Single
Packs

Single Pack KLE4.0GFTX 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4758**

Position	Title	Code	Amount
1	Compressor KLE4.0GFTX	106G5403	1
2	Starting relay (QLZ-4.6A, overload protector T1189/L6)	117U7073	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5001	1
4	KL accessories	103N1060	1
5	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
KLE4.0GFTX

Sales code:
106G5403

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**250g / 8.82oz**
Weight	**8.90 kg / 19.62lbs**
Displacement	**4.00 cm3 / 0.24cu.in**
Compressors on pallet	**100**

General – Configurations With KLE4.0GFTX

–	**Conf. 1**	**Conf. 2**	**Conf. 3**	**Conf. 4**
Motor configuration	CSIR	CSIR	CSIR	CSIR
Power supply (nominal)	220-240 V/50 Hz	208-230 V/60 Hz	220-240 V/50 Hz	208-230 V/60 Hz
Number of phases	1	1	1	1
Voltage range	187-254 V	198-253 V	187-254 V	198-253 V
Approvals	VDE, CB, UL, CCC	VDE, CB, UL, CCC	VDE, CB, UL, CCC	VDE, CB, UL, CCC
Starting torque	HST	HST	HST	HST
Refrigerant	R134a	R134a	R513A	R513A
Application	LBP+MBP+HBP	LBP+MBP	LBP+MBP+HBP	LBP+MBP
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

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)
- Good robustness against liquid intake.
- Ice-cube maker optimization - indirect suction intake.

Model
KLE4.0GFTX

Sales code:
106G5403

Compressor Design

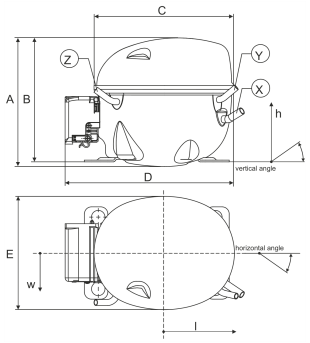
Oil type	**POE**	Winding resistance main	**13.1 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**25.3 Ohm**
Oil quantity	**240 / 8.12fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,560 cm3 / 52.75fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

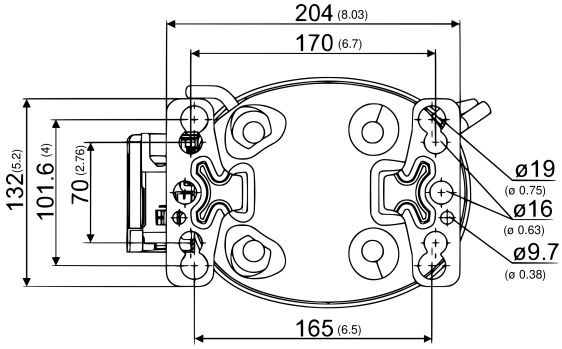
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



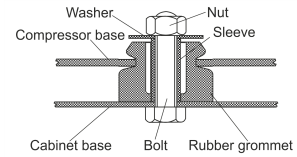
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 6.16–6.24 / 0.24–0.25in	øi 5.1–5.2 / 0.20–0.20in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71 / -3.46/3.98/2.80in
Straight tube l. [mm]	13.5 / 0.53in	13.5 / 0.53in	13.5 / 0.53in

Mounting Accessories

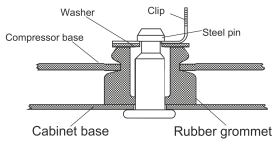


Dimensions in mm [in]

