

LCS SERIES

AIR COOLED CONDENSING UNIT

LARGE OUTDOOR AIR CONDITIONING UNIT

ORIGINAL MANUFACTURED EQUIPMENT

LCS Series
High Ambient
Selections





Product Specifications

The BITZER LCS range of condensing units offers contractors and system owners a complete factory assembled unit, with flexibility for the larger systems. Designed and built by BITZER Australia's trained staff to ensure optimal compatibility of all components and to provide durability, reliability and energy efficient performance in a compact system design.

This series offers the highest possible operational reliability and efficiencies over a wide application range which is increasingly important with the introduction of MEPS (Minimum Energy Performance Standards) and a continually growing awareness of system operational costs.

Safety has been high on our designers' priority, with the inclusion of all necessary pressure controls and internal compressor pressure relief protection fitted as standard, as well as provision for correct mechanical handling of the assembly during installation, ensuring a safety first approach.

BITZER factory fitted components increase system integrity, reduce maintenance down time and reduce installation times. This is achieved through excellent access to all major components with additional isolation valves fitted as standard.

The BITZER LCS range of condensing units incorporates compressor models (4JE-15Y) up to models (6FE-50Y). These compressors all now include BITZER latest integrated pulsation muffler technology (patented by BITZER) ensuring smooth quiet operation. Universally suitable for R134a, R404A, R507A, R407C and R22. (Oil change required for R22 applications).

The BITZER LCS range of condensing units includes fully wired components with options of condenser pressure controls with fan staging or fan speed control.

The electrical board also has external emergency stop standard and indicating run and fault lights as an option. The electrical board has a clear perspex panel offering protection from electrical shock when the unit cover panels are removed. Within the electrical board space is provided for additional electrical components.

The BITZER LCS range of condensing units are constructed with a galvanised steel base then painted and all unit panels are powder coated zinc-anneal steel panels protecting your investment for many years.

Explanation of Type Designation

4HE - 15Y - LCS4 - HS

Compressor number of cylinders and displacement code

4HE - 15Y - LCS4 - HS

ECOLINE line compressor

4HE - 15Y - LCS4 - HS

Code for Motor size

4HE - 15Y - LCS4 - HS

Code for Ester Oil

4HE - 15Y - LCS4 - HS

Condenser model

4HE - 15Y - LCS4 - HS

Fan Speed (high speed or low speed)

Product Specifications

The latest extended range of BITZER outdoor air cooled condensing units; ranging from 26kW to 82kW nominal capacity @-5°C SST incorporating the latest BITZER technology

Standard inclusions for all LCS Condensing Units

- Gold epoxy finned condenser
- BITZER semi hermetic ECOLINE compressor
- Integrated pulsation mufflers (patented by BITZER)
- BITZER factory fitted electrical boards - (up to 30 HP DOL standard)
 - (up to 30 HP P/W option)
 - (30HP to 50HP P/W standard)
- High ambient models
- Generously sized condensers
- Sickle blade high performance condenser fans
- Powder-coated panels
- Liquid receiver, demountable drier shell
- Moisture indicating sight-glass
- Dual pressure control
- Oil level protection (electronic oil pressure switch)
- Electronic motor protection monitoring (SE-B1 and SE-B2)
- Capacity control head prepared (for sol assembly to be fitted optional extra)
- Oil charge - BSE 32 (B5 on request)



Optional Components - Available on Request

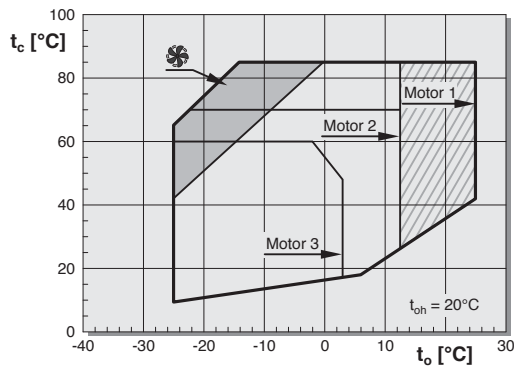
- Oil separator options (COS high efficiency, oil reservoir internal float)
- Traxon oil management
- Up to 30HP part wind
- Suction accumulators
- Capacity control assembly (CR11 control valve)
- Head cooling fan
- Fan speed controlled condenser fans
- Liquid line solenoid and/or isolating valve
- Microrack control
- Multiple compressor options (consult BITZER)
- Phase Monitoring
- Additional pressure controls
- Indicator run and fault lights



