Single
Packs

Single Pack KLF7.7CNT 200-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4780**

Position	Title	Code	Amount
1	Compressor KLF7.7CNT	106H2808	1
2	Starting relay (QLZ-7.85A, overload protector T0916/L6)	117U7079	1
3	Starting capacitor (80µF 260V, 6.3mm)	117U5003	1
4	KL accessories	103N1060	1
5	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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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

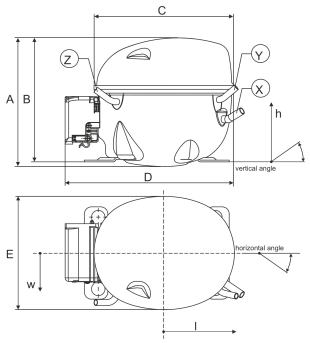
Oil type	**POE**	Winding resistance main	**6.4 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**14.8 Ohm**
Oil quantity	**170 / 5.75fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,575 cm3 / 53.26fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

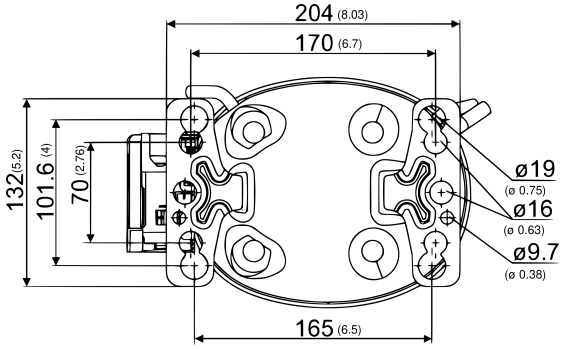
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



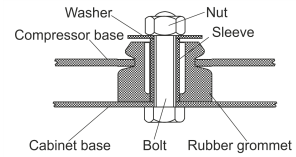
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

Mounting Accessories

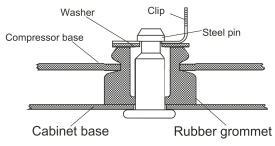


Dimensions in mm [in]

