PRODUCT SELECTION DATA

PRECISION CABINET

For version X

- Compact footprint
- Dual-wall construction
- Fan motor assembly with EC motor (electronically commutated)
- PLC control
- Condenser fan variable speed control

50CJ

Cooling capacity: 5 to 55 kW
Air flow: 1000 to 12,000 m³/h

Precision air conditioning cabinet specially designed for the air handling requirements (filtration, temperature and humidity control) of computer rooms, telecommunications rooms and specific purpose rooms (electronics, sensitive storage, medical, controlled atmosphere rooms, etc.).

Dual-wall construction. The choice of technology used (self regulation depending on the room loads, EC motor: electronically commutated) can reduce the energy consumption.

This unit is quick and easy to install, and particularly simple to use.

RANGE

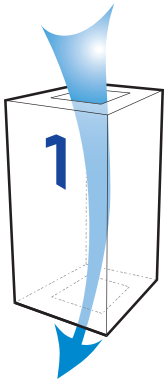
The 50CJ cabinet comes in two versions:

- **50CJ W*: Chilled water model:***
  - Cooling capacity range: 5 to 55 kW
  - Flow rate: 1000 to 12 000 m³/h
  - 7 sizes available
- **50CJ X**: direct expansion model with exterior air condensation unit:
  - Cooling capacity range: 7 to 47 kW
  - Flow rate: 1000 to 12 000 m³/h
  - 11 sizes available

INSTALLATION

UNDER installation: reversed air supply

Installation 1



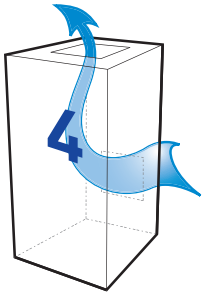
Air supply via raised floor

Installation 3

Front return

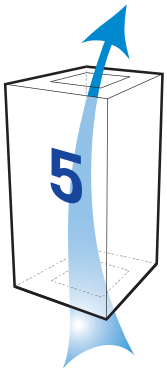
OVER installation: top air supply

Installation 4



Rear return

Assembly 5



Return air below

QUICK SELECTION

50CJ W

Cold water coil

Sizes	W5	W8	W12	W16		W27		W39		W59	
Air flow (m³/h)	1 300	2 000	2 500	3 000	4 000	5 000	6 000	7 000	8 000	10 000	12 000
Maximum operating pressure with G4 or F7 filtration* (Pa)	400	400	259	400	85	400	324	273	26	325	18
Total/sensible cooling capacity (kW)	5/4.8	8/7.6	10.5/9.9	14.7/13.2	18/16.7	23.5/21.5	27/25.1	34/30.5	38/34.4	48/43.4	55/50.5
Water flow rate (m³/h)	0,86	1,4	1,8	2,5	3,1	4	4,6	5,8	6,5	8,2	9,4
Pressure drop (mWC) (Coil + valve)	4,3	4,9	5,1	4,7	10	4,1	5,2	7,3	8,9	5,5	6,9

* Maximum operating pressure dependent on air flow rate. Take away approximately 20 Pa if there is a hot water coil on 50CJW
The operation point can be adjusted directly via the controller. Hence all the air flow/operating pressure combinations are possible, with the values in the table above as the maximum values.

Correction factors	7/12 °C	10/15 °C	12/18 °C
22 °C/45%	0,84	0,58	0,44
24 °C/45%	1	0,74	0,5
30 °C/35%	1,48	1,18	0,9

Correction factors to apply to the cooling capacity based on the outdoor temperature and the return air conditions.

QUICK SELECTION

50CJ W

Hot water coil

Sizes	W5	W8	W12	W16		W27		W39		W59	
Air flow rate (m³/h)	1 300	2000	2 500	3 000	4 000	5 000	6 000	7 000	8 000	10 000	12 000
Heating capacity (kW)	4,5	6,2	7,5	11,9	13,7	17,8	19,5	25,8	27,6	37,5	40,9
Water flow rate (m³/h)	0,21	0,27	0,33	0,5	0,6	0,8	0,9	1,1	1,2	1,65	1,8
Pressure drop (mWC) (Coil + valve)	1,3	2,6	4,3	2,1	2,8	1	1,2	1,7	1,9	2,8	3,3

Specifications: heating capacity, air 20 °C %, pure water 80 °C/60 °C
Correction factors to apply to the heating capacity for 90 °C/70 °C water temperature range: 1.23 and 45 °C/35 °C: 0.37.

Electric heater

Sizes		W5	W8	W12	W16	W27	W39	W59
Total electrical power (kW)		3		6	9	12	18	24
Electrical power (kW)	Stage 1	3			6	6	12	12
	Stage 2	-	-	3	3	6	6	12
Number of heaters	Stage 1	3 x 1 kW			3 x 2 kW	3 x 2 kW	3 x 4 kW	3 x 4 kW
	Stage 2	-		3 x 1 kW	3 x 1 kW	3 x 2 kW	3 x 2 kW	3 x 4 kW
Total current (A)		4,3		8,7	13	17,3	26	34,6

2 stage or TRIAC electric heater, depending on the option selected

50CJ X

Cooling coil

Sizes	X5	X8	X10	X12	X15	X19	X24	X31	X36	X38	X48
Air flow rate (m³/h)	1 300	2 000	2 500	3 000	4 000	5 000	6 000	7 000	8 000	10 000	12 000
Maximum operating pressure with G4 or F7 filtration* (Pa)	400	400	276	400	89	400	324	273	26	330	21
Total/sensible cooling capacity (kW)	7.2/6	8/7.65	10.6/9.7	11/10.9	15/14.7	19/18.6	23.2/22.4	30.1/27.9	35/32	38/37.4	47/45.4

* Maximum operating pressure dependent on air flow rate. Take away approximately 20 Pa if there is a hot water coil on 50CJ X
The operation point can be adjusted directly via the controller. Hence all the air flow/operating pressure combinations are possible, with the values in the table above as the maximum values.

Correction factors	30 °C	32 °C	35 °C	40 °C
24 °C/50%	1,02	1	0,98	0,93
26 °C/50%	1,06	1,04	1,02	0,98

Correction factors to apply to the cooling capacity based on the outdoor temperature and the return air conditions.

Hot water coil

Sizes	X5	X8	X10	X12	X15	X19	X24	X31	X36	X38	X48
Air flow rate (m³/h)	1 300	2 000	2 500	3 000	4 000	5 000	6 000	7 000	8 000	10 000	12 000
Heating capacity (kW)	4,5	6,2	7,5	11,9	13,7	17,8	19,5	25,8	27,6	37,5	40,9
Water flow rate (m³/h)	0,21	0,27	0,33	0,5	0,6	0,8	0,9	1,1	1,2	1,65	1,8
Pressure drop (mWC) (Coil + valve)	1,3	2,6	4,3	2,1	2,8	1	1,2	1,7	1,9	2,8	3,3

Specifications: heating capacity, air 20 °C, pure water 80 °C/60 °C
Correction factors to apply to the heating capacity for 90 °C/70 °C water temperature range: 1.23 and 45 °C/35 °C: 0.37.

