

LCAEX-HT 60Hz

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



High Temperature



R134a

**Screw Compressors
60 Hz frequency**

Serie:	LCAEX-HT 60Hz	Catalogo:	DE 87
Series:		Leaflet:	
Emissione:	11/15	Sostituisce:	-
Issue:		Supersedes:	

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Identification code

LCAEX HT 752/60 – PAC1
1 2 3 4 5 6 7 8 9 10

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	60	Frequency (60Hz)
10	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 60Hz

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 60Hz *Tecnical 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.

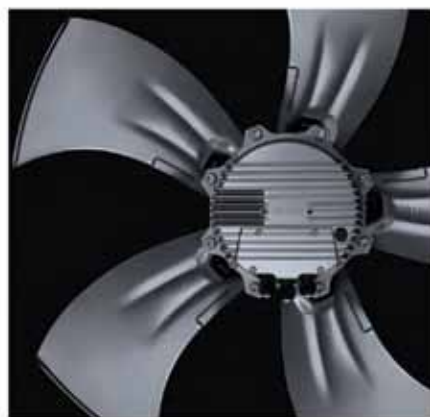
When a compressor starts or stops:

- 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 I or a serial line.



Technical data LCAEX-HT 60Hz

SIZE			492/60	552/60	592/60	692/60	752/60	862/60
Cooling mode								
Cooling capacity	(1)	RT	90	101	106	114	150	163.5
Cooling capacity	(1)	kW	317	356	373	402	528	575
Absorbed power	(2)	kW	144	172	167	196	240	272
EER	-	-	2.21	2.07	2.23	2.05	2.20	2.12
Compressore - Compressors (screw type)								
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		54.7	61.6	64.3	69.6	91.1	99.2
Pressure drop	kPa		29	36	31	36	24	20
Water volume	l		125	125	114	114	148	260
Water connections - VICTAULIC	DN		150	150	150	150	150	200
Condenser (STD/LN version)			(3)					
Axial fan	n°		6	6	6	6	6	8
Max abs. power	kW		11.1	11.1	11.1	11.1	14.8	14.8
Max absorbed current	A		18	18	18	18	24	32
Unit electrical data			(2)					
Max absorbed current	A		346	362	362	382	520	548
LRC	A		607	671	671	718	939	1017
Electrical supply	V/f/Hz		460 / 3 / 60					
PAC version								
Tank volume	l		2.000	2.000	2.000	2.000	2.500	2.500
Water pump nominal power	kW		5.5	5.5	7.5	7.5	7.5	7.5
Water pump nominal current	A		10.5	10.5	14.1	14.1	14.1	14.1
ESP	kPa		120	110	120	100	120	100
DS version (plate to plate exchanger)			(4)					
Heating capacity	kW		64	71	75	81	106	115
Water flow rate	m³/h		5.5	6.1	6.4	6.9	9.1	9.8
Pressure drop	kPa		12	12	12	14	14	15
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 60Hz

SIZE			1012/60	1062/60	1182/60	1292/60	1382/60	1532/60
Cooling mode								
Cooling capacity	(1)	RT	190	212.5	228	253	264	293
Cooling capacity	(1)	kW	669	747	801	889	927	1031
Absorbed power	(2)	kW	305	353	339	392	378	439
EER	-	-	2.19	2.12	2.36	2.27	2.45	2.35
Compressore - Compressors (screw type)								
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		115.3	129	138	153.6	159.7	178
Pressure drop	kPa		25	30	20	22	24	30
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°		10	10	12	12	14	14
Max abs. power	kW		18.5	18.5	22.2	22.2	25.9	25.9
Max absorbed current	A		30	30	36	36	42	42
Unit electrical data			(2)					
Max absorbed current	A		654	774	780	880	885	945
LRC	A		1100	990	995	1110	1115	1300
Electrical supply	V/f/Hz		460 / 3 / 60					
PAC version								
Tank volume	l		2.500	2.500	2.500	2.500	2.500	2.500
Water pump nominal power	kW		7.5	11	11	11	15	15
Water pump nominal current	A		14.1	20.2	20.2	20.2	26.6	26.6
ESP	kPa		105	130	130	120	140	130
DS version (plate to plate exchanger)			(4)					
Heating capacity	kW		134	150	160	178	186	206
Water flow rate	m³/h		11.5	12.9	13.7	15.3	15.9	17.7
Pressure drop	kPa		14	16	16	17	17	18
Sound pressure level at 10m			(2) (5)					
STD Version	dB(A)		71	71	72	72	74	74
LN Version	dB(A)		69	69	70	70	72	72
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 60Hz

