Single
Packs

Single Pack KLF4.8CNT 200-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4687**

Position	Title	Code	Amount
1	Compressor KLF4.8CNT	106H2502	1
2	Starting relay (QLZ-4.4A, overload protector T0089/L6)	117U7070	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

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • **www.secop.com**

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved.

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

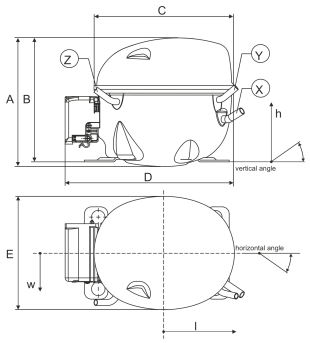
Oil type	**POE**	Winding resistance main	**10.7 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**17 Ohm**
Oil quantity	**170 / 5.75fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,615 cm3 / 54.61fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

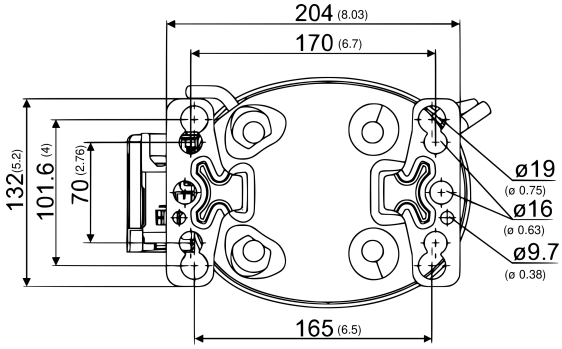
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



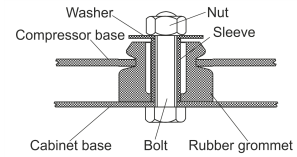
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

Mounting Accessories

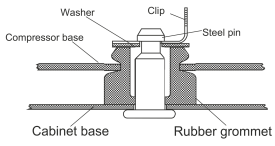


Dimensions in mm [in]

