Carrier
turn to the experts

AQUAFORCE LIQUID CHILLER

PRO-DIALOG PLUS

AQUAFORCE

HFC-134a

* 30XA unit with low noise option

30XA0252-1502

Refrigerant HFC-134a
Nominal cooling capacity 274-1518kW

30XQ0330-1500

Refrigerant HFC-134a
Nominal cooling capacity 322-1500kW
Nominal heating capacity 317-1440kW

The Aquaforce liquid chillers are the premium solution for industrial and commercial applications where installers, consultants and building owners require optimal performances and maximum quality

Benefits:

- Extremely high full load and part load energy efficiency leads to extremely low operation cost.
- Low operating sound with no intrusive low-frequency noise, creates a better working/living environment.
- Environment sound refrigerant HFC-134a of zero ozone depletion potential.
- Easy and fast installation to reduce on-site installation time.
- Exceptional endurance tests ensure superior reliability to minimize chiller down-time.

Features

Economical operation

- Extremely high full load and part load energy efficiency:
  - New twin-rotor screw compressor equipped with a high efficiency motor and a variable capacity valve that permits exact matching of the cooling capacity to the load.
  - Flooded multi-pipe evaporator to increase the heat exchange efficiency, configured with aluminium cladding (standard) to improve thermal insulation and prevent energy loss.
  - Electronic expansion device allows operation at a lower condensing pressure and improved utilization of the evaporator heat exchange surface (superheat control).
  - Economizer system with electronic expansion device to achieve enhanced cooling capacity and efficiency.
  - Average COP of 3.2 at nominal conditions and average integrated part load value (IPLV) of 4.4.

Features

Quiet operation

- Compressors
  - Discharge dampers integrated in the oil separator (Carrier patent).
  - Silencer on the evaporator return line.
  - Acoustic compressor and oil separator enclosure (option) reduce the radiated noise.
- Condenser section
  - Condenser coils in V-shape with an open angle, allows quieter air flow across the coil.
  - Low-noise Flying Bird fans (Carrier patent) enjoy quieter operation and never generate intrusive low-frequency noise.
  - Rigid fan mounting preventing start-up noise (Carrier patent).

Environmental sound

- HFC-134a refrigerant
  - Refrigerant of the HFC group with zero ozone depletion potential.
- Leak-tight refrigerant circuit
  - Reduction of leaks as no capillary tubes and flare connections are used.
  - Verification of pressure transducers and temperature sensors without transferring refrigerant charge.

Easy and fast installation

- Integrated hydronic module (option)
  - Single or dual pump (as required) with operating time balancing and automatic changeover to the back-up pump if a fault develops
  - Water filter protecting the water pump against circulating debris
  - High-capacity membrane expansion tank ensures pressurization of the water circuit
  - Thermal insulation and aluminium protection
  - Pressure gauge to check filter pollution and measure the system water flow rate
  - Water flow control valve
- Simplified electrical connections
  - Main disconnect switch with high trip capacity
  - Transformer to supply the integrated control circuit (400/24V)
- Fast commissioning
  - Systematic factory operation test before shipment
  - Quick-test function for step-by-step verification of the instruments, expansion devices, fans and compressors

Absolute reliability

- Screw compressors
  - Industrial-type screw compressors with oversized bearings and motor cooled by suction gas.
  - All compressor components are easily accessible on site minimizing down-time.
  - Electronic motor protection against overloads and power supply faults (loss of phase, phase reversal).
- Evaporator
  - Thermal insulation with aluminium cladding for perfect resistance against outside aggression(mechanical and UV protection).
- Exceptional endurance tests
  - Partnerships with specialised laboratories and use of limit simulation tools (finite element calculation) for the design of critical components.
  - Transport simulation test in the laboratory on a vibrating table. The test is based on a military standard and equivalent to 4000 km by truck.
  - Salt mist corrosion resistance test in the laboratory for increased corrosion resistance.

New twin screw CARRIER compressor

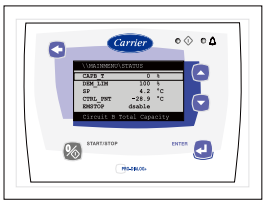
Flying Bird IV axial flow low noise fan

Cooler aluminium protective cladding

Pro-Dialog Plus Control

Pro-Dialog Plus combines advanced control logic with simple operation. The control system monitors all operation parameters all the time and precisely manages the operation of compressors, electronic expansion devices, fans for optimized energy efficiency.

Pro-Dialog Plus interface



Pro-Dialog Plus with touch screen (option)

User-friendly interface

- The new backlighted LCD interface includes a manual control potentiometer to ensure legibility under any lighting conditions. The information is in clear text and can be displayed in English.
- Unit uses intuitive tree-structure menus, similar to the internet navigators. They are user-friendly and permit quick access to the principal operating parameters: number of compressors operating, suction/discharge pressure, compressor operating hours, set point, air temperature, entering/leaving water temperature.
- Large touch screen user interface (option) offers intuitive access to the operating parameters. The information is in clear text and can be displayed in English.

Advanced control function

- Unit provides different control mode including LOCAL/REMOTE/CCN.
- Remote control function including: Unit ON/OFF, dual set point control, 2-level demand limit control, user safety interlock, water pump operation control, operation indication, circuit alarm and alert etc.
- Automatic reset of leaving water temperature based on return water temperature or outside air temperature to ensure optimized energy efficiency.
- Control algorithm prevents excessive compressor cycling and permits reduction of the water quantity in the hydronic circuit (Carrier patent).
- Automatic compressor unloading in case of abnormally high condensing pressure. If an abnomal incident occurs (e.g. fouled condenser coil, fan failure), Aquaforce continues to operate, but at reduced capacity.
- Patented defrost control algorithm reduced the defrost cycle duration by an average level of 50%(30XQ).

Powerful Diagnostics

- A quick test of all unit components and control points to verify the correct operation of every switch, circuit breaker, contactor etc. at the start of the chiller.
- Real-time monitor all the operation parameter, and alarm when necessary.
- Control system is facilitated with RS485 serial communication port for remote diagnosis or special diagnosis tools.

Sufficient safety measures

- Password protection in case of mishandling.
- Unit is protected against: Loss of refrigerant charge, reverse rotation, low chilled water temperature, low oil pressure (per compressor), current imbalance, compressor thermal overload, excessive air temperature, high pressure, electrical overload, loss of phase.

Group control

- Master/slave control of two chillers connected to automatically balance operating times, and also automatically conduct change-over in case of a unit fault.
- Communication with other Building Management System (BMS) by selecting BacNet/J-Bus/LonTalk gateway.

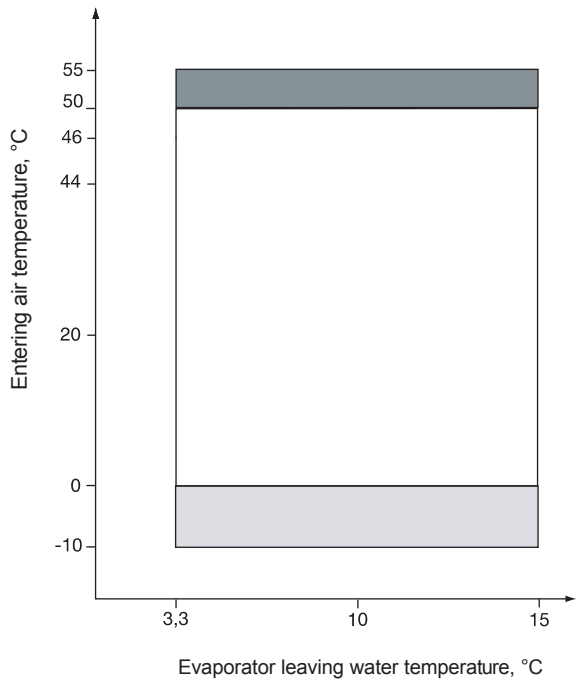
Operating Range, 30XA0252-1502

Cooling mode

Evaporator	Min.temperature	Max.temperature
Entering water temperature (at start) °C	-	45
Entering water temperature (during operation) °C	6.8	21
Leaving water temperature (during operation) °C	3.3	15
Condenser	Min.temperature	Max.temperature
Outdoor air temperature °C	-10*	50**

* A glycol/water solution must be used if the air temperature is below 0°C,
** Max 55°C during part load operation; For 30XA1012/1212, please contact local selling entities

Operating range



Legend

Part load

Operating range, standard unit.

Below 0°C air temperature the unit must either be equipped with the evaporator frost protection option (41A or 41B), or the water loop must be protected against frost by using a frost protection solution (by the installer).

Operating Range, 30XA0330-1500

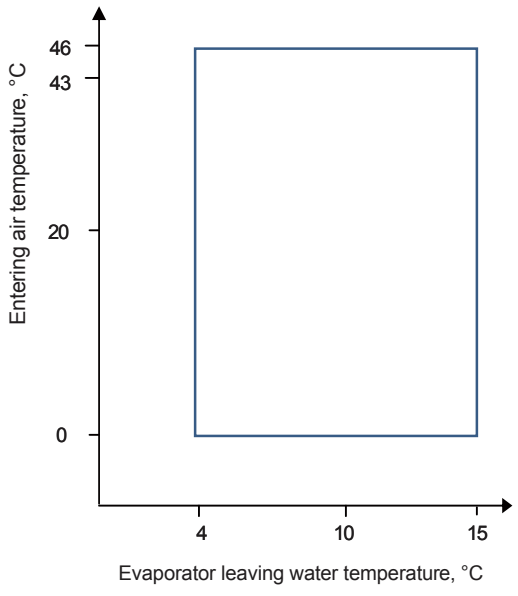
Cooling mode

Water heat exchanger (Evaporator)	Min.temperature	Max.temperature
Entering water temperature (at start) °C	-	45
Entering water temperature (during operation) °C	6.8	21
Entering water temperature (during stop) °C	3	55
Leaving water temperature (during operation) °C	4	15
Air heat exchanger (Condenser)	Min.temperature	Max.temperature
Outdoor air temperature °C	0	46

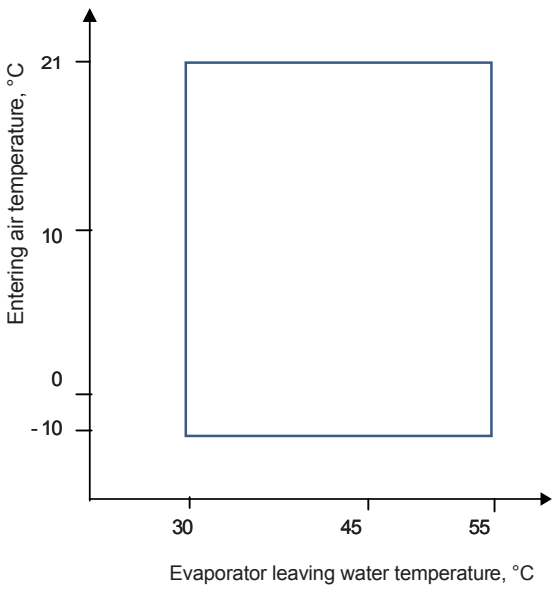
Heating mode

Water heat exchanger (Condenser)	Min.temperature	Max.temperature
Entering water temperature (at start) °C	3.4	50
Entering water temperature (during operation) °C	25	50
Entering water temperature (during stop) °C	3	55
Leaving water temperature (during operation) °C	30	55
Air heat exchanger (Evaporator)	Min.temperature	Max.temperature
Outdoor air temperature °C	-10	21

Operating range - cooling mode



Operating range - heating mode



Technical Specifications

Unit with Cu/Al condenser coil

30XA		0252	0282	0302	0342	0352	0402	0442	0452	0482	0502	0602	0702
Nominal cooling capacity	kW	274	278	299	328	327	391	444	452	493	503	619	674
Compressor input power	kW	80.5	78.8	87.9	90.5	93.0	113.7	133.7	129.8	143.3	141.3	175.3	188.8
EER		3.1	3.2	3.1	3.3	3.2	3.1	3.1	3.2	3.1	3.2	3.2	3.2
Refrigerant		HFC-134a											
Circuit A	kg	60	97	64	102	70	85	113	85	119	102	102	100
Circuit B	kg	64	-	64	-	56	56	-	56	-	56	88	95
Circuit C	kg	-	-	-	-	-	-	-	-	-	-	-	-
Compressor		semi-hermetic screw compressor											
Circuit A		1	1	1	1	1	1	1	1	1	1	1	1
Circuit B		1	-	1	-	1	1	-	1	-	1	1	1
Circuit C		-	-	-	-	-	-	-	-	-	-	-	-
Minimum capacity	%	15	30	15	30	15	15	30	15	30	15	15	15
Control		Pro-Dialog Plus, electronic expansion valve (EXV)											
Condenser		Cu/Al heat exchanger											
Fans		Axial Flying Bird with rotating shround											
Quantity		6	5	6	6	7	8	7	8	8	9	11	12
Total air flow	l/s	27083	22570	27083	27084	31597	36111	31598	36111	36112	40625	49653	54167
Fan speed	rpm	950	950	950	950	950	950	950	950	950	950	950	950
Evaporator		Flooded multi-pipe											
Water content	l	58	49	61	54	61	66	76	70	77	77	79	94
Nominal water flow	l/s	13.1	13.3	14.2	15.6	15.6	18.6	21.2	21.5	23.5	24.0	29.5	32.1
Nominal water pressure drop	kPa	15	22	15	29	18	34	34	38	41	36	46	37
Max. water-side pressure without hydronic module	kPa	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Integrated hydronic module (option)		Pump, victaulic screen filter, safety valve, expansion tank, purge valves etc.										-	-
Water pump		Centrifugal pump										-	-
Water head external to chiller													
Single pump at nominal water flow rate	kPa	188	198	198	169	181	196	254	247	214	213	-	-
Expansion tank	l	50	50	50	50	50	50	50	50	50	50	-	-
Max. water-side pressure with hydronic module	kPa	400	400	400	400	400	400	400	400	400	400	-	-
Water connection		Victaulic											
Nominal Diameter		DN125	DN125	DN125	DN125	DN125	DN125	DN125	DN125	DN125	DN125	DN125	DN150
Electrical data													
Nominal power supply		400V-3Ph-50Hz											
Start-up method		Star-delta start											
Control power supply		24 V via internal transformer											
Nominal unit current draw, Circuit A+B	A	151	147	167	173	182	210	262	238	273	264	320	346
Circuit C	A	-	-		-			-	-	-	-	-	-
Maximum unit current draw, Circuit A+B	A	208	180	226	229	243	284	314	316	367	350	423	457
Circuit C	A	-	-		-			-	-	-	-	-	-
Maximum start-up current, Circuit A+B	A	274	275	274	308	292	407	504	510	587	510	583	616
Circuit C	A	-	-		-			-	-	-	-	-	-
Fan and control power	kW	9.2	8.4	9.1	9.8	9.3	12.2	11.8	11.8	14.6	14.0	16.8	19.0
Unit length	mm	3604	3604	3604	3604	4798	4798	4798	4798	4798	5992	7186	7186
Unit width	mm	2253	2253	2253	2253	2253	2253	2253	2253	2253	2253	2253	2253
Unit height	mm	2297	2297	2297	2297	2297	2297	2297	2297	2297	2297	2297	2297
Unit weight	kg	3764	3523	3793	3820	4317	4761	4571	4823	4900	5393	6392	6544
Operating weight	kg	3830	3578	3860	3875	4380	4830	4641	4900	4984	5470	6480	6640

* Nominal conditions - evaporator entering/leaving water temperature = 12/7°C, outdoor air temperature = 35°C;
Evaporator fouling factor = 0.018m²K/kW

