

Model

Designation	FRK6G	220-240V/50Hz 1~ 208-230V/60Hz 1~	Sales code:	106G5563
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a, R513A
Oil viscosity	19,2cSt	Displacement	4,8cm ³ / 0,29cu.in
Oil quantity	240cm ³ / 8,1fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	700g / 24,7oz		
Free gas volume comp.	1545cm ³ / 52,2fl.oz		
Weight	9,3kg / 20,5lbs		
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		
Additional note	Very good robustness against liquid intake. Ice-cube maker optimization - indirect suction intake. Special design for high refrigerant charge		



General - Configurations with FRK6G

	Conf. 1	Conf. 2
Motor configuration	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	208-230V/60Hz
Number of phases	1	1
Voltage range	187-254V	198-253V
Approvals	VDE, CB, UL	VDE, CB, UL
Starting torque	HST	HST
Note	Electrical equipment is included and pre-assembled to compressor.	

Applications with FRK6G

	Conf. 1	Conf. 2
Refrigerant	R134a	R134a
Application	LBP+MBP+HBP	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 FRK6G

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s/ U(N))	10,5A	
RLA (rated load amps / 1s/ U(N))	1A	-/-A
Cut in current (U(N))	10,2A	

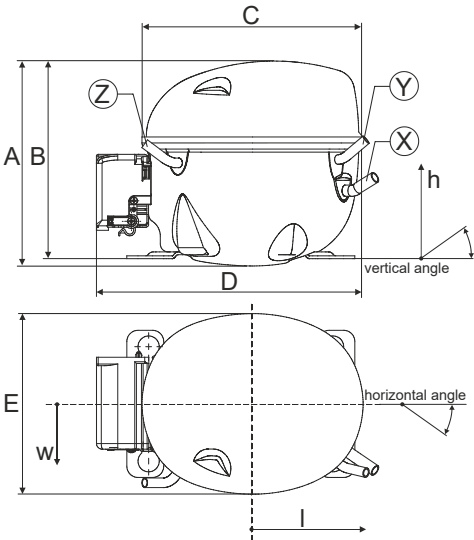
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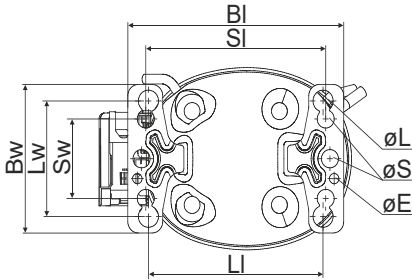
Compressor dimensions

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 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] 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

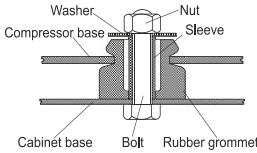


Compressor fixation

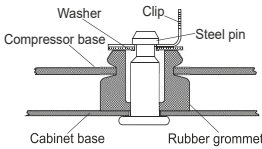


Baseplate	[mm]	[inch]
BI	204	8.03
BW	132	5.2
øE	ø 9.7	ø 0.38
Large holes		
LI	165	6.5
LW	101.6	4
øL	ø 19	ø 0.75
Small holes		
SI	170	6.7
SW	70	2.76
øS	ø 16	ø 0.63

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

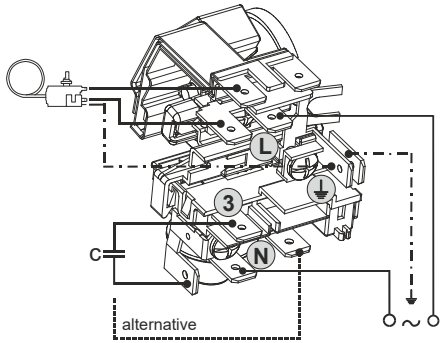
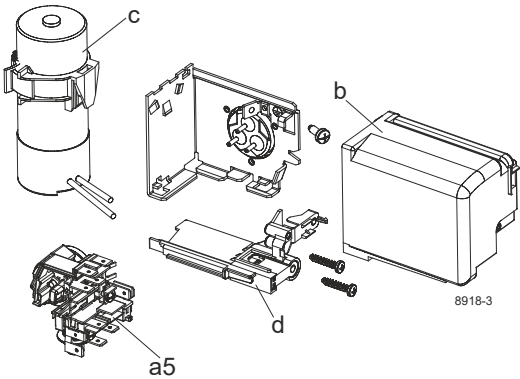
Provision for PE Grounding is located at the PE Stamp on the compressor
Suctiongas connector and Process connector can be switched (minor loss of cooling capacity)

