

Model
KLF7.7CNDS

Sales code:
106h2803

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	200g / 7.05oz
Weight	9.60 kg / 21.16lbs
Displacement	7.70 cm3 / 0.47cu.in
Compressors on pallet	100



General - Configurations With KLF7.7CNDS

-	Conf. 1
Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz
Number of phases	1
Voltage range	198-254 V
Approvals	VDE, CCC
Starting torque	HST
Refrigerant	R290
Application	LBP+MBP
Hot gas defrost	OK
Long interval pull down	OK

Application Notes

- Provision for PE Grounding is located at the PE Stamp on the compressor
- Very good robustness against liquid intake.
- Ice-cube maker optimization - indirect suction intake.

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Compressor Design

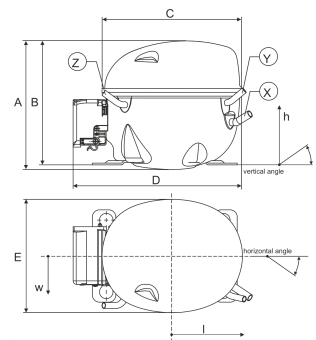
Oil type	POE	Winding resistance main	8.4 Ohm
Oil viscosity	9,7cSt	Winding resistance aux	11.9 Ohm
Oil quantity	165 / 5.58fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,575 cm ³ / 53.26fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	external		

Compressor Dimensions

Housing

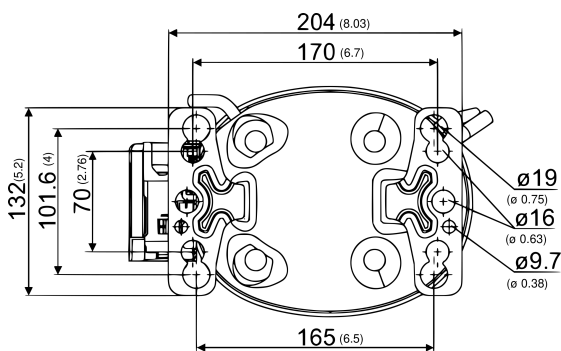
A Height	182mm / 7.17in
B Height	175mm / 6.89in
C Length shell	198mm / 7.80in
D Length w. cover	238mm / 9.37in
E Width	160mm / 6.30in

[Find 3D Model here](#)

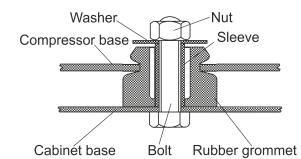


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71 / -3.46/3.98/2.80in
Straight tube l. [mm]	13.5 / 0.53in	13.5 / 0.53in	13.5 / 0.53in

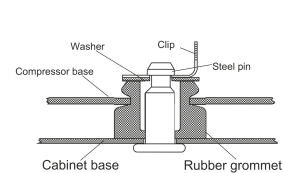
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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

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Configuration 1

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Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, CCC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	13.2 A
RLA (rated load amps / 1s/ U(N))	2.1 A
Cut in current (U(N))	12.3 A

Ambient/ machine room temperatures minimum /maximum

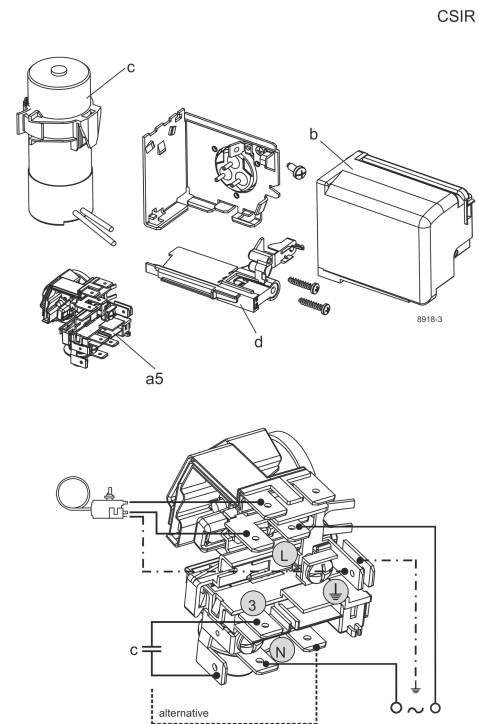
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a5 current relay (T0377/L6-S1) 117U7071