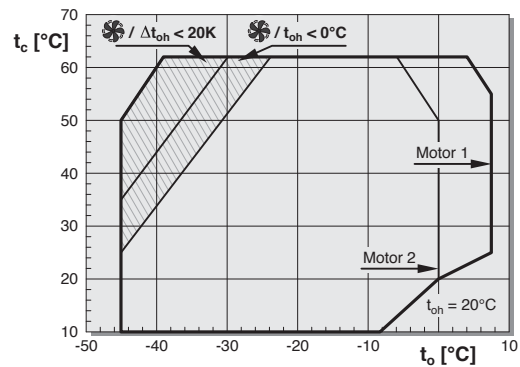
Application limits

Relating to 20°C suction gas temperature

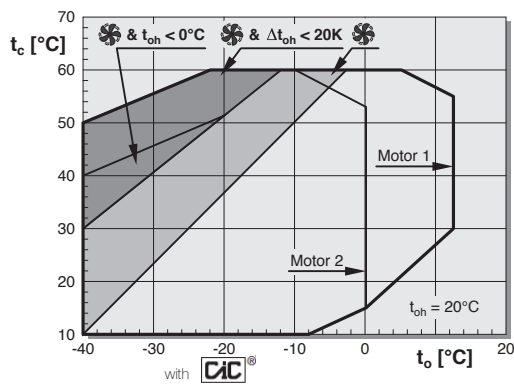
R134a ① 2KES-05Y .. 6FE-50Y



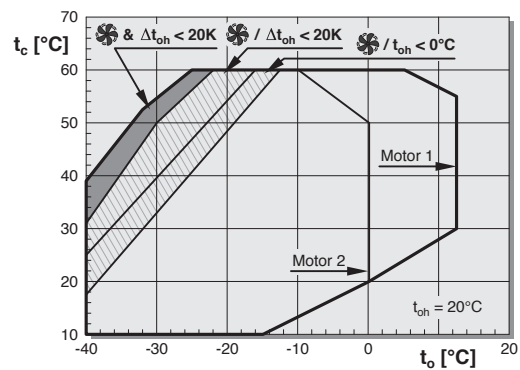
R404A ■ R507A 2KES-05Y .. 6FE-50Y



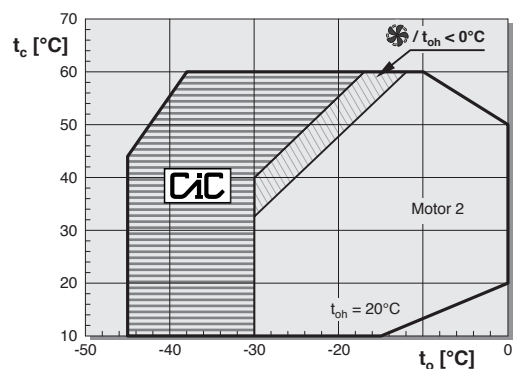
R407F ③ 2KES-05Y .. 4CES-9F



R407F ③ 4VES-7F .. 6FE-50Y



R407F ③ 4VES-7Y .. 6FE-40Y



- ① For R134a and $t_c > 70^\circ\text{C}$ oil BSE55 has to be used (instead of BSE32)
- ② 8GE-50Y .. 8FE-70Y: minimum evaporating temperature -20°C
- ③ Evaporating and condensing temperatures are based on dew point conditions (saturated vapour)
- t_o Evaporating temperature ($^\circ\text{C}$)
- t_{oh} Suction gas temperature ($^\circ\text{C}$)
- Δt_{oh} Suction gas superheat ($^\circ\text{C}$)
- t_c Condensing temperature ($^\circ\text{C}$)

- Additional cooling or limitation see diagram
- Additional cooling
- Additional cooling + limitation see diagram
- Limitation see diagram
- Suction gas superheat $> 10\text{ K}$
- Additional fan +

Performance Data

Performance Data based on 20°C suction gas temperature and 5 K Liquid Sub-cooling