SIZE			1602/60	1722/60	2003/60	2253/60	2583/60
Cooling mode							
Cooling capacity	(1)	RT	303	316	338	363	389
Cooling capacity	(1)	kW	1066	1112	1188	1278	1368
Absorbed power	(2)	kW	445	433	521	540	594
EER		-	2.4	2.57	2.28	2.37	2.3
Compressore - Compressors (screw type)							
Quantity		n°	2	2	3	3	3
Refrigerant circuits		n°	2	2	3	3	3
Capacity step			4 / stepless		6 / stepless		
Refrigerant		-	R134a				
Shell and Tube evaporator							
Water flow		m³/h	183.9	191.5	204.9	220.5	236.4
Pressure drop		kPa	28	30	34	30	30
Water volume		l	397	385	385	533	533
Water connections - VICTAULIC		DN	200	200	200	200	200
Condenser (STD/LN version)			(3)				
Axial fan		n°	14	16	18	18	18
Max abs. power		kW	25.9	29.6	33.3	33.3	33.3
Max absorbed current		A	42	48	54	54	54
Unit electrical data			(2)				
Max absorbed current		A	945	951	1166	1216	1316
LRC		A	1300	1306	1382	1446	1546
Electrical supply		V/f/Hz	460 / 3 / 60				
PAC version							
Tank volume		l	3.000	3.000	3.000	3.000	3.000
Water pump nominal power		kW	15	15	18.5	18.5	18.5
Water pump nominal current		A	26.6	26.6	33	33	33
ESP		kPa	120	110	150	140	120
DS version (plate to plate exchanger)			(4)				
Heating capacity		kW	213	223	238	256	274
Water flow rate		m³/h	18.3	19.1	20.2	20.4	23.5
Pressure drop		kPa	18	18	20	22	22
Sound pressure level at 10m			(2) (5)				
STD Version		dB(A)	74	74	76	76	76
LN Version		dB(A)	72	72	74	74	74
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