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

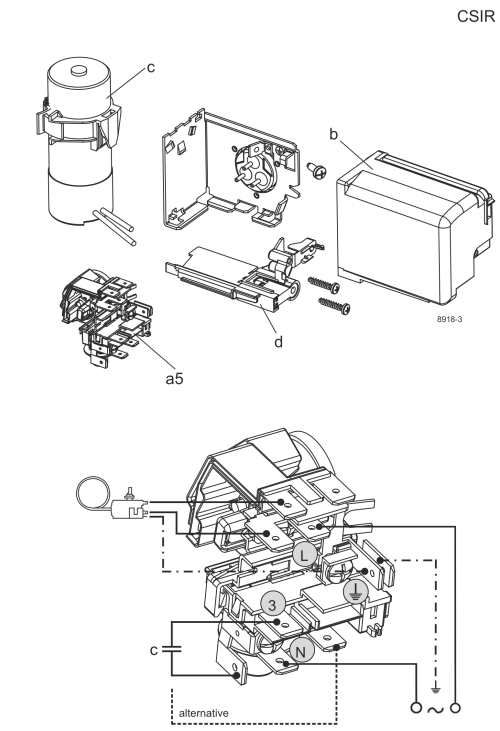
Configuration

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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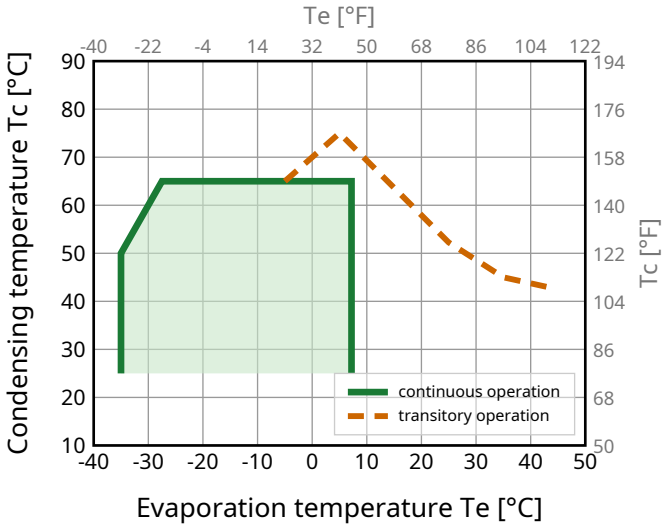
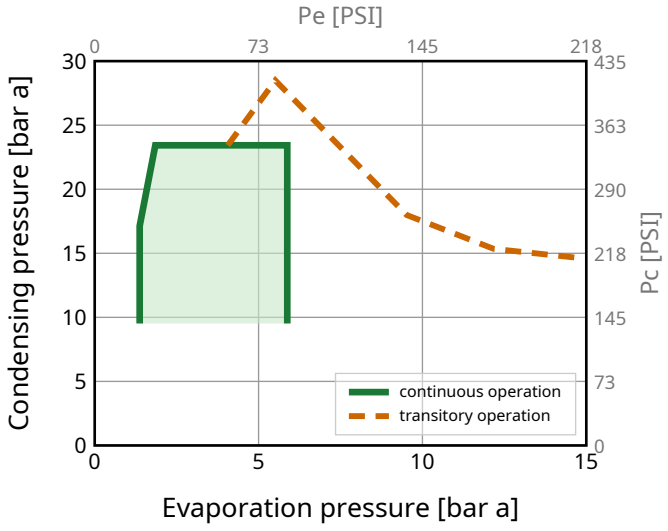
Components
a5 current relay (T0916/L6-S8) 117U7079
c start capacitor (80µF, 6.3mm) 117U5003
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

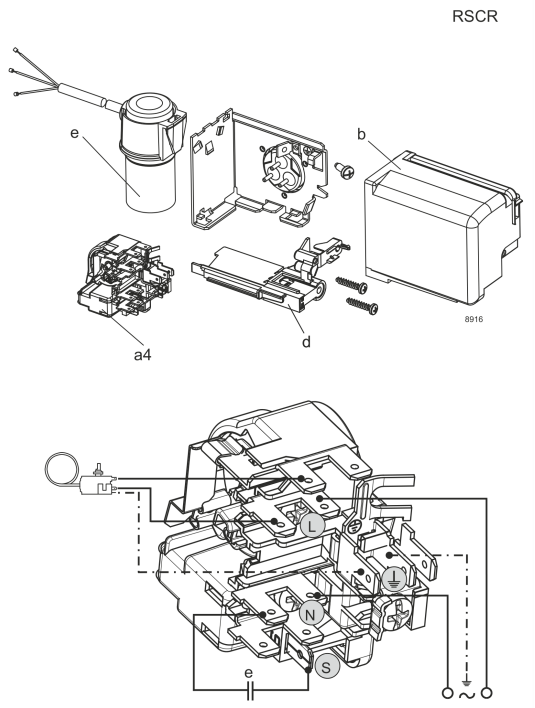
Configuration

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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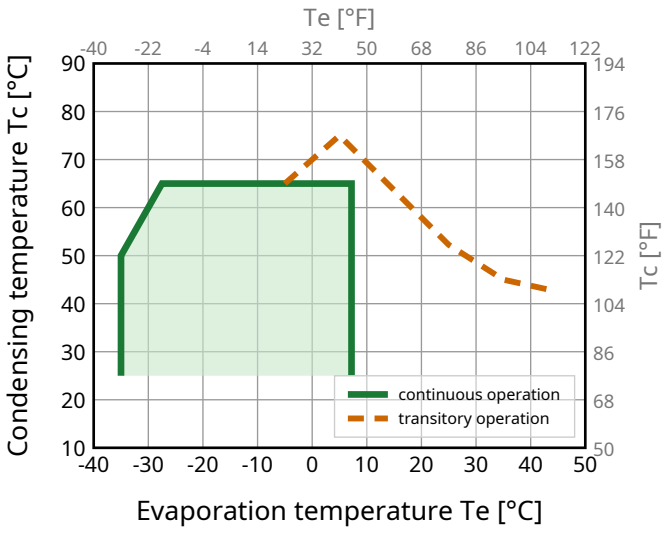
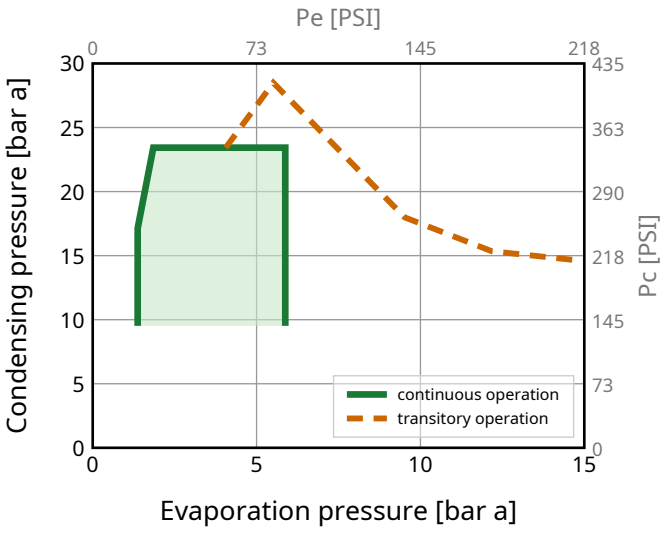
Components
a4 DAS1 (PTC,6.3mm, T0377/L6 - S1) 103N0250
e run capacitor (5µF, 6,3mm) 117-7155
e1 retaining clamp 103N0535
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

