

LCAEX-HT

*Air cooled liquid chiller suitable
for high ambient air temperature
from 250 kW to 1400 kW
(70RT to 400RT)*



High Temperature



R134a

Screw Compressors

Serie:	LCAEX-HT	Catalogo:	DE 85
Series:		Leaflet:	
Emissione:	10/15	Sostituisce:	02/15
Issue:		Supersedes:	

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Identification code

L C A E X HT 752 - PAC1
1 2 3 4 5 6 7 8 9

1 **L** Large series > 300 kW

2 **C** Chiller unit

3 **A** Air cooled

4 **E** Axial fan

5 **X** Refrigerant R134a

6 **HT** High temperature (external air)

7 **75** Capacity factors

8 **2** Numbers of circuits

9 **PAC** Storage tank

P1 1 pump

P2 2 pumps

PAC1 Storage tank + pump1

PAC2 Storage tank + pump2

LN Low noise

VLN Very low noise

LCAEX-HT

General Features

FRAME

Open self-supporting galvanized steel frame protected with polyester powder painting. The open frame enable easy maintenance and service activities while the unit is in operation. As option a protection grid is available.

COMPRESSORS

Semi-hermetic “double screw” type with a built-in thermal switch protection motor complete with: suction (optional) and discharge shut-off valves, oil separator, step control, crankcase heater, oil level switch (option), oil sight glass, safety thermostat, oil strainer, suction strainer, liquid injection device (option).

EVAPORATOR

Shell and tube type, made by copper tube and steel shell and with two or three independent refrigerant circuits and one water circuit. The thermal insulation is made of flexible closed-cells lining. As protection, a flow switch is recommended to mount to stop the unit in case of no water circulation.

CONDENSERS

Double or triple circuits made of several copper tube and aluminium finned coils. They are connected to make two or three refrigerants circuits.

FANS

Axial fans with aerodynamic outline blade, directly coupled to a three phase electric motor with external rotor. If necessary special motors for high temperature. A safety fan guard is fitted on air flow discharge.

REFRIGERANT CIRCUIT

Each unit is supplied with two or more independent refrigerant circuits; each one includes: replaceable cartridge refrigerant filter, liquid line shut-off valve, refrigerant sight glass, solenoid valve, **electronic thermostatic valve**, service valve, HP/LP gauges. To protect the refrigerant circuit following devices are installed: automatic reset low pressure switch, manual reset high and safety pressure switches, safety valve, antifreeze thermostat.

ELECTRICAL BOARD

Weather proof type with protection grade IP 54. It includes: main circuit automatic breaker with locking door device, main fuses, compressor contactor and fuses for the star/delta start or part winding; fans contactors and fuses, auxiliary circuits transformer; Microprocessor to control automatically the unit with a visual system to display the function as well as failures.

Versions

DS

Partial condensing heat recovery. Each refrigerant circuit includes a plate type desuperheater insulated and installed in series between the compressor and the condenser.

RCS

Condensing heat recovery from 70% to 90%. Each refrigerant circuit includes a heat exchanger shell and tube type insulated and mounted in series between compressor and condenser. Condensing control through pressure transducer.

RCP

100% condensing heat recovery. Each refrigerant circuit includes: a heat exchanger shell and tube type insulated and mounted in parallel to the condenser and the relevant solenoid valves.

P1 and P2

Hydraulic kit version. It includes: one or two pumps (one as stand-by pump) expansion vessel, safety valve, air purger, hydraulic circuit insulated, flowswitch, shut-off valves and, in case of stand-by pump, non-return valve. Relevant electrical circuit. As option, pumps with higher ESP are available.

PAC1

Version with hydraulic and inertial storage tank. It includes, further to what included in the P version, a storage tank installed on the return line. The storage tank includes the evaporator.

LN

Low noise version, it includes pressostatic fan speed control and special soundproofing for the compressor.

VLN

Very low noise version. Further to the LN devices, this version is equipped with very low speed fans.

OPTIONS

- Power factor correction
- Fan speed control
- Cu/Cu condenser or epoxy protection coating
- Oversized evaporator
- Compressor shut-off valves (suction)
- Protection grid on compressor chamber
- Flowswitch (STD on P and PAC versions)
- Pumps with higher ESP
- RS 485 card. Protocol (Modbus-Lon work - Bacnet)
- Programmer clock
- Remote control panel
- Soft Starter
- Automatic Breakers
- Evaporator electrical heater
- El. Heater for PAC version
- Rubber antivibration mounts
- Spring antivibration mounts
- Oil level switch
- Liquid injection device

LCAEX-HT *Technical features*

TECHNOLOGY

Electronic expansion valve managed by software, can allow the refrigerant circuit to work very efficiently and reducing the power consumption. When the heating load changes suddenly, a traditional expansion valve experiences a 2-3 minute hunting period before achieving a state of equilibrium. On the contrary we have an immediate action of an electronic expansion valve.

