

Model

Designation	KLF4.0CNT	200-240V/50Hz 1~ 208-230V/60Hz 1~	Sales code:	106H2412
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	19,2cSt	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	8,9kg / 19,6lbs		
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 KLF4.0CNT

	Conf. 1	Conf. 2
Motor configuration	CSIR	CSIR
Power supply (nominal)	200-240V/50Hz	208-230V/60Hz
Number of phases	1	1
Voltage range	187-254V	195-253V
Approvals	UL, VDE	UL, VDE
Starting torque	HST	HST
Note	Electrical equipment is included and pre-assembled to compressor.	

Applications with KLF4.0CNT

	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 KLF4.0CNT

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

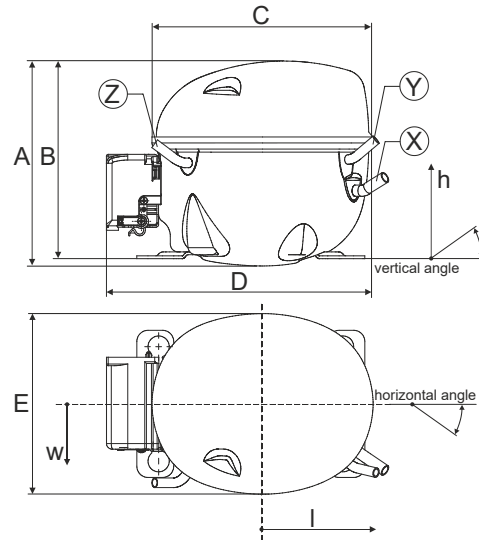
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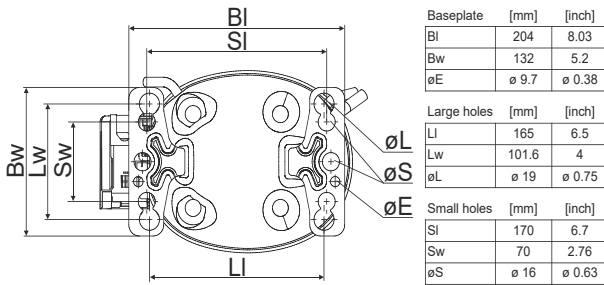
Compressor dimensions

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

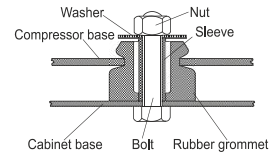
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	ø 8,11-8,29	ø 6,11-6,29	ø 6,11-6,29
	(i:inside, o:outside) [in]	ø 0,32-0,33	ø 0,24-0,25	ø 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	35°	13°	0°
Vertical angle	±2°	30°	40°	145°
Position l/h/w	[mm]	119/73/59	117/107/66	-88/101/71
	[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



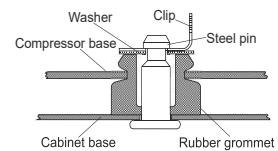
Compressor fixation



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

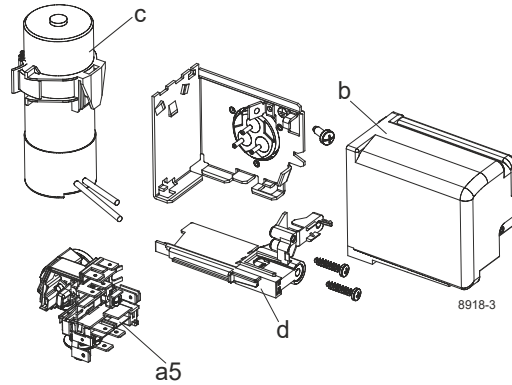
Designation **KLF4.0CNT** **200-240V/50Hz** Conf. 1 Sales code: **106H2412**

Configuration

Motor configuration CSIR
 Power supply (nominal) 200-240V/50Hz 1~
 Refrigerant R290
 Application LBP+MBP
 Voltage range 187-254V
 Starting torque HST
 Approvals UL
 VDE