Electric heater

Sizes		X5	X8	X10	X12	X15	X19	X24	X31	X36	X38	X48
Total electrical power (kW)		3		6	9		12		18		24	
Electrical power (kW)	Stage 1	3			6		6		12		12	
	Stage 2	-	-	3	3		6		6		12	
Number of heaters	Stage 1	3 x 1 kW			3 x 2 kW		3 x 2 kW		3 x 4 kW		3 x 4 kW	
	Stage 2	-		3 x 1 kW	3 x 1 kW		3 x 2 kW		3 x 2 kW		3 x 4 kW	
Total current (A)		4,3		8,7	13		17,3		26		34,6	

2 stage or TRIAC electric heater, depending on the option selected

INDOOR UNIT TECHNICAL DESCRIPTION

■ ***Casing***

Dual-wall construction.

RAL 7035 grey pre-lacquered panel, removable:

- 1 mm pre-lacquered exterior panels,
- Glass wool, thickness 25 mm, class M0,
- 0.8 mm galvanised interior panels.

■ ***Filtration***

- F2SI type filter cells, efficiency 90% as per ASHRAE gravimetric test (G 4).
- Optional F7 opacimetric filtration.
- Optional dual filtration (G4+F7)*.
- Filter cells tightly compressed against counter-frame by a gasket to ensure a completely leaktight seal.
- Fouling level monitored by an analogue pressure sensor.

* except for models W 5/8/12 and X 5/8/12.

■ ***Cooling coil cross-section***

- Copper tube coil, aluminium fins.
- Condensate drain pan.
- Model W with 2- or 4-way control valve fitted and connected. Optional thermally insulated flexible connections
- Model X with thermostatic expansion valve.

■ ***Ventilation section***

- Direct drive centrifugal fan, associated with an electronically commutated (EC motor).
- EC motor: fan adaptation via manual adjustment or "self-regulating" adjustment by the controller, depending on the room load - system air control.
- EC electric motor 1-Ph/230V/50-60Hz, 4-pole, class F.
- Air flow rate monitored by an analogue pressure sensor.

■ ***Electrics box***

Electrical power and control box consisting of:

- Power supply: 3-Ph/400V/50Hz+T+N.
- Emergency stop type disconnect switch.
- Three-phase 400 / 24 V transformer with protection.
- Protection and control of fan motor, and of humidifier and electric heater depending on options selected.
- Regulated by Carrier CCU Controller.
- Return air dry-bulb temperature control.
- Return humidity control:
- Supply humidity control (optional)
- Dehumidification humidity control (optional)
- Options available: water leak detection, fire thermostat and supply air low-limit monitoring.
- Remote control and fault summary contact.
- Condensate drain pump (optional).

■ ***Accessories***

- Support base for supply air via raised floor:
  - Bottom version 225 to 320 mm,
  - Top version 320 to 525 mm.
- Supply plenum.
- Acoustic plenum with sound trap.
- Motorised damper on intake section.
- Additional water leak sensor.
- Fire thermostat.
- Hydraulic connection kit (chilled water and hot water coils).
- LON gateway.
- Changeover thermostat (only for W).

Indoor unit options

■ ***Electric heater***

- Fan-controlled operation.
- 2-stage control (except 3 kW electric heater).
- 2-stage or TRIAC control.
- Two high-limit safety thermostats with automatic and manual reset.

■ ***Hot water coil***

- 1-row coil made of copper tubes with aluminium fins.
- 2- or 4-way control valve fitted and connected.
- Optional flexible connections.

■ ***Humidifier***

Immersed electrode humidifier with humidifier information available directly on the Carrier CCU Controller:

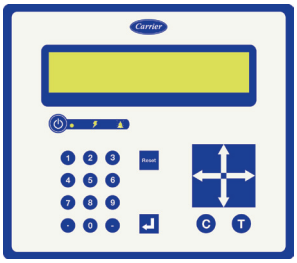
- Stainless steel large surface area electrodes,
- 3 kg steam per hour, nominal flow rate < 3000 m^3/h,
- 8 kg steam per hour, nominal flow rate > 3000 m^3/h,
- Steam cylinder in a single easy to remove component,
- Filling solenoid valves,
- Drain pump,
- Electronics board for operation management,
- Diffusion jet,
- Water supply connection kit.

Operates on municipal water supply only (water conductivity 350 to 1250 µS and hardness 15 to 30°F). Do not use deionised or softened water.

Indoor unit regulation

■ ***Unit control and monitoring***

Carrier CCU Controller



- 160-character display showing the operating instructions, operating states, faults and solutions. Configurable controller.
- Two fault levels.
- Monitoring of operating times.
- RS 485 output with Jbus/ModBus protocol.
- Can manage rotations, backups and top-ups between units.
- Optional LON gateway.
- Optional changeover thermostat (only on W).

DESCRIPTION OF THE OUTDOOR UNIT (MODEL X)

- ***Scroll Compressor***
  - Crankcase resistance on models 50-65-75
  - Air-cooled condenser, copper tube coil, aluminium fins
  - Propeller fan(s) (1 or 2 depending on models) with EC motor
  - All-season operation
  - Condensation pressure control by fan variable speed control (pressure sensor)
  - Refrigerant connections (FLARE connections)
  - External operating temperature limits: -15°C to +45°C
  - Casing in recyclable synthetic "ABS" material and UV stabilised, light and very solid. It exclusive and valuable design, makes it easier to integrate into the visual space.
- ***Optional equipment***
  - Anti-vibration mount kit
  - Wall support kit (models 28-35)
  - Crankcase resistance on models 28-35
  - Thermostatic expansion valve kit
  - Blygold pump kit

TECHNICAL AND ELECTRICAL CHARACTERISTICS

Indoor unit

			W5	W8	W12	W16	W27	W39	W59
			X5	X8	X10	X12/15	X19/24	X31/36	X38/48
Fan motor	Voltage	V	230 V						
	Power	kW	1,036			1,029	2,072	2,058	3,087
	Current	A	4,51			4,38	9,02	8,76	13,14
Control circuit (transformer)	Voltage	V	24 V						
	Current	A	1						
Humidifier (option)	Voltage	V	400						
	Power	kW	2,25			6			
	Current	A	3,2			8,7			
Electric heater (option)	Voltage	V	400						
	Power	kW	3		6	9	12	18	24
	Current	A	4,3		8,7	13	17,3	26	34,6
Total current without option	Current	A	5,51			5,38	10,02	9,76	14,14
	Rating of main switch	A	16						
Total current with humidifier	Current	A	8,71			14,08	18,72	18,46	22,84
	Rating of main switch	A	16				25		
Total current with electric heater	Current	A	9,81		14,21	18,38	27,32	35,76	48,74
	Rating of main switch	A	16			25	40		63
Total current all options	Current	A	13,01		17,41	27,08	36,02	44,46	57,44
	Rating of main switch	A	16		25	40		63	

Outdoor unit (model X)

Sizes			28	35	50	65	75
Compressor	Quantity		1				
	Type		SCROLL				
	Oil capacity	l	1,25			1,7	
	Oil type		POE				
	Voltage		400 V - 3 Ph - 50 Hz				
	Maximum current	A	6,9	7,6	10,3	11,2	14,3
Refrigerant			R410A				
Refrigerant weight		kg	1,6		2,65	2,75	3
Power and current		W/A	45 W/0.2 A Option(1)		45 W/0.2 A		
Crankcase heater							
Coil type			Grooved copper tubes - aluminium fins				
Fan	Quantity		1		2		
	Type		Propeller				
	Nominal flow rate	m³/h	2350	2770	4700	5540	5000
	Speed	Rpm	700	904	700	904	
	Maximum current	A	0,46	0,97	0,92	1,94	1,94
Rated voltage of unit		V	400 V - 3 Ph+N - 50 Hz				
Total current		A	7,5	8,3	11,3	12,6	15,7
Start-up current		A	36	49	65,5	75,5	102,5
Electrical cables not supplied*		mm²	5G1.5	5G2.5	5G4		5G6
Recommended cables for the proximity switch		Am	10		16		20
Refrigerant connections	ø liquid line	inches	3/8”				1/2”
	ø intake line	inches	5/8”	3/4”		7/8”	

* Cable with 2 or 3 charged conductors in a raceway or duct, exposed mounting, for temperatures below 60°C and a maximum length of 30 m.