LCAEX-HT/60Hz - R134A: *PERFORMANCE STD Version*

COOLING CAPACITY AND ABSORBED POWER

Model	Tw	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
492/60	5	41	92	325	115,5	88	311	122,4	84	296	129,7	80	281	137,3	75	265	145,3
	6	42.8	96	336	117,1	91	321	124,0	87	306	131,3	83	291	139,0	78	275	147,0
	7	44.6	99	348	118,7	95	333	125,6	90	317	132,9	86	301	140,6	81	284	148,6
	8	46.4	102	360	120,3	98	344	127,2	93	328	134,6	89	311	142,3	84	294	150,3
	9	48.2	106	372	122,0	101	356	128,9	96	339	136,4	92	322	143,9	86	304	152,0
	10	50	109	384	123,6	104	367	130,6	100	350	138,0	95	332	145,7	89	314	153,8
552/60	5	41	104	365	139,8	99	349	148,2	94	332	157,0	90	315	166,2	*	*	*
	6	42.8	107	378	141,8	103	361	150,1	98	344	159,0	93	326	168,3	*	*	*
	7	44.6	111	391	143,7	106	374	152,1	101	356	160,9	96	338	170,2	*	*	*
	8	46.4	115	404	145,6	110	386	154,0	105	368	163,0	99	350	172,3	*	*	*
	9	48.2	119	418	147,7	114	399	156,1	108	381	165,1	103	361	174,3	*	*	*
	10	50	123	431	149,6	117	413	158,2	112	393	167,0	106	373	176,3	*	*	*
592/60	5	41	109	382	135,5	104	366	143,6	99	348	152,2	94	330	161,0	*	*	*
	6	42.8	113	396	137,3	108	378	145,5	102	360	154,0	97	342	163,1	*	*	*
	7	44.6	116	410	139,2	111	392	147,3	106	373	155,9	101	354	164,9	*	*	*
	8	46.4	120	423	141,1	115	405	149,2	110	386	157,9	104	366	167,0	98	346	176,3
	9	48.2	125	438	143,1	119	419	151,2	114	399	160,0	108	379	168,8	102	358	178,3
	10	50	129	452	145,0	123	432	153,2	117	412	161,8	111	391	170,9	*	*	*
692/60	5	41	117	412	160,7	112	394	170,3	107	375	180,5	101	356	191,0	*	*	*
	6	42.8	121	427	162,9	116	408	172,5	110	388	182,7	105	369	193,4	*	*	*
	7	44.6	126	441	165,1	120	422	174,7	114	402	184,9	109	381	195,6	*	*	*
	8	46.4	130	456	167,3	124	436	176,9	118	416	187,3	112	395	198,0	*	*	*
	9	48.2	134	472	169,7	128	451	179,4	122	430	189,7	116	408	200,2	*	*	*
	10	50	139	487	172,0	133	466	181,8	126	444	191,9	120	422	202,7	*	*	*
752/60	5	41	154	541	195,7	147	517	207,4	140	493	219,8	133	467	232,6	*	*	*
	6	42.8	159	560	198,4	152	535	210,1	145	510	222,5	138	484	235,6	*	*	*
	7	44.6	165	580	201,1	158	554	212,8	150	528	225,2	143	501	238,3	135	473	251,8
	8	46.4	170	599	203,8	163	573	215,5	155	546	228,2	147	518	241,2	139	490	254,7
	9	48.2	176	620	206,7	168	592	218,4	161	565	231,1	152	536	243,9	144	506	257,6
	10	50	182	640	209,4	174	612	221,4	166	583	233,8	157	554	246,8	*	*	*

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/60Hz - R134A: *PERFORMANCE STD Version*