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
KLE4.0GFTX Configuration 1

Sales code:
106G5403

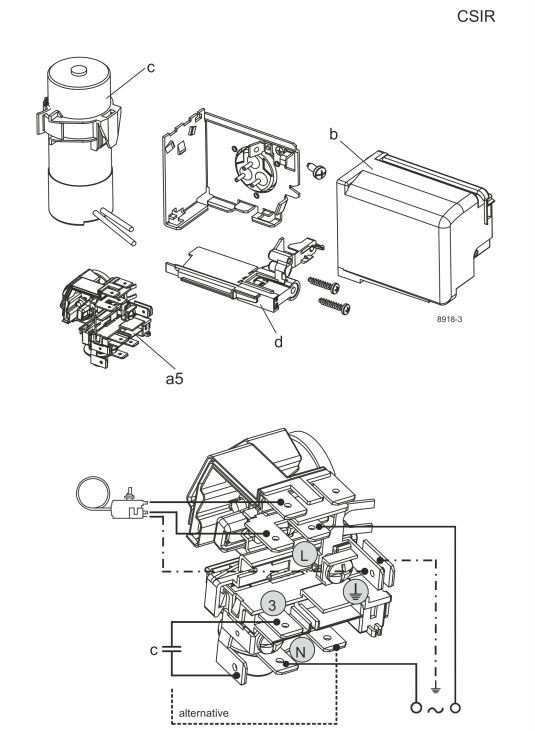
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**LBP+MBP+HBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**VDE, CB, UL, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**10.5 A**
RLA (rated load amps / 1s/ U(N))	**1 A**
Cut in current (U(N))	**10.2 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
static

Electrical Accessories / Wiring Diagram



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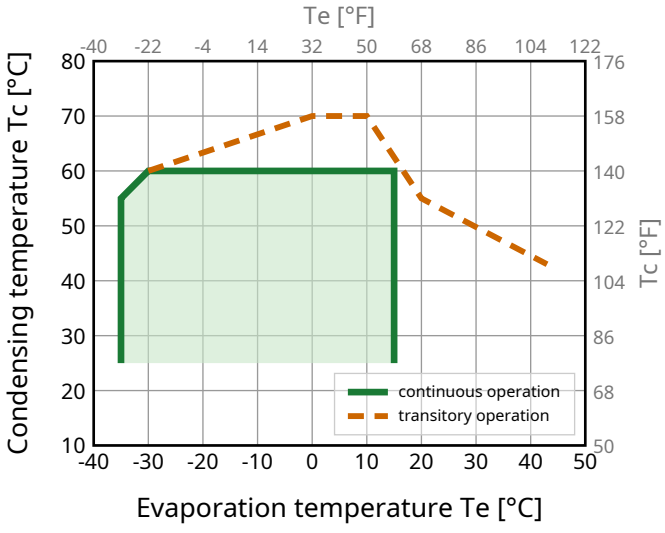
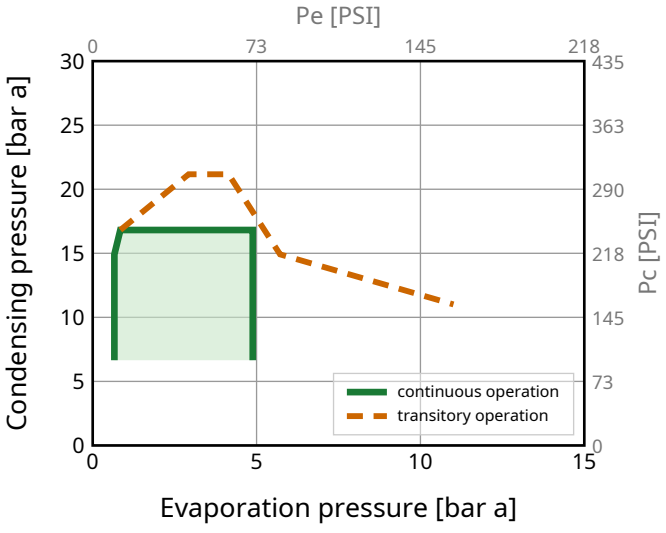
Components
a5 current relay (T1189/L6-S3) 117U7073
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLE4.0GFTX Configuration 1

