

Model

Designation	HXK70NG	200-240V/50Hz 1~ 208-230V/60Hz 1~	Sales code:	16512800
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Compressor design

Oil type	Mineral	Refrigerant(s)	R600a
Oil viscosity	5cSt	Displacement	7cm ³ / 0,43cu.in
Oil quantity	165cm ³ / 5,6fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1600cm ³ / 54,1fl.oz		
Weight	8,2kg / 18,1lbs		
Motor protection	external		
Winding resistance main	24,3Ω (at 25°C)		
Winding resistance aux	13,8Ω (at 25°C)		
Max. winding temp.	130°C / 266°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with HXK70NG

	Conf. 1	Conf. 2
Motor configuration	eRSCR	eRSCR
Power supply (nominal)	200-240V/50Hz	208-230V/60Hz
Number of phases	1	1
Voltage range	170-264V	195-253V
Approvals	VDE	VDE
Starting torque	LST	LST
Note	Electrical equipment is included and pre-assembled to compressor.	

Applications with HXK70NG

	Conf. 1	Conf. 2
Refrigerant	R600a	R600a
Application	LBP+MBP	LBP+MBP
System cooling	static	static
Hot gas defrost	-/-	-/-
Long interval pull down	OK	OK

Electrical data - Configurations with HXK70NG

	Conf. 1	Conf. 2
Starting device type	e-PTC	e-PTC
Run capacitor	4μF	4μF
Start capacitor	-/-	-/-
LRA (locked rotor amps / 4s/ U(N))	4,5A	3,6A
RLA (rated load amps / 1s/ U(N))	0,6A	0,7A
Cut in current (U(N))	9,9A	8,9A

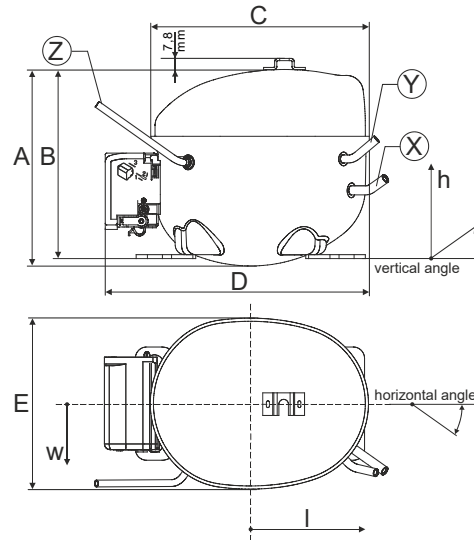
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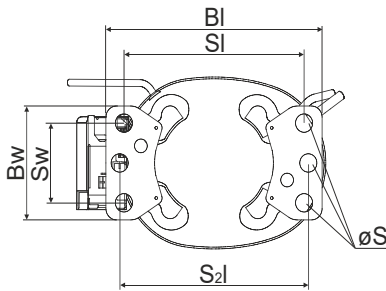
Compressor dimensions

Housing	A Height	174mm / 6,85in
	B Height	167mm / 6,57in
	C Length shell	194mm / 7,64in
	D Length w. cover	238mm / 9,37in
	E Width	151mm / 5,94in

Connectors	Suction	Discharge	Process	
	X	Y	Z	
Diameter [mm]	øi 6,1-6,2	øi 5,1-5,2	øo 5,92-6,08	
(i:inside, o:outside) [in]	øi 0,24-0,24	øi 0,2-0,2	øo 0,23-0,24	
Material	copper	copper	copper	
Horizontal angle	±2° 45°	13°	0°	
Vertical angle	±2° 30°	40°	145°	
Position l/h/w	[mm]	120/72/62	112/106/62	-140/136/70
	[in]	4,7/2,8/2,4	4,4/4,2/2,4	-5,5/5,4/2,8
Straight tube l.	[mm]	14	14	75
	[in]	0,5	0,5	3

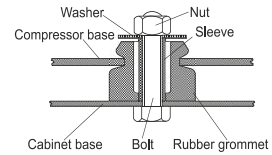


Compressor fixation

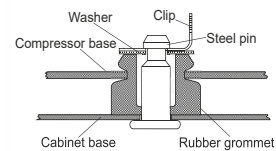


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	100	3.94
Small holes		
	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

Bolt joint



Snap-on



Mounting accessories

- '4ZN' with rubber grommet
- '4ZN' with rubber grommet and sleeve for M6
- Bolt joint kit
- '4ZN' with Snap on kit

- order code
- 772N
 - 768N
 - 4ZN + 118-1917 (18)
 - 776N

Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor Housing with dip-tray fixture (omega bracket).
 Various options of connectors are possible - please contact SECOP-Sales.

