Model
KLF4.0CNT

Sales code:
106H2409

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**200g / 7.05oz**
Weight	**8.90 kg / 19.62lbs**
Displacement	**4.00 cm3 / 0.24cu.in**
Compressors on pallet	**100**

General – Configurations With KLF4.0CNT

–	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	195-253 V	187-253 V
Approvals	UL, VDE	UL, VDE	UL, VDE	UL, VDE
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

- Compressor with low height version.
- Provision for PE Grounding is located at the PE Stamp on the compressor

Model
KLF4.0CNT

Sales code:
106H2409

Compressor Design

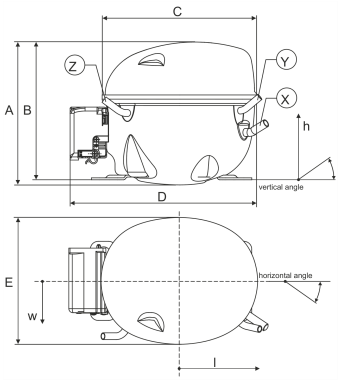
Oil type	**POE**	Winding resistance main	**13.1 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**25.3 Ohm**
Oil quantity	**170 / 5.75fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,630 cm3 / 55.12fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

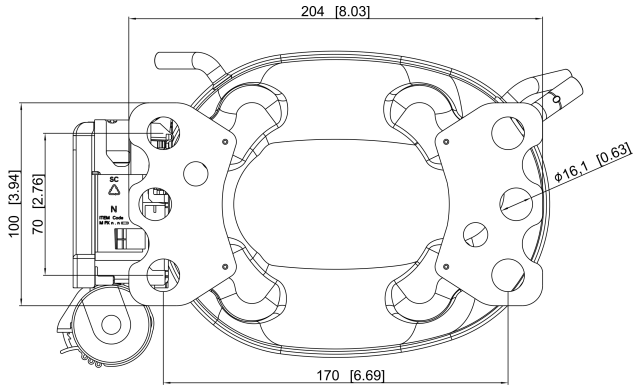
A Height	**174mm / 6.85in**
B Height	**167mm / 6.57in**
C Length shell	**194mm / 7.64in**
D Length w. cover	**235.1mm / 9.26in**
E Width	**151mm / 5.94in**

Find 3D Model here



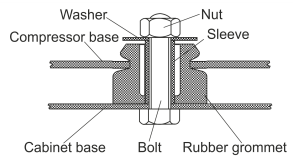
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	114/107/63 / 4.49/4.21/2.48in	-87/101/71 / -3.43/3.98/2.80in
Straight tube l. [mm]	13.5 / 0.53in	13.5 / 0.53in	13.5 / 0.53in

Mounting Accessories

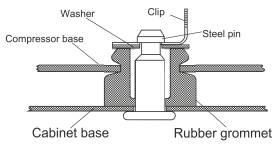


Dimensions in mm [in]

Bolt joint



Snap-on



	one comp.	multi pack
Bolt joint | M6 | ø16mm	118-1917	118-1918
Bolt joint | ø1/4" | ø16mm	118-1946	–
Snap-on | ø7,3 | ø16mm	118-1947	118-1919

Model
KLF4.0CNT Configuration 1

Sales code:
106H2409

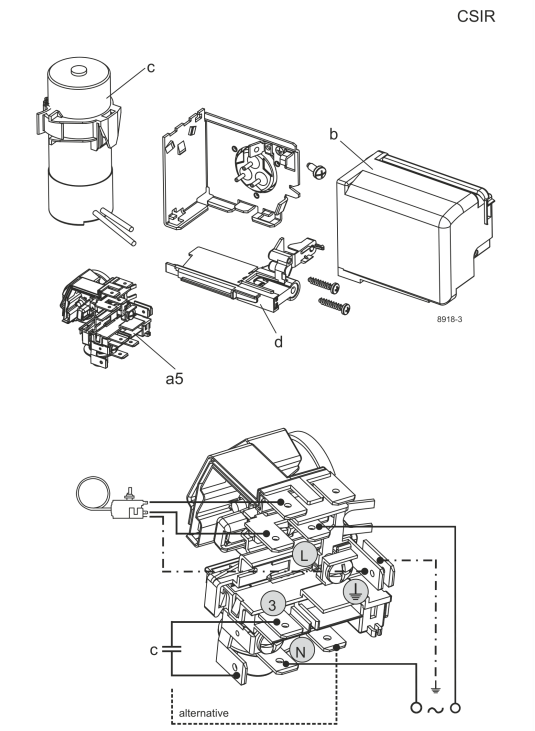
Configuration

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, VDE**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**10.2 A**
RLA (rated load amps / 1s/ U(N))	**1.4 A**
Cut in current (U(N))	**12.65 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

