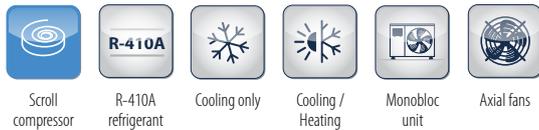


## Outdoor monobloc unit

# LCX 40 - 360 kW



### PLUS

- ✓ Completely configurable range
- ✓ Electronic expansion valve
- ✓ Incorporable hydronic kits
- ✓ Up to 4 compressors
- ✓ 1 or 2 cooling circuits
- ✓ Remote connectivity with the most common protocols

### LCX: wide range of models and configurability

The main feature of the new LCX design is its extremely wide range: the 18 models that comprise it can be built as chiller, free cooling, or heat pump versions, in 3 different acoustic configurations, and cover a range of powers from 40 to 360 kW.

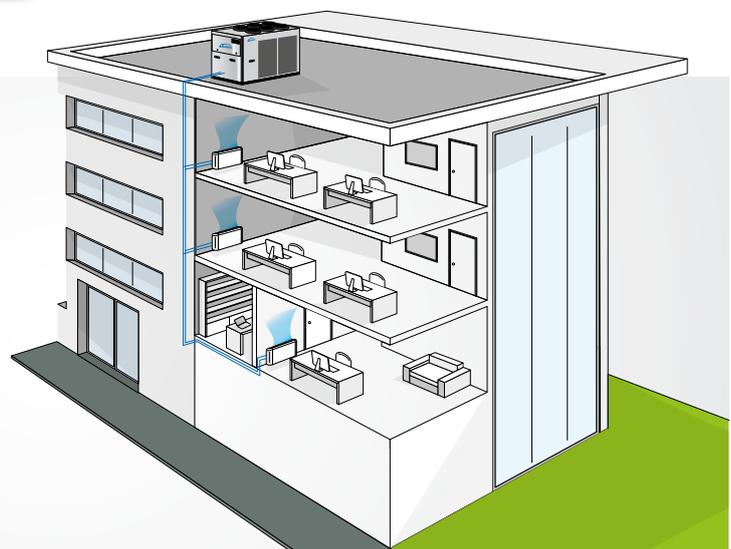
The possibility of setting up different cooling circuits in units of the same power means being able to personalise efficiency levels under full or part load conditions.

- 2 circuits, 2 compressors The dual circuit-dual compressor models provide high efficiency values under full load (EER and COP).
- 1 circuit, 2 compressors The solution of using two compressors in a single cooling circuit increases efficiency under part load conditions, reaching ESEER/SEER and SCOP values greater than 4.
- 2 circuits, 4 compressors 4 compressors enable the unit to output power in 4 steps and adapt perfectly to the actual thermal load of the system, while reducing starting currents.

Complete hydronic kits can be incorporated within the units without modifying their size and you have the option of choosing the water circulation pump.

All units, irrespective of type of construction, are equipped with electronic expansion valves to maximise efficiency under part load conditions.

LCX heat pumps and water chillers are designed for heating or cooling the water to be used in air-conditioning systems for residential, commercial or industrial use.





## MAIN COMPONENTS

### Structure

Made in galvanised steel sheet with a polyester powder coating for outdoors. The compressor compartment is completely sealed and may be accessed on 3 sides thanks to easy-to-remove panels that greatly simplify maintenance and/or inspection.

### Scroll compressors

Scroll compressors are now the best solution in terms of reliability and limiting the sound power emitted. The compressors are supplied complete with motor protection against overheating, overcurrents and excessive outlet gas temperatures.

### Heat exchanger

Made of generously sized aluminum fins and copper piping. The special engineering allows defrost cycles to be carried out at maximum speed in the models with heat pump operation, which brings clear benefits in terms of the integrated efficiency of the whole cycle.

### Electronic microprocessor controller

It completely manages the unit. The electronic control system allows the setpoint to be adjusted automatically according to the outdoor temperature in order to reduce consumption and broaden the working temperature range. With the advanced microprocessor control it is possible to set up LAN networks for controlling up to 4 units in parallel.

### Fan drive assembly

Axial fans with airfoil blades made of plastic-aluminum composite, connected to an electric motor with external rotor. The condensation control system continuously and automatically regulates the fan speed. Electric fans with BLDC motor are available on request.



### Cooling circuit

It can be made in three different versions with the same power (Efficiency Pack), using mainly:

- R410A scroll compressors
- braze-welded plate exchangers
- finned block condenser
- electronic expansion valve



## CONFIGURATION

The models are completely configurable by selecting the version and the options. To the right is shown an example of configuration.

Version	Fields ▶	1	2	3	4	5	6	7	8	9	10	11	12	13
LCX092HL		0	B	1	S	0	0	S	1	0	0	G	0	V

To verify the compatibility of the options, use the selection software or the price list.

### AVAILABLE VERSIONS

#### Cooling only versions

- LCX...CS** Standard execution
- LCX...CL** Low noise execution
- LCX...CQ** Quiet execution (super low noise)

#### Versions with reversible heat pump

- LCX...HS** Standard execution
- LCX...HL** Low noise execution
- LCX...HQ** Quiet execution (super low noise)

### CONFIGURATION OPTIONS

#### 1 - POWER SUPPLY

- 0** 400/3/50 + N
- 1** 400/3/50 with transformer
- 2** 400/3/50 + N + Circuit breakers
- 3** 400/3/50 with transformer+ Circuit breakers

#### 2 - CONTROL MICROPROCESSOR + THROTTLE VALVE

- 0** BASE control microprocessor + electronic expansion valve
- B** ADVANCED control microprocessor + electronic expansion valve

#### 3 - WATER PUMP ON USER SIDE

- 0** Absent
- 1** 1 pump and expansion tank
- 2** 1 updated pump and expansion tank
- 3** 2 pumps for combined operation + expansion tank (only if FIELD 2 = B)
- 4** 2 updated pumps for combined operation + expansion tank (only if FIELD 2 = B)
- 5** 2 pumps and expansion tank (in time sequence)
- 6** 2 updated pumps and expansion tank (in time sequence)

#### 4 - BUFFER TANK

- 0** Absent
- S** Present

#### 5 - PARTIAL HEAT RECOVERY (air flow modulation option is mandatory)

- 0** Absent
- D** Desuperheater

#### 6 - AIR FLOW MODULATION

- 0** Absent
- C** Condensation control with fans adjusted by potentiometer
- E** Condensation control, "EC brushless" electronically controlled fans

#### 7 - ANTIFREEZE KIT

- 0** Absent
- P** Present, basic unit (heating element only on plate exchangers)
- E** Present, unit with pump/s and expansion tank
- S** Present, unit with pump/s, expansion tank and tank

#### 8 - REMOTE COMMUNICATION

- 0** Absent
- 1** RS485 Serial board (Modbus or Carel protocol)
- 2** Lonworks serial board (only if FIELD 2 = B)
- 3** GSM modem kit (only if FIELD 2 = B)
- 4** pCOWEB Ethernet card (SNMP or BACNET protocol) + clock card (only if FIELD 2 = B)
- 5** GSM modem kit (only if FIELD 2 = B)

#### 9 - HEAT EXCHANGER CONSTRUCTION ON REQUEST

- 0** Standard
- R** Copper / copper exchangers
- C** Cataphoresis
- B** Fins pre-coated with epoxy paint

#### 10 - PACKING (net price)

- 0** Standard
- 1** Wooden crate
- 2** Wooden case

#### 11 - INSULATION

- 0** Absent
- G** Base rubber vibration dumpers
- M** Base spring vibration dumpers

#### 12 - REMOTE CONTROLLER

- 0** Absent
- 1** Simplified remote control panel
- 2** Remote display for BASE control microprocessor (only if FIELD 2 = 0)
- 3** Remote display for ADVANCED control microprocessor (only if FIELD 2 = B)

#### 13 - INSTALLING THE UNIT

- 0** Absent
- V** Pair of quick couplings for water IN-OUT
- 3** Power factor correction capacitors + soft starter
- 4** Low air/water temperature (crankcase heating element)
- 5** Opt 4 + Opt 2

## ACCESSORIES

- A** Power factor correction capacitors
- B** Soft-starter kit
- C** Service kit (kit of sensors for quick diagnosis) (only if FIELD 2 = B)
- D** Clock card (only if FIELD 2 = B)
- E** ON/OFF status of the compressors
- F** Remote control for power step limits (only if FIELD 2 = B)
- G** Configurable digital alarm card (only if FIELD 2 = B)
- H** Outdoor air temperature probe for setpoint compensation (standard in heating mode)
- I** Pressure gauges
- L** Regulating filter kit (solenoid and tap on the liquid line)
- M** Normative reference other than "97/23/CE - PED"
- N** Unit lifting kit
- P** Condenser protection grille
- Q** Metal filters for protecting condenser coil

## LCX CS Rated technical data of water chillers

LCX...CS		062	072	082	091	092	101	102
Power supply	V-ph-Hz	400 - 3N - 50						
Cooling capacity (1) (E)	kW	58,2	66,5	78,2	88,6	88,6	101,6	101,6
Power input (1) (E)	kW	21,0	23,6	27,2	31,3	32,2	36,1	36,1
EER (1) (E)		2,78	2,82	2,88	2,83	2,75	2,81	2,81
ESEER (E)		3,67	3,72	3,80	3,29	3,61	3,72	3,37
Eurovent efficiency class		C	C	C	C	C	C	C
Water flow (1)	l/h	10046	11477	13492	15284	15284	17517	17517
Water pressure drop (1) (E)	kPa	28	29	31	32	32	32	32
Available pressure head - standard pump (1)	kPa	142	138	135	130	130	127	127
Maximum current absorption	A	60	64	75	91	91	101	101
Startup current	A	195	192	200	261	261	269	269
Startup current with softstarter kit	A	120	133	148	199	199	207	207
No. of compressors / circuits		2/1	2/1	2/1	2/2	2/1	2/2	2/1
Buffer tank volume	dm <sup>3</sup>	200	200	200	220	220	220	220
Expansion vessel	dm <sup>3</sup>	12	12	12	12	12	12	12
Sound power level (2) (E)	dB(A)	82	82	82	83	83	83	83
Transport weight unit with pump and tank	kg	677	707	787	918	918	918	918
Operating weight unit with pump and full tank	kg	877	907	987	1138	1138	1138	1138

