Model
KLF7.7CNT

Sales code:
106H2808

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**200g / 7.05oz**
Weight	**9.60 kg / 21.16lbs**
Displacement	**7.70 cm3 / 0.47cu.in**
Compressors on pallet	**100**

General – Configurations With KLF7.7CNT

–	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motor configuration	CSIR	RSCR	CSIR	RSCR
Power supply (nominal)	200-240 V/50 Hz	200-240 V/50 Hz	208-230 V/60 Hz	208-230 V/60 Hz
Number of phases	1	1	1	1
Voltage range	187-254 V	187-254 V	198-253 V	198-253 V
Approvals	UL, CCC, CB	UL, CCC, CB	UL, CCC, CB, KC	UL, CCC, CB, KC
Starting torque	HST	LST	HST	LST
Refrigerant	R290	R290	R290	R290
Application	LBP+MBP	LBP+MBP	LBP+MBP	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

Model
KLF7.7CNT

Sales code:
106H2808

Compressor Design

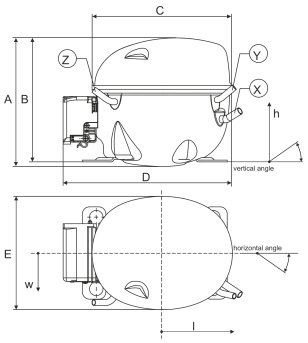
Oil type	**POE**	Winding resistance main	**6.4 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**14.8 Ohm**
Oil quantity	**170 / 5.75fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,575 cm3 / 53.26fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

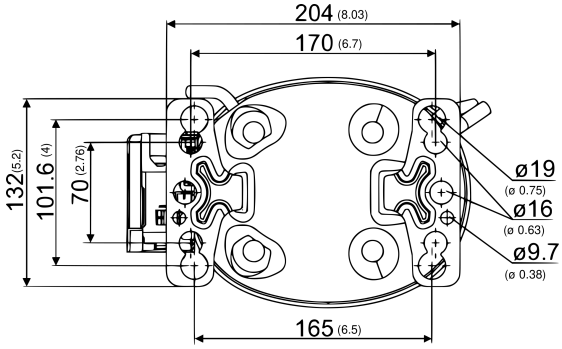
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



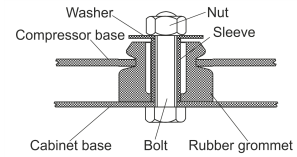
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

Mounting Accessories

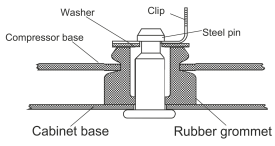


Dimensions in mm [in]

