Model
KLE4.8GFHX

Sales code:
106G6503

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**300g / 10.58oz**
Weight	**9.40 kg / 20.72lbs**
Displacement	**4.80 cm3 / 0.29cu.in**
Compressors on pallet	**100**

General – Configurations With KLE4.8GFHX

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	CSIR
Power supply (nominal)	115-127 V/60 Hz	115-127 V/60 Hz
Number of phases	1	1
Voltage range	95-140 V	95-140 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

- Recommanded voltage range for HBP is 103-140 V/60 Hz
- 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

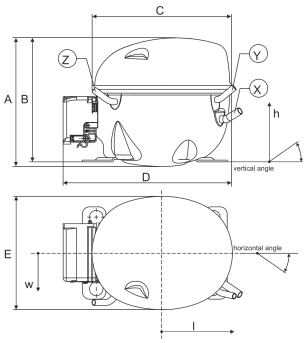
Oil type	**POE**	Winding resistance main	**2 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**8.5 Ohm**
Oil quantity	**200 cm3 / 6.76fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,615 cm3 / 54.61fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

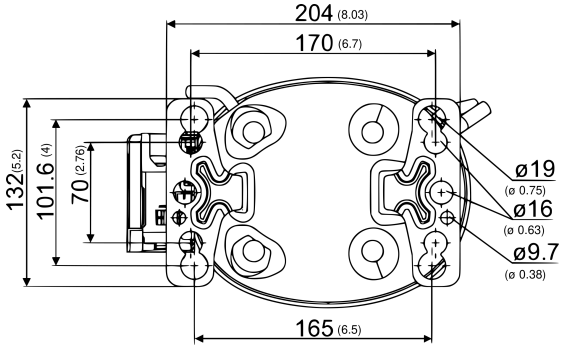
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



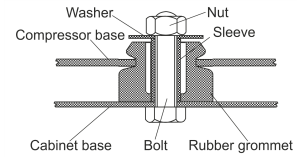
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

Mounting Accessories

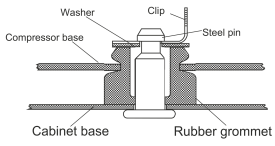


Dimensions in mm [in]

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
KLE4.8GFHX Configuration 1

Sales code:
106G6503

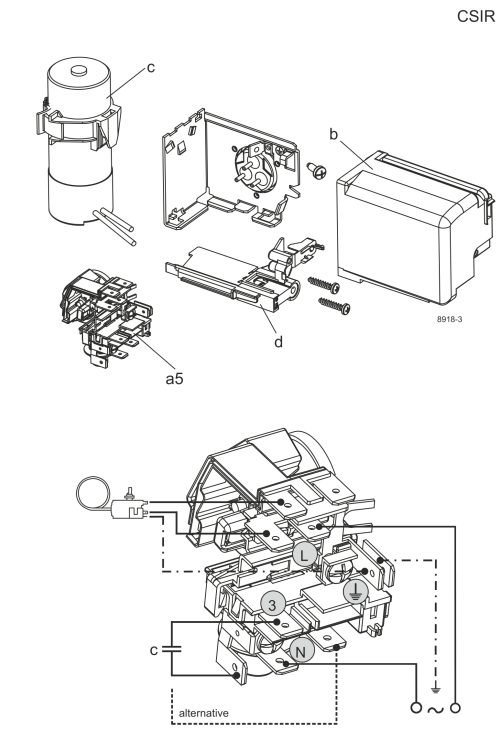
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115-127 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	**80 µF**

