

Model

Designation	KLF4.8CNH	115-127V/60Hz 1~	Sales code:	106H3500
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	9,7cST	Displacement	4,8cm ³ / 0,29cu.in
Oil quantity	170cm ³ / 5,7fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	200g / 7,1oz		
Free gas volume comp.	1615cm ³ / 54,6fl.oz		
Weight	9,4kg / 20,7lbs		
Motor protection	external		
Winding resistance main	2Ω (at 25°C)		
Winding resistance aux	8,5Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with KLF4.8CNH

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	RSCR
Power supply (nominal)	115-127V/60Hz	115-127V/60Hz
Number of phases	1	1
Voltage range	95-140V	95-140V
Approvals	UL, CCC	UL, CCC
Starting torque	HST	LST
Note	LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.	

Applications with KLF4.8CNH

	Conf. 1	Conf. 2
Refrigerant	R290	R290
Application	LBP+MBP	LBP+MBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Electrical data - Configurations with KLF4.8CNH

	Conf. 1	Conf. 2
Starting device type	relay	PTC
Run capacitor	-/-	15μF
Start capacitor	240μF	-/-
LRA (locked rotor amps / 4s)	27,5A	23,2A
RLA (rated load amps / 1s)	4,3A	4,3A
Cut in current	27,5A	30,1A

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Designation

KLF4.8CNH

115-127V/60Hz 1~

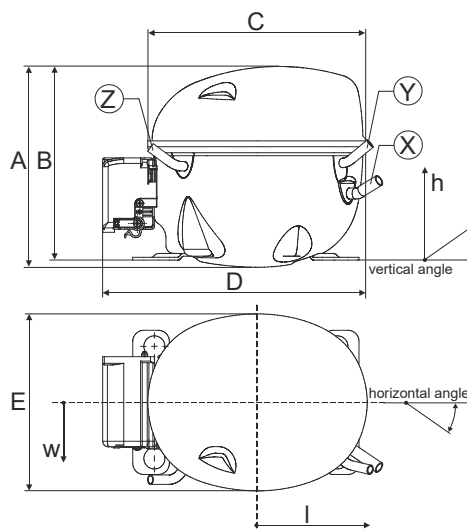
Sales code:

106H3500

Compressor dimensions

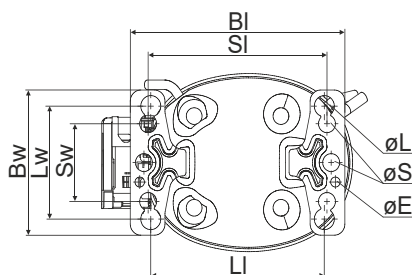
Housing	A Height	182mm / 7,17in
	B Height	175mm / 6,89in
	C Length shell	198mm / 7,8in
	D Length w. cover	238mm / 9,37in
	E Width	160mm / 6,3in

Connectors	Suction	Discharge	Process
	X	Y	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]	120/72/62	112/106/62	-97/102/70
[in]	4,7/2,8/2,4	4,4/4,2/2,4	-3,8/4/2,8
Straight tube l. [mm]	14	14	14
[in]	0,5	0,5	0,5

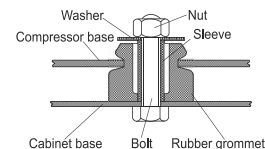


Compressor fixation

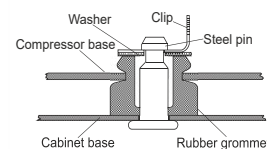
Bolt joint



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



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

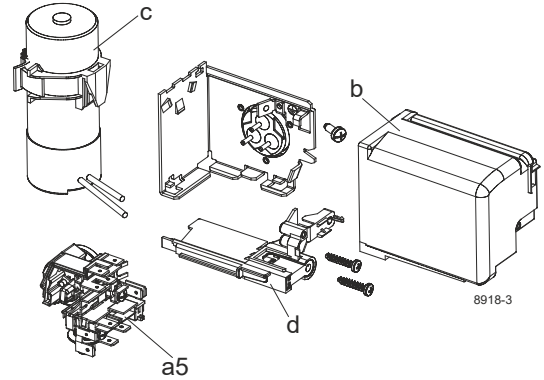
Designation	KLF4.8CNH	115-127V/60Hz	Conf. 1	Sales code:	106H3500
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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115-127V/60Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	95-140V
Starting torque	HST
Approvals	UL CCC

