

Model

Designation	KLF8.6CNH	115-127V/60Hz 1~	Sales code:	106H3910
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	19,2cSt	Displacement	8,6cm ³ / 0,52cu.in
Oil quantity	239cm ³ / 8,1fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	200g / 7,1oz		
Free gas volume comp.	1575cm ³ / 53,3fl.oz		
Weight	9,7kg / 21,4lbs		
Motor protection	external		
Winding resistance main	1,4Ω (at 25°C)		
Winding resistance aux	5,9Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with KLF8.6CNH

	Conf. 1
Motor configuration	CSIR
Power supply (nominal)	115-120V/60Hz
Number of phases	1
Voltage range	103-135V
Approvals	UL
Starting torque	HST
Note	Electrical equipment is included and pre-assembled to compressor.

Applications with KLF8.6CNH

	Conf. 1
Refrigerant	R290
Application	LBP+MBP
System cooling	fan 3m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with KLF8.6CNH

	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	240μF
LRA (locked rotor amps / 4s/ U(N))	35,6A
RLA (rated load amps / 1s/ U(N))	4,9A
Cut in current (U(N))	

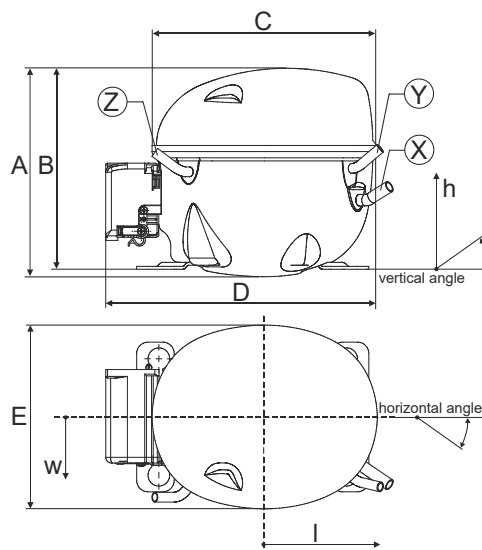
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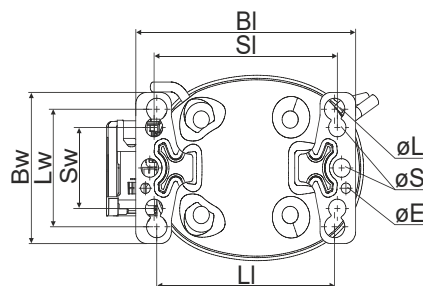
Compressor dimensions

Housing	A Height	182mm / 7,17in
	B Height	175mm / 6,89in
	C Length shell	198mm / 7,8in
	D Length w. cover	238mm / 9,37in
	E Width	160mm / 6,3in

Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59	117/107/66	-88/101/71
[in]	4,7/2,9/2,3	4,6/4,2/2,6	-3,5/4/2,8
Straight tube l. [mm]	14	14	14
[in]	0,5	0,5	0,5

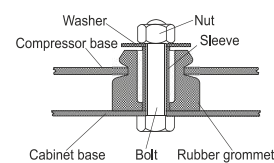


Compressor fixation

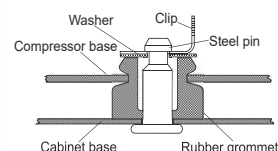


Baseplate	[mm]	[inch]
BI	204	8.03
BW	132	5.2
øE	ø 9.7	ø 0.38
Large holes	[mm]	[inch]
LI	165	6.5
LW	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
SW	70	2.76
øS	ø 16	ø 0.63

Bolt joint



Snap-on



Mounting accessories	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

Application notes

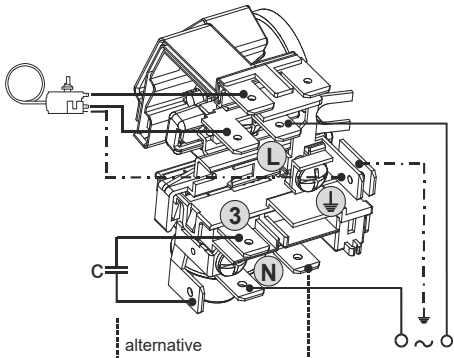
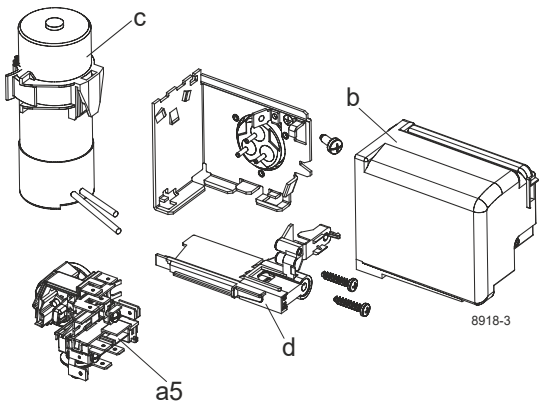
Provision for PE Grounding is located at the PE Stamp on the compressor

Model				
Designation	KLF8.6CNH	115-120V/60Hz	Conf. 1	Sales code: 106H3910

Configuration		Electrical accessories / wiring diagram		
Motor configuration	CSIR	CSIR		
Power supply (nominal)	115-120V/60Hz 1~			
Refrigerant	R290			
Application	LBP+MBP			
Voltage range	103-135V			
Starting torque	HST			
Approvals	UL			

