 x 600 microperforated return air grille (see diffusion range) |
| o: Aluminium single deflection diffusion grille with sealing frame | x: Metal sleeve connecting rectangular sleeve to supply air |
| q: Aluminium double deflection diffusion grille with sealing frame | |

MAJOR LINE size	A	B Mounting centre distance	C hole space	D grille space	Weight (kg)*
10	652	505	430	355	16,5
20	812	665	430	515	20
30	1012	865	780	715	25
40	1212	1065	780	915	32
50	1412	1265	1180	1115	37
60	1612	1465	1180	1315	42

* Weight of heaviest unit in 4-pipe configuration

ASSEMBLY AND DIMENSIONS – NCH MODEL (UNCASED HORIZONTAL)

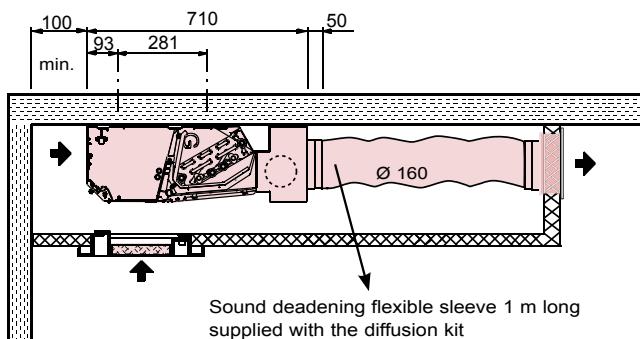
→ **Y assembly:**



Size	Number of collars	Ø of collars
T1	1	200
T2	1	200
T3	2	200
T4	3	200
T5	3	200
T6	3	200

Supply air plenum delivered not fitted. Available for sizes 1 to 6

→ **YK assembly:**

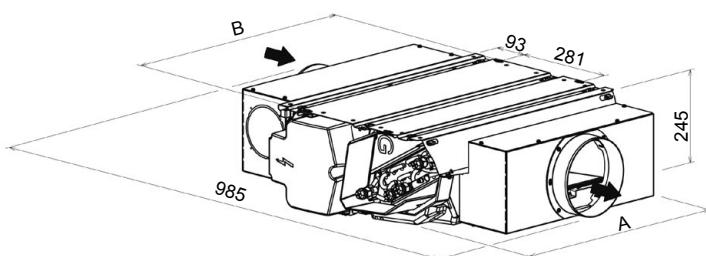


Size	Number of collars	Ø of collars
T1	1	160
T2	1	160
T3	2	160
T4	3	160
T5	3	160

Supply air plenum delivered not fitted. Available for sizes 1 to 5

→ **Assembly H:**

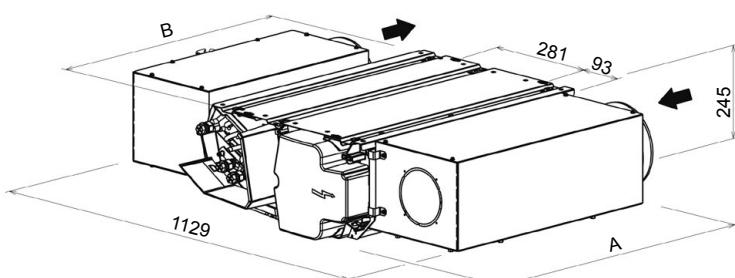
Supply and return air plenum factory-fitted with Ø 160 mm or 200 mm collars available for sizes 2 to 4



Size	A	B	Number of collars
T2	760	665	1
T3	960	865	2
T4	1160	1065	3

→ **Assembly U:**

Supply and return air plenum factory-fitted with Ø 160 mm or 200 mm collars available for sizes 2 to 4