Electrical accessories / wiring diagram

CSIR

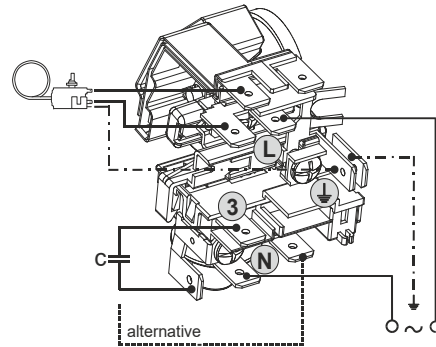


Ambient/ machine room temperatures minimum /maximum

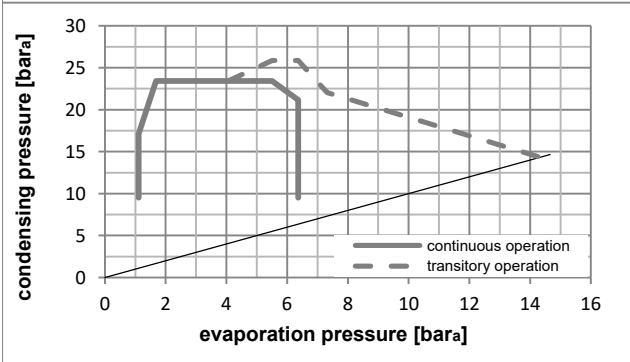
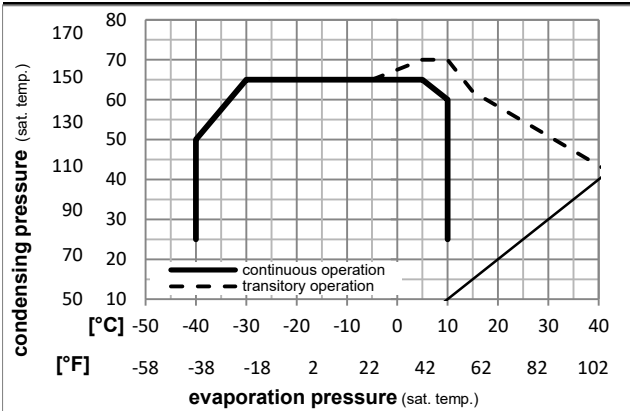
Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s



Operation pressure range



Components (incl. and pre. assembl.)

- a5 current relay (T1252/L6) 117U7085
- c start capacitor (80µF, 6.3mm) 117U5001
- 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

Model

Designation **KLF4.0CNT** **200-240V/50Hz** Conf. 1 Sales code: **106H2412**

Optimization + standard conditions

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

	pe	pc	RGT	Tliq	Cooling capacity	COP	EER	P1	I	Ref. mass flow	
	[°C]	[°C]	[°C]	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
ASHRAE LBP	-23	54	32	32	188,7	1,54	5,26	122,6	0,95	1,91	
	[°F]	[°F]	[°F]	[°F]	[Btu/h]	[kcal/h]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-10	130	90	90	645	1,54	5,26	122,6	0,95	1,91	
cecomaf LBP	-25	55	32	55	139,6	1,18	4,03	118,4	0,95	1,74	
	[°F]	[°F]	[°F]	[°F]	[Btu/h]	[kcal/h]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-13	131	90	131	477	1,18	4,03	118,4	0,95	1,74	
EN12900 LBP	-35	40	20	40	102,2	1,15	3,92	88,9	1,01	1,17	
	[°F]	[°F]	[°F]	[°F]	[Btu/h]	[kcal/h]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-31	104	68	104	349	1,15	3,92	88,9	1,01	1,17	
ASHRAE MBP	-7	54	35	46	356,9	2,12	7,25	168,1	1,02	4,07	
	[°F]	[°F]	[°F]	[°F]	[Btu/h]	[kcal/h]	[kcal/Wh]	[W]	[A]	[kg/h]	
	20	130	95	115	1219	2,12	7,25	168,1	1,02	4,07	
cecomaf MBP	-10	55	32	55	281,7	1,76	6,02	159,9	1,00	3,56	
	[°F]	[°F]	[°F]	[°F]	[Btu/h]	[kcal/h]	[kcal/Wh]	[W]	[A]	[kg/h]	
	14	131	90	131	962	1,76	6,02	159,9	1,00	3,56	
EN12900 MBP	-10	45	20	45	313,3	2,14	7,31	146,3	0,98	3,85	
	[°F]	[°F]	[°F]	[°F]	[Btu/h]	[kcal/h]	[kcal/Wh]	[W]	[A]	[kg/h]	
	14	113	68	113	1070	2,14	7,31	146,3	0,98	3,85	

