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

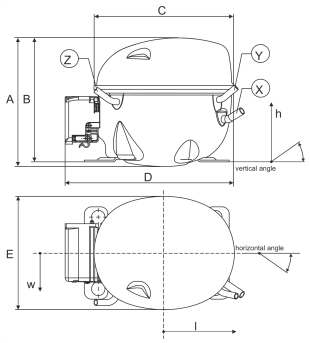
Oil type	**POE**	Winding resistance main	**2 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**4.3 Ohm**
Oil quantity	**200 cm3 / 6.76fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,575 cm3 / 53.26fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

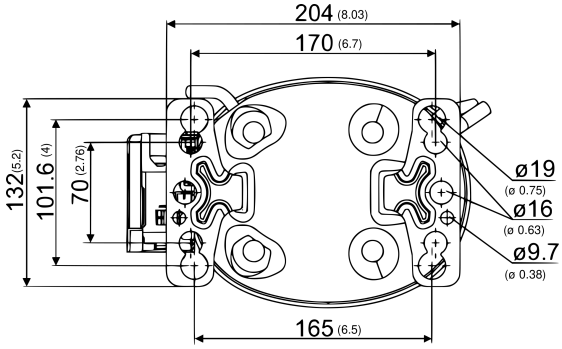
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



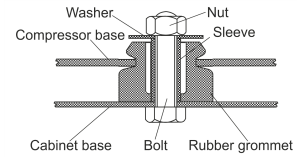
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

Mounting Accessories

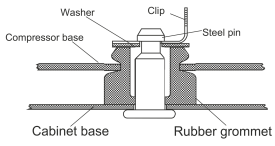


Dimensions in mm [in]

Bolt joint



Snap-on



	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

Model
KLE8.6GFHX Configuration 1

Sales code:
106G6913

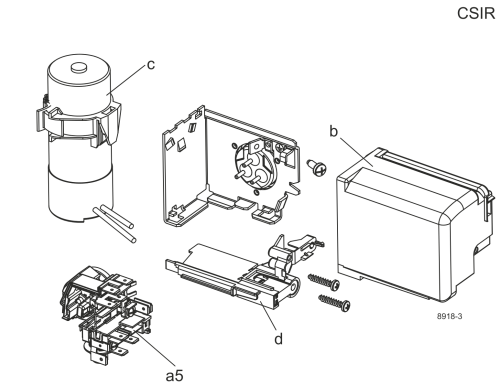
Configuration

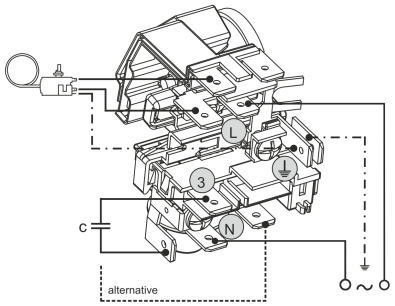
Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R134a**
Application	**LBP+MBP+HBP**
Voltage range	**95-140 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**240 µF**
LRA (locked rotor amps / 4s/ U(N))	**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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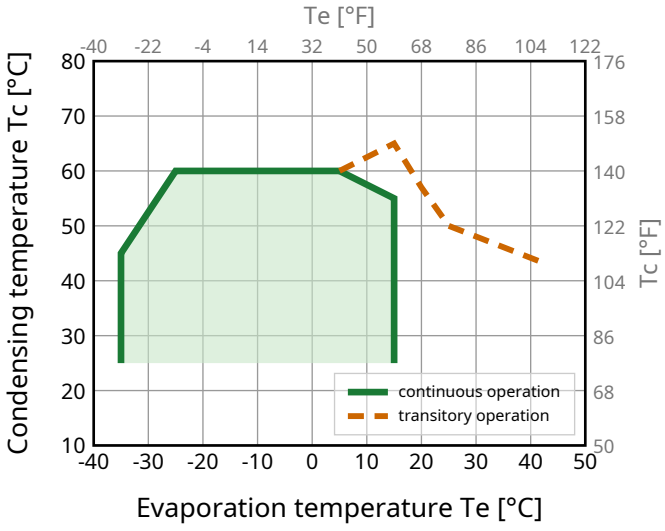
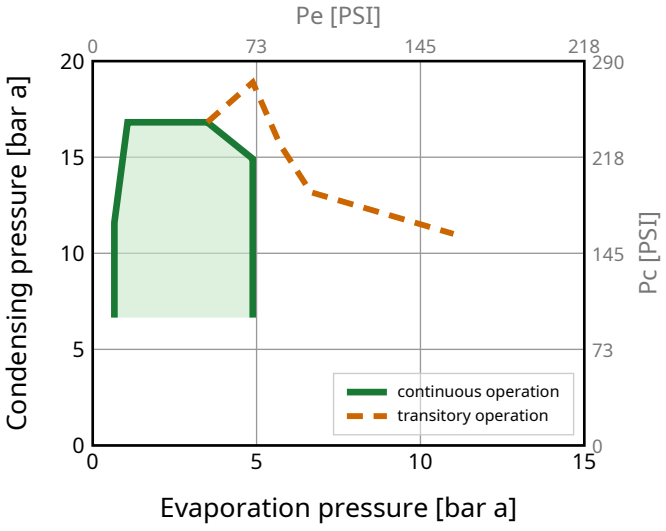
Components (already pre-assembled)
a5 current relay (T1141/L6-S6) 117U7078
c start capacitor (240µF) 117U5002
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLE8.6GFHX Configuration 1

