

Model
KLF8.6CNH

Sales code:
106H3910

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	200g / 7.05oz
Weight	9.70 kg / 21.38lbs
Displacement	8.60 cm³ / 0.52cu.in
Compressors on pallet	100



General - Configurations With KLF8.6CNH

-	Conf. 1
Motor configuration	CSIR
Power supply (nominal)	115-120 V/60 Hz
Number of phases	1
Voltage range	103-135 V
Approvals	UL
Starting torque	HST
Refrigerant	R290
Application	LBP+MBP
Hot gas defrost	OK
Long interval pull down	OK

Application Notes

- Electrical equipment is included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

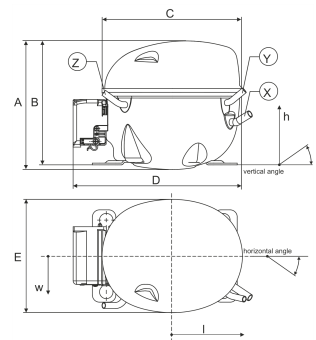
Oil type	POE	Winding resistance main	1.4 Ohm
Oil viscosity	19,2cSt	Winding resistance aux	5.9 Ohm
Oil quantity	239 / 8.08fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,575 cm ³ / 53.26fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	external		

Compressor Dimensions

Housing

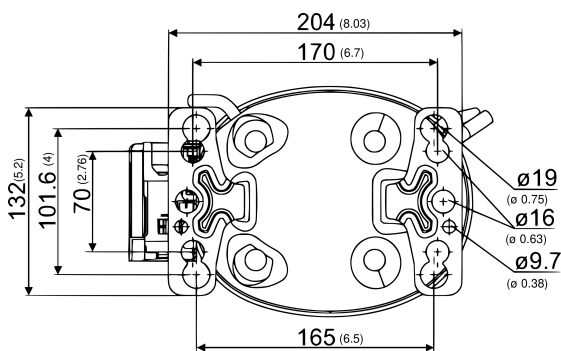
A Height	182mm / 7.17in
B Height	175mm / 6.89in
C Length shell	198mm / 7.80in
D Length w. cover	238mm / 9.37in
E Width	160mm / 6.30in

[Find 3D Model here](#)

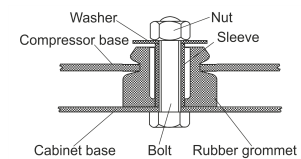


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71 / -3.46/3.98/2.80in
Straight tube l. [mm]	13.5 / 0.53in	13.5 / 0.53in	13.5 / 0.53in

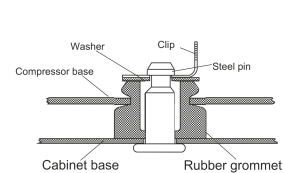
Mounting Accessories



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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Motor configuration	CSIR
Power supply (nominal)	115-120 V/60 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	103-135 V
Starting torque	HST
Approvals	UL
Starting device type	relay
Run capacitor	-/-
Start capacitor	240 µF
LRA (locked rotor amps / 4s/ U(N))	35.6 A
RLA (rated load amps / 1s/ U(N))	4.9 A

Ambient/ machine room temperatures minimum /maximum

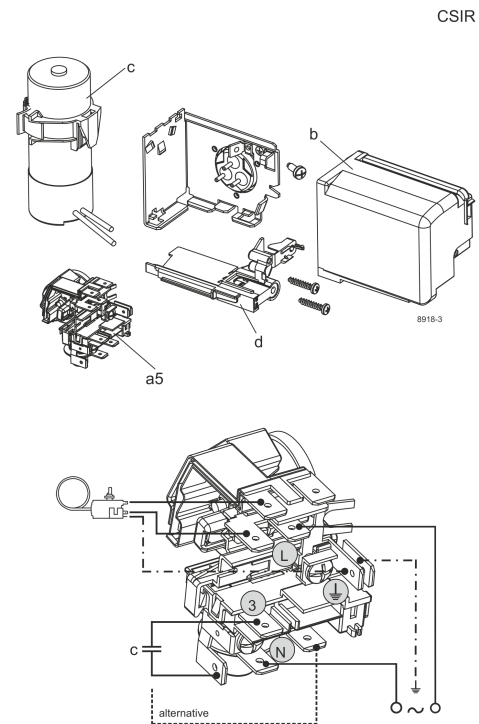
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components (already pre-assembled)