Note: for different conditions, refer to the current standard in the country of installation (example for France: NFC 15-100)

SOUND PRESSURE LEVEL

Indoor unit

Sizes	Chilled water model	5	8	12	16		27		39		59	
	Direct expansion model	5	8	10	12	15	19	24	31	36	38	48
Air flow rate (m³/h)		1 300	2 000	2 500	3 000	4 000	5 000	6 000	7 000	8 000	10 000	12 000
Sound pressure level (dBA)		49	53	58	57	61	59	63	60	63	60	64

Sound pressure level of indoor unit at 2 m unrestricted space, air supply connected, +/-3dB.

Outdoor unit (model X)

Sizes	5	8	10	12	15	19	24	31	36	38	48
Models	28	28	35	35	50	65	75	2x50	2x65	2x65	2X75
Sound pressure level (dBA)	39	39	45	45	43	47	47	46	50	50	50

Sound pressure level of outdoor unit, at 5 m, 1.5 m from floor, in a free field, directivity 2 and +/-3 dB.

COIL WEIGHT AND CONNECTION

Unit weight

Indoor unit

Chilled water model sizes	W5	W8	W12	W16		W27		W39		W59	
Direct expansion model sizes	X5	X8	X10	X12	X15	X19	X24	X31	X36	X38	X48
Weight of indoor unit (kg)	115	120	125	280		310		375		480	

Indoor unit

Direct expansion units	X5	X8	X10	X12	X15	X19	X24	X31	X36	X38	X48
Outdoor units no./type	1x28	1x28	1x35	1x35	1x50	1x65	1x75	2x50	2x65	2x65	2x75
Unit weight of exterior unit (kg)	64	69	69	69	101	112	118	101	112	112	118

Coil connections

Indoor unit

Cold water coil

Sizes	W5	W8	W12	W16	W27	W39	W59
Inlet/outlet connections	G 1/2" M	G 3/4" M	G 3/4" M	G 3/4" M	G 1" M	G 1" M	G 1"1/4 M
Condensate drainage*	Diam 32						

Direct expansion coil

Sizes	X5	X8	X10	X12	X15	X19	X24	X31	X36	X38	X48
Intake pipe	G 5/8"M	G 5/8"M	G 3/4"M	G 7/8"M	G 7/8"M	G1"1/8 M	G1"1/8 M	G 2 X 7/8" M	G 2 X 7/8" M	G 2 X 1"1/8 M	G 2 X 1"1/8 M
Liquid pipes	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	2 x 1/2"	2 x 1/2"	2 x 1/2"	2 x 1/2"
Condensate drainage*	Ø 32 mm										

Hot water coil

Chilled water model sizes	W5	W8	W12	W16		W27		W39		W59	
Direct expansion model sizes	X5	X8	X10	X12	X15	X19	X24	X31	X36	X38	X48
Inlet/outlet connections	G 1/2" M	G 1/2" M	G 1/2" M	G 1/2" M		G 3/4" M		G 3/4" M		G 3/4" M	