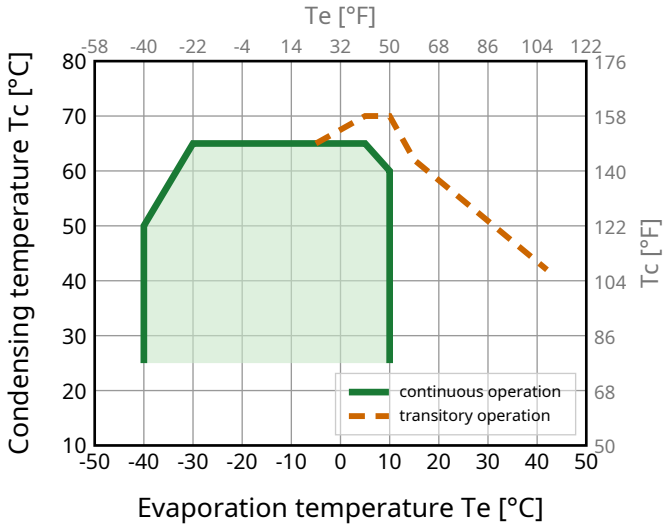


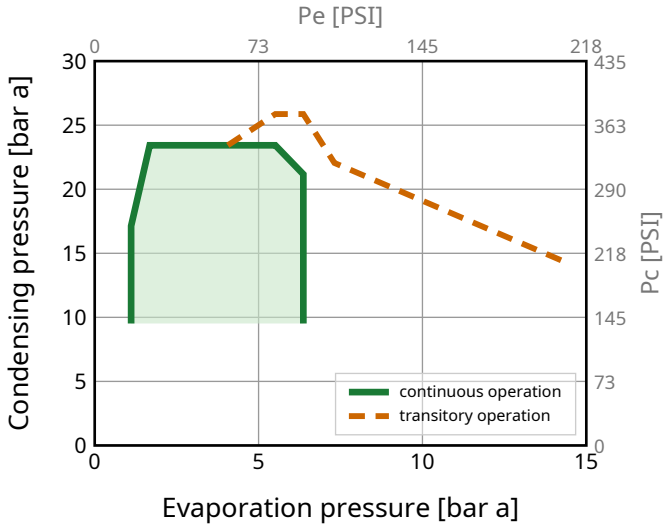
View full size

Components
a5 current relay (T1252/L6) 117U7085
c start capacitor (80µF, 6.3mm) 117U5001
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
KLF4.0CNT Configuration 1

Sales code:
106H2409

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	**190**	648	163	**1.55**	5.28	123	0.95	1.93	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**140**	476	120	**1.18**	4.02	118	0.95	1.75	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**102**	349	88	**1.15**	3.92	89	1.01	1.17	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**357**	1217	307	**2.12**	7.25	168	1.02	4.08	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**282**	961	242	**1.76**	6.01	160	1.00	3.58	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**314**	1070	270	**2.14**	7.32	146	0.98	3.86	**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]
-40	-40	**66**	224	56	**0.80**	2.74	82	1.05	0.74
-30	-22	**128**	437	110	**1.26**	4.31	102	0.97	1.45
-20	-4	**213**	727	183	**1.72**	5.85	124	0.95	2.42
-10	14	**326**	1113	281	**2.23**	7.61	146	0.98	3.75
0	32	**473**	1614	407	**2.88**	9.84	164	1.01	5.50
10	50	**659**	2249	567	**3.80**	12.96	174	1.04	7.79

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

-40	-40	**46**	157	40	**0.54**	1.84	85	1.04	0.57
-30	-22	**104**	355	89	**0.98**	3.35	106	0.96	1.30
-20	-4	**181**	616	155	**1.37**	4.67	132	0.96	2.27
-10	14	**282**	961	242	**1.76**	6.01	160	1.00	3.58
0	32	**413**	1409	355	**2.22**	7.58	186	1.07	5.33
10	50	**580**	1979	499	**2.82**	9.62	206	1.13	7.62