Sales code:
106G5403

Standard Conditions

R134a, 220 V/50 Hz, CSIR, static

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	**102**	346	87	**1.14**	3.90	89	1.16	1.97	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**221**	754	190	**1.76**	6.02	125	1.23	4.81	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**398**	1357	342	**2.58**	8.80	154	1.31	8.80	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**46**	157	40	**0.72**	2.47	64	1.10	1.01	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**192**	654	165	**1.74**	5.94	110	1.20	4.47	**EN12900 MBP**
5 41	50 122	20 68	50 122	**340**	1160	292	**2.37**	8.08	144	1.28	8.53	**EN12900 HBP**

Performance Tables

R134a, 220 V/50 Hz, CSIR, static

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	**43**	148	37	**0.69**	2.34	63	1.10	0.94
-30	-22	**62**	213	54	**0.85**	2.90	73	1.12	1.35
-20	-4	**117**	400	101	**1.27**	4.34	92	1.16	2.54
-10	14	**198**	677	171	**1.80**	6.15	110	1.20	4.33
0	32	**311**	1061	267	**2.43**	8.30	128	1.24	6.86
10	50	**459**	1567	395	**3.15**	10.76	146	1.28	10.28
15	59	**549**	1872	472	**3.54**	12.08	155	1.31	12.39

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

-35	-31	**35**	121	30	**0.59**	2.01	60	1.10	0.84
-30	-22	**52**	179	45	**0.72**	2.46	73	1.12	1.25
-20	-4	**100**	342	86	**1.04**	3.55	97	1.17	2.40
-10	14	**171**	583	147	**1.44**	4.91	119	1.22	4.12
0	32	**269**	917	231	**1.92**	6.55	140	1.27	6.55
10	50	**399**	1361	343	**2.48**	8.45	161	1.33	9.88
15	59	**477**	1629	410	**2.78**	9.50	172	1.36	11.95

Model
KLE4.0GFTX Configuration 2

Sales code:
106G5403

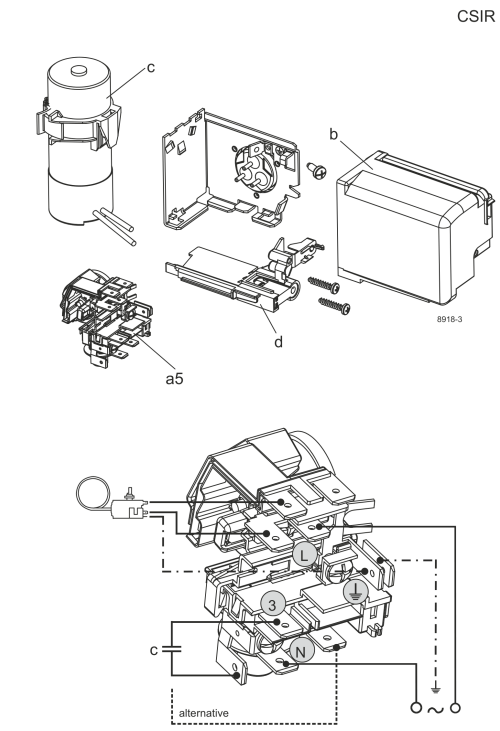
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R134a**
Application	**LBP+MBP**
Voltage range	**198-253 V**
Starting torque	**HST**
Approvals	**VDE, CB, UL, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
RLA (rated load amps / 1s/ U(N))	**-/-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
static