		Cooling capacity Q_o [Watt] Power consumption P_e [kW]									
Compressor type ①	Cond. temp. °C	↓	Evaporation temperature °C (SST)								
			10	5	0	-5	-10	-15	-20	-25	-30
4JE-15Y-LCS3-HS	35	Q			52589	44704	37585	31214	25560	20586	16241
		P			16.68	15.29	13.90	12.52	11.17	9.83	8.53
	40	Q			48407	41062	34449	28543	23312	18714	14697
		P			17.53	15.98	14.46	12.95	11.47	10.03	8.63
	43	Q			45895	38876	32566	26940	21963	17592	13773
		P			18.00	16.37	14.76	13.18	11.63	10.12	8.66
45	Q			44221	37418	31311	25871	21064	16845	13158	
	P			18.30	16.61	14.95	13.31	11.72	10.16	8.67	
4JE-22Y-LCS3-HS	35	Q		60271	51657	43814	36735	30400	24780	19835	15511
		P		17.47	16.11	14.75	13.40	12.06	10.73	9.41	8.13
	40	Q		55348	47345	40077	33532	27687	22507	17948	13955
		P		18.39	16.89	15.39	13.90	12.43	10.98	9.56	8.17
	43	Q		52387	44752	37830	31606	26055	21141	16816	13024
		P		18.91	17.32	15.74	14.17	12.62	11.10	9.61	8.17
45	Q			50411	43020	36329	30320	24966	20229	16061	12404
	P			19.23	17.59	15.95	14.33	12.74	11.17	9.64	8.15
4HE-18Y-LCS4-HS	35	Q			62029	52764	44411	36945	30327	24511	19434
		P			19.89	18.21	16.55	14.90	13.28	11.69	10.15
	40	Q			57090	48482	40741	33836	27728	22363	17680
		P			20.93	19.08	17.25	15.45	13.69	11.97	10.32
	43	Q			54116	45903	38530	31964	26163	21072	16626
		P			21.52	19.56	17.64	15.74	13.90	12.11	10.39
45	Q			52131	44181	37054	30714	25118	20210	15924	
	P			21.89	19.87	17.88	15.93	14.02	12.19	10.42	
4HE-25Y-LCS4-HS	35	Q		71506	61341	52104	43779	36340	29748	23952	18887
		P		20.43	18.92	17.40	15.87	14.33	12.81	11.30	9.82
	40	Q		65691	56269	47728	40049	33199	27136	21803	17134
		P		21.50	19.83	18.16	16.48	14.81	13.16	11.53	9.94
	43	Q		62185	53209	45088	37797	31304	25560	20509	16079
		P		22.10	20.34	18.58	16.82	15.06	13.33	11.64	9.99
45	Q			59841	51163	43321	36291	30036	24506	19643	15375
	P			22.48	20.66	18.84	17.02	15.22	13.44	11.69	10.00
4GE-23Y-LCS4-HS	35	Q			69587	59518	50381	42162	34835	28357	22672
		P			24.27	22.07	19.94	17.86	15.85	13.91	12.06
	40	Q			63922	54615	46189	38626	31893	25944	20720
		P			25.50	23.10	20.78	18.53	16.36	14.28	12.30
	43	Q			60506	51657	43659	36491	30117	24489	19545
		P			26.18	23.68	21.25	18.89	16.63	14.47	12.41
45	Q			58222	49678	41967	35063	28930	23517	18761	
	P			26.62	24.04	21.54	19.12	16.80	14.58	12.47	
4GE-30Y-LCS4-HS	35	Q		79509	68513	58457	49339	41143	33838	27381	21709
		P		24.02	22.18	20.34	18.51	16.69	14.89	13.11	11.39
	40	Q		72851	62702	53446	45073	37560	30871	24953	19742
		P		25.13	23.14	21.16	19.18	17.22	15.29	13.39	11.55
	43	Q		68833	59194	50419	42495	35394	29077	23488	18558
		P		25.75	23.67	21.60	19.54	17.50	15.48	13.52	11.61
45	Q			66145	56846	48392	40768	33944	27876	22508	17767
	P			26.14	24.00	21.87	19.76	17.66	15.60	13.59	11.64
4FE-28Y-LCS5-HS	35	Q			81942	70276	59655	50064	41477	33847	27117
		P			28.29	26.00	23.68	21.35	19.03	16.74	14.51
	40	Q			75240	64500	54738	45931	38042	31022	24804
		P			29.64	27.15	24.63	22.11	19.61	17.15	14.75
	43	Q			71197	61013	51765	43428	35960	29306	23396
		P			30.40	27.78	25.14	22.51	19.90	17.34	14.85
45	Q			68493	58678	49774	41750	34562	28153	22449	
	P			30.87	28.18	25.46	22.76	20.07	17.44	14.89	
4FE-35Y-LCS5-HS	35	Q		93891	81304	69735	59189	49654	41104	33495	26767
		P		29.80	27.61	25.38	23.11	20.83	18.56	16.32	14.12
	40	Q		85956	74420	63837	54201	45490	37670	30687	24473
		P		31.29	28.90	26.47	24.02	21.55	19.10	16.68	14.33
	43	Q		81167	70261	60269	51179	42964	35583	28977	23074
		P		32.13	29.62	27.07	24.50	21.93	19.37	16.85	14.41
45	Q			77963	67476	57878	49152	41268	34180	27826	22131
	P			32.66	30.08	27.45	24.80	22.16	19.53	16.95	14.44
6JE-25Y-LCS4-HS	35	Q			76056	64786	54594	45454	37328	30164	23894
		P			24.94	22.89	20.81	18.73	16.64	14.57	12.55
	40	Q			70108	59580	50085	41592	34058	27427	21627
		P			26.10	23.86	21.60	19.34	17.08	14.86	12.69
	43	Q			66540	56457	47380	39275	32098	25787	20270
		P			26.75	24.40	22.03	19.66	17.31	14.99	12.73
45	Q			64162	54375	45577	37732	30792	24695	19366	
	P			27.16	24.74	22.30	19.86	17.44	15.06	12.75	



Performance Data

Performance Data based on 20°C suction gas temperature and 5 K Liquid Sub cooling