Technical Specifications

Unit with Cu/Al condenser coil

30XA		0752	0852	0902	1002	1012	1102	1202	1212	1302	1352	1502
Nominal cooling capacity	kW	729	833	906	988	975	1141	1246	1219	1353	1449	1518
Compressor input power	kW	213.5	238.8	261.4	288.2	338.9	326.0	362.5	417.2	399.5	435.4	436.8
EER		3.1	3.2	3.2	3.1	2.7	3.2	3.2	2.7	3.1	3.1	3.2
Refrigerant		HFC-134a										
Circuit A	kg	129	130	129	140	92	102	112	90	112	112	140
Circuit B	kg	88	95	103	129	92	92	92	75	92	98	129
Circuit C	kg	-	-	-	-	-	130	130	107	130	117	130
Compressor		semi-hermetic screw compressor										
Circuit A		1	1	1	1	1	1	1	1	1	1	1
Circuit B		1	1	1	1	1	1	1	1	1	1	1
Circuit C		-	-	-	-	-	1	1	1	1	1	1
Minimum capacity	%	15	15	15	15	15	10	10	10	10	10	10
Control		Pro-Dialog Plus, electronic expansion valve (EXV)										
Condenser		Cu/Al heat exchanger										
Fans		Axial Flying Bird with rotating shround										
Quantity		13	14	15	16	12	19	20	16	20	20	24
Total air flow	l/s	58681	63194	67708	72222	69600	85764	90278	92800	90278	90278	108333
Fan speed	rpm	950	950	950	950	930	950	950	930	950	950	950
Evaporator		Flooded multi-pipe										
Water content	l	99	119	130	140	140	168	182	182	203	224	240
Nominal water flow	l/s	34.8	39.7	43.2	47.1	47.0	54.4	59.4	59.4	64.5	69.1	72.4
Nominal water pressure drop	kPa	38	39	38	36	35	42	44	42	48	45	48
Max. water-side pressure without hydronic module	kPa	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Integrated hydronic module (option)		-	-	-	-	-	-	-	-	-	-	-
Water pump		-	-	-	-	-	-	-	-	-	-	-
Water head external to chiller												
Single pump at nominal water flow rate	kPa	-	-	-	-	-	-	-	-	-	-	-
Expansion tank	l	-	-	-	-	-	-	-	-	-	-	-
Max. water-side pressure with hydronic module	kPa	-	-	-	-	-	-	-	-	-	-	-
Water connection												
Nominal Diameter		DN150	DN150	DN150	DN200	DN200	DN200	DN150	DN150	DN150	DN200	DN200
Electrical data		Victaulic										
Nominal power supply		400V-3Ph-50Hz										
Start-up method		Star-delta start										
Control power supply		24 V via internal transformer										
Nominal unit current draw, Circuit A+B	A	404	446	516	546	546	320	404	404	439	537	546
Circuit C	A	-	-	-	-	-	273	273	273	273	275	273
Maximum unit current draw, Circuit A+B	A	512	596	635	734	734	423	512	512	588	678	734
Circuit C	A	-	-	-	-	-	367	367	367	367	364	367
Maximum start-up current, Circuit A+B	A	782	815	905	954	954	583	782	782	812	901	954
Circuit C	A	-	-	-	-	-	587	587	587	587	587	587
Fan and control power	kW	20.2	23.0	24.9	26.7	26.7	30.5	32.6	32.6	32.9	30.8	40.3
Unit length	mm	8380	8380	9574	9574	7186	11962	11962	9574	11962	11962	14872
Unit width	mm	2253	2253	2253	2253	2253	2253	2253	2253	2253	2253	2253
Unit height	mm	2297	2297	2297	2297	2297	2297	2297	2297	2297	2297	2297
Unit weight	kg	7331	7749	8487	8723	7120	10715	11118	9783	11454	11831	13156
Operating weight	kg	7430	7870	8620	8870	7256	10890	11310	9983	11660	12060	13400

* Nominal conditions - evaporator entering/leaving water temperature = 12/7°C, outdoor air temperature = 35°C
Evaporator fouling factor = 0.018m²K/kW

Technical Specifications

Unit with Cu/Al condenser coil

30XQ		0330	0430	0500	0660	0750	0860	0930
Nominal Cooling Capacity*	kW	315	414	490	647	735	827	904
Nominal Heating Capacity*	kW	311	407	470	621	706	814	878
Comp. Input Power(cooling)	kW	90.3	118.2	133.7	186.0	210.4	236.3	251.9
Comp. Input Power(heating)	kW	87.9	116.0	135.2	175.7	201.0	231.9	251.2
Refrigerant Charge		HFC-134a						
Circuit A	kg	115	160	175	115	160	160	175
Circuit B	kg	-	-	-	115	115	-	-
Circuit C	kg	-	-	-	-	-	160	160
Circuit D	kg	-	-	-	-	-	-	-
Compressor		Semi-hermetic twin screw compressor						
Circuit A		1	1	1	1	1	1	1
Circuit B		-	-	-	1	1	-	-
Circuit C		-	-	-	-	-	1	1
Circuit D		-	-	-	-	-	-	-
Minimum capacity	%	30	30	30	15	13	15	14
Control		Pro-Dialog Plus,electronic expansion valve (EXV)						
Air heat exchanger		Cu-Al heat exchanger						
Fans		Axial Flying Bird with rotating shround						
Quantity		6	8	10	12	14	16	18
Total air flow	l/s	27660	36112	45139	54168	63772	72224	81251
Fan speed	r/s	16	16	16	16	16	16	16
Water heat exchanger		Flooded multi-pipe type						
Water content	l	70	79	94	119	135	158	173
Nominal flow rate (cooling)	l/s	15.1	19.8	23.4	30.9	35.1	19.8/19.8	19.8/23.4
Nominal flow rate (heating)	l/s	14.9	19.4	22.5	29.7	33.7	19.4/19.4	19.4/22.5
Nominal pressure drop (cooling)	kPa	21.6	23.0	23.3	25.8	42.0	23.0/23.0	23.0/23.3
Nominal pressure drop (heating)	kPa	21.0	22.0	23.1	24.1	40.0	22.0/22.0	22.0/23.1
Max. water-side pressure with hydronic module	kPa	1000	1000	1000	1000	1000	1000	1000
Water Connection		Victaulic type						
Nominal Diameter	DN	150	150	150	150	150	150+150	150+150
Electrical data								
Nominal power supply		380V-3Ph-50Hz						
Start-up method		Star-delta start						
Control power supply		Transform from main power supply						
Nominal unit current draw, Circuit A+B	A	178	228	271	368	418	228	271
Circuit C+D		-			-		228	228
Maximum unit current draw, Circuit A+B	A	243	341	397	485	583	341	397
Circuit C+D		-			-		341	341
Maximum star start-up current, Circuit A+B	A	388	587	587	631	830	587	587
Circuit C+D		-		-	-		587	587
Maximum transfer current, Circuit A+B	A	1232	1858	1865	1453	2071	1858	1865
Circuit C+D		-		-	-		1858	1858
Fan and control power	kW	10.3	13.7	17.2	20.3	24.0	27.5	30.9
Unit length	mm	3827	4798	5992	7186	8380	9596	10790
Unit width	mm	2253	2253	2253	2253	2253	2253	2253
Unit height	mm	2297	2297	2297	2297	2297	2297	2297
Unit weight	kg	3953	5366	5783	7486	8919	10732	11149
Operating weight	kg	4023	5445	5877	7605	9054	10890	11322

* Nominal cooling mode - evaporator entering/leaving water temperature 12/7°C, outside air temperature 35°C
Nominal heating mode - water heat exchanger entering/leaving water temperature 40/45°C, outside air temperature 7°C
Water heat exchanger fouling factor = 0.018m²K/kW

Technical Specifications

Unit with Cu/Al condenser coil

30XQ		1000	1090	1160	1250	1320	1410	1500
Nominal Cooling Capacity*	kW	981	1061	1137	1226	1294	1383	1471
Nominal Heating Capacity*	kW	941	1029	1092	1177	1243	1328	1412
Comp. Input Power(cooling)	kW	267.4	304.1	319.7	344.1	371.9	396.3	420.8
Comp. Input Power(heating)	kW	270.4	291.7	310.9	336.2	351.4	376.7	402.0
Refrigerant Charge		HFC-134a						
Circuit A	kg	175	115	115	160	115	160	160
Circuit B	kg	-	115	115	115	115	115	115
Circuit C	kg	175	160	175	175	115	115	160
Circuit D	kg	-	-	-	-	115	115	115
Compressor		Semi-hermetic twin screw compressor						
Circuit A		1	1	1	1	1	1	1
Circuit B		-	1	1	1	1	1	1
Circuit C		1	1	1	1	1	1	1
Circuit D		-	-	-	-	1	1	1
Minimum capacity	%	15	9	8	8	8	7	7
Control		Pro-Dialog Plus,electronic expansion valve (EXV)						
Air heat exchanger		Cu-Al heat exchanger						
Fans		Axial Flying Bird with rotating shround						
Quantity		20	20	22	24	24	26	28
Total air flow	l/s	90278	90280	99307	108911	108336	117940	127544
Fan speed	r/s	16	16	16	16	16	16	16
Water heat exchanger		Flooded multi-pipe type						
Water content	l	188	198	213	229	238	254	270
Nominal flow rate (cooling)	l/s	23.4/23.4	19.8/30.9	23.4/30.9	23.4/35.1	30.9/30.9	30.9/35.1	35.1/35.1
Nominal flow rate (heating)	l/s	22.5/22.5	19.4/29.7	22.5/29.7	22.5/33.7	29.7/29.7	29.7/33.7	33.7/33.7
Nominal pressure drop (cooling)	kPa	23.3/23.3	23.0/25.8	23.3/25.8	23.3/42.0	25.8/25.8	25.8/42.0	42.0/42.0
Nominal pressure drop (heating)	kPa	23.1/23.1	22.0/24.1	23.1/24.1	23.1/40.0	24.1/24.1	24.1/40.0	40.0/40.0
Max. water-side pressure with hydronic module	kPa	1000	1000	1000	1000	1000	1000	1000
Water Connection								
Nominal Diameter	DN	150+150	150+150	150+150	150+150	150+150	150+150	150+150
Electrical data								
Nominal power supply		380V-3Ph-50Hz						
Start-up method		Star-delta start						
Control power supply		Transform from main power supply						
Nominal unit current draw, Circuit A+B	A	271	368	368	418	368	418	418
Circuit C+D		271	228	271	271	368	368	418
Maximum unit current draw, Circuit A+B	A	397	485	485	583	485	583	583
Circuit C+D		397	341	397	397	485	485	583
Maximum star start-up current, Circuit A+B	A	587	631	631	830	631	830	830
Circuit C+D		587	587	587	587	631	631	830
Maximum transfer current, Circuit A+B	A	1865	1453	1453	2071	1453	2071	2071
Circuit C+D		1865	1858	1865	1865	1453	1453	2071
Fan and control power	kW	34.4	34.0	37.5	41.2	40.6	44.3	48.0
Unit length	mm	11984	11984	13178	14372	14372	15566	16760
Unit width	mm	2253	2253	2253	2253	2253	2253	2253
Unit height	mm	2297	2297	2297	2297	2297	2297	2297
Unit weight	kg	11566	12852	13269	14702	14972	16405	17838
Operating weight	kg	11754	13050	13482	14931	15210	16659	18108

* Nominal cooling mode - evaporator entering/leaving water temperature 12/7°C, outside air temperature 35°C
Nominal heating mode - water heat exchanger entering/leaving water temperature 40/45°C, outside air temperature 7°C
Water heat exchanger fouling factor = 0.018m²K/kW

Cooling capacities

Models	LWT	OAT°C 25			30			35			40			45		
	°C	CAP kW	COMP kW	FLOW l/s	CAP kW	COMP kW	FLOW l/s	CAP kW	COMP kW	FLOW l/s	CAP kW	COMP kW	FLOW l/s	CAP kW	COMP kW	FLOW l/s
0252PT254	5	277	65.1	13.2	267	71.3	12.7	257	78.3	12.3	247	85.9	11.7	235	94.1	11.2
0282PT254	5	279	63.4	13.3	271	69.6	12.9	262	76.3	12.5	252	83.7	12.0	241	91.6	11.5
0302PT254	5	303	70.6	14.4	292	77.6	13.9	281	85.3	13.4	268	93.6	12.8	255	102.7	12.1
0342PT254	5	327	72.6	15.6	316	79.5	15.1	304	87.0	14.5	292	95.2	13.9	279	104.2	13.3
0352PT254	5	332	74.3	15.8	320	81.8	15.2	307	90.0	14.6	293	98.9	14.0	278	108.6	13.2
0402PT254	5	393	92.0	18.7	380	100.7	18.1	367	110.3	17.5	354	120.9	16.8	339	132.4	16.1
0442PT254	5	449	108.4	21.4	435	118.4	20.7	420	129.6	20.0	404	142.1	19.2	387	156.0	18.4
0452PT254	5	455	104.2	21.7	441	114.5	21.0	425	125.7	20.3	409	137.9	19.5	391	151.2	18.6
0482PT254	5	499	116.0	23.8	482	126.6	23.0	464	138.5	22.1	446	151.8	21.2	426	166.6	20.3
0502PT254	5	507	113.4	24.1	491	124.5	23.4	474	136.7	22.6	455	150.0	21.7	435	164.6	20.7
0602PT254	5	623	141.2	29.7	603	154.7	28.7	582	169.4	27.7	559	185.6	26.6	535	203.3	25.5
0702PT254	5	679	152.1	32.4	657	166.7	31.3	634	182.5	30.2	609	200.0	29.0	583	219.3	27.8
0252PT254	6	286	66.0	13.6	276	72.4	13.2	266	79.3	12.7	255	87.0	12.1	243	95.4	11.6
0282PT254	6	288	64.5	13.7	279	70.7	13.3	270	77.5	12.9	260	85.0	12.4	249	93.1	11.9
0302PT254	6	312	71.7	14.9	301	78.8	14.4	290	86.6	13.8	277	95.0	13.2	263	104.2	12.5
0342PT254	6	340	74.2	16.2	328	81.1	15.6	316	88.7	15.1	303	97.1	14.5	289	106.2	13.8
0352PT254	6	342	75.5	16.3	330	83.2	15.7	317	91.5	15.1	302	100.4	14.4	287	110.2	13.7
0402PT254	6	405	93.5	19.3	393	102.3	18.7	379	112.0	18.1	365	122.7	17.4	349	134.3	16.6
0442PT254	6	463	110.3	22.0	447	120.3	21.3	432	131.6	20.6	416	144.3	19.8	398	158.3	19.0
0452PT254	6	469	106.0	22.3	454	116.4	21.6	439	127.7	20.9	422	140.0	20.1	404	153.5	19.2
0482PT254	6	515	118.1	24.5	497	128.9	23.7	479	140.9	22.8	459	154.4	21.9	439	169.3	20.9
0502PT254	6	522	115.4	24.9	506	126.7	24.1	488	138.9	23.3	469	152.3	22.3	448	167.2	21.4
0602PT254	6	643	143.8	30.6	622	157.4	29.7	601	172.3	28.6	577	188.7	27.5	553	206.7	26.3
0702PT254	6	701	154.9	33.4	678	169.6	32.3	654	185.7	31.2	629	203.3	29.9	601	222.9	28.6
0252PT254	7	295	67.0	14.1	285	73.4	13.6	274	80.5	13.1	263	88.2	12.5	250	96.7	11.9
0282PT254	7	297	65.7	14.2	288	71.9	13.7	278	78.8	13.3	268	86.3	12.8	257	94.4	12.2
0302PT254	7	322	72.9	15.4	311	80.0	14.8	299	87.9	14.2	285	96.4	13.6	271	105.7	12.9
0342PT254	7	351	75.5	16.7	340	82.7	16.2	328	90.5	15.6	315	99.0	15.0	301	108.3	14.3
0352PT254	7	353	76.9	16.8	340	84.6	16.2	327	93.0	15.6	311	102.0	14.8	295	112.0	14.1
0402PT254	7	418	95.0	19.9	405	103.9	19.3	391	113.7	18.6	376	124.4	17.9	360	136.2	17.2
0442PT254	7	477	112.2	22.7	461	122.4	22.0	444	133.7	21.2	427	146.5	20.4	409	160.7	19.5
0452PT254	7	483	107.9	23.0	468	118.4	22.3	452	129.8	21.5	434	142.2	20.7	416	155.8	19.8
0482PT254	7	531	120.3	25.3	512	131.1	24.4	493	143.3	23.5	473	156.9	22.6	452	172.0	21.6
0502PT254	7	539	117.5	25.7	521	128.8	24.9	503	141.3	24.0	483	154.8	23.0	462	169.9	22.0
0602PT254	7	663	146.4	31.6	642	160.2	30.6	619	175.3	29.5	596	191.8	28.4	570	210.0	27.2
0702PT254	7	722	157.7	34.4	699	172.6	33.3	674	188.8	32.1	648	206.6	30.9	619	226.5	29.5
0252PT254	8	304	68.0	14.5	293	74.5	14.0	282	81.6	13.5	270	89.4	12.9	258	97.9	12.3
0282PT254	8	306	66.8	14.6	296	73.1	14.1	286	80.1	13.7	276	87.6	13.1	264	95.8	12.6
0302PT254	8	332	74.1	15.8	320	81.3	15.3	308	89.2	14.7	294	97.8	14.0	279	107.3	13.3
0342PT254	8	362	76.9	17.2	350	84.1	16.7	338	92.0	16.1	325	100.7	15.5	311	110.3	14.8
0352PT254	8	364	78.3	17.4	351	86.0	16.7	336	94.5	16.0	321	103.5	15.3	304	113.7	14.5
0402PT254	8	430	96.6	20.5	417	105.5	19.9	402	115.4	19.2	387	126.3	18.5	371	138.1	17.7
0442PT254	8	491	114.3	23.4	475	124.6	22.7	458	136.1	21.8	440	148.9	21.0	421	163.2	20.1
0452PT254	8	497	109.8	23.7	482	120.3	23.0	465	131.9	22.2	447	144.4	21.3	428	158.2	20.4
0482PT254	8	547	122.5	26.1	528	133.5	25.2	508	145.8	24.2	487	159.6	23.2	466	174.9	22.2
0502PT254	8	555	119.6	26.5	537	131.0	25.6	518	143.6	24.7	497	157.3	23.7	476	172.6	22.7
0602PT254	8	683	149.1	32.6	661	162.9	31.5	638	178.2	30.4	613	194.9	29.3	587	213.4	28.0
0702PT254	8	744	160.6	35.5	720	175.5	34.3	694	192.0	33.1	667	210.0	31.8	638	230.2	30.4
0252PT254	10	323	70.1	15.4	312	76.7	14.9	300	84.0	14.3	287	91.9	13.7	274	100.5	13.1
0282PT254	10	325	69.2	15.5	314	75.7	15.0	304	82.7	14.5	292	90.4	14.0	280	98.8	13.4
0302PT254	10	353	76.6	16.9	340	83.9	16.3	327	92.0	15.6	312	100.7	14.9	297	110.5	14.2
0342PT254	10	384	79.7	18.3	371	87.1	17.7	358	95.1	17.1	345	104.0	16.5	330	114.0	15.8
0352PT254	10	387	81.1	18.5	372	89.0	17.8	357	97.6	17.0	340	106.9	16.2	323	117.4	15.4
0402PT254	10	457	99.8	21.8	442	109.0	21.1	427	119.1	20.4	410	130.1	19.6	393	142.0	18.8
0442PT254	10	522	118.5	24.9	504	129.1	24.1	485	140.9	23.2	466	154.0	22.3	446	168.5	21.3
0452PT254	10	527	113.8	25.2	511	124.5	24.4	493	136.2	23.5	473	149.0	22.6	453	163.2	21.7
0482PT254	10	580	127.0	27.7	560	138.4	26.7	538	151.0	25.7	516	165.0	24.6	493	180.7	23.5
0502PT254	10	588	124.0	28.1	569	135.7	27.2	549	148.4	26.2	527	162.5	25.2	504	178.4	24.1
0602PT254	10	726	154.7	34.7	702	168.8	33.5	677	184.4	32.4	651	201.5	31.1	623	220.4	29.8
0702PT254	10	790	166.6	37.7	764	181.9	36.5	736	198.7	35.2	707	217.2	33.8	676	238.1	32.3