Electrical Accessories / Wiring Diagram



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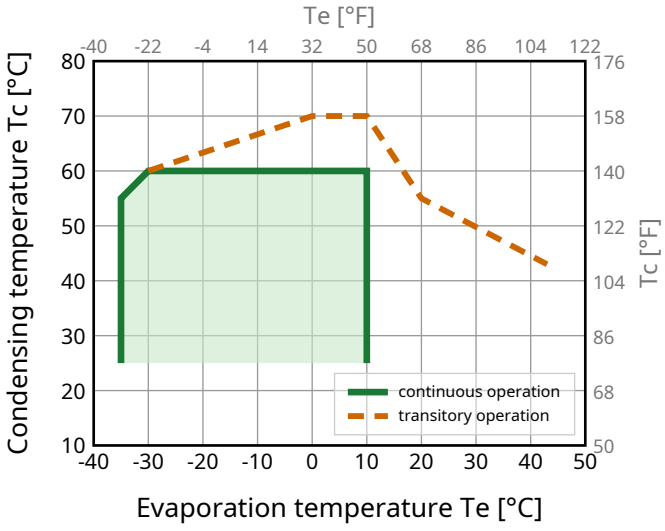
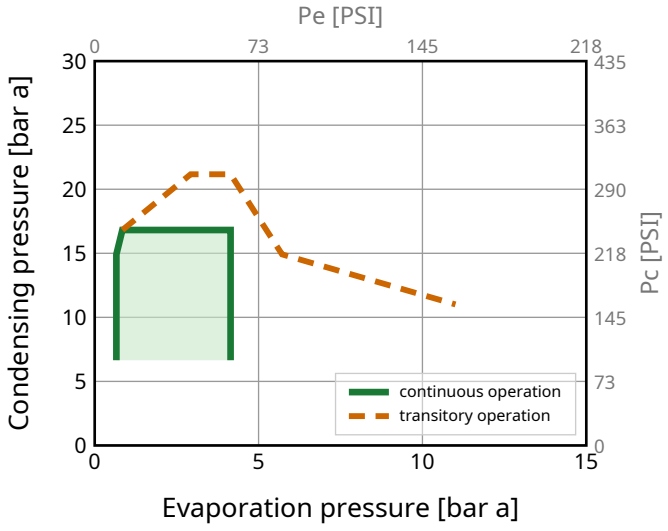
Components
a5 current relay (T1189/L6-S3) 117U7073
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLE4.0GFTX Configuration 2

Sales code:
106G5403

Standard Conditions

R134a, 230 V/60 Hz, CSIR, static

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	**123**	420	106	**1.20**	4.09	102	1.10	2.39	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**261**	890	224	**1.81**	6.18	144	1.19	5.68	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**464**	1585	399	**2.58**	8.80	180	1.28	10.28	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**55**	188	47	**0.76**	2.59	73	1.06	1.21	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**225**	767	193	**1.76**	6.00	128	1.15	5.24	**EN12900 MBP**
5 41	50 122	20 68	50 122	**396**	1353	341	**2.34**	7.99	169	1.25	9.94	**EN12900 HBP**

Performance Tables

R134a, 230 V/60 Hz, CSIR, static

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	**51**	174	44	**0.71**	2.42	72	1.06	1.10
-30	-22	**75**	257	65	**0.90**	3.07	83	1.07	1.62
-20	-4	**140**	477	120	**1.32**	4.51	106	1.11	3.03
-10	14	**233**	795	200	**1.82**	6.22	128	1.15	5.08
0	32	**362**	1235	311	**2.40**	8.20	151	1.20	7.99
10	50	**535**	1826	460	**3.05**	10.42	175	1.26	11.98
15	59	**641**	2186	551	**3.40**	11.59	189	1.30	14.48

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

-35	-31	**39**	133	33	**0.54**	1.85	72	1.06	0.92
-30	-22	**62**	213	54	**0.73**	2.49	85	1.08	1.48
-20	-4	**121**	414	104	**1.09**	3.72	111	1.12	2.90
-10	14	**203**	692	174	**1.49**	5.08	136	1.17	4.89
0	32	**315**	1074	271	**1.95**	6.65	162	1.23	7.68
10	50	**466**	1589	401	**2.47**	8.44	188	1.30	11.54
15	59	**558**	1904	480	**2.76**	9.40	202	1.34	13.97

