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

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Compressor Design

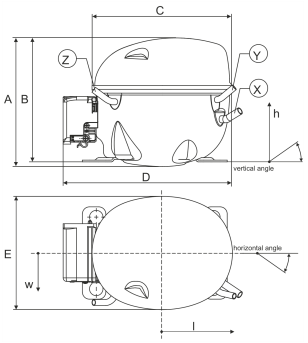
Oil type	**POE**	Winding resistance main	**8.4 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**11.9 Ohm**
Oil quantity	**240 / 8.12fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,495 cm3 / 50.55fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

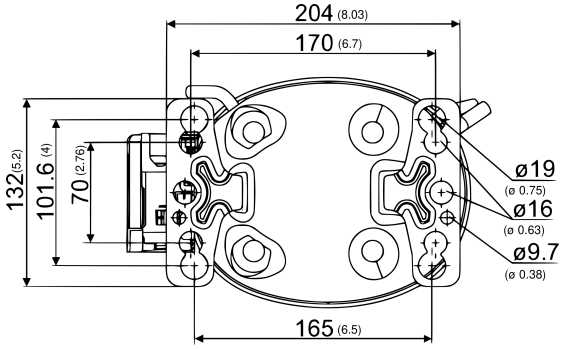
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



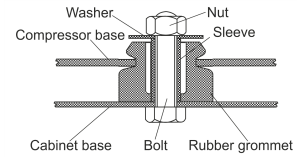
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

Mounting Accessories

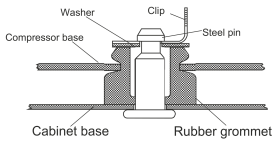


Dimensions in mm [in]