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

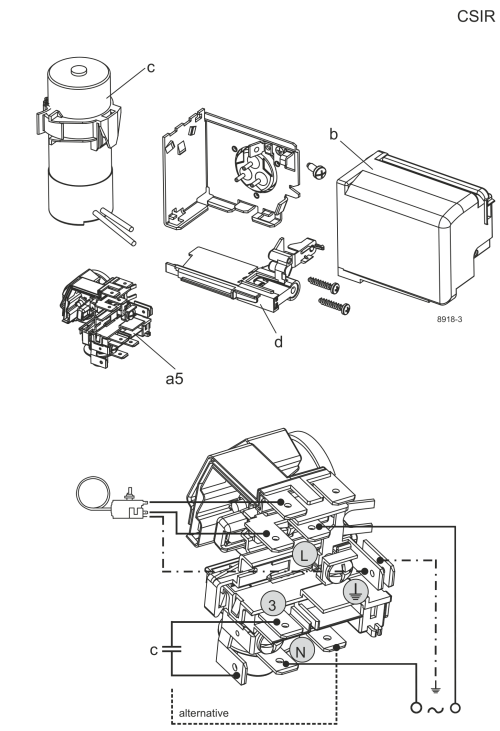
Configuration

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

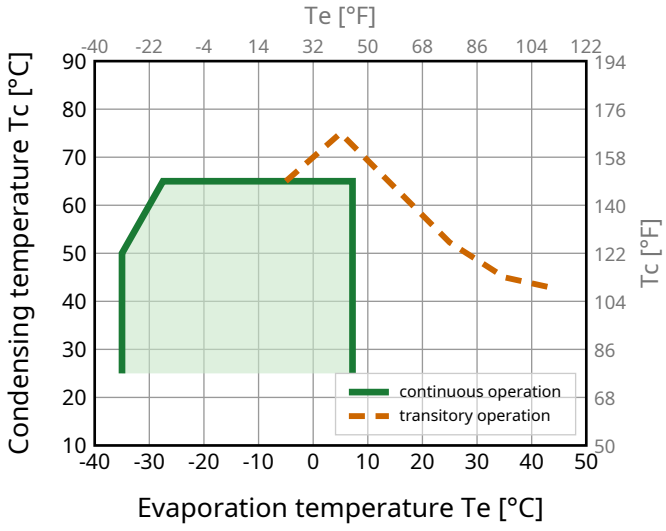


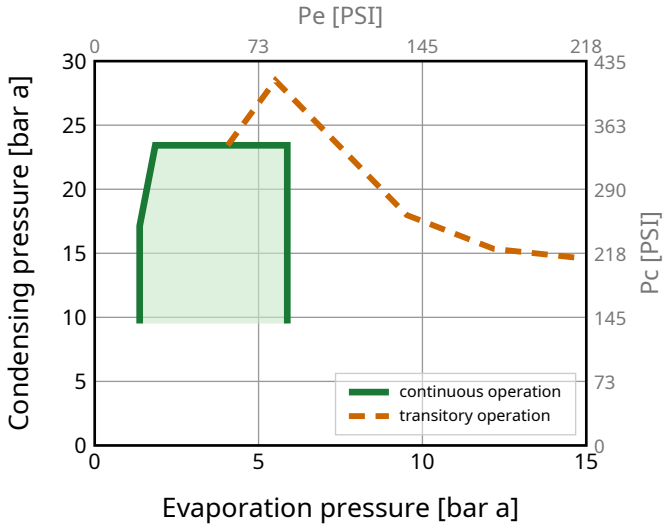
View full size

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
KLF4.8CNT Configuration 2

Sales code:
106H2502

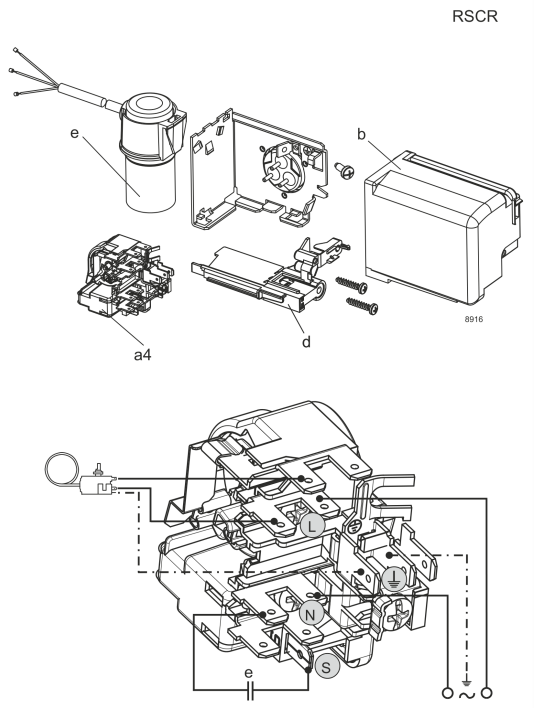
Configuration

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