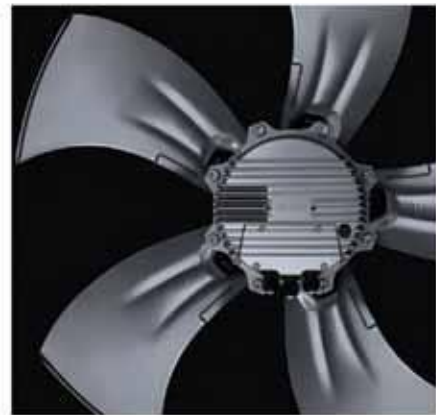
When a compressor starts or stops:

- *The electronic driver pre-positions the valve at a point that is very close to the final equilibrium point*
- *The state of equilibrium is quickly achieved with minor adjustments.*
- *The expansion valve becomes an active part within the system instead of just a passive part.*
- *Hunting lasts hardly any time at all.*



EC-FANS INVERTERS

The inverter technology employed on axial fans (optional extra) continuously and automatically adjusts the fans power and operating speed based on condensing pressure. This means the unit can even be used when outside air temperatures are below zero.



CAPACITY CONTROL

The possibility of adjusting the cooling capacity of screw compressors means we can customize efficiency levels at full or part load.

The stepless control screw compressors favour high efficiency values at full load (EER).

Having a stepless control allows the unit to deliver its output based on a number of capacity reduction steps, thus adjusting capacity to suit the system's actual heating load perfectly reducing inrush currents.



INTERCONNECTIVITY

An advanced microprocessor enable:

- LAN network
- Programming Key
- All the parameters can be configured by the key pad on the front or by a hardware key and / or a serial line.



Technical data LCAEX-HT

SIZE			422	492	552	592	692	752
Cooling mode								
Cooling capacity	(1)	RT	73.5	90	96.5	106	116	139.5
Cooling capacity	(1)	kW	259	313	340	373	408	491
Absorbed power	(2)	kW	118	140	163	172	203	221
EER	-	-	2.19	2.24	2.09	2.16	2.01	2.22
Compressore - Compressors								
Quantity	n°		2	2	2	2	2	2
Refrigerant circuits	n°		2	2	2	2	2	2
Capacity step			4 / stepless					
Refrigerant	-		R134a					
Shell and Tube evaporator								
Water flow	m³/h		44.5	53.8	58.4	64.1	70.1	84.4
Pressure drop	kPa		33	29	33	31	37	21
Water volume	l		81	125	125	114	114	148
Water connections - VICTAULIC	DN		125	150	150	150	150	150
Condenser (STD/LN version)			(3)					
Axial fan	n°		6	6	6	6	6	8
Max abs. power	kW		6.9	10.8	10.8	10.8	10.8	14.4
Max absorbed current	A		13.2	24	24	24	24	32
Unit electrical data			(2)					
Max absorbed current	A		342	369	389	461	520	556
LRC	A		603	677	724	856	939	1025
Electrical supply	V/f/Hz		400/3/50					
PAC version								
Tank volume	l		1.100	2.000	2.000	2.000	2.000	2.500
Water pump nominal power	kW		4	5.5	5.5	7.5	7.5	7.5
Water pump nominal current	A		7.6	10.5	10.5	14.1	14.1	14.1
ESP	kPa		105	105	100	110	120	100
DS version (plate to plate exchanger)			(4)					
Heating capacity	kW		52	63	68	75	82	98
Water flow rate	m³/h		4.4	5.4	5.8	6.4	7	8.4
Pressure drop	kPa		10	12	12	12	12	14
Sound pressure level at 10m			(2) (5)					
STD Version	dB(A)		61	67	67	67	67	69
LN Version	dB(A)		59	65	65	65	65	67
VLN Version	dB(A)		(6)					

Notes:

- 1) Cooling mode : water temp. 12°C (53.6°F) / 7°C (44.6°F)
Ambient air temperature 46°C (114.8°F);
- 2) Compressors + fans only. No water pump(s);
- 3) Max air flow in case of LN version

- 4) Water temperature from 40°C (104°F) to 50°C (122°F)
- 5) Compressors site and free field
- 6) For VLN version contact sales department

Technical data LCAEX-HT

SIZE			862	1012	1062	1182	1292	1382
Cooling mode								
Cooling capacity	(1)	RT	157.5	182.5	203.5	222	242	256.5
Cooling capacity	(1)	kW	555	643	717	781	852	903
Absorbed power	(2)	kW	259	288	334	317	374	356
EER		-	2.14	2.23	2.14	2.46	2.27	2.53
Compressore - Compressors								
Quantity		n°	2	2	2	2	2	2
Refrigerant circuits		n°	2	2	2	2	2	2
Capacity step			4 / stepless					
Refrigerant		-	R134a					
Shell and Tube evaporator								
Water flow		m³/h	95.5	110.5	123.3	134.5	146.5	155.3
Pressure drop		kPa	18	23	27	16	20	22
Water volume		l	261	261	255	240	240	240
Water connections - VICTAULIC		DN	200	200	200	200	200	200
Condenser (STD/LN version)			(3)					
Axial fan		n°	8	10	10	12	12	14
Max abs. power		kW	14.4	18	18	21.6	21.6	25.2
Max absorbed current		A	32	40	40	48	48	56
Unit electrical data			(2)					
Max absorbed current		A	656	784	884	892	952	960
LRC		A	1103	1000	1114	1122	1307	1315
Electrical supply		V/f/Hz	400/3/50					
PAC version								
Tank volume		l	2.500	2.500	2.500	2.500	2.500	2.500
Water pump nominal power		kW	7.5	7.5	11	11	11	15
Water pump nominal current		A	14.1	14.1	20.2	20.2	20.2	26.6
ESP		kPa	105	100	130	120	110	140
DS version (plate to plate exchanger)			(4)					
Heating capacity		kW	111	130	144	156	171	180
Water flow rate		m³/h	9.5	11.1	12.3	13.4	14.7	15.4
Pressure drop		kPa	14	14	16	16	16	16
Sound pressure level at 10m			(2) (5)					
STD Version		dB(A)	69	71	71	72	72	74
LN Version		dB(A)	67	69	69	70	70	72
VLN Version		dB(A)	(6)					

