

## Model

Designation	<b>KLF4.8CNHS</b>	115-127V/60Hz 1~	Sales code:	<b>106H3503</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		
Additional note	Very good robustness against liquid intake. Ice-cube maker optimization - indirect suction intake.		



## General - Configurations with KLF4.8CNHS

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

## Applications with KLF4.8CNHS

	<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 KLF4.8CNHS

	<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

## Model

Designation

**KLF4.8CNHS**

115-127V/60Hz 1~

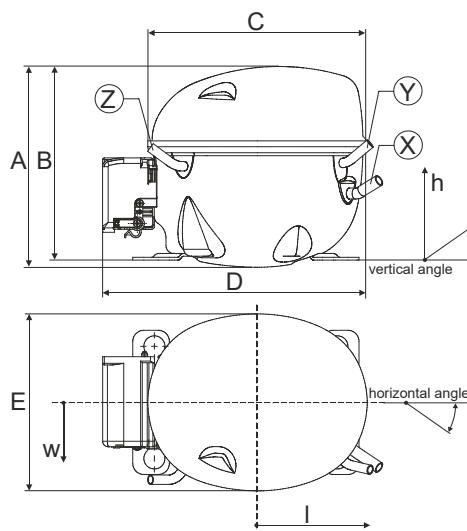
Sales code:

**106H3503**

## Compressor dimensions

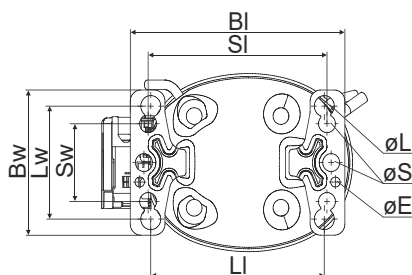
Housing	A Height	182mm / 7,17in
	B Height	175mm / 6,89in
	C Length shell	198mm / 7,8in
	D Length w. cover	238mm / 9,37in
	E Width	160mm / 6,3in

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

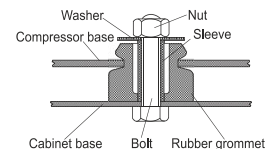


## Compressor fixation

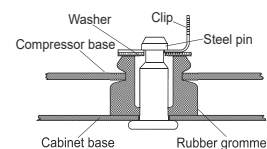
### Bolt joint



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

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

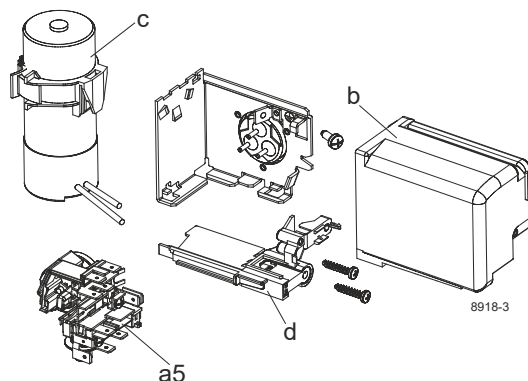
Designation	<b>KLF4.8CNHS</b>	<b>115-127V/60Hz</b>	<b>Conf. 1</b>	Sales code:	<b>106H3503</b>
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## Configuration