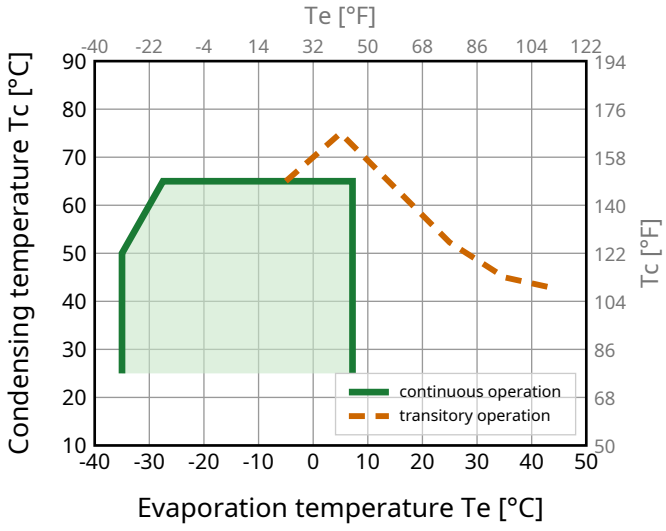


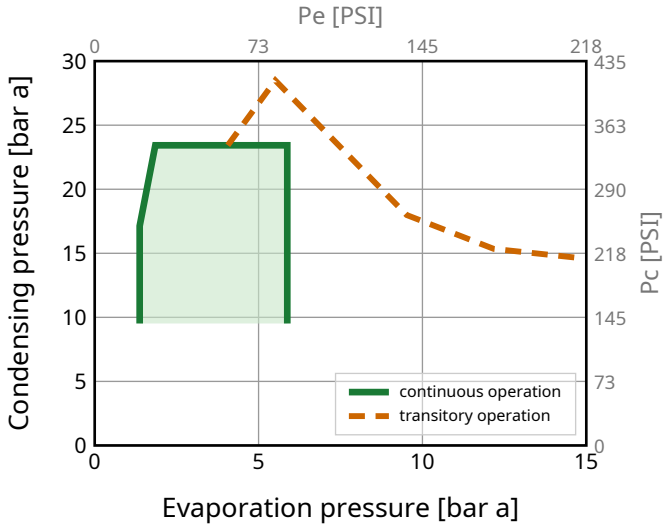
View full size

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

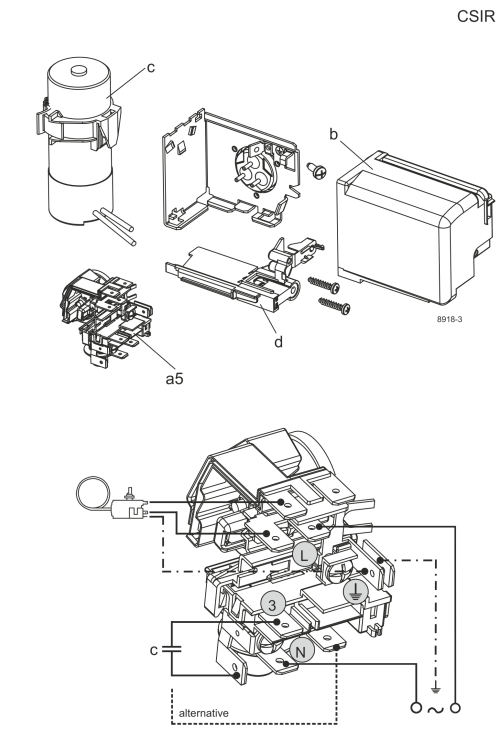
Configuration

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

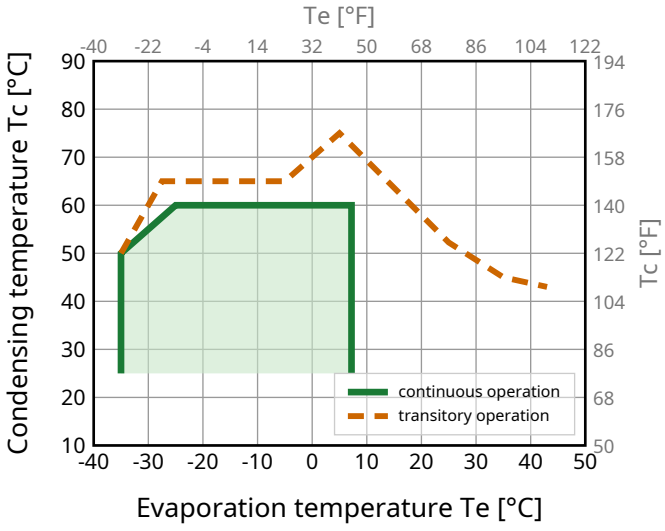


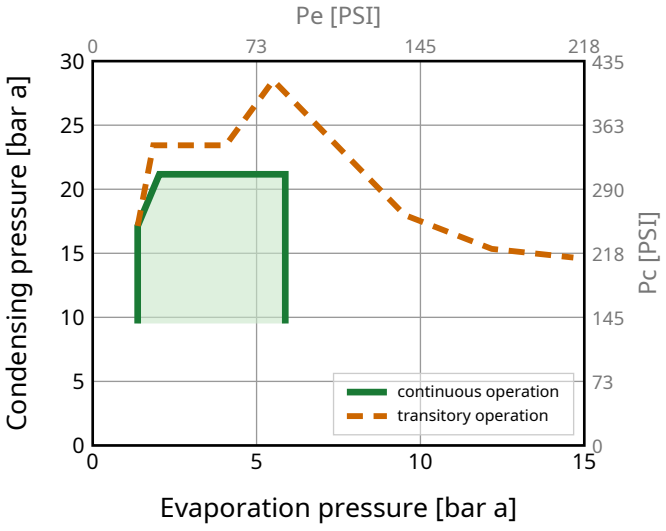
View full size

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

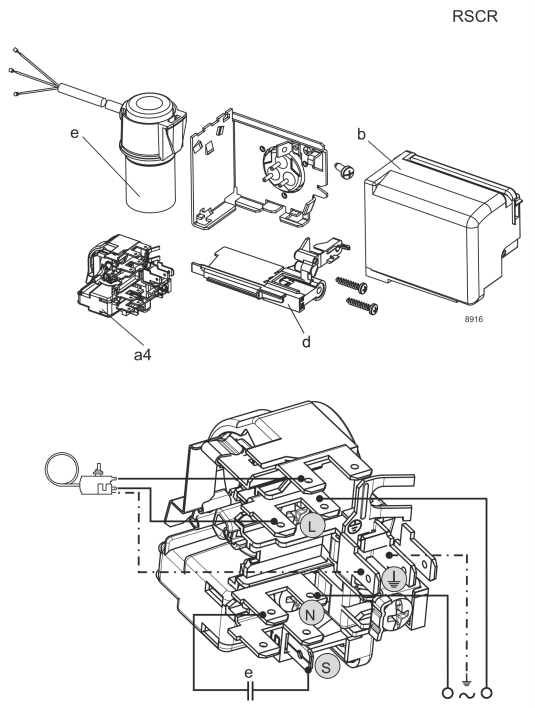
Configuration

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

