Single
Packs

Single Pack KLE8.6GFTX 200-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4779**

Position	Title	Code	Amount
1	Compressor KLE8.6GFTX	106G5903	1
2	Starting relay (QLZ-5.5A, overload protector T0377/L6)	117U7071	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
KLE8.6GFTX

Sales code:
106G5903

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**250g / 8.82oz**
Weight	**9.70 kg / 21.38lbs**
Displacement	**8.60 cm3 / 0.52cu.in**
Compressors on pallet	**100**

General – Configurations With KLE8.6GFTX

–	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	VDE, CB, UL, KC	VDE, CB, UL	VDE, CB, UL, KC
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
KLE8.6GFTX

Sales code:
106G5903

Compressor Design

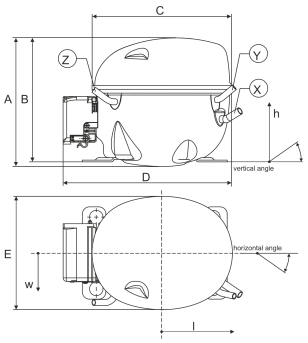
Oil type	**POE**	Winding resistance main	**8.4 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**11.9 Ohm**
Oil quantity	**240 / 8.12fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,495 cm3 / 50.55fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

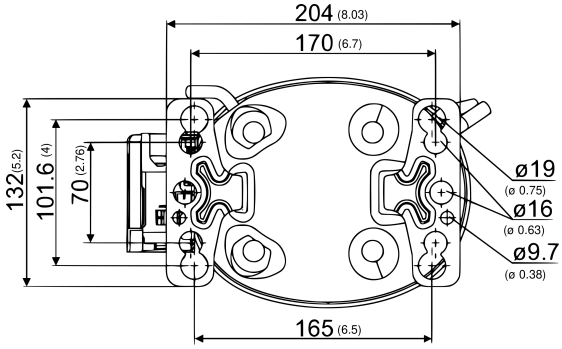
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



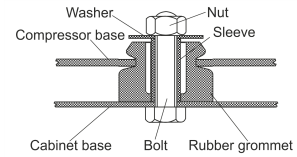
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71 / -3.46/3.98/2.80in
Straight tube l. [mm]	13.5 / 0.53in	13.5 / 0.53in	13.5 / 0.53in

Mounting Accessories

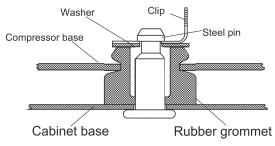


Dimensions in mm [in]