Legend:

LWT leaving water temperature

CAP cooling capacity

COMP compressor power input

FLOW water flow

Application data:

Standard units, refrigerant: HFC-134a

Evaporator temperature rise: 5°C

Fouling factor: 0.018 m^2K/kW

Cooling capacities

Models	LWT	OAT°C 25 CAP	25 COMP	25 FLOW	30 CAP	30 COMP	30 FLOW	35 CAP	35 COMP	35 FLOW	40 CAP	40 COMP	40 FLOW	45 CAP	45 COMP	45 FLOW
	°C	kW	kW	l/s	kW	kW	l/s	kW	kW	l/s	kW	kW	l/s	kW	kW	l/s
0752PT254	5	734	172.7	34.9	710	188.8	33.8	686	206.6	32.7	660	226.5	31.4	633	248.4	30.2
0852PT254	5	841	192.8	40.1	814	210.8	38.8	785	230.8	37.4	754	253.0	35.9	722	277.6	34.4
0902PT254	5	913	212.0	43.5	884	231.3	42.1	853	253.0	40.6	821	277.2	39.1	787	304.2	37.5
1002PT254	5	998	232.9	47.5	965	254.3	46.0	931	278.5	44.3	895	305.4	42.6	857	335.1	40.8
1102PT254	5	1150	263.1	54.8	1113	287.8	53.0	1074	315.0	51.1	1033	345.1	49.2	989	378.3	47.1
1202PT254	5	1256	293.1	59.8	1215	320.2	57.9	1173	350.5	55.9	1128	384.0	53.7	1081	421.2	51.5
1302PT254	5	1366	322.0	65.0	1321	352.2	62.9	1274	385.9	60.7	1225	423.3	58.3	1173	464.9	55.9
1352PT254	5	1467	350.4	69.9	1418	382.9	67.5	1366	419.5	65.1	1312	460.2	62.5	1256	505.4	59.8
1502PT254	5	1534	353.0	73.1	1484	385.4	70.7	1431	421.8	68.1	1375	462.6	65.5	1317	507.6	62.7
0752PT254	6	757	175.7	36.1	733	192.0	34.9	708	210.0	33.7	681	230.0	32.5	653	252.2	31.1
0852PT254	6	867	196.3	41.3	839	214.5	40.0	809	234.8	38.6	778	257.3	37.1	744	282.2	35.5
0902PT254	6	942	215.7	44.9	911	235.3	43.4	879	257.2	41.9	846	281.6	40.3	811	308.9	38.6
1002PT254	6	1029	237.2	49.1	995	258.9	47.4	959	283.3	45.7	922	310.6	43.9	882	340.7	42.0
1102PT254	6	1186	268.0	56.5	1147	292.8	54.7	1107	320.4	52.7	1064	350.9	50.7	1019	384.5	48.6
1202PT254	6	1295	298.4	61.7	1253	325.8	59.7	1209	356.4	57.6	1163	390.4	55.4	1114	428.0	53.1
1302PT254	6	1408	328.0	67.1	1362	358.5	64.9	1313	392.6	62.6	1262	430.6	60.1	1208	472.6	57.6
1352PT254	6	1512	357.3	72.0	1461	390.4	69.6	1408	427.3	67.1	1352	468.6	64.4	1293	514.5	61.6
1502PT254	6	1582	359.5	75.4	1529	392.4	72.9	1474	429.2	70.2	1416	470.4	67.5	1356	516.1	64.6
0752PT254	7	781	178.8	37.2	755	195.2	36.0	729	213.5	34.8	702	233.6	33.5	673	256.0	32.1
0852PT254	7	894	199.9	42.6	864	218.3	41.2	833	238.8	39.7	801	261.6	38.2	766	286.8	36.5
0902PT254	7	971	219.5	46.3	939	239.3	44.8	906	261.4	43.2	871	286.1	41.5	835	313.7	39.8
1002PT254	7	1061	241.6	50.6	1025	263.6	48.9	988	288.2	47.1	949	315.8	45.2	908	346.4	43.3
1102PT254	7	1223	273.0	58.3	1183	298.1	56.4	1141	326.0	54.4	1097	356.8	52.3	1050	390.8	50.1
1202PT254	7	1335	303.9	63.6	1291	331.6	61.6	1246	362.5	59.4	1197	396.9	57.1	1147	434.9	54.7
1302PT254	7	1451	334.1	69.2	1403	365.0	66.9	1353	399.5	64.5	1300	437.9	62.0	1244	480.5	59.3
1352PT254	7	1558	364.3	74.3	1505	398.0	71.7	1449	435.4	69.1	1391	477.1	66.3	1330	523.6	63.4
1502PT254	7	1630	366.2	77.7	1575	399.5	75.1	1518	436.8	72.4	1458	478.4	69.5	1395	524.8	66.5
0752PT254	8	805	182.0	38.4	779	198.5	37.1	752	217.0	35.9	723	237.4	34.5	693	259.9	33.1
0852PT254	8	920	203.6	43.9	890	222.2	42.5	858	242.9	40.9	824	265.9	39.3	789	291.6	37.6
0902PT254	8	1001	223.5	47.8	968	243.5	46.2	933	265.9	44.5	897	290.9	42.8	860	318.7	41.0
1002PT254	8	1092	246.0	52.1	1055	1055.4	50.4	1017	293.3	48.5	977	321.1	46.6	934	352.2	44.6
1102PT254	8	1259	278.0	60.1	1218	303.4	58.1	1175	331.6	56.0	1129	362.7	53.9	1081	397.3	51.6
1202PT254	8	1374	309.4	65.6	1329	337.5	63.4	1282	368.7	61.2	1233	403.5	58.8	1181	442.0	56.3
1302PT254	8	1494	340.3	71.3	1445	371.6	68.9	1392	406.5	66.4	1338	445.3	63.8	1280	488.6	61.1
1352PT254	8	1603	371.5	76.5	1548	405.6	73.9	1491	443.6	71.1	1431	485.8	68.3	1368	532.9	65.2
1502PT254	8	1678	373.0	80.1	1622	406.7	77.4	1562	444.6	74.5	1500	486.6	71.6	1435	533.6	68.5
0752PT254	10	855	188.6	40.8	827	205.5	39.5	798	224.3	38.1	767	245.2	36.6	735	268.1	35.1
0852PT254	10	976	211.2	46.6	943	230.4	45.1	909	251.6	43.4	873	275.1	41.7	835	301.5	39.9
0902PT254	10	1062	231.6	50.7	1027	252.1	49.0	989	275.0	47.3	951	300.6	45.4	910	328.9	43.5
1002PT254	10	1158	255.5	55.3	1119	278.3	53.4	1077	304.0	51.4	1034	332.4	49.4	988	364.1	47.2
1102PT254	10	1335	288.4	63.7	1291	314.5	61.6	1244	343.3	59.4	1196	375.1	57.1	1144	410.7	54.6
1202PT254	10	1457	320.9	69.6	1409	349.7	67.3	1358	381.8	64.8	1305	417.2	62.3	1250	456.6	59.7
1302PT254	10	1585	353.4	75.7	1531	385.5	73.1	1475	421.3	70.4	1417	461.0	67.7	1348	501.3	64.3
1352PT254	10	1699	386.9	81.1	1640	421.9	78.3	1578	460.9	75.4	1514	504.4	72.3	1409	531.2	67.3
1502PT254	10	1779	387.4	85.0	1718	422.0	82.0	1654	460.8	79.0	1588	503.9	75.8	1518	551.9	72.5

Legend:

LWT leaving water temperature

CAP cooling capacity

COMP compressor power input

FLOW water flow

Application data:

Standard units, refrigerant: HFC-134a

Evaporator temperature rise: 5°C

Fouling factor: 0.018 m^2K/kW

Options & accessories

Options	No.	Description	Advantages	Use*
Blygold PoluAL		Coil with field-applied Blygold PoluAL treatment	Improved corrosion resistance, recommended for heavy marine and industrial environments	30XA0282~0482 30XA0252~1502 30XA1012/1212
Gold Fin	003A	Fin made of pre-treated aluminium (polyurethane and epoxy)	Improved corrosion resistance, recommended for light marine environments	30XA0282~0482 30XA0252~1502 30XA1012/1212
Medium brine	005	Leaving water temperature down to -6 °C	For low temperature applications such as ice storage, cold stores or process cooling etc.	30XA0252~1502
High static fan	012	High static pressure fan for indoor unit installation with discharge ducts	Ducted condenser air discharge, optimized condensing temperature control	30XA0252~1502
Low noise	015	Compressor sound enclosure	Low operating noise	30XA0282~0482 30XA0252~1502
Low noise	015L	Low-speed fan	Low operating noise	30XA0282~0482 30XA0252~1502
Super low noise	015LS	Compressor sound enclosure and low-speed fan	Super low operating noise	30XA0282~0482 30XA0252~1502
Low noise	015S	Compressor and oil separator sound enclosure	Low operating noise	30XQ0330~1500
Full heat recovery	050	Heat recovery water cooled condenser	Recover 100% of rejected heat	30XA0252~1002
Single point power connection	081	Single main power connection	Easy to power connection	30XA1102~1502

* 30XA0282~0482 - 30XA0282/0342/0442/0482
30XA0252~0502 - 30XA0252/0302/0352/0402/0452/0502
30XA0252~1002 - 30XA0252/0302/0352/0402/0452/0502/0602/0702/0752/0852/0902/1002
30XA0252~1502 - 30XA0252/0302/0352/0402/0452/0502/0602/0702/0752/0852/0902/1002/1102/1202/1302/1352/1502
30XA0602~1502 - 30XA0602/0702/0752/0852/0902/1002/1102/1202/1302/1352/1502
30XA1102~1502 - 30XA1102/1202/1302/1352/1502
30XQ0330~1500 - 30XQ0330/0430/0500/0660/0750/0860/0930/1000/1090/1160/1250/1320/1410/1500

