Single
Packs

Single Pack KLE4.8GFHX 115-127V 60Hz CSIR

Single pack code number: **195B4813**

Position	Title	Code	Amount
1	Compressor KLE4.8GFHX	106G6503	1
2	Starting relay (QLZ-13.6A, overload protector T1248/L6)	117U7082	1
3	Starting capacitor (240µF 125V, 6.3mm)	117U5002	1
4	KL accessories	103N1060	1
5	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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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.

Model
KLE4.8GFHX

Sales code:
106G6503

Compressor Design

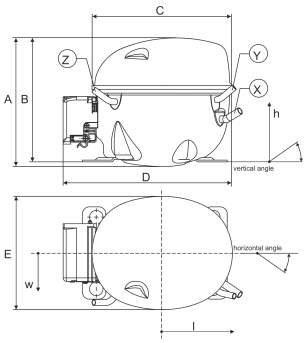
Oil type	**POE**	Winding resistance main	**2 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**8.5 Ohm**
Oil quantity	**200 cm3 / 6.76fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,615 cm3 / 54.61fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

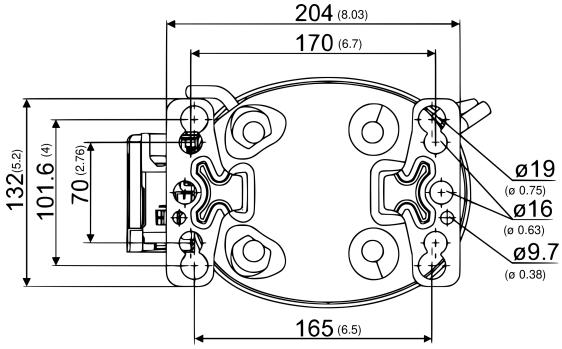
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



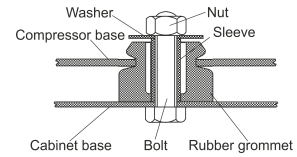
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

Mounting Accessories

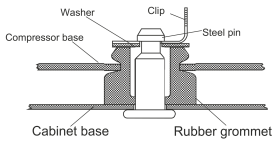


Dimensions in mm [in]