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
KLE8.6GFTX Configuration 1

Sales code:
106G5903

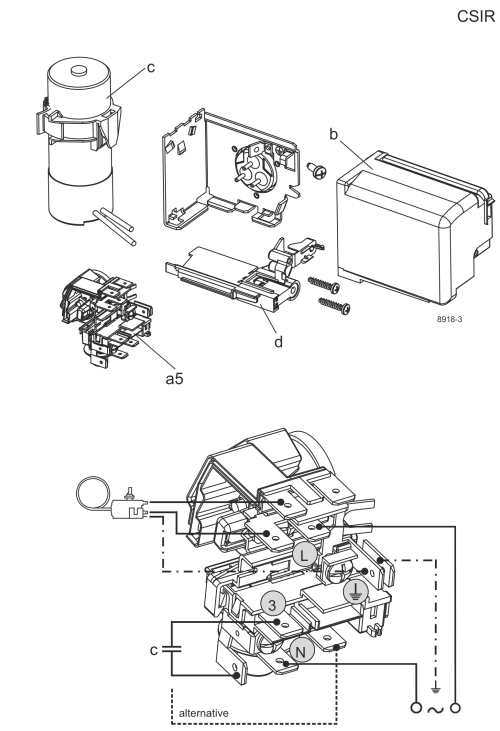
Configuration

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**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**13.4 A**
RLA (rated load amps / 1s/ U(N))	**1.8 A**
Cut in current (U(N))	**12.3 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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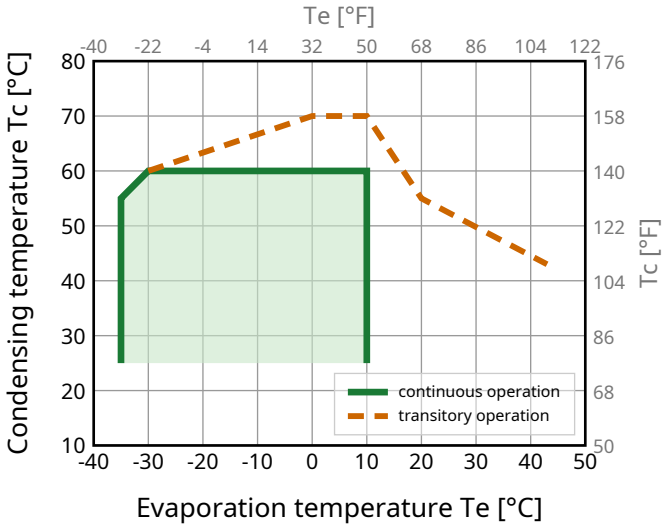
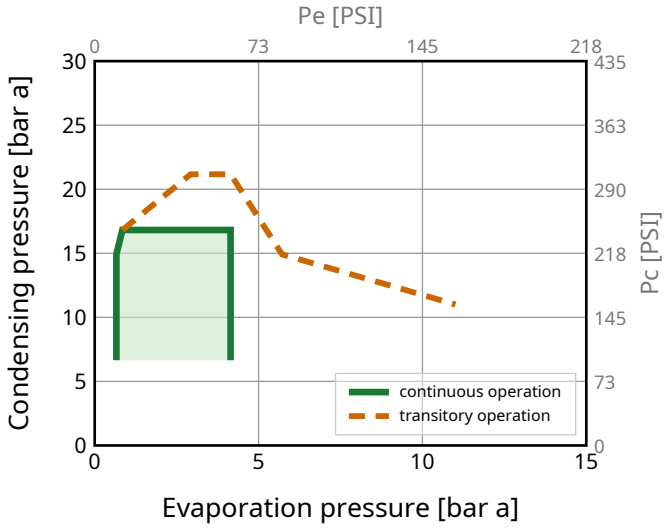
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model Sales code:

KLE8.6GFTX Configuration 1 **106G5903**

Standard Conditions

R134a, 220 V/50 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	**248**	847	213	**1.33**	4.53	187	1.42	4.82	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**516**	1761	444	**1.78**	6.07	290	1.82	11.23	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**900**	3071	774	**2.31**	7.89	389	2.27	19.93	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**131**	448	113	**1.04**	3.56	126	1.23	2.88	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**452**	1541	388	**1.81**	6.18	249	1.65	10.53	**EN12900 MBP**
5 41	50 122	20 68	50 122	**775**	2644	666	**2.19**	7.47	354	2.10	19.43	**EN12900 HBP**

Performance Tables

R134a, 220 V/50 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	**124**	422	106	**0.98**	3.35	126	1.23	2.66
-30	-22	**163**	557	140	**1.10**	3.74	149	1.29	3.52
-20	-4	**285**	971	245	**1.44**	4.91	198	1.45	6.17
-10	14	**468**	1596	402	**1.88**	6.40	249	1.65	10.21
0	32	**718**	2449	617	**2.37**	8.08	303	1.87	15.84
10	50	**1041**	3551	895	**2.91**	9.93	358	2.12	23.30

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

-35	-31	**96**	329	83	**0.76**	2.58	128	1.24	2.29
-30	-22	**133**	455	115	**0.88**	3.00	152	1.30	3.17
-20	-4	**242**	826	208	**1.17**	4.00	207	1.48	5.79
-10	14	**402**	1370	345	**1.49**	5.09	269	1.73	9.68
0	32	**618**	2109	531	**1.82**	6.23	339	2.03	15.07
10	50	**897**	3060	771	**2.17**	7.40	414	2.38	22.22

