

Model

Designation	KLE8.6GFHX	115-127V/60Hz 1~	Sales code:	106G6913
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a, R513A
Oil viscosity	19,2cSt	Displacement	8,6cm ³ / 0,52cu.in
Oil quantity	200cm ³ / 6,8fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	300g / 10,6oz		
Free gas volume comp.	1575cm ³ / 53,3fl.oz		
Weight	9,4kg / 20,7lbs		
Motor protection	external		
Winding resistance main	2Ω (at 25°C)		
Winding resistance aux	4,3Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		
Additional note	Good robustness against liquid intake. Ice-cube maker optimization - indirect suction intake.		



General - Configurations with KLE8.6GFHX

	Conf. 1	Conf. 2
Motor configuration	CSIR	CSIR
Power supply (nominal)	115V/60Hz	115V/60Hz
Number of phases	1	1
Voltage range	95-140V	103-127V
Approvals	UL	UL
Starting torque	HST	HST
Note	Electrical equipment is included and pre-assembled to compressor.	

Applications with KLE8.6GFHX

	Conf. 1	Conf. 2
Refrigerant	R134a	R513A
Application	LBP+MBP+HBP	LBP+MBP+HBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Electrical data - Configurations with KLE8.6GFHX

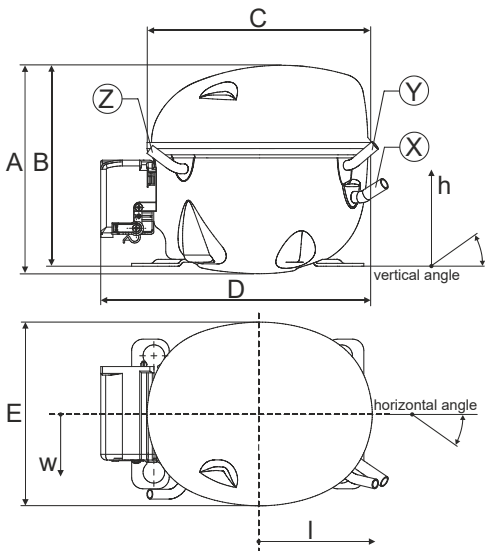
	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	240μF	240μF
LRA (locked rotor amps / 4s/ U(N))	33,3A	33,3A
RLA (rated load amps / 1s/ U(N))	4,2A	4,2A
Cut in current (U(N))		

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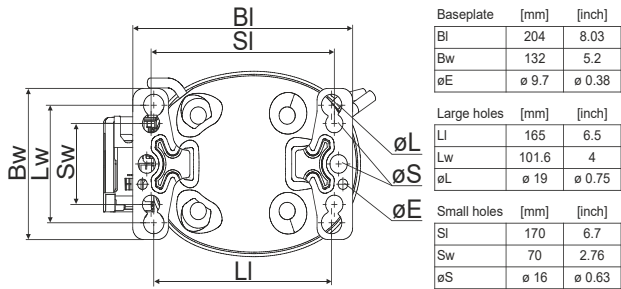
Compressor dimensions

Housing	A Height	182mm / 7,17in
	B Height	175mm / 6,89in
	C Length shell	198mm / 7,8in
	D Length w. cover	238mm / 9,37in
	E Width	160mm / 6,3in

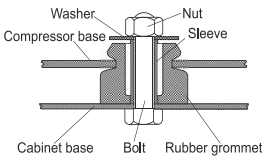
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59	117/107/66	-88/101/71
[in]	4,7/2,9/2,3	4,6/4,2/2,6	-3,5/4/2,8
Straight tube l.	[mm]	14	14
	[in]	0,5	0,5



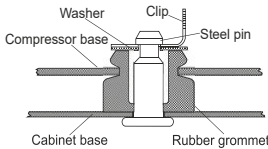
Compressor fixation



Bolt joint



Snap-on



Mounting accessories	one comp.	multi pack
Bolt joint M6 ø16mm	118-1917	118-1918
Bolt joint ø1/4" ø16mm	118-1946	
Bolt joint ø1/4" ø19mm	118-1949	
Snap-on ø7,3 ø16mm	118-1947	118-1919

Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

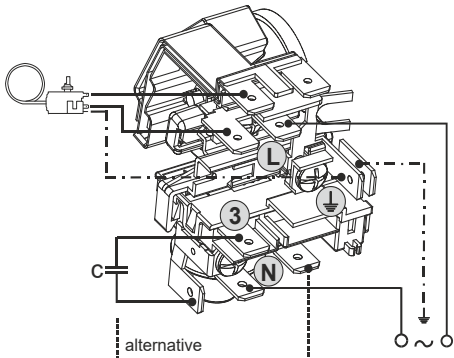
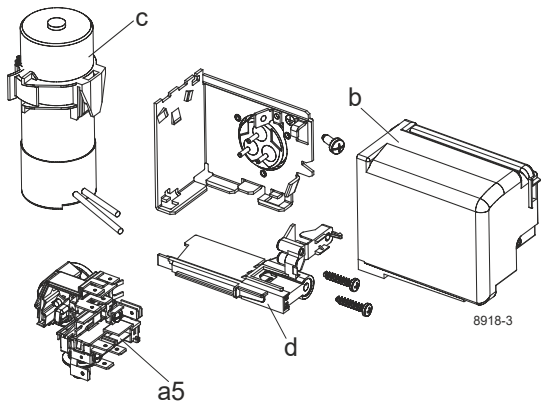
Suctiongas connector and Process connector can be switched (minor loss of cooling capacity)

Model				
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Configuration		Electrical accessories / wiring diagram		
Motor configuration	CSIR	CSIR		
Power supply (nominal)	115V/60Hz 1~			
Refrigerant	R134a			
Application	LBP+MBP+HBP			
Voltage range	95-140V			
Starting torque	HST			
Approvals	UL			

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

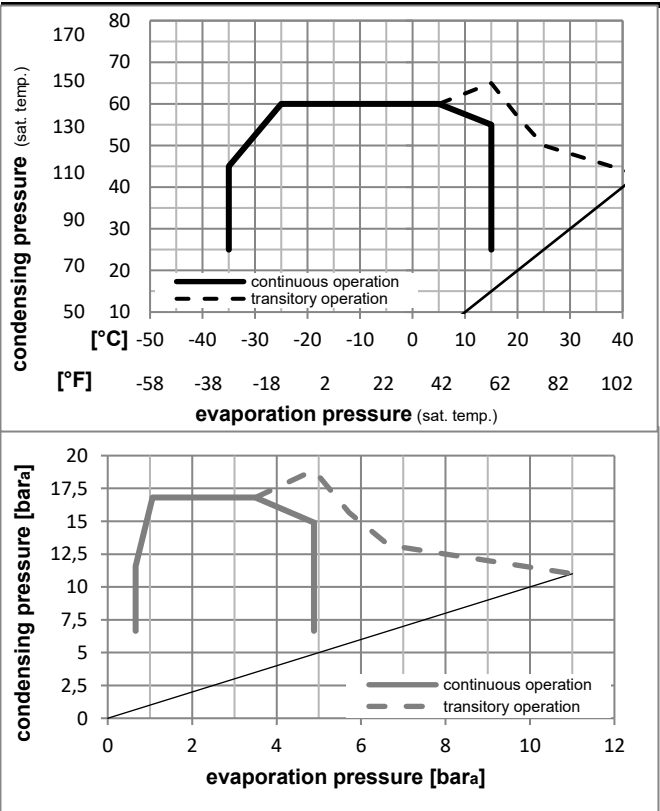


Components (incl. and pre. assembl.)		
a5	current relay (T1141/L6-S6)	117U7078
c	start capacitor (240µF)	117U5002
b, d	cover + clamp + screws(5VA-compl.)	103N0600

Alternative comp.

b, d	100x cover + clamp + screws(5VA)	103N2060
b, d	cover + clamp + screws(5VA) in bag	103N1060