		Cooling capacity Q_o [Watt] Power consumption P_e [kW]								
Model No.	Ambient Temp. °C	↓	Evaporation Temperature °C (SST)							
			10	5	0	-5	-10	-15	-20	-25
6JE-33Y-LCS5-HS	35	Q	89949	76918	65106	54486	45018	36648	29306	22907
		P	25.14	23.40	21.59	19.72	17.81	15.87	13.92	11.98
	40	Q	82817	70654	59659	49800	41031	33292	26508	20591
		P	26.42	24.49	22.50	20.44	18.35	16.24	14.13	12.04
	43	Q	78528	66887	56383	46982	38634	31276	24829	19203
		P	27.13	25.09	22.98	20.82	18.63	16.41	14.21	12.03
6HE-28Y-LCS5-HS	35	Q	75665	64372	54196	45101	37034	29930	23709	18279
		P	27.59	25.47	23.29	21.05	18.79	16.51	14.24	12.01
	40	Q	87697	74922	63330	52903	43604	35383	28169	22169
		P	29.77	27.25	24.73	22.23	19.75	17.32	14.95	12.58
	43	Q	80672	68810	58073	48434	39852	32268	25607	20007
		P	31.22	28.48	25.74	23.02	20.34	17.72	15.18	12.64
6HE-35Y-LCS6-HS	35	Q	76448	65134	54910	45745	37593	30392	24065	18825
		P	32.04	29.16	26.29	23.44	20.64	17.91	15.27	12.62
	40	Q	73628	62679	52797	43948	36083	29138	23034	17834
		P	32.56	29.59	26.63	23.70	20.82	18.02	15.31	12.58
	43	Q	105428	90382	76731	64446	53483	43780	35259	27823
		P	29.91	27.88	25.78	23.62	21.41	19.18	16.95	14.74
6GE-34Y-LCS6-HS	35	Q	96962	82993	70353	59004	48894	39955	32102	25232
		P	31.54	29.30	26.99	24.62	22.21	19.78	17.37	14.98
	40	Q	91862	78541	66508	55722	46126	37648	30198	23671
		P	32.46	30.09	27.65	25.16	22.63	20.09	17.56	15.08
	43	Q	88453	75565	63937	53526	44274	36103	28923	22626
		P	33.04	30.59	28.07	25.49	22.88	20.27	17.67	15.12
6GE-40Y-LCS6-HS	35	Q	102527	87908	74627	62663	51980	42521	34208	27208
		P	35.80	32.77	29.78	26.83	23.93	21.12	18.41	15.70
	40	Q	94279	80796	68570	57573	47759	39064	31404	24889
		P	37.79	34.47	31.20	27.99	24.85	21.81	18.89	15.96
	43	Q	89298	76498	64906	54490	45199	36963	29696	23696
		P	38.93	35.44	32.00	28.63	25.35	22.17	19.13	16.10
6FE-44Y-LCS6-HS	35	Q	85963	73617	62448	52420	43477	35548	28543	22543
		P	39.66	36.06	32.52	29.04	25.66	22.39	19.27	16.15
	40	Q	115853	99919	85333	72092	60178	49549	40144	31881
		P	35.27	32.77	30.22	27.65	25.06	22.47	19.90	17.37
	43	Q	106140	91461	78056	65912	54996	45259	36630	29017
		P	37.02	34.30	31.53	28.74	25.94	23.14	20.37	17.66
6FE-50Y-LCS6-HS	35	Q	100286	86360	73664	62178	51862	42662	34499	27277
		P	38.01	35.16	32.26	29.34	26.41	23.49	20.60	17.77
	40	Q	96370	82946	70723	59675	49760	40917	33065	26105
		P	38.64	35.70	32.72	29.71	26.69	23.69	20.73	17.83
	43	Q	118534	102092	87012	73299	60934	49877	40063	31863
		P	43.17	39.66	36.14	32.63	29.16	25.74	22.43	19.11
6FE-50Y-LCS6-HS	35	Q	108684	93575	79739	67168	55829	45669	36613	28613
		P	45.00	41.22	37.43	33.67	29.94	26.29	22.75	19.00
	40	Q	102745	88434	75345	63458	52734	43114	34514	27514
		P	46.01	42.08	38.13	34.21	30.34	26.55	22.87	19.14
	43	Q	98775	84995	72402	60971	50659	41398	33102	26102
		P	46.66	42.61	38.57	34.54	30.57	26.69	22.93	19.20
6FE-50Y-LCS6-HS	35	Q	134033	116466	100195	85248	71636	59345	48337	38546
		P	44.92	41.55	38.14	34.70	31.27	27.87	24.52	21.24
	40	Q	122408	106333	91472	77838	65423	54198	44110	35078
		P	46.81	43.19	39.52	35.84	32.15	28.50	24.91	21.42
	43	Q	115403	100220	86205	73358	61662	51078	41543	32971
		P	47.86	44.09	40.27	36.43	32.60	28.80	25.07	21.44
6FE-50Y-LCS6-HS	45	Q	110720	96132	82680	70357	59141	48984	39819	31554
		P	48.53	44.65	40.73	36.79	32.86	28.97	25.15	21.43

Performance Data

Performance Data based on 20°C suction gas temperature and 5 K Liquid Sub-cooling

		Cooling capacity Q_o [Watt] Power consumption P_e [kW]								
Model	Ambient °C	↓	Evaporation Temperature °C (SST)							
			10	5	0	-10	-5	-15	-20	-25
4JE-13Y-LCS3-LS	35	Q		32739	26835	21659	17163	13287	9962	7112
		P		9.09	8.27	7.43	6.59	5.77	4.97	4.23
	40	Q		30658	25081	20197	15954	12289	9133	6407
		P		9.63	8.70	7.77	6.85	5.95	5.09	4.29
	43	Q		29418	24037	19326	15233	11693	8637	5983
		P		9.93	8.95	7.96	6.99	6.04	5.14	4.32
45	Q		28594	23343	18747	14753	11297	8305	5700	
	P		10.12	9.10	8.07	7.07	6.09	5.17	4.32	
4HE-15Y-LCS3-LS	35	Q		37808	31119	25233	20100	15656	11827	8525
		P		10.90	9.83	8.78	7.75	6.76	5.82	4.94
	40	Q		35382	29083	23545	18716	14530	10910	7768
		P		11.50	10.32	9.17	8.05	6.98	5.96	5.03
	43	Q		33923	27860	22533	17889	13861	10369	7325
		P		11.84	10.59	9.38	8.21	7.09	6.04	5.07
45	Q		32948	27043	21858	17339	13416	10011	7034	
	P		12.05	10.76	9.51	8.30	7.15	6.07	5.09	
4GE-20Y-LCS3-HS	35	Q		43889	36248	29533	23677	18601	14211	10403
		P		12.96	11.64	10.36	9.11	7.90	6.75	5.66
	40	Q		41043	33848	27542	22055	17304	13194	9618
		P		13.64	12.21	10.81	9.46	8.15	6.91	5.74
	43	Q		39317	32387	26323	21055	16497	12553	9115
		P		14.02	12.52	11.06	9.64	8.28	6.98	5.77
45	Q		38159	31405	25502	20379	15949	12115	8768	
	P		14.26	12.71	11.21	9.75	8.35	7.02	5.78	
4FE-25Y-LCS4-LS	35	Q		51095	42224	34430	27659	21832	16852	12605
		P		16.04	14.28	12.60	11.02	9.54	8.19	7.00
	40	Q		47996	39636	32297	25918	20417	15696	11635
		P		16.84	14.93	13.11	11.39	9.80	8.35	7.07
	43	Q		46135	38080	31013	24869	19564	14997	11048
		P		17.29	15.29	13.38	11.59	9.93	8.42	7.09
45	Q			37041	30155	24168	18994	14530	10655	
	P			15.51	13.55	11.71	10.01	8.46	7.11	
6JE-22Y-LCS4-LS	35	Q		47480	38879	31352	24832	19235	14461	10393
		P		13.81	12.42	11.04	9.69	8.36	7.08	5.86
	40	Q		44353	36224	29118	22966	17681	13161	9287
		P		14.51	12.95	11.43	9.94	8.50	7.12	5.83
	43	Q		42472	34626	27774	21844	16749	12382	8627
		P		14.89	13.24	11.62	10.06	8.55	7.12	5.78
45	Q		41217	33560	26878	21097	16127	11865	8189	
	P		15.12	13.41	11.74	10.13	8.57	7.11	5.74	
6HE-25Y-LCS5-LS	35	Q		55777	45759	36998	29415	22912	17372	12659
		P		16.30	14.65	13.03	11.44	9.90	8.42	7.01
	40	Q		52167	42722	34468	27322	21183	15931	11427
		P		17.16	15.33	13.54	11.80	10.12	8.52	7.01
	43	Q		49999	40898	32948	26066	20147	15069	10691
		P		17.63	15.69	13.81	11.98	10.22	8.55	6.99
45	Q		48554	39682	31936	25229	19457	14496	10204	
	P		17.93	15.92	13.97	12.08	10.28	8.56	6.96	
6GE-30Y-LCS5-LS	35	Q		63933	52917	43217	34770	27485	21247	15915
		P		19.65	17.62	15.67	13.81	12.02	10.31	8.70
	40	Q		59946	49587	40470	32522	25648	19725	14611
		P		20.67	18.47	16.36	14.34	12.40	10.55	8.81
	43	Q		57559	47594	38824	31175	24545	18811	13827
		P		21.24	18.94	16.74	14.62	12.59	10.67	8.87
45	Q			46268	37729	30279	23812	18204	13306	
	P			19.23	16.97	14.79	12.71	10.74	8.89	
6FE-40Y-LCS5-HS	35	Q		75182	62143	50652	40639	32001	24601	18278
		P		23.31	20.94	18.67	16.47	14.36	12.33	10.39
	40	Q		70383	58125	47327	37908	29758	22735	16671
		P		24.41	21.85	19.39	17.02	14.73	12.54	10.46
	43	Q		67512	55720	45335	36272	28414	21616	15707
		P		25.00	22.34	19.78	17.30	14.91	12.63	10.48
45	Q		65603	54121	44011	35184	27520	20872	15066	
	P		25.37	22.65	20.01	17.46	15.02	12.68	10.48	