Model
KLE4.0GFTX Configuration 3

Sales code:
106G5403

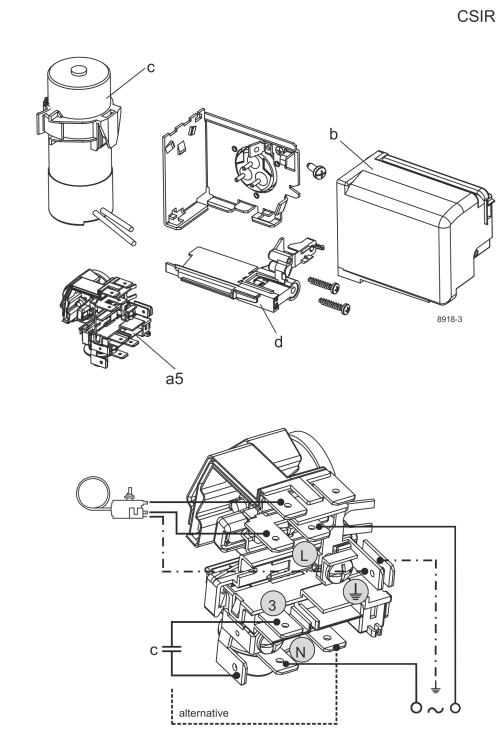
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**LBP+MBP+HBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**VDE, CB, UL, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**10.2 A**
RLA (rated load amps / 1s/ U(N))	**1.4 A**
Cut in current (U(N))	**12.65 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
static

Electrical Accessories / Wiring Diagram



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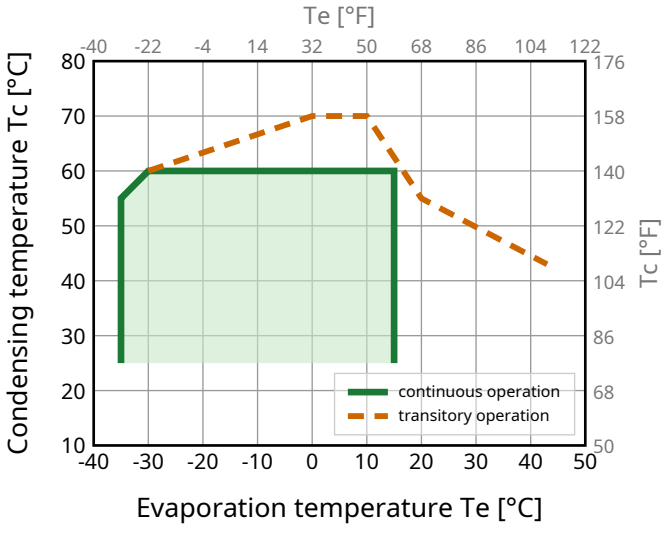
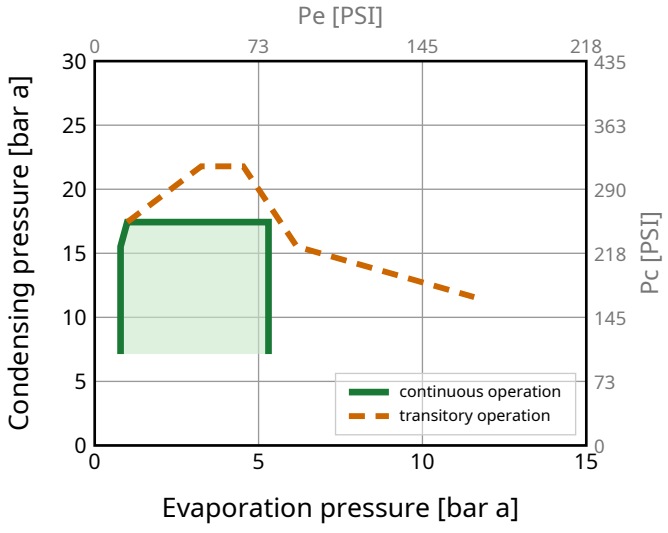
Components
a5 current relay (T1189/L6-S3) 117U7073
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE4.0GFTX Configuration 3

Sales code:

