Model
KLF4.8CNT

Sales code:
106H2502

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**200g / 7.05oz**
Weight	**9.20 kg / 20.28lbs**
Displacement	**4.80 cm3 / 0.29cu.in**
Compressors on pallet	**100**

General – Configurations With KLF4.8CNT

–	**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	–	–

Application Notes

- Provision for PE Grounding is located at the PE Stamp on the compressor

Model
KLF4.8CNT

Sales code:
106H2502

Compressor Design

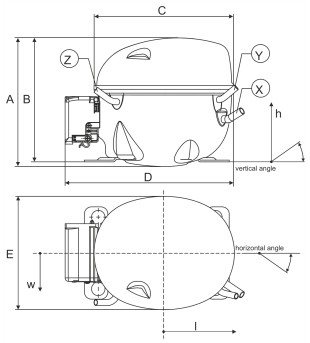
Oil type	**POE**	Winding resistance main	**10.7 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**17 Ohm**
Oil quantity	**170 / 5.75fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,615 cm3 / 54.61fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

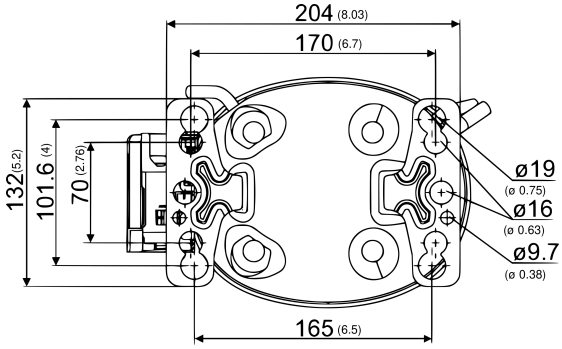
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



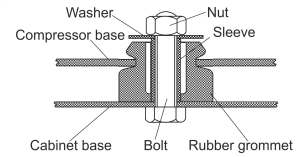
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

Mounting Accessories

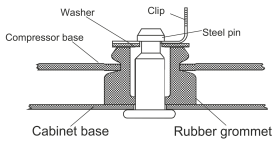


Dimensions in mm [in]