 Additional cooling required



Performance Data

Performance Data based on 20°C suction gas temperature and 5 K Liquid Sub-cooling

		Cooling capacity Q_o [Watt] Power consumption P_e [kW]									
Model No.	Ambient °C	↓	Evaporation Temperature °C (SST)								
			10	5	0	-5	-10	-15	-20	-25	-30
4JE-15Y-LCS3-HS	35	Q			49643	41375	33990	27457	21735	16765	12475
		P			15.8	14.2	12.7	11.3	9.8	8.4	7.1
	40	Q			46168	38388	31450	25320	19952	15285	11243
		P			16.5	14.8	13.2	11.6	10.1	8.6	7.1
	43	Q			44086	36598	29929	24042	18889	14405	10514
		P			16.9	15.2	13.5	11.8	10.2	8.6	7.2
4JE-22Y-LCS3-HS	35	Q			42699	35407	28918	23194	18184	13823	10035
		P			17.1	15.4	13.6	11.9	10.3	8.7	7.2
	40	Q	67860	57896	48824	40643	33336	26870	21192	16232	11902
		P	18.4	16.9	15.5	14.0	12.5	11.1	9.7	8.3	7.0
	43	Q	63093	53736	45235	37581	30752	24707	19387	14719	10611
		P	19.3	17.7	16.2	14.6	13.0	11.4	9.9	8.5	7.0
4HE-18Y-LCS4-HS	35	Q			59221	49405	40654	32929	26173	20313	15259
		P			18.8	17.0	15.2	13.5	11.8	10.1	8.6
	40	Q			55190	45951	37729	30478	24139	18633	13868
		P			19.7	17.8	15.9	14.0	12.2	10.4	8.8
	43	Q			52769	43878	35975	29011	22923	17633	13045
		P			20.3	18.2	16.2	14.3	12.4	10.6	8.8
4HE-25Y-LCS4-HS	35	Q			51156	42498	34807	28035	22117	16971	12502
		P			20.6	18.5	16.5	14.5	12.5	10.7	8.9
	40	Q	81219	69284	58451	48711	40034	32371	25654	19793	14678
		P	21.4	19.8	18.1	16.5	14.9	13.2	11.6	10.1	8.6
	43	Q	75671	64458	54302	45185	37069	29899	23601	18078	13219
		P	22.5	20.8	19.0	17.3	15.5	13.7	12.0	10.4	8.8
4GE-23Y-LCS4-HS	35	Q			72334	61555	51805	43061	35283	28411	22365
		P			23.1	21.3	19.5	17.7	15.8	14.0	12.2
	40	Q			70107	59616	50137	41643	34091	27417	21541
		P			23.5	21.7	19.8	17.9	16.1	14.2	12.4
	43	Q			67045	56229	46526	37906	30323	23707	17969
		P			22.9	20.5	18.3	16.2	14.1	12.1	10.3
4GE-30Y-LCS4-HS	35	Q			62508	52344	43239	35158	28047	21833	16424
		P			24.0	21.6	19.2	16.8	14.6	12.5	10.6
	40	Q			59784	50013	41268	33511	26687	20717	15508
		P			24.7	22.1	19.6	17.2	14.9	12.7	10.7
	43	Q			57968	48459	39955	32416	25783	19978	14905
		P			25.2	22.5	19.9	17.5	15.1	12.9	10.8
4FE-28Y-LCS5-HS	35	Q	90677	77680	65812	55075	45453	36908	29376	22770	16978
		P	25.1	23.1	21.1	19.2	17.3	15.3	13.5	11.7	9.9
	40	Q	84437	72240	61126	51086	42097	34109	27052	20832	15332
		P	26.3	24.2	22.1	20.0	18.0	15.9	13.9	12.0	10.2
	43	Q	80686	68968	58306	48685	40076	32424	25655	19669	14347
		P	27.0	24.8	22.7	20.5	18.4	16.2	14.2	12.2	10.3
4FE-35Y-LCS5-HS	35	Q			66784	56423	47082	38727	31300	24722	18894
		P			25.2	23.0	20.8	18.6	16.4	14.3	12.3
	40	Q			80063	67124	55523	45223	36167	28271	21427
		P			26.4	23.9	21.4	18.9	16.6	14.4	12.2
	43	Q			74639	62477	51589	41932	33441	26027	19576
		P			27.7	25.0	22.3	19.7	17.2	14.8	12.5
4FE-35Y-LCS5-HS	35	Q			71382	59688	49229	39961	31812	24690	18480
		P			28.5	25.6	22.8	20.1	17.5	15.0	12.7
	40	Q			69212	57829	47658	38649	30729	23804	17757
		P			28.9	26.0	23.2	20.4	17.7	15.2	12.8
	43	Q	108170	92705	78575	65786	54322	44137	35158	27281	20375
		P	30.7	28.2	25.7	23.2	20.8	18.4	16.1	13.9	11.8
4FE-35Y-LCS5-HS	35	Q	100681	86178	72954	61004	50299	40785	32378	24968	18414
		P	32.2	29.6	26.9	24.3	21.7	19.2	16.7	14.3	12.1
	40	Q	96180	82254	69573	58127	47879	38770	30709	23581	17244
		P	33.1	30.3	27.6	24.9	22.2	19.5	17.0	14.6	12.2
	43	Q			79635	67317	56206	46265	37426	29597	22659
		P			30.8	28.0	25.2	22.5	19.8	17.2	14.7