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
KLF7.7CNT Configuration 1

Sales code:
106H2808

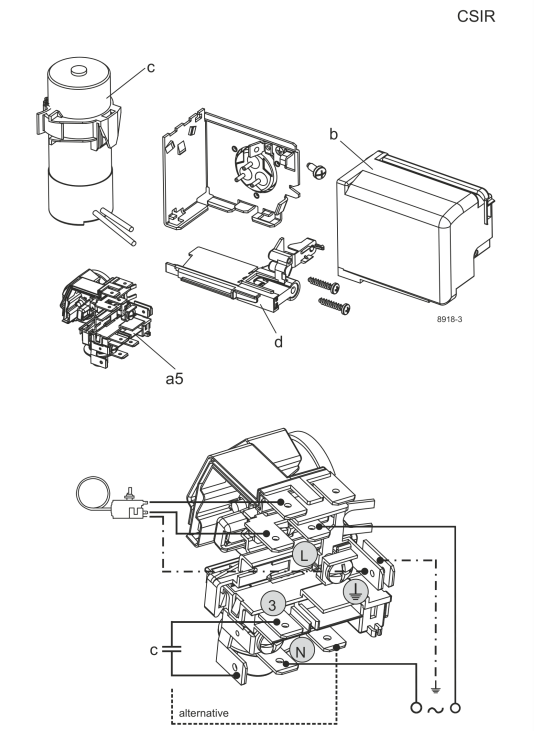
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**200-240 V/50 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**UL, CCC, CB**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**15.8 A**
RLA (rated load amps / 1s/ U(N))	**1.9 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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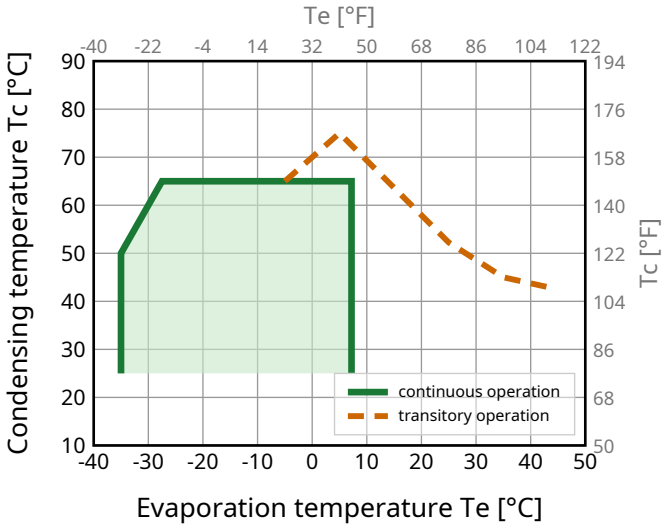
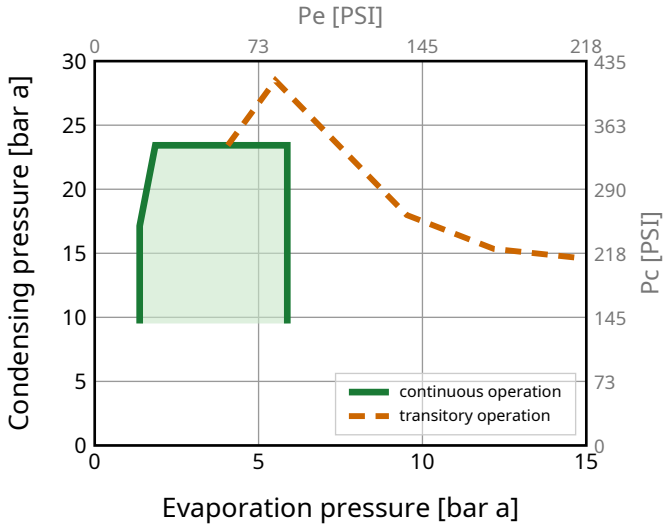
Components
a5 current relay (T0916/L6-S8) 117U7079
c start capacitor (80µF, 6.3mm) 117U5003
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLF7.7CNT Configuration 1

Sales code:
106H2808

Standard Conditions

R290, 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	**398**	1356	342	**1.56**	5.33	255	1.88	4.04	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**296**	1010	254	**1.20**	4.11	246	1.86	3.71	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**228**	779	196	**1.24**	4.24	184	1.74	2.62	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**704**	2403	606	**2.02**	6.89	349	2.18	8.06	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**560**	1911	482	**1.68**	5.74	333	2.12	7.12	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**616**	2101	530	**2.07**	7.06	298	2.01	7.58	**EN12900 MBP**

Performance Tables

R290, 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	**220**	752	189	**1.16**	3.97	189	1.75	2.48
-30	-22	**276**	942	237	**1.31**	4.48	210	1.78	3.12
-20	-4	**429**	1462	369	**1.68**	5.74	255	1.88	4.88
-10	14	**640**	2184	551	**2.15**	7.34	298	2.01	7.35
0	32	**917**	3127	788	**2.76**	9.40	333	2.12	10.66
7.2	45	**1159**	3955	997	**3.31**	11.31	350	2.18	13.64

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

-35	-31	**180**	615	155	**0.94**	3.21	192	1.74	2.25
-30	-22	**232**	793	200	**1.07**	3.64	218	1.79	2.90
-20	-4	**371**	1267	319	**1.35**	4.61	275	1.94	4.67
-10	14	**560**	1911	482	**1.68**	5.74	333	2.12	7.12
0	32	**805**	2747	692	**2.08**	7.10	387	2.31	10.38
7.2	45	**1020**	3479	877	**2.43**	8.29	419	2.44	13.32

Model

KLF7.7CNT Configuration 2

Sales code:

106H2808

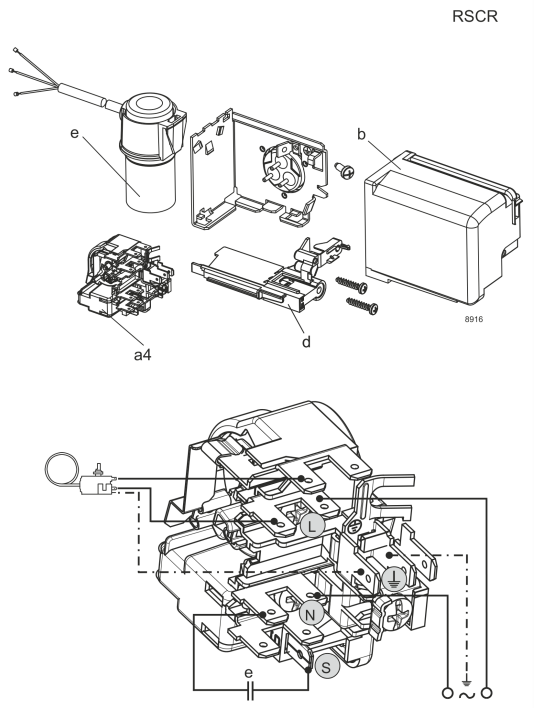
Configuration

Motor configuration	**RSCR**
Power supply (nominal)	**200-240 V/50 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**187-254 V**
Starting torque	**LST**
Approvals	**UL, CCC, CB**
Starting device type	**PTC**
Run capacitor	**5 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**15.8 A**
RLA (rated load amps / 1s/ U(N))	**1.9 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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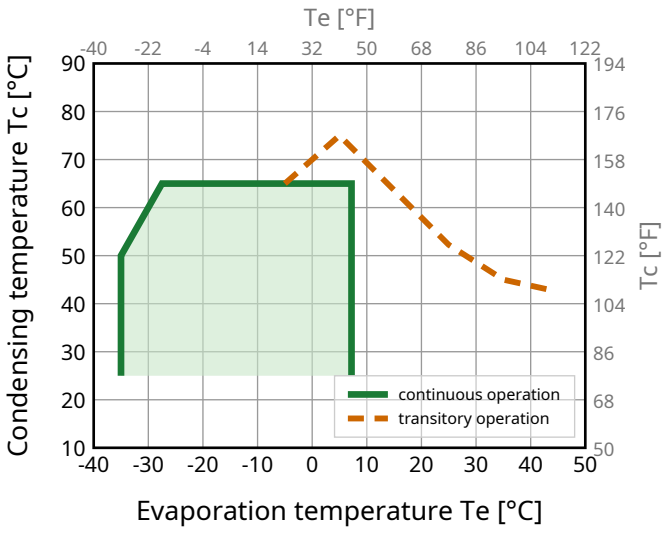
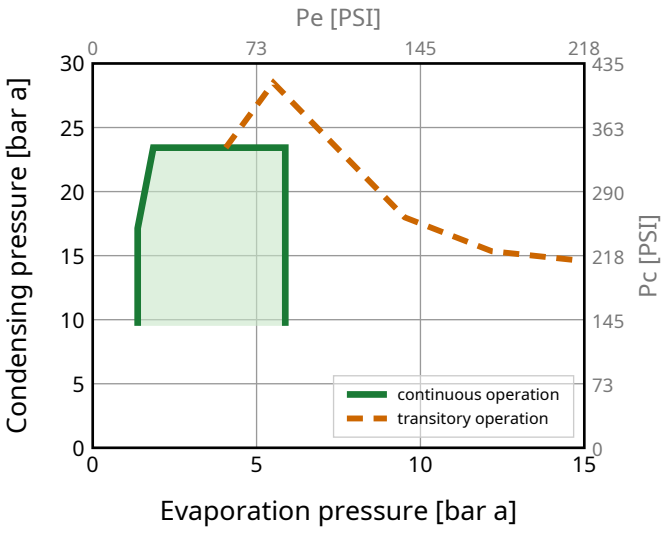
Components
a4 DAS1 (PTC,6.3mm, T0377/L6 - S1) 103N0250
e run capacitor (5µF, 6,3mm) 117-7155
e1 retaining clamp 103N0535
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLF7.7CNT Configuration 2

Sales code:

106H2808

Standard Conditions

R290, 220 V/50 Hz, RSCR, 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	**402**	1371	346	**1.62**	5.54	248	1.50	4.08	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**300**	1023	258	**1.25**	4.27	240	1.48	3.76	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**228**	777	196	**1.33**	4.55	171	1.29	2.61	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**708**	2415	609	**2.14**	7.31	331	1.81	8.11	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**564**	1923	485	**1.78**	6.06	317	1.76	7.17	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**621**	2118	534	**2.17**	7.41	286	1.64	7.64	**EN12900 MBP**