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

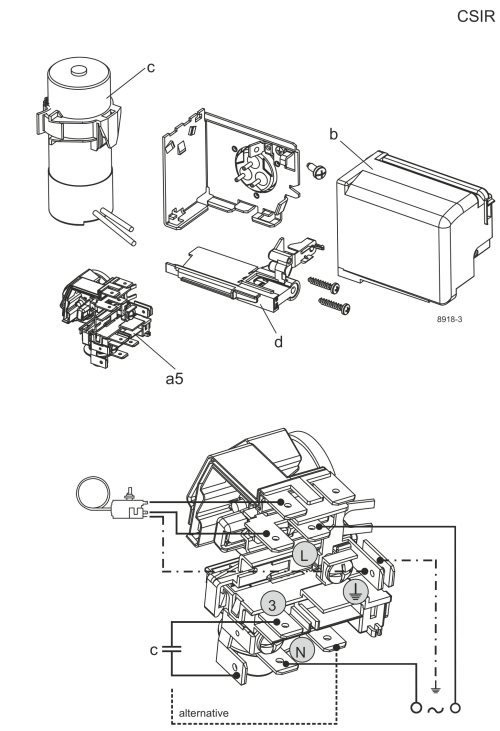
Configuration

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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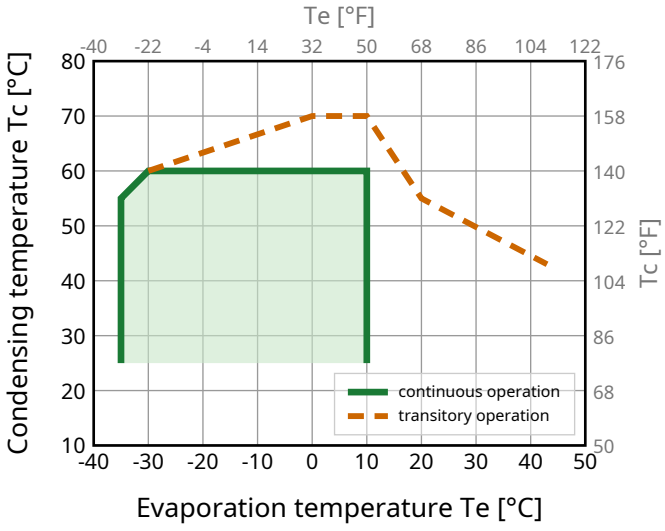
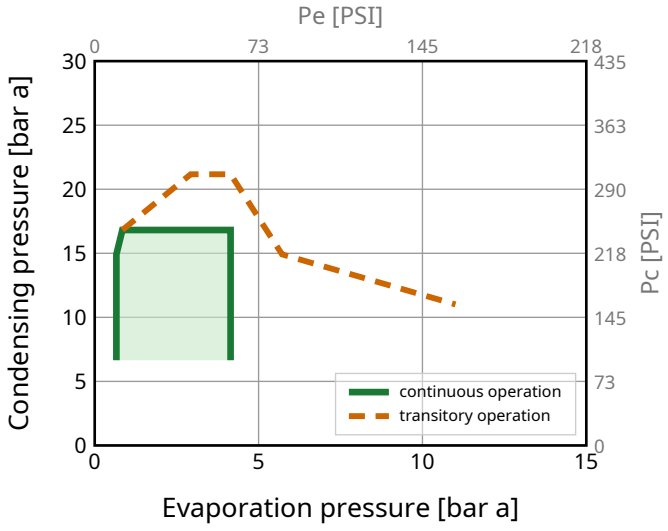
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE8.6GFTX Configuration 1

Sales code:

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

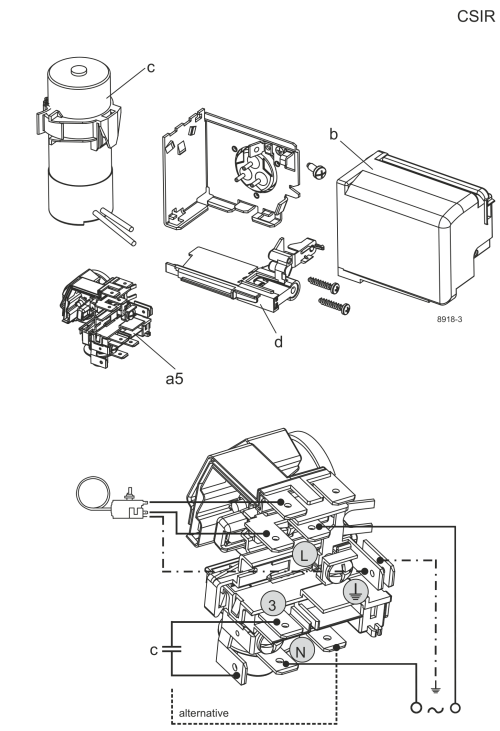
Configuration

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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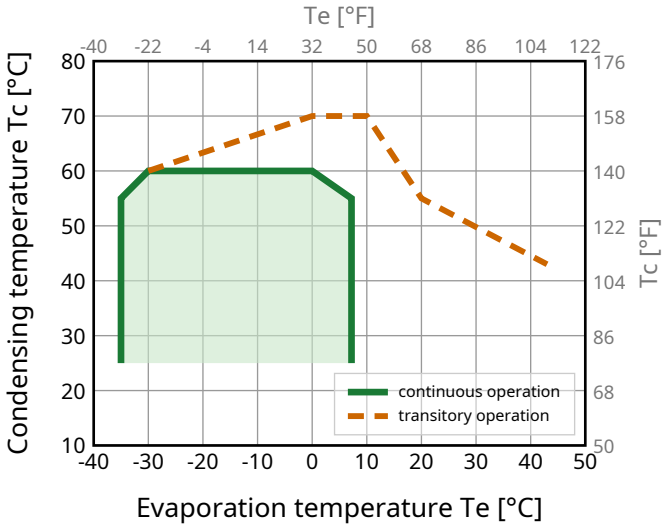
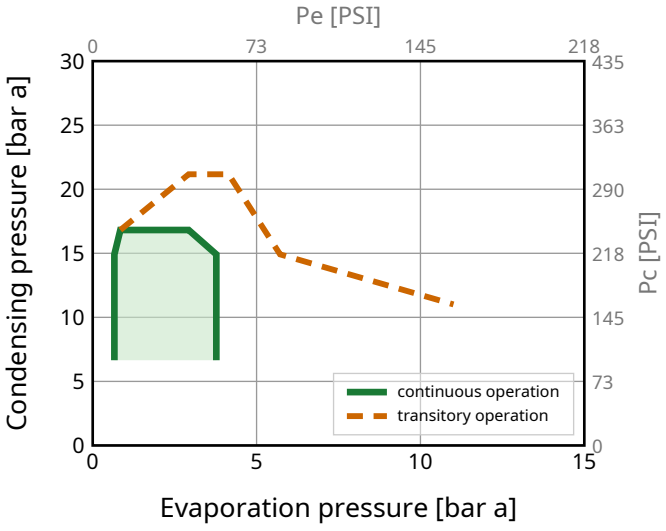
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

