

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

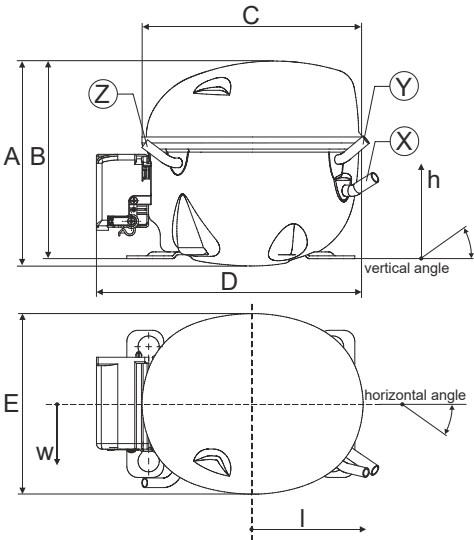
	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s/ U(N))	10,5A	
RLA (rated load amps / 1s/ U(N))	1A	-/-A
Cut in current (U(N))	10,2A	

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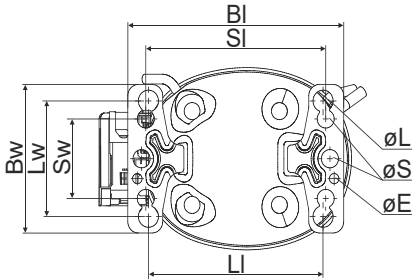
Compressor dimensions

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	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
	[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

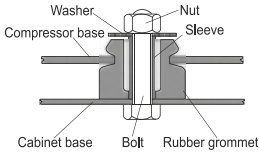


Compressor fixation

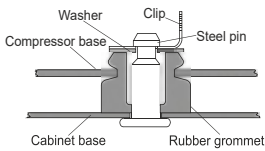


Baseplate	[mm]	[inch]
BI	204	8.03
BW	132	5.2
øE	ø 9.7	ø 0.38
Large holes	[mm]	[inch]
LI	165	6.5
LW	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
SW	70	2.76
øS	ø 16	ø 0.63

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

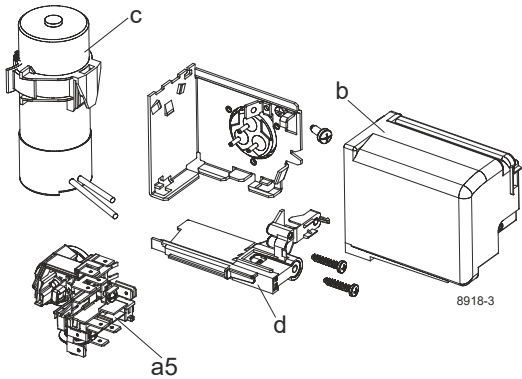
Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

Suctiongas connector and Process connector can be switched (minor loss of cooling capacity)

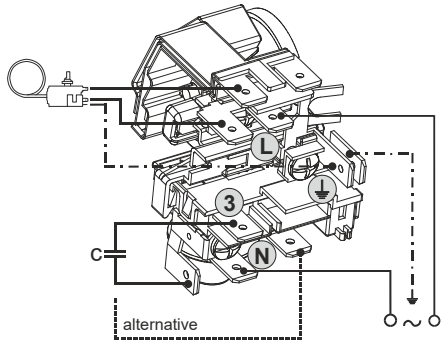
Model				
Designation	FRK6G	220-240V/50Hz	Conf. 1	Sales code: 106G5563

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

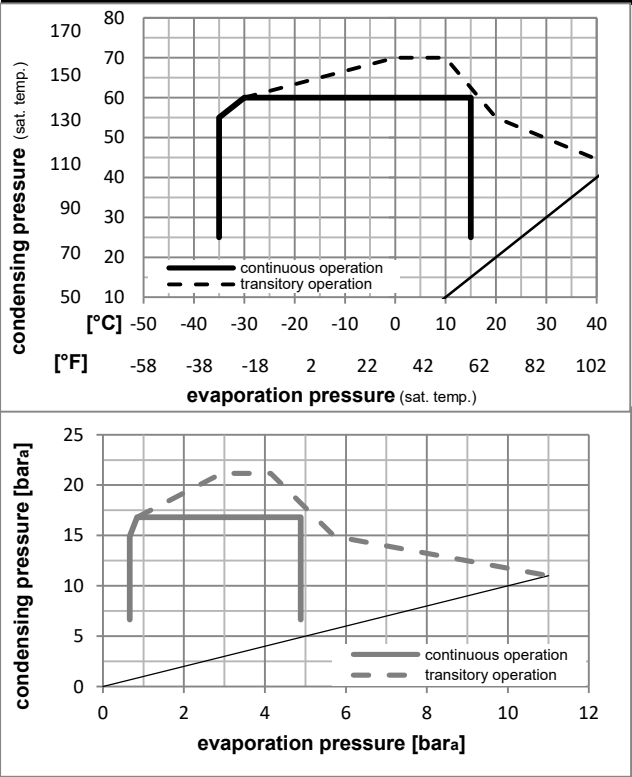


Ambient/ machine room temperatures minimum /maximum

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)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Performance tables

