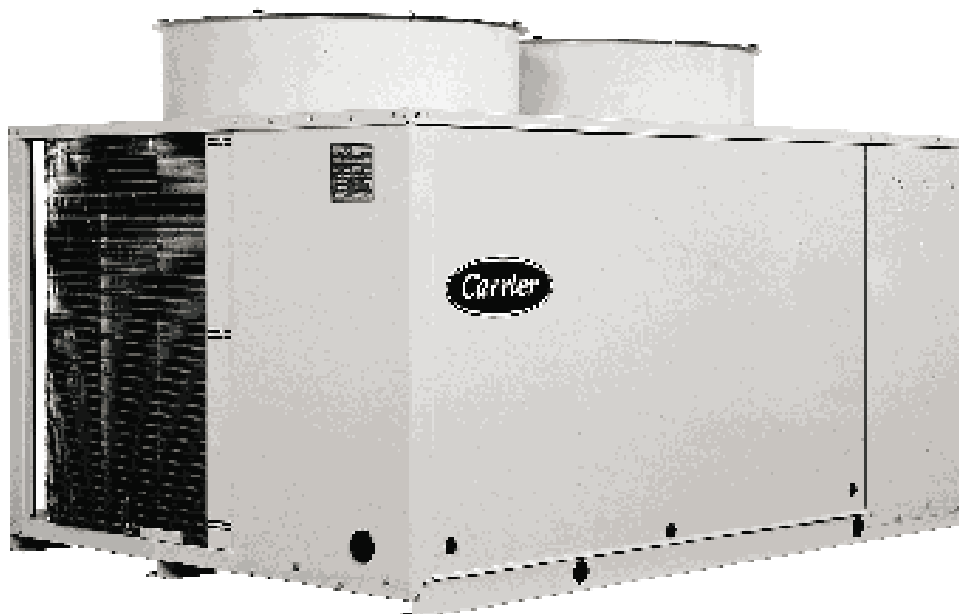




30GH/GZ 009-035

Air-Cooled Liquid Chillers

50 Hz



Installation, Operation and Maintenance Instructions

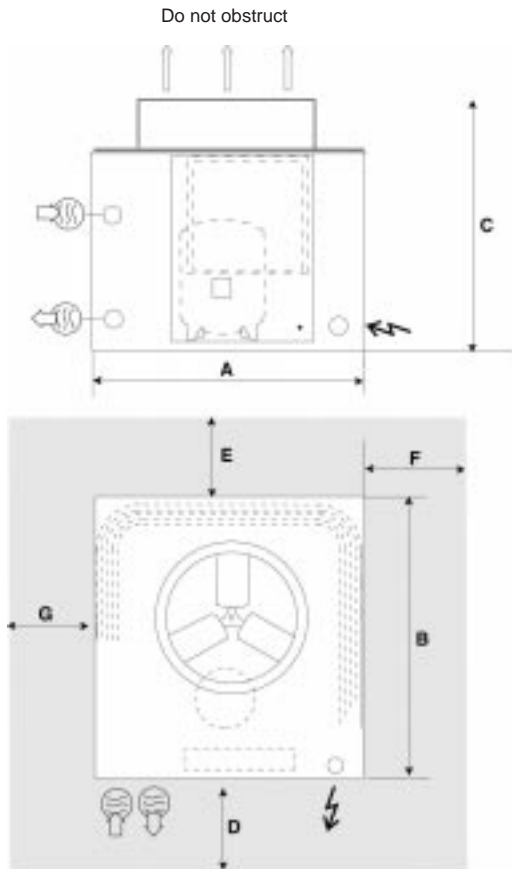


Dimensions and clearances (standard unit)

30GH/GZ	A	B	C	D	E	F	G
009-013	1160	1220	1060	1200	1000	1000	1000
015-025	1720	1160	1112	1200	1000	1000	1000
030-035	2060	1370	1231	1200	1000	1000	1200

All dimensions are given in mm.