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
KLF4.8CNT Configuration 1

Sales code:
106H2502

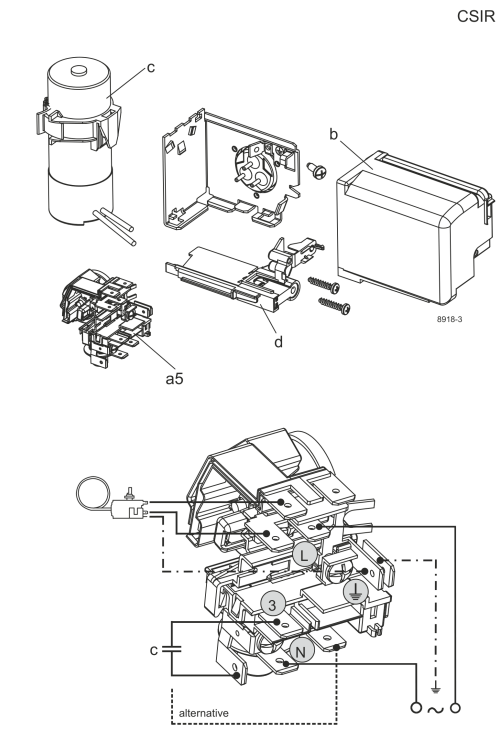
Configuration

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))	**11.3 A**
RLA (rated load amps / 1s/ U(N))	**1.7 A**
Cut in current (U(N))	**10.7 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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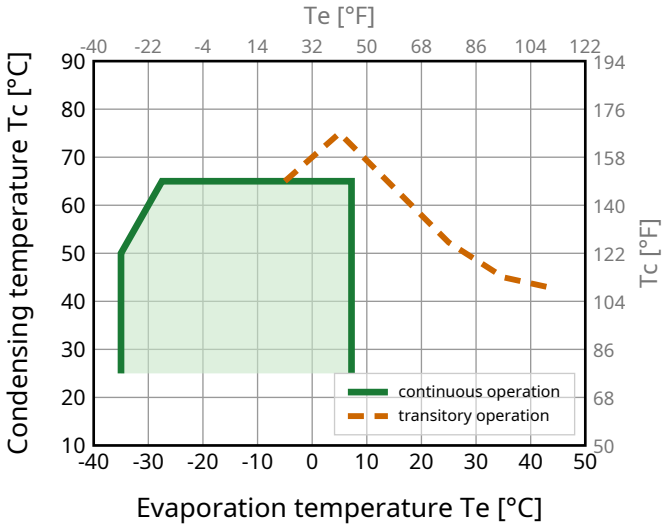
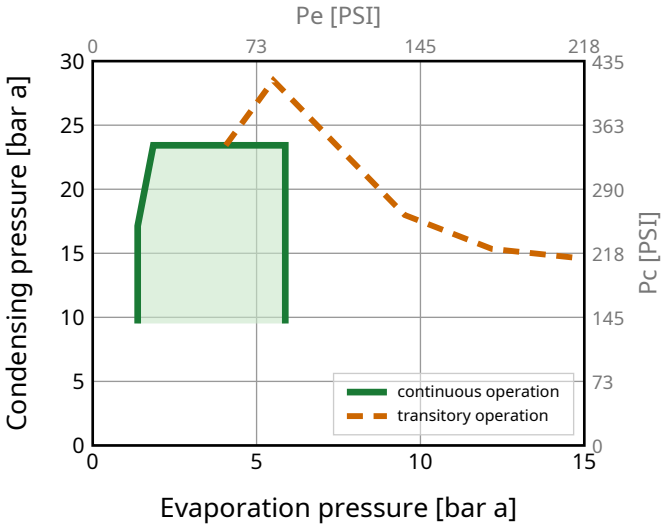
Components
a5 current relay (T0089/L6-S2) 117U7070
c start capacitor (80µF, 6.3mm) 117U5003
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLF4.8CNT Configuration 1

Sales code:
106H2502

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	**230**	784	198	**1.49**	5.07	155	1.38	2.34	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**170**	581	146	**1.13**	3.87	150	1.37	2.13	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**132**	450	114	**1.08**	3.69	122	1.33	1.51	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**420**	1434	361	**2.07**	7.07	203	1.49	4.81	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**332**	1134	286	**1.71**	5.82	195	1.47	4.23	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**385**	1314	331	**2.14**	7.30	180	1.43	4.74	**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	**121**	414	104	**0.99**	3.37	123	1.33	1.36
-30	-22	**164**	559	141	**1.22**	4.16	134	1.34	1.85
-20	-4	**266**	907	229	**1.69**	5.75	158	1.38	3.02
-10	14	**400**	1366	344	**2.22**	7.59	180	1.43	4.60
0	32	**580**	1978	499	**2.90**	9.88	200	1.48	6.74
7.2	45	**743**	2536	639	**3.50**	11.95	212	1.51	8.74

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

-35	-31	**90**	308	78	**0.74**	2.53	122	1.32	1.12
-30	-22	**128**	438	110	**0.95**	3.23	136	1.34	1.60
-20	-4	**217**	741	187	**1.31**	4.49	165	1.40	2.73
-10	14	**332**	1134	286	**1.71**	5.82	195	1.47	4.23
0	32	**486**	1658	418	**2.18**	7.44	223	1.54	6.26
7.2	45	**627**	2139	539	**2.60**	8.86	241	1.60	8.19

Model Sales code:

KLF4.8CNT Configuration 2 **106H2502**

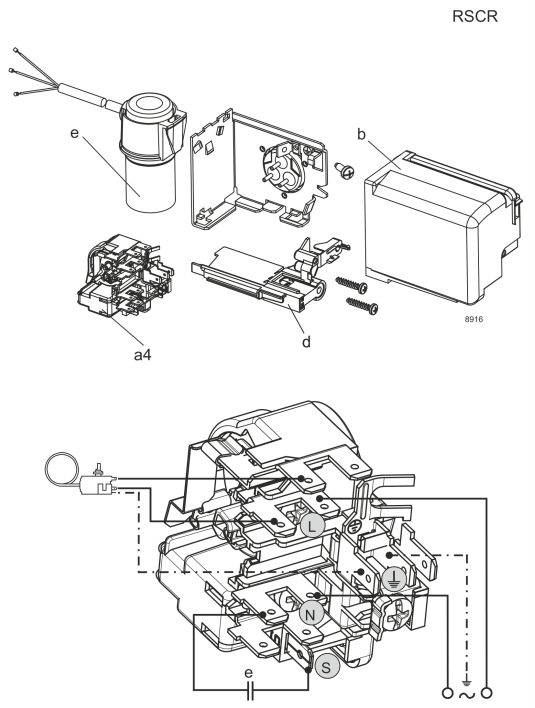
Configuration

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))	**11.3 A**
RLA (rated load amps / 1s/ U(N))	**1.7 A**
Cut in current (U(N))	**10.7 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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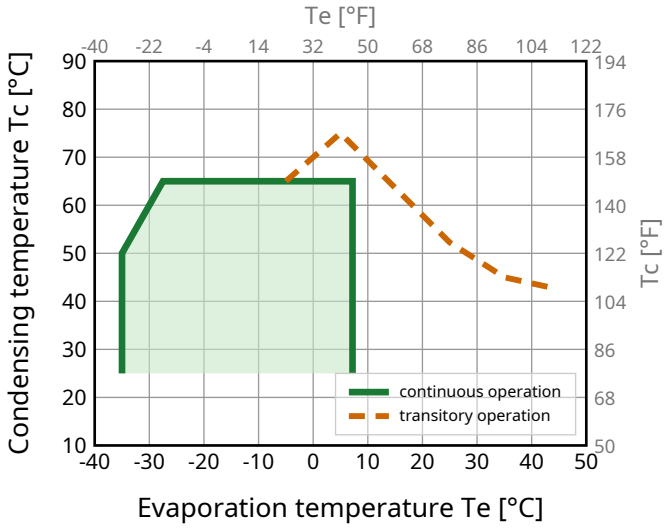
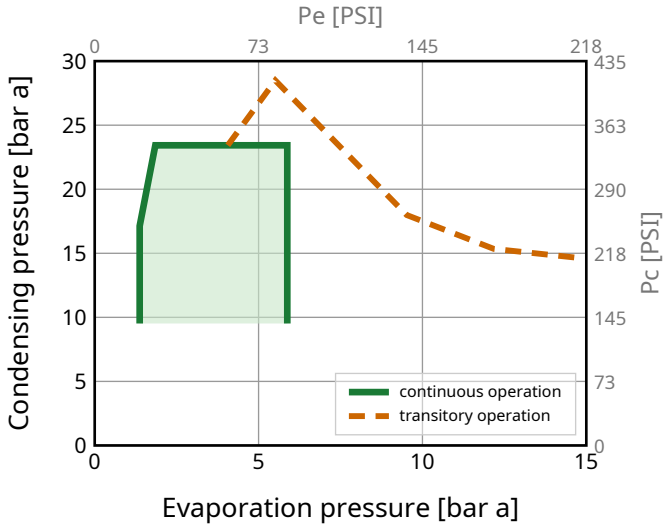
Components
a4 DAS2 (PTC,6.3mm, T0089/L6 - S2) 103N0251
e run capacitor (5µF, 6,3mm) 117-7155
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLF4.8CNT Configuration 2

Sales code:

106H2502

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	**234**	799	201	**1.55**	5.28	151	1.11	2.38	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**174**	592	149	**1.18**	4.02	147	1.09	2.18	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**131**	447	113	**1.10**	3.77	119	1.02	1.50	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**421**	1435	362	**2.17**	7.42	194	1.22	4.82	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**334**	1140	287	**1.79**	6.10	187	1.20	4.25	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**382**	1304	329	**2.23**	7.61	171	1.16	4.70	**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	**121**	413	104	**1.01**	3.45	120	1.02	1.36
-30	-22	**163**	558	141	**1.25**	4.28	130	1.05	1.85
-20	-4	**264**	902	227	**1.74**	5.95	152	1.11	3.01
-10	14	**397**	1355	342	**2.32**	7.91	171	1.16	4.56
0	32	**574**	1960	494	**3.05**	10.39	189	1.20	6.68
7.2	45	**737**	2513	633	**3.70**	12.62	199	1.23	8.67

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

-35	-31	**91**	312	79	**0.76**	2.61	120	1.01	1.14
-30	-22	**131**	447	113	**0.98**	3.35	134	1.05	1.64
-20	-4	**221**	753	190	**1.37**	4.68	161	1.13	2.78
-10	14	**334**	1140	287	**1.79**	6.10	187	1.20	4.25
0	32	**484**	1651	416	**2.30**	7.84	210	1.27	6.24
7.2	45	**621**	2120	534	**2.75**	9.39	226	1.32	8.12

Model
KLF4.8CNT Configuration 3

Sales code:
106H2502

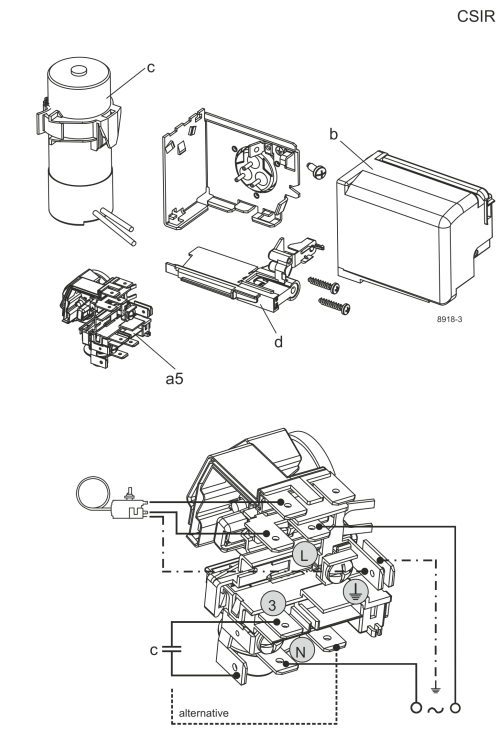
Configuration

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))	**11.3 A**
RLA (rated load amps / 1s/ U(N))	**1.7 A**
Cut in current (U(N))	**10.7 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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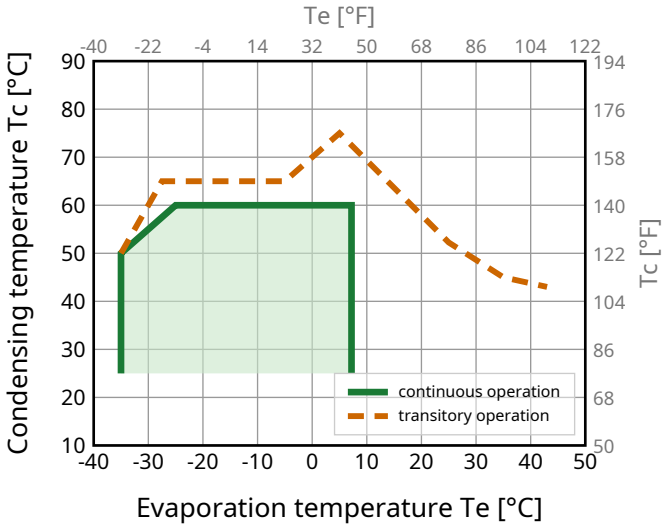
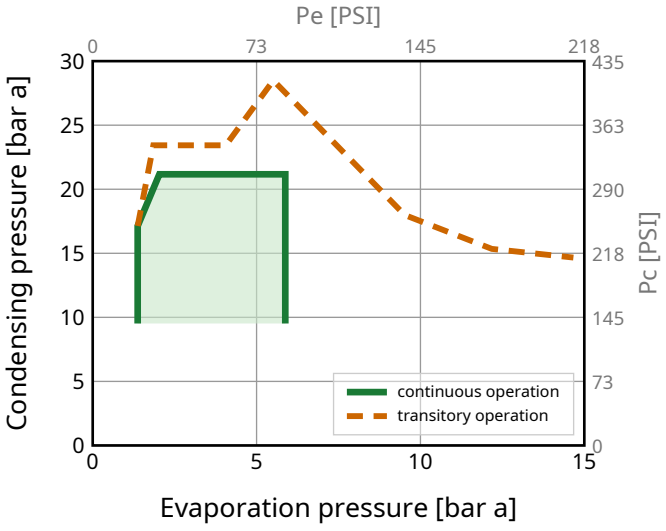
Components
a5 current relay (T0089/L6-S2) 117U7070
c start capacitor (80µF, 6.3mm) 117U5003
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLF4.8CNT Configuration 3