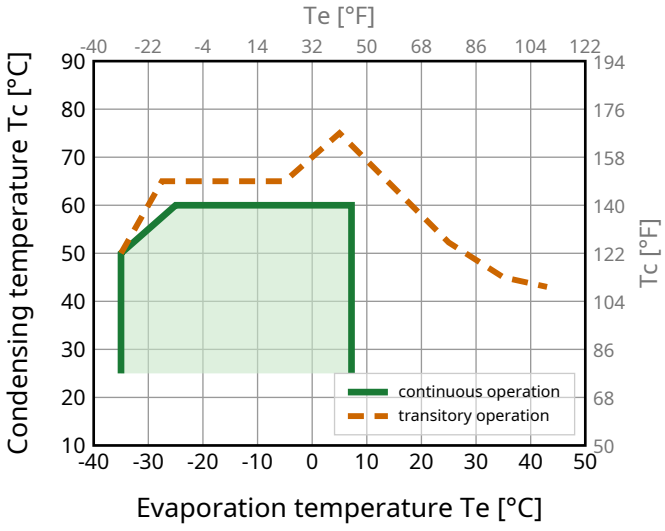


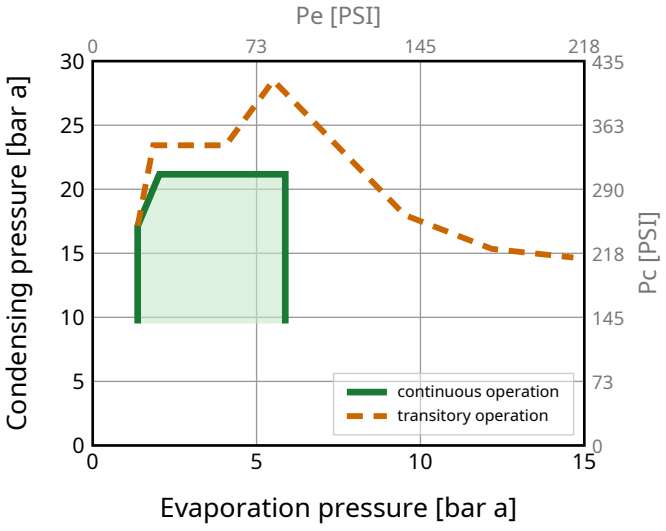
View full size

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

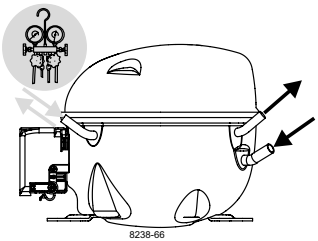
R290, 230 V/60 Hz, RSCR, fan 3m/s

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



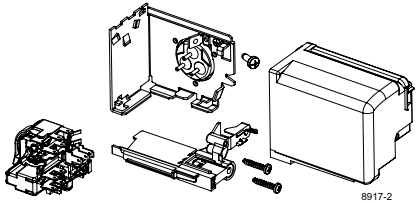
KL Compressors

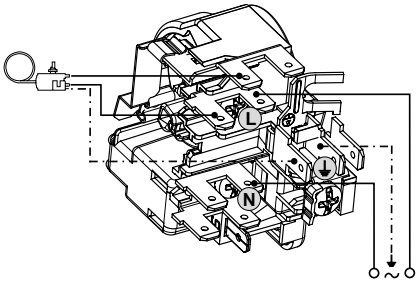
SECOP

Keep electrical equipment clear from oil, chemicals, and water

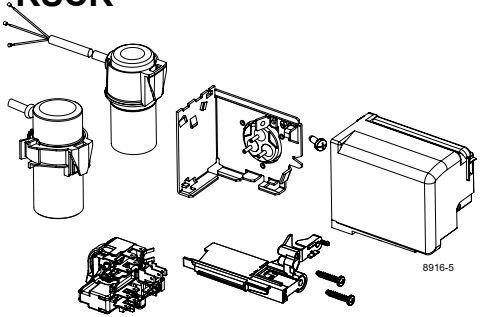
