Model
KLF7.7MFT

Sales code:
106G2812

Compressor Data

Refrigerant(s)	**R134a**
Refr. charge - tech. limit	**400g / 14.11oz**
Weight	**9.40 kg / 20.72lbs**
Displacement	**7.70 cm3 / 0.47cu.in**
Compressors on pallet	**100**

General – Configurations With KLF7.7MFT

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	CSIR
Power supply (nominal)	200-240 V/50 Hz	208-230 V/60 Hz
Number of phases	1	1
Voltage range	170-254 V	198-253 V
Approvals	VDE, UL, CCC	VDE, UL, CCC
Starting torque	HST	HST
Refrigerant	R134a	R134a
Application	MBP	MBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

- Electrical equipment is included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor
- Compressor can operate safely in LBP, no official third-party approval yet

Model
KLF7.7MFT

Sales code:
106G2812

Compressor Design

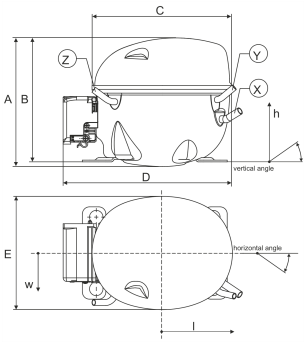
Oil type	**POE**	Winding resistance main	**8.4 Ohm**
Oil viscosity	**9,7cSt**	Winding resistance aux	**11.9 Ohm**
Oil quantity	**165 / 5.58fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,575 cm3 / 53.26fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

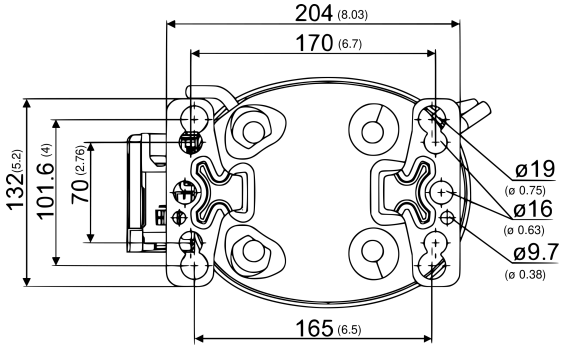
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



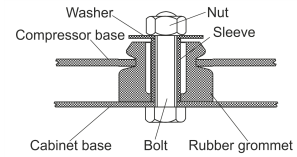
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

Mounting Accessories

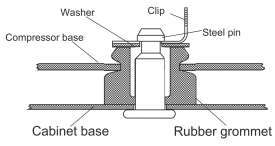


Dimensions in mm [in]

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
KLF7.7MFT Configuration 1

Sales code:
106G2812

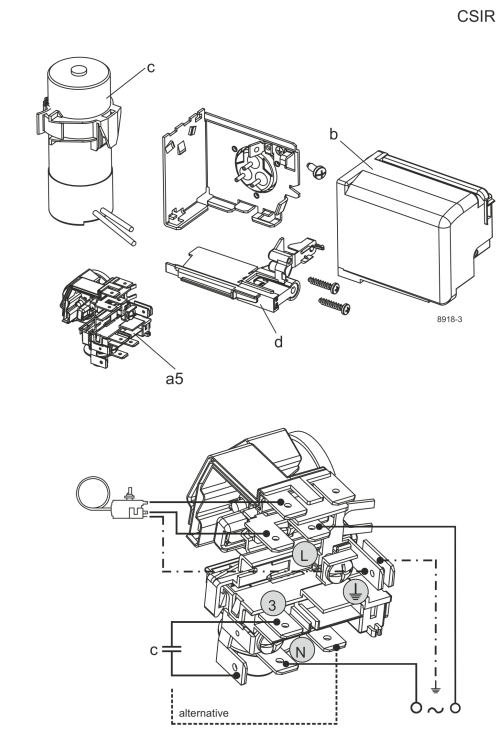
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**200-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**MBP**
Voltage range	**170-254 V**
Starting torque	**HST**
Approvals	**VDE, UL, CCC**
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