Sales code:
106G6913

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	ṁ
[°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

Model
KLE8.6GFHX Configuration 2

Sales code:
106G6913

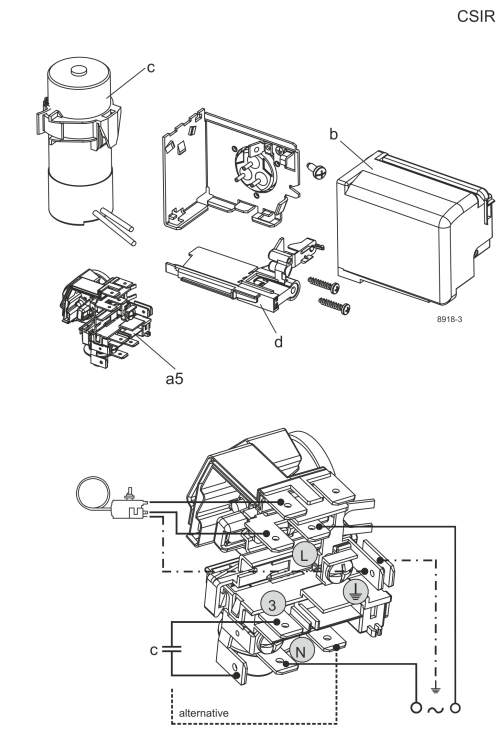
Configuration

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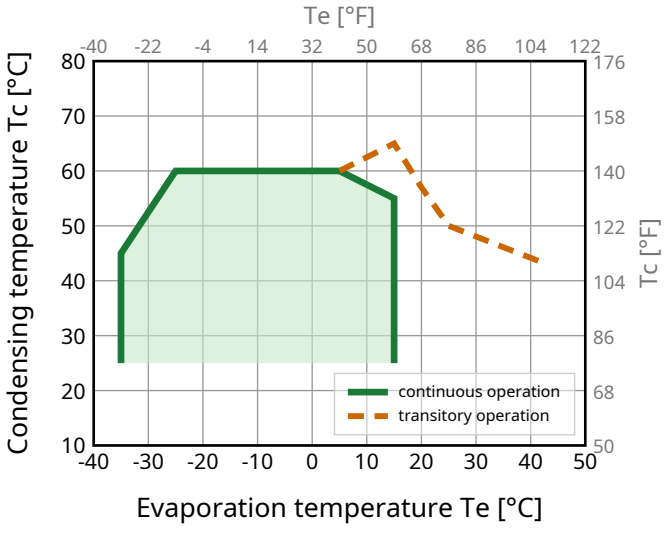
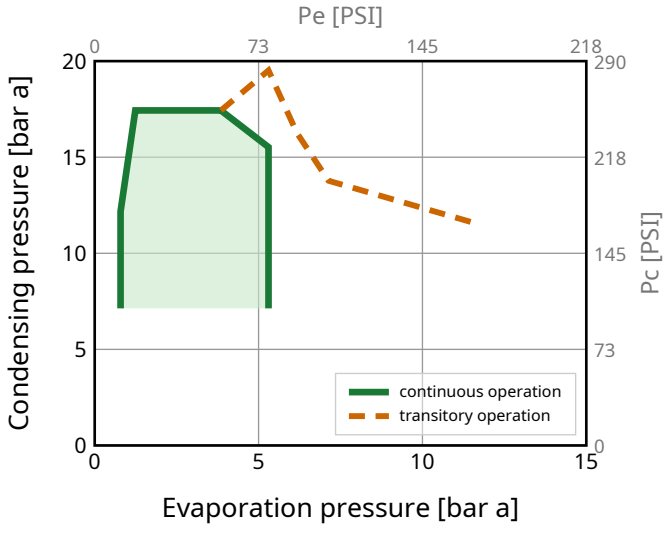
Components (already pre-assembled)
a5 current relay (T1141/L6-S6) 117U7078
c start capacitor (240µF) 117U5002
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE8.6GFHX Configuration 2

Sales code:

106G6913

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	ṁ
[°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