Model
KLE7.7GFTX

Sales code:
106G5803

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**250g / 8.82oz**
Weight	**9.60 kg / 21.16lbs**
Displacement	**7.70 cm3 / 0.47cu.in**
Compressors on pallet	**100**

General – Configurations With KLE7.7GFTX

–	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	VDE, CB, UL	VDE, CB, UL
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
KLE7.7GFTX

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Compressor Design

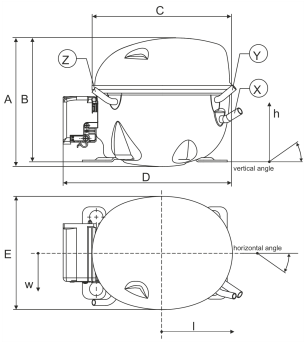
Oil type	**POE**	Winding resistance main	**8.4 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**11.9 Ohm**
Oil quantity	**240 / 8.12fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,505 cm3 / 50.89fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

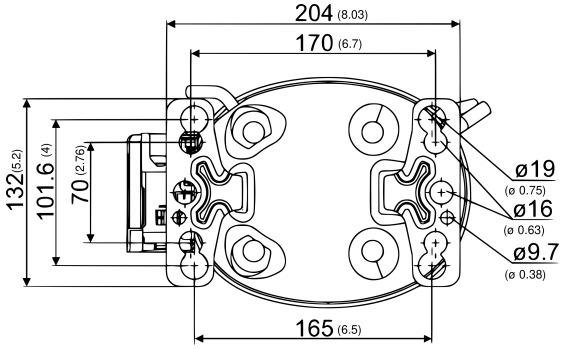
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



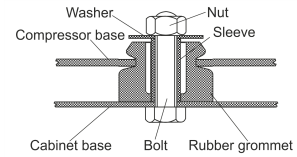
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

Mounting Accessories

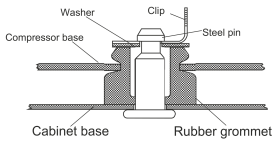


Dimensions in mm [in]