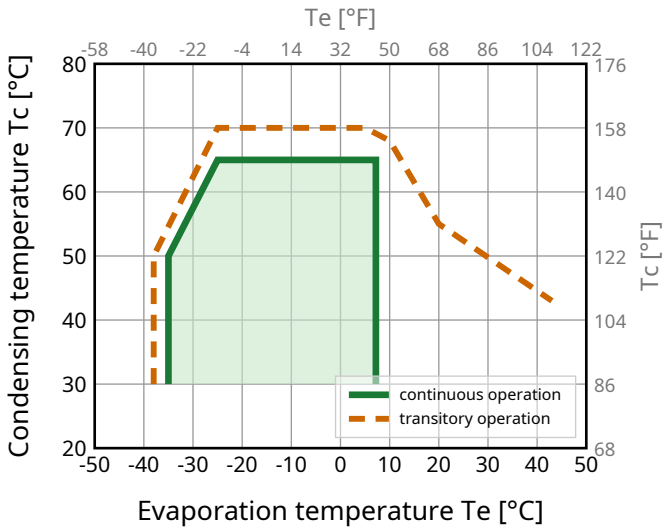


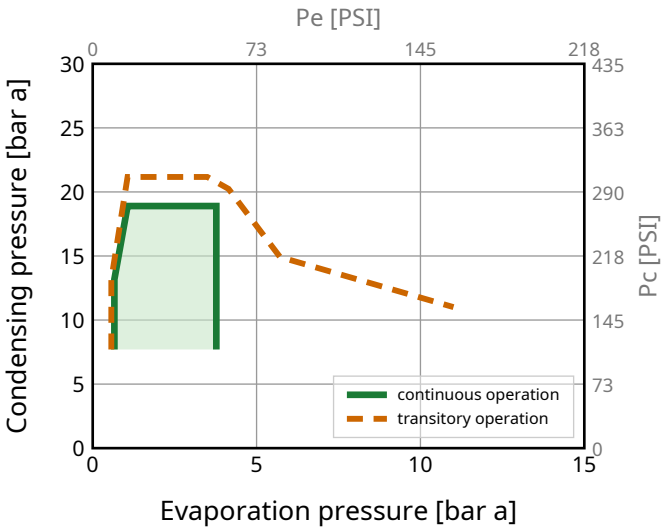
View full size

Components (already pre-assembled)
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b cover terminal board 10636401
. screw uni en iso 4757 10641201

Alternative components
. cable clamp 16058100
. screw - uni6954 10636000
. screw - uni6954 10636200

Operation Pressure Range





Model Sales code:

KLF7.7MFT Configuration 1 **106G2812**

Standard Conditions

R134a, 200 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]	
-6.7 20	54.4 129.9	35 95	46.1 115	**461**	1572	396	**1.89**	6.45	244	1.62	10.03	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**358**	1223	308	**1.58**	5.38	227	1.56	8.64	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**403**	1374	346	**1.91**	6.50	211	1.50	9.39	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**438**	1496	377	**1.88**	6.41	233	1.58	10.77	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**417**	1423	359	**1.97**	6.73	211	1.50	9.11	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**193**	657	166	**1.29**	4.42	149	1.29	4.17	**opt MBP 2**

Performance Tables

R134a, 200 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]
-30	-22	**145**	495	125	**1.12**	3.82	130	1.24	3.13
-20	-4	**254**	865	218	**1.50**	5.11	169	1.35	5.50
-10	14	**417**	1423	359	**1.97**	6.73	211	1.50	9.11
0	32	**642**	2189	552	**2.52**	8.61	254	1.67	14.15
7.2	45	**844**	2879	726	**2.96**	10.10	285	1.80	18.80

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

-30	-22	**119**	405	102	**0.90**	3.07	132	1.25	2.83
-20	-4	**216**	735	185	**1.22**	4.16	177	1.38	5.15
-10	14	**358**	1223	308	**1.58**	5.38	227	1.56	8.64
0	32	**553**	1888	476	**1.96**	6.69	282	1.78	13.49
7.2	45	**729**	2487	627	**2.25**	7.69	323	1.96	17.97

Model
KLF7.7MFT Configuration 2

Sales code:
106G2812

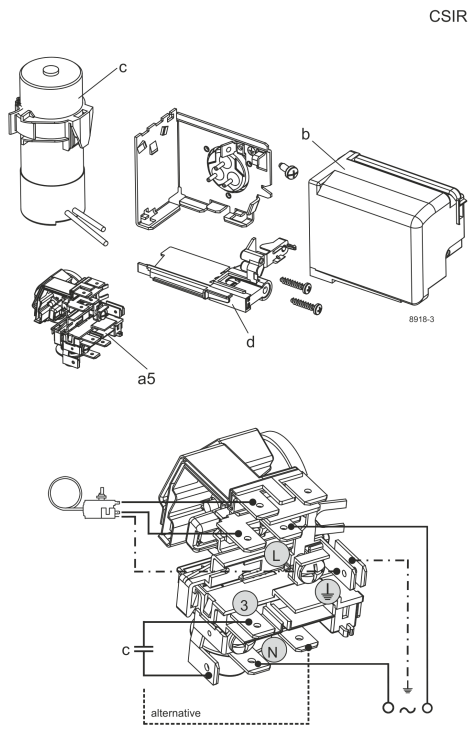
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R134a**
Application	**MBP**
Voltage range	**198-253 V**
Starting torque	**HST**
Approvals	**VDE, UL, CCC**
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

