

Model
KLE8.6GFHX

Sales code:
106G6913

Compressor Data

Refrigerant(s)	R134a / R513A
Refr. charge - tech. limit	300g / 10.58oz
Weight	9.40 kg / 20.72lbs
Displacement	8.60 cm3 / 0.52cu.in
Compressors on pallet	100



General – Configurations With KLE8.6GFHX

-	Conf. 1	Conf. 2
Motor configuration	CSIR	CSIR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1
Voltage range	95-140 V	103-127 V
Approvals	UL	UL
Starting torque	HST	HST
Refrigerant	R134a	R513A
Application	LBP+MBP+HBP	LBP+MBP+HBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

- Electrical equipment is included and pre-assembled to compressor.
- 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)
- Good robustness against liquid intake.
- Ice-cube maker optimization - indirect suction intake.

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Compressor Design

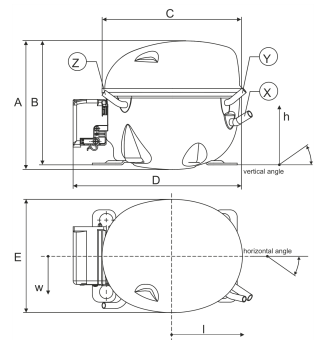
Oil type	POE	Winding resistance main	2 Ohm
Oil viscosity	19,2cSt	Winding resistance aux	4.3 Ohm
Oil quantity	200 / 6.76fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,575 cm³ / 53.26fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	external		

Compressor Dimensions

Housing

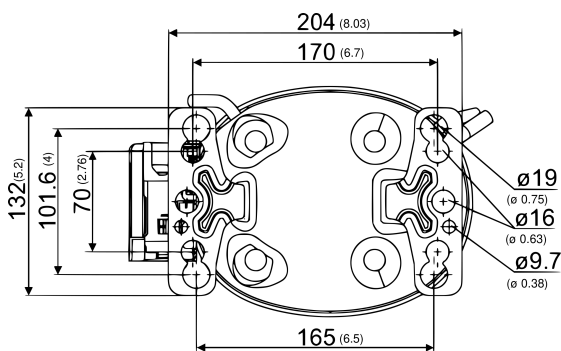
A Height	182mm / 7.17in
B Height	175mm / 6.89in
C Length shell	198mm / 7.80in
D Length w. cover	238mm / 9.37in
E Width	160mm / 6.30in

[Find 3D Model here](#)

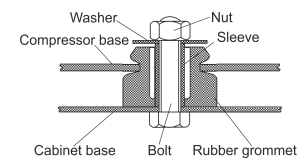


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71 / -3.46/3.98/2.80in
Straight tube l. [mm]	13.5 / 0.53in	13.5 / 0.53in	13.5 / 0.53in

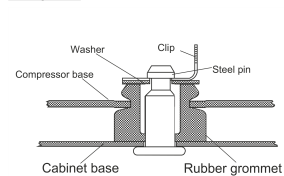
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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

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Configuration 1

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Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R134a
Application	LBP+MBP+HBP
Voltage range	95-140 V
Starting torque	HST
Approvals	UL
Starting device type	relay
Run capacitor	-/-
Start capacitor	240 µF
LRA (locked rotor amps / 4s/ U(N))	33.3 A
RLA (rated load amps / 1s/ U(N))	4.2 A

Ambient/ machine room temperatures minimum /maximum

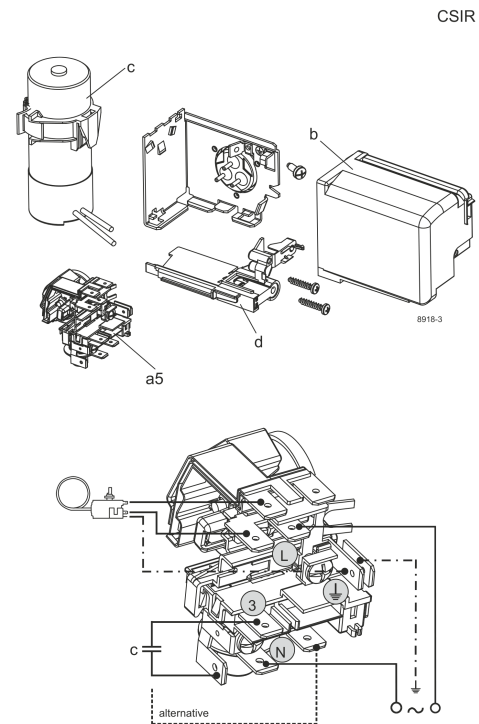
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components (already pre-assembled)