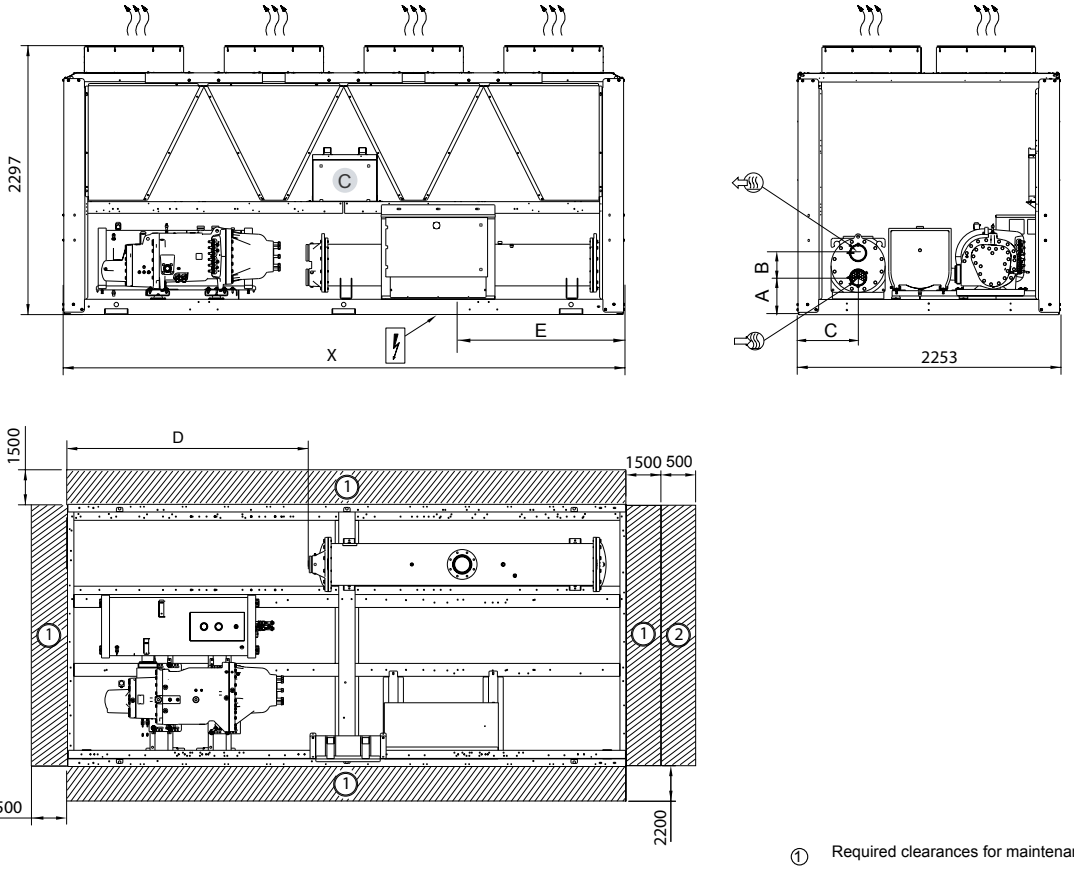
Options & accessories

Options	No.	Description	Advantages	Use*
1600kPa evaporator	104	Reinforced evaporator for extension of the maximum water-side pressure range to 1600kPa	Covers applications with a high water column (high buildings)	30XA0282~0482 30XA0252~1502
Reversed water connections	107	Evaporator with reversed water inlet/outlet	Simplification of water piping	30XA0282~0482 30XA0602~1502
Fixed speed single pump hydronic module	116B	Provide fixed speed single pump of average 200KPa external pressure	Easy and fast installation	30XA0282~0482 30XA0252~0502
Fixed speed dual pump hydronic module	116C	Provide fixed speed dual pumps of average 200KPa external pressure	Easy and fast installation, operating safety	30XA0282~0482 30XA0252~0502
J-Bus gateway	148B	Two-directional communication board with J-Bus protocol	Easy connection by communication bus to a building management system	30XA0282~0482 30XA0252~1502 30XA1012/1212 30XQ0330~1500
BacNet gateway	148C	Two-directional communication board with BacNet protocol	Easy connection by communication bus to a building management system	30XA0282~0482 30XA0252~1502 30XA1012/1212 30XQ0330~1500
LonTalk gateway	148D	Two-directional communication board with LonTalk protocol	Easy connection by communication bus to a building management system	30XA0282~0482 30XA0252~1502 30XA1012/1212 30XQ0330~1500
Energy Management Module (EMM)	156	See control manual	-	30XA0282~0482 30XA0252~1502 30XA1012/1212 30XQ0330~1500
Touch screen display	158	Pro-Dialog control with touch screen interface	User friendly	30XA0282~0482 30XA0252~1502 30XQ0330~1500
Cu/Al condenser coils	254	Coil made of copper tube with aluminium fin	-	30XA0282~0482 30XA0252~1502 30XA1012/1212

* 30XA0282~0482 - 30XA0282/0342/0442/0482
30XA0252~0502 - 30XA0252/0302/0352/0402/0452/0502
30XA0252~1502 - 30XA0252/0302/0352/0402/0452/0502/0602/0702/0752/0852/0902/1002/1102/1202/1302/1352/1502
30XA0602~1502 - 30XA0602/0702/0752/0852/0902/1002/1102/1202/1302/1352/1502
30XQ0330~1500 - 30XQ0330/0430/0500/0660/0750/0860/0930/1000/1090/1160/1250/1320/1410/1500

Dimensions/Clearances

30XA0282~0482 - Cu/Al Condenser coils (option 254)



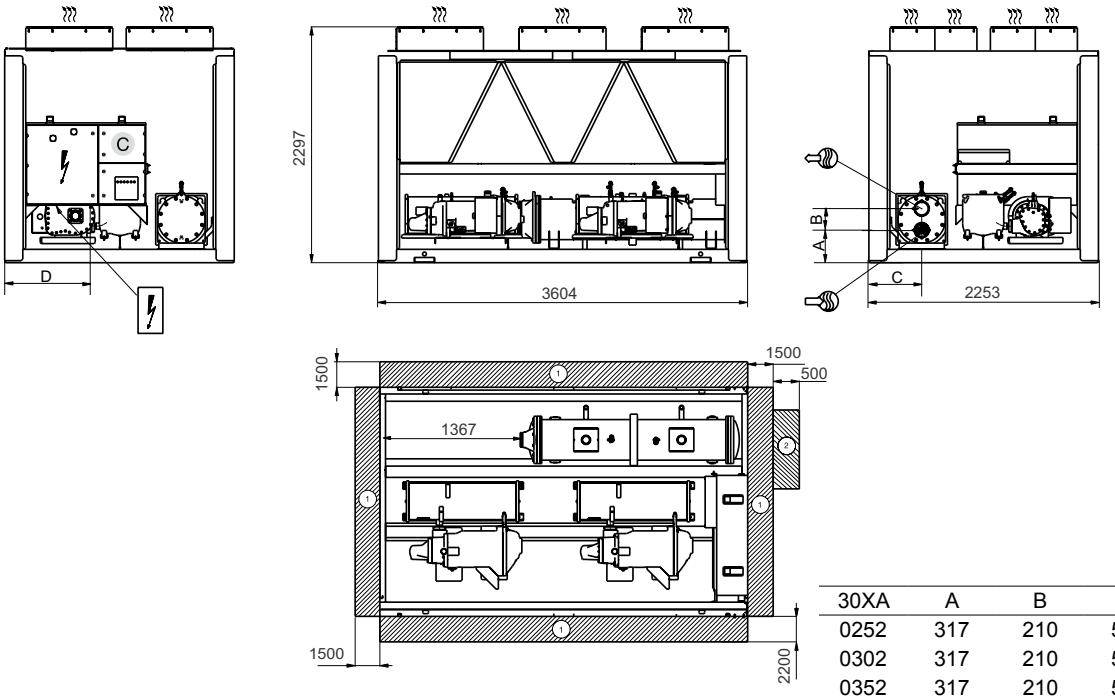
30XA	A	B	C	D	E	X
0282	317	210	515	1371	734	3604
0342	317	210	515	1371	1371	3604
0442	346	272	438	2182	1371	4798
0482	346	272	438	2182	1371	4798

① Required clearances for maintenance and air flow
② Recommended space for evaporator
Water outlet
Water inlet
Power supply connection
Air outlet - do not obstruct
C Control circuit connection

Note: Single point power connection for 30XA262~1002, power cable arrive from bottom of control panel, Reserve at least 120mm height space below unit for power supply connection (unit aerial installation or cable slot)

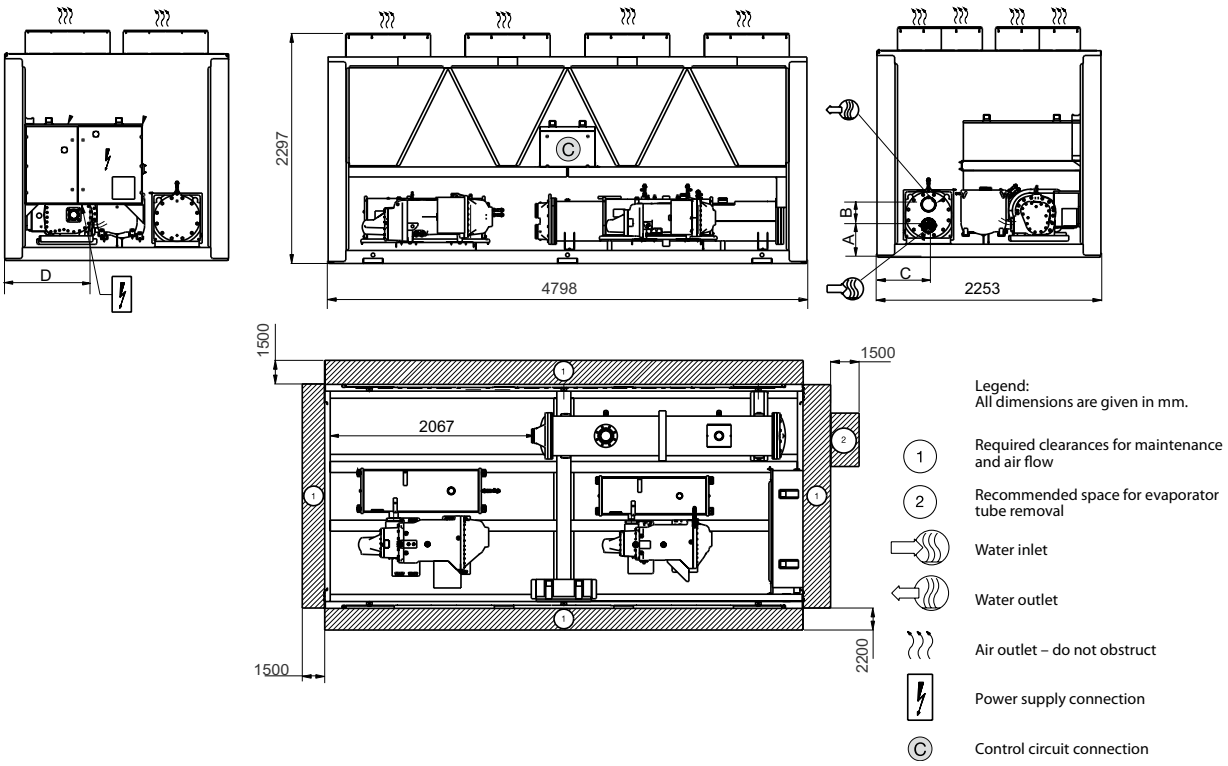
Dimensions/Clearances

30XA0252-0302 - Cu/Al Condenser coils (option 254)



30XA	A	B	C	D
0252	317	210	515	777
0302	317	210	515	777
0352	317	210	515	777
0402	317	210	515	777
0452	317	210	515	777

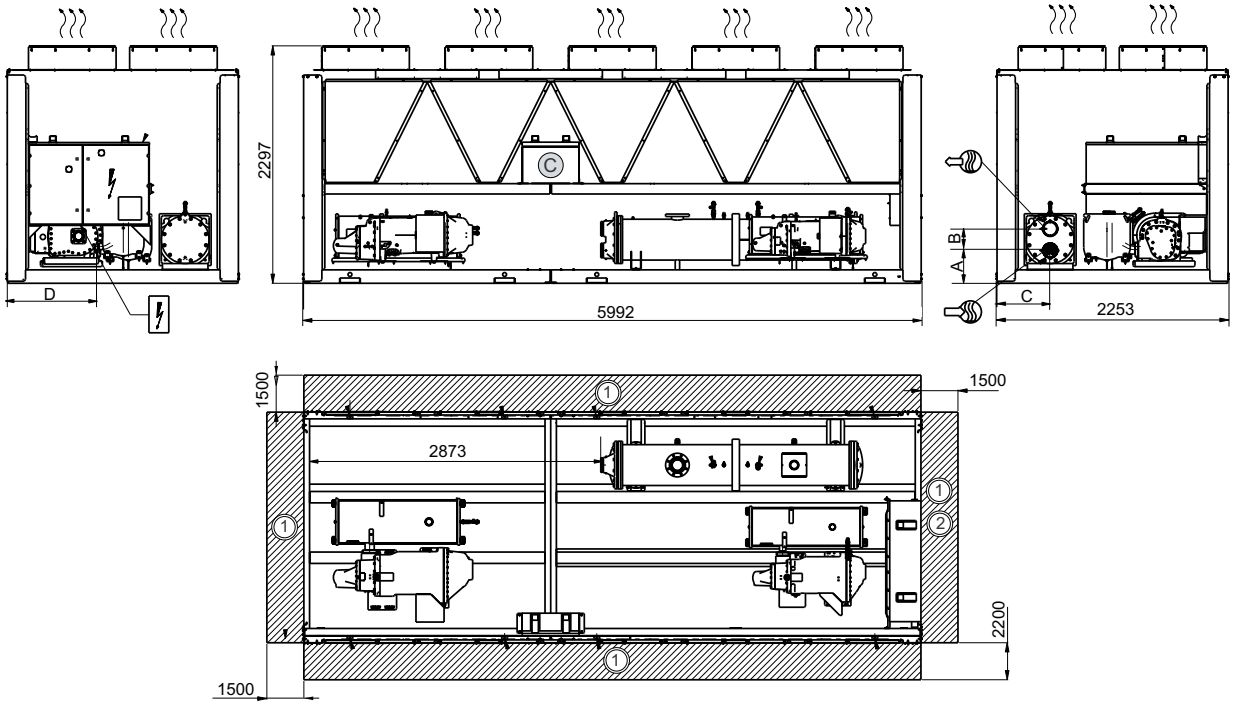
30XA0352-0452 - Cu/Al Condenser coils (option 254)



Note: Single point power connection for 30XA262~1002, power cable arrive from bottom of control panel, Reserve at least 120mm height space below unit for power supply connection (unit aerial installation or cable slot)

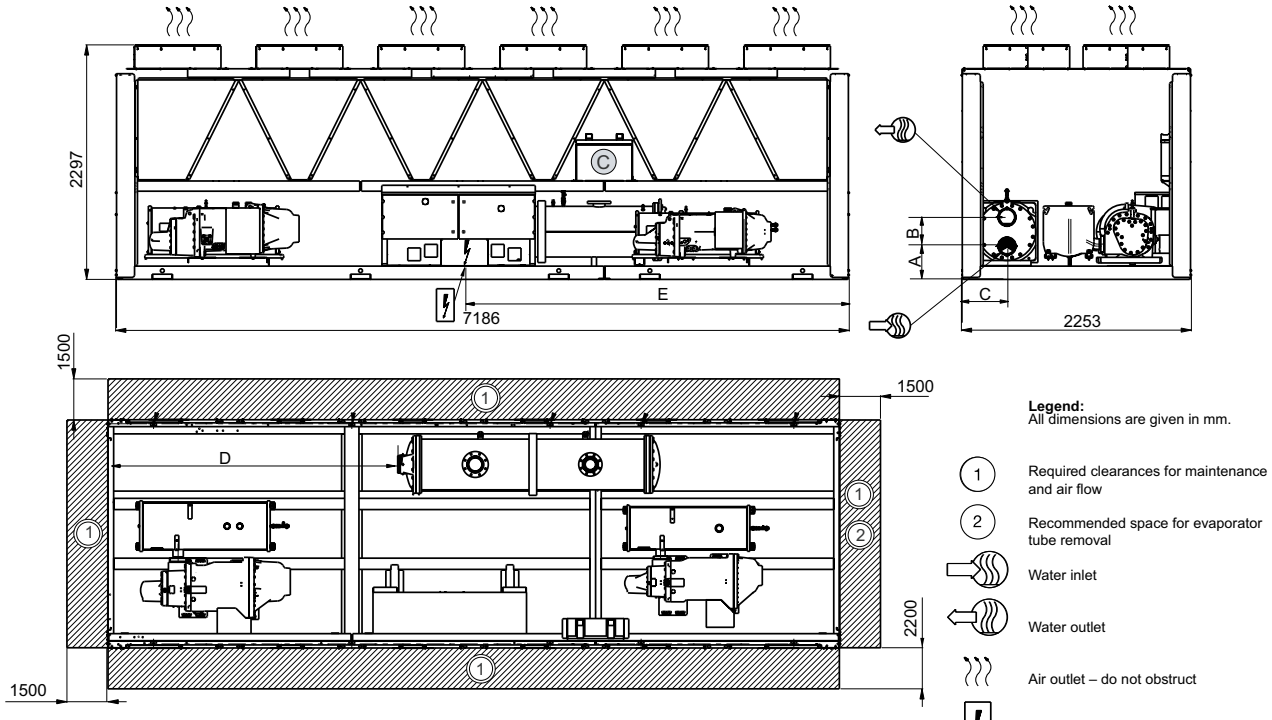
Dimensions/Clearances

30XA0502 - Cu/Al Condenser coils (option 254)