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

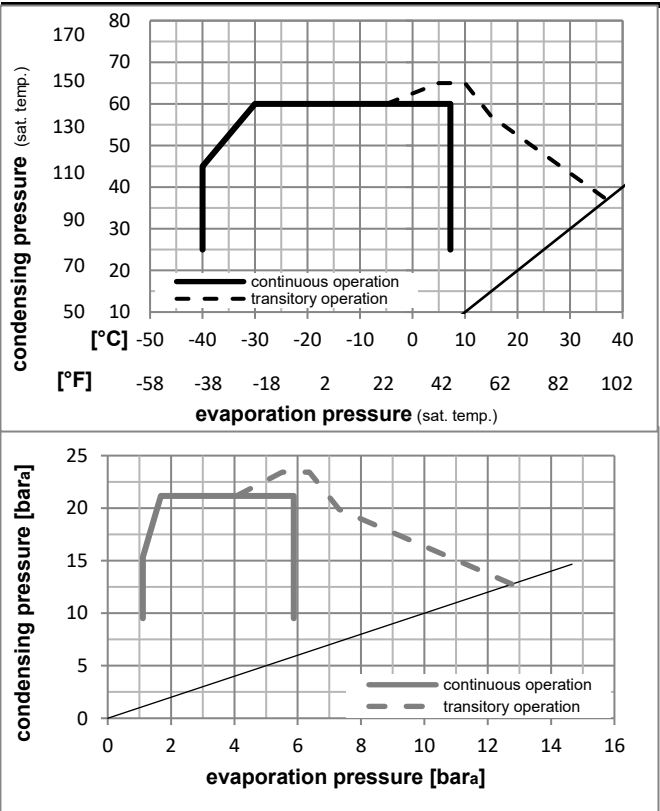


Components (inci. and pre. assembl.)		
a5	current relay (T1141/L6-S6)	117U7078
c	start capacitor (240µF)	117U5002
b, d	cover + clamp + screws(5VA-compl.)	103N0600

Alternative comp.

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

Operation pressure range



Model

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Optimization + standard conditions

R290, 120V/60Hz, CSIR, fan 3m/s, UL

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)					Power consumption																								
Return gas temp.					Current consumption					Ref. mass flow																								
Liquid temp.					Cooling capacity					COP					EER					P1					I					m				
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]																						
[°C]	-23	54	32	32	564,3	1927	485,6	1,63	5,57	1,40	345,8	3,63	5,71	ASHRAE LBP																				
[°F]	-10	130	90	90																														
[°C]	-25	55	32	55	423,0	1445	364,0	1,27	4,35	1,10	332,0	3,52	5,27	cecomaf LBP																				
[°F]	-13	131	90	131																														
[°C]	-35	40	20	40	315,5	1077	271,5	1,32	4,51	1,14	238,7	2,86	3,60	EN12900 LBP																				
[°F]	-31	104	68	104																														
[°C]	-7	54	35	46	976,0	3333	840,0	2,04	6,96	1,75	479,0	4,78	11,13	ASHRAE MBP																				
[°F]	20	130	95	115																														
[°C]	-10	55	32	55	781,1	2668	672,2	1,71	5,83	1,47	457,3	4,58	9,88	cecomaf MBP																				
[°F]	14	131	90	131																														
[°C]	-10	45	20	45	854,4	2918	735,3	2,12	7,23	1,82	403,8	4,11	10,49	EN12900 MBP																				
[°F]	14	113	68	113																														

Performance tables

R290, 120V/60Hz, CSIR, fan 3m/s, UL

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-40	-40	218,7	747	188,2	1,08	3,69	0,93	202,5	2,65	2,44
cond. pressure	-34	-30	308,7	1054	265,7	1,25	4,28	1,08	246,1	2,91	3,46
pc= 45/113	-23	-10	529,6	1809	455,8	1,62	5,55	1,40	325,9	3,47	5,98
return gas temp.	-15	5	740,5	2529	637,3	1,96	6,70	1,69	377,3	3,88	8,43
RGT= 32/90	-4	25	1097,5	3748	944,6	2,55	8,70	2,19	431,0	4,35	12,66
liquid temp	0	32	1246,1	4256	1072,4	2,80	9,56	2,41	445,1	4,48	14,45
Tliq= 45/113	7,2	45	1558,7	5323	1341,5	3,36	11,47	2,89	464,0	4,65	18,31
[°C / °F]	-40	-40	165,1	564	142,1	0,86	2,92	0,74	192,8	2,59	2,04
cond. pressure	-34	-30	251,9	860	216,8	1,03	3,51	0,88	245,3	2,91	3,12
pc= 55/131	-23	-10	457,0	1561	393,3	1,32	4,50	1,13	346,8	3,64	5,70
return gas temp	-15	5	647,7	2212	557,4	1,55	5,30	1,33	417,7	4,22	8,14
RGT= 32/90	-4	25	966,6	3301	831,8	1,93	6,58	1,66	502,0	4,99	12,33
liquid temp	0	32	1098,8	3753	945,7	2,08	7,11	1,79	527,9	5,25	14,11
Tliq= 55/131	7,2	45	1377,0	4703	1185,0	2,41	8,24	2,08	570,5	5,68	17,94