Model
KLE8.6GFTX Configuration 2

Sales code:
106G5903

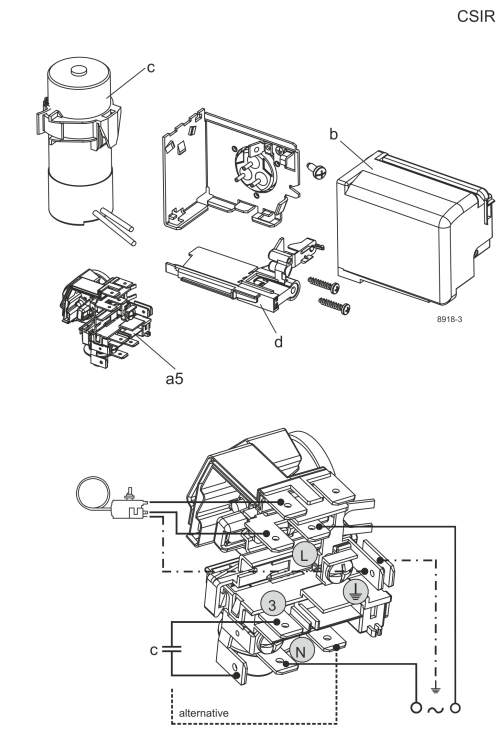
Configuration

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, KC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**13.4 A**
RLA (rated load amps / 1s/ U(N))	**1.8 A**
Cut in current (U(N))	**12.3 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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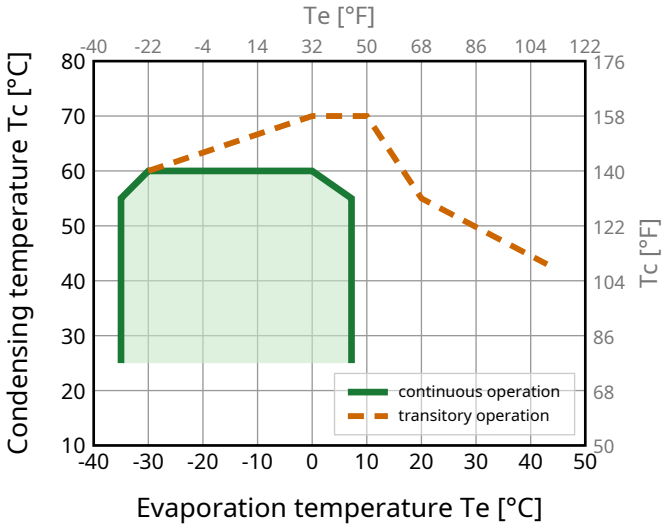
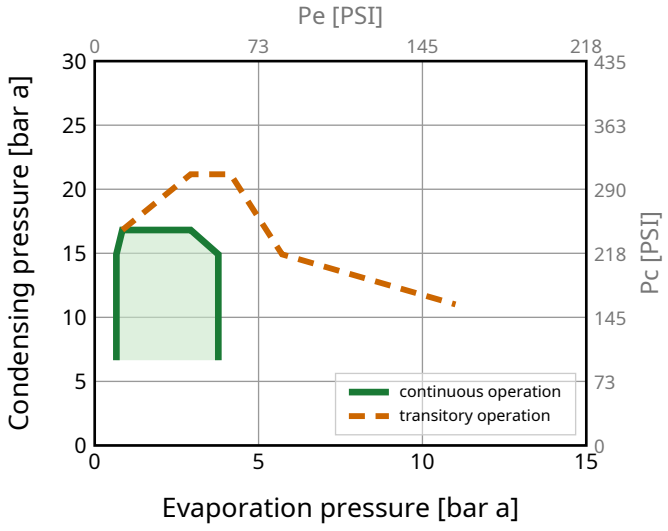
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE8.6GFTX Configuration 2

Sales code:

106G5903

Standard Conditions

R134a, 230 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	**299**	1021	257	**1.35**	4.59	222	1.41	5.81	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**616**	2101	530	**1.77**	6.06	347	1.86	13.41	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1075**	3669	925	**2.31**	7.89	465	2.35	23.80	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**157**	534	135	**1.13**	3.84	139	1.17	3.42	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**538**	1837	463	**1.81**	6.16	298	1.67	12.55	**EN12900 MBP**
5 41	50 122	20 68	50 122	**925**	3155	795	**2.19**	7.47	422	2.17	23.20	**EN12900 HBP**