30XA	A	B	C	D
0502	317	210	515	777

30XA 0602-0702 - Cu/Al Condenser coils (option 254)

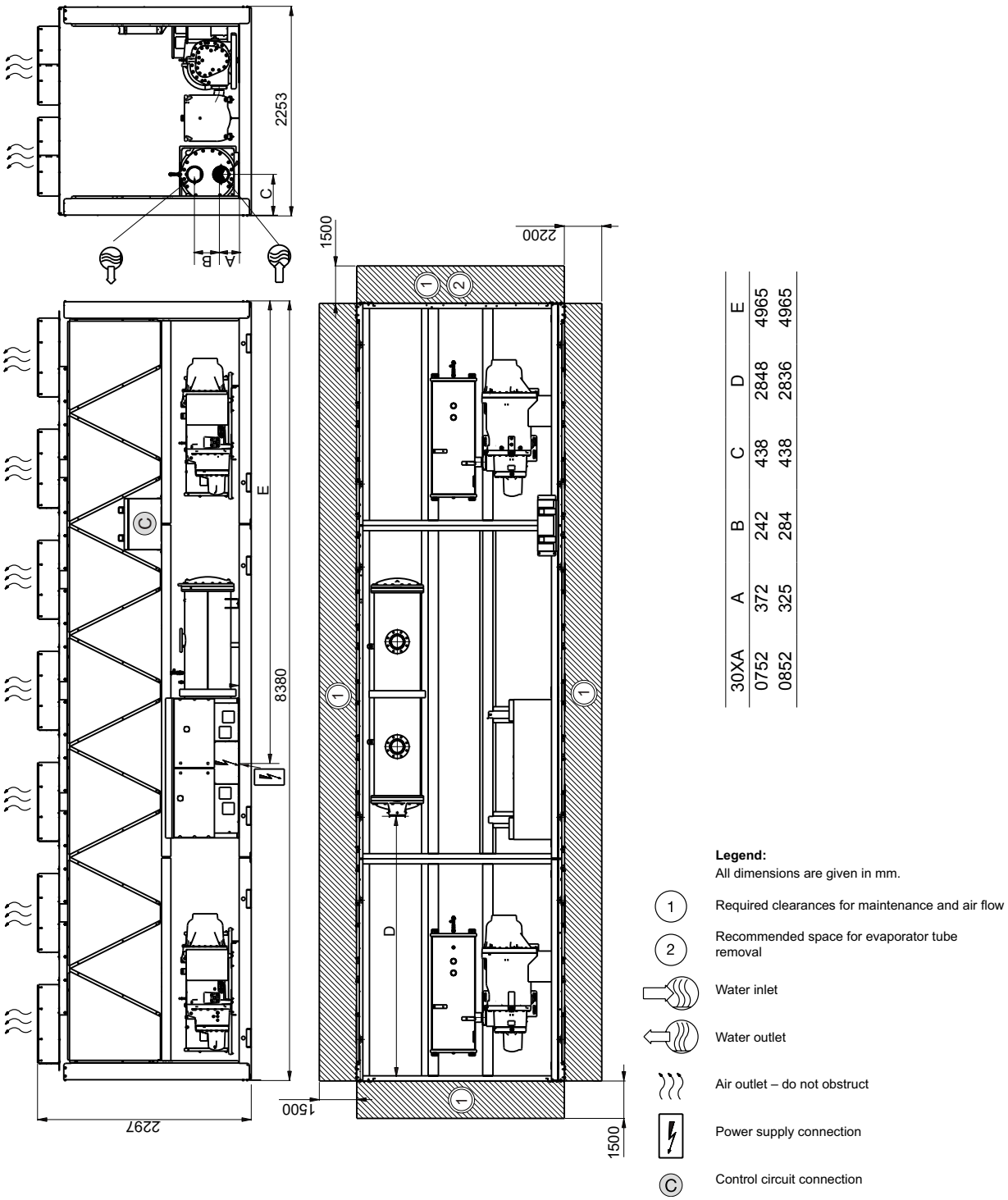


30XA	A	B	C	D	E
0602	356	272	438	2852	3787
0702	372	242	438	2852	3787

Note: Single point power connection for 30XA262~1002, power cable arrive from bottom of control panel, Reserve at least 120mm height space below unit for power supply connection (unit aerial installation or cable slot)

Dimensions/Clearances

30XA0752-0852 - Cu/Al Condenser coils (option 254)



30XA	A	B	C	D	E
0752	372	242	438	2848	4965
0852	325	284	438	2836	4965

Legend:
All dimensions are given in mm.

1 Required clearances for maintenance and air flow

2 Recommended space for evaporator tube removal

Water inlet

Water outlet

Air outlet – do not obstruct

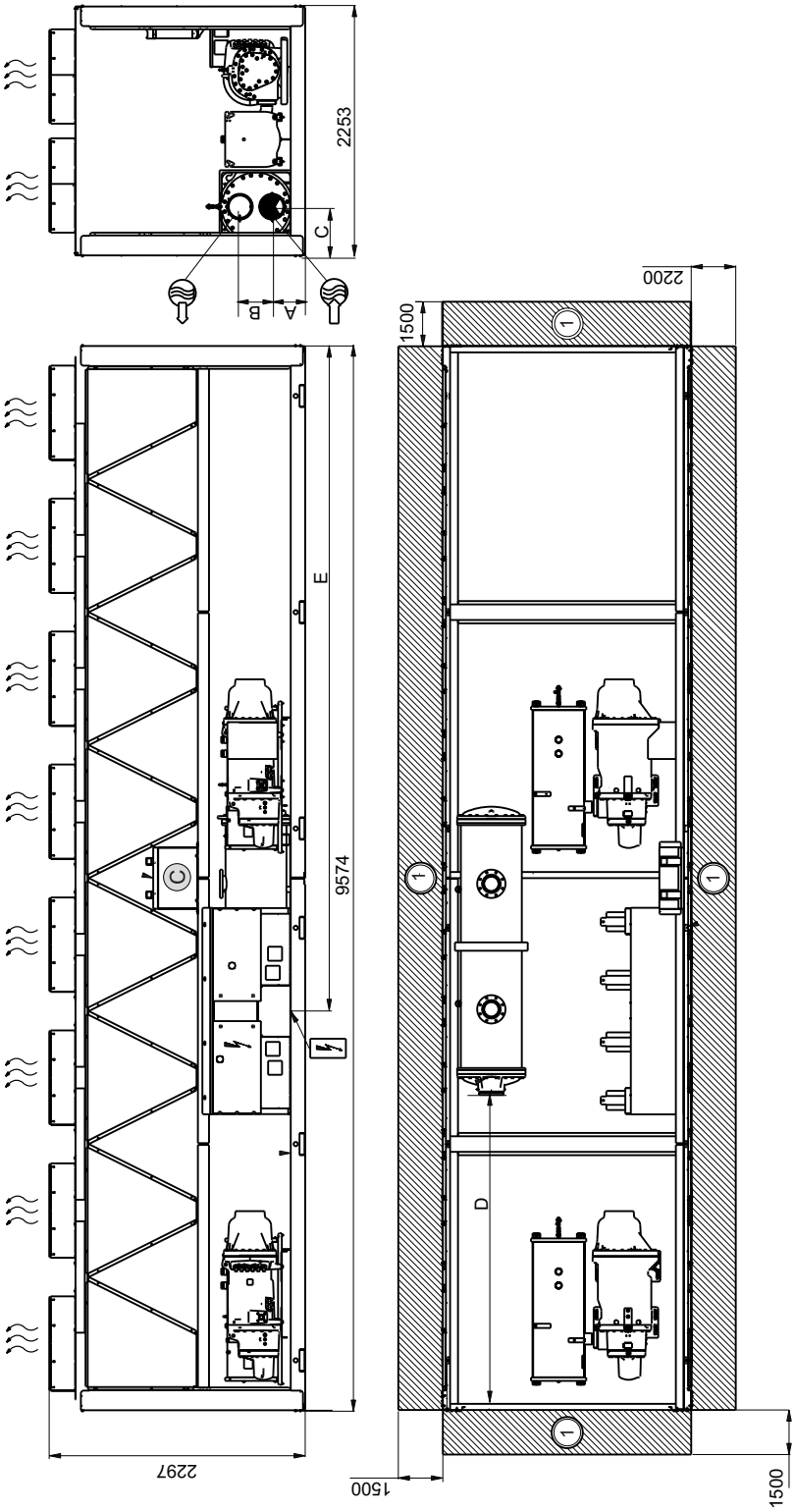
Power supply connection

C Control circuit connection

Note: Single point power connection for 30XA262~1002, power cable arrive from bottom of control panel, Reserve at least 120mm height space below unit for power supply connection (unit aerial installation or cable slot)

Dimensions/Clearances

30XA0902-1002 - Cu/Al Condenser coils (option 254)



30XA	A	B	C	D	E
0902	325	284	438	2840	5924
1002	297	438	438	2832	5924

Legend:
All dimensions are given in mm.

1. Required clearances for maintenance and air flow
2. Recommended space for evaporator tube removal

Water inlet

Water outlet

Air outlet – do not obstruct

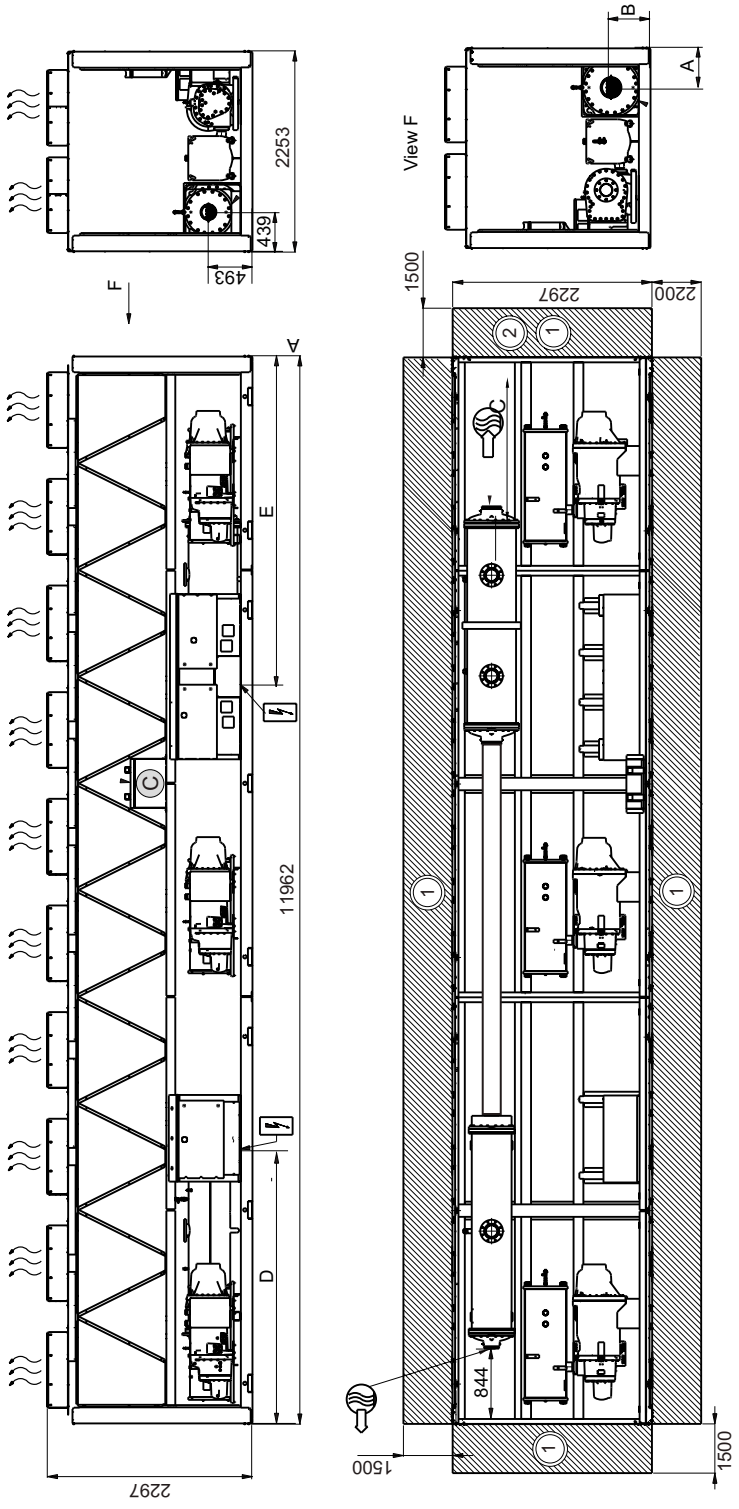
Power supply connection

C Control circuit connection

Note: Single point power connection for 30XA262~1002, power cable arrive from bottom of control panel, Reserve at least 120mm height space below unit for power supply connection (unit aerial installation or cable slot)

Dimensions/Clearances

30XA1102-1352 - Cu/Al Condenser coils (option 254)



30XA	A	B	C	D	E
1102	439	493	1685	3428	3387
1202	439	493	1685	3428	3387
1302	439	467	1675	3428	3387
1352	439	442	1670	3428	3387

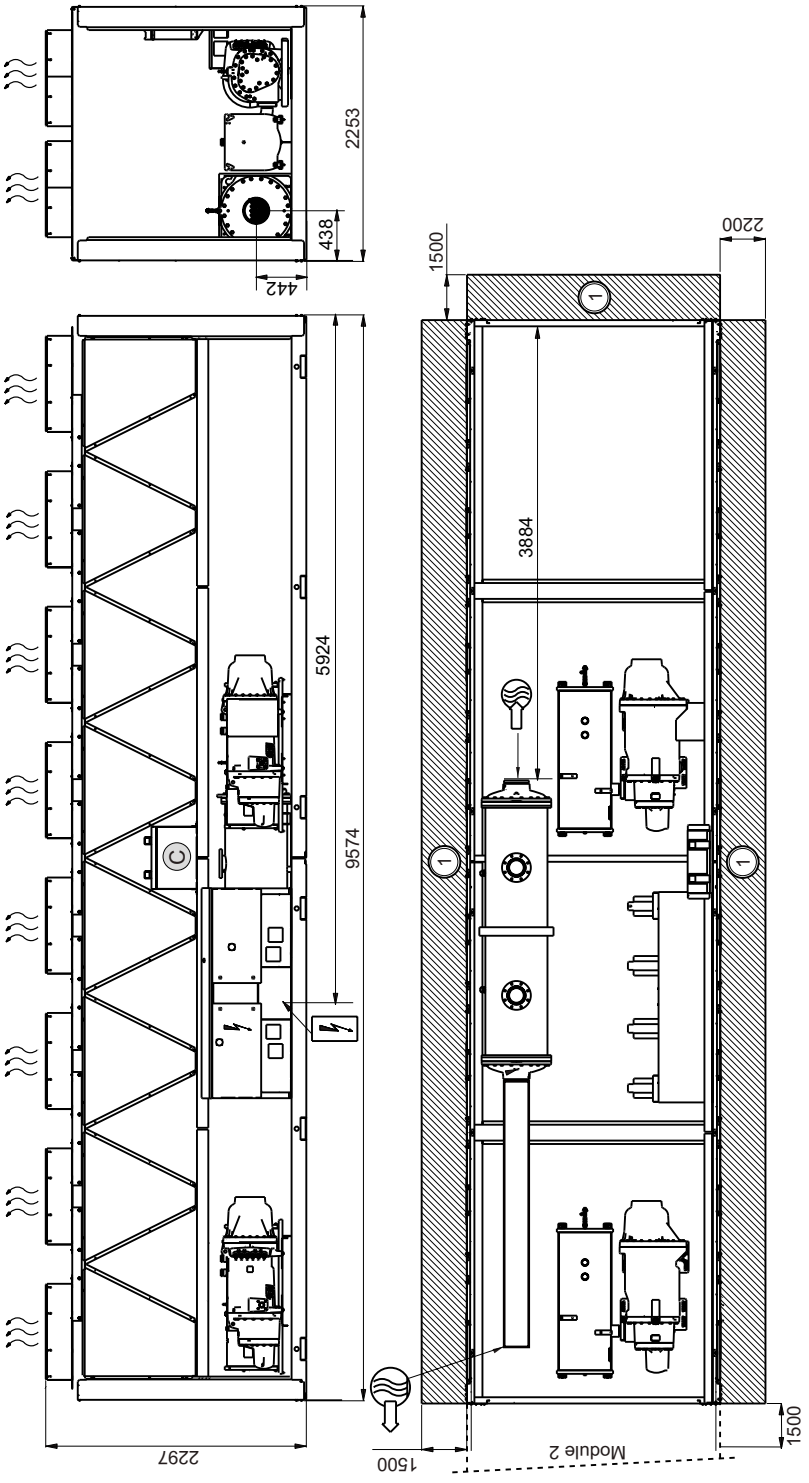
Legend:
All dimensions are given in mm.