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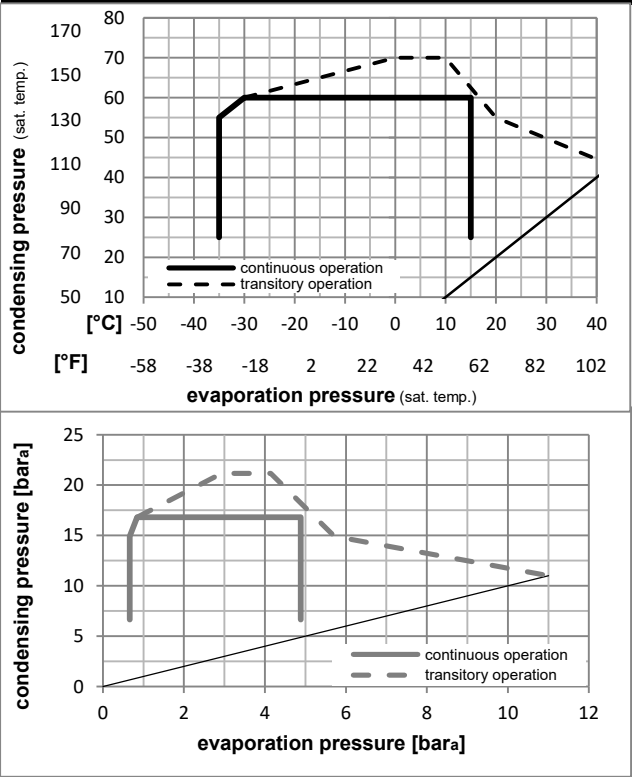
Configuration	Electrical accessories / wiring diagram				
Motor configuration	CSIR				CSIR
Power supply (nominal)	220-240V/50Hz 1~				
Refrigerant	R134a				
Application	LBP+MBP+HBP				
Voltage range	187-254V				
Starting torque	HST				
Approvals	VDE				
	CB				
	UL				

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 (T1189/L6-S3)	117U7073
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 **FRK6G** **220-240V/50Hz** Conf. 1 Sales code: **106G5563**

Optimization + standard conditions

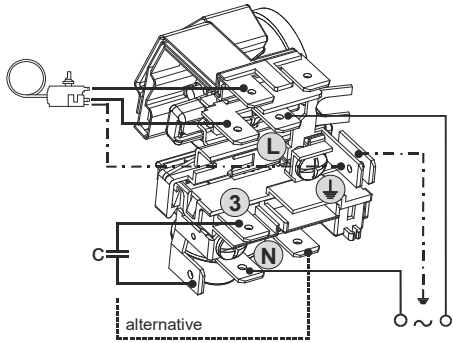
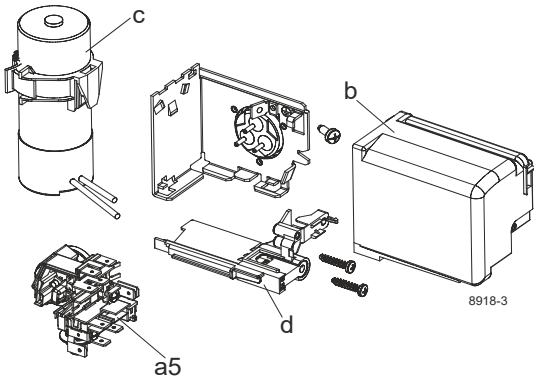
R134a, 220V/50Hz, CSIR, fan 3m/s, VDE, CB, UL

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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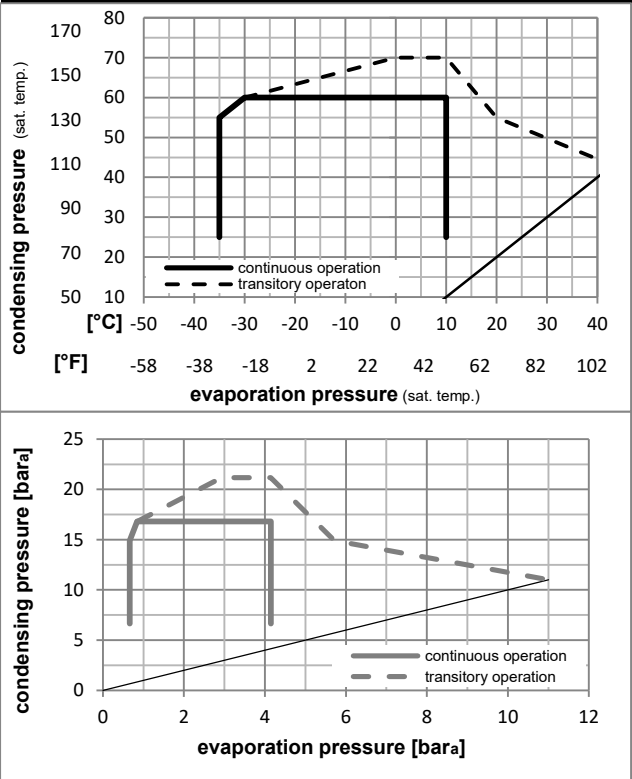
Model			
Designation	FRK6G	208-230V/60Hz	Conf. 2
			Sales code: 106G5563
Configuration		Electrical accessories / wiring diagram	
Motor configuration	CSIR	CSIR	
Power supply (nominal)	208-230V/60Hz 1~		
Refrigerant	R134a		
Application	LBP+MBP		
Voltage range	198-253V		
Starting torque	HST		
Approvals	VDE		
	CB		
	UL		