COOLING CAPACITY AND ABSORBED POWER

Model	Tw 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
862/60	5	41	168	589	223,3	160	564	236,7	153	536	250,8	145	509	265,5	*	*	*
	6	42.8	174	610	226,4	166	583	239,8	158	555	253,9	150	527	268,8	*	*	*
	7	44.6	180	631	229,5	172	604	242,9	164	575	257,0	155	546	271,9	*	*	*
	8	46.4	186	653	232,6	177	624	245,9	169	595	260,4	161	565	275,2	*	*	*
	9	48.2	192	675	235,9	183	645	249,3	175	615	263,7	166	584	278,3	*	*	*
	10	50	198	697	239,0	190	666	252,6	181	635	266,8	172	603	281,7	*	*	*
1012/60	5	41	195	686	249,0	186	656	263,9	178	624	279,6	168	592	296,0	*	*	*
	6	42.8	202	710	252,4	193	678	267,3	184	646	283,1	174	613	299,7	165	580	316,9
	7	44.6	209	735	255,8	200	702	270,7	190	669	286,5	181	635	303,1	170	599	320,3
	8	46.4	216	759	259,3	206	726	274,2	197	692	290,3	187	657	306,8	*	*	*
	9	48.2	223	785	263,0	213	751	277,9	204	716	293,9	193	679	310,3	*	*	*
	10	50	231	811	266,4	221	775	281,6	210	739	297,4	200	702	314,0	*		
1062/60	5	41	218	766	290,7	208	732	308,1	198	697	326,5	188	661	345,5	*	*	*
	6	42.8	225	793	294,7	215	757	312,1	205	722	330,5	195	685	349,9	*	*	*
	7	44.6	233	820	298,7	223	784	316,1	212	747	334,5	202	709	353,9	*	*	*
	8	46.4	241	848	302,7	231	810	320,1	220	772	338,9	209	734	358,2	*	*	*
	9	48.2	249	877	307,1	238	838	324,5	227	799	343,2	216	758	362,3	*	*	*
	10	50	257	905	311,1	246	866	328,8	235	825	347,2	223	783	366,6	*	*	*
1182/60	5	41	234	821	275,3	223	785	291,8	213	747	309,2	202	709	327,3	190	670	346,3
	6	42.8	242	850	279,1	231	812	295,6	220	774	313,0	209	735	331,4	198	694	350,4
	7	44.6	250	879	282,9	239	841	299,4	228	801	316,8	216	760	335,2	204	718	354,2
	8	46.4	259	909	286,7	247	869	303,2	236	828	321,0	224	787	339,3	211	743	358,3
	9	48.2	267	940	290,8	256	899	307,3	244	857	325,0	231	813	343,1	218	768	362,4
	10	50	276	971	294,6	264	928	311,4	252	884	328,8	239	840	347,2	226	794	366,5
1292/60	5	41	259	911	321,4	248	871	340,6	236	829	360,9	224	787	382,0	*	*	*
	6	42.8	268	943	325,8	256	901	345,0	244	859	365,4	232	815	386,8	*	*	*
	7	44.6	278	976	330,2	265	933	349,5	253	889	369,8	240	844	391,2	*	*	*
	8	46.4	287	1009	334,7	274	965	353,9	261	919	374,6	248	873	396,1	*	*	*
	9	48.2	297	1044	339,5	284	997	358,7	271	951	379,4	257	902	400,5	*	*	*
	10	50	306	1077	343,9	293	1030	363,5	279	981	383,9	265	932	405,3	*	*	*
1382/60	5	41	270	950	305,9	258	908	324,2	246	865	343,6	233	820	363,6	220	775	384,7
	6	42.8	280	984	310,1	267	940	328,4	255	895	347,8	242	850	368,2	229	804	389,3
	7	44.6	289	1018	314,3	277	973	332,6	264	927	352,0	250	880	372,4	236	831	393,5
	8	46.4	299	1052	318,6	286	1006	336,9	273	959	356,6	259	910	377,0	245	860	398,1
	9	48.2	310	1088	323,1	296	1040	341,4	282	992	361,2	268	941	381,2	253	889	402,7
	10	50	320	1124	327,4	306	1074	346,0	291	1023	365,4	277	972	385,8	261	919	407,3

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/60Hz - R134A: *PERFORMANCE STD Version*

