

Model

Designation	KLF4.0CND	220-240V/50Hz 1~	Sales code:	106H2411
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	9,7cST	Displacement	4cm ³ / 0,24cu.in
Oil quantity	170cm ³ / 5,7fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	200g / 7,1oz		
Free gas volume comp.	1630cm ³ / 55,1fl.oz		
Weight	8,95kg / 19,7lbs		
Motor protection	external		
Winding resistance main	13,1Ω (at 25°C)		
Winding resistance aux	25,3Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with KLF4.0CND

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz
Number of phases	1
Voltage range	198-254V
Approvals	VDE
Starting torque	HST
Note	Electrical equipment is included and pre-assembled to compressor.

Applications with KLF4.0CND

	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 KLF4.0CND

	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	80μF
LRA (locked rotor amps / 4s)	10,2A
RLA (rated load amps / 1s)	
Cut in current	10,2A

Model

Designation

KLF4.0CND

220-240V/50Hz 1~

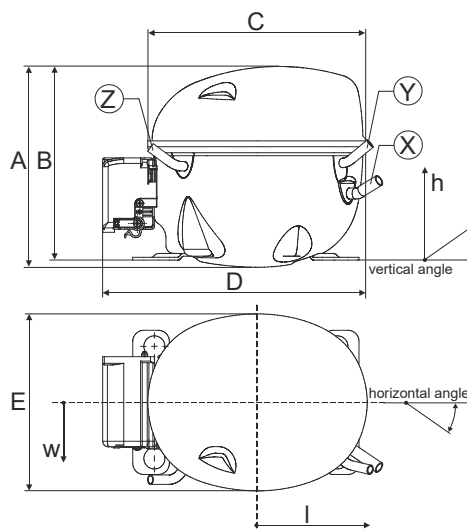
Sales code:

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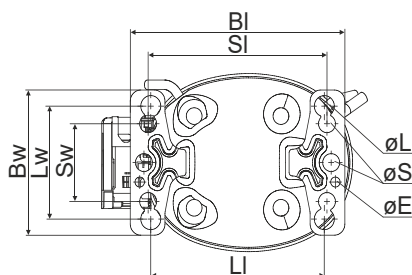
Compressor dimensions

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 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
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

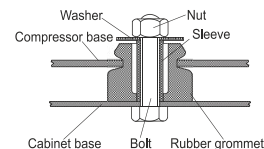


Compressor fixation

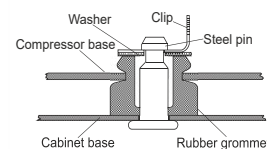


Baseplate	[mm]	[inch]
BI	204	8.03
BW	132	5.2
øE	ø 9.7	ø 0.38
Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63

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

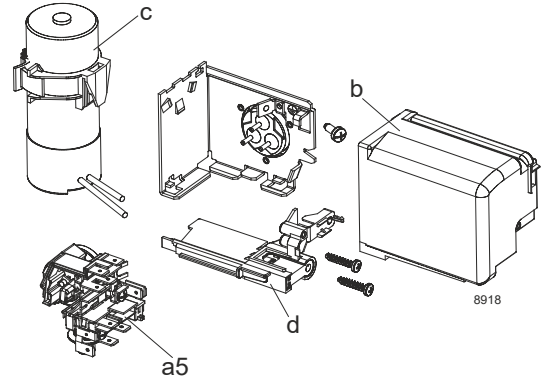
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Starting torque	HST
Approvals	VDE