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

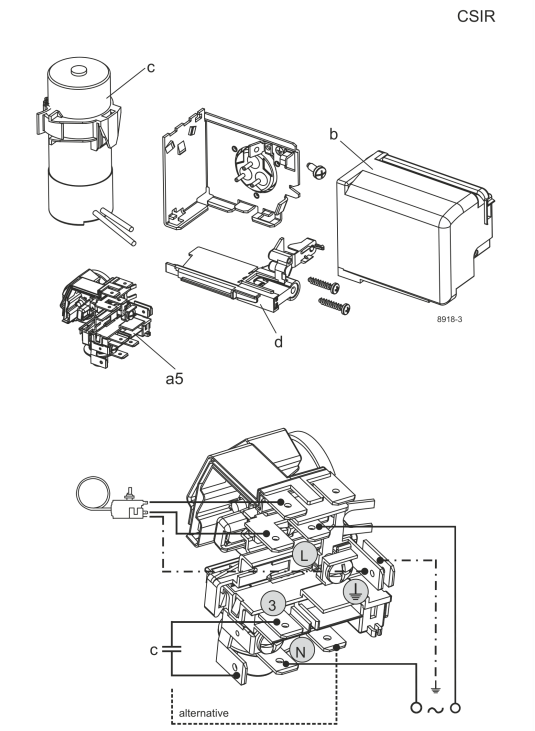
Configuration

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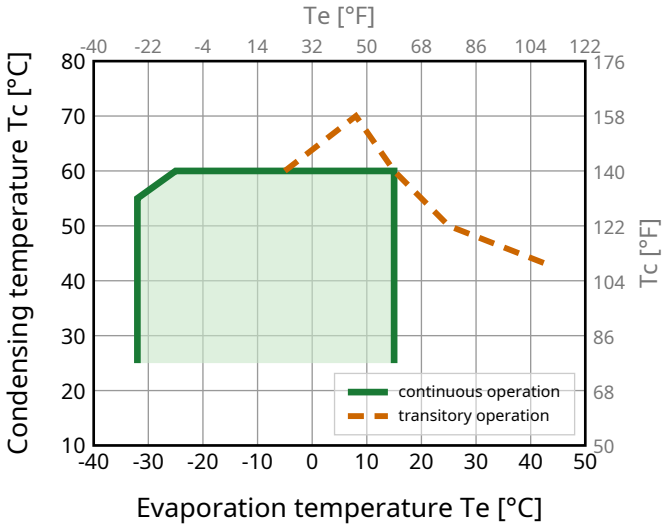
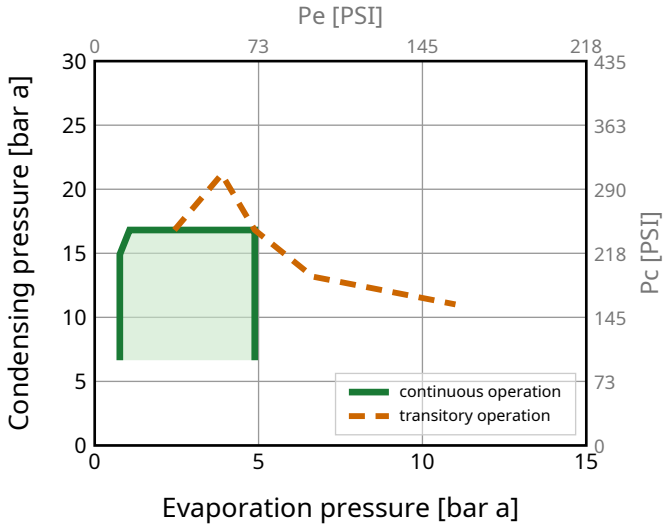
Components
a5 current relay (T1248/L6) 117U7082
c start capacitor (240µF) 117U5002
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE4.8GFHX Configuration 1

Sales code:

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

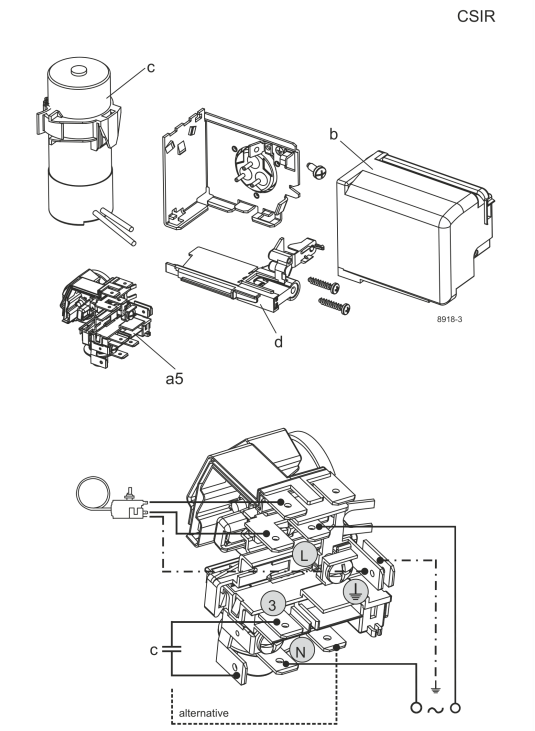
Configuration

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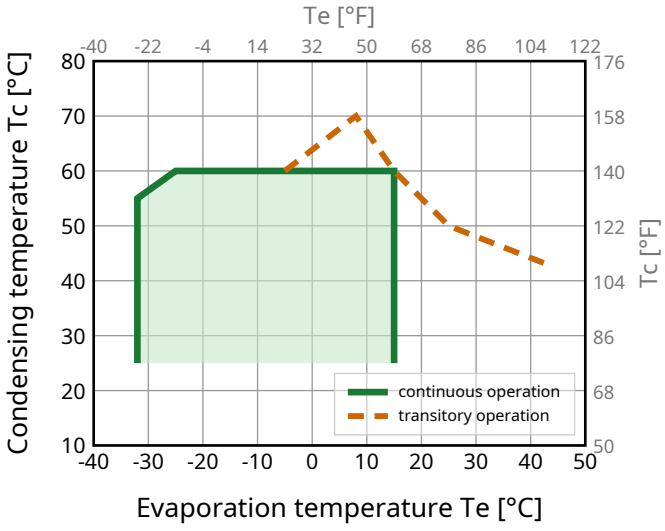
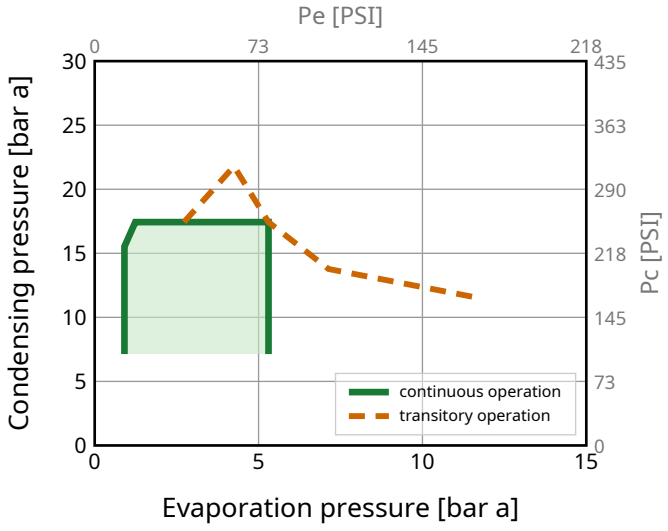
Components
a5 current relay (T1248/L6) 117U7082
c start capacitor (240µF) 117U5002
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE4.8GFHX Configuration 2