COOLING CAPACITY AND ABSORBED POWER

Model	Tw	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
1532/60	5	41	301	1057	359,0	287	1010	380,5	274	962	403,2	260	912	426,7	*	*	*
	6	42.8	311	1094	363,9	297	1045	385,4	283	996	408,1	269	945	432,1	254	894	456,9
	7	44.6	322	1132	368,9	308	1083	390,4	293	1031	413,1	278	978	437,1	263	924	461,8
	8	46.4	333	1170	373,9	318	1119	395,3	303	1066	418,5	288	1012	442,4	272	957	467,2
	9	48.2	344	1210	379,2	329	1157	400,7	314	1103	423,8	298	1046	447,4	*	*	*
	10	50	355	1250	384,2	340	1195	406,1	324	1138	428,8	308	1081	452,8	*	*	*
1602/60	5	41	311	1093	364,2	297	1045	386,0	283	995	409,0	268	943	432,9	*	*	*
	6	42.8	322	1131	369,2	307	1081	391,0	293	1030	414,1	278	978	438,4	*	*	*
	7	44.6	333	1170	374,3	318	1119	396,0	303	1066	419,1	288	1012	443,4	*	*	*
	8	46.4	344	1210	379,3	329	1157	401,1	313	1102	424,6	298	1047	448,9	*	*	*
	9	48.2	356	1251	384,7	340	1196	406,5	324	1141	430,0	308	1082	453,9	*	*	*
	10	50	367	1292	389,8	351	1235	412,0	335	1177	435,0	318	1118	459,3	*	*	*
1722/60	5	41	324	1140	350,6	310	1090	371,5	295	1037	393,7	280	984	416,7	264	930	440,9
	6	42.8	336	1180	355,4	321	1128	376,4	306	1074	398,6	290	1020	422,0	274	964	446,2
	7	44.6	347	1221	360,2	332	1168	381,2	316	1112	403,4	300	1055	426,8	283	996	451,0
	8	46.4	359	1262	365,1	343	1207	386,1	327	1150	408,7	311	1092	432,0	293	1032	456,2
	9	48.2	371	1305	370,3	355	1248	391,3	338	1190	413,9	321	1129	436,9	*	*	*
	10	50	383	1348	375,2	367	1289	396,5	349	1228	418,7	332	1166	442,1	*	*	*
2003/60	5	41	346	1218	423,8	331	1164	449,2	315	1108	476,0	299	1051	503,8	282	993	533,1
	6	42.8	358	1260	429,7	343	1205	455,0	326	1148	481,8	310	1089	510,1	293	1030	539,4
	7	44.6	371	1304	435,5	355	1247	460,9	338	1188	487,7	321	1127	516,0	303	1064	545,2
	8	46.4	383	1348	441,4	367	1289	466,7	349	1228	494,1	332	1167	522,3	314	1102	551,6
	9	48.2	397	1395	447,7	379	1333	473,1	362	1271	500,4	343	1206	528,2	324	1139	557,9
	10	50	410	1440	453,6	392	1377	479,4	373	1312	506,2	354	1246	534,5	335	1178	564,3
2253/60	5	41	373	1310	440,3	356	1252	466,7	339	1192	494,5	322	1131	523,4	*	*	*
	6	42.8	386	1356	446,4	369	1296	472,8	351	1235	500,6	333	1172	530,0	*	*	*
	7	44.6	399	1403	452,5	382	1342	478,8	363	1278	506,7	345	1213	536,1	*	*	*
	8	46.4	413	1451	458,6	394	1387	484,9	376	1321	513,3	357	1255	542,7	*	*	*
	9	48.2	427	1500	465,2	408	1434	491,5	389	1367	519,9	369	1297	548,8	*	*	*
	10	50	441	1549	471,2	421	1481	498,1	401	1411	526,0	381	1340	555,3	*	*	*
2583/60	5	41	399	1402	487,2	381	1341	516,4	363	1276	547,2	344	1211	579,2	*	*	*
	6	42.8	413	1451	494,0	395	1387	523,1	376	1321	554,0	357	1254	586,5	*	*	*
	7	44.6	427	1502	500,7	409	1436	529,9	389	1368	560,7	369	1298	593,2	*	*	*
	8	46.4	442	1553	507,4	422	1484	536,6	402	1415	568,0	382	1343	600,5	*	*	*
	9	48.2	457	1606	514,7	437	1535	543,9	416	1464	575,3	395	1389	607,2	*	*	*
	10	50	472	1658	521,5	451	1586	551,2	430	1510	582,0	408	1435	614,5	*	*	*

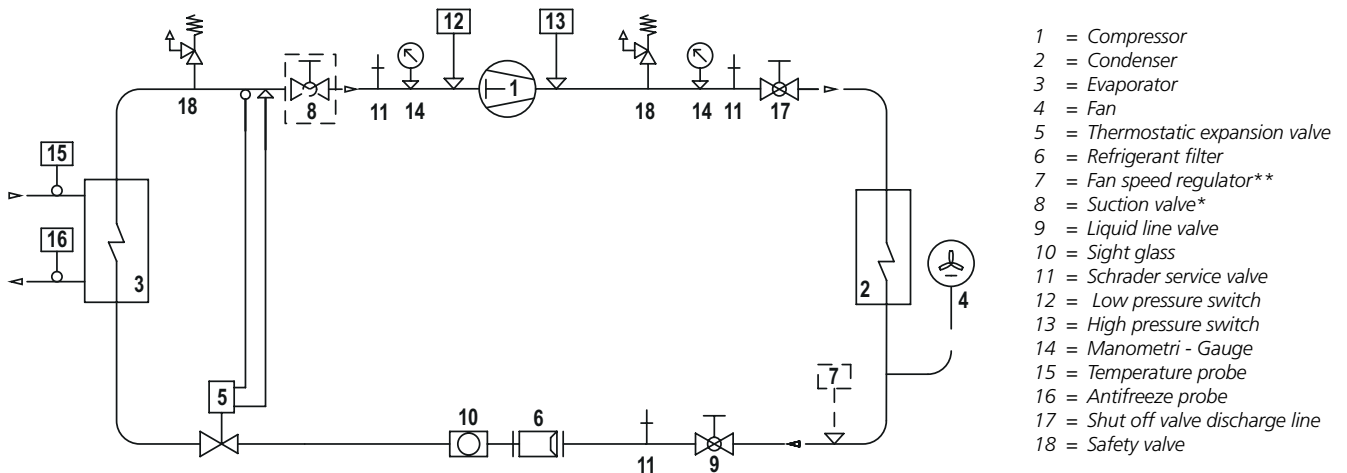
Notes:

