

## Model

Designation	<b>KLF4.8CNH</b>	115-127V/60Hz 1~	Sales code:	<b>106H3510</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	9,7cST	Displacement	4,8cm <sup>3</sup> / 0,29cu.in
Oil quantity	170cm <sup>3</sup> / 5,7fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	200g / 7,1oz		
Free gas volume comp.	1615cm <sup>3</sup> / 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

	<b>Conf. 1</b>
Motorconfiguration	CSIR
Power supply (nominal)	115-127V/60Hz
Number of phases	1
Voltage range	95-140V
Approvals	UL, CCC
Starting torque	HST
Note	Electrical equipment is included and pre-assembled to compressor.

## Applications with KLF4.8CNH

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

## Electrical data - Configurations with KLF4.8CNH

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

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Designation

**KLF4.8CNH**

115-127V/60Hz 1~

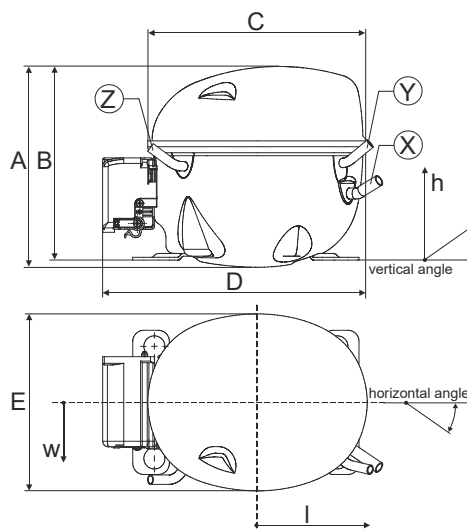
Sales code:

**106H3510**

## Compressor dimensions

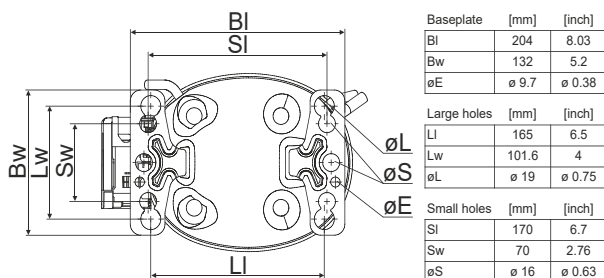
<b>Housing</b>	A Height	182mm / 7,17in
	B Height	175mm / 6,89in
	C Length shell	198mm / 7,8in
	D Length w. cover	238mm / 9,37in
	E Width	160mm / 6,3in

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
	[in]	0,5	0,5



## Compressor fixation

### 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

Operation possible until tilted up to 3 degrees

LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

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

## Model

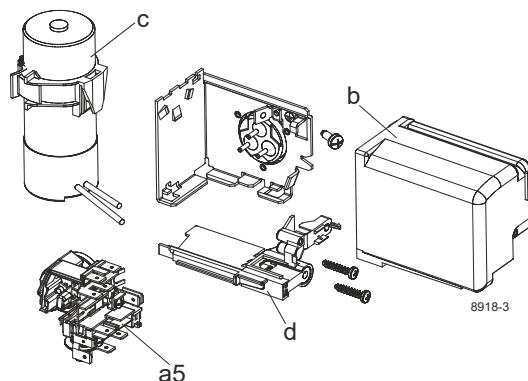
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## Configuration

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Refrigerant	R290
Application	LBP+MBP
Voltage range	95-140V
Starting torque	HST
Approvals	UL CCC

## Electrical accessories / wiring diagram

CSIR

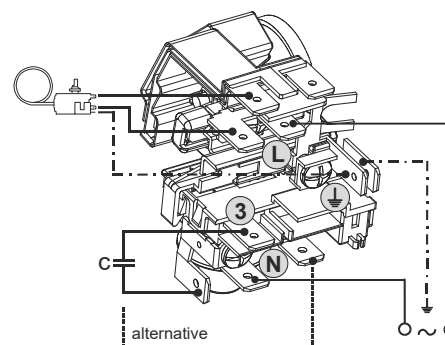
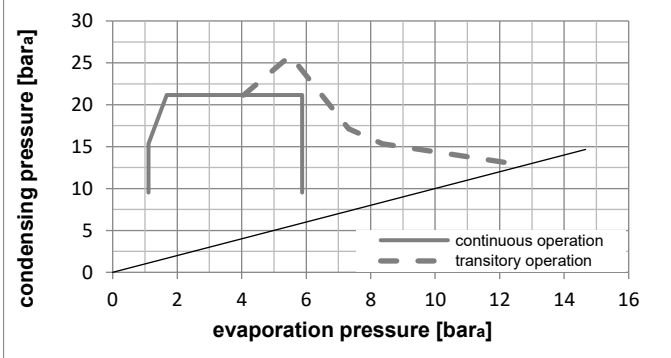
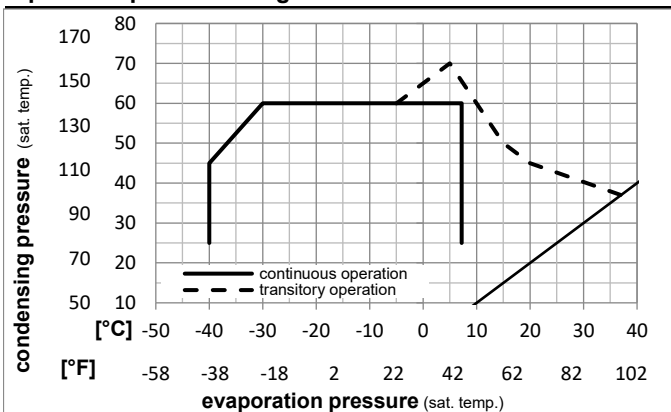


## Ambient/ machine room temperatures minimum /maximum

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 (already pre-assembled)

a5	current relay TY (T1217/L6-S5)	117U7072
c	start capacitor (240µF)	117U5002
.	cable clamp (screws not included)	16058100
b	cover terminal board	10636401
.	screw uni en iso 4757	10641201
.	screw - uni6954	10636000

### Alternative components

.	screw - uni6954	10636200
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### 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	Ref. mass flow							
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]							[W]	[A]	[kg/h]	ASHRAE LBP						
-23	54	32	32	278,1	950	239,3	1,55	5,31	1,34	178,9	2,78	2,82	ASHRAE LBP								
-10	130	90	90												ASHRAE LBP						
-25	55	32	55	208,0	710	179,0	1,21	4,13	1,04	172,0	2,75	2,59	cecomaf LBP								
-13	131	90	131												cecomaf LBP						
-35	40	20	40	156,7	535	134,9	1,17	4,00	1,01	133,8	2,61	1,79	EN12900 LBP								
-31	104	68	104												EN12900 LBP						
-7	54	35	46	508,0	1735	437,2	2,07	7,07	1,78	245,4	3,16	5,80	ASHRAE MBP								
20	130	95	115												ASHRAE MBP						
-10	55	32	55	401,5	1371	345,6	1,72	5,87	1,48	233,7	3,09	5,08	cecomaf MBP								
14	131	90	131												cecomaf MBP						
-10	45	20	45	452,0	1544	389,0	2,06	7,05	1,78	219,0	2,99	5,55	EN12900 MBP								
14	113	68	113												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