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
KLE7.7GFTX Configuration 1

Sales code:
106G5803

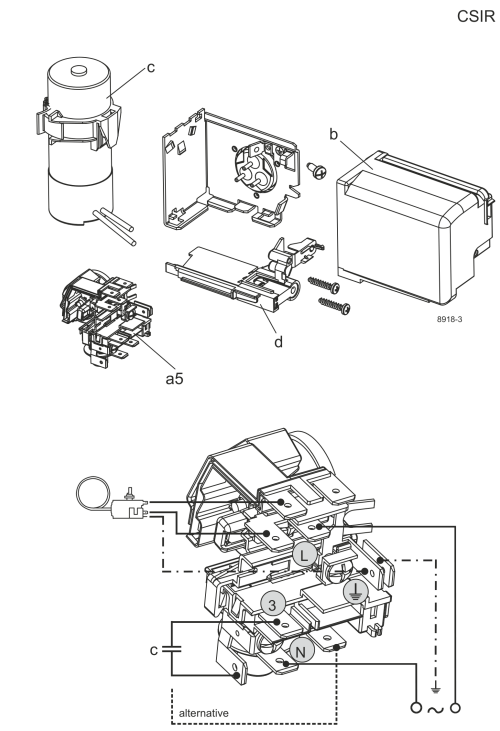
Configuration

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

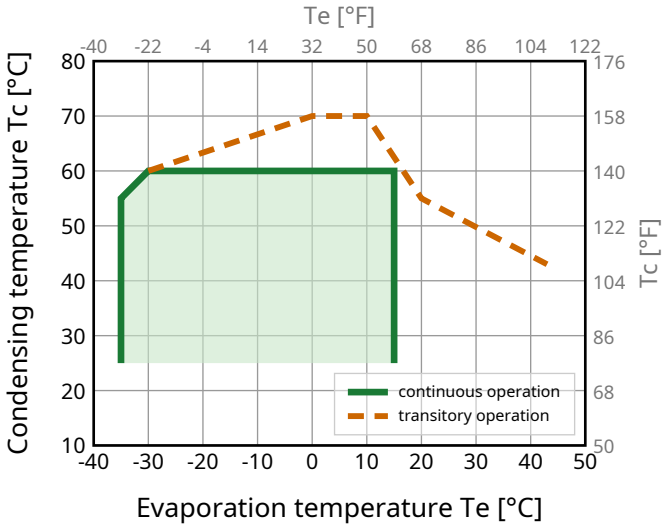


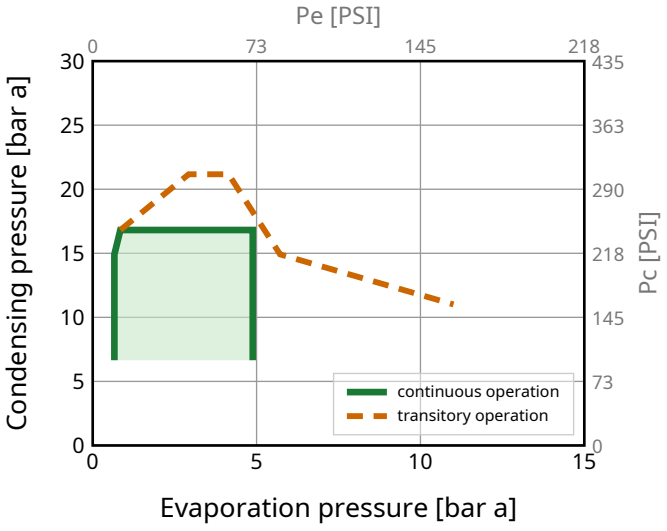
View full size

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

KLE7.7GFTX Configuration 1

Sales code:

106G5803

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	**221**	755	190	**1.33**	4.52	167	1.35	4.30	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**452**	1541	388	**1.81**	6.19	249	1.65	9.84	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**790**	2697	680	**2.41**	8.22	328	1.99	17.50	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**115**	393	99	**1.02**	3.48	113	1.21	2.52	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**396**	1349	340	**1.83**	6.24	216	1.52	9.22	**EN12900 MBP**
5 41	50 122	20 68	50 122	**679**	2316	584	**2.26**	7.72	300	1.86	17.03	**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	**109**	373	94	**0.96**	3.28	114	1.21	2.35
-30	-22	**146**	497	125	**1.09**	3.71	134	1.25	3.14
-20	-4	**252**	859	217	**1.44**	4.92	175	1.37	5.46
-10	14	**410**	1398	352	**1.89**	6.46	216	1.52	8.95
0	32	**627**	2140	539	**2.42**	8.26	259	1.69	13.84
10	50	**913**	3114	785	**3.01**	10.27	303	1.88	20.43
15	59	**1084**	3697	932	**3.32**	11.33	326	1.97	24.48

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

-35	-31	**87**	297	75	**0.75**	2.55	116	1.22	2.06
-30	-22	**120**	411	104	**0.88**	2.99	138	1.26	2.86
-20	-4	**215**	733	185	**1.17**	4.01	183	1.40	5.13
-10	14	**352**	1201	303	**1.51**	5.16	233	1.58	8.49
0	32	**541**	1846	465	**1.88**	6.42	288	1.81	13.19
10	50	**789**	2693	679	**2.27**	7.75	348	2.07	19.55
15	59	**938**	3201	807	**2.47**	8.42	380	2.22	23.48