Notes:

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Ambient air temperature 46°C (114.8°F);
- 2) Compressors + fans only. No water pump(s);
- 3) Max air flow in case of LN version

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- 5) Compressors site and free field
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Technical data LCAEX-HT

SIZE			1532	1602	1722	2003	2253	2583
Cooling mode								
Cooling capacity	(1)	RT	281.5	300.5	314.5	337	355	380.5
Cooling capacity	(1)	kW	990	1057	1106	1184	1249	1338
Absorbed power	(2)	kW	411	491	477	477	505	555
EER		-	2.40	2.15	2.31	2.48	2.47	2.41
Compressore - Compressors								
Quantity		n°	2	2	2	3	3	3
Refrigerant circuits		n°	2	2	2	3	3	3
Capacity step			4 / stepless			6 / stepless		
Refrigerant		-	R134a					
Shell and Tube evaporator								
Water flow		m³/h	170	182	190	204	215	230
Pressure drop		kPa	27	28	30	33	29	29
Water volume		l	240	397	385	385	533	533
Water connections - VICTAULIC		DN	200	200	200	200	200	200
Condenser (STD/LN version)			(3)					
Axial fan		n°	14	14	16	18	18	18
Max abs. power		kW	25.2	25.2	28.8	32.4	32.4	32.4
Max aborbed current		A	56	56	64	72	72	72
Unit electrical data			(2)					
Max aborbed current		A	960	1192	1199	1335	1365	1425
LRC		A	1315	1543	1550	1565	1720	1780
Electrical supply		V/f/Hz	400/3/50					
PAC version								
Tank volume		l	2500	3000	3000	3000	3000	3000
Water pump nominal power		kW	15	15	15	18.5	18.5	18.5
Water pump nominal current		A	26.6	26.6	26.6	33	33	33
ESP		kPa	130	120	110	150	140	120
DS version (plate to plate exchanger)			(4)					
Heating capacity		kW	197	210	220	235	248	265
Water flow rate		m³/h	16.9	18	18.8	20.2	21.3	22.8
Pressure drop		kPa	16	18	18	18	20	20
Sound pressure level at 10m			(2) (5)					
STD Version		dB(A)	74	74	74	76	76	76
LN Version		dB(A)	72	72	72	74	74	74
VLN Version		dB(A)	(6)					

Notes:

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Ambient air temperature 46°C (114.8°F);
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- 5) Compressors site and free field
- 6) For VLN version contact sales department

LCAEX-HT - R134A: *PERFORMANCE STD Version*

COOLING CAPACITY AND ABSORBED POWER

Model	Tw		Ambient air temperature														
	[°C]	[°F]	40 °C / 104 °F			43 °C / 109.4 °F			46 °C / 114.8 °F			49 °C / 120.2 °F			52 °C / 125.6 °F		
			RT	kWf	kWe	RT	kWf	kWe	RT	kWf	kWe	RT	kWf	kWe	RT	kWf	kWe
422	5	41	76	267	96,75	72	255	102,59	69	242	108,81	65	228	115,44	61	215	122,50
	6	42.8	79	276	98,00	75	263	103,88	71	250	110,14	67	236	116,81	63	222	123,92
	7	44.6	81	286	99,36	78	273	105,28	74	259	111,57	70	245	118,25	66	230	125,37
	8	46.4	84	296	100,67	80	282	106,61	76	268	112,93	72	253	119,67	68	239	126,84
	9	48.2	87	306	102,11	83	292	108,07	79	277	114,41	75	262	121,16	70	247	128,34
	10	50	90	316	103,51	86	302	109,51	82	287	115,87	77	271	122,65	73	255	129,85
492	5	41	91	321	111,98	87	306	118,66	83	292	125,69	79	277	133,07	74	261	140,80
	6	42.8	94	332	113,45	90	317	120,17	86	302	127,24	82	287	134,67	77	271	142,46
	7	44.6	98	343	115,04	93	328	121,76	89	313	128,82	84	297	136,24	80	280	144,01
	8	46.4	101	355	116,56	96	339	123,31	92	323	130,43	87	307	137,90	83	290	145,72
	9	48.2	104	367	118,21	100	351	124,97	95	334	132,09	90	317	139,55	85	300	147,37
	10	50	108	379	119,82	103	362	126,60	98	345	133,72	93	328	141,20	88	310	149,03
552	5	41	100	350	130,98	95	334	139,09	90	318	147,82	86	301	157,20	*	*	*
	6	42.8	103	362	132,74	98	345	140,92	93	328	149,72	88	311	159,17	*	*	*
	7	44.6	106	374	134,67	102	357	142,92	97	340	151,76	91	322	161,24	*	*	*
	8	46.4	110	386	136,54	105	369	144,83	100	351	153,74	94	332	163,31	*	*	*
	9	48.2	114	399	138,58	108	381	146,92	103	363	155,87	98	343	165,48	*	*	*
	10	50	117	412	140,59	112	393	148,98	106	374	157,98	101	354	167,64	*	*	*
592	5	41	109	384	138,95	104	367	147,82	99	348	157,35	94	329	167,58	*	*	*
	6	42.8	113	397	140,74	108	379	149,70	102	360	159,33	97	341	169,68	*	*	*
	7	44.6	117	411	142,72	112	392	151,77	106	373	161,46	100	353	171,86	*	*	*
	8	46.4	121	424	144,63	115	405	153,74	110	385	163,54	104	365	174,08	98	343	185,39
	9	48.2	125	439	146,71	119	419	155,90	113	398	165,77	107	377	176,37	101	355	187,75
	10	50	129	453	148,76	123	432	158,02	117	411	167,98	111	389	178,66	*	*	*
692	5	41	120	424	165,23	115	403	175,81	109	382	187,21	102	360	199,44	*	*	*
	6	42.8	124	437	167,43	118	416	178,16	112	395	189,68	106	372	202,05	*	*	*
	7	44.6	128	451	169,89	122	430	180,75	116	408	192,41	110	385	204,90	*	*	*
	8	46.4	133	466	172,35	126	444	183,29	120	421	195,03	113	398	207,63	*	*	*
	9	48.2	137	481	174,99	130	459	186,06	124	435	197,89	117	411	210,60	*	*	*
	10	50	141	496	177,61	135	473	188,75	128	449	200,70	121	424	213,52	*	*	*
752	5	41	143	502	176,72	136	480	188,39	130	457	201,11	124	435	215,00	*	*	*
	6	42.8	148	520	179,37	142	498	191,16	135	475	204,01	128	452	218,03	*	*	*
	7	44.6	153	538	181,92	146	515	193,80	140	491	206,76	133	467	220,89	126	443	236,32
	8	46.4	158	557	184,65	152	533	196,65	145	509	209,73	138	484	223,98	130	459	239,53
	9	48.2	164	576	187,45	157	551	199,56	150	526	212,74	142	501	227,11	135	475	242,78
	10	50	169	595	190,25	162	570	202,48	155	544	215,80	147	518	230,32	*	*	*