Performance Tables

R290, 220 V/50 Hz, RSCR, 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	**220**	750	189	**1.23**	4.18	179	1.31	2.48
-30	-22	**278**	949	239	**1.37**	4.67	203	1.37	3.14
-20	-4	**433**	1477	372	**1.75**	5.97	247	1.50	4.92
-10	14	**645**	2202	555	**2.26**	7.70	286	1.64	7.41
0	32	**924**	3152	794	**2.92**	9.95	317	1.76	10.74
7.2	45	**1169**	3990	1006	**3.51**	11.98	333	1.82	13.76

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

-35	-31	**182**	622	157	**0.97**	3.33	187	1.32	2.27
-30	-22	**236**	805	203	**1.11**	3.77	213	1.40	2.95
-20	-4	**375**	1280	322	**1.41**	4.81	266	1.57	4.72
-10	14	**564**	1923	485	**1.78**	6.06	317	1.76	7.17
0	32	**809**	2761	696	**2.22**	7.56	365	1.95	10.43
7.2	45	**1026**	3500	882	**2.59**	8.83	396	2.07	13.40

Model
KLF7.7CNT Configuration 3

Sales code:
106H2808

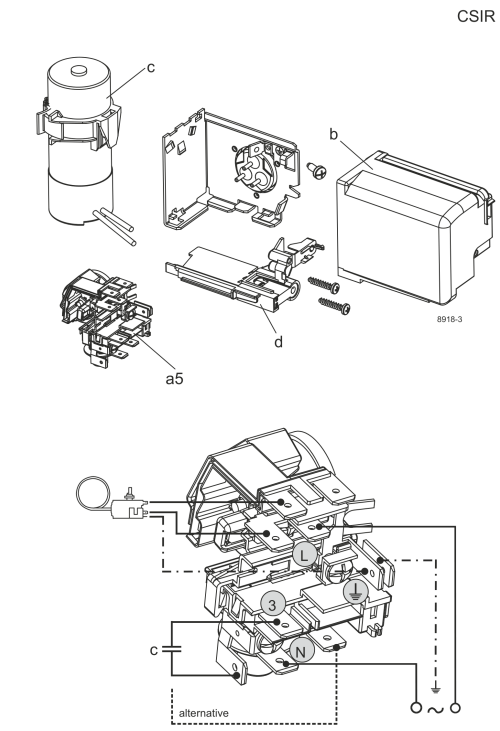
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**198-253 V**
Starting torque	**HST**
Approvals	**UL, CCC, CB, KC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**15.8 A**
RLA (rated load amps / 1s/ U(N))	**1.9 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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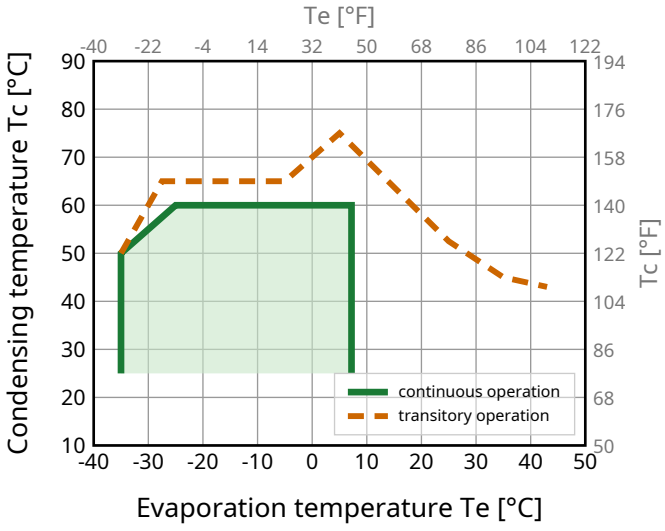
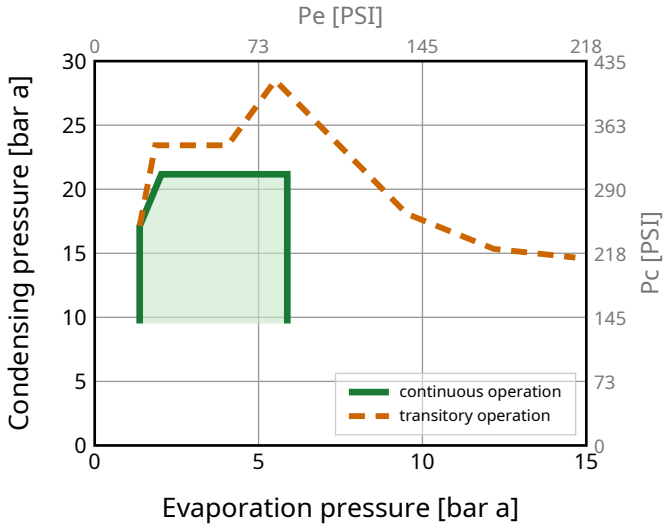
Components
a5 current relay (T0916/L6-S8) 117U7079
c start capacitor (80µF, 6.3mm) 117U5003
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLF7.7CNT Configuration 3