Electrical accessories / wiring diagram

CSIR

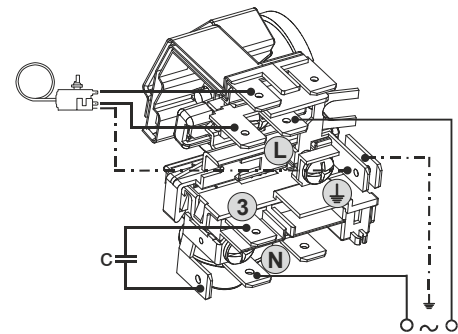
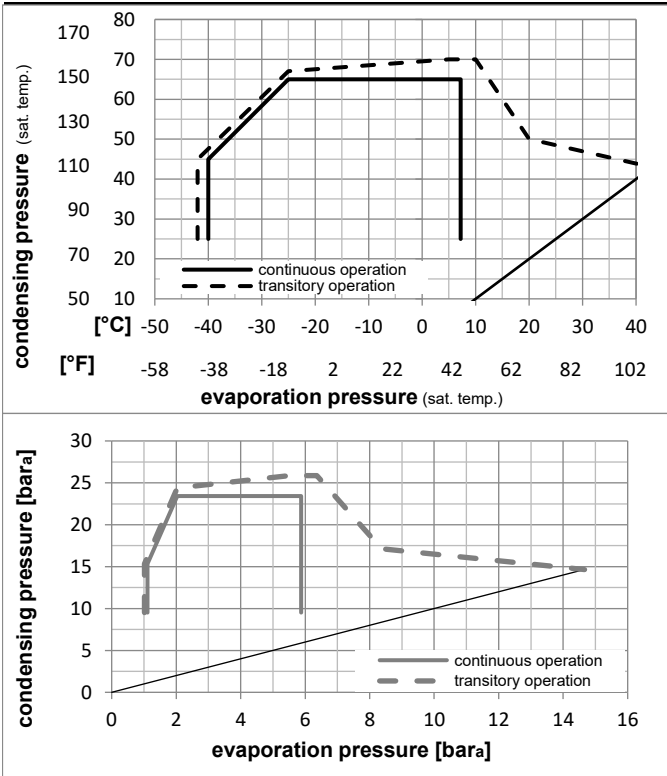


Ambient/ machine room temperatures minimum /maximum

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 (T1189/L6-S3)	117U7073
c	start capacitor (80μF, 6.3mm)	117U5001
b	cover terminal board	10636401
.	screw uni en iso 4757	10641201

Alternative components

.	cable clamp (screws not included)	16058100
.	screw - uni6954	10636000
.	screw - uni6954	10636200

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Optimization + standard conditions

R290, 220V/50Hz, CSIR, fan 3m/s, VDE

		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	m	[W]	[A]	[kg/h]						
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]																		
-23	-10	54	130	32	90	182,9	625	157,4	1,48	5,04	1,27	123,9	0,99	1,85							ASHRAE LBP		
55	131	32	90	55	131	135,8	464	116,9	1,13	3,85	0,97	120,6	0,99	1,69							cecomaf LBP		
-35	-31	40	104	20	68	100,2	342	86,2	1,14	3,88	0,98	88,1	0,91	1,14							EN12900 LBP		
-7	20	54	130	35	95	335,7	1146	288,9	2,08	7,10	1,79	161,5	1,10	3,83							ASHRAE MBP		
-10	14	55	131	32	90	265,2	906	228,2	1,71	5,85	1,47	154,7	1,08	3,35							cecomaf MBP		
-10	14	45	113	20	68	299,1	1021	257,4	2,14	7,31	1,84	139,7	1,03	3,67							EN12900 MBP		

Performance tables

R290, 220V/50Hz, CSIR, fan 3m/s, VDE

	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	67,2	229	57,8	0,80	2,72	0,69	84,2	0,91	0,75
cond. pressure	-35	-31	95,4	326	82,1	1,03	3,52	0,89	92,4	0,92	1,07
pc= 45/113	-25	-13	163,7	559	140,9	1,48	5,04	1,27	111,0	0,96	1,85
return gas temp.	-15	5	254,8	870	219,3	1,95	6,67	1,68	130,4	1,01	2,90
RGT= 32/90	-5	23	376,5	1286	324,0	2,54	8,67	2,18	148,4	1,06	4,33
liquid temp	0	32	451,3	1541	388,4	2,89	9,88	2,49	156,0	1,08	5,24
Tliq= 45/113	7,2	45	578,1	1974	497,5	3,51	11,99	3,02	164,7	1,11	6,79
[°C / °F]	-40	-40	48,1	164	41,4	0,52	1,78	0,45	92,3	0,92	0,59
cond. pressure	-35	-31	74,4	254	64,0	0,74	2,52	0,64	100,6	0,94	0,92
pc= 55/131	-25	-13	135,8	464	116,9	1,13	3,85	0,97	120,6	0,99	1,69
return gas temp	-15	5	215,8	737	185,7	1,51	5,15	1,30	143,2	1,05	2,71
RGT= 32/90	-5	23	322,2	1100	277,3	1,94	6,63	1,67	166,0	1,11	4,10
liquid temp	0	32	387,8	1324	333,8	2,19	7,49	1,89	176,8	1,15	4,98
Tliq= 55/131	7,2	45	499,5	1706	429,9	2,62	8,95	2,25	190,7	1,20	6,51