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

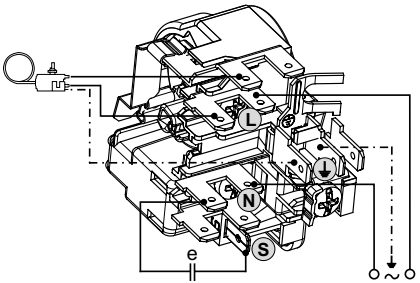
RSIR



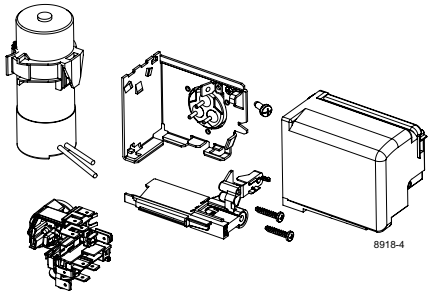


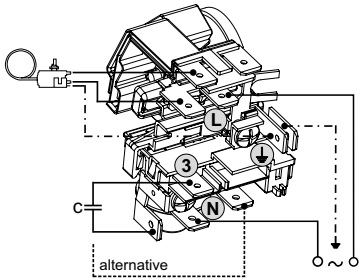
RSCR

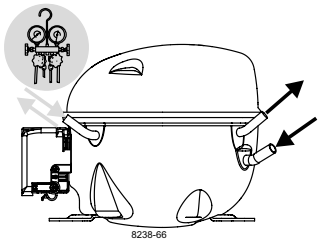




CSIR







KL Compressors

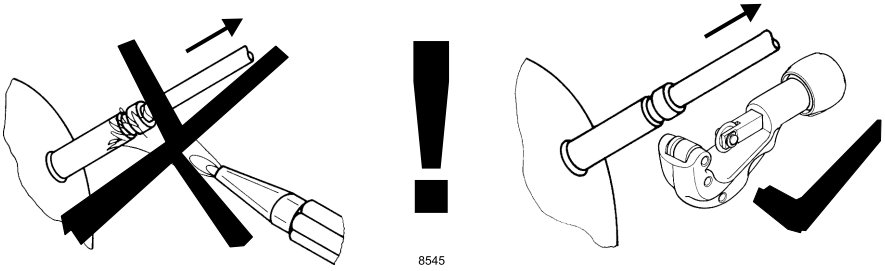
SECOP

Keep electrical equipment clear from oil, chemicals, and water

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

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**