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

kWe - Absorbed power (compressors only)

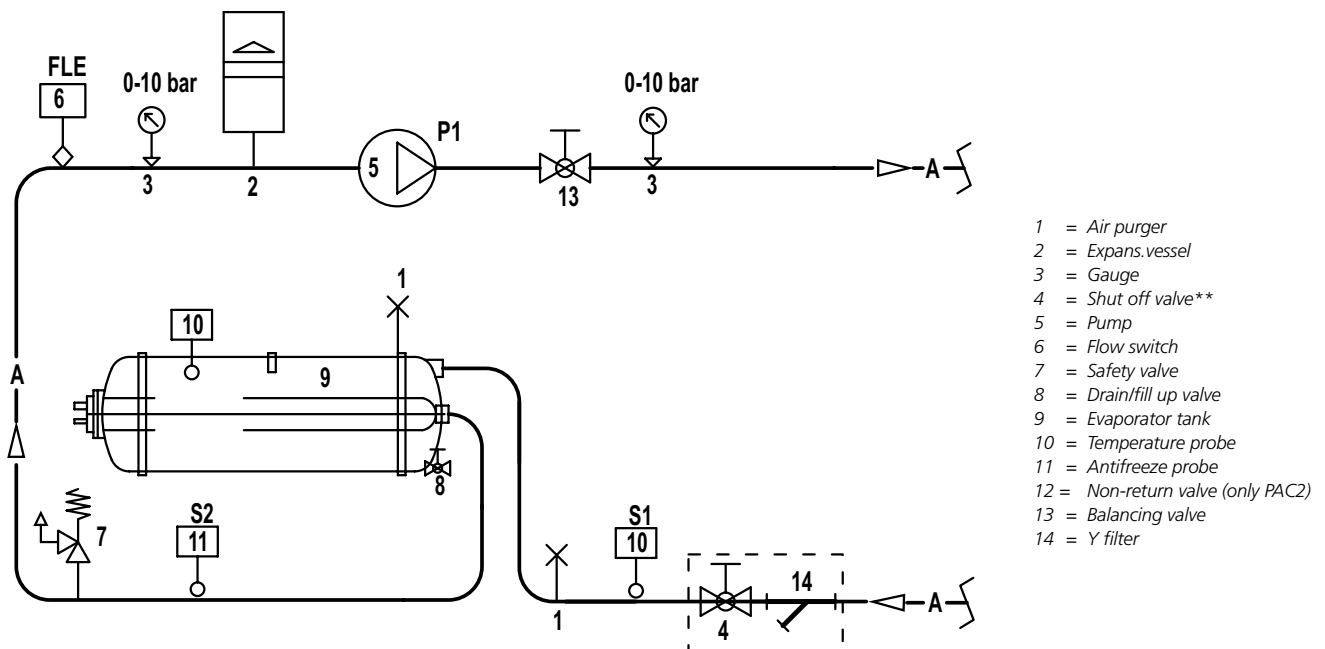
* This temperature can only if the appropriate kit "partial load" has been installed