Model
KLE7.7GFTX Configuration 2

Sales code:
106G5803

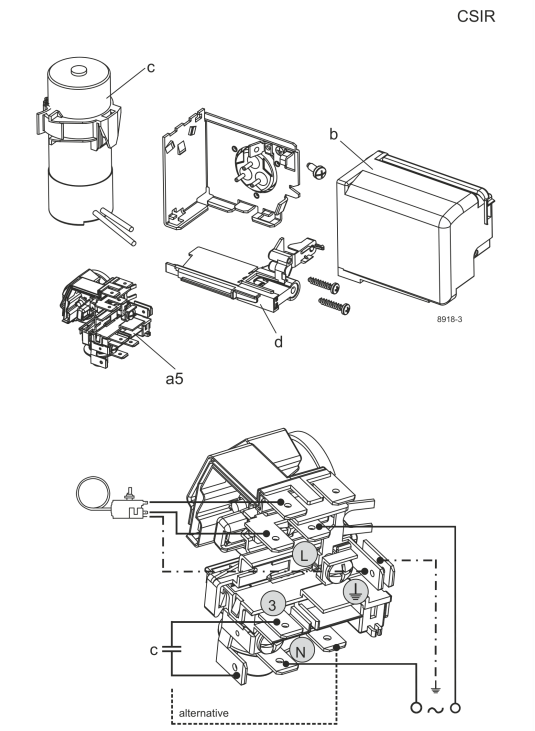
Configuration

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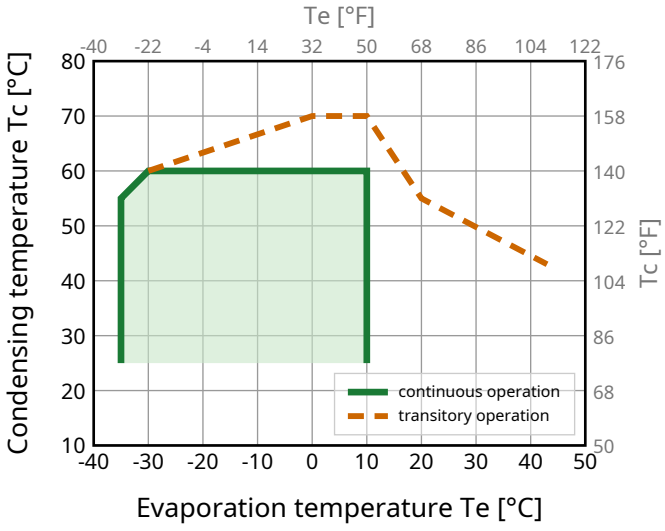
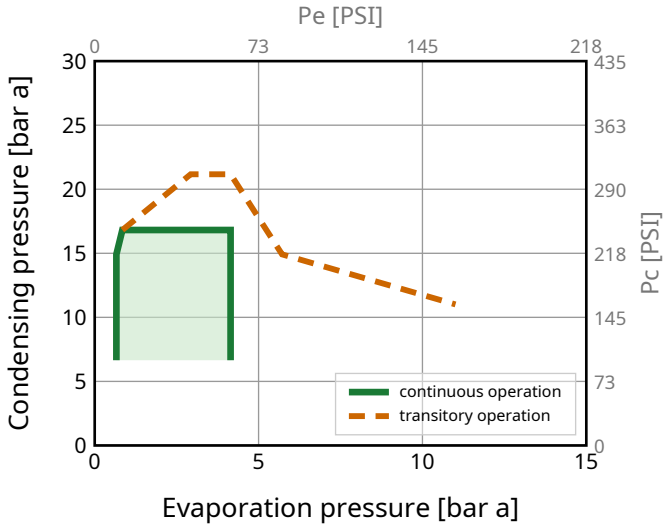
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLE7.7GFTX Configuration 2

Sales code:
106G5803

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	**266**	906	228	**1.39**	4.73	192	1.31	5.15	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**540**	1842	464	**1.85**	6.32	292	1.65	11.76	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**945**	3223	812	**2.46**	8.39	384	2.01	20.91	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**136**	462	117	**1.12**	3.84	120	1.13	2.96	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**472**	1609	406	**1.87**	6.37	252	1.51	11.00	**EN12900 MBP**
5 41	50 122	20 68	50 122	**810**	2765	697	**2.31**	7.89	350	1.88	20.33	**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	**128**	438	110	**1.06**	3.61	121	1.13	2.76
-30	-22	**173**	591	149	**1.16**	3.95	150	1.20	3.73
-20	-4	**301**	1026	259	**1.49**	5.07	202	1.35	6.52
-10	14	**489**	1667	420	**1.94**	6.60	252	1.51	10.67
0	32	**748**	2552	643	**2.47**	8.44	302	1.69	16.50
10	50	**1090**	3718	937	**3.07**	10.49	354	1.89	24.39
15	59	**1295**	4419	1114	**3.39**	11.57	382	2.00	29.26