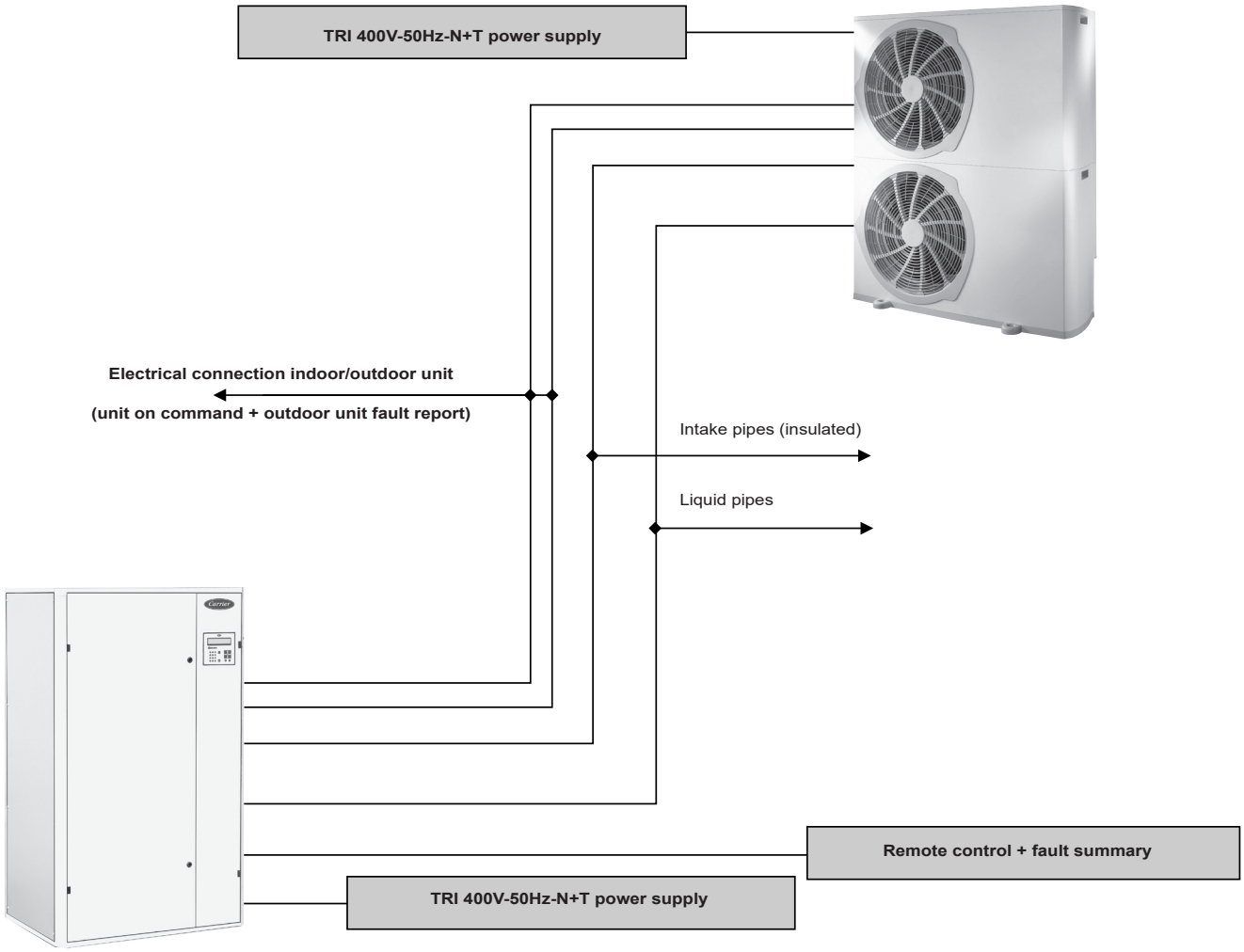
Outdoor unit

Direct expansion model sizes	X5	X8	X10	X12	X15	X19	X24	X31	X36	X38	X48
Outdoor units no./type	1x28	1x28	1x35	1x35	1x50	1x65	1x75	2x50	2x65	2x65	2x75
Intake pipe	5/8"	5/8"	3/4"	3/4"	3/4"	7/8"	7/8"	2 x 3/4"	2 x 7/8"	2 x 7/8"	2 x 7/8"
Liquid pipes	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	2 x 3/8"	2 x 3/8"	2 x 3/8"	2 x 1/2"
Condensate drainage*	Diam 32										

Chilled water coil connections: inlet on threaded coupling and outlet on threaded control valve.
Condensate drain connection on smooth coupling.

* Drain connections if optional pump is fitted: Ø 6

PRINCIPLE FOR INSTALLATION



Note:

- For all electrical connections, refer to the wiring diagram sent with the indoor and outdoor unit.
- Electrical connection not supplied by CARRIER
- Refrigerant pipe not supplied by CARRIER

Caution: 50CJ (X 31, X 36, X 38, X 48) models have 2 outdoor units.

TABLE OF THE MAXIMUM LENGTHS FOR REFRIGERANT CONNECTIONS

The tables below show the permitted lengths for the pipers and the corresponding maximum height difference.

The values in the tables show the reduction in cooling capacity as compared to the nominal capacity as a percentage.

X 5 + outdoor unit 28 / 3/8" liquid line, 5/8" gas line

Total length (m) Height difference (m)	6	20	30
0	0	-6	-9
5	0	-6	-9
10	-	-6	-

X 8 + outdoor unit 28 / 3/8" liquid line, 5/8" gas line

Total length (m) Height difference (m)	6	20	30	40	50
0	0	-3	-5	-7	-9
10	-	-3	-5	-7	-9
20	-	-3	-5	-7	-9
30	-	-	-5	-7	-9

X 10 + outdoor unit 35 / 3/8" liquid line, 3/4" gas line

Total length (m) Height difference (m)	6	20	30	40	50
0	0	-2	-4	-6	-8
10	-	-2	-4	-6	-8
20	-	-2	-4	-6	-8
30	-	-	-4	-6	-8

X 12 + outdoor unit 35 / 3/8" liquid line, 3/4" gas line

Total length (m) Height difference (m)	6	20	30	40	50
0	0	-2	-4	-6	-8
10	-	-2	-4	-6	-8
20	-	-2	-4	-6	-8
30	-	-	-4	-6	-8

X 15 + outdoor unit 50 / 3/8" liquid line, 3/4" gas line

Total length (m) Height difference (m)	6	20	30	40	50
0	0	-2	-4	-6	-8
10	-	-2	-4	-6	-8
20	-	-2	-4	-6	-8
30	-	-	-4	-6	-8

X 19 + outdoor unit 65 / 3/8" liquid line, 7/8" gas line

Total length (m) Height difference (m)	6	20	30	40	50
0	0	-4	-5	-6	-7
10	0	-4	-5	-6	-7
20	-	-4	-5	-6	-
30	-	-4	-5	-	-

X 24 + outdoor unit 75 / 1/2" liquid line, 7/8" gas line

Total length (m) Height difference (m)	6	20	30	40	50
0	0	-2	-3	-4	-5
10	-	-2	-3	-4	-5
20	-	-2	-3	-4	-5
30	-	-	-3	-4	-5

X 31 + 2 x outdoor unit 50 / liquid line 2 x 3/8", gas line 2 x 3/4"

Total length (m) Height difference (m)	6	20	30	40	50
0	0	-5	-7	-8	-9
10	-	-5	-7	-8	-9
20	-	-5	-7	-8	-9
25	-	-	-7	-8	-

X 36 + 2 x outdoor unit 65 / liquid line 2 x 3/8», gas line 2 x 7/8»

Total length (m) Height difference (m)	6	20	30	40	50
0	0	-4	-5	-6	-7
10	-	-4	-5	-6	-7
20	-	-4	-5	-	-

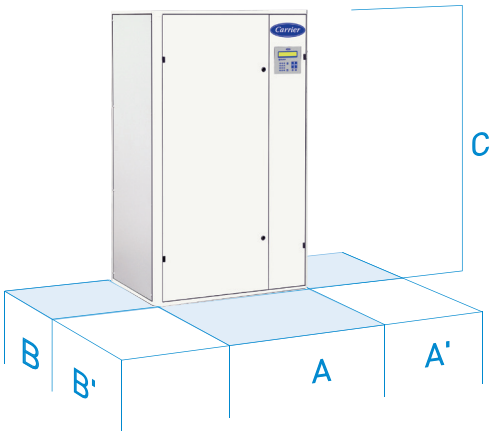
X 38 + 2 x outdoor unit 65 / liquid line 2 x 3/8", gas line 2 x 7/8"

Total length (m) Height difference (m)	6	20	30	40	50
0	0	-4	-5	-6	-7
10	-	-4	-5	-6	-7
20	-	-4	-5	-	-

X 48 + 2 x outdoor unit 75 / liquid line 2 x 1/2», gas line 2 x 7/8»

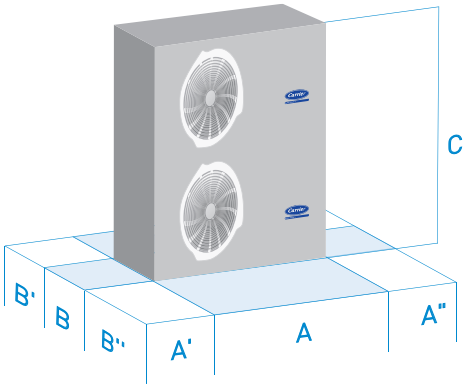
Total length (m) Height difference (m)	6	20	30	40	50
0	0	-5	-7	-8	-9
10	-	-5	-7	-8	-9
20	-	-5	-7	-8	-9
30	-	-	-7	-8	-

DIMENSIONS AND OPERATING AREA



Indoor unit

Units	Dimensions (mm)				
	A	A'	B	B'	C
W5 or X5	675	500	500	700	1700
W8 or X8	675	500	500	700	1700
W12 or X10	675	500	500	700	1700
W16 or X12/15	850	500	780	700	1900
W27 or X19/24	1150	500	780	700	1900
W39 or X31/36	1490	500	780	700	1900
W59 or X38/48	1990	500	780	700	1900



outdoor unit

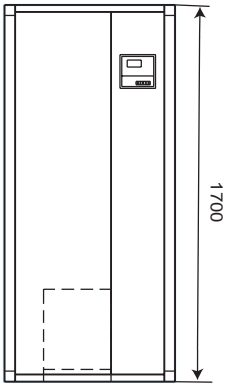
Models	Dimensions (mm)						
	A	A'	A"	B	B'	B"	C
28	1035	150	1000	450	150	1500	732
35	1035	150	1000	450	150	1500	732
50	1035	150	1000	450	150	1500	1332
65	1035	150	1000	450	150	1500	1332
75	1035	150	1000	450	150	1500	1332