LCX...CS		121	122	124	141	142	144
Power supply	V-ph-Hz	400 - 3N - 50					
Cooling capacity (1) (E)	kW	113	113	119	144	144	143
Power input (1) (E)	kW	40,5	40,5	42,1	50,9	50,9	50,8
EER (1) (E)		2,79	2,78	2,83	2,83	2,83	2,82
ESEER (E)		3,36	3,68	3,76	3,48	3,63	3,64
Eurovent efficiency class		C	C	C	C	C	C
Water flow (1)	l/h	19449	19447	20517	24817	24815	24665
Water pressure drop (1) (E)	kPa	34	34	34	36	36	36
Available pressure head - standard pump (1)	kPa	115	115	116	177	176	172
Maximum current absorption	A	119	119	120	131	131	129
Startup current	A	319	319	247	330	330	245
Startup current with softstarter kit	A	254	254	172	265	265	186
No. of compressors / circuits		2/2	2/1	4/2	2/2	2/1	4/2
Buffer tank volume	dm <sup>3</sup>	340	340	340	340	340	340
Expansion vessel	dm <sup>3</sup>	12	12	12	12	12	12
Sound power level (2) (E)	dB(A)	83	83	82	84	84	82
Transport weight unit with pump and tank	kg	1241	1241	1301	1286	1286	1321
Operating weight unit with pump and full tank	kg	1581	1581	1641	1626	1626	1661

(1) Water temperature 12/7 °C, outdoor air temperature 35 °C (UNI EN 14511:2011)

(2) Sound power level measured according to UNI EN ISO 9614

(E) EUROVENT certified data



## LCX CS Rated technical data of water chillers

LCX...CS		161	162	164	174	194	214
Power supply	V-ph-Hz	400 - 3N - 50					
Cooling capacity (1) (E)	kW	160	160	152	162	183	201
Power input (1) (E)	kW	58,9	58,9	56,4	58,1	65,6	76,4
EER (1) (E)		2,71	2,71	2,70	2,78	2,78	2,63
ESEER (E)		3,49	3,75	3,68	3,71	3,59	3,72
Eurovent efficiency class		C	C	C	C	C	D
Water flow (1)	l/h	27525	27525	26192	27841	31473	34669
Water pressure drop (1) (E)	kPa	36	36	36	37	37	38
Available pressure head - standard pump (1)	kPa	162	162	162	171	151	163
Maximum current absorption	A	137	144	150	136	155	173
Startup current	A	389	396	266	252	310	330
Startup current with softstarter kit	A	306	313	214	200	248	268
No. of compressors / circuits		2/2	2/1	4/2	4/2	4/2	4/2
Buffer tank volume	dm <sup>3</sup>	340	340	340	600	600	600
Expansion vessel	dm <sup>3</sup>	12	12	12	24	24	24
Sound power level (2) (E)	dB(A)	84	84	82	85	85	86
Transport weight unit with pump and tank	kg	1316	1316	1471	1608	1676	1686
Operating weight unit with pump and full tank	kg	1656	1656	1811	2208	2276	2286

LCX...CS		244	274	294	324	364
Power supply	V-ph-Hz	400 - 3N - 50				
Cooling capacity (1) (E)	kW	245	263	293	327	354
Power input (1) (E)	kW	95,8	90,5	104	119	138
EER (1) (E)		2,55	2,91	2,81	2,76	2,56
ESEER (E)		3,68	3,71	3,62	3,59	3,54
Eurovent efficiency class		D	B	C	C	D
Water flow (1)	l/h	42146	45335	50506	56411	60931
Water pressure drop (1) (E)	kPa	38	39	40	41	41
Available pressure head - standard pump (1)	kPa	194	179	166	159	137
Maximum current absorption	A	196	224	237	251	300
Startup current	A	380	403	468	476	497
Startup current with softstarter kit	A	315	338	385	393	440
No. of compressors / circuits		4/2	4/2	4/2	4/2	4/2
Buffer tank volume	dm <sup>3</sup>	600	765	765	765	765
Expansion vessel	dm <sup>3</sup>	24	24	24	24	24
Sound power level (2) (E)	dB(A)	86	86	86	86	87
Transport weight unit with pump and tank	kg	1869	2129	2161	2196	2196
Operating weight unit with pump and full tank	kg	2469	2894	2926	2961	2961

(1) Water temperature 12/7 °C, outdoor air temperature 35 °C (UNI EN 14511:2011)

(2) Sound power level measured according to UNI EN ISO 9614

(E) EUROVENT certified data

## LCX CL Rated technical data of water chillers

LCX...CL		042	052	062	072	082	091	092
Power supply	V-ph-Hz	400-3N-50						
Cooling capacity (1) (E)	kW	45,2	52,4	58,2	66,6	78,5	88,6	88,6
Power input (1) (E)	kW	15,7	18,0	20,3	22,9	26,6	30,2	31,1
EER (1) (E)		2,88	2,91	2,86	2,90	2,95	2,93	2,85
ESEER (E)		3,98	4,23	4,02	4,02	4,06	3,61	4,03
Eurovent efficiency class		C	B	C	B	B	B	C
Water flow (1)	l/h	7803	9035	10035	11482	13549	15283	15283
Water pressure drop (1) (E)	kPa	26	28	28	29	31	32	32
Available pressure head - standard pump (1)	kPa	155	153	142	137	133	129	129
Maximum current absorption	A	41	44	51	55	66	77	77
Startup current	A	159	162	185	183	191	246	246
Startup current with softstarter kit	A	88	101	111	124	139	184	184
No. of compressors / circuits		2/1	2/1	2/1	2/1	2/1	2/2	2/1
Buffer tank volume	dm <sup>3</sup>	200	200	220	220	220	340	340
Expansion vessel	dm <sup>3</sup>	12	12	12	12	12	12	12
Sound power level (2) (E)	dB(A)	74	74	77	77	77	78	78
Transport weight unit with pump and tank	kg	662	662	762	767	847	1086	1086
Operating weight unit with pump and full tank	kg	862	862	982	987	1067	1426	1426

LCX...CL		094	101	102	104	121	122	124
Power supply	V-ph-Hz	400 - 3N - 50						
Cooling capacity (1) (E)	kW	90,3	102	102	105	113	113	116
Power input (1) (E)	kW	31,5	35,2	35,2	36,0	40,2	40,2	41,0
EER (1) (E)		2,87	2,89	2,89	2,90	2,81	2,81	2,84
ESEER (E)		3,86	3,66	4,09	3,95	3,43	3,75	3,64
Eurovent efficiency class		C	C	C	B	C	C	C
Water flow (1)	l/h	15574	17539	17539	18027	19478	19478	20075
Water pressure drop (1) (E)	kPa	32	32	32	34	34	34	34
Available pressure head - standard pump (1)	kPa	129	127	127	127	115	115	114
Maximum current absorption	A	81	86	86	87	95	95	96
Startup current	A	194	254	254	198	295	295	220
Startup current with softstarter kit	A	122	192	192	137	230	230	146
No. of compressors / circuits		4/2	2/2	2/1	4/2	2/2	2/1	4/2
Buffer tank volume	dm <sup>3</sup>	340	340	340	340	600	600	600
Expansion vessel	dm <sup>3</sup>	12	12	12	12	24	24	24
Sound power level (2) (E)	dB(A)	77	78	78	77	80	80	77
Transport weight unit with pump and tank	kg	1217	1096	1096	1217	1440	1440	1455
Operating weight unit with pump and full tank	kg	1557	1436	1436	1557	2040	2040	2055

(1) Water temperature 12/7°C; outdoor air temperature 35°C (14511:2011)

(2) Sound power level measured according to UNI EN ISO 9614

(E) EUROVENT certified data



## LCX CL Rated technical data of water chillers

LCX...CL		141	142	144	161	162	164	194
Power supply	V-ph-Hz	400-3N-50						
Cooling capacity (1) (E)	kW	127	127	133	160	160	152	177
Power input (1) (E)	kW	46,7	46,7	46,5	58,5	58,5	56,1	63,6
EER (1) (E)		2,73	2,73	2,86	2,74	2,74	2,71	2,79
ESEER (E)		3,47	3,76	3,91	3,59	3,81	3,71	3,54
Eurovent efficiency class		C	C	C	C	C	C	C
Water flow (1)	l/h	21967	21965	22949	27595	27601	26210	30574
Water pressure drop (1) (E)	kPa	36	36	36	37	37	37	37
Available pressure head - standard pump (1)	kPa	170	170	168	162	162	162	155
Maximum current absorption	A	106	106	105	120	120	126	148
Startup current	A	306	306	222	371	371	241	307
Startup current with softstarter kit	A	241	241	163	288	288	189	245
No. of compressors / circuits		2/2	2/1	4/2	2/2	2/1	4/2	4/2
Buffer tank volume	dm <sup>3</sup>	600	600	600	600	600	600	600
Expansion vessel	dm <sup>3</sup>	24	24	24	24	24	24	24
Sound power level (2) (E)	dB(A)	81	81	77	81	81	77	82
Transport weight unit with pump and tank	kg	1490	1490	1470	1510	1510	1620	1676
Operating weight unit with pump and full tank	kg	2090	2090	2070	2110	2110	2220	2276