Performance tables

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

	pe	pc	RGT	Tliq	Cooling capacity	COP	EER	P1	I	m
	[°C]	[°F]	[°C]	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
cond. pressure	-40	-40	-35	-31	65,6	0,80	2,74	81,9	1,05	0,73
pc= 45/113	-25	-13	-15	5	167,5	1,49	5,08	112,7	0,95	1,89
return gas temp.	-15	5	-5	23	265,8	1,96	6,69	135,6	0,96	3,02
RGT= 32/90	-5	23	0	32	394,9	2,53	8,65	156,0	0,99	4,55
liquid temp	0	32	10	50	472,9	2,88	9,85	164,0	1,01	5,48
Tliq= 45/113	10	50			659,0	3,80	12,97	173,5	1,04	7,79
cond. pressure	-40	-40	-35	-31	46,0	0,54	1,84	85,2	1,04	0,57
pc= 55/131	-25	-13	-15	5	139,6	1,18	4,03	118,4	0,95	1,74
return gas temp	-15	5	-5	23	227,8	1,56	5,33	145,9	0,98	2,86
RGT= 32/90	-5	23	0	32	343,2	1,98	6,76	173,3	1,03	4,37
liquid temp	0	32	10	50	412,9	2,22	7,59	185,7	1,07	5,30
Tliq= 55/131	10	50			579,9	2,82	9,63	205,7	1,13	7,60

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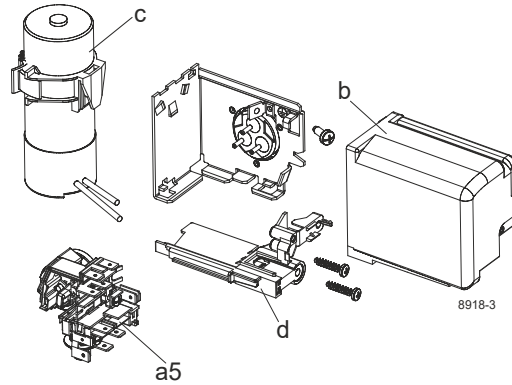
Designation	KLF4.0CNT	208-230V/60Hz	Conf. 2	Sales code:	106H2412
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Configuration

Motor configuration	CSIR
Power supply (nominal)	208-230V/60Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	195-253V
Starting torque	HST
Approvals	UL
	VDE