a5 current relay (T1141/L6-S6) 117U7078

c start capacitor (240µF) 117U5002

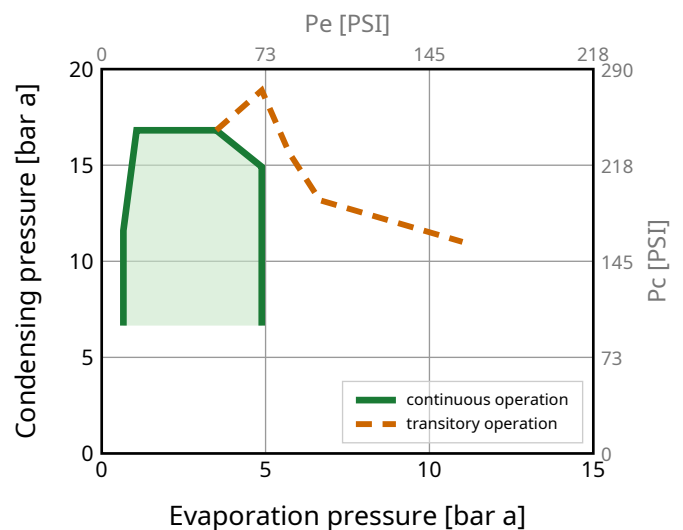
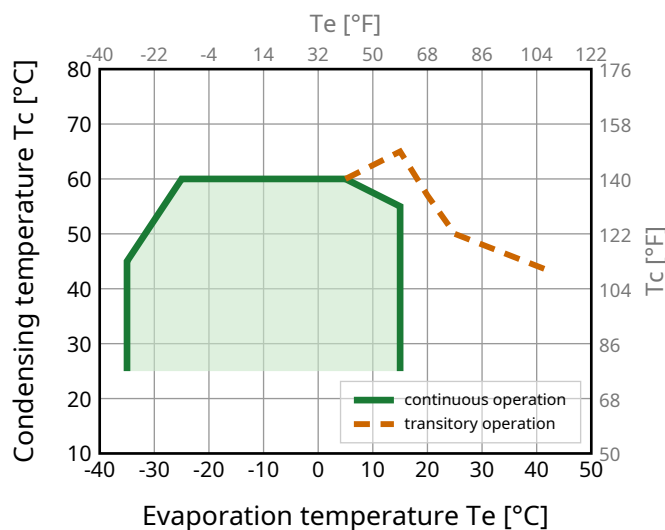
b, d cover + clamp + screws (5VA-compl.) 103N0600

Alternative components

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

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

Operation Pressure Range



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Configuration 1

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Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	306	1045	263	1.35	4.62	226	2.83	5.94	ASHRAE LBP
-6.7 20	54.4 129.9	35 95	46.1 115	611	2086	526	1.77	6.04	346	3.78	13.31	ASHRAE MBP
7.2 45	54.4 129.9	35 95	46.1 115	1059	3614	911	2.39	8.16	443	4.56	23.45	ASHRAE HBP
-35 -31	40 104	20 68	40 104	152	520	131	1.04	3.55	147	2.13	3.33	EN12900 LBP
-10 14	45 113	20 68	45 113	527	1798	453	1.77	6.03	298	3.40	12.29	EN12900 MBP
5 41	50 122	20 68	50 122	900	3073	774	2.22	7.57	406	4.25	22.59	EN12900 HBP

Performance Tables

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

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	140	479	121	0.94	3.19	150	2.16	3.02
-30	-22	198	674	170	1.11	3.80	177	2.41	4.26
-20	-4	343	1171	295	1.45	4.94	237	2.92	7.44
-10	14	546	1862	469	1.83	6.25	298	3.40	11.92
0	32	824	2811	709	2.33	7.95	354	3.84	18.18
10	50	1196	4081	1029	3.02	10.29	397	4.19	26.78
15	59	1423	4857	1224	3.46	11.81	411	4.32	32.16

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	105	360	91	0.67	2.30	157	2.23	2.50
-30	-22	162	551	139	0.88	2.99	184	2.48	3.84
-20	-4	297	1014	256	1.19	4.07	249	3.02	7.11
-10	14	480	1637	413	1.49	5.07	322	3.60	11.57
0	32	728	2483	626	1.84	6.26	396	4.18	17.74
10	50	1059	3615	911	2.28	7.79	464	4.74	26.25
15	59	1262	4308	1086	2.56	8.74	493	4.99	31.60

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Configuration 2

Sales code:

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Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R513A
Application	LBP+MBP+HBP
Voltage range	103-127 V
Starting torque	HST
Approvals	UL
Starting device type	relay
Run capacitor	-/-
Start capacitor	240 µF
LRA (locked rotor amps / 4s/ U(N))	33.3 A
RLA (rated load amps / 1s/ U(N))	4.2 A