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

-35	-31	**102**	349	88	**0.84**	2.85	122	1.14	2.43
-30	-22	**144**	491	124	**0.94**	3.22	152	1.21	3.42
-20	-4	**258**	879	221	**1.22**	4.16	212	1.37	6.16
-10	14	**421**	1437	362	**1.55**	5.28	272	1.58	10.15
0	32	**646**	2204	556	**1.92**	6.55	336	1.82	15.76
10	50	**943**	3219	811	**2.32**	7.91	407	2.10	23.37
15	59	**1123**	3831	966	**2.52**	8.60	445	2.26	28.10

Model
KLE7.7GFTX Configuration 3

Sales code:
106G5803

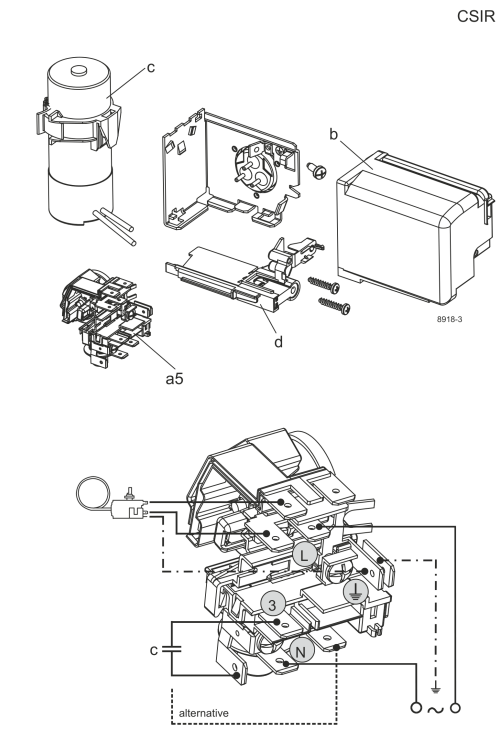
Configuration

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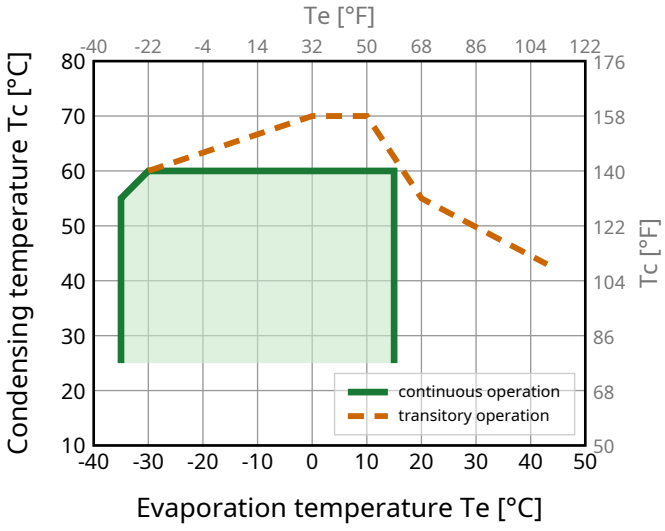
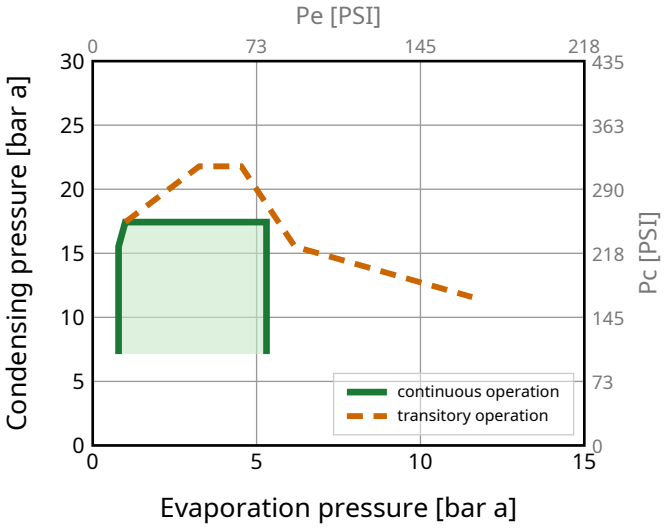
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE7.7GFTX Configuration 3