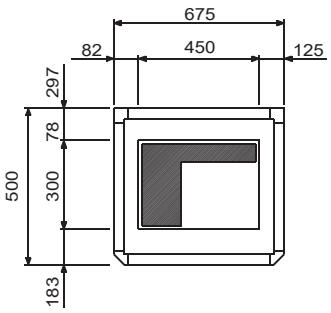
DIMENSION DETAILS

Indoor unit

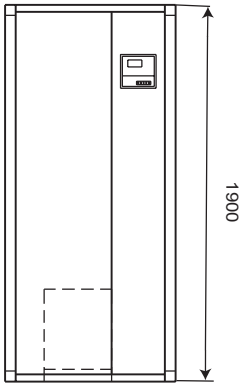
Fitting UNDER 1

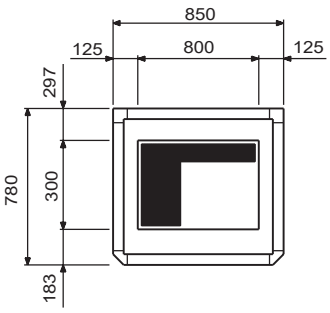
W5/8/12
X 5/8/10



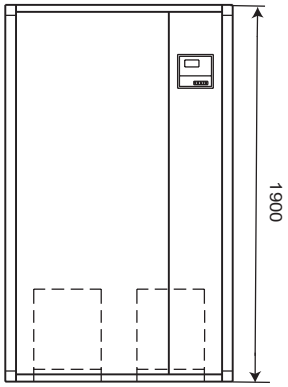


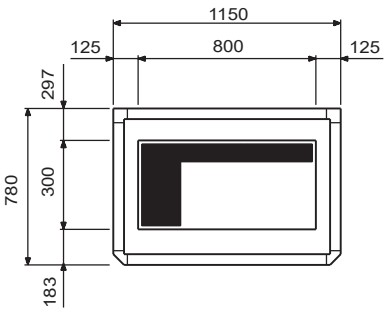
W16
X 12/15



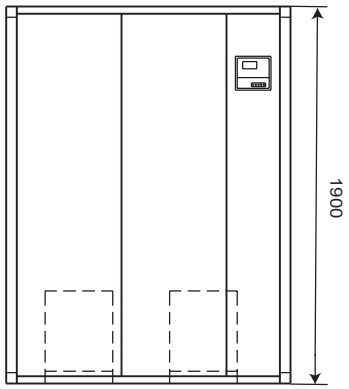


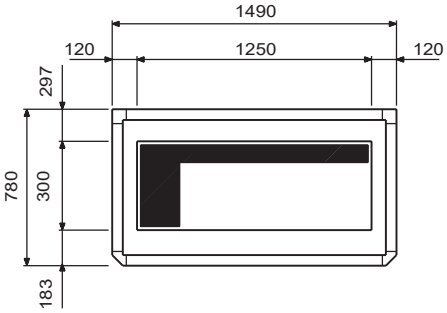
W27
X 19/24



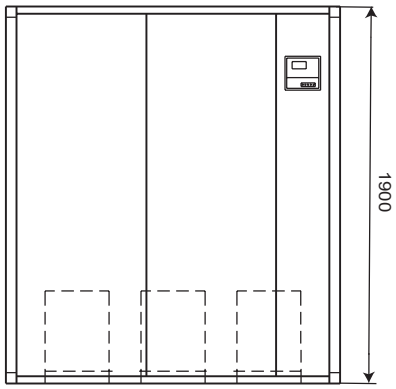


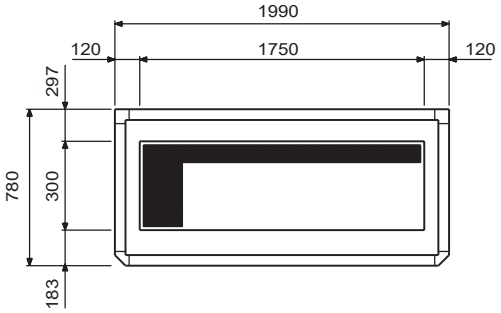
W39
X 31/36





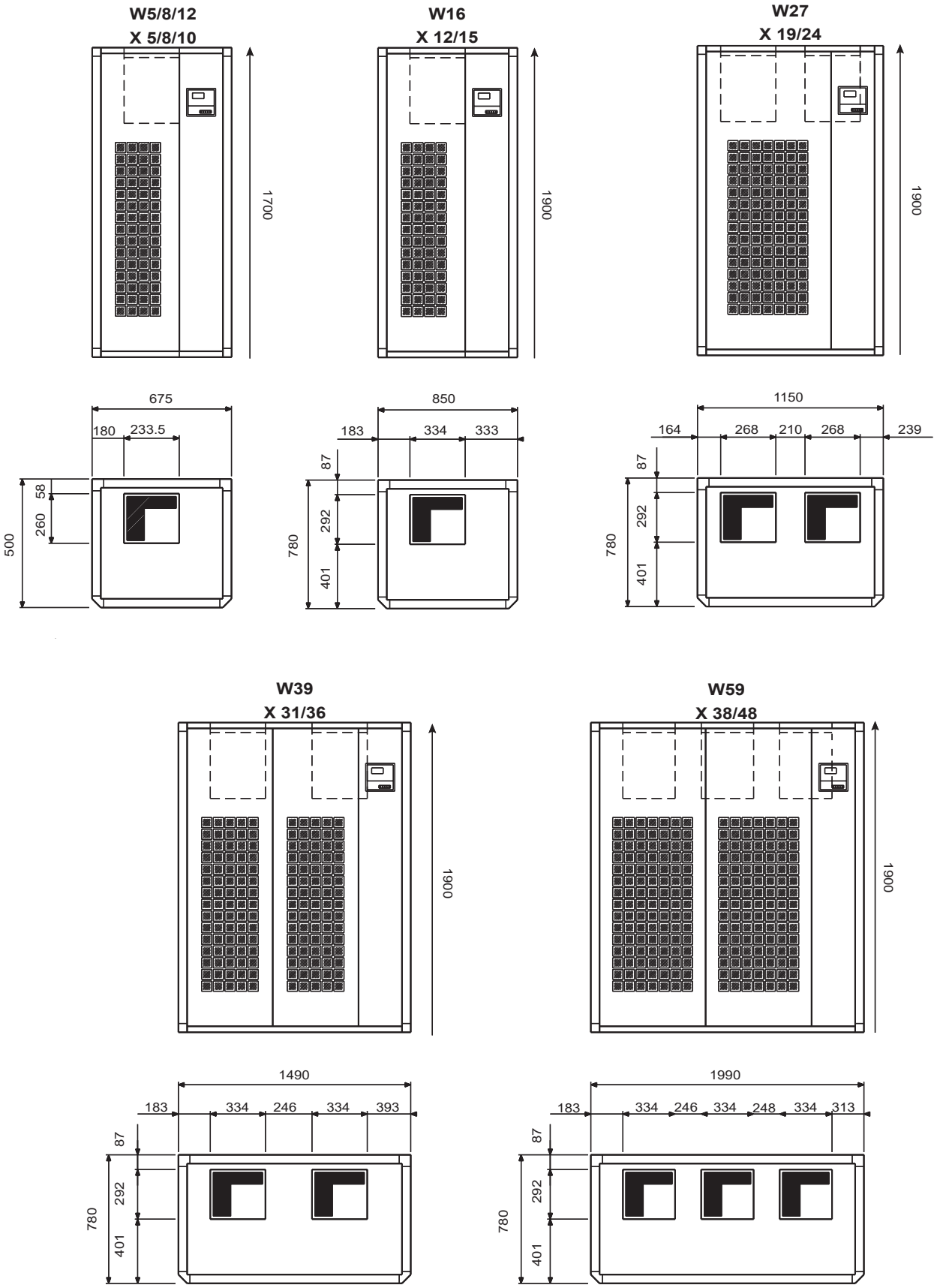
W59
X 38/48





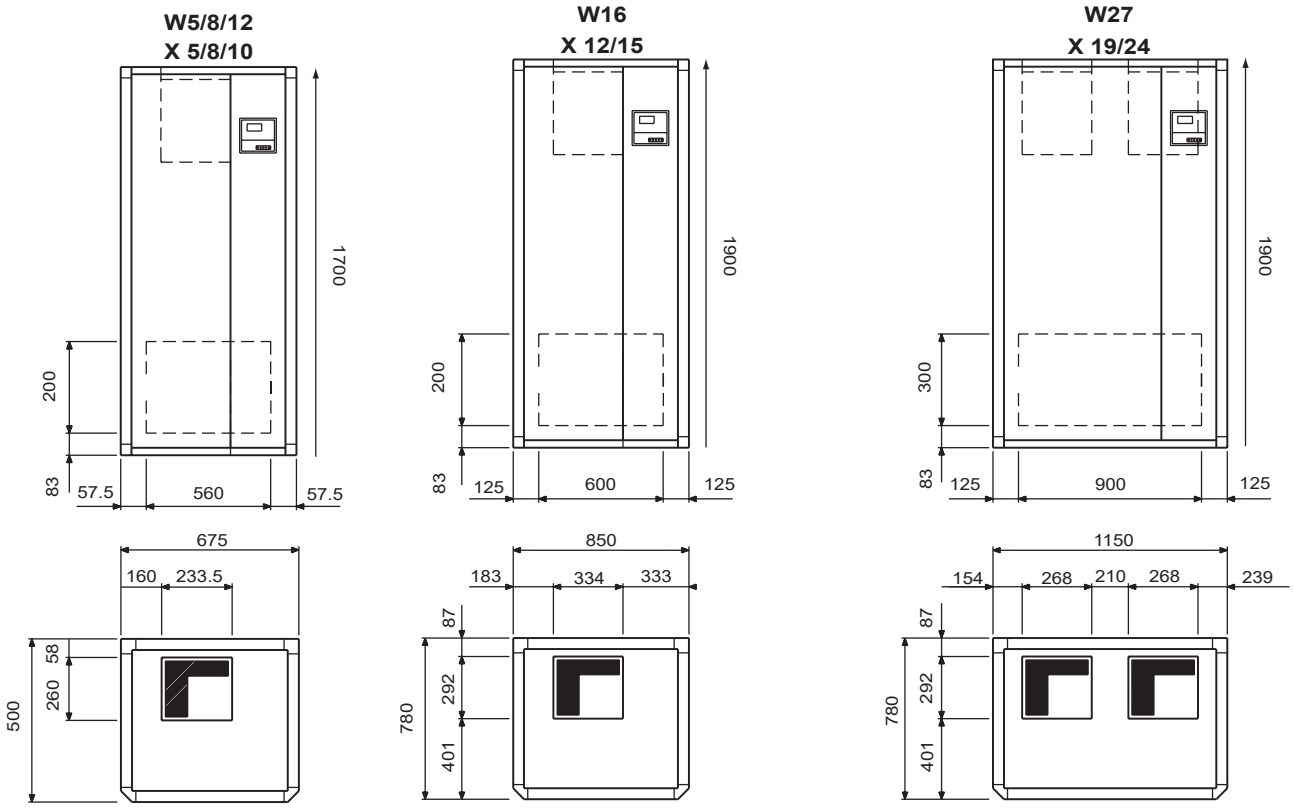
DETAILED DIMENSIONS

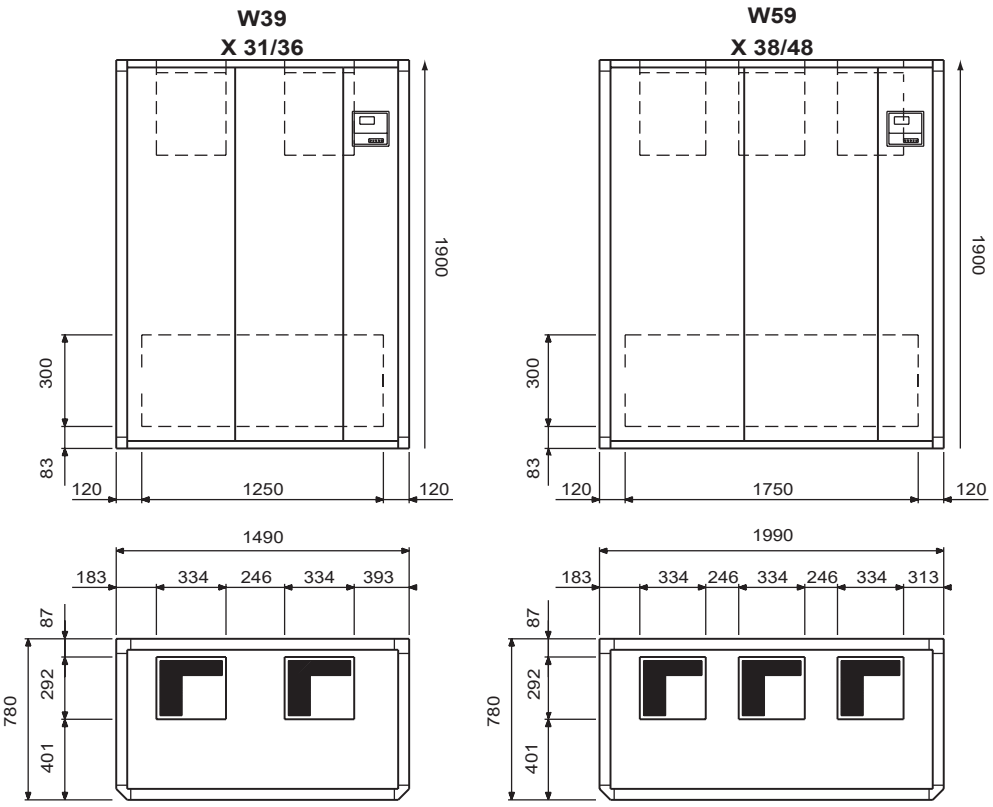
Fitting OVER 3



DETAILED DIMENSIONS

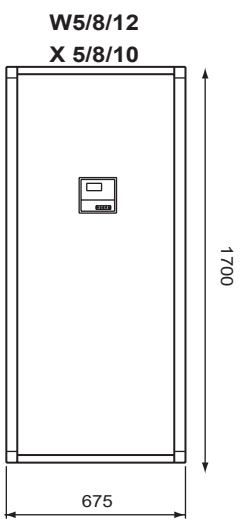
Fitting OVER 4

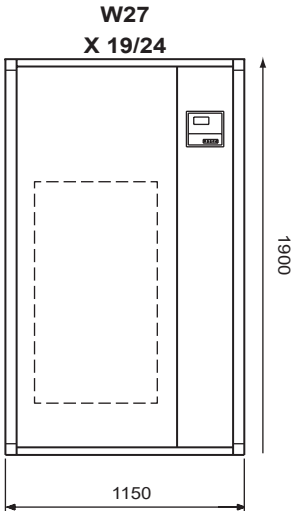


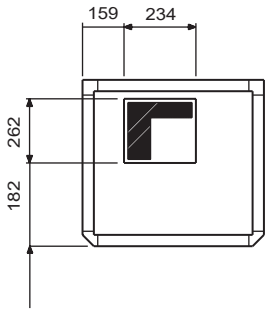