Sales code:

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

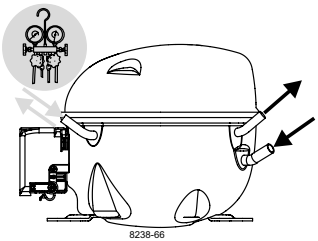
R513A, 120 V/60 Hz, CSIR, fan 3m/s

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



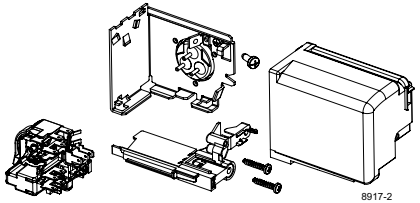
KL Compressors

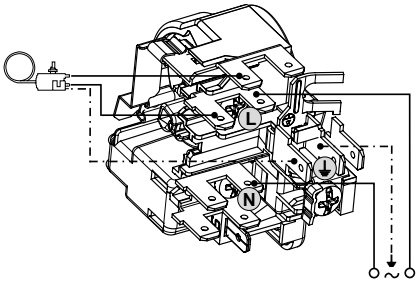
SECOP

Keep electrical equipment clear from oil, chemicals, and water

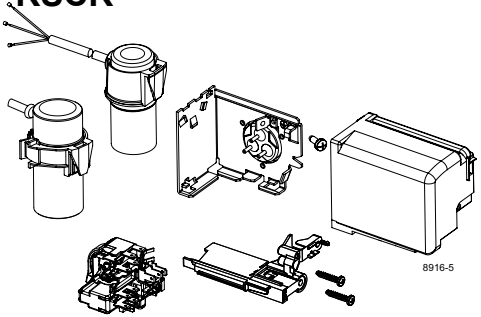
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

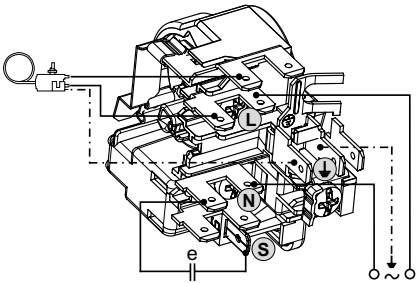
RSIR



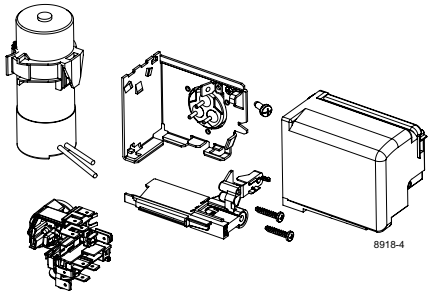


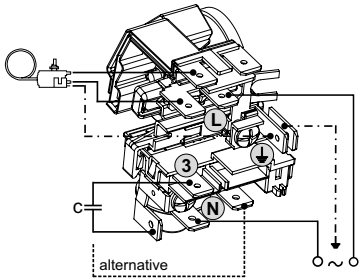
RSCR

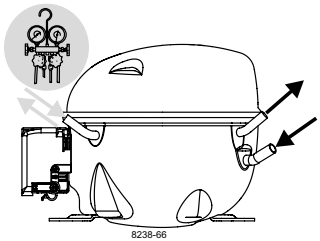




CSIR







KL Compressors

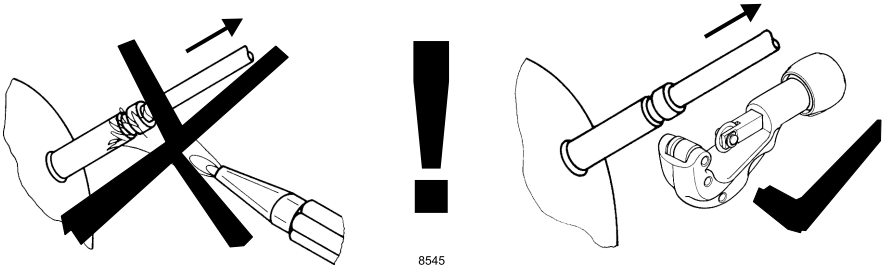
SECOP

Keep electrical equipment clear from oil, chemicals, and water

When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**