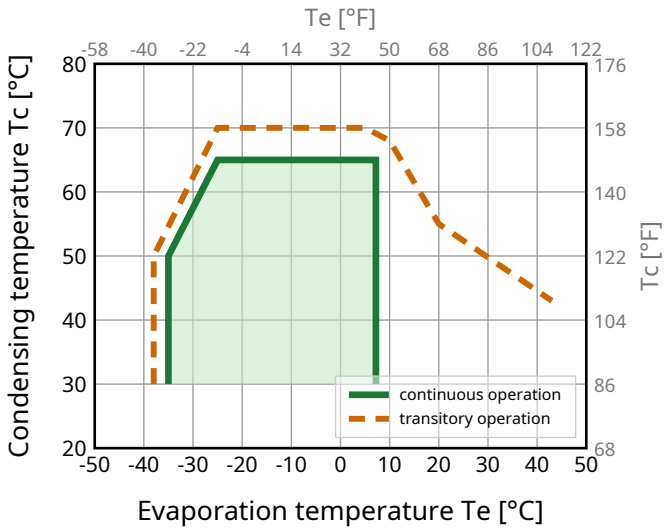


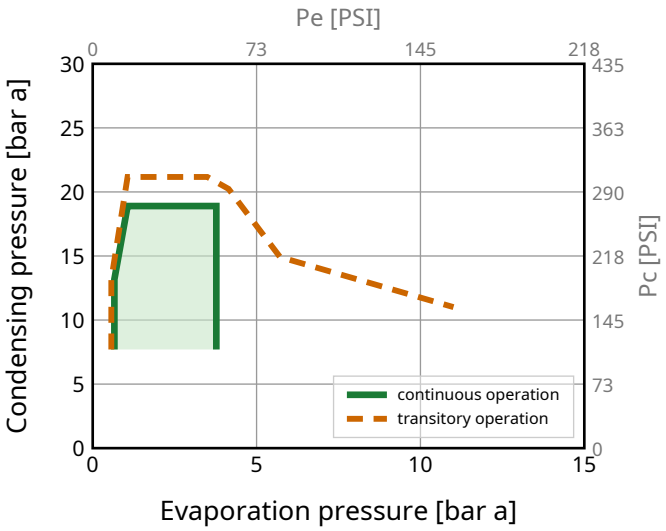
View full size

Components (already pre-assembled)
a5 current relay (T0377/L6-S1) 117U7071
c start capacitor (80µF, 6.3mm) 117U5001
b cover terminal board 10636401
. screw uni en iso 4757 10641201

Alternative components
. cable clamp 16058100
. screw - uni6954 10636000
. screw - uni6954 10636200

Operation Pressure Range





Model Sales code:

KLF7.7MFT Configuration 2 **106G2812**

Standard Conditions

R134a, 208 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]	
-6.7 20	54.4 129.9	35 95	46.1 115	**544**	1855	467	**1.87**	6.38	291	1.65	11.84	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**423**	1442	364	**1.56**	5.33	271	1.57	10.19	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**474**	1619	408	**1.89**	6.45	251	1.50	11.06	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**517**	1764	445	**1.86**	6.35	278	1.60	12.70	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**492**	1677	423	**1.96**	6.68	251	1.50	10.73	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**226**	771	194	**1.29**	4.42	175	1.26	4.89	**opt MBP 2**

Performance Tables

R134a, 208 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]
-30	-22	**169**	577	145	**1.13**	3.85	150	1.20	3.65
-20	-4	**298**	1017	256	**1.49**	5.09	200	1.34	6.46
-10	14	**492**	1677	423	**1.96**	6.68	251	1.50	10.73
0	32	**757**	2582	651	**2.50**	8.52	303	1.69	16.70
7.2	45	**996**	3399	857	**2.92**	9.98	340	1.83	22.20

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

-30	-22	**140**	476	120	**0.91**	3.10	154	1.21	3.32
-20	-4	**254**	866	218	**1.21**	4.14	209	1.37	6.07
-10	14	**423**	1442	364	**1.56**	5.33	271	1.57	10.19
0	32	**653**	2228	562	**1.94**	6.62	337	1.82	15.92
7.2	45	**861**	2938	740	**2.23**	7.60	387	2.02	21.23