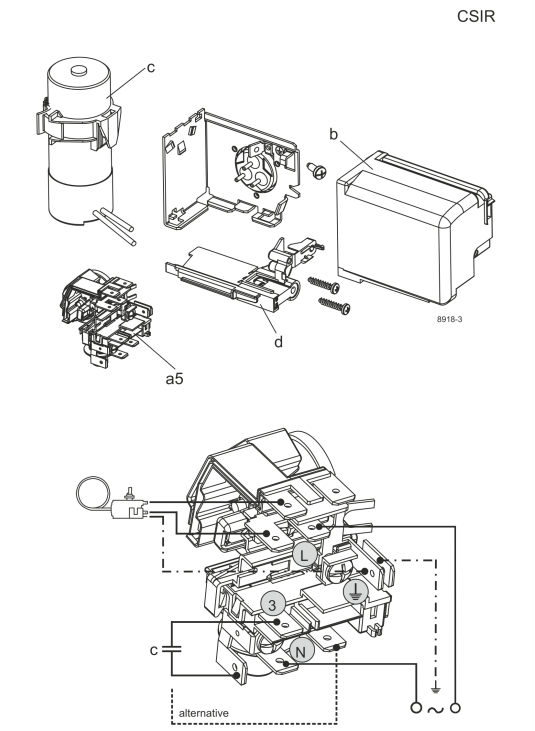
Configuration

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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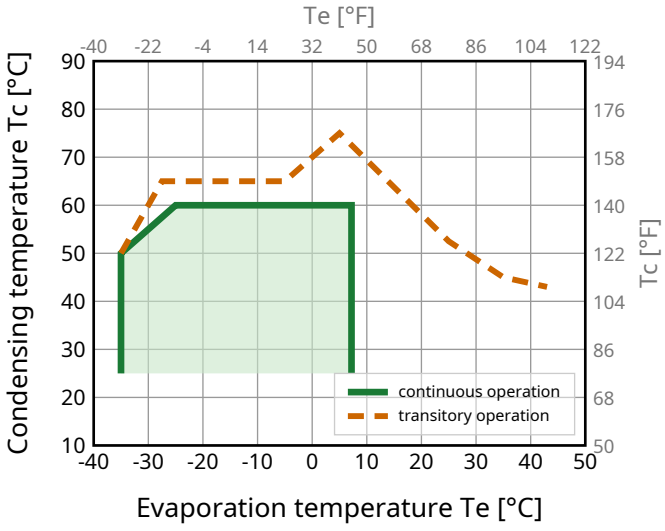
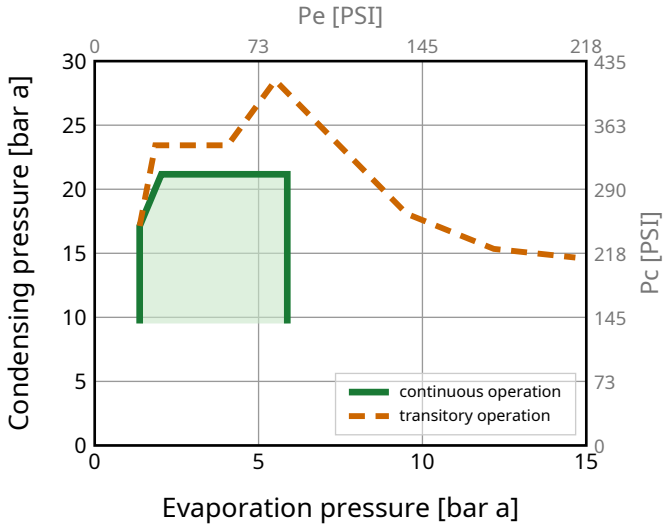
Components
a5 current relay (T0916/L6-S8) 117U7079
c start capacitor (80µF, 6.3mm) 117U5003
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