Sales code:
106H2502

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	**286**	977	246	**1.58**	5.40	181	1.26	2.91	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**213**	727	183	**1.23**	4.18	174	1.24	2.67	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**161**	548	138	**1.19**	4.07	135	1.15	1.84	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**520**	1774	447	**2.09**	7.13	249	1.47	5.95	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**411**	1402	353	**1.73**	5.92	237	1.43	5.23	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**463**	1581	399	**2.09**	7.12	222	1.38	5.70	**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	**153**	521	131	**1.13**	3.84	136	1.15	1.72
-30	-22	**198**	676	170	**1.29**	4.42	153	1.19	2.24
-20	-4	**318**	1086	274	**1.69**	5.75	189	1.28	3.62
-10	14	**482**	1644	414	**2.17**	7.41	222	1.38	5.53
0	32	**694**	2366	596	**2.80**	9.56	247	1.46	8.06
7.2	45	**879**	2999	756	**3.40**	11.60	259	1.50	10.34

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

-35	-31	**130**	444	112	**0.98**	3.35	132	1.14	1.62
-30	-22	**167**	570	144	**1.09**	3.74	153	1.19	2.09
-20	-4	**268**	916	231	**1.38**	4.69	195	1.30	3.38
-10	14	**411**	1402	353	**1.73**	5.92	237	1.43	5.23
0	32	**600**	2047	516	**2.19**	7.49	273	1.55	7.73
7.2	45	**767**	2618	660	**2.62**	8.92	293	1.62	10.02