Model
KLF4.0CNT Configuration 2

Sales code:
106H2409

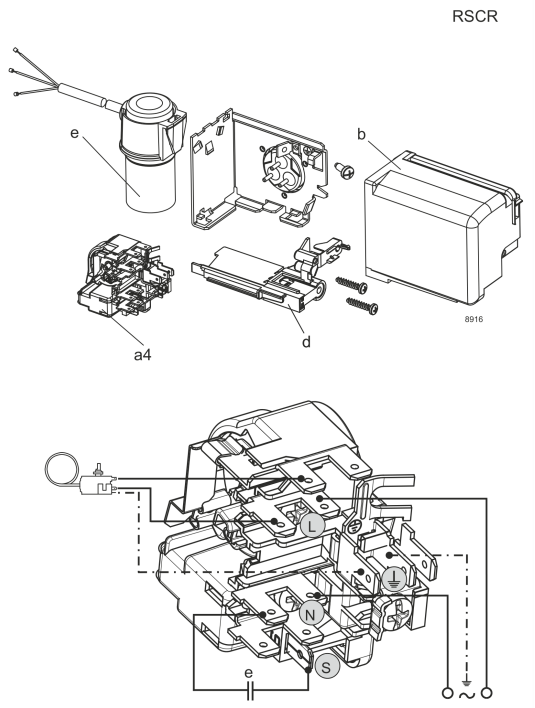
Configuration

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, VDE**
Starting device type	**PTC**
Run capacitor	**5 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**10.2 A**
RLA (rated load amps / 1s/ U(N))	**1.4 A**
Cut in current (U(N))	**12.65 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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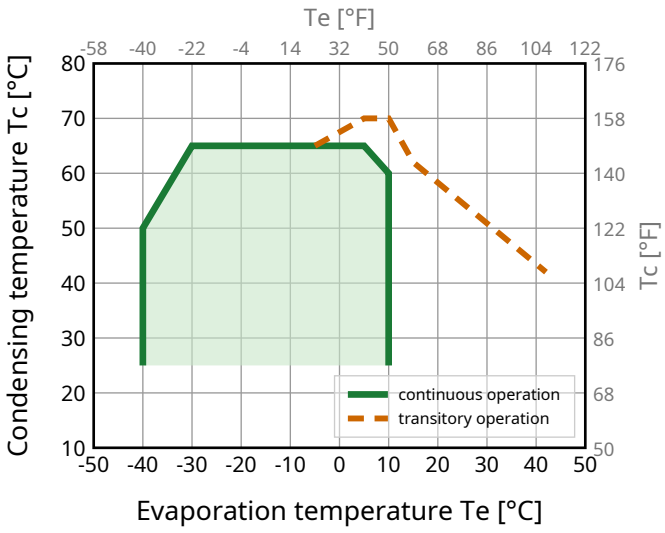
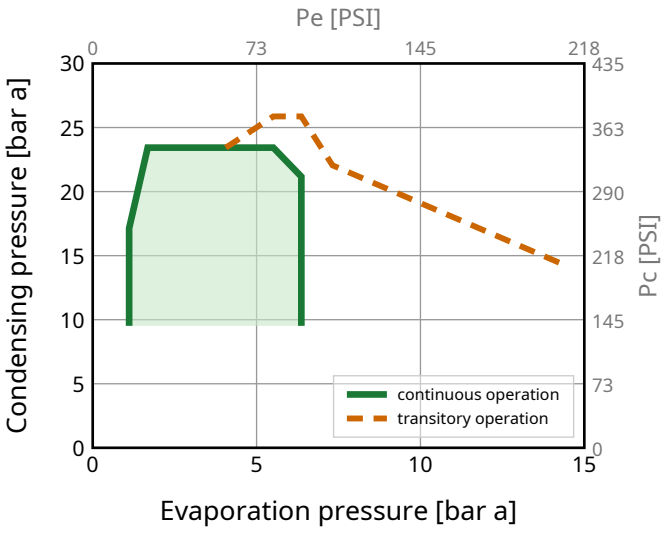
Components
a4 DAS12 (PTC,4.8mm, T1252/L6 - S12) 103N0259
e run capacitor (5µF, 6,3mm) 117-7155
e1 retaining clamp 103N0535
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLF4.0CNT Configuration 2