- (1) Required clearances for maintenance and air flow
- (2) Recommended space for evaporator tube removal
- Water inlet
- Water outlet
- Air outlet – do not obstruct
- Power supply connection
- (C) Control circuit connection

Note: Dual point power connection for 30XA1202~1502 (Single point power connection as option), power cable arrive from bottom of control panel, Reserve at least 120mm height space below unit for power supply connection (unit aerial installation or cable slot)

Dimensions/Clearances

30XA1502, module 1/2 - Cu/Al Condenser coils (option 254)



Legend:
All dimensions are given in mm.

1 Required clearances for maintenance and air flow

2 Recommended space for evaporator tube removal

Water inlet

Water outlet (to be connected to the water inlet of module 2)

Air outlet – do not obstruct

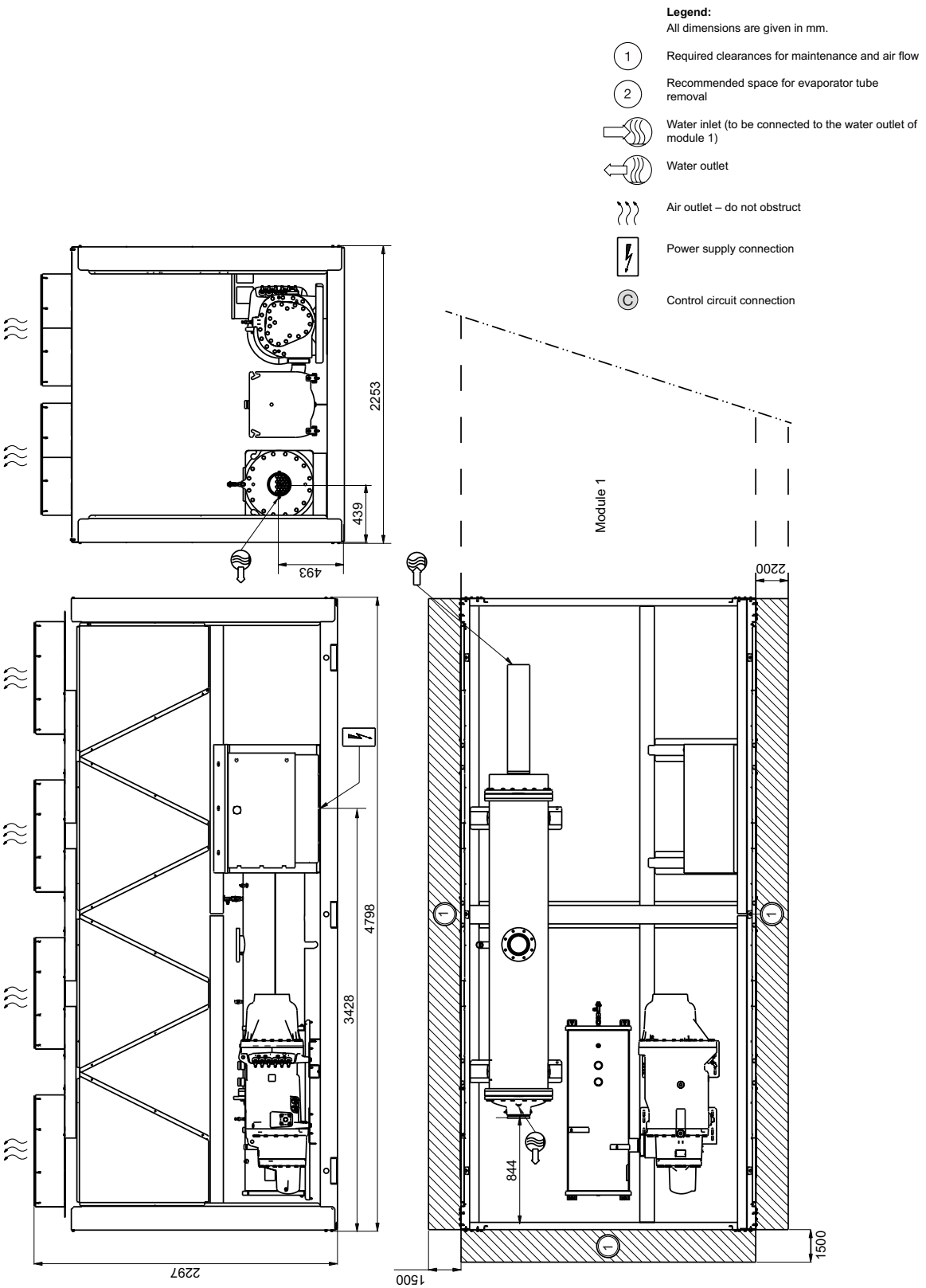
Power supply connection

C Control circuit connection

Note: Dual point power connection for 30XA1202~1502 (Single point power connection as option), power cable arrive from bottom of control panel, Reserve at least 120mm height space below unit for power supply connection (unit aerial installation or cable slot)

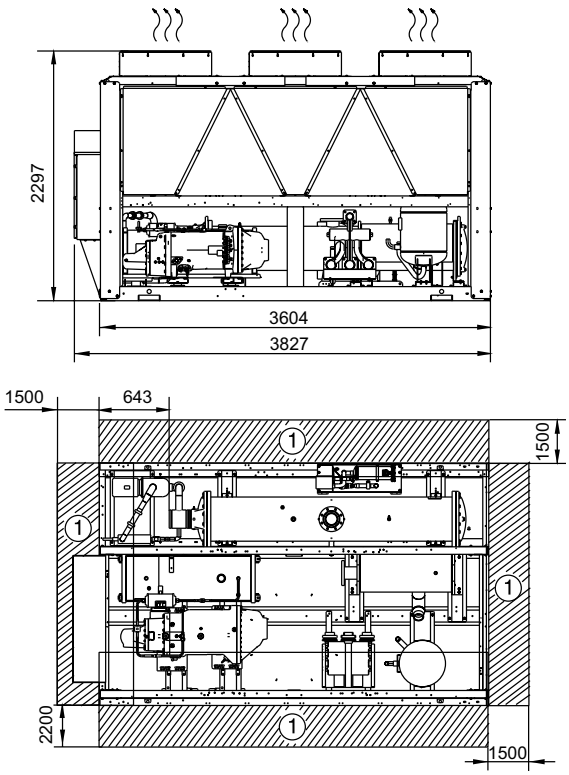
Dimensions/Clearances

30XA1502, module 2/2 - Cu/Al Condenser coils (option 254)