LCX...CL		214	244	274	294	324	364
Power supply	V-ph-Hz	400 - 3N - 50					
Cooling capacity (1) (E)	kW	197	219	255	278	315	337
Power input (1) (E)	kW	74,2	83,9	90,0	107	122	150
EER (1) (E)		2,65	2,61	2,84	2,59	2,58	2,25
ESEER (E)		3,69	3,61	3,5	3,54	3,56	3,49
Eurovent efficiency class		D	D	C	D	D	F
Water flow (1)	l/h	33918	37691	44001	47825	54326	58016
Water pressure drop (1) (E)	kPa	37	38	38	39	40	41
Available pressure head - standard pump (1)	kPa	160	190	181	168	163	142
Maximum current absorption	A	167	190	215	229	242	290
Startup current	A	318	382	398	464	472	487
Startup current with softstarter kit	A	256	317	333	381	389	430
No. of compressors / circuits		4/2	4/2	4/2	4/2	4/2	4/2
Buffer tank volume	dm <sup>3</sup>	600	600	765	765	765	765
Expansion vessel	dm <sup>3</sup>	24	24	24	24	24	24
Sound power level (2) (E)	dB(A)	82	82	84	84	84	85
Transport weight unit with pump and tank	kg	1726	1869	2129	2161	2196	2196
Operating weight unit with pump and full tank	kg	2326	2469	2894	2926	2961	2961

(1) Water temperature 12/7°C; outdoor air temperature 35°C (14511:2011)

(2) Sound power level measured according to UNI EN ISO 9614

(E) EUROVENT certified data

## LCX CQ Rated technical data of water chillers

LCX...CQ		042	052	062	072	082	091	092
Power supply	V-ph-Hz	400-3N-50						
Cooling capacity (1) (E)	kW	43.2	50.0	55.6	63.5	75.0	84.7	84.7
Power input (1) (E)	kW	15.6	17.9	20.2	22.9	26.5	31.0	31.0
EER (1) (E)		2.76	2.79	2.76	2.78	2.83	2.73	2.73
ESEER (E)		3.85	4.08	3.90	3.90	3.93	3.49	3.91
Eurovent efficiency class		C	C	C	C	C	C	C
Water flow (1)	l/h	7452	8627	9601	10963	12934	14610	14610
Water pressure drop (1) (E)	kPa	26	28	28	29	31	32	32
Available pressure head - standard pump (1)	kPa	154	152	140	136	133	128	128
Maximum current absorption	A	41	44	51	55	66	77	77
Startup current	A	159	162	185	183	191	246	246
Startup current with softstarter kit	A	88	101	111	124	139	184	184
No. of compressors / circuits		2/1	2/1	2/1	2/1	2/1	2/2	2/1
Buffer tank volume	dm <sup>3</sup>	200	200	220	220	220	340	340
Expansion vessel	dm <sup>3</sup>	12	12	12	12	12	12	12
Sound power level (2) (E)	dB(A)	71	71	73	73	73	75	75
Transport weight unit with pump and tank	kg	662	662	762	767	847	1086	1086
Operating weight unit with pump and full tank	kg	862	862	982	987	1067	1426	1426

LCX...CQ		094	101	102	104	121	122	124
Power supply	V-ph-Hz	400 - 3N - 50						
Cooling capacity (1) (E)	kW	86,4	97,1	97,1	100	107	107	110
Power input (1) (E)	kW	31,30	35,1	35,1	35,8	40,1	40,1	41,1
EER (1) (E)		2,76	2,76	2,76	2,79	2,66	2,66	2,67
ESEER (E)		3,74	3,53	3,95	3,82	3,26	3,56	3,46
Eurovent efficiency class		C	C	C	C	D	D	D
Water flow (1)	l/h	14910	16742	16742	17250	18383	18398	18886
Water pressure drop (1) (E)	kPa	32	32	32	32	33	33	33
Available pressure head - standard pump (1)	kPa	127	125	125	128	114	114	114
Maximum current absorption	A	81	86	86	87	99	99	100
Startup current	A	194	254	254	198	299	299	225
Startup current with softstarter kit	A	122	192	192	137	234	234	150
No. of compressors / circuits		4/2	2/2	2/1	4/2	2/2	2/1	4/2
Buffer tank volume	dm <sup>3</sup>	340	340	340	340	600	600	600
Expansion vessel	dm <sup>3</sup>	12	12	12	12	24	24	24
Sound power level (2) (E)	dB(A)	74	75	75	74	76	76	73
Transport weight unit with pump and tank	kg	1217	1096	1096	1217	1440	1440	1455
Operating weight unit with pump and full tank	kg	1557	1436	1436	1557	2040	2040	2055

(1) Water temperature 12/7 °C, outdoor air temperature 35 °C (UNI EN 14511:2011)

(2) Sound power level measured according to UNI EN ISO 9614

(E) EUROVENT certified data



## LCX CQ Rated technical data of water chillers

LCX...CQ		141	142	144	161	162	164
Power supply	V-ph-Hz	400-3N-50					
Cooling capacity (1) (E)	kW	120	120	124	150	150	138
Power input (1) (E)	kW	46,7	46,7	46,5	58,5	58,5	56,1
EER (1) (E)		2,58	2,58	2,67	2,57	2,57	2,47
ESEER (E)		3,30	3,57	3,71	3,41	3,62	3,53
Eurovent efficiency class		D	D	D	D	D	E
Water flow (1)	l/h	20730	20730	21337	25875	25876	23812
Water pressure drop (1) (E)	kPa	35	35	35	35	35	36
Available pressure head - standard pump (1)	kPa	170	170	169	166	166	163
Maximum current absorption	A	110	110	108	124	124	130
Startup current	A	310	310	227	377	377	247
Startup current with softstarter kit	A	245	245	168	294	294	195
No. of compressors / circuits		2/2	2/1	4/2	2/2	2/1	4/2
Buffer tank volume	dm <sup>3</sup>	600	600	600	600	600	600
Expansion vessel	dm <sup>3</sup>	24	24	24	24	24	24
Sound power level (2) (E)	dB(A)	77	77	73	77	77	73
Transport weight unit with pump and tank	kg	1490	1490	1470	1510	1510	1620
Operating weight unit with pump and full tank	kg	2090	2090	2070	2110	2110	2220

LCX...CQ		194	214	244	274	294	324
Power supply	V-ph-Hz	400-3N-50					
Cooling capacity (1) (E)	kW	160	178	196	241	261	283
Power input (1) (E)	kW	63,6	74,2	83,9	90,0	107	122
EER (1) (E)		2,29	2,24	2,25	2,68	2,43	2,32
ESEER (E)		3,36	3,51	3,43	3,32	3,37	3,38
Eurovent efficiency class		F	F	F	D	E	E
Water flow (1)	l/h	27594	30652	33747	41455	45007	48740
Water pressure drop (1) (E)	kPa	35	35	36	37	38	38
Available pressure head - standard pump (1)	kPa	173	181	200	181	172	168
Maximum current absorption	A	148	167	190	213	226	240
Startup current	A	314	328	395	396	465	475
Startup current with softstarter kit	A	252	266	330	331	382	392
No. of compressors / circuits		4/2	4/2	4/2	4/2	4/2	4/2
Buffer tank volume	dm <sup>3</sup>	600	600	600	765	765	765
Expansion vessel	dm <sup>3</sup>	24	24	24	24	24	24
Sound power level (2) (E)	dB(A)	78	78	78	80	80	80
Transport weight unit with pump and tank	kg	1676	1726	1869	2129	2161	2196
Operating weight unit with pump and full tank	kg	2276	2326	2469	2894	2926	2961

(1) Water temperature 12/7 °C, outdoor air temperature 35 °C (UNI EN 14511:2011)

(2) Sound power level measured according to UNI EN ISO 9614

(E) EUROVENT certified data

## LCX HS Rated technical data of heat pumps

LCX...HS		062	072	082	091	092	101	102
Power supply	V-ph-Hz	400 - 3N - 50						
Cooling capacity (1) (E)	kW	57,4	65,6	77,1	87,4	87,4	100	100
Power input (1) (E)	kW	20,9	23,6	27,1	32,1	32,1	36,4	36,4
EER (1) (E)		2,74	2,78	2,85	2,72	2,72	2,75	2,75
ESEER (E)		3,60	3,64	3,72	3,23	3,54	3,65	3,30
Eurovent efficiency class		C	C	C	C	C	C	C
Water flow (1)	l/h	9895	11303	13293	15063	15062	17262	17263
Water pressure drop (1) (E)	kPa	23	23	23	24	24	26	26
Available pressure head - standard pump (1)	kPa	148	145	142	138	138	133	133
Heating capacity (3) (E)	kW	69,5	79,2	93,5	105	107	120	120
Power input (3) (E)	kW	19,8	22,1	25,7	30,0	30,0	34,2	34,2
COP (3) (E)		3,51	3,58	3,64	3,51	3,55	3,52	3,52
Eurovent efficiency class		A	A	A	A	A	A	A
Water flow (3)	l/h	12012	13696	16182	18239	18452	20809	20809
Water pressure drop (3) (E)	kPa	33	33	33	35	36	37	37
Available pressure head - standard pump (3)	kPa	132	128	123	123	123	115	115
Maximum current absorption	A	60	64	75	91	91	101	101
Startup current	A	195	192	200	261	261	269	269
Startup current with softstarter kit	A	120	133	148	199	199	207	207
No. of compressors / circuits		2/1	2/1	2/1	2/2	2/1	2/2	2/1
Buffer tank volume	dm <sup>3</sup>	200	200	200	220	220	220	220
Expansion vessel	dm <sup>3</sup>	12	12	12	12	12	12	12
Sound power level (2) (E)	dB(A)	82	82	82	83	83	83	83
Transport weight unit with pump and tank	kg	677	707	787	918	918	918	918
Operating weight unit with pump and full tank	kg	877	907	987	1138	1138	1138	1138