Performance Tables

R134a, 230 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	**148**	504	127	**1.06**	3.60	140	1.17	3.18
-30	-22	**196**	667	168	**1.14**	3.88	172	1.26	4.22
-20	-4	**340**	1162	293	**1.45**	4.93	236	1.45	7.38
-10	14	**558**	1903	480	**1.87**	6.38	298	1.67	12.18
0	32	**856**	2919	736	**2.37**	8.07	362	1.92	18.88
7.2	45	**1125**	3838	967	**2.75**	9.39	409	2.11	25.06

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

-35	-31	**118**	402	101	**0.83**	2.84	142	1.18	2.80
-30	-22	**162**	554	140	**0.92**	3.15	176	1.27	3.86
-20	-4	**291**	993	250	**1.18**	4.03	247	1.49	6.96
-10	14	**480**	1637	413	**1.49**	5.08	322	1.76	11.57
0	32	**737**	2516	634	**1.82**	6.22	404	2.09	17.98
7.2	45	**970**	3310	834	**2.07**	7.07	468	2.36	23.91

Model
KLE8.6GFTX Configuration 3

Sales code:
106G5903

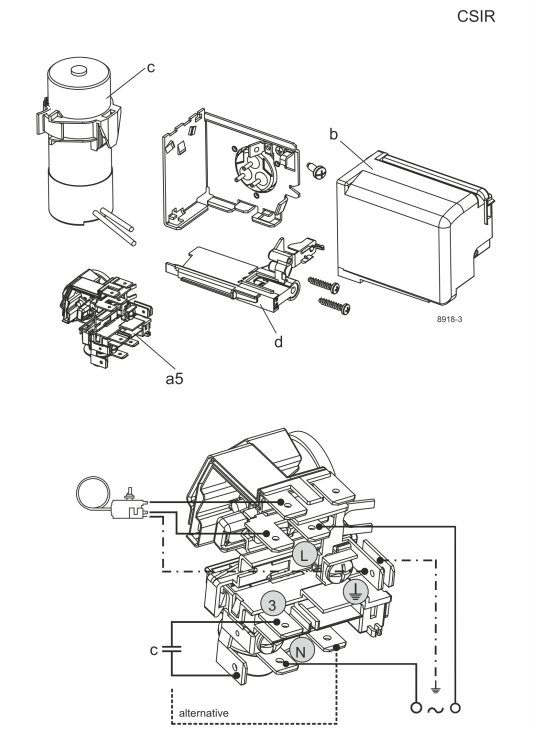
Configuration

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**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**13.4 A**
RLA (rated load amps / 1s/ U(N))	**1.8 A**
Cut in current (U(N))	**12.3 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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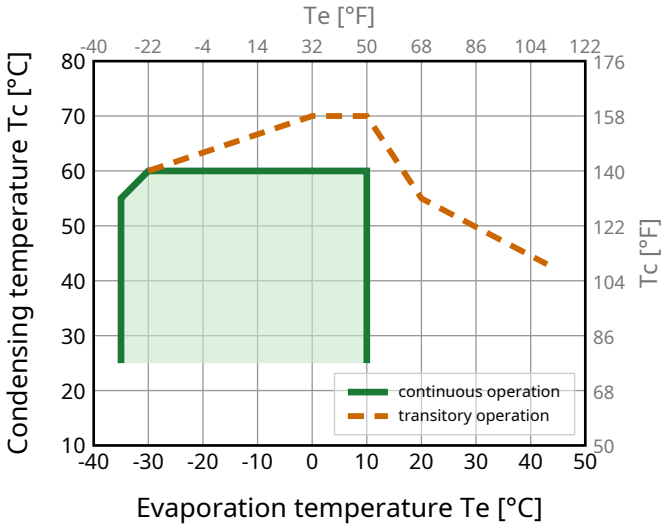
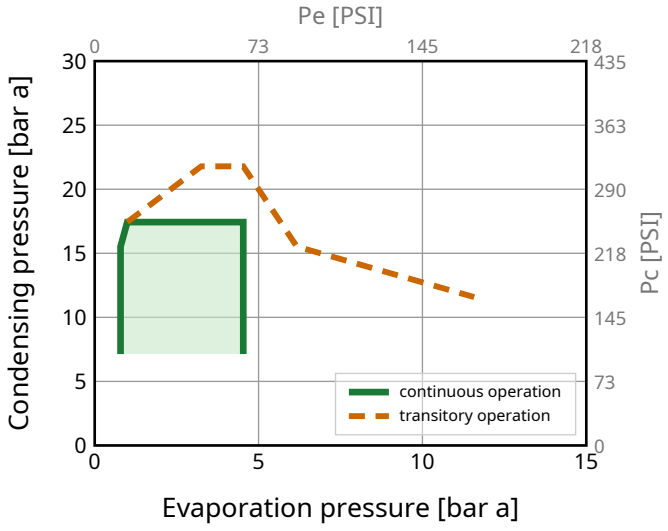
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE8.6GFTX Configuration 3

