

Model
KLF4.8CND

Sales code:
106H2500

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 KLF4.8CND

-	Conf. 1	Conf. 2
Motor configuration	CSIR	RSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1
Voltage range	198-254 V	198-254 V
Approvals	VDE, CCC	VDE, CCC
Starting torque	HST	LST
Refrigerant	R290	R290
Application	LBP+MBP	LBP+MBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

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

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Compressor Design

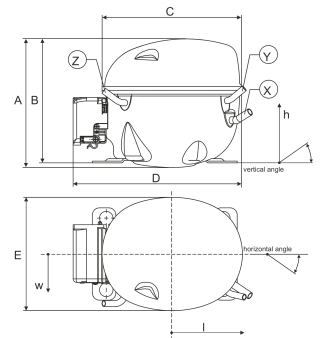
Oil type	POE	Winding resistance main	13.1 Ohm
Oil viscosity	9,7cSt	Winding resistance aux	25.3 Ohm
Oil quantity	165 / 5.58fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,615 cm ³ / 54.61fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	external		

Compressor Dimensions

Housing

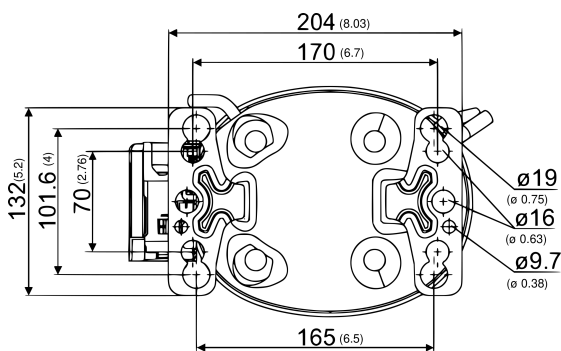
A Height	182mm / 7.17in
B Height	175mm / 6.89in
C Length shell	198mm / 7.80in
D Length w. cover	238mm / 9.37in
E Width	160mm / 6.30in

[Find 3D Model here](#)

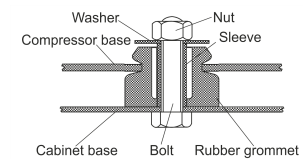


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71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

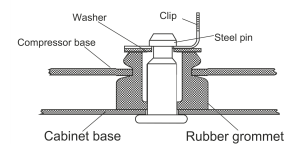
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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

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Configuration 1

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Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, CCC
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

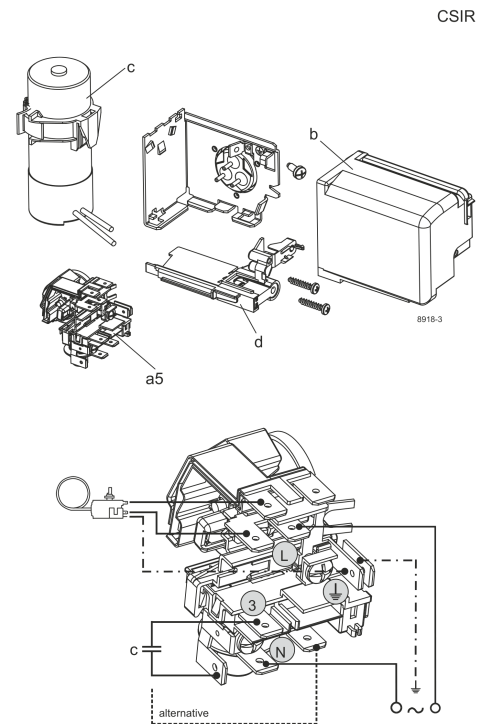
Ambient temperature range: 10 - 43°C / 50 - 109°F