a5 current relay (T1141/L6-S6) 117U7078

c start capacitor (240µF) 117U5002

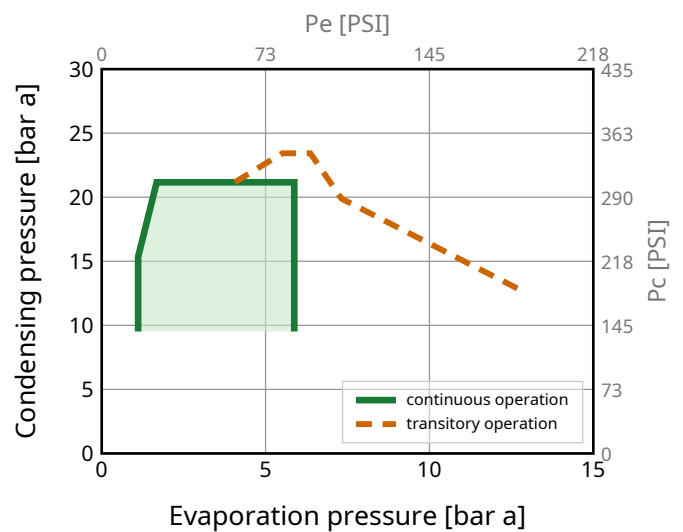
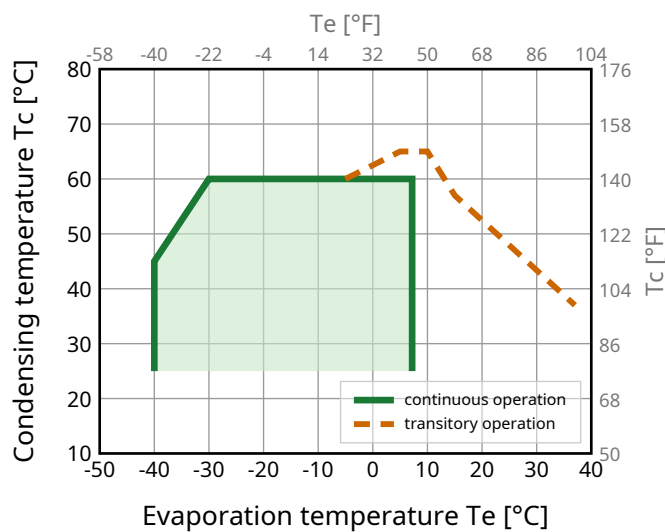
b, d cover + clamp + screws (5VA-compl.) 103N0600

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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Standard Conditions

R290, 120 V/60 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	567	1935	488	1.64	5.59	346	3.63	5.76	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	423	1443	364	1.27	4.35	332	3.52	5.30	CECOMAF LBP
-35 -31	40 104	20 68	40 104	316	1077	271	1.32	4.51	239	2.86	3.62	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	974	3322	837	2.04	6.95	478	4.77	11.15	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	781	2665	672	1.71	5.83	457	4.58	9.93	CECOMAF MBP
-10 14	45 113	20 68	45 113	856	2919	736	2.12	7.23	404	4.11	10.53	EN12900 MBP

Performance Tables

R290, 120 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	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	219	746	188	1.08	3.68	202	2.65	2.46
-30	-22	390	1330	335	1.40	4.76	279	3.13	4.41
-20	-4	609	2077	523	1.75	5.98	348	3.64	6.92
-10	14	890	3035	765	2.20	7.52	404	4.11	10.21
0	32	1246	4252	1072	2.80	9.55	445	4.48	14.49
7.2	45	1558	5315	1340	3.36	11.46	464	4.65	18.32

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

-40	-40	165	563	142	0.86	2.92	193	2.59	2.05
-30	-22	328	1120	282	1.15	3.91	287	3.19	4.10
-20	-4	529	1805	455	1.41	4.80	376	3.87	6.66
-10	14	781	2665	672	1.71	5.83	457	4.58	9.93
0	32	1099	3749	945	2.08	7.10	528	5.25	14.17
7.2	45	1376	4695	1183	2.41	8.23	570	5.67	17.98