Model
KLF4.8CNT Configuration 4

Sales code:
106H2502

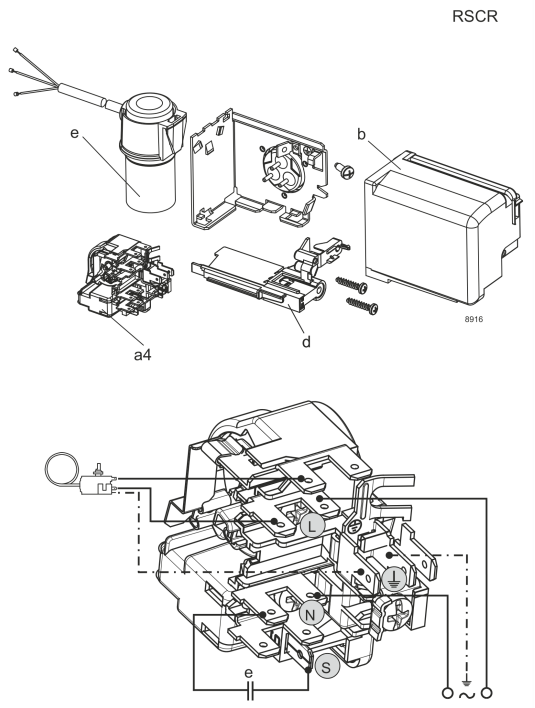
Configuration

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))	**11.3 A**
RLA (rated load amps / 1s/ U(N))	**1.7 A**
Cut in current (U(N))	**10.7 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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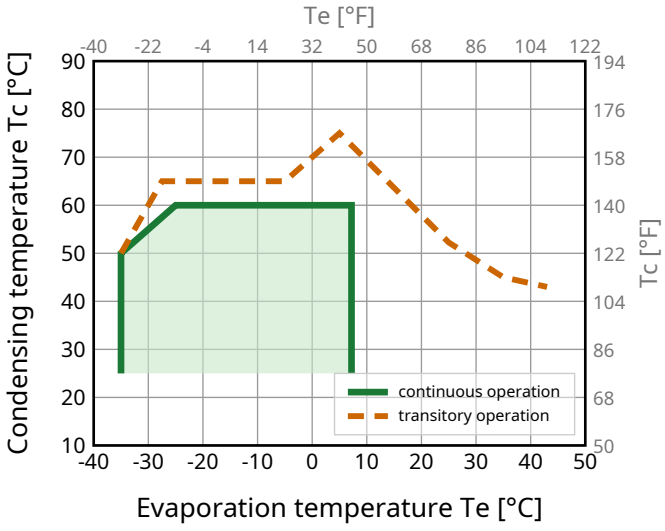
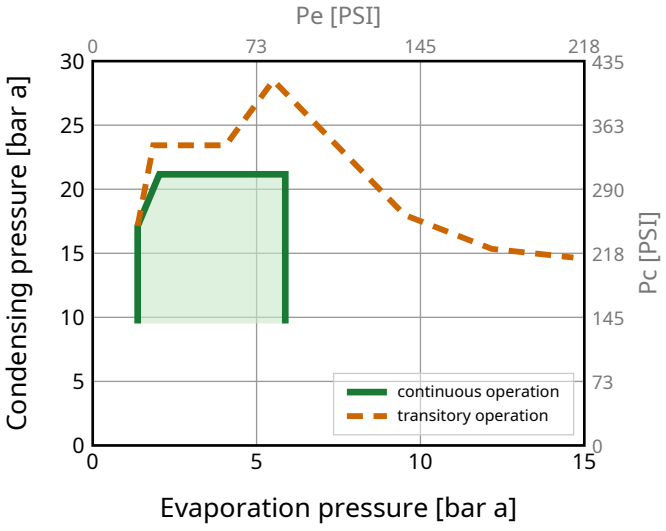
Components
a4 DAS2 (PTC,6.3mm, T0089/L6 - S2) 103N0251
e run capacitor (5µF, 6,3mm) 117-7155
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLF4.8CNT Configuration 4

Sales code:

106H2502

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	**281**	958	241	**1.65**	5.63	170	0.91	2.85	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**210**	715	180	**1.28**	4.36	164	0.89	2.63	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**168**	572	144	**1.24**	4.22	135	0.78	1.92	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**510**	1741	439	**2.21**	7.54	231	1.16	5.84	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**402**	1373	346	**1.83**	6.24	220	1.12	5.12	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**465**	1586	400	**2.18**	7.45	213	1.09	5.72	**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	**157**	535	135	**1.17**	4.00	134	0.77	1.77
-30	-22	**203**	691	174	**1.34**	4.59	151	0.83	2.29
-20	-4	**321**	1096	276	**1.75**	5.98	184	0.96	3.66
-10	14	**483**	1649	416	**2.27**	7.75	213	1.09	5.55
0	32	**697**	2379	600	**2.93**	10.01	238	1.19	8.11
7.2	45	**888**	3030	764	**3.53**	12.05	251	1.25	10.45

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

-35	-31	**131**	448	113	**1.03**	3.50	128	0.75	1.64
-30	-22	**166**	567	143	**1.14**	3.89	146	0.81	2.08
-20	-4	**263**	897	226	**1.44**	4.91	183	0.96	3.31
-10	14	**402**	1373	346	**1.83**	6.24	220	1.12	5.12
0	32	**594**	2025	510	**2.32**	7.92	256	1.27	7.66
7.2	45	**768**	2620	660	**2.75**	9.37	280	1.37	10.03