106G5403

Standard Conditions

R513A, 220 V/50 Hz, CSIR, static

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	**112**	381	96	**1.18**	4.02	95	0.93	2.45	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**232**	791	199	**1.76**	6.00	132	1.01	5.78	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**409**	1396	352	**2.55**	8.70	160	1.09	10.40	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**51**	175	44	**0.74**	2.53	69	0.87	1.29	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**199**	680	171	**1.72**	5.87	116	0.97	5.40	**EN12900 MBP**
5 41	50 122	20 68	50 122	**343**	1169	295	**2.29**	7.81	150	1.06	10.10	**EN12900 HBP**

Performance Tables

R513A, 220 V/50 Hz, CSIR, static

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	**49**	167	42	**0.71**	2.42	69	0.87	1.20
-30	-22	**69**	235	59	**0.88**	2.99	79	0.89	1.70
-20	-4	**126**	430	108	**1.29**	4.40	98	0.93	3.13
-10	14	**209**	713	180	**1.80**	6.16	116	0.97	5.24
0	32	**323**	1101	278	**2.41**	8.24	134	1.02	8.17
10	50	**471**	1606	405	**3.11**	10.62	151	1.06	12.12
15	59	**559**	1908	481	**3.49**	11.92	160	1.09	14.55

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

-35	-31	**40**	136	34	**0.61**	2.07	66	0.87	1.10
-30	-22	**57**	196	49	**0.73**	2.49	78	0.89	1.59
-20	-4	**106**	363	92	**1.03**	3.53	103	0.94	2.96
-10	14	**177**	605	152	**1.41**	4.82	125	0.99	4.97
0	32	**274**	936	236	**1.87**	6.38	147	1.05	7.80
10	50	**402**	1371	345	**2.41**	8.21	167	1.11	11.64
15	59	**478**	1632	411	**2.71**	9.23	177	1.15	14.02

Model

KLE4.0GFTX Configuration 4

Sales code:

106G5403

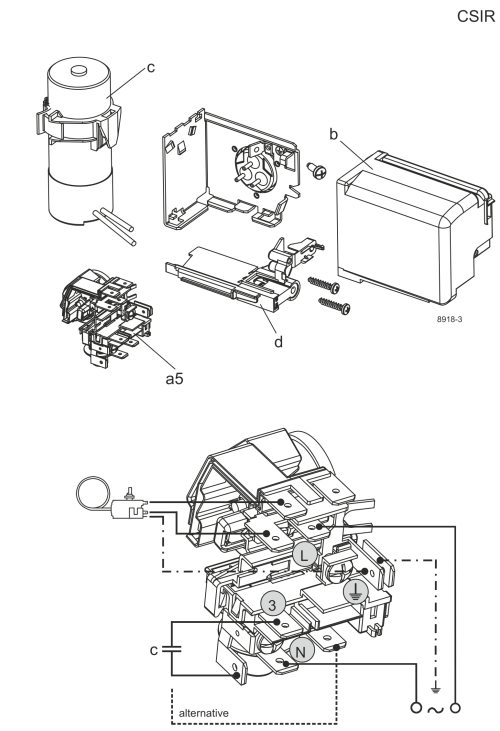
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**LBP+MBP**
Voltage range	**198-253 V**
Starting torque	**HST**
Approvals	**VDE, CB, UL, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
RLA (rated load amps / 1s/ U(N))	**-/-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
static