30GH and 30GZ 009-013



Legend:

Required service clearance

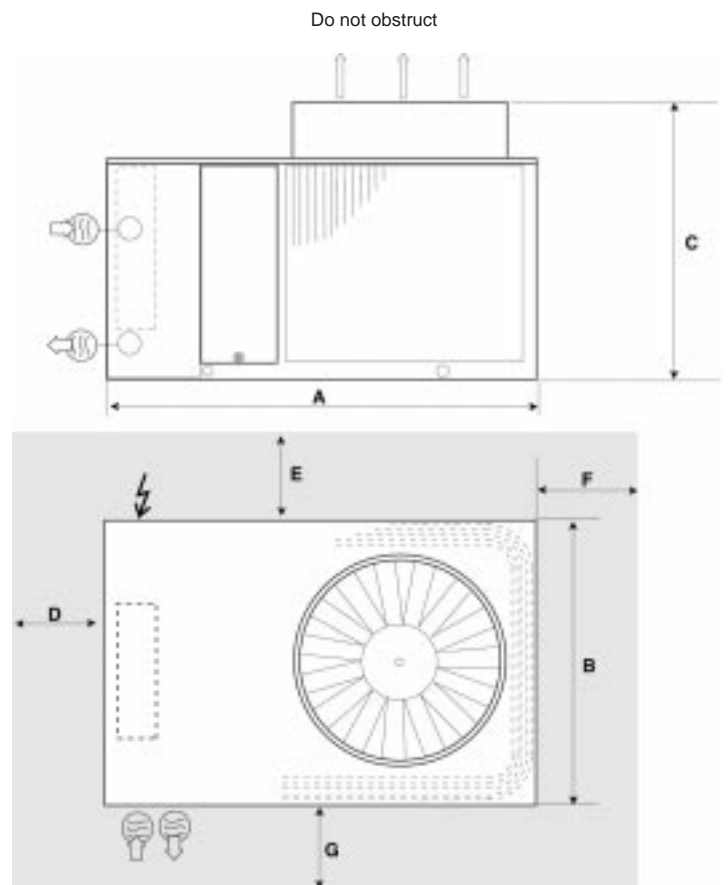
Power supply

Water inlet

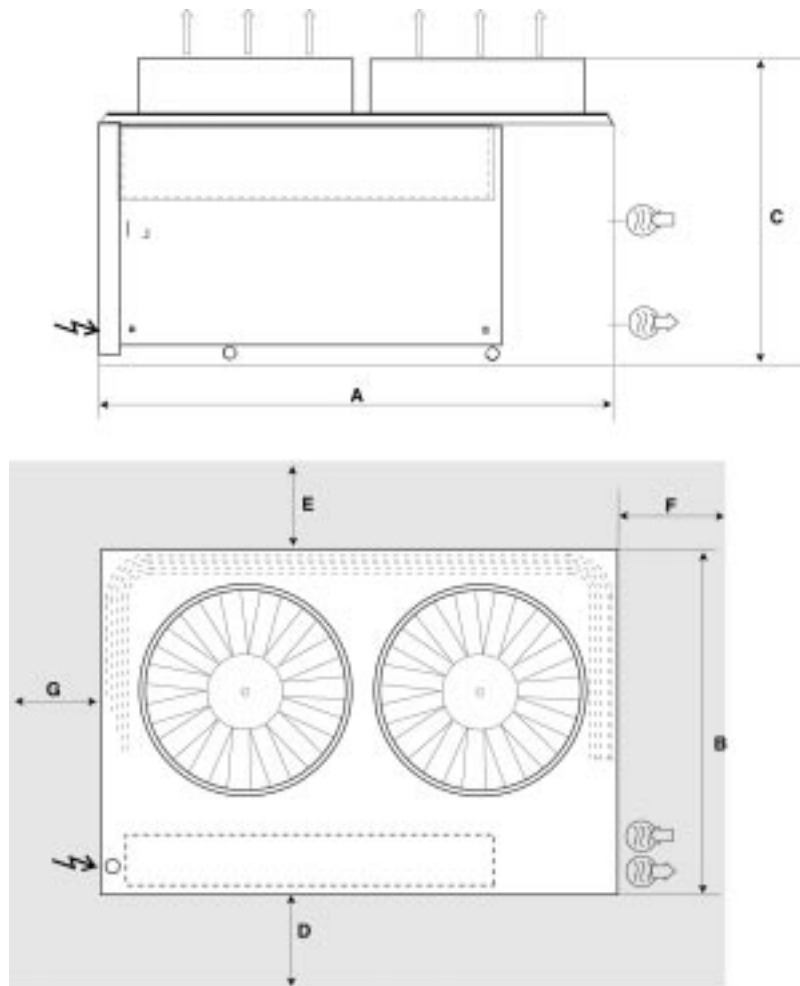
Water outlet

Note:
Certified drawings are available on request.