Size	A	B	Number of collars
T2	770	665	1
T3	970	865	1
T4	1170	1065	1

PERFORMANCE – 2-TUBE SYSTEM

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

Heating operation: water temperature: 45/40 °C, inlet air temperature: 20 °C

Major Line	AC motor Motor reference	HEE motor Voltage (V)	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Electrical power W		Electric heater	
			Total	Sensible			Motor AC	Motor EC	High capacity W	Low capacity W
102J / 120J HEE	V4	4,6	1 040	990	1 530	46	24	10	300	600
	V3	3,9	880	830	1 360	41	19	6		
	V1	2,8	710	660	1 030	33	12	5		
102M / 102M HEE	V4	5,0	1 390	1 130	1 880	46	25	11	300	600
	V3	4,2	1 200	970	1 600	42	19	8		
	V1	2,9	850	670	1 160	36	11	5		
202J / 202J HEE	V4	4,8	1 760	1 690	2 500	50	42	15	500	1000
	V3	4,3	1 620	1 540	2 330	47	40	12		
	V1	2,7	1 150	1 050	1 550	36	33	5		
202M / 202M HEE	V4	4,8	2 140	1 800	2 690	50	42	15	500	1000
	V3	4,3	1 910	1 640	2 430	46	40	12		
	V1	2,7	1 320	1 120	1 670	35	33	5		
202N / 202N HEE	V4	4,8	2 420	1 960	2 960	50	42	15	800	1600
	V3	4,3	2 190	1 770	2 650	47	40	12		
	V1	2,7	1 480	1 150	1 740	36	33	5		
302J / 302J HEE	V4	5,3	2 720	2 150	3 410	53	53	26	800	1600
	V3	4,4	2 390	1 870	2 960	47	47	17		
	V1	2,2	1 380	1 030	1 670	29	36	4		
302K / 302K HEE	V4	5,3	3 160	2 620	3 840	53	53	26	800	1600
	V3	4,4	2 760	2 250	3 180	47	47	17		
	V1	2,2	1 300	1 080	1 680	29	36	4		
302M / 302M HEE	V4	5,3	3 510	2 700	4 280	53	53	26	1200	2400
	V3	4,4	3 050	2 340	3 590	47	47	17		
	V1	2,2	1 370	1 060	1 690	29	36	4		
402M / 402M HEE	V4	6,8	5 750	4 480	6 310	60	102	59	1600	3200
	V3	5,4	4 740	3 590	5 150	55	87	31		
	V1	3,2	2 910	2 160	3 170	41	68	10		
502M / 502M HEE	V4	7,1	6 150	4 840	6 950	60	94	60	800	1600
	V3	5,8	5 350	4 100	5 740	55	80	35		
	V1	3,6	3 440	2 620	3 660	42	64	11		
602N / 602N HEE	V4	7,8	7 990	5 970	8 590	63	122	87	1200	2400
	V3	7,1	7 420	5 550	7 870	61	118	65		
	V1	4,4	5 070	3 770	5 230	49	105	18		

Table with hypothetical acoustic attenuation of the room and installation for 2-pipe system from previous page:

CV/CH/NCV models:

12dB: Sizes 102J, 102M, 202J, 202M, 202N, 302J, 302K, 302M

14dB: Sizes 402M, 502M

15dB: Size 602N

NCH models:

14dB: Sizes 102J, 102M, 202J, 202M, 202N, 302J, 302K, 302M

16dB: Sizes 402M, 502M, 602N

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

PERFORMANCE – 4 TUBE SYSTEM

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

Heating operation: water temperature: 65/55°C, inlet air temperature: 20°C

Major Line	AC motor Motor reference	HEE motor Voltage (V)	Cooling cap. W		Heating capacity W	Sound power LW dB(A)	Electrical power W	
			Total	Sensible			Motor AC	Motor EC
104P / 104P HEE	V4	5,0	1 390	1 130	1 130	46	25	11
	V3	4,2	1 200	970	1 030	42	19	8
	V1	2,9	850	670	850	36	11	5
204P / 204P HEE	V4	4,8	2 130	1 850	1 860	50	42	15
	V3	4,3	1 940	1 660	1 760	46	40	12
	V1	2,7	1 320	1 120	1 390	35	33	5
204R / 204R HEE	V4	4,8	1 910	1 740	3 420	50	42	15
	V3	4,3	1 720	1 560	3 250	46	40	12
	V1	2,7	1 200	1 090	2 470	35	33	5
304P / 304P HEE	V4	5,3	3 310	2 690	2 980	53	53	26
	V3	4,4	2 790	2 280	2 650	47	47	17
	V1	2,2	1 200	1 040	1 540	29	36	4
304R / 304R HEE	V4	5,3	2 930	2 390	4 730	53	53	26
	V3	4,4	2 550	2 040	4 150	47	47	17
	V1	2,2	1 180	960	2 130	29	36	4
404P / 404P HEE	V4	6,8	5 480	4 300	4 110	60	102	59
	V3	5,4	4 650	3 570	3 600	55	87	31
	V1	3,2	2 940	2 190	2 610	41	68	10
404R / 404R HEE	V4	6,8	4 910	4 080	5 720	60	102	59
	V3	5,4	4 150	3 380	4 990	55	87	31
	V1	3,2	2 650	2 070	3 600	41	68	10
504P / 504P HEE	V4	7,1	5 880	4 810	5 770	60	94	60
	V3	5,8	4 980	4 070	5 090	55	80	35
	V1	3,6	3 330	2 590	3 790	42	64	11
604P / 604P HEE	V4	7,8	8 150	6 040	9 150	64	120	82
	V3	7,1	7 460	5 550	8 160	62	117	61
	V1	4,5	4 960	3 670	6 270	50	105	19