Additional cooling required Additional cooling + CIC

Performance Data

Performance Data based on 20°C suction gas temperature and 5 K Liquid Sub-cooling

		Cooling capacity Q_o [Watt] Power consumption P_e [kW]									
Model No.	Ambient °C	↓	Evaporation Temperature °C (SST)								
			10	5	0	-5	-10	-15	-20	-25	-30
4FE-35Y-LCS5-HS	35	Q	108170	92705	78575	65786	54322	44137	35158	27281	20375
		P	30.7	28.2	25.7	23.2	20.8	18.4	16.1	13.9	11.8
	40	Q	100681	86178	72954	61004	50299	40785	32378	24968	18414
		P	32.2	29.6	26.9	24.3	21.7	19.2	16.7	14.3	12.1
	43	Q	96180	82254	69573	58127	47879	38770	30709	23581	17244
		P	33.1	30.3	27.6	24.9	22.2	19.5	17.0	14.6	12.2
6JE-25Y-LCS4-HS	35	Q		79635	67317	56206	46265	37426	29597	22659	16468
		P		30.8	28.0	25.2	22.5	19.8	17.2	14.7	12.3
	40	Q			71871	60149	49603	40214	31939	24711	18442
		P			24.1	21.7	19.3	17.0	14.7	12.6	10.6
	43	Q			66743	55728	45836	37039	29288	22510	16611
		P			25.1	22.5	20.0	17.5	15.1	12.8	10.7
6JE-33Y-LCS5-HS	35	Q			63674	53083	43584	35144	27710	21205	15531
		P			25.6	22.9	20.3	17.8	15.3	12.9	10.7
	40	Q			61631	51324	42088	33886	26664	20342	14820
		P			26.0	23.2	20.5	17.9	15.4	13.0	10.7
	43	Q									
		P									
6JE-33Y-LCS5-HS	35	Q	101744	86779	73163	60893	49942	40256	31756	24333	17854
		P	27.3	25.1	22.9	20.8	18.6	16.5	14.4	12.4	10.4
	40	Q	94564	80510	67750	56272	46039	36988	29030	22052	15913
		P	28.5	26.2	23.9	21.6	19.3	17.0	14.8	12.6	10.5
	43	Q		76744	64499	53497	43696	35028	27399	20690	14759
		P		26.8	24.4	22.0	19.6	17.3	15.0	12.7	10.5
6HE-28Y-LCS5-HS	35	Q			62330	51647	42135	33723	26314	19787	13996
		P			24.8	22.3	19.9	17.4	15.1	12.7	10.5
	40	Q			84948	71250	58926	47951	38276	29823	22487
		P			29.0	26.1	23.2	20.5	17.8	15.3	12.9
	43	Q			79015	66153	54599	44321	35260	27333	20427
		P			30.3	27.2	24.1	21.2	18.4	15.7	13.1
6HE-35Y-LCS6-HS	35	Q			75459	63099	52008	42150	33461	25851	19208
		P			31.1	27.8	24.6	21.6	18.7	15.9	13.3
	40	Q			73090	61065	50285	40707	32266	24871	18404
		P			31.5	28.2	25.0	21.8	18.8	16.0	13.3
	43	Q									
		P									
6HE-35Y-LCS6-HS	35	Q	121650	103755	87519	72926	59933	48467	38423	29663	22024
		P	32.4	29.8	27.3	24.7	22.2	19.7	17.3	14.9	12.7
	40	Q	113259	96456	81242	67591	55448	44729	35321	27081	19838
		P	34.1	31.3	28.6	25.8	23.1	20.5	17.8	15.3	12.9
	43	Q		92066	77466	64381	52750	42483	33462	25538	18537
		P		32.2	29.3	26.5	23.6	20.9	18.1	15.5	13.0
6GE-34Y-LCS6-HS	35	Q			74946	62239	50950	40986	32224	24513	17676
		P			29.8	26.9	23.9	21.1	18.3	15.6	13.1
	40	Q			99554	83375	68868	55995	44684	34834	26311
		P			33.8	30.3	27.0	23.8	20.7	17.7	15.0
	43	Q			92651	77462	63863	51807	41214	31975	23952
		P			35.5	31.7	28.1	24.7	21.4	18.2	15.3
6GE-40Y-LCS6-HS	35	Q			88509	73914	60862	49299	39140	30273	22554
		P			36.4	32.5	28.8	25.2	21.8	18.5	15.5
	40	Q			85749	71551	58864	47630	37763	29145	21631
		P			37.0	33.0	29.2	25.5	22.0	18.7	15.6
	43	Q									
		P									
6GE-40Y-LCS6-HS	35	Q	135806	116298	98498	82410	68006	55225	43970	34106	25462
		P	37.7	34.7	31.8	28.8	25.9	23.1	20.3	17.6	15.0
	40	Q	126380	108075	91410	76374	62925	50990	40460	31189	22999
		P	39.5	36.3	33.2	30.0	26.9	23.9	20.9	18.0	15.3
	43	Q	120715	103132	87148	72744	59871	48448	38356	29448	21538
		P	40.5	37.2	34.0	30.7	27.5	24.3	21.2	18.3	15.4
6FE-44Y-LCS6-HS	35	Q			99834	84304	70323	57835	46754	36958	28293
		P			37.8	34.4	31.1	27.8	24.6	21.4	18.4
	40	Q			115523	97263	80779	66052	53023	41598	31642
		P			40.9	36.8	32.8	29.0	25.4	21.9	18.7
	43	Q			107478	90341	74899	61120	48935	38239	28892
		P			42.7	38.3	34.1	30.1	26.2	22.6	19.1
6FE-50Y-LCS6-HS	35	Q			102660	86198	71385	58179	46506	36256	27282
		P			43.7	39.2	34.9	30.7	26.7	22.9	19.4
	40	Q			99454	83444	69051	56230	44901	34951	26229
		P			44.3	39.8	35.3	31.0	27.0	23.1	19.5
	43	Q									
		P									
6FE-50Y-LCS6-HS	35	Q	154591	133120	113352	95326	79048	64485	51559	40146	30076
		P	46.7	42.8	39.0	35.3	31.6	28.0	24.6	21.3	18.2
	40	Q	143617	123505	105031	88216	73048	59475	47404	36696	27171
		P	48.6	44.5	40.5	36.6	32.7	28.9	25.3	21.8	18.5
	43	Q		117729	100032	83946	69446	56472	44919	34641	25452
		P		45.5	41.4	37.3	33.3	29.4	25.7	22.1	18.7
45	Q			96699	81099	67047	54473	43268	33281	24319	
	P			41.9	37.7	33.7	29.7	25.9	22.2	18.8	