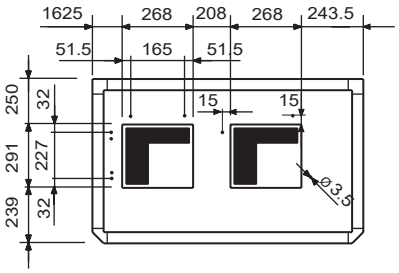
DETAILED DIMENSIONS

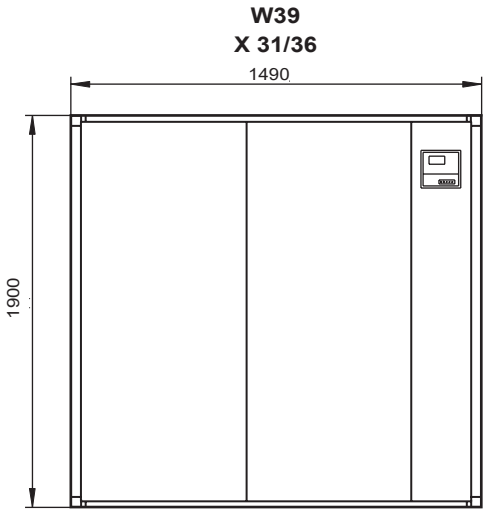
Fitting OVER 5

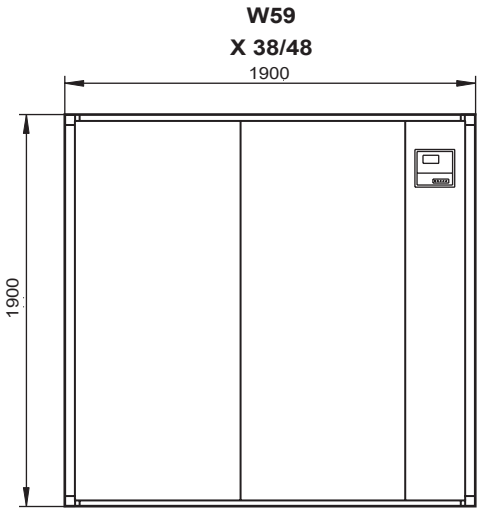


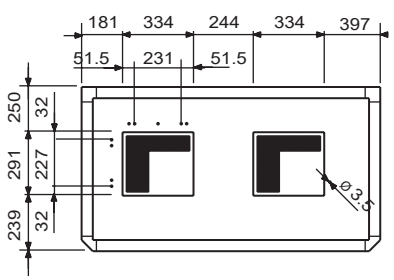


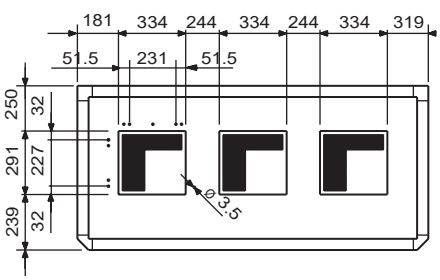








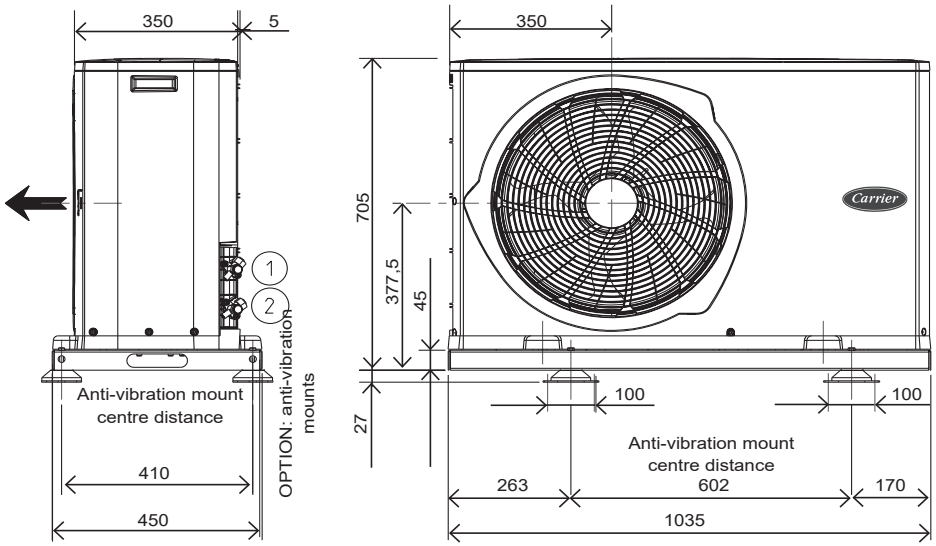




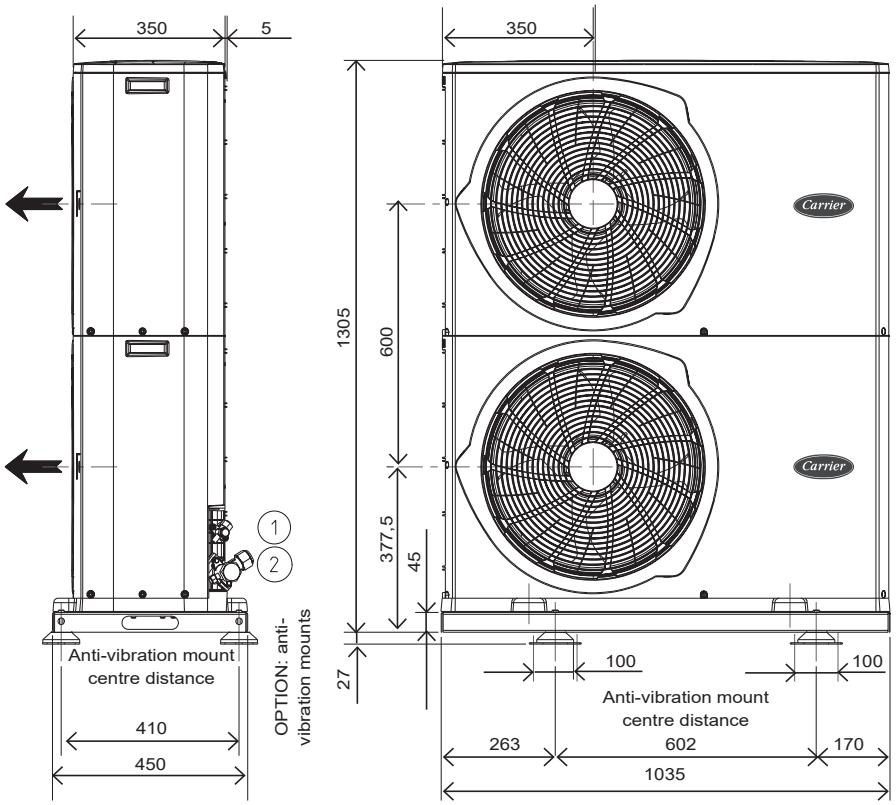
DETAILED DIMENSIONS

Outdoor unit

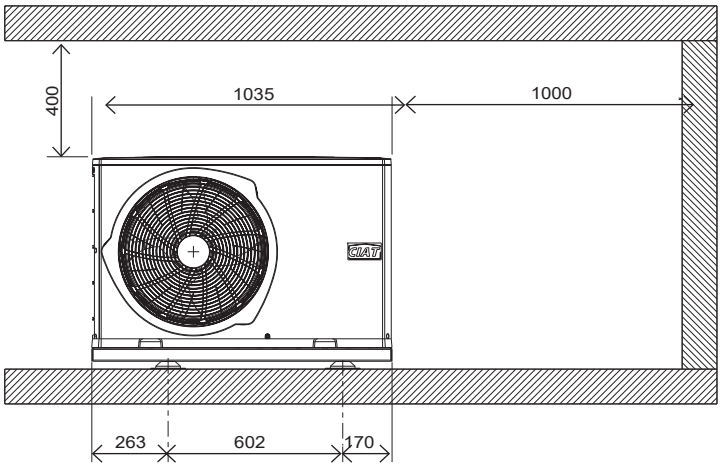
Models 28 and 35

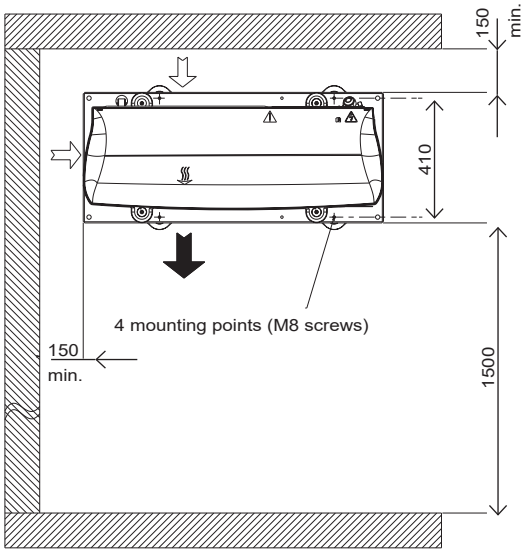


Models 50, 65 and 75

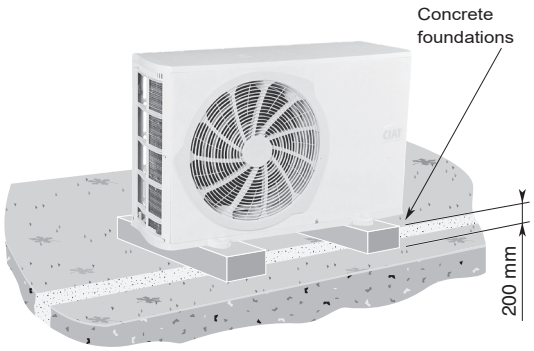


OUTDOOR UNIT INSTALLATION (IN MM)

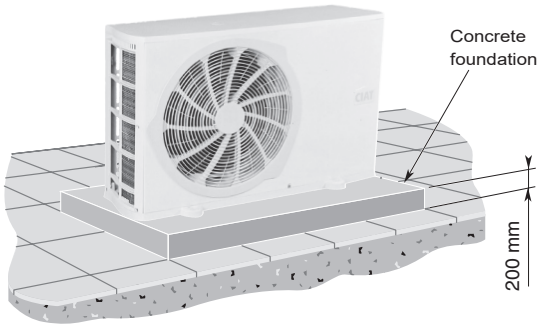


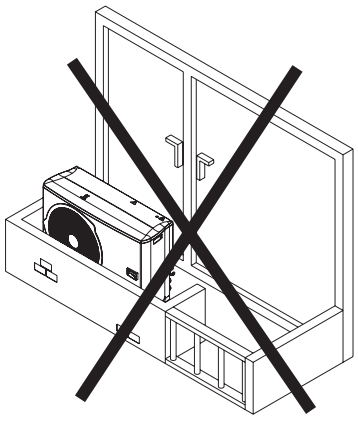


Installation on soft ground



Installation on concrete ground

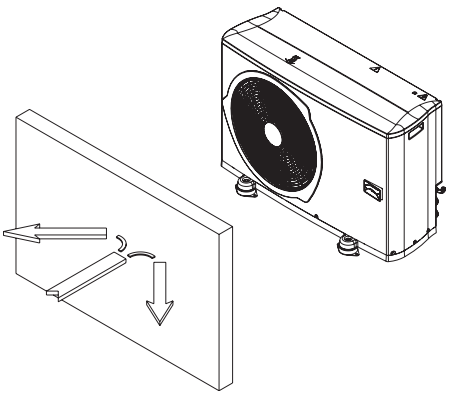