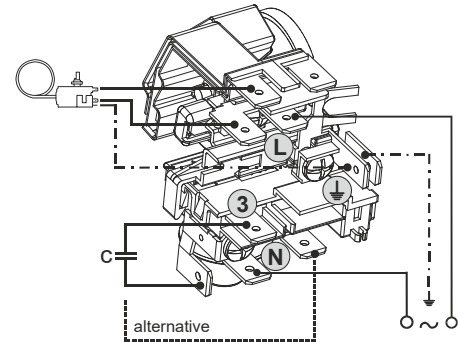
Electrical accessories / wiring diagram

CSIR



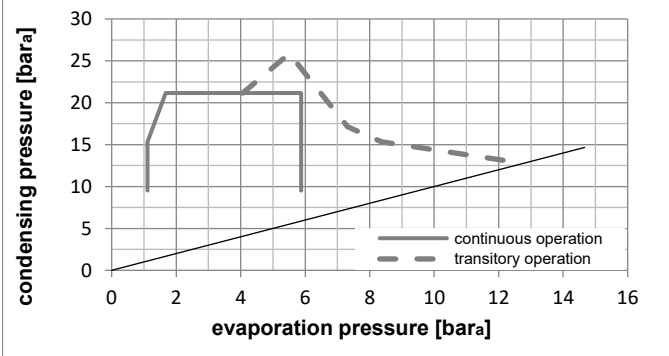
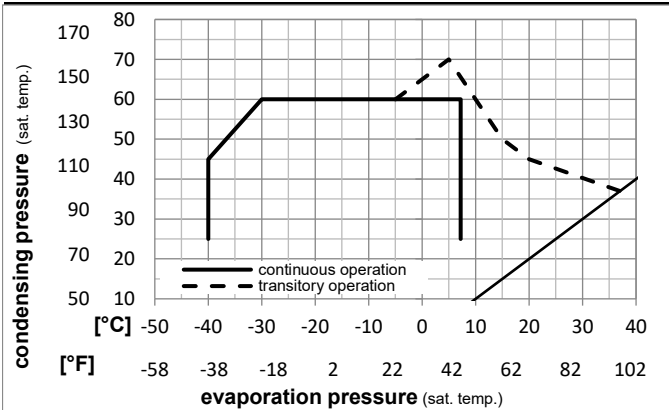
Ambient/ machine room temperatures minimum /maximum

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



Operation Limits

Operation pressure range



Components

a5	current relay TY (T1217/L6-S5)	117U7072
c	start capacitor (240µF)	117U5002
b, d	cover + clamp + screws(5VA) in bag	103N1060

Alternative components

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

Designation **KLF4.8CNH** **115-127V/60Hz** Conf. 1 Sales code: **106H3500**

Optimization + standard conditions

R290, 115V/60Hz, CSIR, fan 3m/s, UL, CCC

		Evaporating pressure (saturation temperature)			Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Current consumption		Ref. mass flow					
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]							[W]	[A]	[A]	[kg/h]						
-23	-10	54	130	32	90	278,1	950	239,3	1,55	5,31	1,34	178,9	2,78	2,82					ASHRAE LBP		
-25	-13	55	131	32	90	208,0	710	179,0	1,21	4,13	1,04	172,0	2,75	2,59					cecomaf LBP		
-35	-31	40	104	20	68	156,7	535	134,9	1,17	4,00	1,01	133,8	2,61	1,79					EN12900 LBP		
-7	20	54	130	35	95	508,0	1735	437,2	2,07	7,07	1,78	245,4	3,16	5,80					ASHRAE MBP		
-10	14	55	131	32	90	401,5	1371	345,6	1,72	5,87	1,48	233,7	3,09	5,08					cecomaf MBP		
-10	14	45	113	20	68	452,0	1544	389,0	2,06	7,05	1,78	219,0	2,99	5,55					EN12900 MBP		