LCAEX-HT 60Hz Refrigerant circuit



LCAEX-HT 60Hz PAC1 (PAC2) Hydraulic circuit

PAC1: 1 off pump - PAC2: 2 off pumps



** The outlined components are optional

OPERATING RANGE

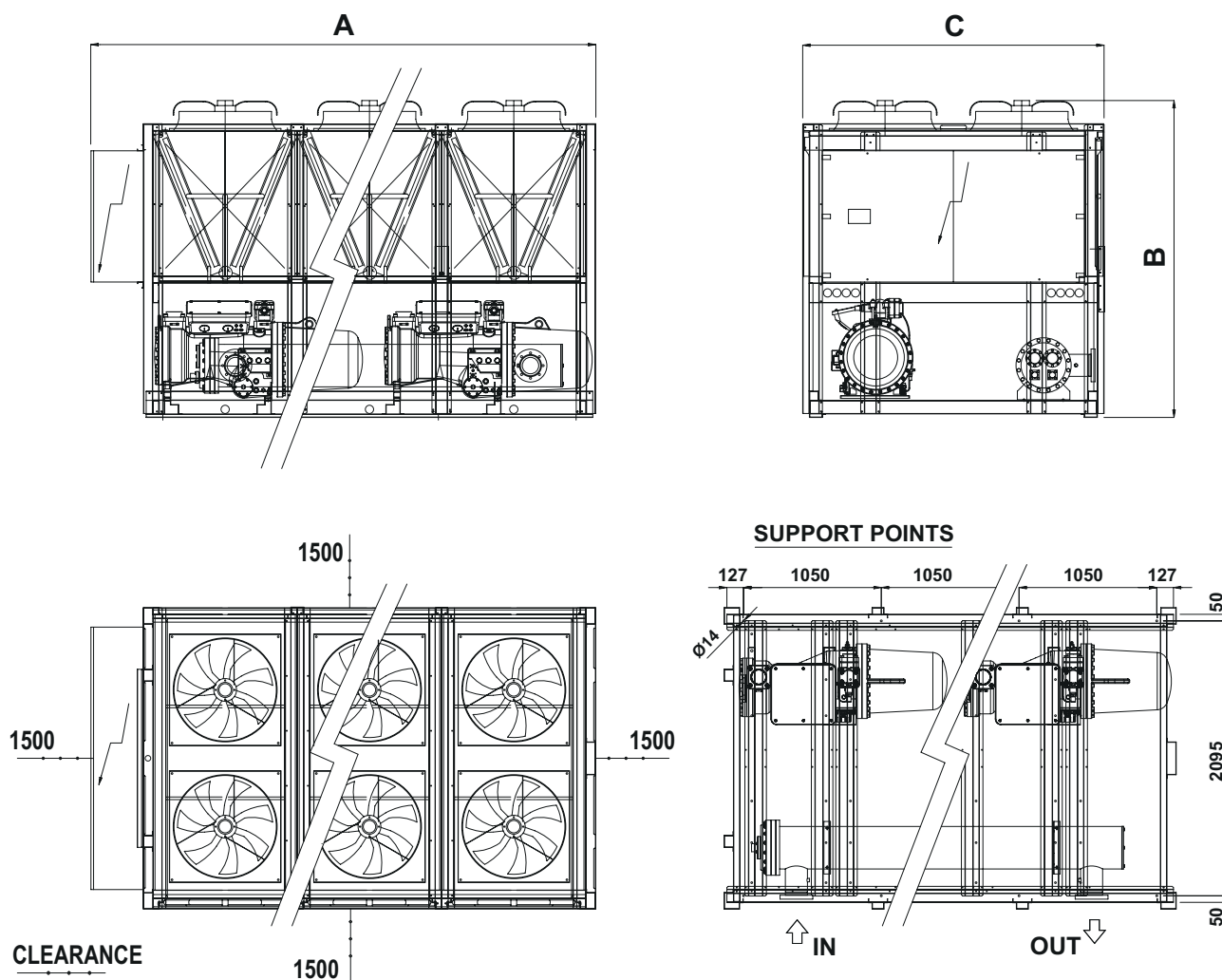
Cooling		
INLET WATER TEMPERATURE	Max °C/°F	15 / 59
	Min °C/°F	10 / 50
INLET WATER TEMPERATURE	Max °C/°F	10 / 50
	Min °C/°F	5 / 41
AMBIENT AIR TEMPERATURE	Max °C/°F	56 ₍₁₎ / 132.8 ₍₁₎
	Min °C/°F	15 ₍₂₎ / 53.6 ₍₂₎