Sales code:
106H2409

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	**190**	649	163	**1.60**	5.48	118	0.73	1.93	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**140**	477	120	**1.22**	4.16	115	0.72	1.75	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**102**	349	88	**1.18**	4.01	87	0.62	1.17	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**358**	1221	308	**2.23**	7.60	161	0.89	4.10	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**282**	964	243	**1.84**	6.30	153	0.86	3.59	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**314**	1073	270	**2.24**	7.64	140	0.81	3.87	**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]
-40	-40	**66**	224	57	**0.82**	2.79	80	0.60	0.74
-30	-22	**128**	438	110	**1.30**	4.44	99	0.67	1.45
-20	-4	**214**	728	184	**1.78**	6.07	120	0.74	2.43
-10	14	**327**	1115	281	**2.33**	7.94	140	0.81	3.75
0	32	**474**	1618	408	**3.02**	10.31	157	0.87	5.51
10	50	**661**	2255	568	**3.99**	13.61	166	0.91	7.82

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

-40	-40	**46**	157	40	**0.55**	1.88	84	0.62	0.57
-30	-22	**104**	355	90	**1.01**	3.45	103	0.68	1.30
-20	-4	**181**	618	156	**1.42**	4.86	127	0.76	2.28
-10	14	**282**	964	243	**1.84**	6.30	153	0.86	3.59
0	32	**414**	1413	356	**2.34**	7.98	177	0.95	5.34
10	50	**582**	1985	500	**2.97**	10.15	196	1.02	7.65

Model
KLF4.0CNT Configuration 3

Sales code:
106H2409

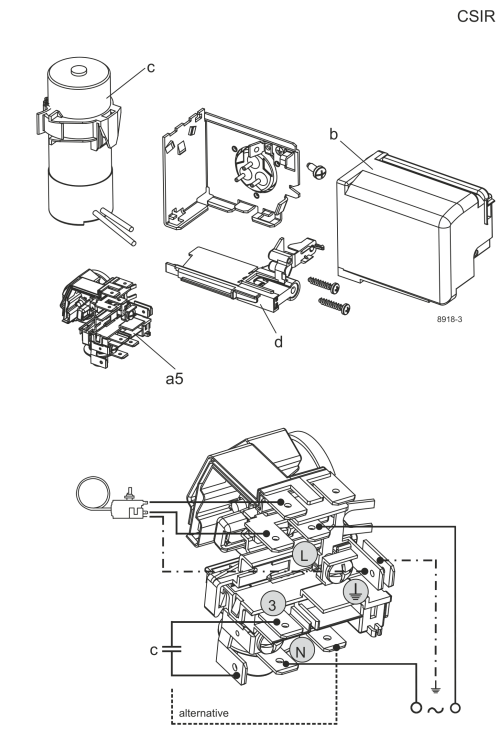
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**195-253 V**
Starting torque	**HST**
Approvals	**UL, VDE**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**10.2 A**
RLA (rated load amps / 1s/ U(N))	**1.4 A**
Cut in current (U(N))	**12.65 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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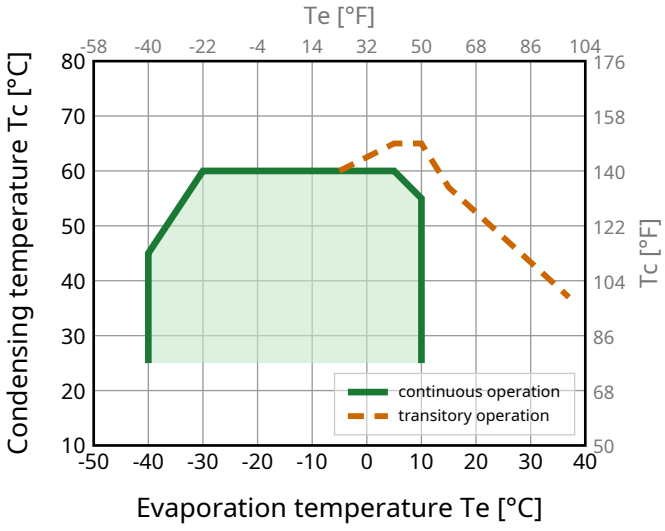
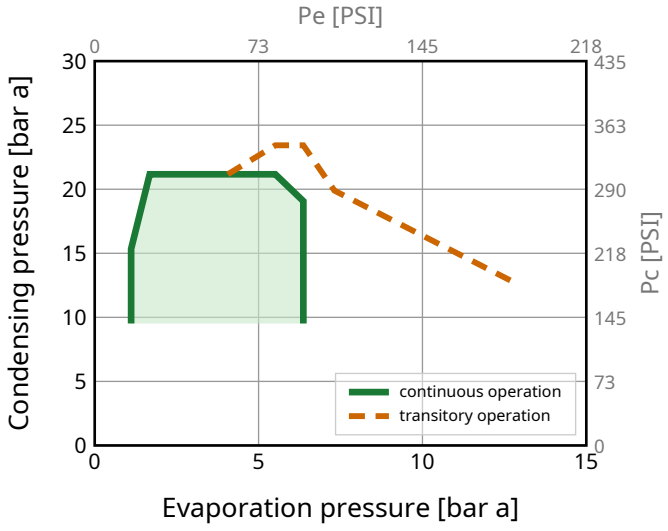
Components
a5 current relay (T1252/L6) 117U7085
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model