Additional cooling required Additional cooling + CIC



Technical Data

Compressor Data								
Compressor Model	Motor Version	Motor Connection Volt	Max Operating Current Amps	Maximum Power Consumption KW	Capacity Control Stages	Oil Charge dm ³	Crankcase Heater 240/1/50	Compressor Weight
4JE-13Y	3	PW 380.420YY/3/50 440.480YY/3/60	19.8	11.0	100%, 50% Optional further control from 10-100% with CRIL unloader available. See KT-100-3 and KT-101-2 for further information. Note additional cooling may be required under these conditions.	4	140W	179
4JE-15Y	2		30.8	19.0		4		190
4JE-22Y	1		37.2	21.0		4		190
4HE-15Y	3		22.5	13.0		4		183
4HE-18Y	2		36.7	22.0		4		190
4HE-25Y	1		44.0	25.0		4		194
4GE-20Y	3		25.9	16.0		4.5		192
4GE-23Y	2		43.9	27.0		4.5		192
4GE-30Y	1		51.2	28.0		4.5		206
4FE-25Y	3		32.1	19.0		4.5		196
4FE-28Y	2		52.8	31.0		4.5		207
4FE-35Y	1		62.1	35.0		4.5		207
6JE-22Y	3		28.5	16.0	100%, 66%, 33% Optional further control from 10-100% with CRIL unloader available. See KT-100-3 and KT-101-2 for further information.	4.75		213
6JE-25Y	2		46.4	27.0		4.75		228
6JE-33Y	1		53.2	30.0		4.75		231
6HE-25Y	3		32.9	19.0		4.75		224
6HE-28Y	2		53.2	33.0		4.75		228
6HE-35Y	1		64.4	36.0		4.75		235
6GE-30Y	3		40.0	23.0		4.75		228
6GE-34Y	2		65.5	40.0		4.75		228
6GE-40Y	1		73.9	42.0		4.75		238
6FE-40Y	3		51.1	27.0		4.75		238
6FE-44Y	2		83.2	46.0		4.75		241
6FE-50Y	1	PW 380.400YY/3/50 440.460YY/3/60	96.2	51.0		4.75		241

Note: Use of the CRIL Capacity control system can provide virtually stepless capacity control (intermittently engaged).
Tolerance (+/-10%) based on mean value of voltage range. Other voltages and electrical supplies upon request.
Data refer to 400V/3/50 Hz at direct mains operation.