(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

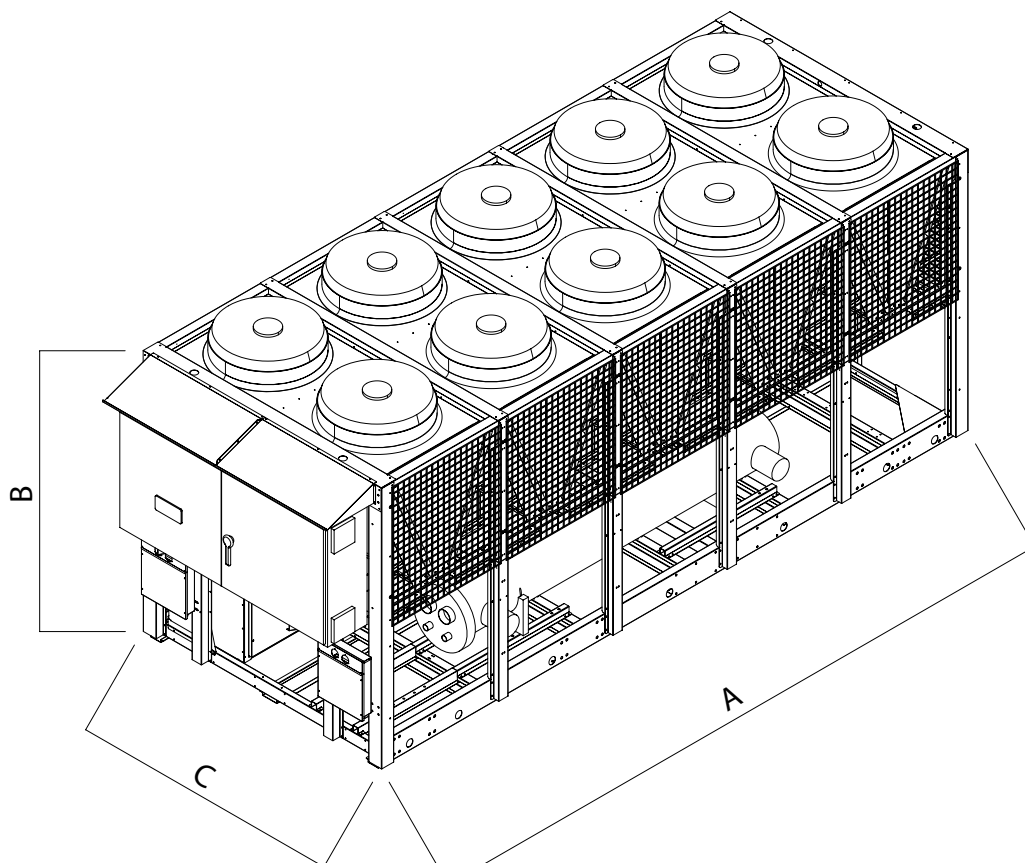
Ethylene glycol percentage by weight (%)	10	20	30
Freezing point (°C / °F)	-3,6 / 25.5	-8,7 / 16.3	-15,3 / 4.4
Cooling capacity	0,986	0,980	0,973
Absorbed Power	1,000	0,995	0,990
Mixture flow rate	1,023	1,054	1,092
Pressure drop	1,061	1,114	1,190



SUPPORT POINTS									
Ø	-	492	552	592	692	752	862	1012	1062
14mm		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 60Hz STD/LN																	
MODEL	492	552	592	692	752	862	1012	1062	1182	1292	1382	1532	1602	1722	2003	2253	2583
A	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
C	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300
Operating	3600	3680	3880	3930	4100	4450	4680	5100	5650	6050	6450	6850	7300	7750	8300	9100	9800
Transport	3550	3650	3740	3800	3980	4200	4480	4880	5400	5750	6150	6550	6900	7350	7900	8550	9200
LCAEX-HT 60Hz PAC1																	
VERS.																	
A	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
C	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300
Operating	5850	5950	6140	6200	6880	7200	7480	7980	8500	8850	9350	9850	10700	11300	11800	12450	13500
Transport	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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