Sales code:

106G5803

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	**244**	831	209	**1.34**	4.57	182	1.40	5.33	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**473**	1614	407	**1.79**	6.10	265	1.71	11.79	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**812**	2770	698	**2.36**	8.06	344	2.06	20.63	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**128**	436	110	**1.03**	3.53	124	1.22	3.21	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**411**	1402	353	**1.78**	6.09	230	1.57	11.12	**EN12900 MBP**
5 41	50 122	20 68	50 122	**683**	2330	587	**2.17**	7.41	314	1.92	20.13	**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	**123**	418	105	**0.98**	3.34	125	1.23	3.02
-30	-22	**160**	548	138	**1.10**	3.74	146	1.29	3.96
-20	-4	**270**	922	232	**1.43**	4.89	188	1.42	6.71
-10	14	**431**	1471	371	**1.87**	6.39	230	1.57	10.79
0	32	**650**	2218	559	**2.38**	8.13	273	1.74	16.46
10	50	**934**	3187	803	**2.95**	10.06	317	1.93	24.06
15	59	**1103**	3762	948	**3.25**	11.08	340	2.04	28.70

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

-35	-31	**98**	333	84	**0.75**	2.57	129	1.24	2.69
-30	-22	**132**	450	113	**0.87**	2.97	152	1.30	3.64
-20	-4	**227**	776	196	**1.15**	3.91	198	1.45	6.32
-10	14	**365**	1245	314	**1.47**	5.01	248	1.64	10.23
0	32	**551**	1880	474	**1.82**	6.20	303	1.88	15.67
10	50	**794**	2708	682	**2.18**	7.44	364	2.15	22.99
15	59	**938**	3200	807	**2.37**	8.08	396	2.30	27.50