30GH and 30GZ 015-025



Do not obstruct



Floor mounting

- For unit mounting holes, weight distribution and centre of gravity coordinates, refer to the dimensional drawings.
- These units are designed for outdoor installation.

CAUTION:

- Ensure the air flow around the unit is not obstructed.
- If several units are installed, next to each other, ensure that the space in between the units is the same as the unit depth.
- There must not be any roof or cover above the unit.

Dimensions and clearances (unit with optional Hydroflow kit)

CAUTION: ONLY PRO-DIALOG UNITS CAN BE EQUIPPED WITH THE OPTIONAL HYDROFLOW KIT.

30GH/GZ	A	B	C	D	E	F	G
009-013	1160	1310	1781	1200	1000	1000	1000
015-025	1720	1246	1833	1200	1000	1000	1000
030-035	2150	1370	2052	1200	1000	1000	1200

All dimensions are given in mm.

Legend:

Required service clearance

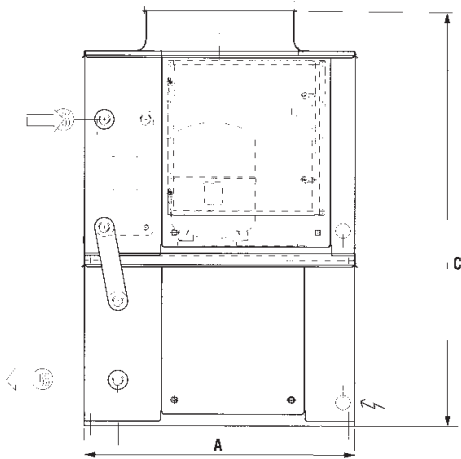
Power supply

Water inlet

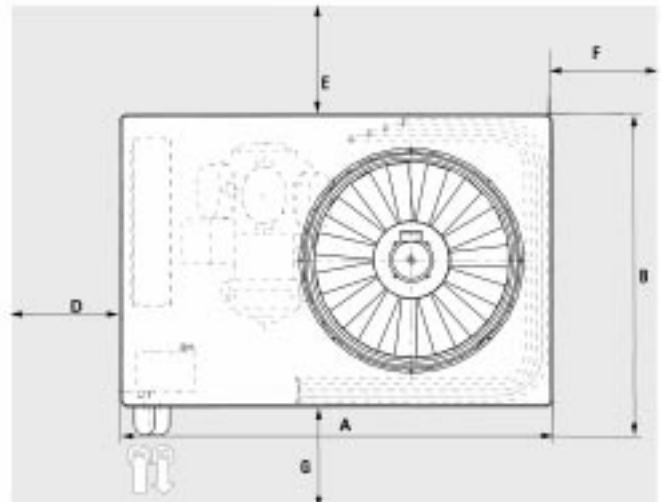
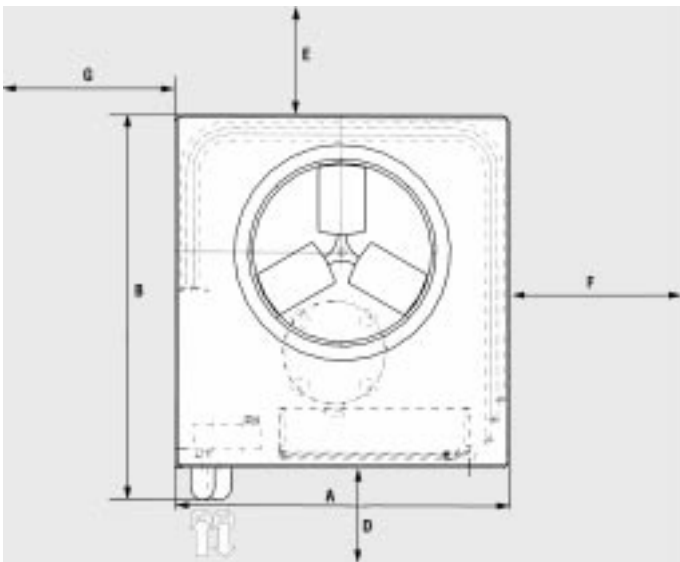
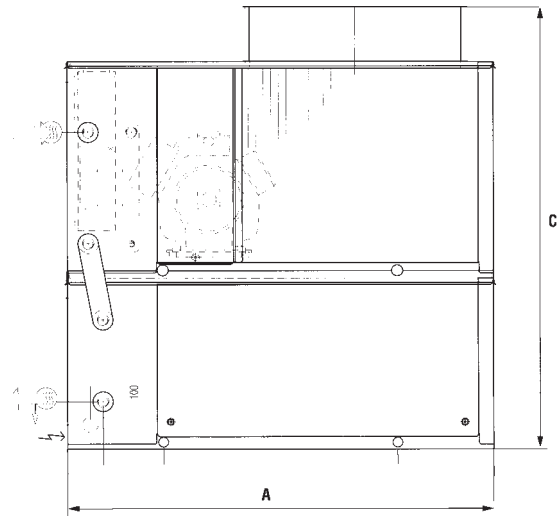
Water outlet