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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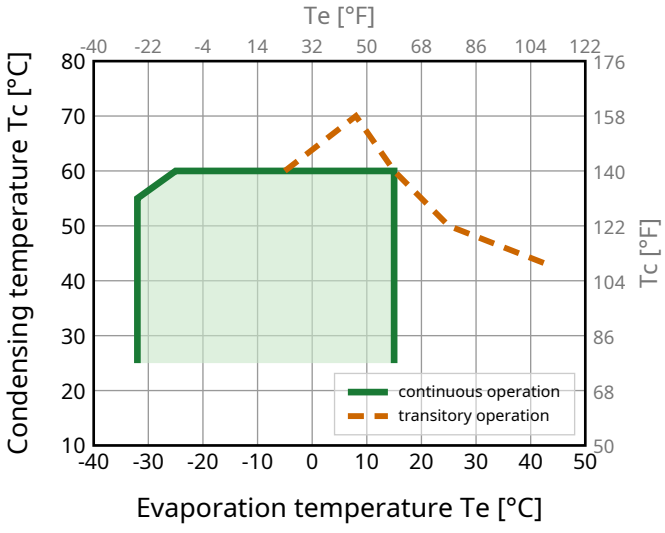
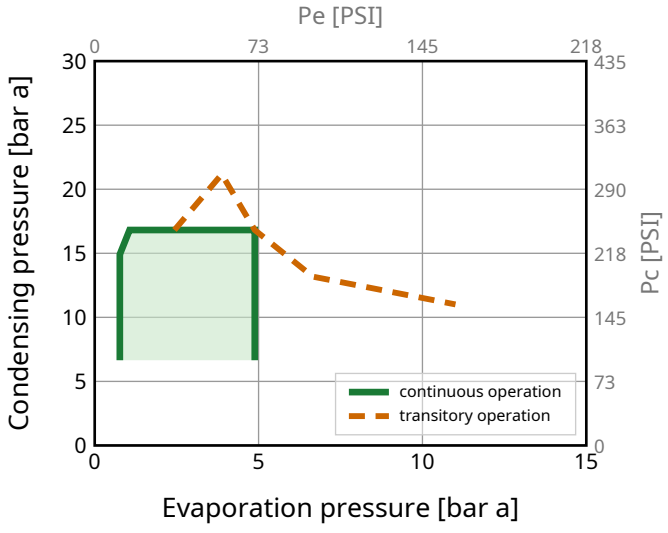
Components
a5 current relay (T1248/L6) 117U7082
c start capacitor (240µF) 117U5002
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model Sales code:

KLE4.8GFHX Configuration 1 **106G6503**

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	**162**	552	139	**1.29**	4.42	125	2.02	3.14	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**340**	1158	292	**1.87**	6.39	181	2.34	7.39	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**618**	2108	531	**2.71**	9.23	228	2.66	13.67	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**82**	278	70	**0.88**	3.00	93	1.89	1.78	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**296**	1011	255	**1.89**	6.44	157	2.19	6.91	**EN12900 MBP**
5 41	50 122	20 68	50 122	**527**	1798	453	**2.52**	8.58	210	2.53	13.22	**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]
-32	-26	**91**	311	78	**0.92**	3.12	100	1.92	1.97
-30	-22	**104**	355	90	**0.99**	3.38	105	1.94	2.25
-20	-4	**186**	635	160	**1.42**	4.85	131	2.05	4.04
-10	14	**307**	1047	264	**1.96**	6.67	157	2.19	6.70
0	32	**479**	1633	412	**2.60**	8.88	184	2.35	10.56
10	50	**714**	2437	614	**3.35**	11.42	213	2.56	15.98
15	59	**860**	2933	739	**3.75**	12.79	229	2.67	19.42

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

-32	-26	**75**	256	64	**0.81**	2.75	93	1.88	1.78
-30	-22	**86**	294	74	**0.86**	2.93	100	1.91	2.05
-20	-4	**158**	539	136	**1.16**	3.94	137	2.08	3.78
-10	14	**263**	896	226	**1.54**	5.24	171	2.27	6.33
0	32	**413**	1410	355	**2.02**	6.88	205	2.50	10.08
10	50	**622**	2123	535	**2.59**	8.85	240	2.75	15.42
15	59	**753**	2568	647	**2.92**	9.95	258	2.89	18.84

Model
KLE4.8GFHX Configuration 2

Sales code:
106G6503

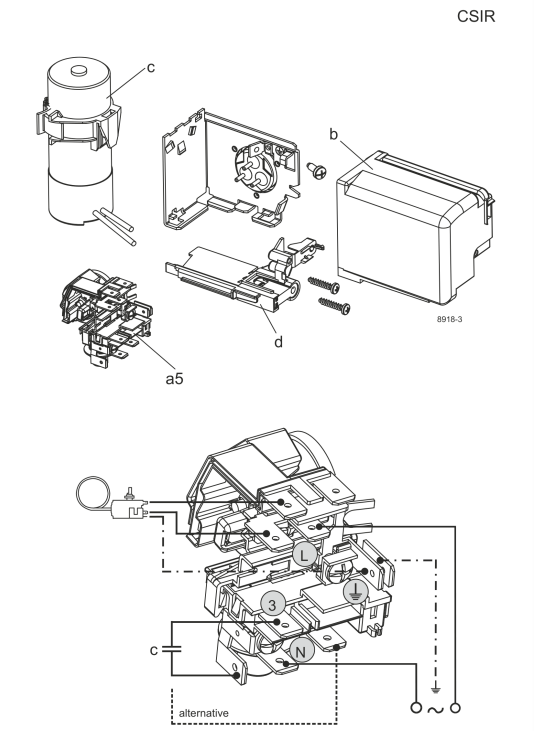
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115-127 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**LBP+MBP+HBP**
Voltage range	**95-140 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**