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 (T1189/L6-S3) 117U7073

c start capacitor (80µF, 6.3mm) 117U5001

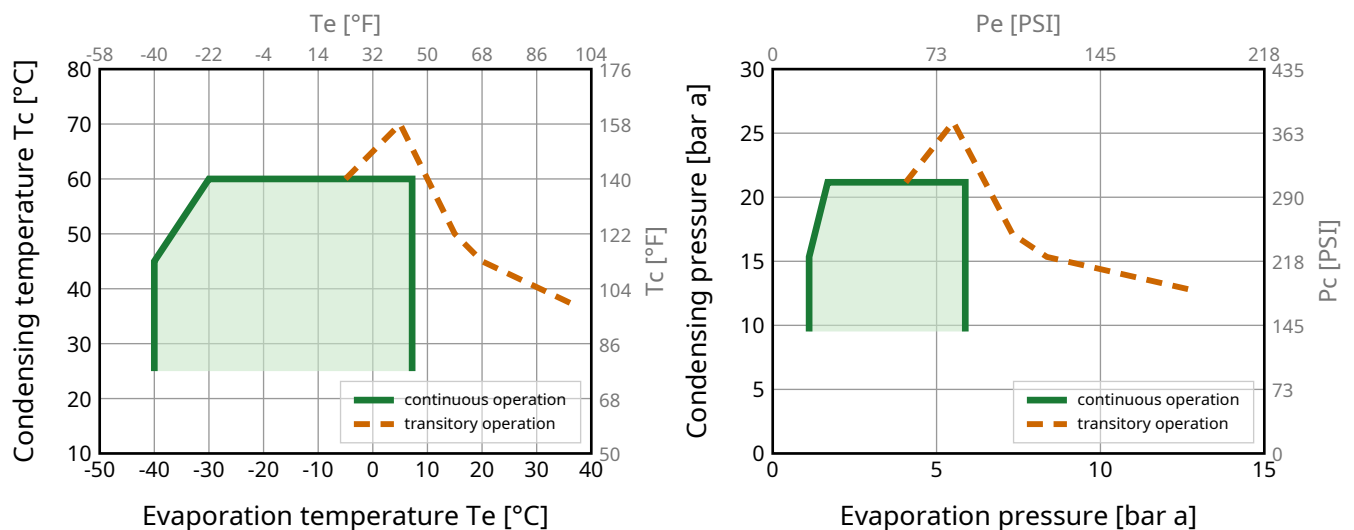
b, d cover + clamp + screws (5VA-compl.) 103N0600

Alternative components

b, d 100x cover + clamp + screws (5VA) 103N2060

b, d cover + clamp + screws (5VA) in bag 103N1060

Operation Pressure Range



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Configuration 1

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Standard Conditions

R290, 220 V/50 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°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	231	789	199	1.51	5.14	154	1.07	2.35	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	171	585	147	1.15	3.93	149	1.06	2.15	CECOMAF LBP
-35 -31	40 104	20 68	40 104	127	433	109	1.07	3.66	118	0.98	1.46	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	410	1399	353	2.07	7.05	198	1.22	4.70	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	326	1112	280	1.71	5.82	191	1.20	4.14	CECOMAF MBP
-10 14	45 113	20 68	45 113	368	1256	317	2.13	7.27	173	1.13	4.53	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	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	79	268	68	0.73	2.49	108	0.96	0.88
-30	-22	161	550	139	1.22	4.17	132	1.01	1.82
-20	-4	258	880	222	1.68	5.74	154	1.07	2.94
-10	14	383	1306	329	2.22	7.56	173	1.13	4.39
0	32	549	1873	472	2.90	9.89	189	1.19	6.38
7.2	45	702	2394	603	3.51	11.99	200	1.23	8.26

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

-40	-40	52	177	45	0.51	1.73	102	0.94	0.64
-30	-22	130	443	112	0.97	3.31	134	1.02	1.62
-20	-4	217	740	186	1.33	4.52	163	1.10	2.73
-10	14	326	1112	280	1.71	5.82	191	1.20	4.14
0	32	471	1607	405	2.17	7.41	217	1.29	6.07
7.2	45	605	2065	521	2.58	8.82	234	1.36	7.91

Model

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Configuration 2

Sales code:

106H2500

Configuration

Motor configuration	RSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE, CCC
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

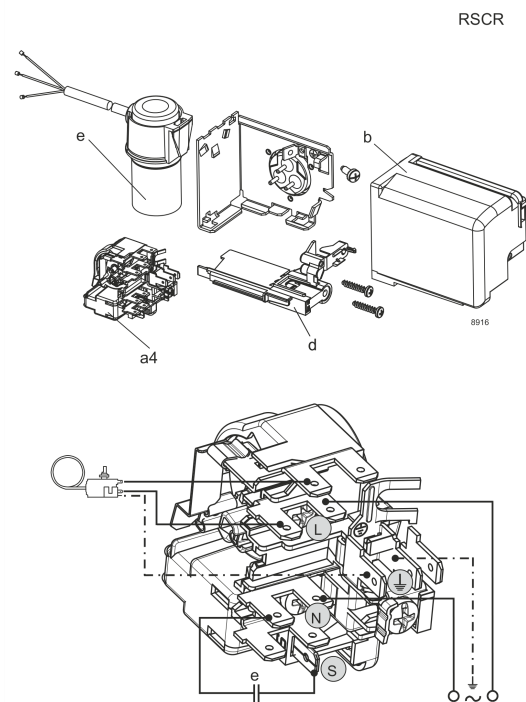
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a4 DAS3 (PTC,6.3mm, T1189/L6 - S3) 103N0254