Notes:

Tw - Evaporator outlet water temperature (delta T 5 °C / 41 °F)

RT - kWf - Cooling capacity

kWe - Absorbed power (compressors only)

* This temperature can only if the appropriate kit "partial load" has been installed

LCAEX-HT - R134A: *PERFORMANCE* STD Version

COOLING CAPACITY AND ABSORBED POWER

Model	Tw		Ambient air temperature														
	[°C]	[°F]	40 °C / 104 °F			43 °C / 109,4 °F			46 °C / 114,8 °F			49 °C / 120,2 °F			52 °C / 125,6 °F		
			RT	kWf	kWe	RT	kWf	kWe	RT	kWf	kWe	RT	kWf	kWe	RT	kWf	kWe
862	5	41	162	568	208,83	154	543	222,45	147	518	237,32	140	493	253,58	*	*	*
	6	42.8	168	589	212,26	160	564	226,05	153	538	241,11	146	512	257,55	*	*	*
	7	44.6	173	608	215,35	166	582	229,27	158	555	244,45	150	529	261,04	*	*	*
	8	46.4	179	630	218,96	172	603	233,04	164	576	248,40	156	548	265,17	*	*	*
	9	48.2	185	651	222,48	177	624	236,70	169	595	252,20	161	567	269,14	*	*	*
	10	50	191	672	225,83	183	643	240,21	175	614	255,91	166	585	273,06	*	*	*
1012	5	41	189	663	235,32	180	632	249,25	171	600	264,01	161	568	279,64	*	*	*
	6	42.8	195	687	238,49	186	655	252,55	177	623	267,42	168	589	283,18	158	556	299,84
	7	44.6	202	710	241,43	192	677	255,54	183	643	270,48	173	609	286,31	163	574	303,05
	8	46.4	209	735	244,73	199	701	258,98	190	667	274,06	180	631	289,93	*	*	*
	9	48.2	216	759	247,95	206	725	262,25	196	689	277,39	186	653	293,40	*	*	*
	10	50	223	783	251,04	213	747	265,40	202	711	280,60	191	673	296,68	*	*	*
1062	5	41	210	740	275,47	201	705	290,92	191	670	307,60	181	635	325,70	*	*	*
	6	42.8	218	766	279,67	208	731	295,30	198	695	312,14	187	658	330,42	*	*	*
	7	44.6	225	791	283,66	215	754	299,37	204	717	316,34	193	680	334,74	*	*	*
	8	46.4	233	818	288,02	222	780	303,93	211	742	321,11	200	703	339,60	*	*	*
	9	48.2	240	844	292,32	229	806	308,33	218	766	325,60	*	*	*	*	*	*
	10	50	248	870	296,57	236	831	312,72	225	790	330,14	*	*	*	*	*	*
1182	5	41	228	800	258,07	218	765	272,36	207	729	287,74	197	693	304,33	187	656	322,31
	6	42.8	236	829	261,60	226	793	276,02	215	756	291,52	204	719	308,24	194	681	326,33
	7	44.6	244	857	265,00	233	820	279,50	222	782	295,09	211	743	311,92	200	704	330,13
	8	46.4	252	887	268,60	241	849	283,22	230	809	298,92	219	770	315,86	207	729	334,18
	9	48.2	261	917	272,21	250	877	286,93	238	837	302,75	226	796	319,80	215	755	338,24
	10	50	269	947	275,88	258	907	290,73	246	865	306,68	234	824	323,88	222	781	342,47
1292	5	41	249	875	307,39	238	836	324,79	226	796	342,99	215	755	361,99	*	*	*
	6	42.8	257	905	311,99	246	865	329,56	235	825	347,93	223	783	367,12	*	*	*
	7	44.6	266	935	316,52	254	894	334,20	242	852	352,69	230	809	371,99	*	*	*
	8	46.4	275	967	321,26	263	925	339,14	251	881	357,75	238	837	377,20	*	*	*
	9	48.2	284	998	326,04	272	955	344,03	259	910	362,82	246	865	382,41	*	*	*
	10	50	293	1030	330,91	280	985	349,04	267	940	367,98	254	893	387,73	*	*	*
1382	5	41	261	919	287,92	251	881	304,65	239	842	322,20	228	801	340,58	216	760	359,79
	6	42.8	271	952	291,78	260	913	308,67	248	873	326,38	236	831	344,93	224	789	364,31
	7	44.6	280	985	295,65	269	945	312,64	257	903	330,46	245	860	349,12	232	817	368,61
	8	46.4	290	1019	299,60	278	977	316,77	266	935	334,78	253	891	353,56	241	846	373,20
	9	48.2	300	1053	303,66	287	1011	320,94	275	967	339,05	262	922	358,00	249	876	377,78
	10	50	309	1088	307,76	297	1044	325,18	284	999	343,43	271	953	362,51	258	906	382,45