Ambient/ machine room temperatures minimum /maximum

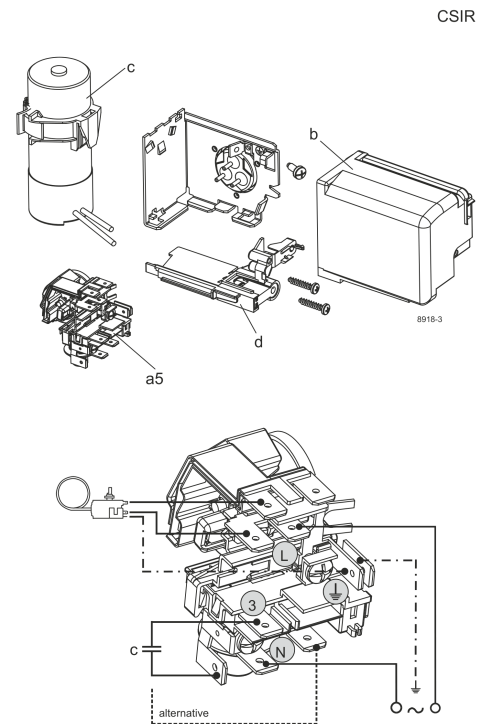
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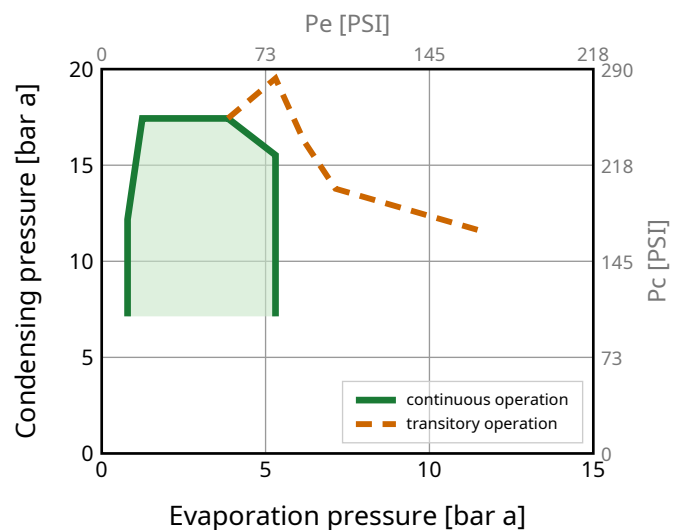
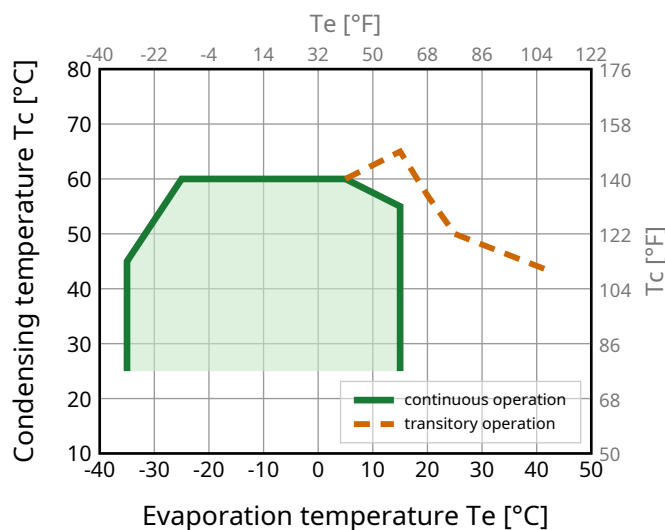
b, d cover + clamp + screws (5VA-compl.) 103N0600

Alternative components

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

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

Operation Pressure Range



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Configuration 2

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Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	338	1154	291	1.38	4.71	245	2.98	7.40	ASHRAE LBP
-6.7 20	54.4 129.9	35 95	46.1 115	640	2185	551	1.75	5.95	367	3.95	15.97	ASHRAE MBP
7.2 45	54.4 129.9	35 95	46.1 115	1088	3713	936	2.34	7.99	465	4.74	27.65	ASHRAE HBP
-35 -31	40 104	20 68	40 104	171	583	147	1.05	3.59	162	2.28	4.29	EN12900 LBP
-10 14	45 113	20 68	45 113	548	1868	471	1.72	5.88	318	3.56	14.82	EN12900 MBP
5 41	50 122	20 68	50 122	906	3091	779	2.12	7.25	426	4.42	26.71	EN12900 HBP

Performance Tables

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

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	160	545	137	0.96	3.27	167	2.32	3.93
-30	-22	219	747	188	1.13	3.85	194	2.56	5.40
-20	-4	369	1258	317	1.45	4.93	255	3.06	9.15
-10	14	574	1960	494	1.81	6.17	318	3.56	14.38
0	32	854	2914	734	2.28	7.79	374	4.00	21.63
10	50	1225	4178	1053	2.95	10.08	415	4.33	31.54
15	59	1450	4946	1247	3.40	11.59	427	4.45	37.73

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	122	416	105	0.69	2.37	175	2.40	3.36
-30	-22	179	610	154	0.88	3.01	203	2.63	4.94
-20	-4	316	1076	271	1.17	4.01	269	3.17	8.77
-10	14	497	1696	428	1.45	4.94	344	3.76	13.95
0	32	741	2530	638	1.77	6.04	419	4.36	21.08
10	50	1066	3636	916	2.19	7.49	486	4.92	30.87
15	59	1263	4310	1086	2.46	8.40	513	5.17	37.03