Sales code:
106H2808

Standard Conditions

R290, 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	**487**	1661	419	**1.63**	5.56	298	1.78	4.94	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**365**	1244	314	**1.27**	4.32	288	1.74	4.57	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**270**	921	232	**1.26**	4.29	214	1.51	3.10	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**835**	2849	718	**2.07**	7.07	403	2.17	9.56	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**667**	2275	574	**1.73**	5.90	386	2.10	8.48	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**734**	2504	631	**2.10**	7.15	350	1.96	9.03	**EN12900 MBP**

Performance Tables

R290, 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	**261**	890	224	**1.19**	4.07	219	1.52	2.94
-30	-22	**335**	1144	288	**1.35**	4.62	248	1.61	3.79
-20	-4	**519**	1770	446	**1.72**	5.87	302	1.79	5.90
-10	14	**763**	2603	656	**2.18**	7.43	350	1.96	8.76
0	32	**1084**	3699	932	**2.78**	9.48	390	2.12	12.61
7.2	45	**1372**	4683	1180	**3.33**	11.35	413	2.21	16.15

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

-35	-31	**222**	759	191	**1.01**	3.46	219	1.52	2.77
-30	-22	**289**	986	248	**1.14**	3.89	254	1.62	3.61
-20	-4	**451**	1540	388	**1.40**	4.79	322	1.86	5.68
-10	14	**667**	2275	574	**1.73**	5.90	386	2.10	8.48
0	32	**952**	3249	819	**2.14**	7.31	444	2.34	12.28
7.2	45	**1210**	4129	1041	**2.51**	8.56	482	2.49	15.81

Model

KLF7.7CNT Configuration 4

Sales code:

106H2808

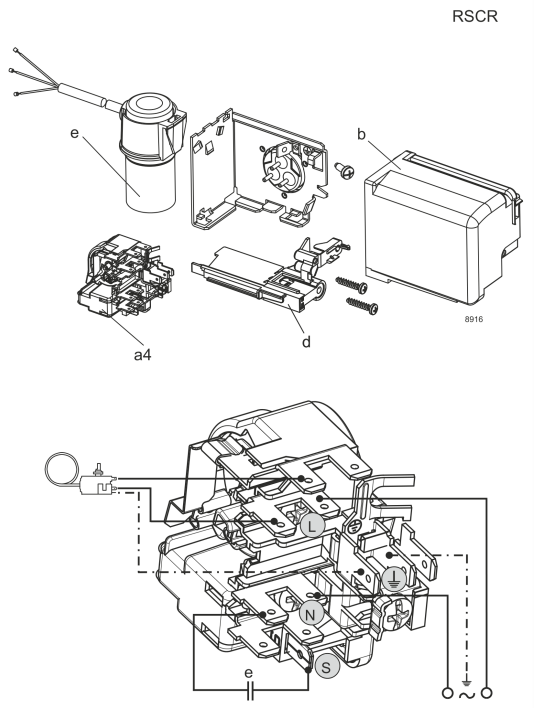
Configuration

Motor configuration	**RSCR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**198-253 V**
Starting torque	**LST**
Approvals	**UL, CCC, CB, KC**
Starting device type	**PTC**
Run capacitor	**5 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**15.8 A**
RLA (rated load amps / 1s/ U(N))	**1.9 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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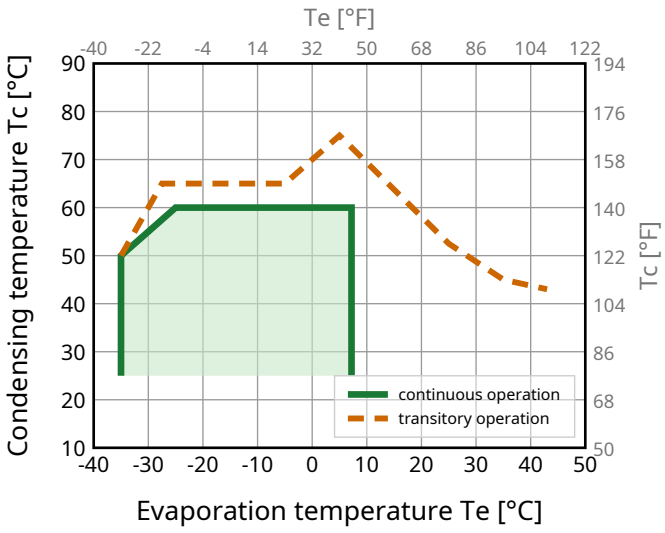
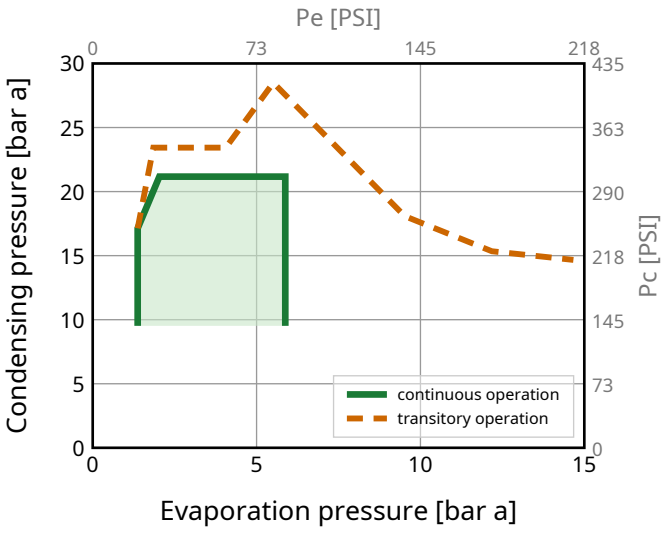
Components
a4 DAS1 (PTC,6.3mm, T0377/L6 - S1) 103N0250
e run capacitor (5µF, 6,3mm) 117-7155
e1 retaining clamp 103N0535
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLF7.7CNT Configuration 4

Sales code:
106H2808

Standard Conditions

R290, 230 V/60 Hz, RSCR, 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	**492**	1679	423	**1.73**	5.90	285	1.73	5.00	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**369**	1258	317	**1.34**	4.58	275	1.70	4.62	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**273**	931	235	**1.33**	4.53	206	1.49	3.13	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**845**	2884	727	**2.21**	7.53	383	2.09	9.68	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**675**	2303	580	**1.84**	6.28	367	2.03	8.58	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**742**	2533	639	**2.23**	7.60	333	1.90	9.14	**EN12900 MBP**

Performance Tables

R290, 230 V/60 Hz, RSCR, 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	**264**	900	227	**1.26**	4.29	210	1.50	2.97
-30	-22	**339**	1156	291	**1.43**	4.88	237	1.57	3.83
-20	-4	**525**	1791	451	**1.82**	6.21	288	1.74	5.97
-10	14	**772**	2634	664	**2.31**	7.90	333	1.90	8.86
0	32	**1097**	3744	944	**2.96**	10.09	371	2.04	12.76
7.2	45	**1389**	4741	1195	**3.54**	12.09	392	2.13	16.34

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

-35	-31	**225**	767	193	**1.07**	3.65	210	1.49	2.80
-30	-22	**292**	997	251	**1.20**	4.11	243	1.59	3.65
-20	-4	**457**	1558	393	**1.49**	5.08	306	1.80	5.75
-10	14	**675**	2303	580	**1.84**	6.28	367	2.03	8.58
0	32	**964**	3289	829	**2.28**	7.79	422	2.25	12.43
7.2	45	**1226**	4181	1054	**2.68**	9.14	457	2.39	16.01