Sales code:

106G5903

Standard Conditions

R513A, 220 V/50 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	**273**	931	235	**1.34**	4.56	204	1.47	5.98	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**540**	1843	464	**1.75**	5.96	309	1.90	13.46	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**924**	3151	794	**2.25**	7.69	410	2.36	23.46	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**146**	497	125	**1.04**	3.57	139	1.26	3.66	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**469**	1600	403	**1.76**	6.02	266	1.72	12.70	**EN12900 MBP**
5 41	50 122	20 68	50 122	**779**	2657	670	**2.09**	7.13	373	2.19	22.96	**EN12900 HBP**

Performance Tables

R513A, 220 V/50 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	**138**	472	119	**0.99**	3.37	140	1.26	3.41
-30	-22	**180**	613	155	**1.10**	3.75	164	1.34	4.44
-20	-4	**306**	1042	263	**1.43**	4.88	213	1.51	7.58
-10	14	**492**	1678	423	**1.85**	6.31	266	1.72	12.31
0	32	**743**	2536	639	**2.32**	7.92	320	1.95	18.83
10	50	**1064**	3631	915	**2.84**	9.69	375	2.20	27.41

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

-35	-31	**108**	369	93	**0.75**	2.57	144	1.28	2.98
-30	-22	**146**	498	126	**0.87**	2.96	168	1.35	4.03
-20	-4	**256**	874	220	**1.14**	3.90	224	1.55	7.12
-10	14	**416**	1419	358	**1.44**	4.93	288	1.81	11.67
0	32	**629**	2146	541	**1.75**	5.99	358	2.12	17.89
10	50	**900**	3073	774	**2.07**	7.07	434	2.48	26.09