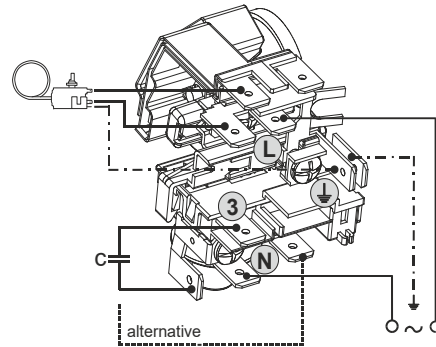
Electrical accessories / wiring diagram

CSIR

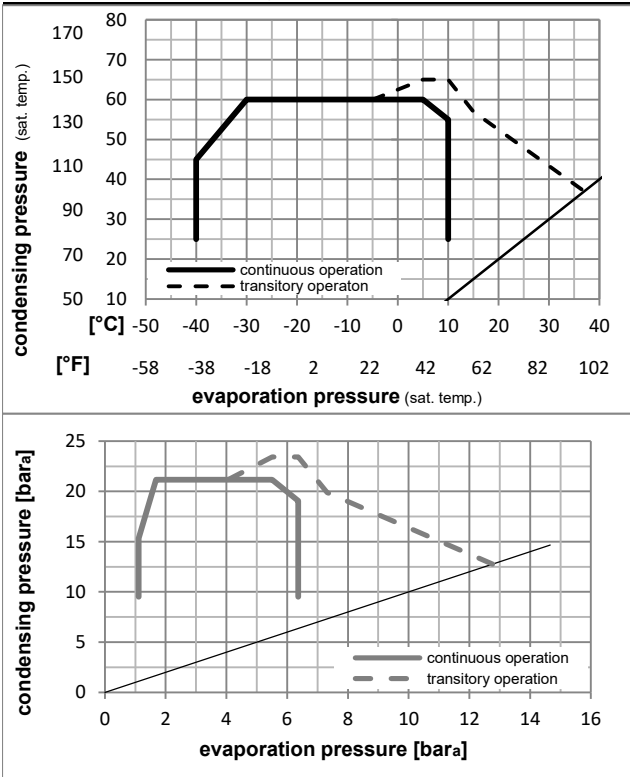


Ambient/ machine room temperatures minimum /maximum

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 pressure range



Components (incl. and pre. assembl.)

a5	current relay (T1252/L6)	117U7085
c	start capacitor (80µF, 6.3mm)	117U5001
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

Model

Designation **KLF4.0CNT** **208-230V/60Hz** Conf. 2 Sales code: **106H2412**

Optimization + standard conditions

R290, 230V/60Hz, CSIR, fan 3m/s, UL, VDE

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			COP	EER	Power consumption			ASHRAE LBP	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]			P1	I	m		
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23	54	32	32	235,5	804	202,7	1,63	5,56	1,40	144,7	0,98	2,38	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	175,7	600	151,2	1,25	4,28	1,08	140,3	0,97	2,19	cecomaf LBP
	-13	131	90	131										
	-35	40	20	40	129,9	444	111,8	1,27	4,34	1,09	102,2	0,93	1,48	EN12900 LBP
	-31	104	68	104										
	-7	54	35	46	425,3	1453	366,0	2,18	7,43	1,87	195,5	1,12	4,85	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	338,1	1155	291,0	1,81	6,19	1,56	186,5	1,09	4,28	cecomaf MBP
	14	131	90	131										
	-10	45	20	45	372,1	1271	320,2	2,22	7,57	1,91	167,8	1,03	4,57	EN12900 MBP
	14	113	68	113										

Performance tables

R290, 230V/60Hz, CSIR, fan 3m/s, UL, 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	88,6	303	76,3	0,92	3,15	0,79	96,0	0,95	0,99
cond. pressure	-35	-31	122,2	417	105,2	1,15	3,93	0,99	106,3	0,94	1,37
pc= 45/113	-25	-13	206,2	704	177,4	1,58	5,40	1,36	130,5	0,95	2,33
return gas temp.	-15	5	318,4	1088	274,0	2,04	6,97	1,76	155,9	1,00	3,62
RGT= 32/90	-5	23	466,0	1592	401,1	2,61	8,92	2,25	178,4	1,06	5,37
liquid temp	0	32	555,3	1896	477,9	2,97	10,13	2,55	187,1	1,09	6,44
Tliq= 45/113	10	50	769,1	2627	661,9	3,90	13,33	3,36	197,0	1,13	9,09
[°C / °F]	-40	-40	66,5	227	57,2	0,64	2,19	0,55	103,6	0,95	0,82
cond. pressure	-35	-31	98,5	336	84,7	0,86	2,95	0,74	113,9	0,94	1,22
pc= 55/131	-25	-13	175,7	600	151,2	1,25	4,28	1,08	140,3	0,97	2,19
return gas temp	-15	5	276,6	945	238,0	1,62	5,52	1,39	171,0	1,04	3,48
RGT= 32/90	-5	23	408,2	1394	351,3	2,03	6,92	1,74	201,5	1,14	5,20
liquid temp	0	32	487,7	1665	419,7	2,26	7,73	1,95	215,4	1,19	6,26
Tliq= 55/131	10	50	678,5	2317	583,9	2,85	9,74	2,46	237,8	1,27	8,90