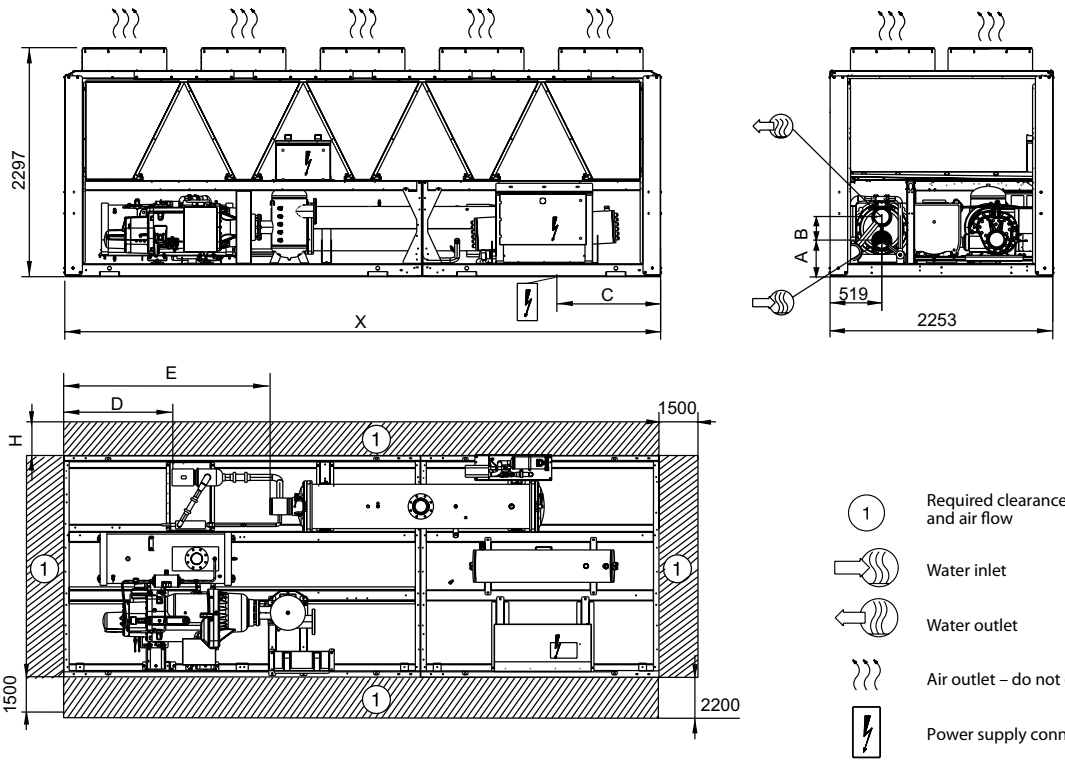


Dimensions/Clearances

30XQ0330



30XQ0430~0500



1 Required clearances for maintenance and air flow

Water inlet

Water outlet

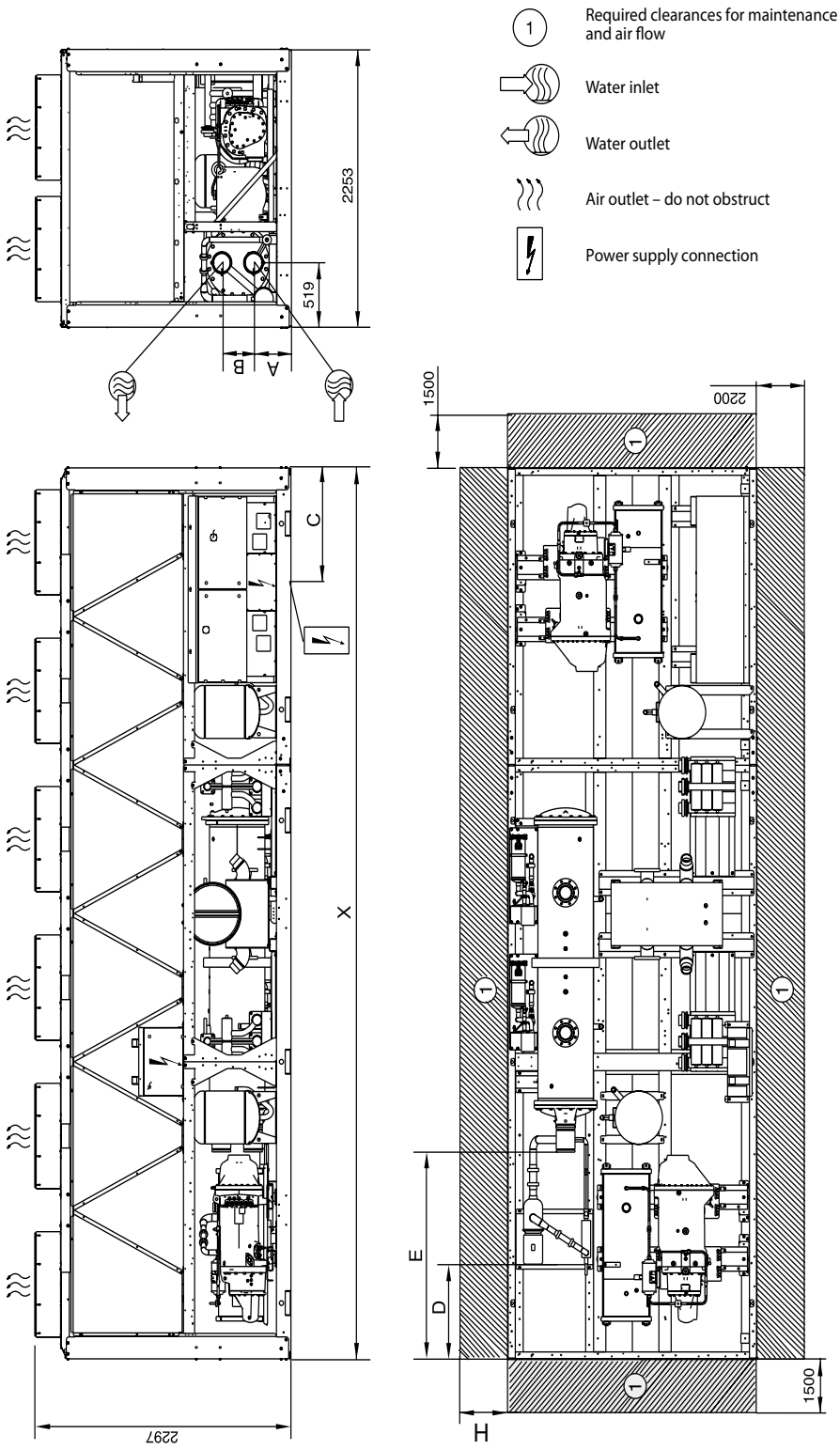
Air outlet – do not obstruct

Power supply connection

30XQ	A	B	C	D	E	H	X
0430	362	242	457	856	1854	1500	4798
0500	362	242	950	856	1854	1500	5992

Dimensions/Clearances

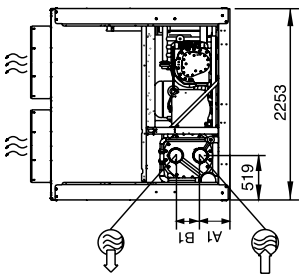
30XQ0660~0750

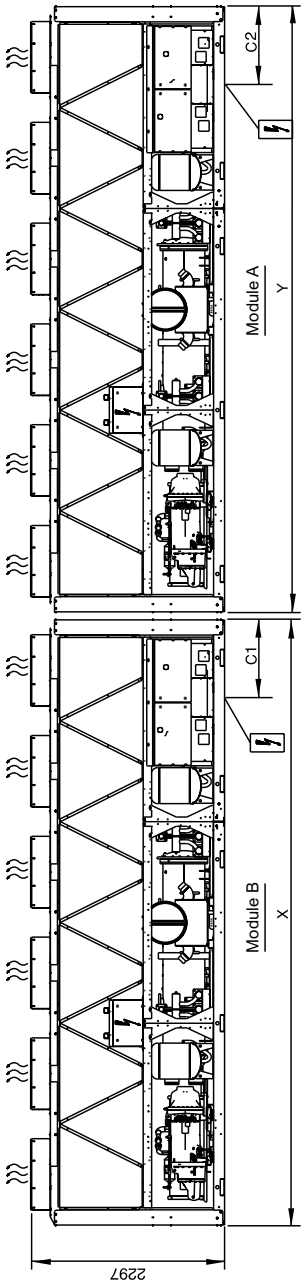


30XQ	A	B	C	D	E	H	X
0660	340	284	943	762	1663	2200	7186
0750	340	284	4730	1396	2297	1500	8380

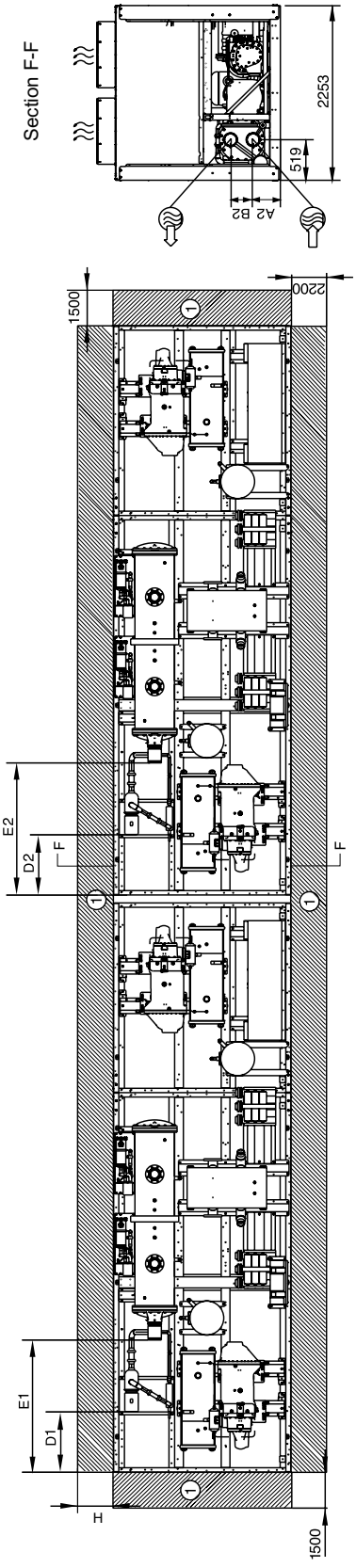
Dimensions/Clearances

30XQ0860~1500

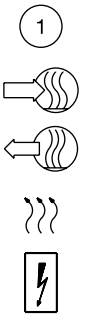




Section F-F



30XQ	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	H	X	Y
0860	362	362	242	242	457	457	856	856	1854	1854	1500	4798	4798
0930	362	362	242	242	457	950	856	856	1854	1854	1500	4798	5992
1000	362	362	242	242	950	950	856	856	1854	1854	1500	5992	5992
1090	362	340	242	284	457	943	856	762	1854	1663	2200	4798	7186
1160	362	340	242	284	950	943	856	762	1854	1663	2200	5992	7186
1250	362	340	242	284	950	4730	856	1396	1854	2297	1500	5992	8380
1320	340	340	284	284	943	943	762	762	1663	1663	2200	7186	7186
1410	340	340	284	284	943	4730	762	1396	1663	2297	2200	7186	8380
1500	340	340	284	284	4730	4730	1396	1396	2297	2297	1500	8380	8380



Required clearances for maintenance and air flow

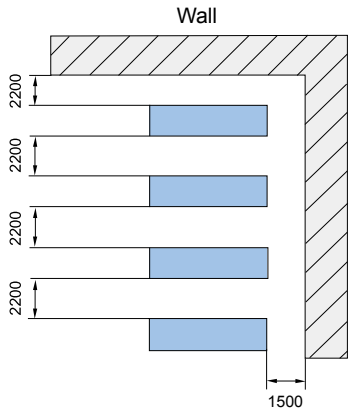
Water inlet

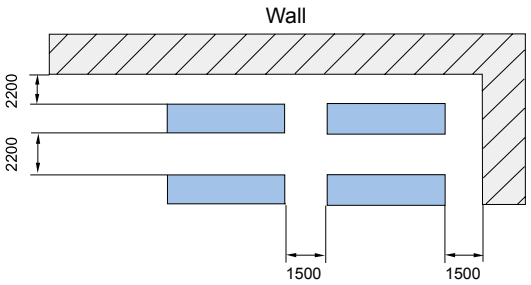
Water outlet

Air outlet – do not obstruct

Power supply connection

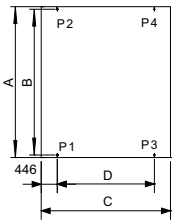
Multiple Chiller Installation



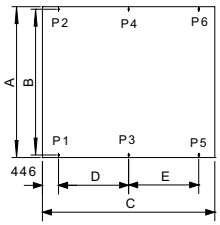


Note: If the height of wall exceeds 2m, please contact local Carrier Sales & Service Corporation.

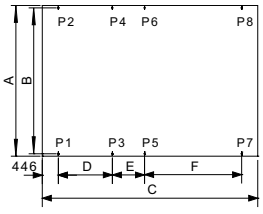
Weight Distribution, 30XA0252~1502



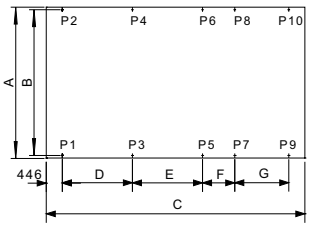
30XA0252-0342



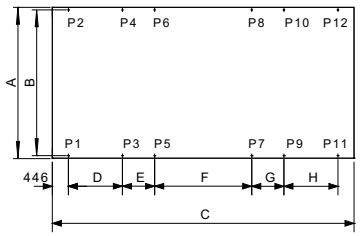
30XA0352-0482



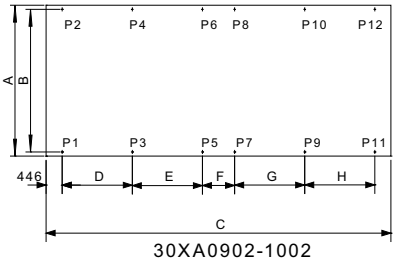
30XA0502



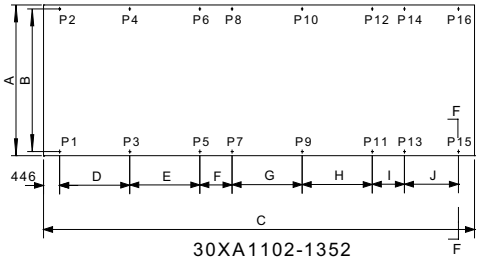
30XA0602-0702
30XA1012



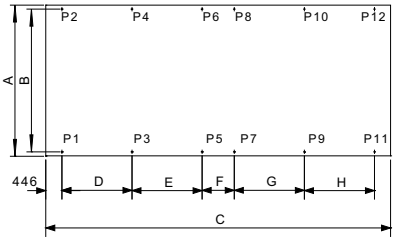
30XA0752-0852



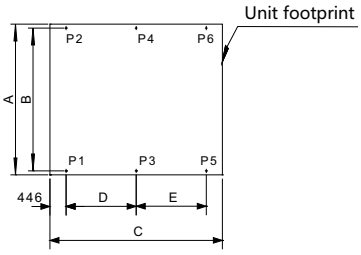
30XA0902-1002
30XA1212



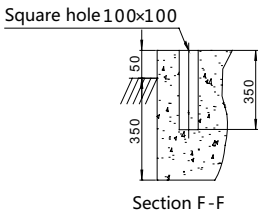
30XA1102-1352



30XA1502-1



30XA1502-2



Section F-F

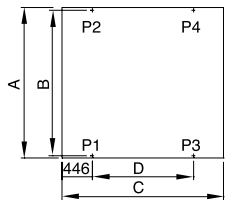
Weight Distribution, 30XA0252~1502

Models	Dimensions, mm										Weight distribution, kg																Operating weight
	A	B	C	D	E	F	G	H	I	J	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	
30XA0252	2231	2157	3582	2690							930	901	1016	983													3830
30XA0282	2231	2157	3582	2690							865	775	1015	923													3578
30XA0302	2231	2157	3582	2690							942	835	1103	980													3860
30XA0342	2231	2157	3582	2690							930	840	1100	1005													3875
30XA0352	2231	2157	4776	1942	1942						737	665	768	692	798	720											4380
30XA0402	2231	2157	4776	1942	1942						859	739	865	745	871	751											4830
30XA0442	2231	2157	4776	1942	1942						991	887	784	701	665	612											4640
30XA0452	2231	2157	4776	1942	1942						876	751	880	753	884	756											4900
30XA0482	2231	2157	4776	1942	1942						1080	976	874	790	663	601											4984
30XA0502	2231	2157	5970	1496	892	2690					716	628	724	635	730	639	744	654									5470
30XA0602	2231	2157	7164	1942	1942	892	1496				698	601	697	599	697	599	697	599	695	598							6480
30XA0702	2231	2157	7164	1942	1942	892	1496				709	615	709	618	710	618	711	618	713	619							6640
30XA0752	2231	2157	8358	1496	892	2690	892	1496			704	600	691	588	682	580	656	558	647	552	633	539					7430
30XA0852	2231	2157	8358	1496	892	2690	892	1496			739	644	724	631	716	622	687	598	678	591	662	578					7870
30XA0902	2231	2157	9552	1942	1942	892	1942	1942			865	764	820	723	773	683	752	664	707	624	661	584					8620
30XA1002	2231	2157	9552	1942	1942	892	1942	1942			899	793	847	749	796	704	772	683	722	639	671	595					8870
30XA1012	2231	2157	7164	1942	1942	892	1496				771	677	772	677	772	678	773	678	773	685							7256
30XA1102	2231	2157	11940	1942	1942	892	1942	1942	892	1496	748	661	740	653	731	647	727	643	719	635	709	628	706	625	699	619	10890
30XA1202	2231	2157	11940	1942	1942	892	1942	1942	892	1496	784	674	776	669	769	663	763	659	756	650	748	642	744	640	738	635	11310
30XA1212	2231	2157	9552	1942	1942	892	1942	1942			982	877	935	835	888	797	867	777	821	735	772	697					9983
30XA1302	2231	2157	11940	1942	1942	892	1942	1942	892	1496	793	698	786	693	779	688	777	686	772	681	766	676	763	674	758	670	11660
30XA1352	2231	2157	11940	1942	1942	892	1942	1942	892	1496	792	711	793	712	794	712	796	713	794	713	797	713	796	714	796	714	12060
30XA1502/1	2231	2157	9552	1942	1942	892	1942	1942			906	802	853	754	803	709	780	688	727	642	676	599					8939
30XA1502/2	2231	2157	4776	1942	1942						981	877	785	701	590	527											4461

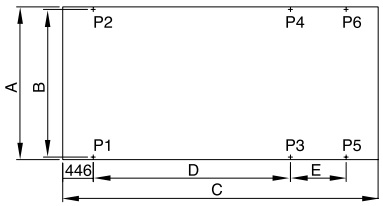
Note: (1) foot screw even hole number (far side) represent for evaporator side

(2) foot screw, M20X300

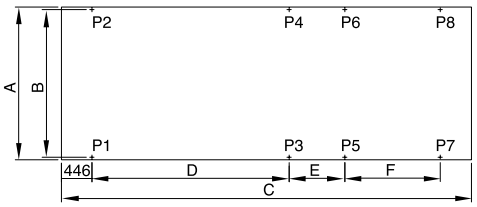
Weight Distribution, 30XQ0330~1500



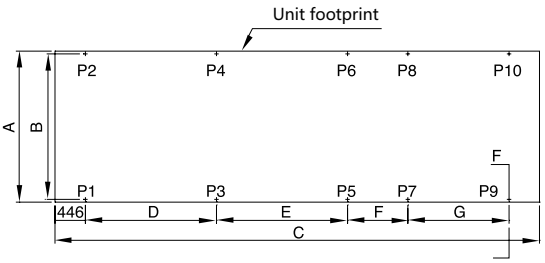
30XQ0330



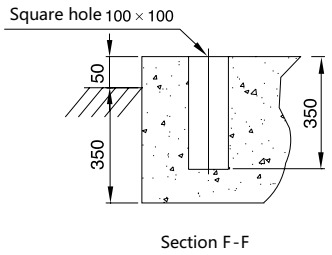
30XQ0430 30XQ0930 Module B
30XQ1090 Module B 30XQ0860 Module A/B



30XQ0500 , 30XQ0930 Module A
30XQ1000 Module A/B , 30XQ1160 Module B , 30XQ1250 Module B



30XQ0660 , 30XQ0750,30XQ1090 Module A
30XQ1160 Module A,30XQ1250 Module A , 30XQ1320/1410/1500 Module A/B

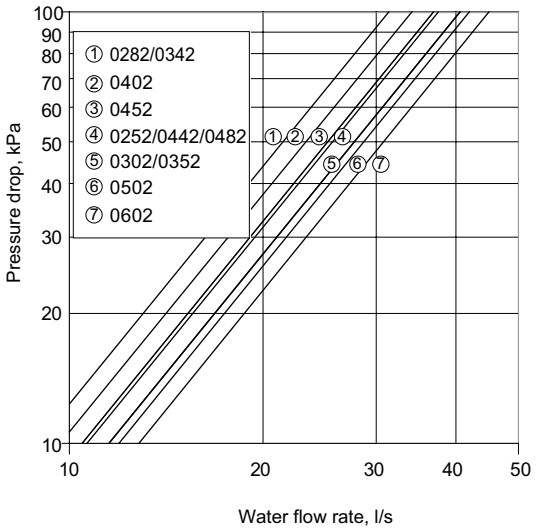


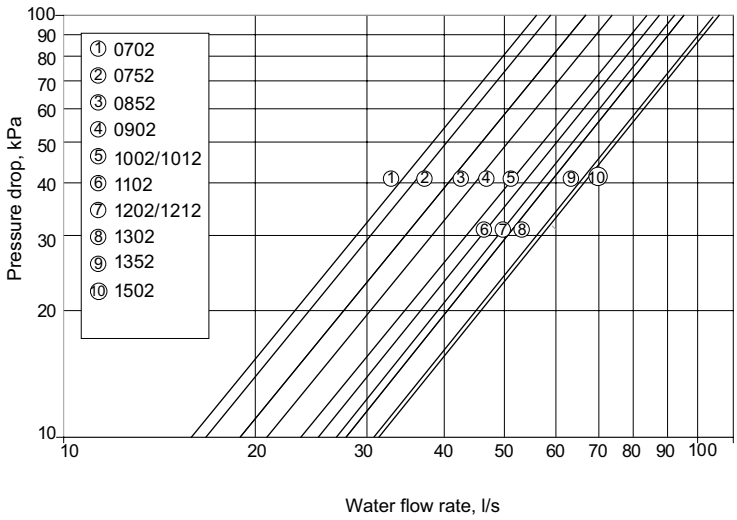
Section F-F

Models	Dimensions, mm							Weight distribution, kg										Operating weight
	A	B	C	D	E	F	G	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	
30XQ0330	2231	2157	3582	2690				1030	991	1020	982							4023
30XQ0430	2231	2157	4776	1942	1942			912	948	890	925	868	902					5445
30XQ0500	2231	2157	5970	2690	892	1496		737	736	735	737	734	734	732	732			5877
30XQ0660	2231	2157	7164	1942	1942	892	1496	764	758	765	761	760	762	761	759	760	755	7605
30XQ0750	2231	2157	8358	1942	1942	892	2690	1017	990	963	938	910	886	886	862	812	790	9054
30XQ0860 Module A/B	2231	2157	4776	1942	1942			912	948	890	925	868	902					5445
30XQ0930 Module A	2231	2157	5970	2690	892	1496		737	736	735	737	734	734	732	732			5877
30XQ0930 Module B	2231	2157	4776	1942	1942			912	948	890	925	868	902					5445
30XQ1000 Module A	2231	2157	5970	2690	892	1496		737	736	735	737	734	734	732	732			5887
30XQ1090 Module A	2231	2157	7164	1942	1942	892	1496	764	758	765	761	760	762	761	759	760	755	7605
30XQ1090 Module B	2231	2157	4776	1942	1942			912	948	890	925	868	902					5445
30XQ1160 Module A	2231	2157	7164	1942	1942	892	1496	764	758	765	761	760	762	761	759	760	755	7605
30XQ1160 Module B	2231	2157	5970	2690	892	1496		734	736	735	737	734	734	732	732			5877
30XQ1250 Module A	2231	2157	8358	1942	1942	892	2690	1071	990	963	938	910	886	886	862	812	790	9054
30XQ1250 Module B	2231	2157	5970	2690	892	1496		734	736	735	737	734	734	732	732			5877
30XQ1320 Module A/B	2231	2157	7164	1942	1942	892	1496	764	758	765	761	760	762	761	759	760	755	7605
30XQ1410 Module A	2231	2157	8358	1942	1942	892	2690	1071	990	963	938	910	886	886	862	812	790	9054
30XQ1410 Module B	2231	2157	7164	1942	1942	892	1496	764	758	765	761	760	762	761	759	760	755	7605
30XQ1500 Module A/B	2231	2157	8358	1942	1942	892	2690	1071	990	963	938	910	886	886	862	812	790	9054