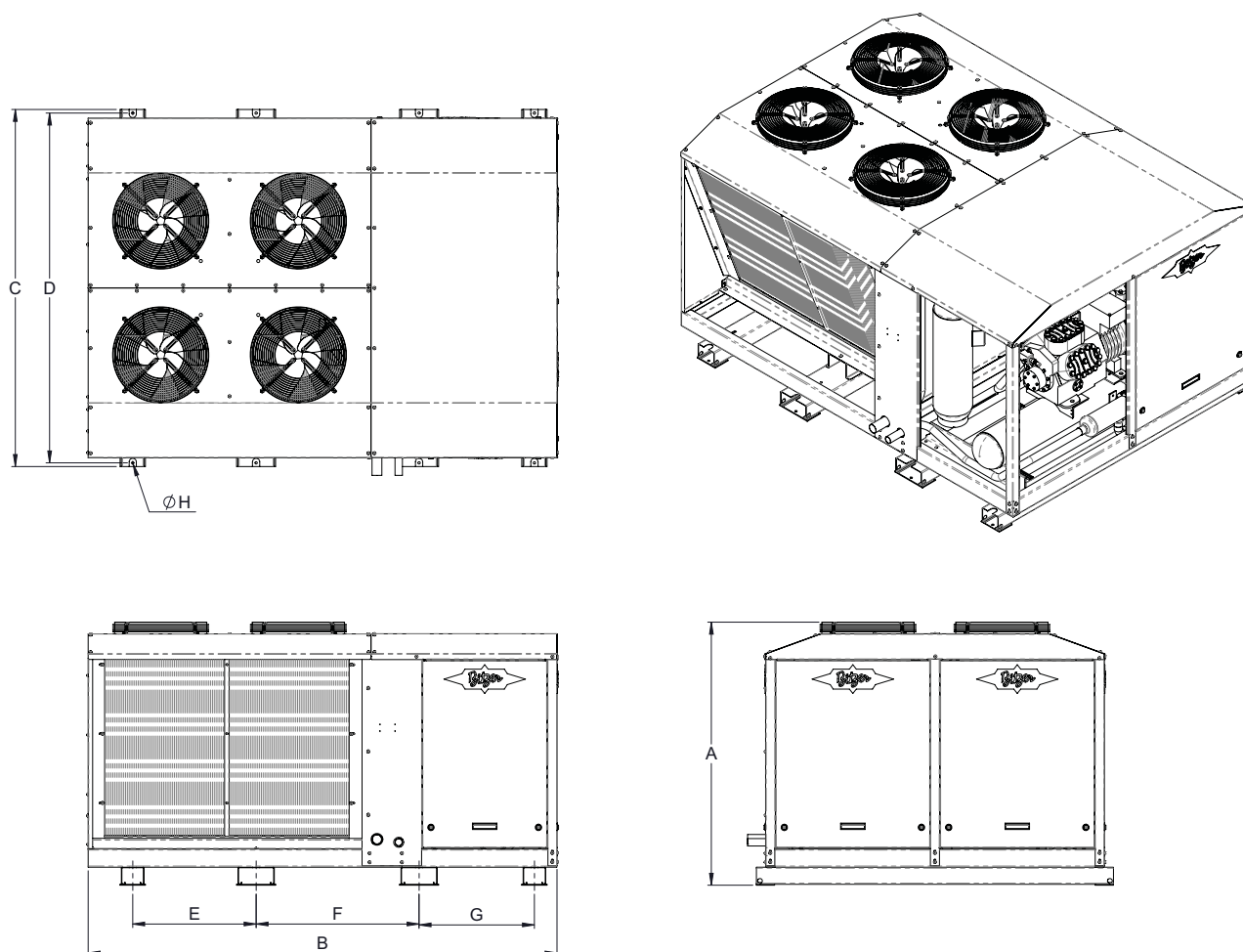
Condenser Data				
Condenser Model	Number of Fans	Fan Voltage	Fan total Amps	Fan Total KW
LCS3-LS	4 x 500mm	415/3/50	3.76	3.12
LCS3-HS			5.4	2.2
LCS4-LS			3.76	3.12
LCS4-HS			5.4	2.2
LCS5-LS	6 x 500mm	415/3/50	5.64	3.3
LCS5-HS			8.1	4.68
LCS6-LS			5.64	3.3
LCS6-HS			8.1	4.68

Note for total unit power consumption add compressor and condenser values together. Tolerance (+ / - 10%)

Condensing Unit Data				
Condenser Model	Liquid Line Size	Suction Line Size	Base Unit Weight (Add comp. weight for total) KG	Receiver Pump Down R507A / R134a
LCS3-LS	1-1/8"	1-5/8"	704	44 / 50
LCS3-HS	1-1/8"	1-5/8"	704	44 / 50
LCS4-LS	1-1/8"	2-1/8"	734	44 / 50
LCS4-HS	1-3/8"	2-1/8"	734	44 / 50
LCS5-LS	1-3/8"	2-1/8"	860	44 / 50
LCS5-HS	1-3/8"	2-1/8"	860	44 / 50
LCS6-LS	1-3/8"	2-1/8"	910	44 / 50
LCS6-HS	1-3/8"	2-1/8"	910	44 / 50

Note for total unit weight add compressor weight to base unit weight
Note for total unit power consumption add compressor and condenser values together.

Dimensional Drawings



LCS 3 indicated

Dimensions									Sound Data *dB(A) 3 metres			
Condenser Model	A	B	C	D	E	F	G	H Ø	Minimum Clearance condenser air on side	Speed Controlled @ 25°C ambient	Low Speed	High Speed
LCS 3 & 4 - LS & HS	1427	2590	1972	1932	685	900	637	12	950	66	67	72
LCS 5 & 6 - LS & HS	1427	3310	1972	1932	1218	900	637	12	1050	67.8	68.8	74

±2.5mm tolerance

Based on Manufacturers Nominal Data

Sound pressure levels dB(A) are calculated with typical 17.5 dB deduction for 3 metre distance

*Speed control ratings based on operation at 25°C ambient

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