Notes:

Tw - Evaporator outlet water temperature (delta T 5 °C / 41 °F)
RT - kWf - Cooling capacity

kWe - Absorbed power (compressors only)

* This temperature can only if the appropriate kit "partial load" has been installed

LCAEX-HT - R134A: *PERFORMANCE STD Version*

COOLING CAPACITY AND ABSORBED POWER

Model	Tw		Ambient air temperature														
	[°C]	[°F]	40 °C / 104 °F			43 °C / 109.4 °F			46 °C / 114.8 °F			49 °C / 120.2 °F			52 °C / 125.6 °F		
			RT	kWf	kWe	RT	kWf	kWe	RT	kWf	kWe	RT	kWf	kWe	RT	kWf	kWe
1532	5	41	288	1012	335,63	275	969	354,97	263	924	375,25	250	879	396,47	*	*	*
	6	42.8	298	1046	340,29	285	1002	359,84	272	957	380,33	259	911	401,75	245	863	424,12
	7	44.6	308	1083	345,16	295	1037	364,83	282	990	385,43	268	942	406,96	254	893	429,46
	8	46.4	318	1118	349,92	305	1072	369,80	291	1024	390,61	277	975	412,39	263	925	435,12
	9	48.2	329	1156	354,99	315	1108	375,01	301	1059	395,96	287	1008	417,86	*	*	*
	10	50	339	1193	360,07	325	1144	380,25	311	1094	401,36	296	1042	423,41	*	*	*
1602	5	41	310	1089	405,86	295	1038	428,40	281	986	452,63	265	933	478,75	*	*	*
	6	42.8	320	1127	411,82	306	1075	434,56	290	1021	459,00	275	966	485,32	*	*	*
	7	44.6	331	1165	417,96	316	1112	440,93	301	1057	465,58	285	1000	492,12	*	*	*
	8	46.4	342	1203	424,05	327	1148	447,21	311	1092	472,06	294	1034	498,81	*	*	*
	9	48.2	353	1243	430,53	337	1187	453,89	321	1129	478,96	304	1069	505,94	*	*	*
	10	50	365	1285	437,50	349	1227	461,09	332	1168	486,41	315	1107	513,64	*	*	*
1722	5	41	322	1133	391,88	308	1082	413,53	293	1031	436,77	278	977	461,76	262	922	488,71
	6	42.8	333	1173	397,29	319	1121	419,12	304	1067	442,53	288	1013	467,71	272	956	494,85
	7	44.6	345	1214	402,94	330	1161	424,95	315	1106	448,55	298	1049	473,93	282	991	501,27
	8	46.4	356	1253	408,39	341	1199	430,58	325	1142	454,36	308	1085	479,91	291	1025	507,42
	9	48.2	368	1295	414,29	353	1239	436,67	336	1182	460,64	319	1123	486,39	*	*	*
	10	50	381	1341	420,73	365	1284	443,31	348	1225	467,51	331	1164	493,49	*	*	*
2003	5	41	345	1212	388,49	330	1159	410,00	314	1105	433,14	299	1050	458,11	283	994	485,15
	6	42.8	357	1254	393,64	341	1200	415,31	325	1144	438,60	309	1087	463,74	293	1030	490,95
	7	44.6	369	1298	398,93	353	1242	420,78	337	1184	444,25	320	1126	469,57	304	1067	496,96
	8	46.4	381	1341	404,08	365	1283	426,08	348	1224	449,71	331	1164	475,19	314	1103	502,75
	9	48.2	394	1386	409,54	377	1326	431,70	360	1266	455,51	342	1204	481,17	325	1142	508,92
	10	50	408	1434	415,37	390	1373	437,71	373	1310	461,71	355	1247	487,58	336	1183	515,54
2253	5	41	363	1277	412,32	348	1223	435,54	332	1167	460,15	315	1109	486,40	*	*	*
	6	42.8	375	1319	417,63	359	1262	440,85	342	1204	465,55	325	1144	491,89	*	*	*
	7	44.6	389	1368	423,82	372	1309	447,24	355	1249	472,19	338	1188	498,76	*	*	*
	8	46.4	401	1411	429,34	384	1351	452,96	367	1289	478,09	349	1227	504,87	*	*	*
	9	48.2	415	1458	435,35	397	1396	459,16	379	1333	484,48	361	1269	511,46	*	*	*
	10	50	429	1508	441,78	411	1445	465,79	392	1380	491,32	374	1314	518,58	*	*	*
2583	5	41	389	1369	455,21	373	1310	481,19	355	1250	508,40	338	1187	536,85	*	*	*
	6	42.8	402	1413	461,33	385	1353	487,53	367	1291	514,94	349	1227	543,58	*	*	*
	7	44.6	416	1464	468,49	399	1402	494,91	381	1338	522,55	362	1272	551,43	*	*	*
	8	46.4	429	1509	474,79	411	1446	501,47	393	1381	529,37	374	1314	558,51	*	*	*
	9	48.2	443	1559	481,75	425	1494	508,65	406	1427	536,76	386	1358	566,13	*	*	*
	10	50	459	1613	489,22	439	1545	516,33	420	1476	544,67	400	1405	574,27	*	*	*