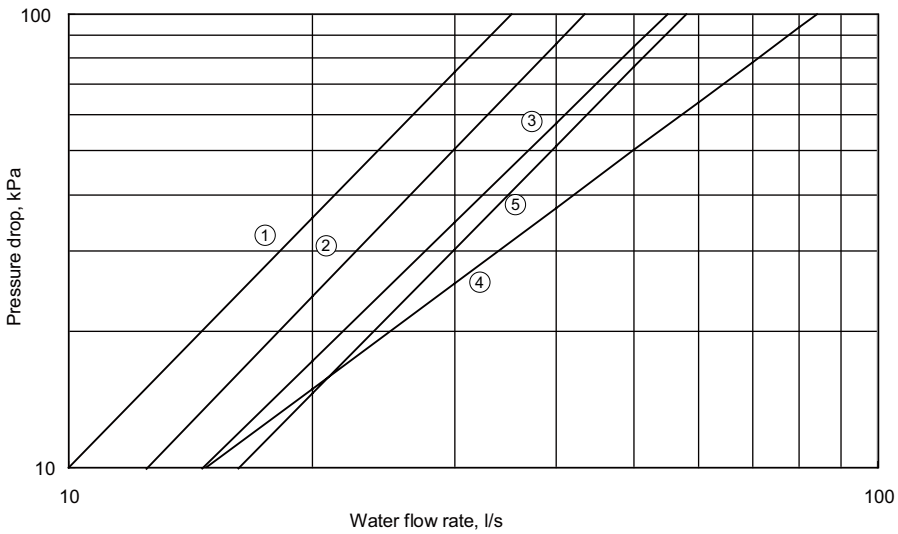
Note: (1) foot screw even hole number (far side) represent for evaporator side
(2) foot screw, M20X300

Evaporator Water Pressure Drop, 30XA0252~1502



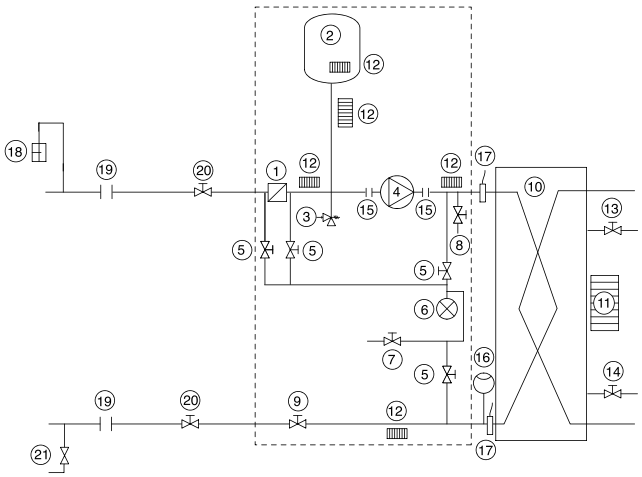


Evaporator Water Pressure Drop, 30XQ0330~1500



1. 30XQ0330 2. 30XQ0430,30XQ0860 ModuleA/B,30XQ0930 ModuleB,30XQ1090 ModuleB 3. 30XQ0500,30XQ0930 ModuleA,30XQ1000 ModuleA/B,30XQ1160 ModuleB,30XQ1250 ModuleB 4. 30XQ0660,30XQ1090 ModuleA,30XQ1160 ModuleA,30XQ1320 ModuleA/B 30XQ1410 ModuleB 5. 30XQ0750,30XQ1250 ModuleA ,30XQ1410 ModuleA ,30XQ1500 ModuleA/B

Hydronic Connections



Legend:

Components of the unit and hydronic module

1 Victaulic screen filter
2 Expansion tank
3 Safety valve
4 Water pump
5 Pressure tap valve (see Installation Manual)
6 Pressure gauge to measure the component pressure loss (see Installation Manual)
7 System vent valve
8 Drain valve
9 Water flow control valve
10 Evaporator
11 Evaporator anti-freeze heater (option)
12 Hydronic module anti-freeze heater (option)
13 Air vent (evaporator)
14 Water purge (evaporator)
15 Expansion compensator (flexible connections)
16 Flow switch
17 Water temperature sensor

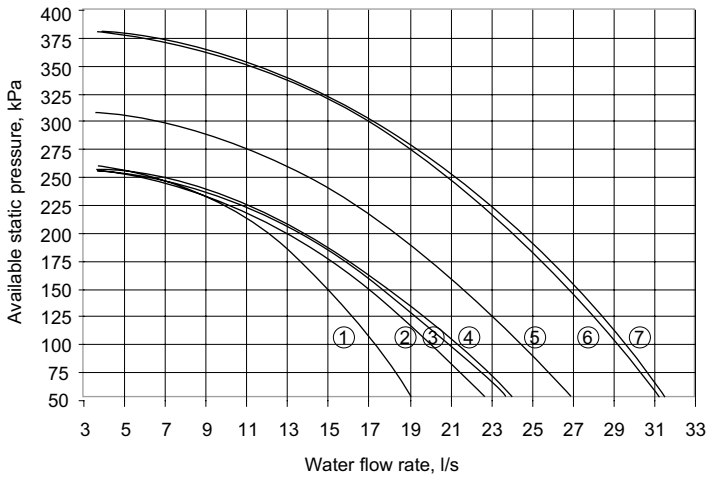
System components

18 Air vent
19 Flexible connection
20 Shut-down valves
21 Charge valve

--- Hydronic module (option)

Available Static System Pressure

High-pressure pumps



Legend
1 30XA 0252/0282
2 30XA 0342
3 30XA 0352
4 30XA 0302
5 30XA 0402/0442
6 30XA 0452/0482
7 30XA 0502

Minimum Water Loop Volume

For better control of leaving water temperature, the water loop minimum capacity is given by the formula:

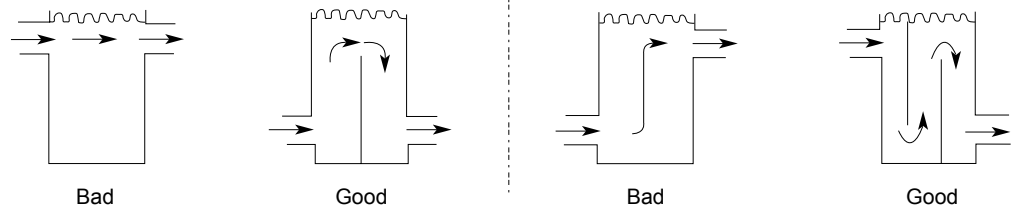
Capacity = CAP (kW) × N Liters

Application		N
Normal air conditioning	30XA0282-0482/30XA0252-1502	3.25
	30XQ0330-1500	3.5
Process cooling	30XA0282-0482/30XA0252-1502	6.5
	30XQ0330-1500	6.5

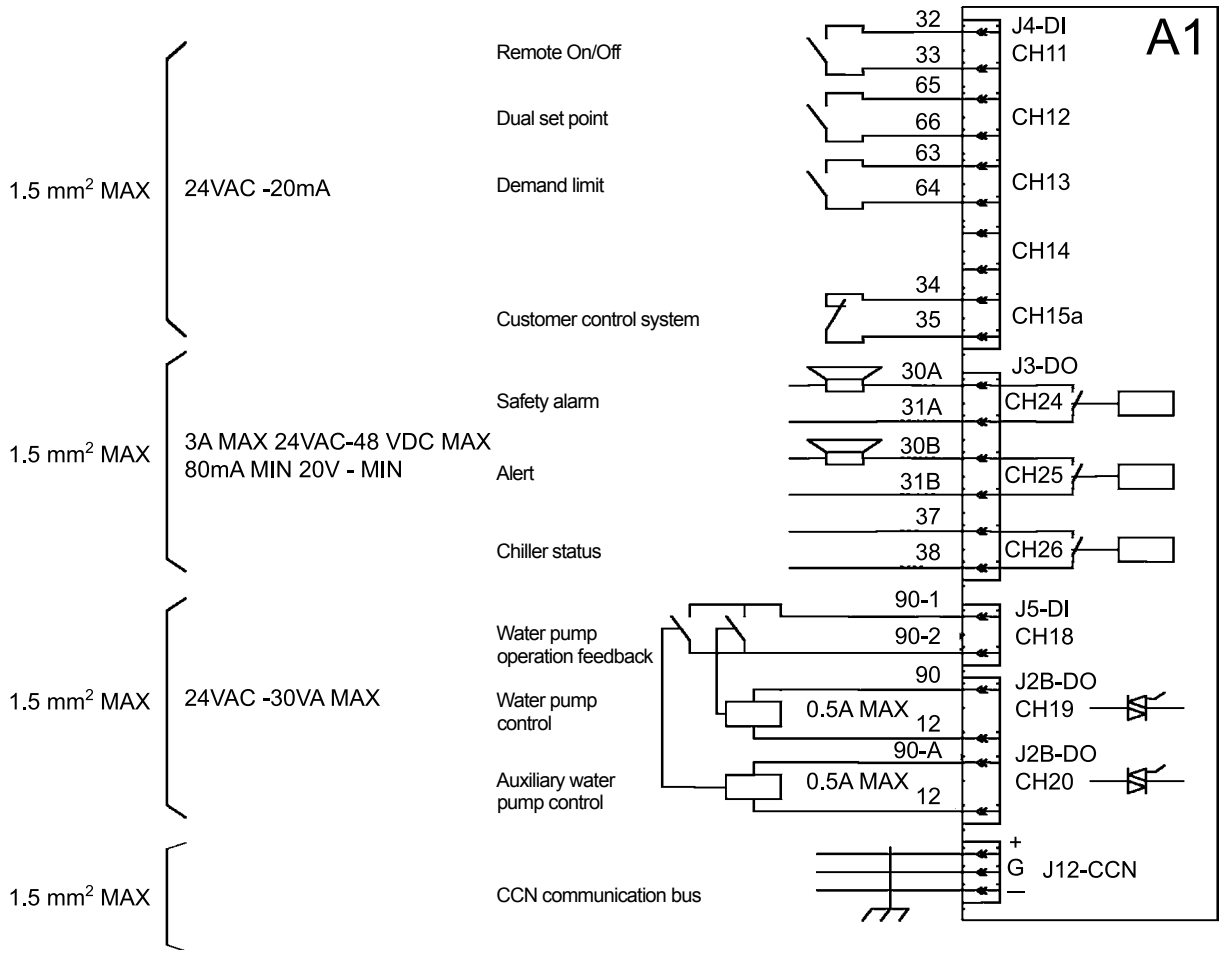
Where Cap is the nominal system cooling capacity (kW) at the nominal operating conditions of the installation.

This volume is necessary for stable operation and accurate temperature control.

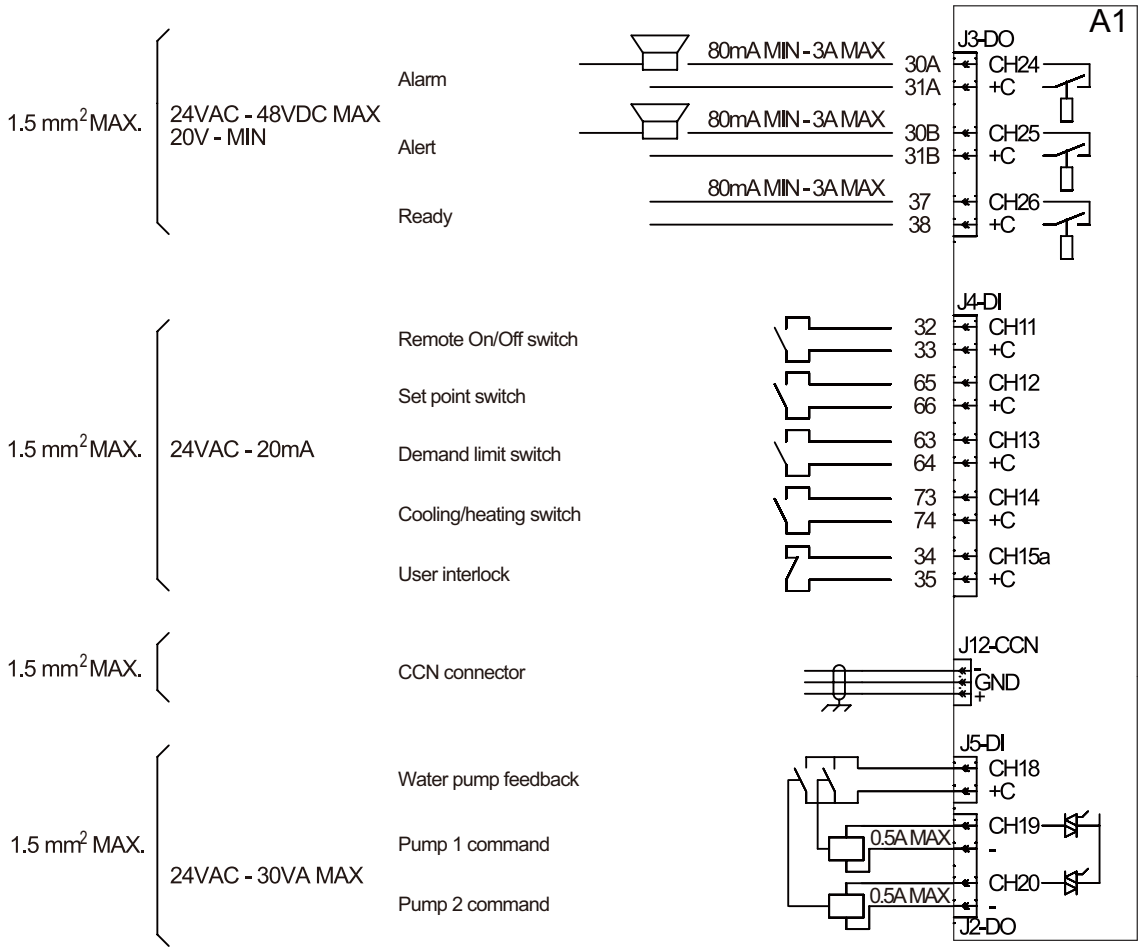
It is often necessary to add a buffer water tank to the circuit in order to achieve the required volume. The tank must be internally baffled in order to ensure proper mixing of the liquid (water or brine). Refer to the exam.



Field Control Wiring, 30XA0252~1502



Field Control Wiring, 30XQ0330~1500



Carrier Corporation identified six specific areas of concentration that directly impact how we, as a world manufacturer, balance our curtomer' needs for comfort with the environment's needs for responsible consumption.