c start capacitor (80µF, 6.3mm) 117U5001

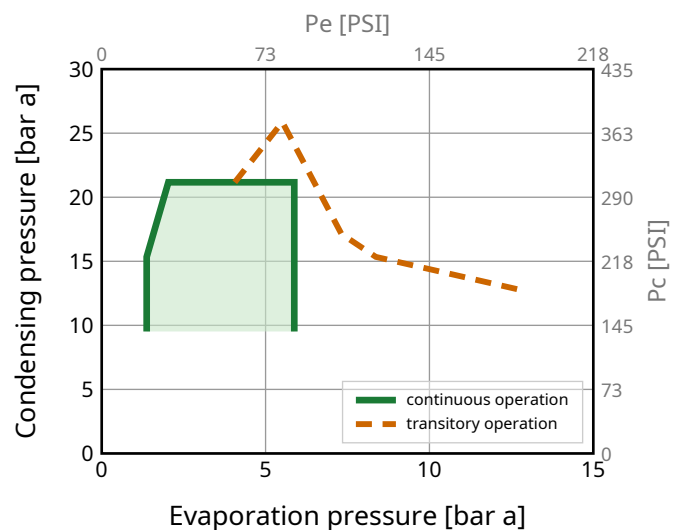
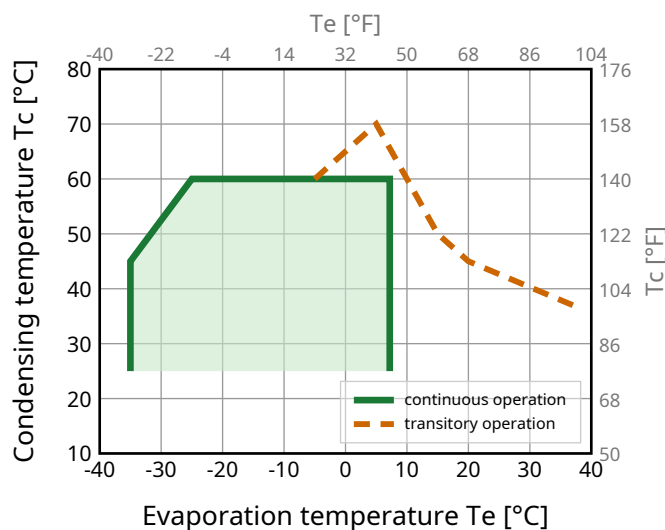
b, d cover + clamp + screws (5VA-compl.) 103N0600

Alternative components

b, d 100x cover + clamp + screws (5VA) 103N2060

b, d cover + clamp + screws (5VA) in bag 103N1060

Operation Pressure Range



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Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	373	1273	321	1.49	5.07	251	1.66	3.79	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	278	947	239	1.15	3.91	242	1.64	3.48	CECOMAF LBP
-35 -31	40 104	20 68	40 104	215	733	185	1.18	4.01	183	1.47	2.47	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	663	2264	571	1.96	6.67	339	1.97	7.59	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	528	1802	454	1.63	5.56	324	1.91	6.71	CECOMAF MBP
-10 14	45 113	20 68	45 113	588	2006	506	1.98	6.76	297	1.81	7.24	EN12900 MBP

Performance Tables

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

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	203	692	174	1.08	3.70	187	1.48	2.28
-30	-22	261	890	224	1.24	4.24	210	1.54	2.95
-20	-4	411	1402	353	1.62	5.53	254	1.67	4.68
-10	14	611	2086	526	2.06	7.03	297	1.81	7.02
0	32	867	2958	746	2.56	8.74	338	1.97	10.08
7.2	45	1088	3713	936	2.96	10.11	367	2.08	12.80

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	165	562	142	0.90	3.05	184	1.48	2.05
-30	-22	216	737	186	1.01	3.46	213	1.55	2.70
-20	-4	350	1192	301	1.29	4.42	270	1.73	4.40
-10	14	528	1802	454	1.63	5.56	324	1.91	6.71
0	32	757	2583	651	2.02	6.89	375	2.11	9.76
7.2	45	956	3262	822	2.33	7.95	410	2.25	12.49