Model
KLE8.6GFTX Configuration 4

Sales code:
106G5903

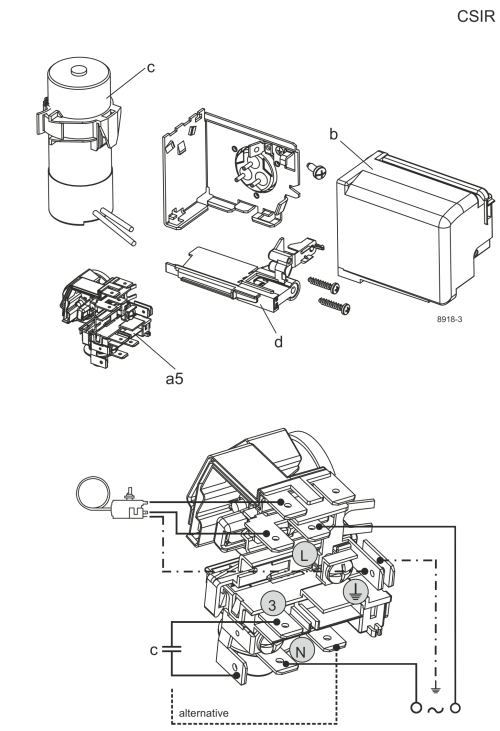
Configuration

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, KC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**13.4 A**
RLA (rated load amps / 1s/ U(N))	**1.8 A**
Cut in current (U(N))	**12.3 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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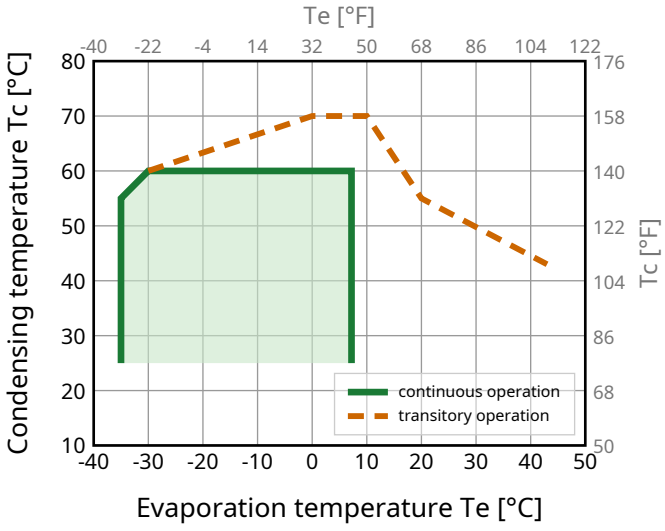
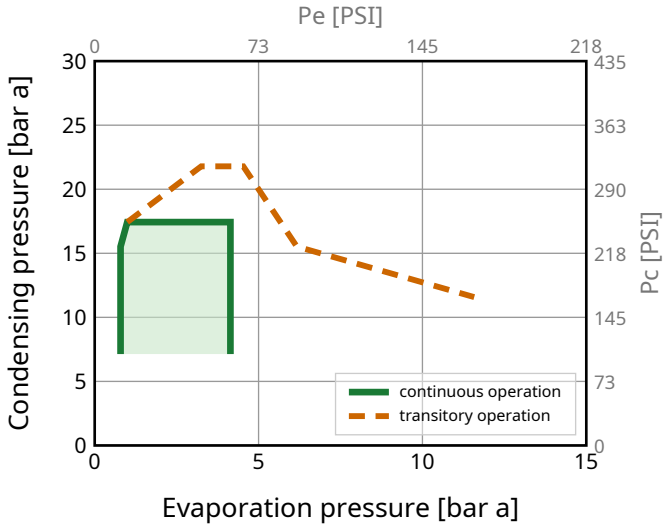
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE8.6GFTX Configuration 4

Sales code:

106G5903

Standard Conditions

R513A, 230 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	**329**	1124	283	**1.35**	4.62	243	1.48	7.21	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**645**	2200	555	**1.74**	5.94	370	1.95	16.08	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1104**	3766	949	**2.26**	7.70	489	2.44	28.04	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**174**	592	149	**1.12**	3.82	155	1.21	4.37	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**559**	1907	481	**1.76**	5.99	318	1.75	15.14	**EN12900 MBP**
5 41	50 122	20 68	50 122	**930**	3173	800	**2.09**	7.13	445	2.26	27.42	**EN12900 HBP**

Performance Tables

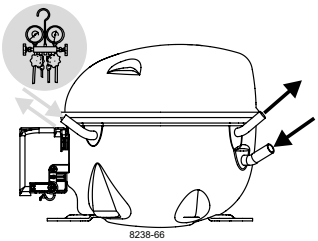
R513A, 230 V/60 Hz, CSIR, fan 3m/s

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	**166**	565	142	**1.06**	3.61	157	1.21	4.07
-30	-22	**216**	736	186	**1.14**	3.87	190	1.31	5.32
-20	-4	**365**	1247	314	**1.43**	4.89	255	1.52	9.07
-10	14	**587**	2001	504	**1.84**	6.28	318	1.75	14.68
0	32	**886**	3024	762	**2.32**	7.91	382	2.00	22.45
7.2	45	**1154**	3938	993	**2.69**	9.18	429	2.19	29.57