Performance tables

R290, 115V/60Hz, CSIR, fan 3m/s, UL, CCC

	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	113,5	388	97,7	0,96	3,27	0,82	118,6	2,57	1,27
cond. pressure	-34	-30	153,7	525	132,3	1,12	3,84	0,97	136,6	2,62	1,72
pc= 45/113	-23	-10	267,3	913	230,1	1,53	5,21	1,31	175,2	2,77	3,02
return gas temp.	-15	5	385,1	1315	331,4	1,89	6,46	1,63	203,5	2,91	4,38
RGT= 32/90	-4	25	591,1	2019	508,7	2,51	8,58	2,16	235,3	3,09	6,82
liquid temp	0	32	677,5	2314	583,1	2,78	9,49	2,39	243,9	3,14	7,86
Tliq= 45/113	7,2	45	859,4	2935	739,6	3,37	11,52	2,90	254,8	3,22	10,10
[°C / °F]	-40	-40	99,2	339	85,4	0,88	2,99	0,75	113,2	2,54	1,22
cond. pressure	-34	-30	130,7	446	112,5	0,98	3,34	0,84	133,7	2,60	1,62
pc= 55/131	-23	-10	225,0	768	193,6	1,26	4,29	1,08	179,0	2,78	2,81
return gas temp	-15	5	326,6	1115	281,0	1,53	5,22	1,31	213,8	2,97	4,11
RGT= 32/90	-4	25	508,6	1737	437,7	1,98	6,78	1,71	256,2	3,23	6,49
liquid temp	0	32	586,0	2001	504,3	2,18	7,44	1,87	269,0	3,31	7,53
Tliq= 55/131	7,2	45	750,2	2562	645,7	2,60	8,88	2,24	288,6	3,45	9,77

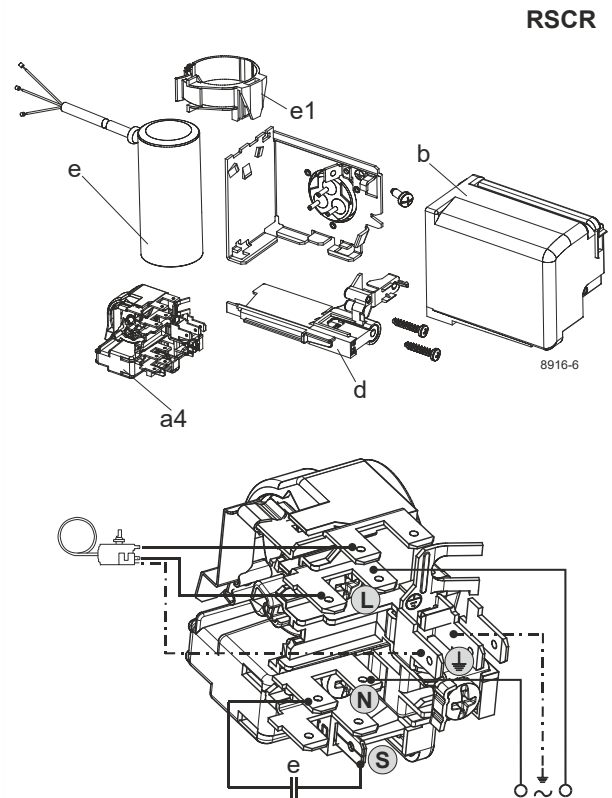
Model

Designation	KLF4.8CNH	115-127V/60Hz	Conf. 2	Sales code:	106H3500
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Configuration

Motorconfiguration	RSCR
Power supply (nominal)	115-127V/60Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	95-140V
Starting torque	LST
Approvals	UL CCC