Electrical Accessories / Wiring Diagram



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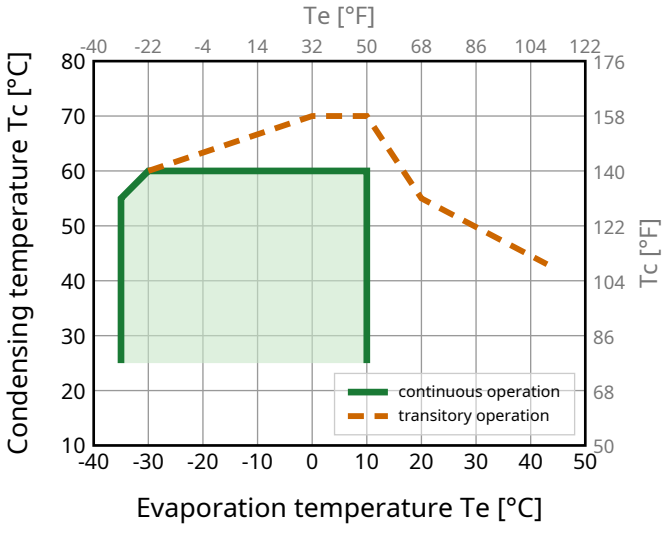
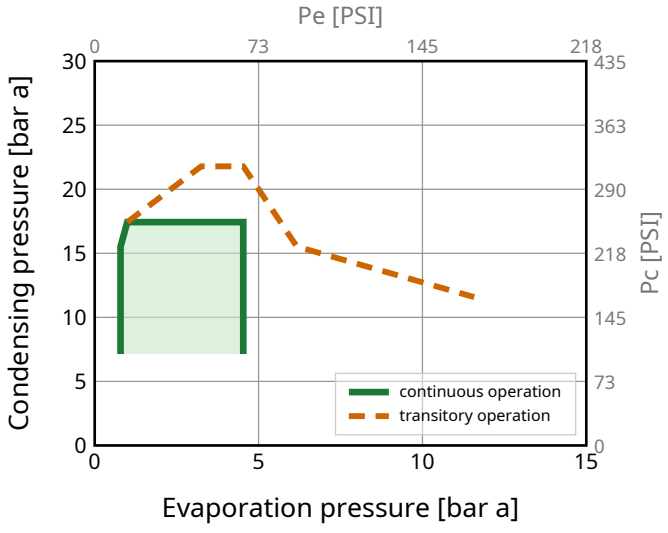
Components
a5 current relay (T1189/L6-S3) 117U7073
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE4.0GFTX Configuration 4

Sales code:

106G5403

Standard Conditions

R513A, 230 V/60 Hz, CSIR, static

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	**136**	462	117	**1.24**	4.23	109	1.06	2.96	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**274**	934	235	**1.81**	6.16	152	1.19	6.82	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**478**	1631	411	**2.56**	8.72	187	1.27	12.14	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**61**	209	53	**0.77**	2.63	80	0.77	1.54	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**234**	798	201	**1.74**	5.94	134	1.16	6.33	**EN12900 MBP**
5 41	50 122	20 68	50 122	**400**	1363	344	**2.26**	7.72	176	1.24	11.78	**EN12900 HBP**

Performance Tables

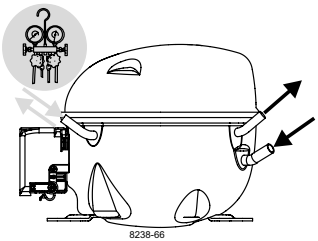
R513A, 230 V/60 Hz, CSIR, static

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	**57**	196	49	**0.73**	2.49	79	0.79	1.41
-30	-22	**83**	283	71	**0.93**	3.16	90	0.93	2.05
-20	-4	**150**	513	129	**1.35**	4.59	112	1.09	3.73
-10	14	**245**	837	211	**1.83**	6.24	134	1.16	6.14
0	32	**376**	1282	323	**2.38**	8.14	158	1.19	9.52
10	50	**548**	1871	472	**3.02**	10.29	182	1.26	14.13
15	59	**653**	2229	562	**3.36**	11.46	194	1.32	17.01

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

-35	-31	**44**	150	38	**0.56**	1.91	79	0.80	1.21
-30	-22	**68**	233	59	**0.74**	2.53	92	0.94	1.89
-20	-4	**128**	438	111	**1.09**	3.71	118	1.10	3.57
-10	14	**210**	718	181	**1.46**	5.00	144	1.17	5.90
0	32	**321**	1097	276	**1.90**	6.48	169	1.22	9.14
10	50	**469**	1601	404	**2.41**	8.22	195	1.30	13.59
15	59	**559**	1908	481	**2.69**	9.18	208	1.38	16.40