Operation pressure range



Model

Designation **KLE8.6GFHX 115V/60Hz** Conf. 1 Sales code: **106G6913**

Optimization + standard conditions

R134a, 120V/60Hz, CSIR, fan 3m/s, UL

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)														
Return gas temp.														
Liquid temp.														
Cooling capacity														
COP														
EER														
Power consumption														
Current consumption														
Ref. mass flow														
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m		
[°C]	[°F]									[W]	[A]	[kg/h]		
-23	-10	54	32	32	306,4	1046	263,7	1,36	4,63	1,17	225,9	2,83	5,95	ASHRAE LBP
-7	20	54	35	46	614,6	2099	528,9	1,77	6,06	1,53	346,3	3,78	13,41	ASHRAE MBP
7,2	45	54	35	46	1060,4	3621	912,6	2,40	8,18	2,06	442,7	4,56	23,52	ASHRAE HBP
-35	-31	40	20	40	152,1	520	130,9	1,04	3,54	0,89	146,6	2,13	3,34	EN12900 LBP
-10	14	45	20	45	526,1	1797	452,8	1,77	6,03	1,52	298,1	3,40	12,31	EN12900 MBP
5	41	50	20	50	898,9	3070	773,6	2,22	7,57	1,91	405,5	4,25	22,65	EN12900 HBP

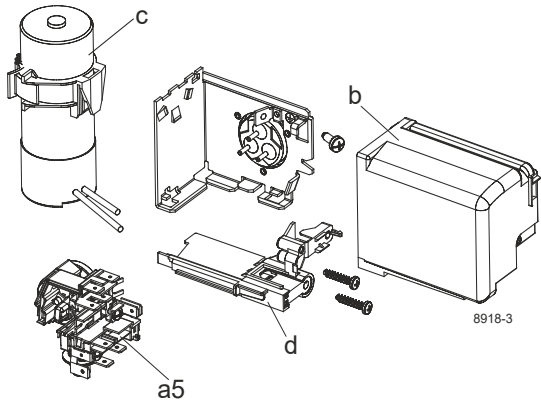
Performance tables

R134a, 120V/60Hz, CSIR, fan 3m/s, UL

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	140,3	479	120,7	0,93	3,19	0,80	150,1	2,16	3,03
cond. pressure	-25	-13	264,4	903	227,5	1,28	4,38	1,10	206,3	2,66	5,73
pc= 45/113	-15	5	436,2	1490	375,4	1,63	5,56	1,40	267,7	3,16	9,51
return gas temp.	-10	14	545,8	1864	469,7	1,83	6,25	1,58	298,1	3,40	11,95
RGT= 32/90	0	32	824,0	2814	709,1	2,33	7,95	2,00	353,8	3,84	18,22
liquid temp	5	41	997,2	3406	858,2	2,64	9,03	2,27	377,3	4,03	22,20
Tliq= 45/113	15	59	1423,4	4861	1225,0	3,46	11,82	2,98	411,4	4,32	32,24
[°C / °F]	-35	-31	105,4	360	90,7	0,67	2,30	0,58	156,6	2,23	2,51
cond. pressure	-25	-13	224,7	767	193,3	1,04	3,56	0,90	215,3	2,74	5,37
pc= 55/131	-15	5	381,4	1303	328,3	1,34	4,56	1,15	285,4	3,30	9,18
return gas temp	-10	14	479,7	1638	412,8	1,49	5,08	1,28	322,5	3,60	11,60
RGT= 32/90	0	32	727,6	2485	626,2	1,84	6,27	1,58	396,4	4,18	17,80
liquid temp	5	41	881,8	3012	758,9	2,04	6,98	1,76	431,3	4,46	21,73
Tliq= 55/131	15	59	1262,5	4312	1086,6	2,56	8,75	2,20	493,0	4,99	31,71

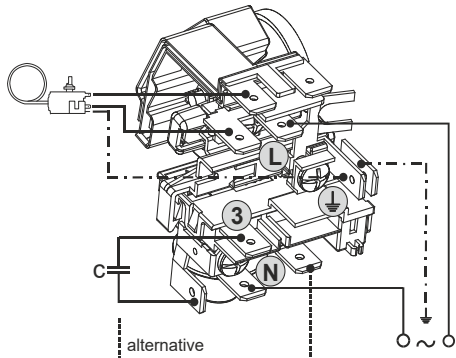
Model				
Designation	KLE8.6GFHX	115V/60Hz	Conf. 2	Sales code: 106G6913

Configuration		Electrical accessories / wiring diagram		
Motor configuration	CSIR	CSIR		
Power supply (nominal)	115V/60Hz 1~			
Refrigerant	R513A			
Application	LBP+MBP+HBP			
Voltage range	103-127V			
Starting torque	HST			
Approvals	UL			