Notes:

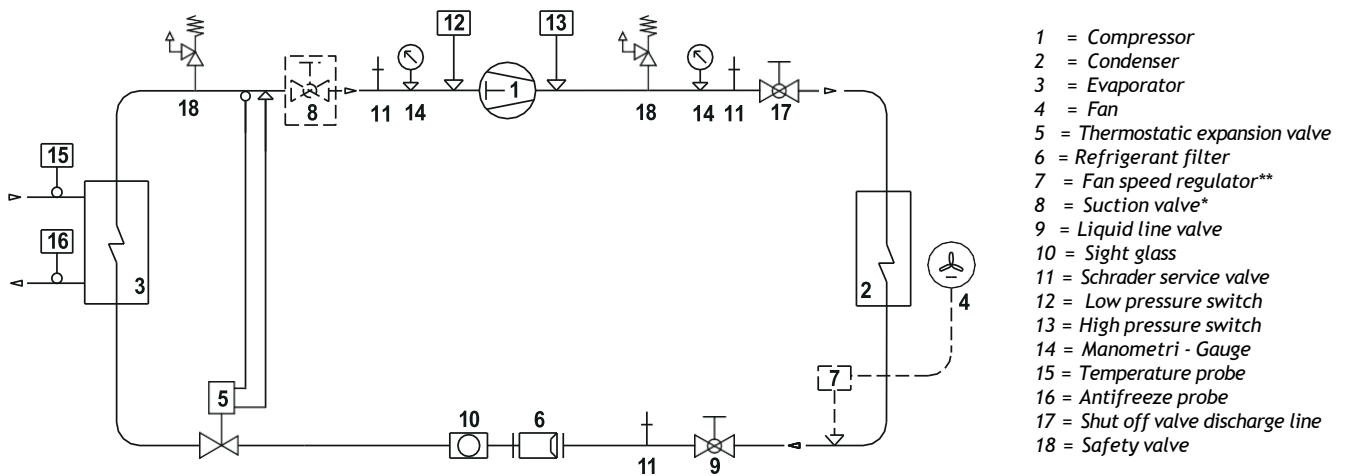
Tw - Evaporator outlet water temperature (delta T 5°C / 41°F)

RT - kWf - Cooling capacity

kWe - Absorbed power (compressors only)

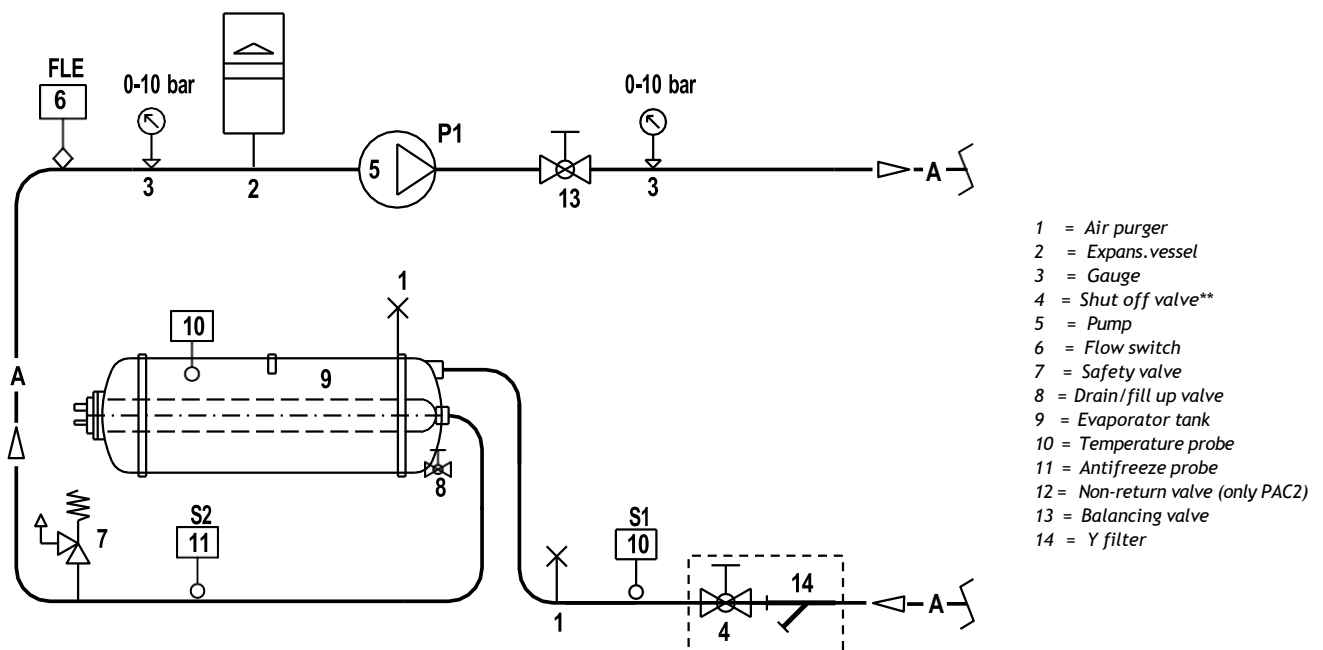
* This temperature can only if the appropriate kit "partial load" has been installed