Note:
Certified drawings are available on request.

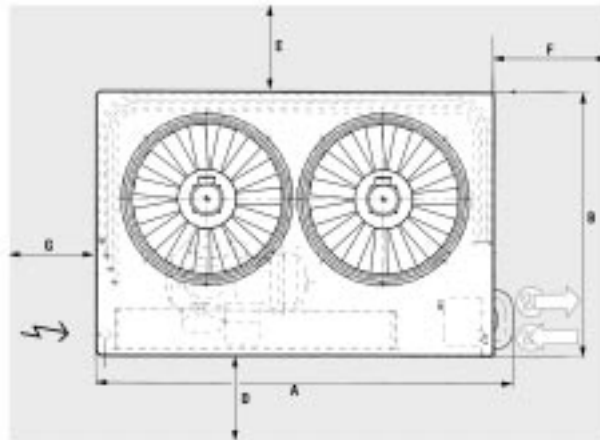
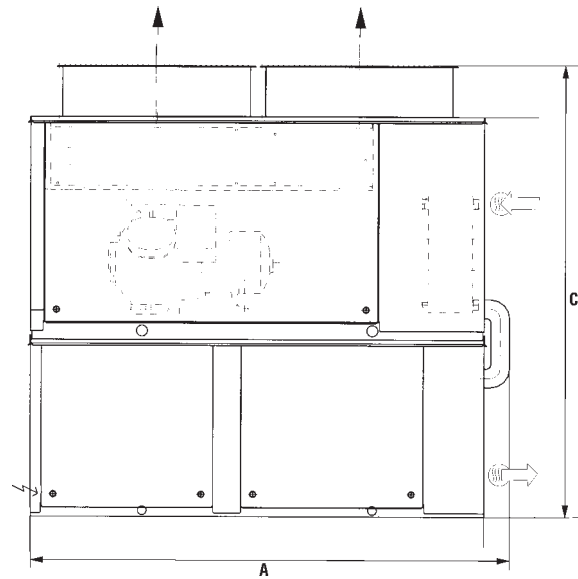
30GH and 30GZ 009-013



30GH and 30GZ 015-025



30GH and 30GZ 030-035



Floor mounting

- For unit mounting holes, weight distribution and centre of gravity coordinates, refer to the dimensional drawings.
- These units are designed for outdoor installation.

CAUTION:

- Ensure the air flow around the unit is not obstructed.
- If several units are installed, next to each other, ensure that the space in between the units is the same as the unit depth.
- There must not be any roof or cover above the unit.