e run capacitor (5 μ F, 6.3mm) 117-7191

b, d cover + clamp + screws (5VA-compl.) 103N0600

Alternative components

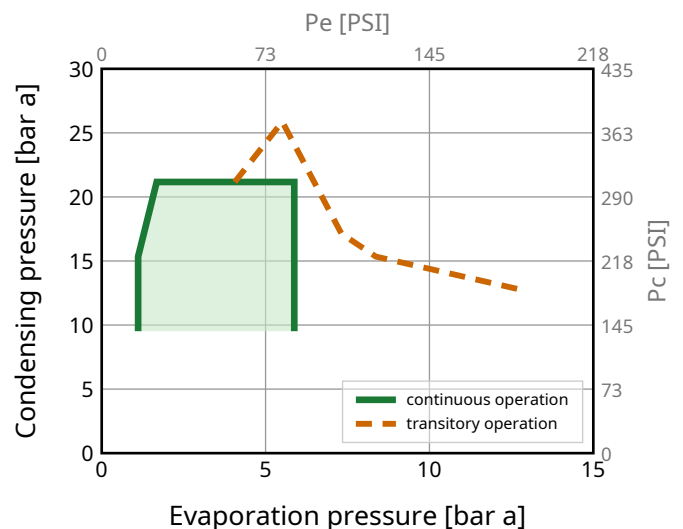
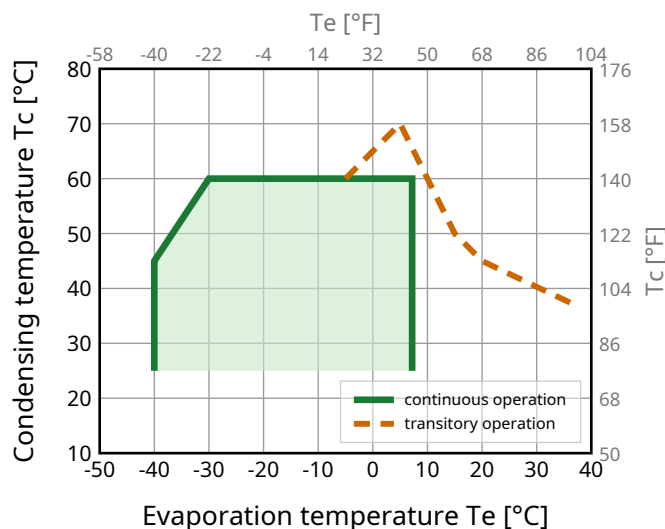
a4 ZAS3 (PTC,4.8mm, T1189/L6 - S3) 103N0255

e run capacitor (5 μ F, 4.8mm) 117-7190

b, d 100x cover + clamp + screws (5VA) 103N2060

b, d cover + clamp + screws (5VA) in bag 103N1060

Operation Pressure Range



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Configuration 2

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Standard Conditions

R290, 220 V/50 Hz, RSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°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	232	790	199	1.56	5.32	149	0.78	2.35	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	172	585	148	1.19	4.06	144	0.77	2.15	CECOMAF LBP
-35 -31	40 104	20 68	40 104	127	433	109	1.09	3.73	116	0.66	1.46	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	411	1403	354	2.17	7.40	190	0.95	4.71	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	327	1115	281	1.79	6.09	183	0.92	4.15	CECOMAF MBP
-10 14	45 113	20 68	45 113	369	1258	317	2.22	7.57	166	0.85	4.54	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	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	79	269	68	0.74	2.53	106	0.62	0.89
-30	-22	161	550	139	1.25	4.28	129	0.70	1.82
-20	-4	258	882	222	1.74	5.93	149	0.78	2.94
-10	14	383	1308	330	2.31	7.87	166	0.85	4.40
0	32	550	1877	473	3.03	10.35	181	0.92	6.39
7.2	45	703	2400	605	3.69	12.58	191	0.96	8.27

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

-40	-40	52	177	45	0.51	1.75	101	0.60	0.65
-30	-22	130	444	112	1.00	3.40	130	0.71	1.62
-20	-4	217	741	187	1.38	4.70	158	0.82	2.73
-10	14	327	1115	281	1.79	6.09	183	0.92	4.15
0	32	472	1611	406	2.29	7.82	206	1.02	6.09
7.2	45	607	2071	522	2.74	9.35	222	1.09	7.93