

Model

Designation	KLF7.7CNT	200-240V/50Hz 1~ 208-230V/60Hz 1~	Sales code:	106H2818
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	19,2cSt	Displacement	7,7cm ³ / 0,47cu.in
Oil quantity	170cm ³ / 5,7fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	200g / 7,1oz		
Free gas volume comp.	1575cm ³ / 53,3fl.oz		
Weight	9,6kg / 21,2lbs		
Motor protection	external		
Winding resistance main	6,4Ω (at 25°C)		
Winding resistance aux	14,8Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with KLF7.7CNT

	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	198-253V
Approvals	UL, CCC, CB	UL, CCC, CB, KC
Starting torque	HST	HST
Note	Electrical equipment is included and pre-assembled to compressor.	

Applications with KLF7.7CNT

	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 KLF7.7CNT

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s/ U(N))	15,8A	15,3A
RLA (rated load amps / 1s/ U(N))	1,9A	2A
Cut in current (U(N))		

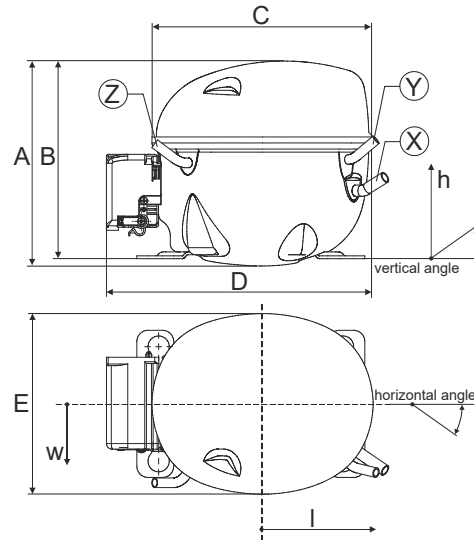
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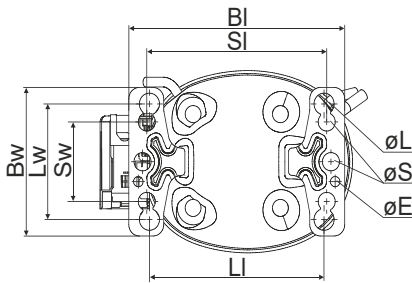
Compressor dimensions

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]	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]	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

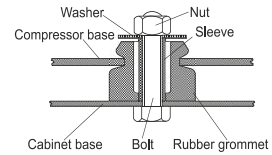


Compressor fixation

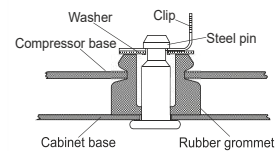


Baseplate	[mm]	[inch]
BI	204	8.03
BW	132	5.2
øE	ø 9.7	ø 0.38
Large holes	[mm]	[inch]
LI	165	6.5
LW	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
SW	70	2.76
øS	ø 16	ø 0.63

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
Compressor comes on a wooden pallet

Model

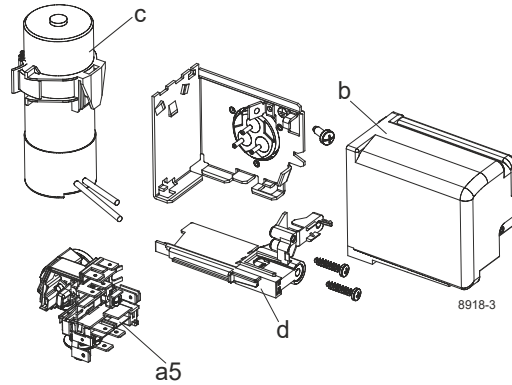
Designation **KLF7.7CNT** **200-240V/50Hz** Conf. 1 Sales code: **106H2818**