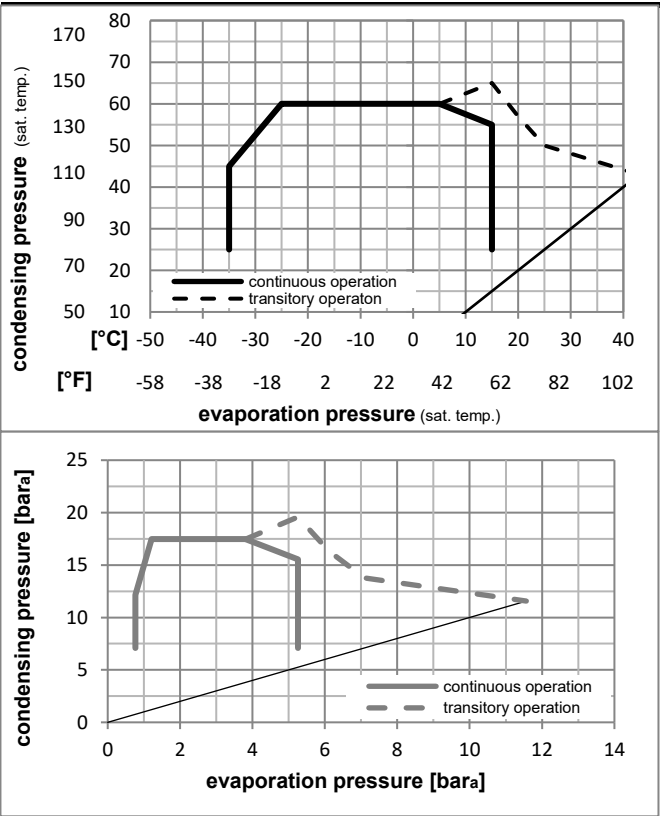


Ambient/ machine room temperatures minimum /maximum

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Compressor cooling:	fan 3m/s



Operation pressure range



Components (inci. and pre. assembl.)		
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c	start capacitor (240µF)	117U5002
b, d	cover + clamp + screws(5VA-compl.)	103N0600

Alternative comp.

b, d	100x cover + clamp + screws(5VA)	103N2060
b, d	cover + clamp + screws(5VA) in bag	103N1060

Model

Designation **KLE8.6GFHX 115V/60Hz** Conf. 2 Sales code: **106G6913**

Optimization + standard conditions

R513A, 120V/60Hz, CSIR, fan 3m/s, UL

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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Performance tables

R513A, 120V/60Hz, CSIR, fan 3m/s, UL

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	159,6	545	137,4	0,96	3,27	0,82	166,6	2,32	3,88
cond. pressure	-25	-13	287,8	983	247,7	1,29	4,40	1,11	223,6	2,81	7,01
pc= 45/113	-15	5	463,4	1583	398,8	1,62	5,52	1,39	286,6	3,31	11,35
return gas temp.	-10	14	574,5	1962	494,4	1,81	6,17	1,56	317,7	3,56	14,12
RGT= 32/90	0	32	854,0	2916	734,9	2,28	7,80	1,97	373,8	4,00	21,18
liquid temp	5	41	1026,8	3507	883,7	2,59	8,84	2,23	396,7	4,18	25,61
Tliq= 45/113	15	59	1449,5	4950	1247,4	3,40	11,60	2,92	426,9	4,45	36,67
[°C / °F]	-35	-31	122,0	417	105,0	0,70	2,37	0,60	175,4	2,40	3,33
cond. pressure	-25	-13	242,6	829	208,8	1,04	3,54	0,89	234,1	2,89	6,64
pc= 55/131	-15	5	399,6	1365	343,9	1,31	4,47	1,13	305,6	3,46	11,01
return gas temp	-10	14	497,2	1698	427,9	1,45	4,94	1,25	343,6	3,76	13,75
RGT= 32/90	0	32	741,4	2532	638,0	1,77	6,05	1,52	418,7	4,36	20,70
liquid temp	5	41	892,4	3048	768,0	1,97	6,72	1,69	453,7	4,65	25,08
Tliq= 55/131	15	59	1263,1	4314	1087,1	2,46	8,40	2,12	513,3	5,17	36,07