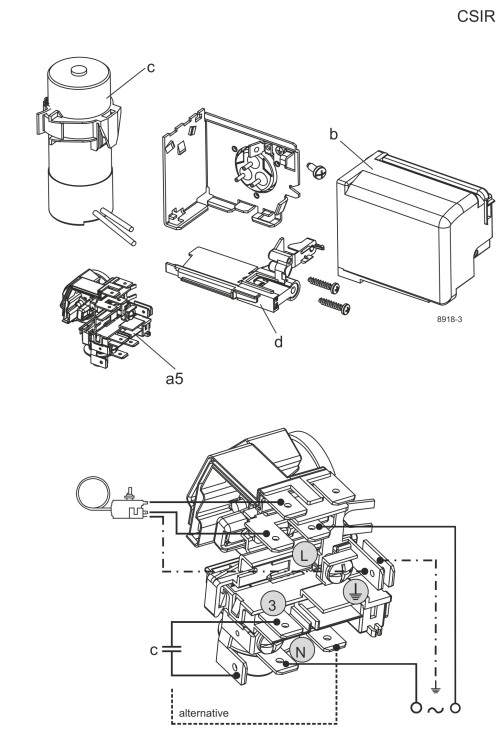
Configuration

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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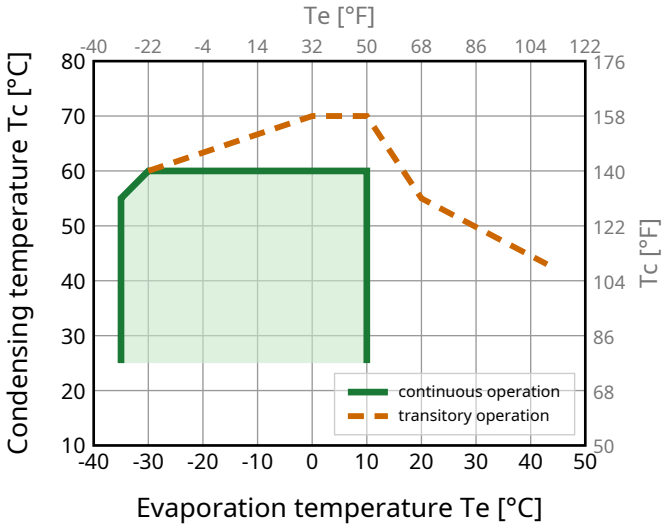
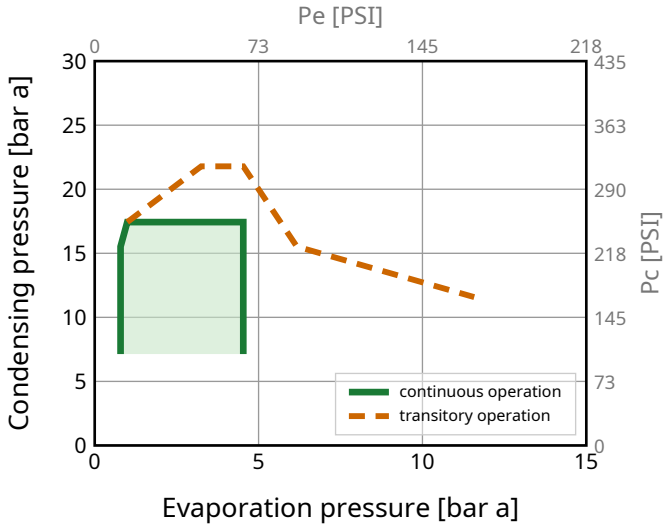
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