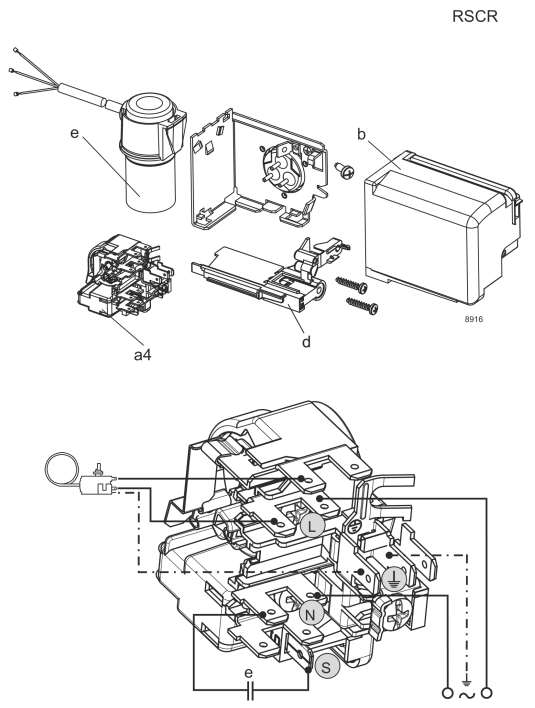
Configuration

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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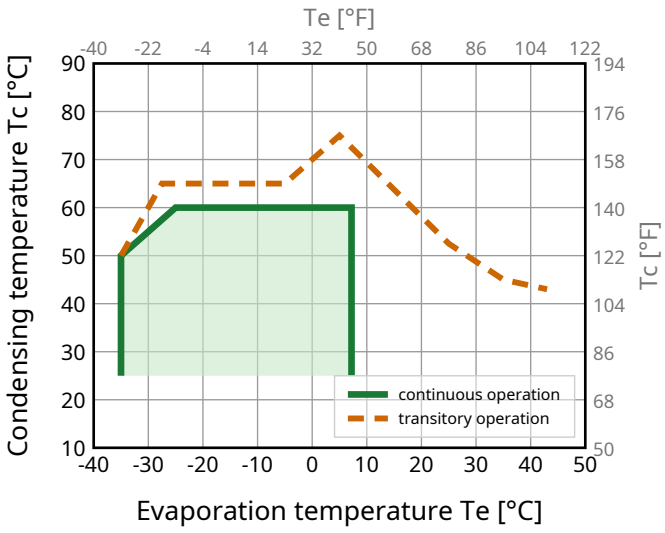
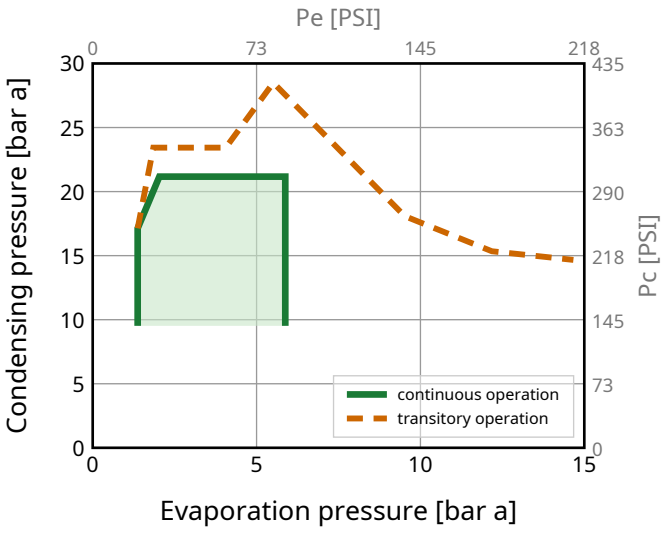
Components
a4 DAS1 (PTC,6.3mm, T0377/L6 - S1) 103N0250
e run capacitor (5µF, 6,3mm) 117-7155
e1 retaining clamp 103N0535
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