KLF4.0CNT Configuration 3

Sales code:

106H2409

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	**237**	808	204	**1.64**	5.58	145	0.98	2.40	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**176**	599	151	**1.25**	4.27	140	0.97	2.20	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**130**	444	112	**1.27**	4.34	102	0.94	1.49	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**425**	1451	366	**2.18**	7.43	195	1.12	4.87	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**338**	1154	291	**1.81**	6.18	186	1.09	4.30	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**373**	1271	320	**2.22**	7.58	168	1.03	4.59	**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]
-40	-40	**89**	302	76	**0.92**	3.15	96	0.95	1.00
-30	-22	**161**	550	139	**1.37**	4.66	118	0.94	1.82
-20	-4	**258**	881	222	**1.80**	6.15	143	0.98	2.94
-10	14	**387**	1322	333	**2.31**	7.88	168	1.03	4.45
0	32	**555**	1895	478	**2.97**	10.12	187	1.09	6.46
10	50	**769**	2624	661	**3.90**	13.32	197	1.13	9.10

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

-40	-40	**66**	227	57	**0.64**	2.19	104	0.95	0.83
-30	-22	**135**	459	116	**1.06**	3.63	126	0.95	1.68
-20	-4	**223**	760	192	**1.43**	4.89	155	1.00	2.80
-10	14	**338**	1154	291	**1.81**	6.18	186	1.09	4.30
0	32	**488**	1664	419	**2.26**	7.72	215	1.19	6.29
10	50	**678**	2315	584	**2.85**	9.73	238	1.27	8.92