Model
KLE7.7GFTX Configuration 4

Sales code:
106G5803

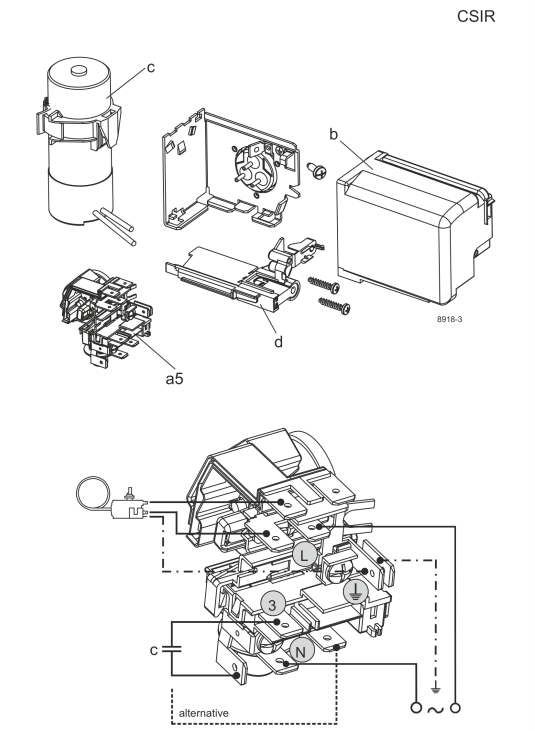
Configuration

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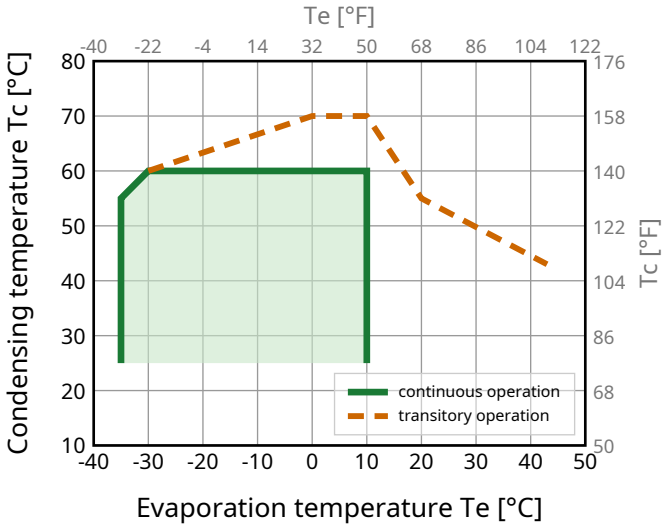
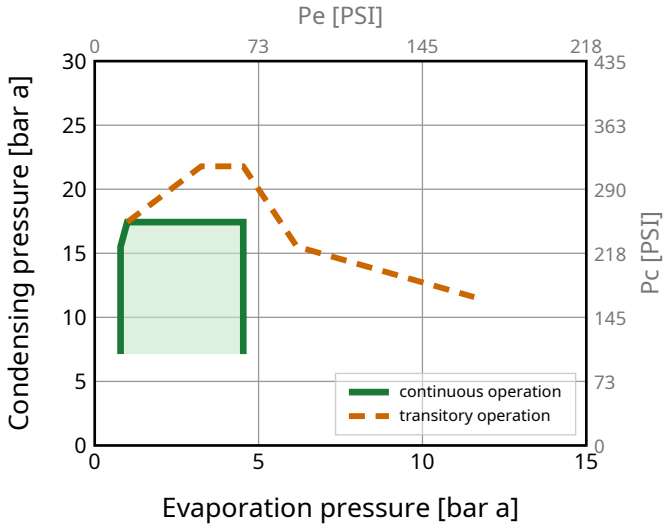
Components
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLE7.7GFTX Configuration 4

Sales code:

106G5803

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	**292**	997	251	**1.40**	4.79	208	1.36	6.40	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**566**	1930	486	**1.83**	6.23	310	1.72	14.10	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**970**	3311	835	**2.41**	8.23	402	2.08	24.66	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**151**	514	130	**1.13**	3.86	133	1.15	3.79	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**490**	1673	422	**1.82**	6.22	269	1.57	13.27	**EN12900 MBP**
5 41	50 122	20 68	50 122	**816**	2783	701	**2.22**	7.56	368	1.94	24.05	**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	**144**	492	124	**1.07**	3.65	135	1.16	3.55
-30	-22	**191**	651	164	**1.17**	3.97	164	1.24	4.71
-20	-4	**323**	1102	278	**1.48**	5.05	218	1.40	8.01
-10	14	**514**	1755	442	**1.91**	6.53	269	1.57	12.88
0	32	**775**	2645	667	**2.43**	8.30	319	1.75	19.64
10	50	**1115**	3805	959	**3.01**	10.28	370	1.95	28.73
15	59	**1318**	4498	1134	**3.32**	11.32	397	2.06	34.32

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

-35	-31	**115**	393	99	**0.84**	2.86	137	1.17	3.17
-30	-22	**158**	538	136	**0.94**	3.20	168	1.25	4.35
-20	-4	**273**	931	235	**1.19**	4.07	229	1.43	7.58
-10	14	**436**	1489	375	**1.50**	5.13	290	1.65	12.24
0	32	**658**	2247	566	**1.85**	6.33	355	1.89	18.73
10	50	**949**	3238	816	**2.23**	7.61	425	2.18	27.49
15	59	**1123**	3832	966	**2.42**	8.27	463	2.33	32.93