LCX...HS		121	122	124	141	142	144
Power supply	V-ph-Hz	400 - 3N - 50					
Cooling capacity (1) (E)	kW	111	111	117	142	142	141
Power input (1) (E)	kW	40,4	40,4	42,0	50,8	50,9	50,7
EER (1) (E)		2,75	2,75	2,80	2,79	2,79	2,78
ESEER (E)		3,29	3,61	3,69	3,41	3,55	3,56
Eurovent efficiency class		C	C	C	C	C	C
Water flow (1)	l/h	19162	19159	20214	24449	24448	24301
Water pressure drop (1) (E)	kPa	27	27	25	29	31	31
Available pressure head - standard pump (1)	kPa	122	122	124	181	180	176
Heating capacity (3) (E)	kW	134	134	147	166	167	168
Power input (3) (E)	kW	38,1	38,1	41,7	47,6	47,7	47,3
COP (3) (E)		3,52	3,50	3,52	3,49	3,49	3,55
Eurovent efficiency class		A	A	A	A	A	A
Water flow (3)	l/h	23201	23097	25393	28797	28799	29100
Water pressure drop (3) (E)	kPa	39	39	39	40	43	44
Available pressure head - standard pump (3)	kPa	104	105	106	161	158	150
Maximum current absorption	A	119	119	120	131	131	129
Startup current	A	319	319	247	330	330	245
Startup current with softstarter kit	A	254	254	172	265	265	186
No. of compressors / circuits		2/2	2/1	4/2	2/2	2/1	4/2
Buffer tank volume	dm <sup>3</sup>	340	340	340	340	340	340
Expansion vessel	dm <sup>3</sup>	12	12	12	12	12	12
Sound power level (2) (E)	dB(A)	83	83	82	84	84	82
Transport weight unit with pump and tank	kg	1241	1241	1301	1286	1286	1321
Operating weight unit with pump and full tank	kg	1581	1581	1641	1626	1626	1661

(1) Water temperature 12/7 °C, outdoor air temperature 35 °C (UNI EN 14511:2011)  
 (2) Sound power level measured according to UNI EN ISO 9614

(3) Water temperature 40/45 °C, outdoor air temperature 7 °C D.B. / 6 °C W.B. (UNI EN 14511:2011)  
 (E) EUROVENT certified data



## LCX HS Rated technical data of heat pumps

LCX...HS		161	162	164	174	194	214
Power supply	V-ph-Hz	400 - 3N - 50					
Cooling capacity (1) (E)	kW	157	157	150	159	180	198
Power input (1) (E)	kW	58,8	58,8	56,3	58,1	65,6	76,3
EER (1) (E)		2,67	2,67	2,66	2,74	2,74	2,60
ESEER (E)		3,42	3,68	3,6	3,64	3,52	3,64
Eurovent efficiency class		D	D	D	C	C	D
Water flow (1)	l/h	27118	27118	25805	27429	31007	34156
Water pressure drop (1) (E)	kPa	32	32	32	33	34	35
Available pressure head - standard pump (1)	kPa	165	165	166	173	153	165
Heating capacity (3) (E)	kW	185	185	179	189	214	233
Power input (3) (E)	kW	53,1	53,1	50,7	56,9	64,6	71,0
COP (3) (E)		3,48	3,48	3,54	3,32	3,32	3,28
Eurovent efficiency class		A	A	A	A	A	A
Water flow (3)	l/h	32038	32038	31033	32718	37042	40356
Water pressure drop (3) (E)	kPa	45	45	46	47	48	49
Available pressure head - standard pump (3)	kPa	133	133	135	148	118	124
Maximum current absorption	A	137	144	150	136	155	173
Startup current	A	389	396	266	252	310	330
Startup current with softstarter kit	A	306	313	214	200	248	268
No. of compressors / circuits		2/2	2/1	4/2	4/2	4/2	4/2
Buffer tank volume	dm <sup>3</sup>	340	340	340	600	600	600
Expansion vessel	dm <sup>3</sup>	12	12	12	24	24	24
Sound power level (2) (E)	dB(A)	84	84	82	85	85	86
Transport weight unit with pump and tank	kg	1316	1316	1471	1608	1676	1686
Operating weight unit with pump and full tank	kg	1656	1656	1811	2208	2276	2286

LCX...HS		244	274	294	324	364
Power supply	V-ph-Hz	400 - 3N - 50				
Cooling capacity (1) (E)	kW	241	259	289	323	349
Power input (1) (E)	kW	95,7	90,4	104	119	138
EER (1) (E)		2,52	2,87	2,77	2,72	2,53
ESEER (E)		3,61	3,63	3,55	3,52	3,47
Eurovent efficiency class		D	C	C	C	D
Water flow (1)	l/h	41524	44665	49760	55581	60030
Water pressure drop (1) (E)	kPa	35	35	35	37	35
Available pressure head - standard pump (1)	kPa	196	182	170	161	142
Heating capacity (3) (E)	kW	282	309	343	374	419
Power input (3) (E)	kW	85,6	88,7	99,5	110	128
COP (3) (E)		3,29	3,49	3,44	3,39	3,27
Eurovent efficiency class		A	A	A	A	A
Water flow (3)	l/h	48773	53510	59333	64799	72467
Water pressure drop (3) (E)	kPa	48	50	50	50	51
Available pressure head - standard pump (3)	kPa	168	152	136	120	80
Maximum current absorption	A	196	224	237	251	300
Startup current	A	380	403	468	476	497
Startup current with softstarter kit	A	315	338	385	393	440
No. of compressors / circuits		4/2	4/2	4/2	4/2	4/2
Buffer tank volume	dm <sup>3</sup>	600	765	765	765	765
Expansion vessel	dm <sup>3</sup>	24	24	24	24	24
Sound power level (2) (E)	dB(A)	86	86	86	86	87
Transport weight unit with pump and tank	kg	1869	2129	2161	2196	2196
Operating weight unit with pump and full tank	kg	2469	2894	2926	2961	2961

(1) Water temperature 12/7 °C, outdoor air temperature 35 °C (UNI EN 14511:2011)  
 (2) Sound power level measured according to UNI EN ISO 9614

(3) Water temperature 40/45 °C, outdoor air temperature 7 °C D.B. / 6 °C W.B. (UNI EN 14511:2011)  
 (E) EUROVENT certified data

## LCX HL Rated technical data of heat pumps

LCX...HL		042	052	062	072	082	091	092
Power supply	V-ph-Hz	400-3N-50						
Cooling capacity (1) (E)	kW	44,6	51,6	57,3	65,6	77,4	87,3	87,3
Power input (1) (E)	kW	15,7	18,0	20,3	22,9	26,5	30,1	31,0
EER (1) (E)		2,84	2,87	2,83	2,86	2,92	2,90	2,82
ESEER (E)		3,90	4,14	3,94	3,94	3,98	3,54	3,95
Eurovent efficiency class		C	C	C	C	B	B	C
Water flow (1)	l/h	7688	8901	9887	11311	13349	15057	15057
Water pressure drop (1) (E)	kPa	22	25	25	25	26	25	25
Available pressure head - standard pump (1)	kPa	159	156	145	141	138	136	136
Heating capacity (3) (E)	kW	52,5	59,9	66,7	76,1	88,0	103	103
Power input (3) (E)	kW	14,7	17,0	19,1	21,4	24,9	28,7	28,7
COP (3) (E)		3,56	3,53	3,50	3,56	3,53	3,59	3,59
Eurovent efficiency class		A	A	A	A	A	A	A
Water flow (3)	l/h	9080	10350	11529	13159	15219	17805	17805
Water pressure drop (3) (E)	kPa	30	33	33	33	33	35	35
Available pressure head - standard pump (3)	kPa	146	140	129	125	119	119	119
Maximum current absorption	A	41	44	51	55	66	77	77
Startup current	A	159	162	185	183	191	246	246
Startup current with softstarter kit	A	88	101	111	124	139	184	184
No. of compressors / circuits		2/1	2/1	2/1	2/1	2/1	2/2	2/1
Buffer tank volume	dm <sup>3</sup>	200	200	220	220	220	340	340
Expansion vessel	dm <sup>3</sup>	12	12	12	12	12	12	12
Sound power level (2) (E)	dB(A)	74	74	77	77	77	78	78
Transport weight unit with pump and tank	kg	662	662	762	767	847	1086	1086
Operating weight unit with pump and full tank	kg	862	862	982	987	1067	1426	1426