Electrical accessories / wiring diagram

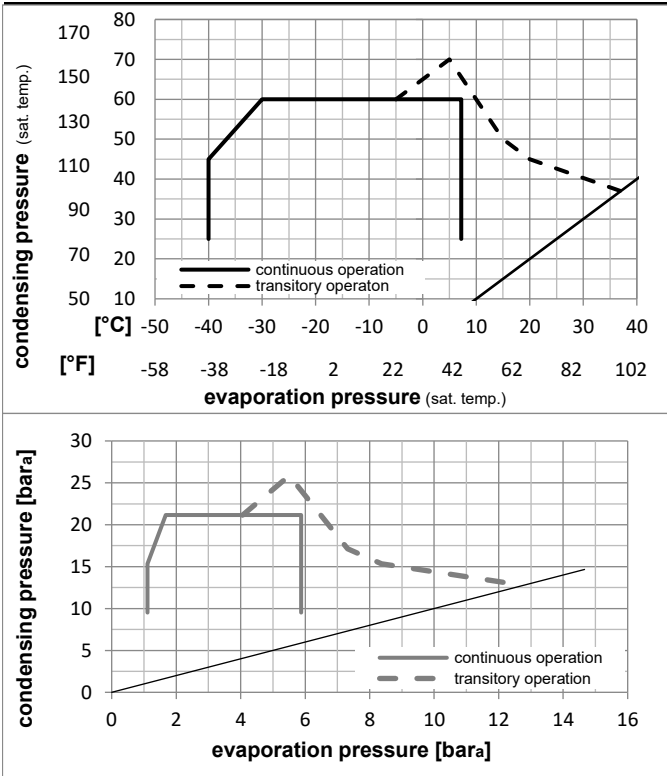


Ambient/ machine room temperatures minimum /maximum

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

Operation Limits

Operation pressure range



Components

a4	DLS5 (PTC,6.3mm, T1217/L6 - S5)	103N0212
e	run capacitor (15μF, 6,3mm)	117-7153
b, d	cover + clamp + screws(5VA) in bag	103N1060
e1	retaining clamp	103N0535

Alternative components

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

Designation **KLF4.8CNH** **115-127V/60Hz** Conf. 2 Sales code: **106H3500**

Optimization + standard conditions

R290, 115V/60Hz, RSCR, fan 3m/s, UL, CCC

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.		Liquid temp.		Cooling capacity		COP	EER		P1	I	Ref. mass flow		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-23	54	32	32	278,7	952	239,9	1,61	5,51	1,39	172,7	2,80	2,82	ASHRAE LBP	
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	208,5	712	179,4	1,26	4,29	1,08	166,0	2,77	2,60	cecomaf LBP	
[°F]	-13	131	90	131											
[°C]	-35	40	20	40	157,1	537	135,2	1,22	4,15	1,05	129,1	2,62	1,80	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-7	54	35	46	509,2	1739	438,2	2,15	7,34	1,85	236,8	3,17	5,81	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	402,5	1375	346,4	1,78	6,09	1,54	225,6	3,10	5,09	cecomaf MBP	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	453,1	1547	389,9	2,14	7,32	1,85	211,3	3,01	5,56	EN12900 MBP	
[°F]	14	113	68	113											

Performance tables

R290, 115V/60Hz, RSCR, fan 3m/s, UL, CCC

	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	113,8	389	97,9	0,99	3,39	0,86	114,5	2,59	1,27	
cond. pressure	-34	-30	154,0	526	132,6	1,17	3,99	1,01	131,8	2,63	1,73	
pc= 45/113	-23	-10	268,0	915	230,6	1,58	5,41	1,36	169,1	2,78	3,03	
return gas temp.	-15	5	386,0	1318	332,2	1,97	6,71	1,69	196,4	2,92	4,39	
RGT= 32/90	-4	25	592,5	2024	509,9	2,61	8,91	2,25	227,1	3,11	6,83	
liquid temp	0	32	679,2	2319	584,5	2,89	9,86	2,48	235,3	3,16	7,88	
Tliq= 45/113	7,2	45	861,4	2942	741,3	3,50	11,97	3,02	245,9	3,23	10,12	
[°C / °F]	-40	-40	99,4	340	85,6	0,91	3,11	0,78	109,2	2,55	1,23	
cond. pressure	-34	-30	131,0	447	112,7	1,02	3,47	0,87	129,0	2,61	1,62	
pc= 55/131	-23	-10	225,5	770	194,1	1,31	4,46	1,12	172,7	2,80	2,81	
return gas temp	-15	5	327,3	1118	281,7	1,59	5,42	1,37	206,3	2,98	4,12	
RGT= 32/90	-4	25	509,8	1741	438,7	2,06	7,04	1,77	247,3	3,24	6,51	
liquid temp	0	32	587,4	2006	505,6	2,26	7,73	1,95	259,6	3,33	7,55	
Tliq= 55/131	7,2	45	752,1	2568	647,2	2,70	9,22	2,32	278,5	3,46	9,80	