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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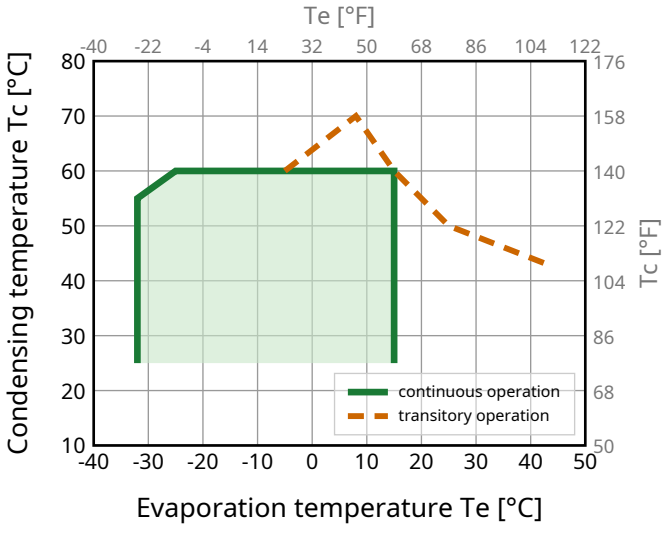
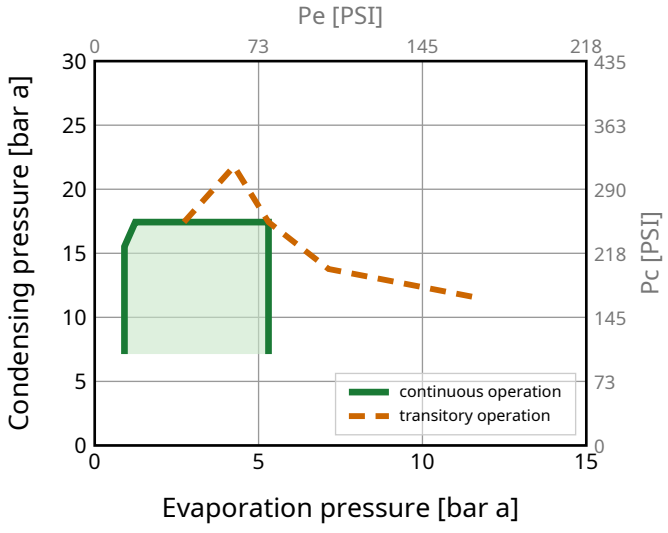
Components
a5 current relay (T1248/L6) 117U7082
c start capacitor (240µF) 117U5002
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model Sales code:

KLE4.8GFHX Configuration 2 **106G6503**

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	**178**	608	153	**1.32**	4.51	135	2.07	3.90	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**356**	1213	306	**1.86**	6.34	192	2.40	8.87	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**635**	2167	546	**2.67**	9.09	238	2.73	16.14	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**91**	310	78	**0.88**	3.01	103	1.94	2.28	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**308**	1051	265	**1.85**	6.33	166	2.24	8.34	**EN12900 MBP**
5 41	50 122	20 68	50 122	**531**	1810	456	**2.42**	8.27	219	2.60	15.64	**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]
-32	-26	**101**	346	87	**0.92**	3.15	110	1.96	2.50
-30	-22	**115**	392	99	**1.00**	3.42	115	1.98	2.84
-20	-4	**200**	683	172	**1.43**	4.88	140	2.09	4.97
-10	14	**323**	1103	278	**1.95**	6.64	166	2.24	8.09
0	32	**496**	1693	427	**2.57**	8.77	193	2.42	12.57
10	50	**732**	2497	629	**3.31**	11.28	222	2.61	18.85
15	59	**877**	2993	754	**3.71**	12.67	236	2.72	22.83

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

-32	-26	**82**	281	71	**0.79**	2.71	104	1.92	2.28
-30	-22	**94**	322	81	**0.85**	2.90	111	1.96	2.61
-20	-4	**167**	571	144	**1.14**	3.90	146	2.13	4.65
-10	14	**272**	929	234	**1.50**	5.12	181	2.34	7.64
0	32	**421**	1437	362	**1.95**	6.67	216	2.57	11.98
10	50	**627**	2139	539	**2.51**	8.56	250	2.82	18.16
15	59	**755**	2575	649	**2.83**	9.64	267	2.95	22.13