LCX...HL		094	101	102	104	121	122	124
Power supply	V-ph-Hz	400-3N-50						
Cooling capacity (1) (E)	kW	89	100	100	103	112	112	115
Power input (1) (E)	kW	31,4	35,1	35,1	36,0	40,8	40,6	41,1
EER (1) (E)		2,84	2,85	2,85	2,87	2,74	2,75	2,80
ESEER (E)		3,78	3,59	4,00	3,87	3,36	3,67	3,57
Eurovent efficiency class		C	C	C	C	C	C	C
Water flow (1)	l/h	15344	17280	17280	17761	19234	19227	19829
Water pressure drop (1) (E)	kPa	25	29	29	29	27	27	27
Available pressure head - standard pump (1)	kPa	135	129	129	132	122	122	121
Heating capacity (3) (E)	kW	105	114	113	118	135	135	139
Power input (3) (E)	kW	29,5	32,3	32,3	33,8	38,4	38,1	39,4
COP (3) (E)		3,56	3,52	3,50	3,49	3,53	3,55	3,53
Eurovent efficiency class		A	A	A	A	A	A	A
Water flow (3)	l/h	18186	19627	19537	20375	23419	23397	24032
Water pressure drop (3) (E)	kPa	36	37	37	38	40	40	40
Available pressure head - standard pump (3)	kPa	117	108	109	112	104	104	101
Maximum current absorption	A	81	86	86	87	95	95	96
Startup current	A	194	254	254	198	295	295	220
Startup current with softstarter kit	A	122	192	192	137	230	230	146
No. of compressors / circuits		4/2	2/2	2/1	4/2	2/2	2/1	4/2
Buffer tank volume	dm <sup>3</sup>	340	340	340	340	600	600	600
Expansion vessel	dm <sup>3</sup>	12	12	12	12	24	24	24
Sound power level (2) (E)	dB(A)	77	78	78	77	80	80	77
Transport weight unit with pump and tank	kg	1217	1096	1096	1217	1440	1440	1455
Operating weight unit with pump and full tank	kg	1557	1436	1436	1557	2040	2040	2055

(1) Water temperature 12/7 °C, outdoor air temperature 35 °C (UNI EN 14511:2011)  
 (2) Sound power level measured according to UNI EN ISO 9614

(3) Water temperature 40/45 °C, outdoor air temperature 7 °C D.B. / 6 °C W.B. (UNI EN 14511:2011)  
 (E) EUROVENT certified data



## LCX HL Rated technical data of heat pumps

LCX...HL		141	142	144	161	162	164
Power supply	V-ph-Hz	400-3N-50					
Cooling capacity (1) (E)	kW	126	126	132	158	158	150
Power input (1) (E)	kW	46,7	46,6	46,6	59,2	59,2	56,1
EER (1) (E)		2,70	2,70	2,84	2,67	2,67	2,67
ESEER (E)		3,40	3,68	3,83	3,52	3,74	3,64
Eurovent efficiency class		C	C	C	D	D	D
Water flow (1)	l/h	21723	21737	22790	27297	27297	25863
Water pressure drop (1) (E)	kPa	29	29	29	34	34	32
Available pressure head - standard pump (1)	kPa	177	177	174	163	163	165
Heating capacity (3) (E)	kW	148	148	155	183	183	174
Power input (3) (E)	kW	44,7	44,7	43,4	52,7	52,7	50,5
COP (3) (E)		3,30	3,30	3,56	3,47	3,47	3,45
Eurovent efficiency class		A	A	A	A	A	A
Water flow (3)	l/h	25526	25528	26746	31637	31637	30167
Water pressure drop (3) (E)	kPa	40	40	40	46	46	44
Available pressure head - standard pump (3)	kPa	156	156	151	131	131	134
Maximum current absorption	A	106	106	105	120	120	126
Startup current	A	306	306	222	371	371	241
Startup current with softstarter kit	A	241	241	163	288	288	189
No. of compressors / circuits		2/2	2/1	4/2	2/2	2/1	4/2
Buffer tank volume	dm <sup>3</sup>	600	600	600	600	600	600
Expansion vessel	dm <sup>3</sup>	24	24	24	24	24	24
Sound power level (2) (E)	dB(A)	81	81	77	81	81	77
Transport weight unit with pump and tank	kg	1490	1490	1470	1510	1510	1620
Operating weight unit with pump and full tank	kg	2090	2090	2070	2110	2110	2220

LCX...HL		194	214	244	274	294	324
Power supply	V-ph-Hz	400 - 3N - 50					
Cooling capacity (1) (E)	kW	176	194	216	252	274	311
Power input (1) (E)	kW	63,6	74,9	84,2	90,2	108	123
EER (1) (E)		2,77	2,59	2,57	2,80	2,54	2,54
ESEER (E)		3,47	3,62	3,54	3,43	3,47	3,48
Eurovent efficiency class		C	D	D	C	D	D
Water flow (1)	l/h	30320	33492	37260	43482	47226	53617
Water pressure drop (1) (E)	kPa	33	34	33	36	34	37
Available pressure head - standard pump (1)	kPa	158	163	195	182	172	165
Heating capacity (3) (E)	kW	206	233	263	295	329	364
Power input (3) (E)	kW	59,9	66,8	76,8	85,6	96,8	109
COP (3) (E)		3,44	3,49	3,42	3,45	3,40	3,36
Eurovent efficiency class		A	A	A	A	A	A
Water flow (3)	l/h	35646	40379	45454	51057	57004	63061
Water pressure drop (3) (E)	kPa	46	49	49	50	50	51
Available pressure head - standard pump (3)	kPa	120	115	163	150	134	119
Maximum current absorption	A	148	167	190	215	229	242
Startup current	A	307	318	382	398	464	472
Startup current with softstarter kit	A	245	256	317	333	381	389
No. of compressors / circuits		4/2	4/2	4/2	4/2	4/2	4/2
Buffer tank volume	dm <sup>3</sup>	600	600	600	765	765	765
Expansion vessel	dm <sup>3</sup>	24	24	24	24	24	24
Sound power level (2) (E)	dB(A)	82	82	82	84	84	85
Transport weight unit with pump and tank	kg	1676	1726	1869	2129	2161	2196
Operating weight unit with pump and full tank	kg	2276	2326	2469	2894	2926	2961

(1) Water temperature 12/7 °C, outdoor air temperature 35 °C (UNI EN 14511:2011)  
 (2) Sound power level measured according to UNI EN ISO 9614

(3) Water temperature 40/45 °C, outdoor air temperature 7 °C D.B. / 6 °C W.B. (UNI EN 14511:2011)  
 (E) EUROVENT certified data

## LCX HQ Rated technical data of water chillers

LCX...HQ		042	052	062	072	082	091	092
Power supply	V-ph-Hz	400-3N-50						
Cooling capacity (1) (E)	kW	42,8	49,5	55,1	62,9	74,2	83,9	83,9
Power input (1) (E)	kW	15,6	17,9	20,2	22,9	26,5	30,0	30,8
EER (1) (E)		2,75	2,77	2,73	2,75	2,81	2,80	2,72
ESEER (E)		3,84	4,07	3,89	3,88	3,91	3,47	3,89
Eurovent efficiency class		C	C	C	C	C	C	C
Water flow (1)	l/h	7376	8538	9502	10849	12801	14459	14459
Water pressure drop (1) (E)	kPa	21	24	24	24	25	24	24
Available pressure head - standard pump (1)	kPa	159	156	144	141	138	136	137
Heating capacity (3) (E)	kW	50,7	57,8	64,3	73,7	85,4	98,8	99,6
Power input (3) (E)	kW	14,7	16,9	19,0	21,3	24,8	27,7	28,5
COP (3) (E)		3,45	3,43	3,39	3,46	3,44	3,57	3,50
Eurovent efficiency class		A	A	A	A	A	A	A
Water flow (3)	l/h	8760	10000	11122	12744	14768	17102	17234
Water pressure drop (3) (E)	kPa	30	33	33	33	33	33	33
Available pressure head - standard pump (3)	kPa	144	138	127	122	117	119	119
Maximum current absorption	A	41	44	51	55	66	77	77
Startup current	A	159	162	185	183	191	246	246
Startup current with softstarter kit	A	88	101	111	124	139	184	184
No. of compressors / circuits		2/1	2/1	2/1	2/1	2/1	2/2	2/1
Buffer tank volume	dm <sup>3</sup>	200	200	220	220	220	340	340
Expansion vessel	dm <sup>3</sup>	12	12	12	12	12	12	12
Sound power level (2) (E)	dB(A)	71	71	73	73	73	75	75
Transport weight unit with pump and tank	kg	662	662	762	767	847	1086	1086
Operating weight unit with pump and full tank	kg	862	862	982	987	1067	1426	1426

LCX...HQ		094	101	102	104	121	122	124
Power supply	V-ph-Hz	400 - 3N - 50						
Cooling capacity (1) (E)	kW	85,6	96,1	96,1	99,0	106	106	109
Power input (1) (E)	kW	31,2	35,1	35,1	35,8	40,0	40,0	41,0
EER (1) (E)		2,74	2,74	2,74	2,76	2,64	2,64	2,65
ESEER (E)		3,72	3,51	3,93	3,79	3,19	3,49	3,39
Eurovent efficiency class		C	C	C	C	D	D	D
Water flow (1)	l/h	14756	16569	16569	17072	18206	18226	18698
Water pressure drop (1) (E)	kPa	24	27	27	28	26	26	26
Available pressure head - standard pump (1)	kPa	136	130	130	131	122	122	122
Heating capacity (3) (E)	kW	101	109	110	114	130	130	134
Power input (3) (E)	kW	29,4	31,2	32,4	33,7	37,7	37,6	38,7
COP (3) (E)		3,45	3,48	3,38	3,37	3,44	3,45	3,47
Eurovent efficiency class		A	A	A	A	A	A	A
Water flow (3)	l/h	17518	18811	18959	19661	22417	22497	23212
Water pressure drop (3) (E)	kPa	33	35	35	37	39	39	39
Available pressure head - standard pump (3)	kPa	118	108	109	110	100	99	97
Maximum current absorption	A	81	86	86	87	99	99	100
Startup current	A	194	254	254	198	299	299	225
Startup current with softstarter kit	A	122	192	192	137	234	234	150
No. of compressors / circuits		4/2	2/2	2/1	4/2	2/2	2/1	4/2
Buffer tank volume	dm <sup>3</sup>	340	340	340	340	600	600	600
Expansion vessel	dm <sup>3</sup>	12	12	12	12	24	24	24
Sound power level (2) (E)	dB(A)	74	75	75	74	76	76	73
Transport weight unit with pump and tank	kg	1217	1096	1096	1217	1440	1440	1455
Operating weight unit with pump and full tank	kg	1557	1436	1436	1557	2040	2040	2055