Nothing should obstruct the free flow of air over the air-cooled exchanger.

Adhere to the minimum distances shown above.

Protect from prevailing winds.



The outdoor unit must be installed outdoors, either on a patio or in a garden. It has been designed to operate in all weathers, including adverse conditions, but can also be placed under a shelter open on all four sides.

The unit should ideally be positioned facing north or in the shade, to keep the condenser coil out of bright sunlight.

Do not place objects over the fan's return and supply air. There should be nothing obstructing the coil's air intake.

OPERATING LIMITS

Chilled water (W)

Water circuit	Maximum pressure: PN16	Minimum water inlet temperature: 5 °C (Consult us for other values)
		Maximum water inlet temperature: 80 °C (Consult us for other values)
Indoor temperature		Minimum air inlet temperature: 12 °C, and according to return humidity
		Maximum air inlet temperature: 45 °C, and according to return humidity (Weight in water, condensed < 0.8 g of water/kg of dry air)
Power supply		3PH/400V+E+N

Direct expansion (X)

Indoor temperature		Minimum air inlet temperature: 18 °C, and according to return humidity
		Maximum air outlet temperature: 28 °C, and according to return humidity (Weight in water, condensed < 0.8 g of water/kg of dry air)
Outdoor temperature		Minimum air inlet temperature: -15 °C
		Maximum air inlet temperature: 45 °C
Power supply	Indoor unit	3PH/400V+E+N
	Outdoor unit(s)	

Quality and Environment Management Systems Approval

Order No.: 10035, 12.2017 - Supersedes order No.: 10035, 03.2016

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