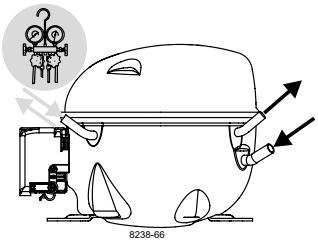
R290, 230 V/60 Hz, RSCR, fan 3m/s

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



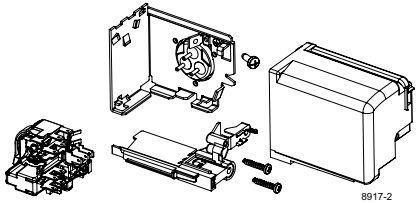
KL Compressors

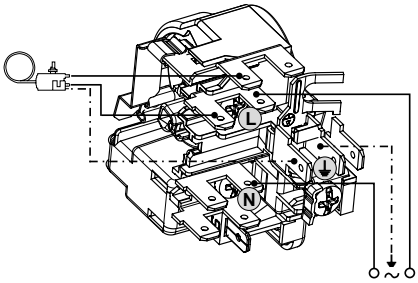
SECOP

Keep electrical equipment clear from oil, chemicals, and water

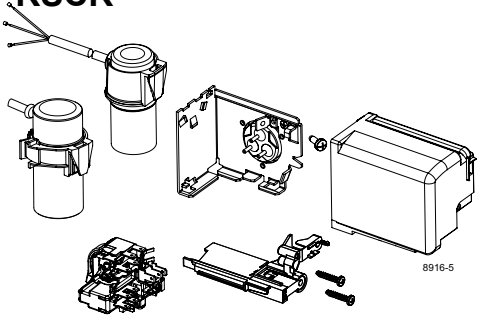
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

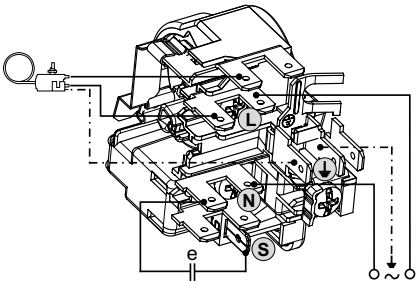
RSIR



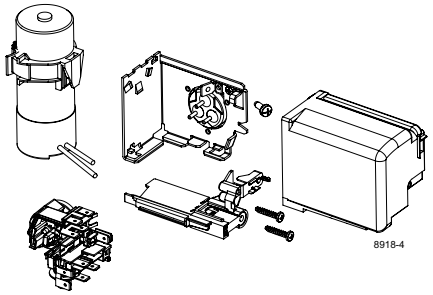


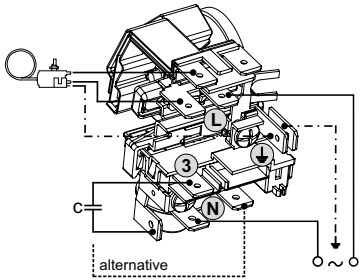
RSCR

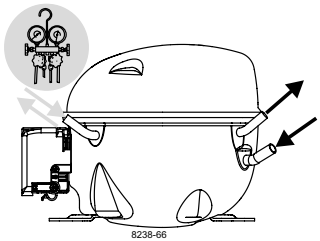




CSIR







KL Compressors

SECOP

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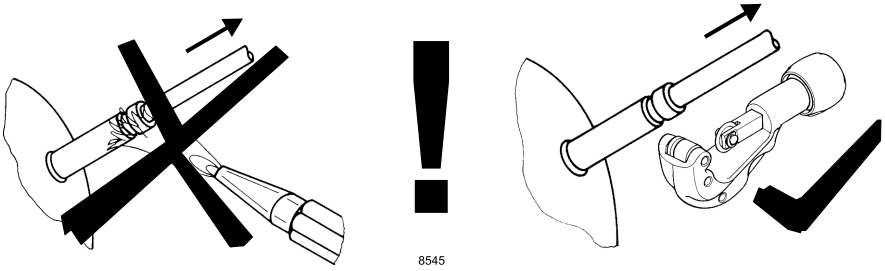
Service/Repair – R290, R600a, R170, R1270, R1234yf

(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**