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
 CCC
 CB

Electrical accessories / wiring diagram

CSIR

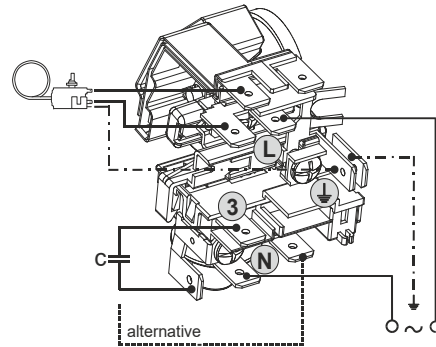


Ambient/ machine room temperatures minimum /maximum

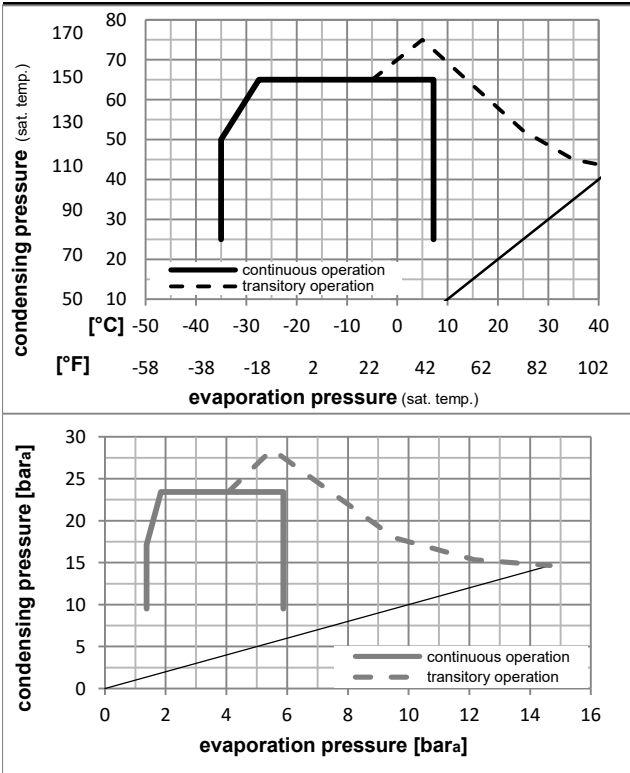
Ambient temperature range: 10 - 43°C / 50 - 110°F

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 (T0916/L6-S8) 117U7079
- c start capacitor (80µF, 6.3mm) 117U5003
- 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 **KLF7.7CNT** **200-240V/50Hz** Conf. 1 Sales code: **106H2818**

Optimization + standard conditions

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

	Evaporating pressure (saturation temperature)				Cooling capacity						Power consumption			
	Condensing pressure (saturation temperature)				COP						Current consumption			
	Return gas temp.				EER						Ref. mass flow			
	Liquid temp.				P1						I			
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-23	54	32	32	395,4	1350	340,3	1,55	5,30	1,34	254,6	1,88	4,00	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	295,9	1011	254,7	1,20	4,11	1,04	245,7	1,86	3,68	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	228,1	779	196,3	1,24	4,24	1,07	183,8	1,74	2,61	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-7	54	35	46	704,6	2406	606,3	2,02	6,89	1,73	349,5	2,18	8,04	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	560,2	1913	482,1	1,68	5,74	1,45	333,3	2,13	7,09	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	614,9	2100	529,2	2,07	7,06	1,78	297,5	2,01	7,55	EN12900 MBP
[°F]	14	113	68	113										

Performance tables

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

	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]	-35	-31	220,3	752	189,6	1,16	3,97	1,00	189,3	1,75	2,47			
cond. pressure	-25	-13	345,3	1179	297,2	1,49	5,08	1,28	232,3	1,83	3,89			
pc= 45/113	-15	5	526,6	1799	453,2	1,90	6,50	1,64	276,7	1,94	5,99			
return gas temp.	-10	14	640,2	2186	550,9	2,15	7,35	1,85	297,5	2,01	7,32			
RGT= 32/90	-5	23	769,9	2629	662,6	2,43	8,31	2,09	316,4	2,07	8,86			
liquid temp	0	32	916,6	3130	788,9	2,76	9,41	2,37	332,6	2,12	10,63			
Tliq= 45/113	7,2	45	1159,1	3958	997,5	3,31	11,32	2,85	349,7	2,18	13,62			
[°C / °F]	-35	-31	180,2	615	155,1	0,94	3,21	0,81	191,5	1,74	2,23			
cond. pressure	-25	-13	295,9	1011	254,7	1,20	4,11	1,04	245,7	1,86	3,68			
pc= 55/131	-15	5	459,1	1568	395,1	1,51	5,15	1,30	304,3	2,03	5,77			
return gas temp	-10	14	560,2	1913	482,1	1,68	5,74	1,45	333,3	2,13	7,09			
RGT= 32/90	-5	23	675,4	2306	581,2	1,87	6,39	1,61	361,1	2,22	8,60			
liquid temp	0	32	805,2	2750	693,0	2,08	7,11	1,79	387,0	2,32	10,34			
Tliq= 55/131	7,2	45	1019,5	3482	877,4	2,43	8,30	2,09	419,4	2,44	13,28			

Model

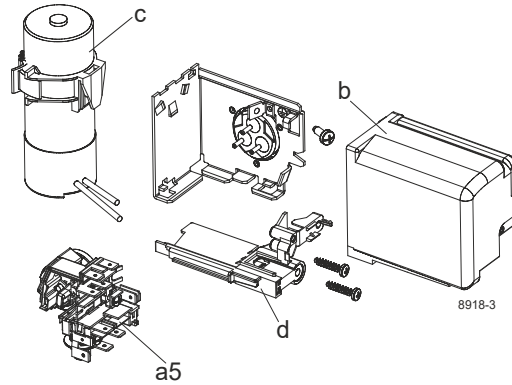
Designation	KLF7.7CNT	208-230V/60Hz	Conf. 2	Sales code:	106H2818
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Configuration

Motor configuration	CSIR
Power supply (nominal)	208-230V/60Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-253V
Starting torque	HST
Approvals	UL
	CCC
	CB
	KC