Ambient/ machine room temperatures minimum /maximum

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Operation pressure range



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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 **FRK6G** **208-230V/60Hz** Conf. 2 Sales code: **106G5563**

Optimization + standard conditions

R134a, 230V/60Hz, CSIR, fan 3m/s, VDE, CB, UL

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption																																																																			
Return gas temp.					Current consumption						Ref. mass flow																																																																			
Liquid temp.					Cooling capacity						COP				EER				P1				I				ṁ																																																			
pe					pc					RGT					Tliq					[W]					[Btu/h]					[kcal/h]					[W/W]					[Btu/Wh]					[kcal/Wh]					[W]					[A]					[kg/h]																		
[°C]					-23	54	32	32	149,8					511					128,9					1,27					4,33					1,09					118,2					1,13					2,91					ASHRAE LBP																								
[°F]					-10	130	90	90																																																																						
[°C]					-7	54	35	46	320,6					1095					275,9					1,86					6,35					1,60					172,3					1,26					6,99					ASHRAE MBP																								
[°F]					20	130	95	115																																																																						
[°C]					7,2	54	35	46	569,7					1946					490,3					2,63					8,97					2,26					216,9					1,39					12,64					ASHRAE HBP																								
[°F]					45	130	95	115																																																																						
[°C]					-35	40	20	40	79,1					270					68,1					0,90					3,08					0,78					87,8					1,08					1,74					EN12900 LBP																								
[°F]					-31	104	68	104																																																																						
[°C]					-10	45	20	45	273,4					934					235,3					1,82					6,21					1,57					150,3					1,20					6,40					EN12900 MBP																								
[°F]					14	113	68	113																																																																						
[°C]					5	50	20	50	485,8					1659					418,1					2,37					8,11					2,04					204,5					1,35					12,24					EN12900 HBP																								
[°F]					41	122	68	122																																																																						

Performance tables

R134a, 230V/60Hz, CSIR, fan 3m/s, VDE, CB, UL

	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	73,8	252	63,5	0,86	2,92	0,74	86,1	1,08	1,59		
cond. pressure	-25	-13	127,3	435	109,5	1,18	4,03	1,01	107,9	1,11	2,76		
pc= 45/113	-15	5	220,7	754	189,9	1,63	5,57	1,40	135,3	1,17	4,81		
return gas temp.	-10	14	283,6	969	244,1	1,89	6,44	1,62	150,3	1,20	6,21		
RGT= 32/90	0	32	444,4	1518	382,4	2,45	8,38	2,11	181,2	1,28	9,83		
liquid temp	5	41	543,2	1855	467,5	2,77	9,44	2,38	196,4	1,33	12,09		
Tliq= 45/113	15	59	780,2	2664	671,4	3,47	11,85	2,99	224,9	1,42	17,67		
[°C / °F]	-35	-31	59,2	202	50,9	0,69	2,34	0,59	86,3	1,08	1,41		
cond. pressure	-25	-13	109,8	375	94,5	0,97	3,30	0,83	113,6	1,12	2,62		
pc= 55/131	-15	5	192,8	658	165,9	1,33	4,53	1,14	145,2	1,19	4,64		
return gas temp	-10	14	247,7	846	213,2	1,53	5,23	1,32	161,8	1,23	5,99		
RGT= 32/90	0	32	386,9	1321	333,0	1,98	6,78	1,71	194,9	1,32	9,46		
liquid temp	5	41	472,2	1613	406,4	2,24	7,65	1,93	210,8	1,37	11,64		
Tliq= 55/131	15	59	676,5	2310	582,2	2,82	9,65	2,43	239,5	1,48	16,99		