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

-35	-31	**132**	451	114	**0.82**	2.81	160	1.22	3.64
-30	-22	**178**	606	153	**0.91**	3.10	196	1.32	4.91
-20	-4	**308**	1051	265	**1.15**	3.92	268	1.57	8.56
-10	14	**497**	1695	427	**1.44**	4.91	345	1.85	13.94
0	32	**751**	2562	646	**1.75**	5.98	428	2.19	21.35
7.2	45	**978**	3337	841	**1.99**	6.78	492	2.46	28.17



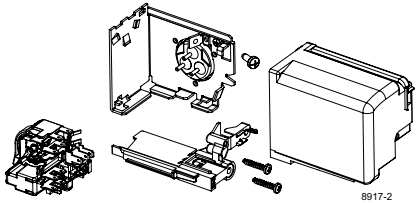
KL Compressors

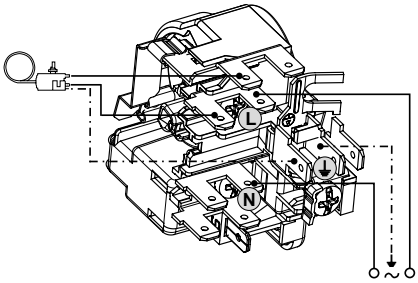
SECOP

Keep electrical equipment clear from oil, chemicals, and water

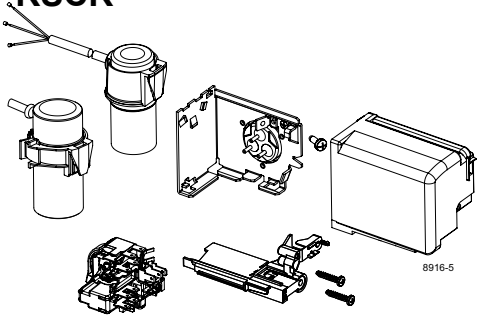
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

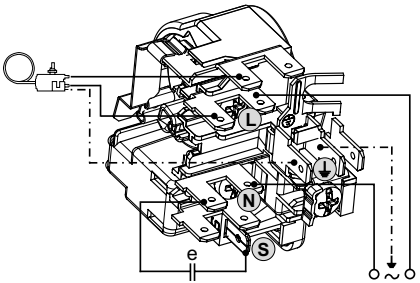
RSIR



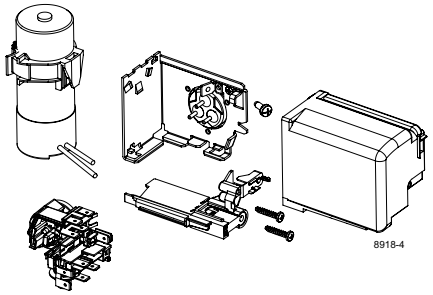


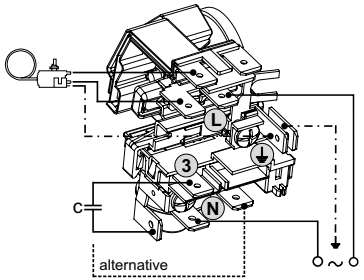
RSCR

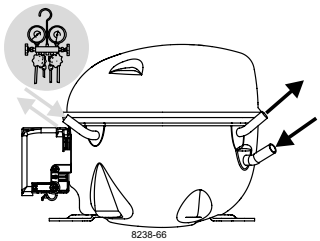




CSIR







KL Compressors

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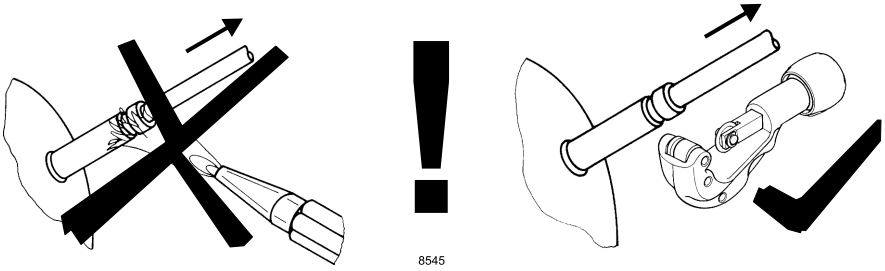
Service/Repair – R290, R600a, R170, R1270, R1234yf

(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**