(1) Water temperature 12/7 °C, outdoor air temperature 35 °C (UNI EN 14511:2011)  
 (2) Sound power level measured according to UNI EN ISO 9614

(3) Water temperature 40/45 °C, outdoor air temperature 7 °C D.B. / 6 °C W.B. (UNI EN 14511:2011)  
 (E) EUROVENT certified data


**LCX HQ Rated technical data of water chillers**

LCX...HQ		141	142	144	161	162	164
Power supply	V-ph-Hz	400-3N-50					
Cooling capacity (1) (E)	kW	119	119	124	149	149	138
Power input (1) (E)	kW	46,5	46,5	46,3	58,4	58,4	55,8
EER (1) (E)		2,56	2,56	2,67	2,55	2,55	2,46
ESEER (E)		3,23	3,50	3,64	3,35	3,55	3,46
Eurovent efficiency class		D	D	D	D	D	E
Water flow (1)	l/h	20502	20514	21306	25609	25609	23686
Water pressure drop (1) (E)	kPa	27	27	27	32	32	26
Available pressure head - standard pump (1)	kPa	178	178	177	168	168	172
Heating capacity (3) (E)	kW	143	143	149	175	175	169
Power input (3) (E)	kW	44,5	44,5	43,3	52,7	52,7	50,3
COP (3) (E)		3,20	3,22	3,44	3,33	3,33	3,36
Eurovent efficiency class		A	A	A	A	A	A
Water flow (3)	l/h	24675	24789	25821	30324	30324	29248
Water pressure drop (3) (E)	kPa	39	40	39	44	44	40
Available pressure head - standard pump (3)	kPa	152	151	147	131	131	137
Maximum current absorption	A	110	110	108	124	124	130
Startup current	A	310	310	227	377	377	247
Startup current with softstarter kit	A	245	245	168	294	294	195
No. of compressors / circuits		2/2	2/1	4/2	2/2	2/1	4/2
Buffer tank volume	dm <sup>3</sup>	600	600	600	600	600	600
Expansion vessel	dm <sup>3</sup>	24	24	24	24	24	24
Sound power level (2) (E)	dB(A)	77	77	73	77	77	73
Transport weight unit with pump and tank	kg	1490	1490	1470	1510	1510	1620
Operating weight unit with pump and full tank	kg	2090	2090	2070	2110	2110	2220

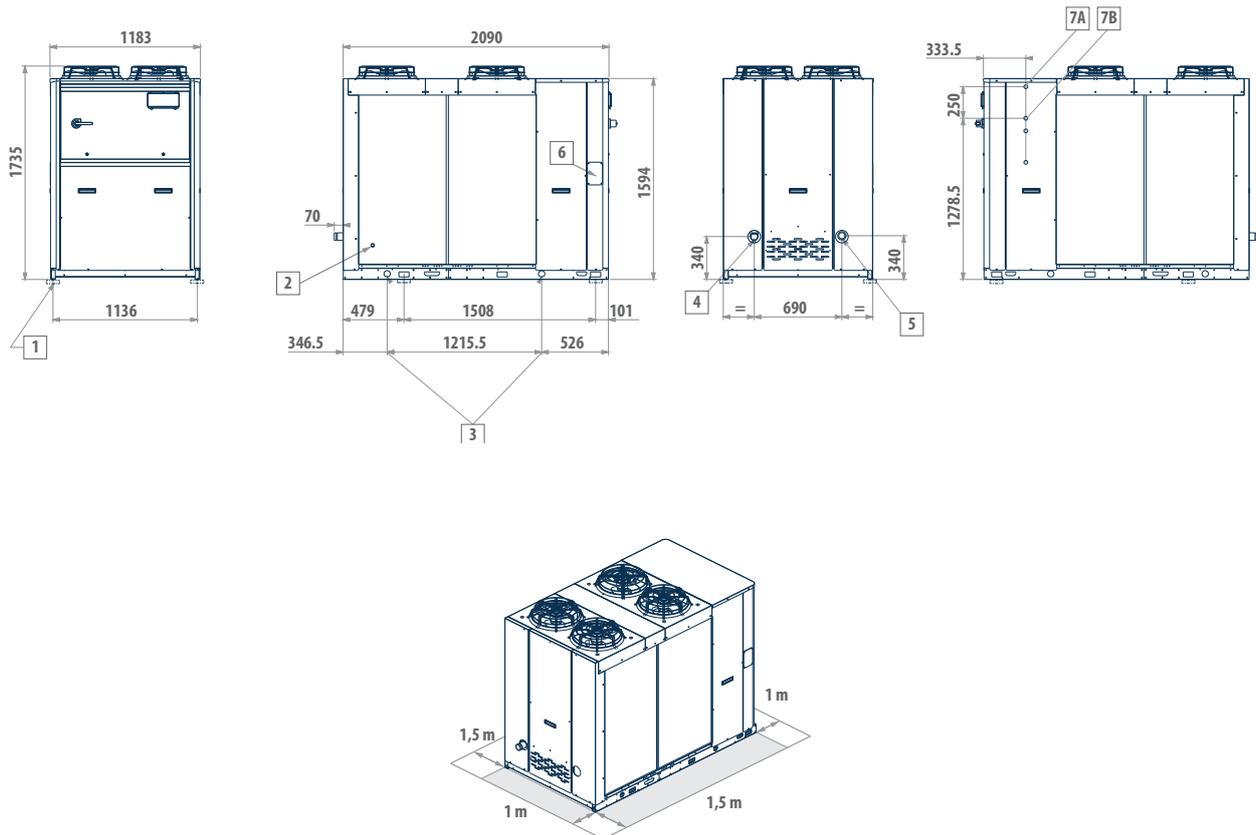
LCX...HQ		194	214	244	274	294	324
Power supply	V-ph-Hz	400 - 3 - 50					
Cooling capacity (1) (E)	kW	160	177	194	239	259	280
Power input (1) (E)	kW	70,4	79,2	87,0	89,8	107	122
EER (1) (E)		2,27	2,23	2,23	2,66	2,41	2,30
ESEER (E)		3,30	3,44	3,36	3,26	3,30	3,31
Eurovent efficiency class		F	F	F	D	E	E
Water flow (1)	l/h	27519	30461	33466	41098	44631	48237
Water pressure drop (1) (E)	kPa	29	28	29	34	33	32
Available pressure head - standard pump (1)	kPa	178	189	208	184	177	174
Heating capacity (3) (E)	kW	199	225	253	286	318	352
Power input (3) (E)	kW	59,5	66,6	76,0	84,6	95,9	108
COP (3) (E)		3,34	3,38	3,32	3,38	3,31	3,26
Eurovent efficiency class		A	A	A	A	A	A
Water flow (3)	l/h	34382	39009	43700	49424	54968	60858
Water pressure drop (3) (E)	kPa	46	45	48	49	49	50
Available pressure head - standard pump (3)	kPa	122	118	163	147	133	118
Maximum current absorption	A	148	167	190	213	226	240
Startup current	A	314	328	395	396	465	475
Startup current with softstarter kit	A	252	266	330	331	382	392
No. of compressors / circuits		4/2	4/2	4/2	4/2	4/2	4/2
Buffer tank volume	dm <sup>3</sup>	600	600	600	765	765	765
Expansion vessel	dm <sup>3</sup>	24	24	24	24	24	24
Sound power level (2) (E)	dB(A)	78	78	78	80	80	80
Transport weight unit with pump and tank	kg	1676	1726	1869	2129	2161	2196
Operating weight unit with pump and full tank	kg	2276	2326	2469	2894	2926	2961

(1) Water temperature 12/7 °C, outdoor air temperature 35 °C (UNI EN 14511:2011)  
 (2) Sound power level measured according to UNI EN ISO 9614

(3) Water temperature 40/45 °C, outdoor air temperature 7 °C D.B. / 6 °C W.B. (UNI EN 14511:2011)  
 (E) EUROVENT certified data

## Dimensional drawings

### LCX FRAME 1



#### LEGEND

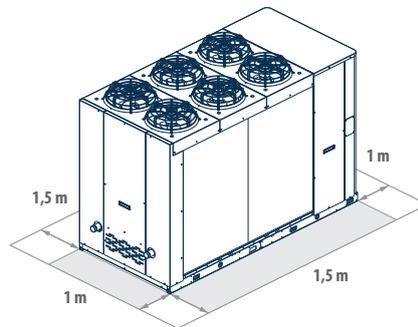
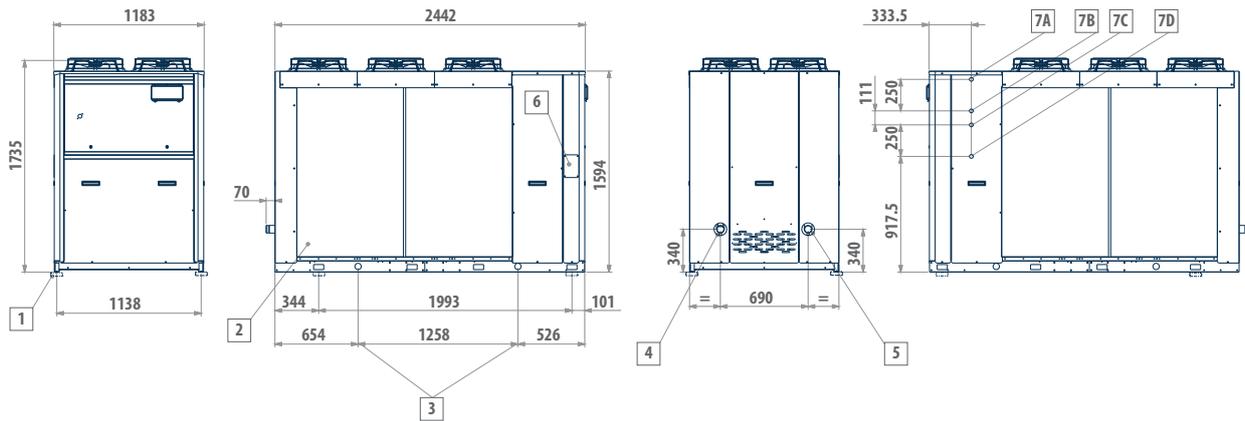
<b>1</b>	Vibration dampers
<b>2</b>	Protective grille (optional)
<b>3</b>	Fastening points
<b>4</b>	Water inlet (Victaulic 2")
<b>5</b>	Water outlet (Victaulic 2")
<b>6</b>	Power supply input
<b>7A</b>	Heat recovery water outlet (1")
<b>7B</b>	Heat recovery water inlet (1")