LCAEX-HT Refrigerant circuit



LCAEX-HT PAC1 (PAC2) Hydraulic circuit

PAC1: 1 off pump - PAC2: 2 off pumps



** The outlined components are optional

OPERATING RANGE

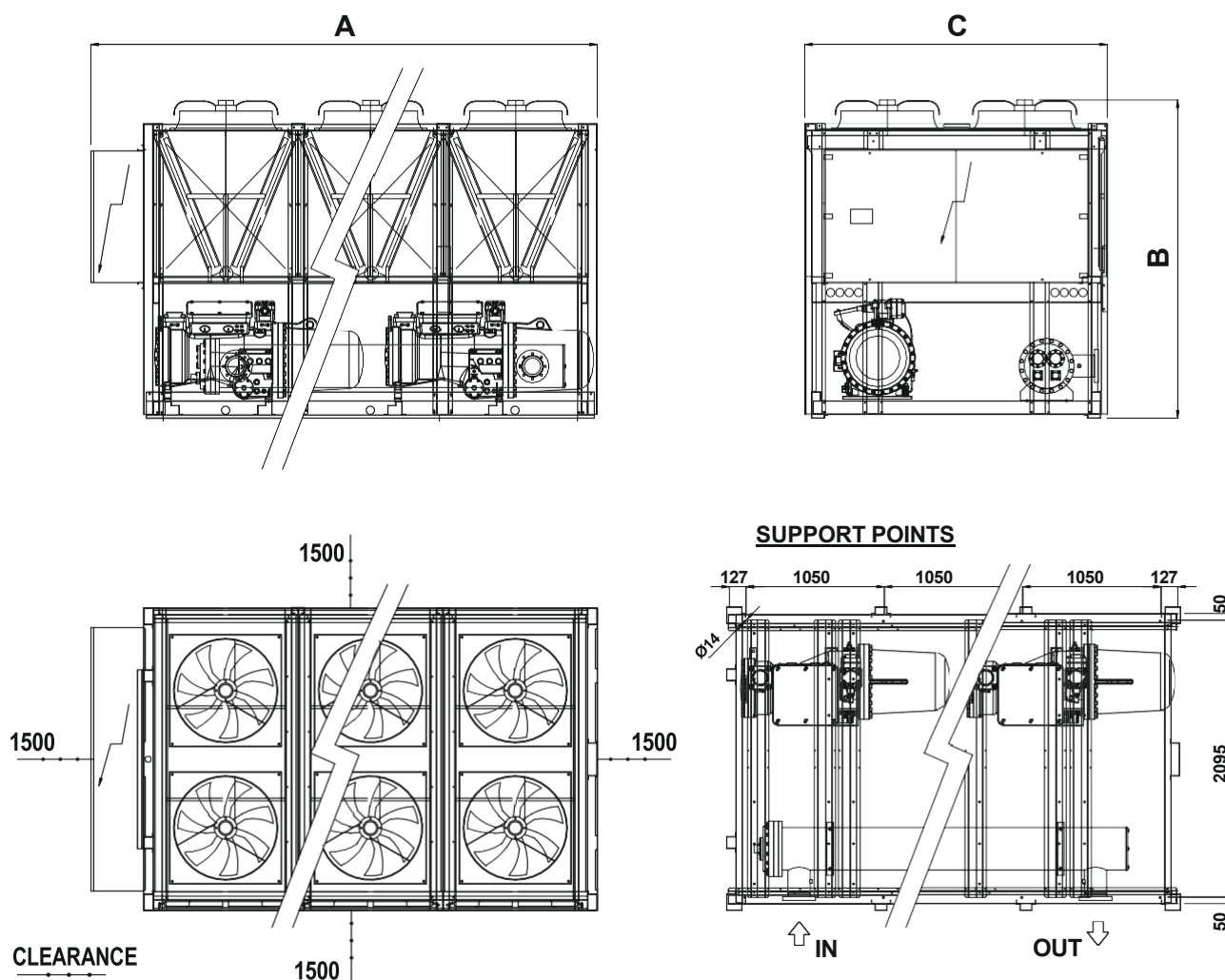
	Cooling	
	Max °C/°F	15 / 59
INLET WATER TEMPERATURE	Min °C/°F	10 / 50
	Max °C/°F	10 / 50
INLET WATER TEMPERATURE	Min °C/°F	5 / 41
	Max °C/°F	56 ₍₁₎ / 132.8 ₍₁₎
AMBIENT AIR TEMPERATURE	Min °C/°F	15 ₍₂₎ / 53.6 ₍₂₎
	Max °C/°F	

(1) This temperature is possible only if the appropriate kit "partial load" has been installed.