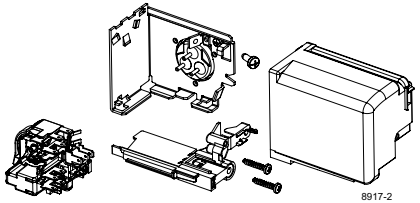
KL Compressors

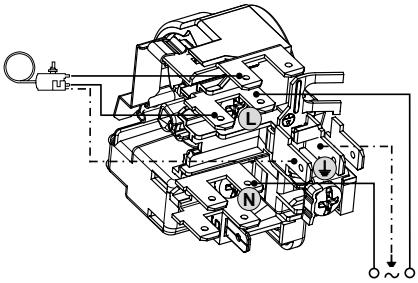
SECOP

Keep electrical equipment clear from oil, chemicals, and water

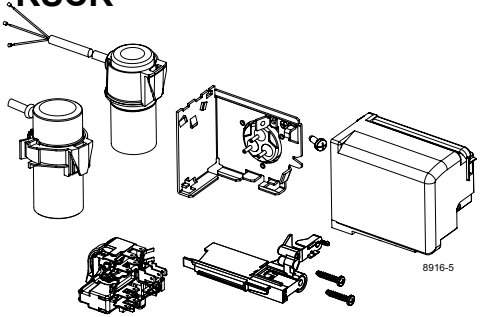
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

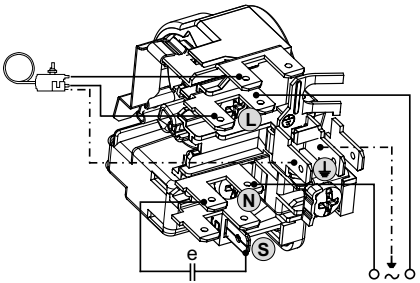
RSIR



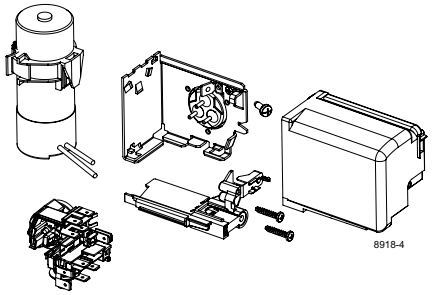


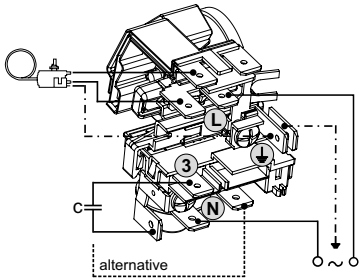
RSCR

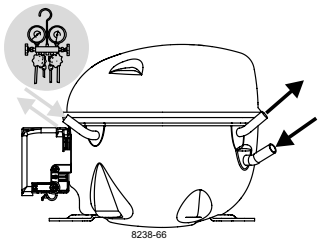




CSIR







KL Compressors

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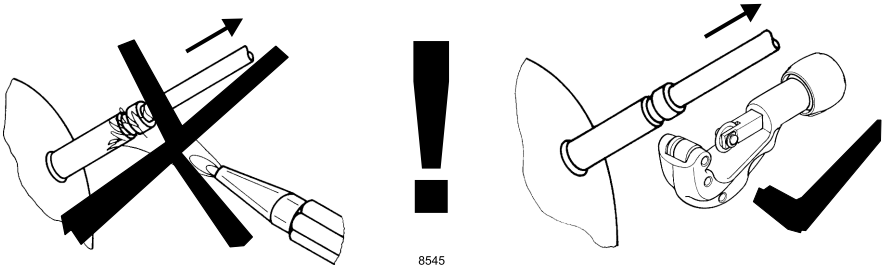
Service/Repair – R290, R600a, R170, R1270, R1234yf

(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**