Model	Version
LCX 42	L - Q
LCX 52	L - Q
LCX 62	S
LCX 72	S
LCX 82	S



## Dimensional drawings

### LCX FRAME 2



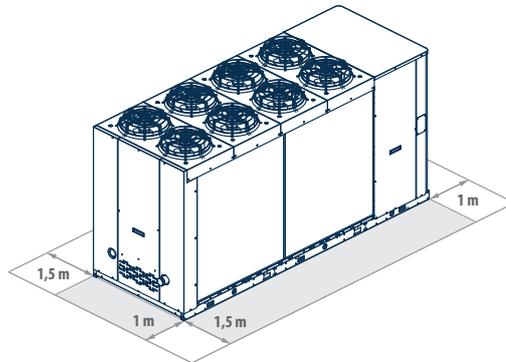
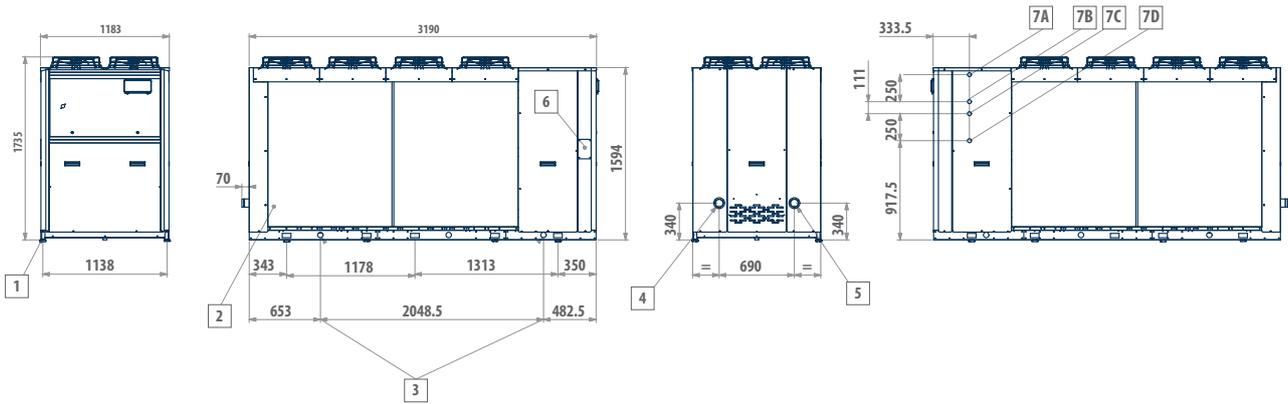
Model	Version
LCX 62	L - Q
LCX 72	L - Q
LCX 82	L - Q
LCX 91	S
LCX 92	S
LCX 101	S
LCX 102	S

#### LEGEND

1	Vibration dampers	6	Power supply input
2	Protective grille (optional)	7A	Heat recovery water outlet (1"), left-hand circuit
3	Fastening points	7B	Heat recovery water inlet (1"), left-hand circuit
4	Water inlet (Victaulic 2")	7C	Heat recovery water outlet (1"), right-hand circuit
5	Water outlet (Victaulic 2")	7D	Heat recovery water inlet (1"), right-hand circuit

## Dimensional drawings

### LCX FRAME 3



Model	Version
LCX 91	L - Q
LCX 92	L - Q
LCX 101	L - Q
LCX 102	L - Q
LCX 121	S
LCX 122	S
LCX 141	S
LCX 142	S
LCX 161	S
LCX 162	S

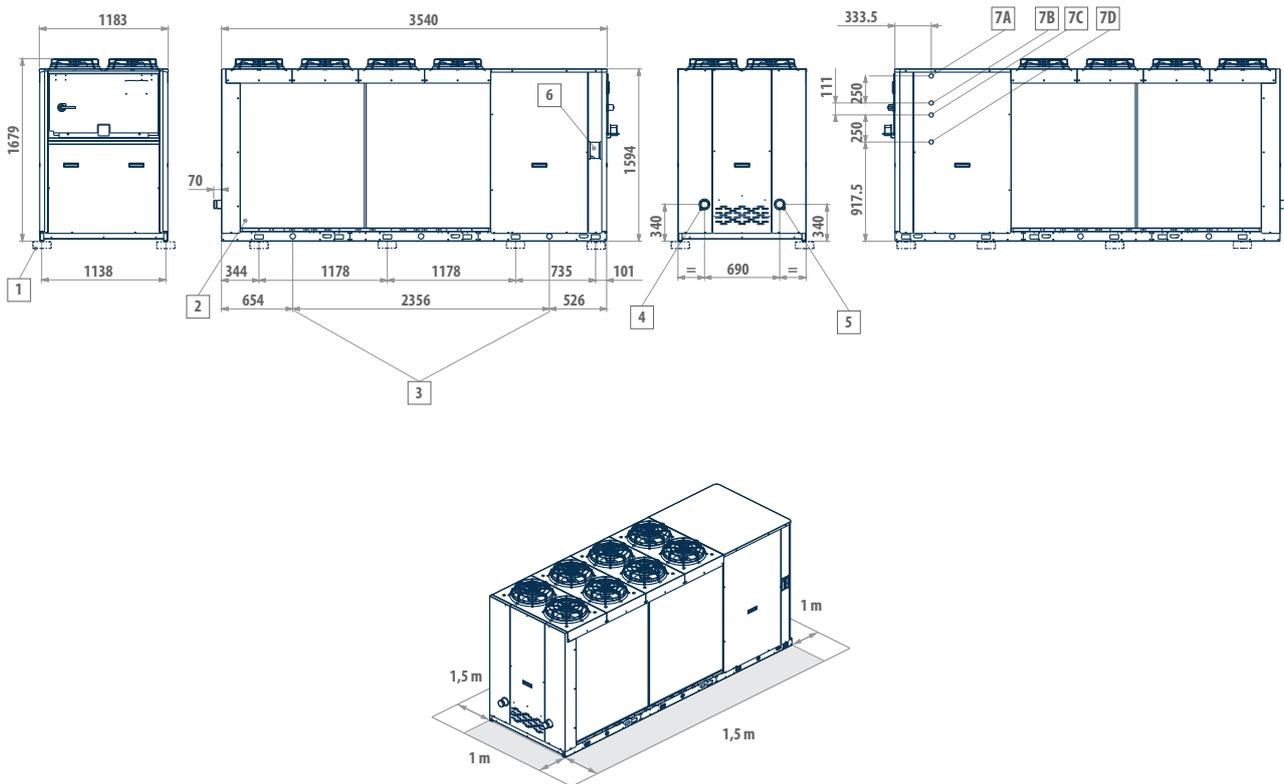
#### LEGEND

<b>1</b>	Vibration dampers	<b>6</b>	Power supply input
<b>2</b>	Protective grille (optional)	<b>7A</b>	Heat recovery water outlet (1"), left-hand circuit
<b>3</b>	Fastening points	<b>7B</b>	Heat recovery water inlet (1"), left-hand circuit
<b>4</b>	Water inlet (Victaulic 2"½)	<b>7C</b>	Heat recovery water outlet (1"), right-hand circuit
<b>5</b>	Water outlet (Victaulic 2"½)	<b>7D</b>	Heat recovery water inlet (1"), right-hand circuit