Physical data

Size		009	013	015	020	025	030	035
Net nominal cooling capacity 30GH*	kW	21.2	31.6	40.1	52.0	64.0	74.0	93.0
Net nominal cooling capacity 30GZ*	kW	21.0	32.0	41.0	53.0	65.0	75.0	94.0
Operating weight	kg	265	283	400	460	510	682	725
Refrigerant charge (R-22 - 30GH)	kg	6.5	8.0	9.2	11.9	13.3	15.7	16.5
Refrigerant charge (R-407C - 30GZ)	kg	7.5	9.0	10.5	13.5	15.0	15.7	18.6
Compressor		1 ... hermetic, 48.3 r/s		1 ... semi-hermetic, 4 or 6 cylinders, 24.2 r/s				
Control type		PRO-DIALOG or electromechanical						
Capacity control steps		1	1	2	2	2	2	2
Minimum capacity step	%	100	100	66	50	66	66	66
Evaporator		Direct-expansion, plate heat exchanger						
Water volume	l	1.9	2.8	3.8	4.7	5.6	6.6	7.5
No. of refrigerant circuits		1	1	1	1	1	1	1
Water connections	in	Gas thread						
Inlet/outlet		1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
Max. water side operating pressure	kPa	1000	1000	1000	1000	1000	1000	1000
Condenser		Copper tube, aluminium fins			Low-noise shrouded axial Flying Bird fan			
Fans		Propeller		Propeller				
Quantity		1	1	1	1	1	2	2
Total air flow	l/s	2640	2640	4700	4700	4700	9400	9400
Fan speed**	r/s	15.8/12.5	15.8/12.5	12.5	12.5	12.5	12.5	12.5
OPTIONAL HYDROFLOW KIT								
Nominal water flow rate	l/s	1	1.5	3.0	2.5	3.1	3.6	4.5
Available pressure	kPa	70	36	72	62	45	60	59
Unit operating weight	kg	297	616	854	915	966	1369	1413
Buffer tank capacity	l	100	100	150	150	150	300	300
Expansion tank capacity	l	8	18	18	18	18	24	24
Water volume	l	112	113	174	175	176	337	338
Water connections								
Inlet	in	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
Outlet	in	1-1/4	1-1/4	1-1/2	1-1/2	1-1/2	2-1/2	2-1/2

* Net cooling capacity = gross cooling capacity minus the water pump heat against the internal evaporator pressure drop.
Evaporator entering/leaving water temperature 12°C and 7°C. Condenser entering air temperature 35°C.

** The first figure is for the standard fan, the second figure is for the optional low speed fan.

Electrical data

Size		009	013	015	020	025	030	035
Power supply								
Nominal power supply	V-ph-Hz	400-3-50						
Voltage range	V	360-440						
Auxiliary circuit								
Auxiliary circuit power input (heaters)	W	70	70	110	250	250	250	250
Fan power input	kW	0.80	0.80	1.15	1.15	1.15	2.30	2.30
Fan power supply	V-ph-Hz	400-3-50						
Nominal unit power input*	kW	8.4	13.7	13.6	18.2	24.2	26.9	37.8
Maximum unit power input**	kW	10.0	16.8	16.4	22.0	29.0	32.3	46.2
Maximum unit starting current	A	83.2	136.7	87.0	107.0	134.0	158.0	213.0
Nominal unit current drawn*	A	13.2	22.5	21.1	29.0	39.3	42.1	60.7
Maximum unit current drawn**	A	24.7	38.7	34.0	38.9	51.0	60.0	83.0
UNIT WITH OPTIONAL HYDRAULIC KIT								
Nominal unit power input*	kW	8.9	14.2	14.3	18.9	24.9	28.3	39.2
Maximum unit power input**	kW	10.6	17.4	17.2	22.8	29.8	33.8	47.7
Maximum unit starting current	A	84.5	138.0	88.7	108.7	135.7	161.0	216.0
Nominal unit current drawn*	A	14.4	23.7	27.7	30.6	40.9	45.0	63.6
Maximum unit current drawn**	A	26.0	40.0	35.7	40.6	52.7	62.9	85.9
Heater power input	W	120	120	150	150	150	220	220

* Evaporator entering/leaving water temperature 12°C and 7°C. Condenser entering air temperature 35°C.

** Evaporator entering/leaving water temperature 18°C and 13°C. Condenser entering air temperature 45°C. Currents are given at nominal voltage.