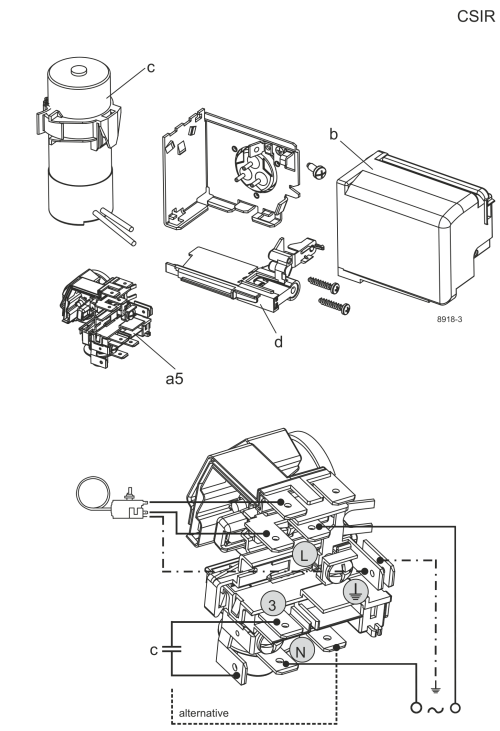
Configuration

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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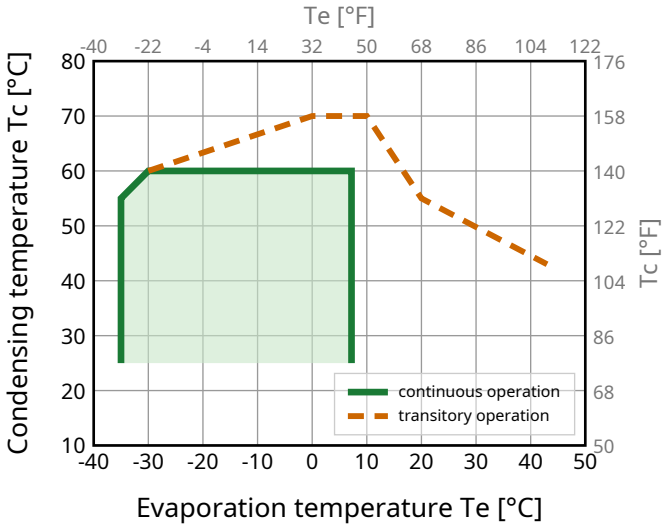
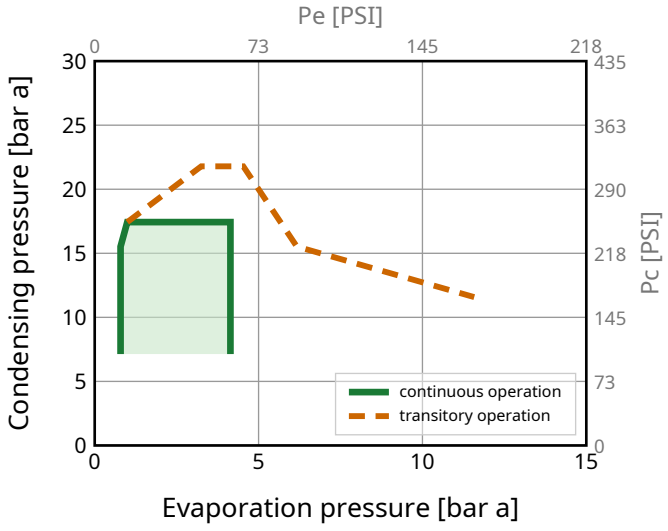
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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