**Dimensional drawings**

**LCX FRAME 3+**



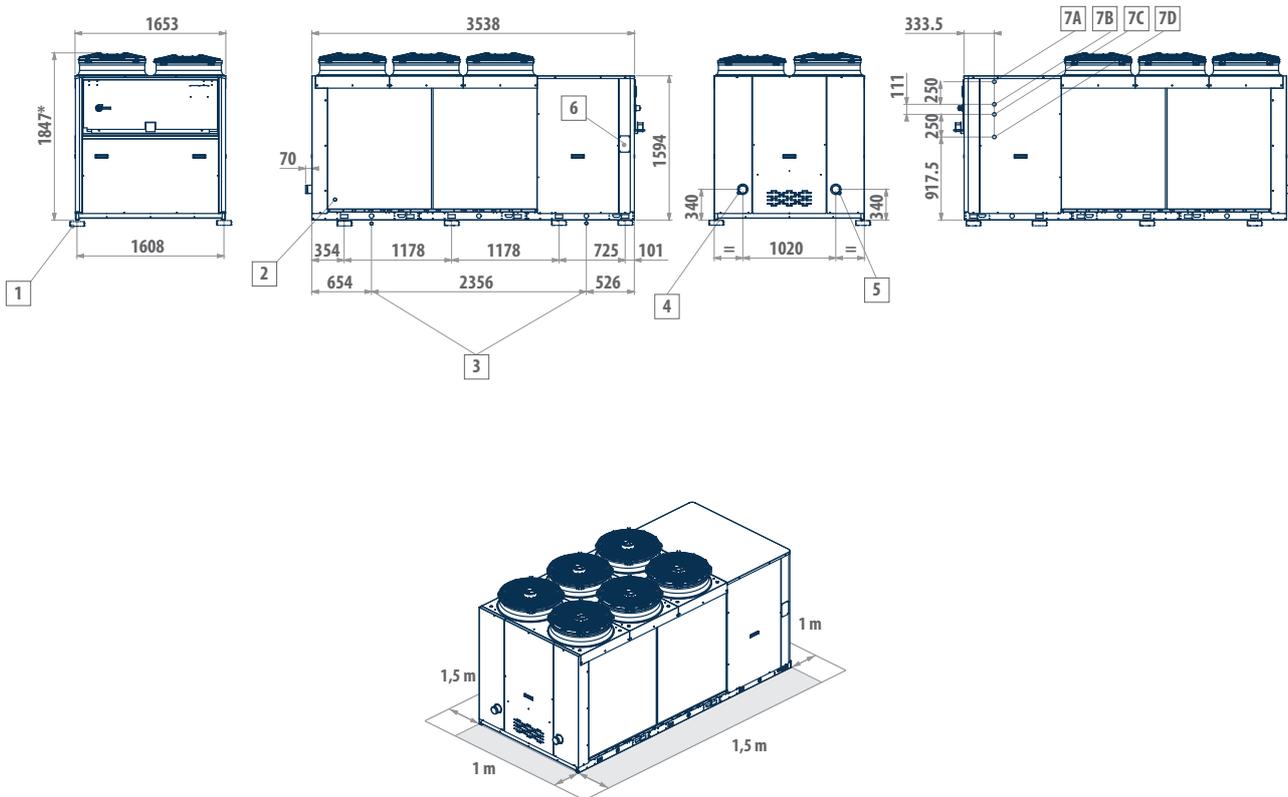
Model	Version
LCX 94	L - Q
LCX 104	L - Q
LCX 124	S
LCX 144	S
LCX 164	S
LCX 102	S

**LEGEND**

1	Vibration dampers	6	Power supply input
2	Protective grille (optional)	7A	Heat recovery water outlet (1"), left-hand circuit
3	Fastening points	7B	Heat recovery water inlet (1"), left-hand circuit
4	Water inlet (Victaulic 2"½)	7C	Heat recovery water outlet (1"), right-hand circuit
5	Water outlet (Victaulic 2"½)	7D	Heat recovery water inlet (1"), right-hand circuit

## Dimensional drawings

### LCX FRAME 4



Model	Version
LCX 121	L - Q
LCX 122	L - Q
LCX 124	L - Q
LCX 141	L - Q
LCX 142	L - Q
LCX 144	L - Q
LCX 161	L - Q
LCX 162	L - Q
LCX 164	L - Q
LCX 174	S
LCX 194	S - L - Q
LCX 214	S

#### LEGEND

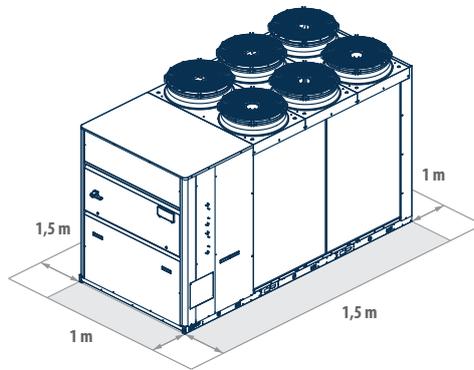
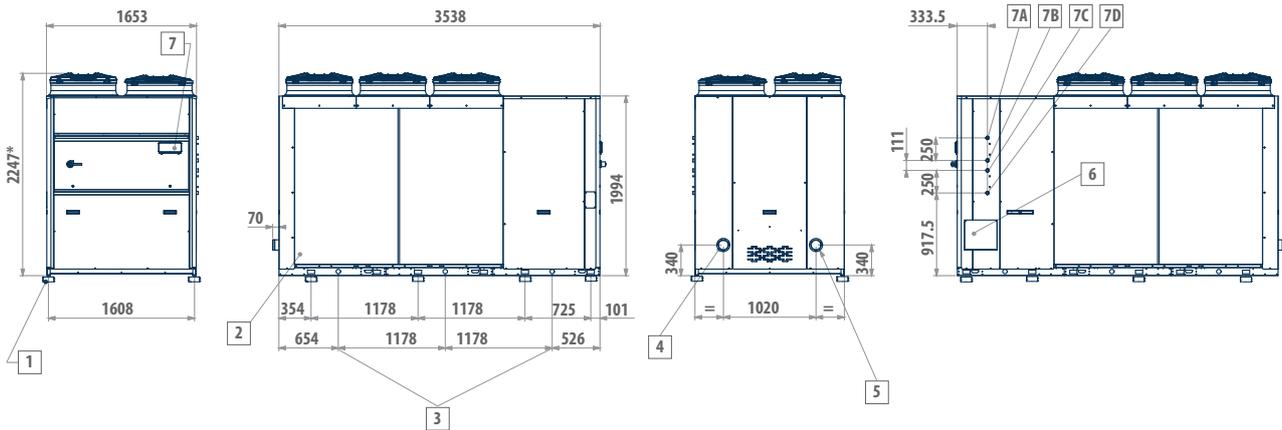
1	Vibration dampers
2	Protective grille (optional)
3	Fastening points (optional)
4	Water inlet (Victaulic 3")
5	Water outlet (Victaulic 3")
6	Power supply input

7A	Heat recovery water outlet (1"), left-hand circuit
7B	Heat recovery water inlet (1"), left-hand circuit
7C	Heat recovery water outlet (1"), right-hand circuit
7D	Heat recovery water inlet (1"), right-hand circuit
*	With EC fans=1884



**Dimensional drawings**

**LCX FRAME 5**



**LEGEND**

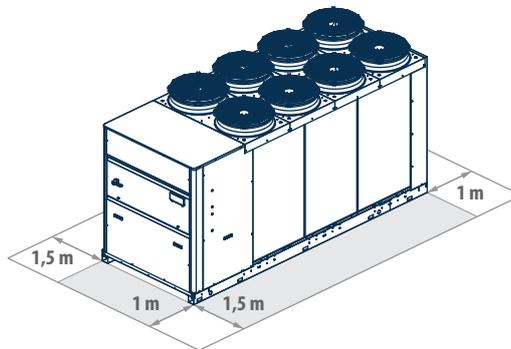
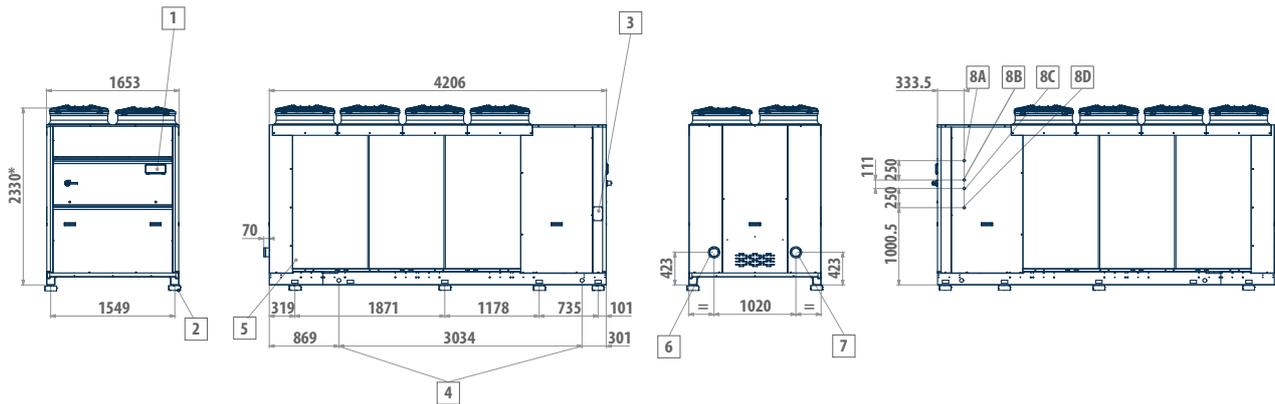
Model	Version
LCX214	L - Q
LCX244	S - L - Q

1	Vibration dampers
2	Protective grille (optional)
3	Fastening points (optional)
4	Water inlet (Victaulic 4")
5	Water outlet (Victaulic 4")
6	Power supply input

7A	Heat recovery water outlet (1"), left-hand circuit
7B	Heat recovery water inlet (1"), left-hand circuit
7C	Heat recovery water outlet (1"), right-hand circuit
7D	Heat recovery water inlet (1"), right-hand circuit
*	With EC fans=2284

## Dimensional drawings

### LCX FRAME 6



#### LEGEND

Model	Version
LCX 274	S - L - Q
LCX 294	S - L - Q
LCX 324	S - L - Q
LCX 364	S - L

1	Vibration dampers
2	Protective grille (optional)
3	Fastening points (optional)
4	Water inlet (Victaulic 4")
5	Water outlet (Victaulic 4")
6	Power supply input

7A	Heat recovery water outlet (1"), left-hand circuit
7B	Heat recovery water inlet (1"), left-hand circuit
7C	Heat recovery water outlet (1"), right-hand circuit
7D	Heat recovery water inlet (1"), right-hand circuit
*	With EC fans=2367