Table with hypothetical acoustic attenuation of the room and the installation:

CV/CH/NCV models

12dB: Sizes 104P, 204P, 204R, 304P, 304R

14dB: Sizes 404P, 404R, 504P

15dB: Sizes 604P

NCH models:

14dB: Sizes 104P, 104R, 204P, 204R, 304P, 304R,

16dB: Sizes 404P, 404R, 504P, 604P

TECHNICAL CHARACTERISTICS

Coil capacity (litres)

		102J	102M	202J	202M	202N	302J	302K	302M	402M	502M	602N
2-pipe system	Hot or cold water coil	0,23	0,33	0,30	0,45	0,53	0,40	0,47	0,63	0,84	1,03	1,33
		104P	204P	204R		304P	304R	404P	404R	504P	604P	
4-pipe system	Cold water coil	0,33	0,45	0,36		0,60	0,52	0,71	0,72	1,11	1,32	
	Hot water coil	0,075	0,098	0,19		0,13	0,21	0,22	0,24	0,274	0,47	

Coil connection diameters

- Coil connection type: rotary couplings with flat face;
- Valve connection type: install flush fit male threaded unions.

		102J	102M	202J	202M	202N	302J	302K	302M	402M	502M	602N
2-pipe system	Hot or cold water coil	G1/2"	G3/4"	G3/4"								
		104P	204P	204R		304P	304R	404P	404R	504P	604P	
4-pipe system	Cold water coil	G1/2"	G1/2"	G1/2"		G1/2"	G1/2"	G1/2"	G1/2"	G3/4"	G3/4"	G3/4"
	Hot water coil	G1/2"	G1/2"	G1/2"		G1/2"						

Motor specifications

	Speeds	AC Asynchronous Motor						Speeds	HEE brushless motor						
		Sizes							Sizes						
		10--	20--	30--	40--	50--	60--		10--	20--	30-	40--	50--	60--	
Max. power input (W)	V5	33	58	88	106	108	135	V5	11	25	32	77	90	100	
	V4	31	41	67	93	94	114	V4	9	15	22	63	80	75	
	V3	29	36	52	80	79	99	V3	6	11	13	36	42	55	
	V2	27	31	42	72	72	88	V2	5	8	7	21	26	32	
	V1	26	27	35	63	63	77	V1	4	5	3	11	13	16	
Max. input current (W)	V5	0,14	0,25	0,38	0,46	0,47	0,59	V5	0,11	0,20	0,29	0,62	0,71	0,74	
	V4	0,13	0,18	0,29	0,40	0,41	0,50	V4	0,09	0,13	0,20	0,50	0,62	0,67	
	V3	0,13	0,16	0,23	0,35	0,34	0,43	V3	0,07	0,11	0,13	0,30	0,35	0,44	
	V2	0,12	0,13	0,18	0,31	0,31	0,38	V2	0,06	0,09	0,08	0,19	0,21	0,27	
	V1	0,11	0,12	0,15	0,27	0,27	0,33	V1	0,06	0,06	0,06	0,11	0,13	0,16	

Note: Specifications determined for 230V +/-10% - 50Hz supply.

For operation at 60 Hz, the power input and rotation speed values are generally higher. Motor operating range:
 minimum return T°C: 0°C,
 maximum return T°: 40°C

Unit information plate

The information plate shows all the information needed to identify the unit and its configuration. This plate is located on the condensate pan, on the electrical connection side.

- 1 Code
- 2 Serial number
- 3 Description of the unit
- 4 Nominal motor output
- 5 Motor rotation speed
- 6 Coil type
- 7 Wiring diagram reference
- 8 Motor speed wiring
- 9 Maximum operating pressure
- 10 Electrical heater specifications (if fitted)
- 11 EC declaration no.
- 12 Refer to the installation instructions