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

## Electrical accessories / wiring diagram

CSIR

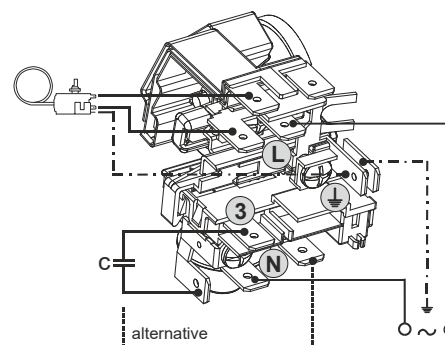
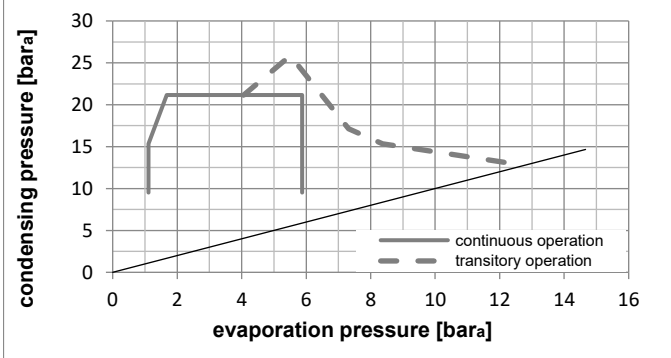
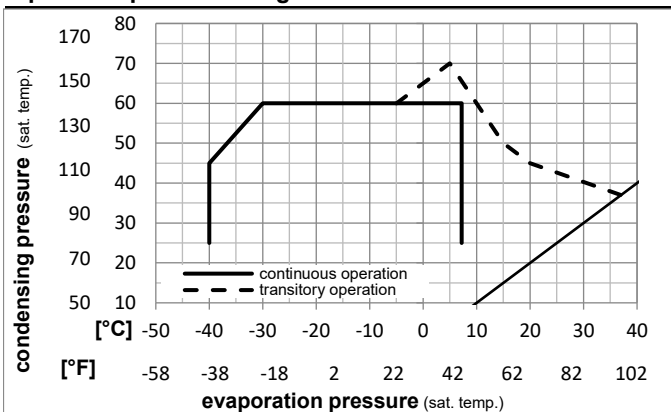


## Ambient/ machine room temperatures minimum /maximum

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

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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### 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			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]						P1	I	Ref. mass flow	
[°C]																
[°F]																
	-23	54	32	32	268,3	916	230,9	1,52	5,18	1,30	177,0	2,76	2,72			
	-10	130	90	90												
	-25	55	32	55	200,7	686	172,7	1,18	4,03	1,01	170,2	2,72	2,50			
	-13	131	90	131												
	-35	40	20	40	151,3	517	130,2	1,14	3,90	0,98	132,4	2,58	1,73			
	-31	104	68	104												
	-7	54	35	46	490,3	1674	421,9	2,02	6,89	1,74	242,8	3,12	5,59			
	20	130	95	115												
	-10	55	32	55	387,5	1323	333,5	1,68	5,72	1,44	231,3	3,05	4,90			
	14	131	90	131												
	-10	45	20	45	436,2	1490	375,4	2,01	6,87	1,73	216,7	2,96	5,36			
	14	113	68	113												

### 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	109,5	374	94,3	0,93	3,19	0,80	117,4	2,54	1,22
cond. pressure	-34	-30	148,3	506	127,6	1,10	3,75	0,94	135,2	2,59	1,66
pc= 45/113	-23	-10	258,0	881	222,0	1,49	5,08	1,28	173,4	2,74	2,91
return gas temp.	-15	5	371,6	1269	319,8	1,85	6,30	1,59	201,4	2,88	4,23
RGT= 32/90	-4	25	570,4	1948	490,9	2,45	8,37	2,11	232,9	3,06	6,58
liquid temp	0	32	653,9	2233	562,7	2,71	9,25	2,33	241,3	3,11	7,58
Tliq= 45/113	7,2	45	829,3	2832	713,7	3,29	11,24	2,83	252,1	3,18	9,74
[°C / °F]	-40	-40	95,7	327	82,4	0,85	2,92	0,74	112,0	2,51	1,18
cond. pressure	-34	-30	126,1	431	108,5	0,95	3,26	0,82	132,3	2,57	1,56
pc= 55/131	-23	-10	217,1	742	186,9	1,23	4,19	1,06	177,1	2,76	2,71
return gas temp	-15	5	315,1	1076	271,2	1,49	5,09	1,28	211,5	2,94	3,96
RGT= 32/90	-4	25	490,8	1676	422,4	1,94	6,61	1,67	253,6	3,19	6,26
liquid temp	0	32	565,5	1931	486,7	2,12	7,26	1,83	266,2	3,28	7,26
Tliq= 55/131	7,2	45	724,0	2473	623,1	2,54	8,66	2,18	285,5	3,41	9,43