(2) This temperature can go down to -15 °C / 5 °F only if the appropriate kit has been installed.

CORRECTION FACTORS

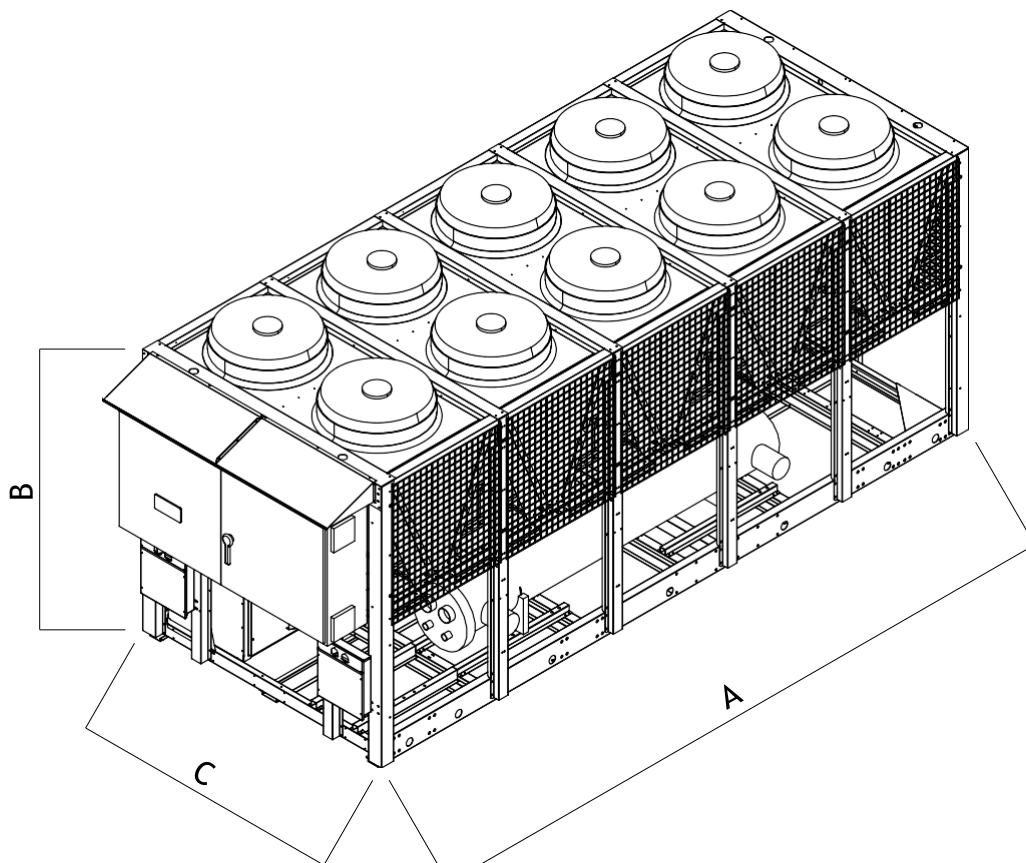
Ethylene glycol percentage by weight (%)	10	20	30
Freezing point (°C / °F)	-3,6 / 25.5	-8,7 / 16.3	-15,3 / 4.4
Cooling capacity	0,986	0,980	0,973
Absorbed Power	1,000	0,995	0,990
Mixture flow rate	1,023	1,054	1,092
Pressure drop	1,061	1,114	1,190



SUPPORT POINTS									
Ø	422	492	552	592	692	752	862	1012	1062
14mm	8	8	8	8	8	10	10	12	12
Ø	1182	1292	1382	1532	1602	1722	2003	2253	2583
14mm	18	18	22	22	22	24	28	28	28

WEIGHT (kg) e DIMENSIONS (mm)

LCAEX-HT STD/LN																		
MODEL	422	492	552	592	692	752	862	1012	1062	1182	1292	1382	1532	1602	1722	2003	2253	2583
A	3900	3900	3900	3900	3900	5000	5000	6100	6100	7250	7250	8350	8350	8350	9500	10600	10600	10600
B	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550
C	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300
Operating	3580	3600	3680	3880	3930	4100	4450	4680	5100	5650	6050	6450	6850	7300	7750	8300	9100	9800
Transport	3480	3550	3650	3740	3800	3980	4200	4480	4880	5400	5750	6150	6550	6900	7350	7900	8550	9200
VERS.																		
A	3900	3900	3900	3900	3900	5000	5000	6100	6100	7250	7250	8350	8350	8350	9500	10600	10600	10600
B	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550
C	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300
Operating	4780	5850	5950	6140	6200	6880	7200	7480	7980	8500	8850	9350	9850	10700	11300	11800	12450	13500
Transport	3780	3850	3950	4140	4200	4380	4700	4980	5480	6000	6350	6850	7350	7700	8300	8800	9450	10500



Technical data shown in this booklet are not binding. ACM Kälte Klima S.r.l reserves the right to modify data without any prior notice.

DETAILS



NOTES:

[illegible]



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