Electrical accessories / wiring diagram

CSIR

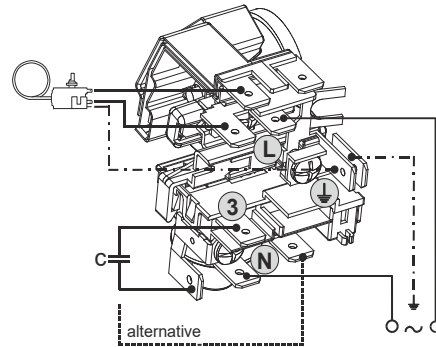


Ambient/ machine room temperatures minimum /maximum

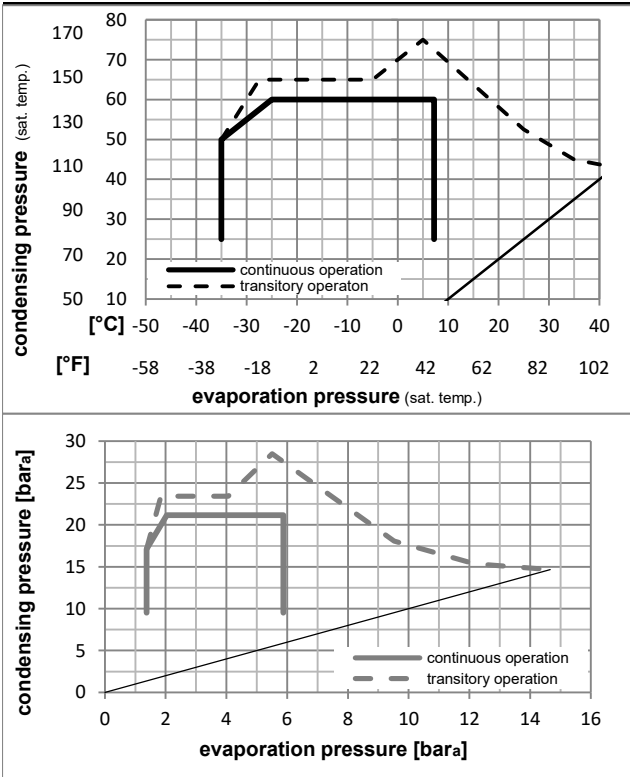
Ambient temperature range: 10 - 43°C / 50 - 110°F

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 (T0916/L6-S8)	117U7079
c	start capacitor (80µF, 6.3mm)	117U5003
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 **KLF7.7CNT** **208-230V/60Hz** Conf. 2 Sales code: **106H2818**

Optimization + standard conditions

R290, 230V/60Hz, CSIR, fan 3m/s, UL, CCC, CB, KC

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			COP	EER	P1	Power consumption		Ref. mass flow	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				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	484,2	1654	416,7	1,62	5,54	1,40	298,3	1,78	4,90	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	364,6	1245	313,8	1,27	4,32	1,09	287,9	1,74	4,54	cecomaf LBP
	-13	131	90	131										
	-35	40	20	40	269,9	922	232,2	1,26	4,30	1,08	214,5	1,51	3,08	EN12900 LBP
	-31	104	68	104										
	-7	54	35	46	835,2	2852	718,7	2,07	7,07	1,78	403,6	2,17	9,53	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	666,9	2277	573,9	1,73	5,90	1,49	385,8	2,10	8,44	cecomaf MBP
	14	131	90	131										
	-10	45	20	45	732,8	2503	630,7	2,09	7,15	1,80	350,1	1,96	9,00	EN12900 MBP
	14	113	68	113										

Performance tables

R290, 230V/60Hz, CSIR, fan 3m/s, UL, CCC, CB, KC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						
[°C / °F]	-35	-31	260,8	891	224,5	1,19	4,07	1,03	218,8	1,52	2,92
cond. pressure	-25	-13	420,6	1436	361,9	1,53	5,22	1,32	275,2	1,70	4,74
pc= 45/113	-15	5	632,3	2159	544,2	1,93	6,61	1,67	326,8	1,88	7,19
return gas temp.	-10	14	762,9	2605	656,6	2,18	7,44	1,88	350,1	1,96	8,73
RGT= 32/90	-5	23	912,8	3117	785,6	2,46	8,40	2,12	371,3	2,05	10,51
liquid temp	0	32	1084,1	3702	933,0	2,78	9,49	2,39	390,1	2,12	12,57
Tliq= 45/113	7,2	45	1372,5	4687	1181,2	3,33	11,36	2,86	412,6	2,21	16,13
[°C / °F]	-35	-31	222,4	759	191,4	1,01	3,46	0,87	219,4	1,52	2,75
cond. pressure	-25	-13	364,6	1245	313,8	1,27	4,32	1,09	287,9	1,74	4,54
pc= 55/131	-15	5	551,4	1883	474,6	1,56	5,32	1,34	354,2	1,98	6,93
return gas temp	-10	14	666,9	2277	573,9	1,73	5,90	1,49	385,8	2,10	8,44
RGT= 32/90	-5	23	799,7	2731	688,2	1,92	6,57	1,65	416,0	2,22	10,19
liquid temp	0	32	952,1	3252	819,4	2,14	7,32	1,84	444,5	2,34	12,23
Tliq= 55/131	7,2	45	1210,1	4133	1041,5	2,51	8,57	2,16	482,1	2,49	15,77