Model
KLF4.0CNT Configuration 4

Sales code:
106H2409

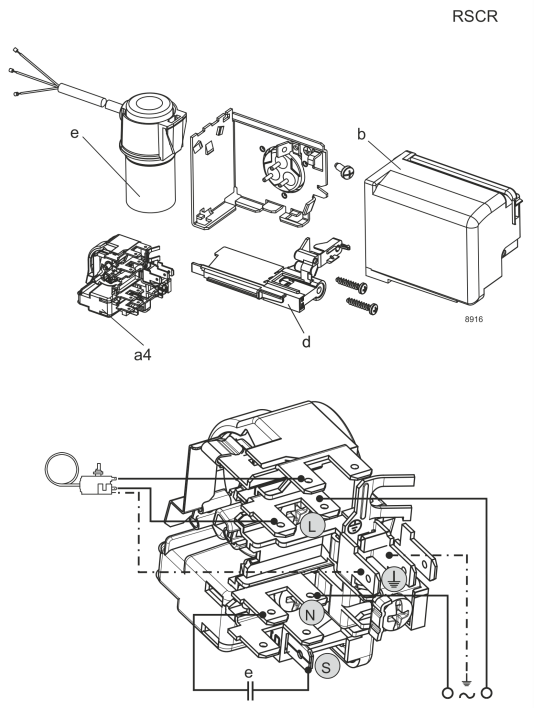
Configuration

Motor configuration	**RSCR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**187-253 V**
Starting torque	**LST**
Approvals	**UL, VDE**
Starting device type	**PTC**
Run capacitor	**5 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**10.2 A**
RLA (rated load amps / 1s/ U(N))	**1.4 A**
Cut in current (U(N))	**12.65 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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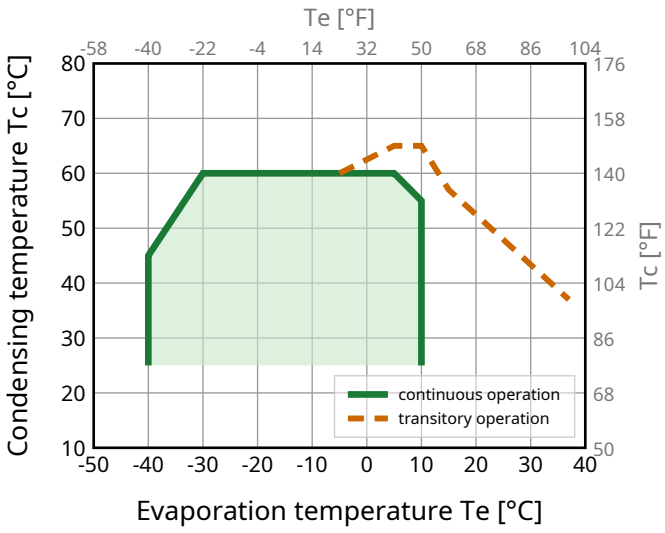
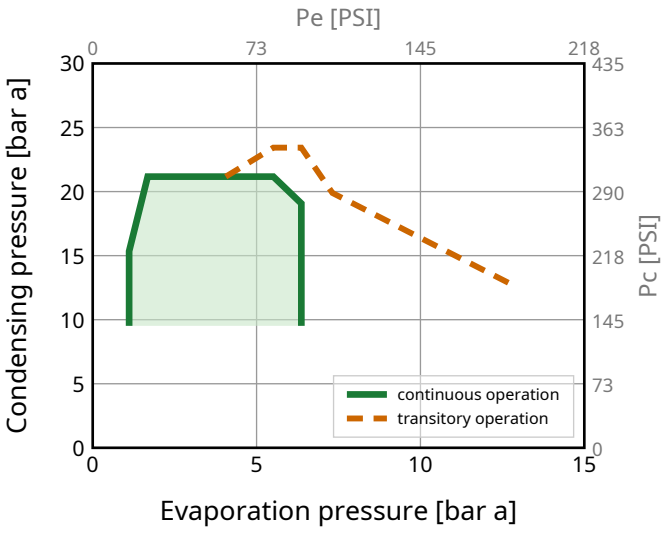
Components
a4 DAS12 (PTC,4.8mm, T1252/L6 - S12) 103N0259
e run capacitor (5µF, 6,3mm) 117-7155
e1 retaining clamp 103N0535
b, d cover + clamp + screws (5VA-compl.) 103N0600

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

Operation Pressure Range





Model
KLF4.0CNT Configuration 4

Sales code:
106H2409

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	**237**	809	204	**1.68**	5.74	141	0.83	2.41	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**176**	601	151	**1.28**	4.38	137	0.82	2.21	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**130**	444	112	**1.27**	4.34	102	0.69	1.49	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**426**	1455	367	**2.28**	7.79	187	1.01	4.88	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**339**	1157	292	**1.90**	6.47	179	0.98	4.31	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**374**	1274	321	**2.31**	7.87	162	0.91	4.60	**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]
-40	-40	**89**	303	76	**0.92**	3.13	97	0.67	1.00
-30	-22	**161**	550	139	**1.38**	4.72	117	0.74	1.82
-20	-4	**259**	883	223	**1.85**	6.33	140	0.83	2.94
-10	14	**388**	1325	334	**2.40**	8.19	162	0.91	4.46
0	32	**557**	1900	479	**3.10**	10.59	179	0.98	6.47
10	50	**771**	2632	663	**4.10**	13.99	188	1.02	9.12

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

-40	-40	**67**	228	57	**0.64**	2.19	104	0.70	0.83
-30	-22	**135**	460	116	**1.08**	3.70	124	0.77	1.68
-20	-4	**223**	762	192	**1.48**	5.06	151	0.87	2.81
-10	14	**339**	1157	292	**1.90**	6.47	179	0.98	4.31
0	32	**489**	1669	421	**2.39**	8.15	205	1.08	6.31
10	50	**681**	2324	586	**3.03**	10.33	225	1.17	8.95