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

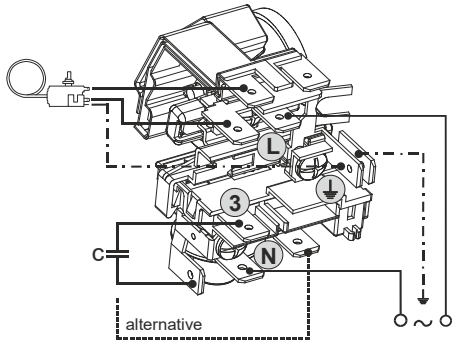
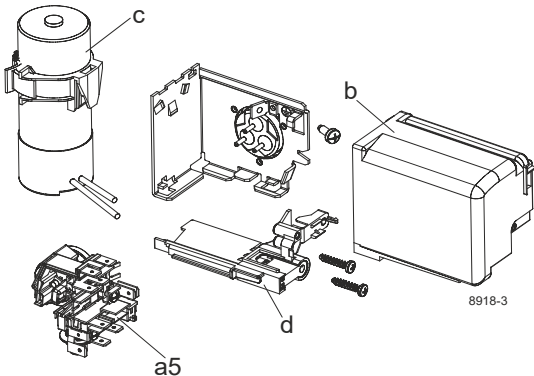
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	58,6	200	50,4	0,81	2,76	0,70	72,4	0,88	1,26
cond. pressure	-25	-13	108,4	370	93,3	1,14	3,89	0,98	95,2	0,93	2,35
pc= 45/113	-15	5	189,4	647	163,0	1,61	5,49	1,38	117,9	0,98	4,13
return gas temp.	-10	14	243,2	831	209,3	1,88	6,43	1,62	129,2	1,00	5,32
RGT= 32/90	0	32	380,6	1300	327,6	2,51	8,56	2,16	151,8	1,07	8,42
liquid temp	5	41	465,5	1590	400,7	2,85	9,75	2,46	163,1	1,10	10,36
Tliq= 45/113	15	59	671,0	2292	577,5	3,62	12,35	3,11	185,5	1,18	15,20
[°C / °F]	-35	-31	47,4	162	40,8	0,70	2,38	0,60	67,8	0,87	1,13
cond. pressure	-25	-13	91,9	314	79,1	0,94	3,21	0,81	97,7	0,93	2,20
pc= 55/131	-15	5	162,6	555	139,9	1,29	4,39	1,11	126,5	1,00	3,91
return gas temp	-10	14	209,3	715	180,2	1,49	5,09	1,28	140,4	1,03	5,06
RGT= 32/90	0	32	328,9	1123	283,1	1,97	6,71	1,69	167,4	1,11	8,05
liquid temp	5	41	403,0	1376	346,9	2,23	7,63	1,92	180,4	1,16	9,93
Tliq= 55/131	15	59	583,1	1991	501,8	2,84	9,69	2,44	205,5	1,26	14,65

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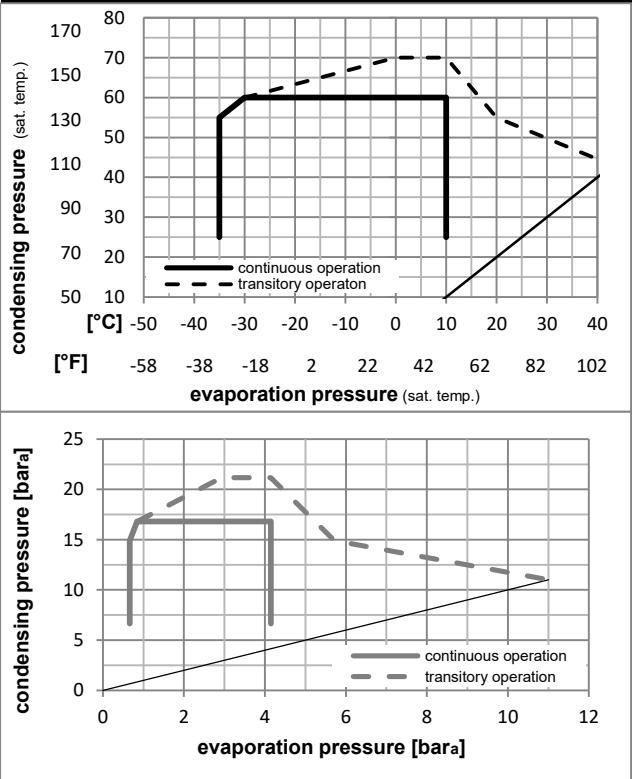
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Refrigerant	R134a				
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Voltage range	198-253V				
Starting torque	HST				
Approvals	VDE				
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	UL				

Ambient/ machine room temperatures minimum /maximum

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Operation pressure range



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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

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Optimization + standard conditions

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

ASHRAE LBP														
ASHRAE MBP														
ASHRAE HBP														
EN12900 LBP														
EN12900 MBP														
EN12900 HBP														

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