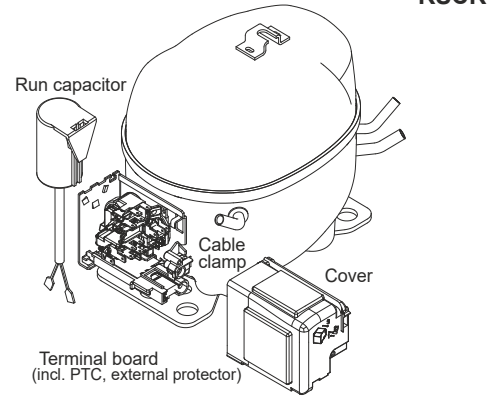
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Configuration

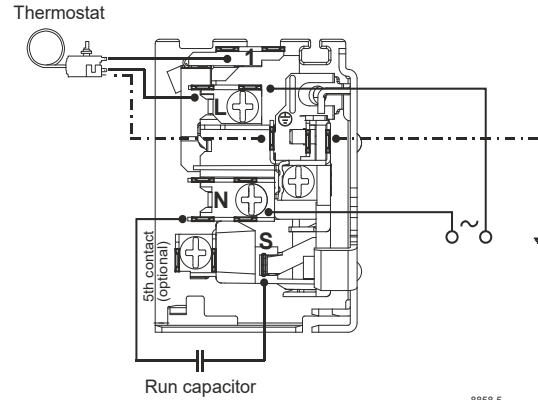
Motor configuration	eRSCR
Power supply (nominal)	200-240V/50Hz 1~
Refrigerant	R600a
Application	LBP+MBP
Voltage range	170-264V
Starting torque	LST
Approvals	VDE

Electrical accessories / wiring diagram

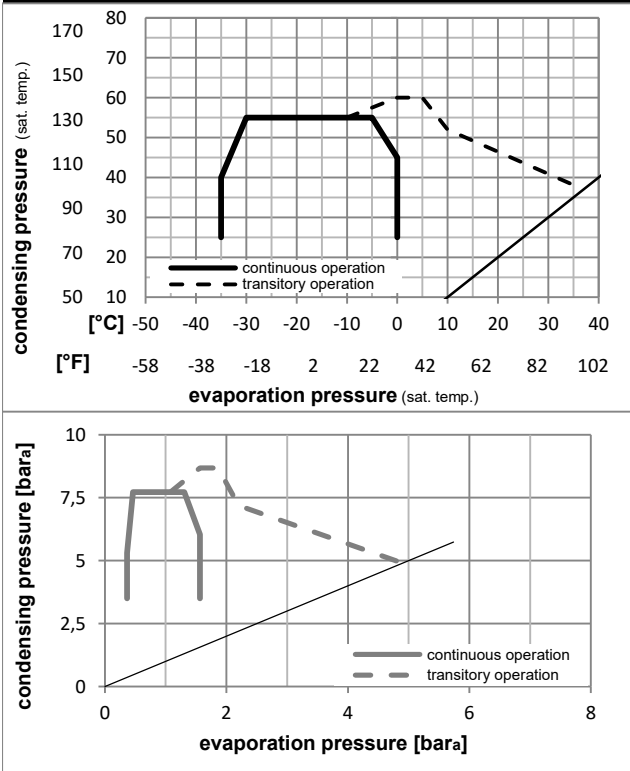


Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	static



Operation pressure range



Components (incl. and pre. assemb.)

terminal board (e-PTC, 4.8mm)	15540500
run capacitor (4μF, 4.8mm)	11261700
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 **HXK70NG** **200-240V/50Hz** Conf. 1 Sales code: **16512800**

Optimization + standard conditions

R600a, 240V/50Hz, eRSCR, static, VDE

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	I	m	[W]	[A]	[kg/h]	ASHRAE LBP					
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]		ASHRAE LBP				
	-23	54	32	32	117,6	402	101,2	1,65	5,64	1,42	71,2	0,32	1,26	71,2	0,32	1,26			ASHRAE LBP			
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]	ASHRAE LBP					
	-10	130	90	90													ASHRAE LBP					
	-25	55	32	55	87,8	300	75,5	1,27	4,35	1,09	69,0	0,31	1,14	69,0	0,31	1,14	cecomaf LBP					
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]	cecomaf LBP					
	-13	131	90	131													cecomaf LBP					
	-35	40	20	40	59,3	203	51,1	1,20	4,11	1,04	49,3	0,23	0,72	49,3	0,23	0,72	EN12900 LBP					
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]	EN12900 LBP					
	-31	104	68	104													EN12900 LBP					
	-7	54	35	46	235,7	805	202,8	2,25	7,67	1,93	105,0	0,45	2,80	105,0	0,45	2,80	ASHRAE MBP					
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]	ASHRAE MBP					
	20	130	95	115													ASHRAE MBP					
	-10	55	32	55	185,7	634	159,8	1,89	6,47	1,63	98,1	0,42	2,44	98,1	0,42	2,44	cecomaf MBP					
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]	cecomaf MBP					
	14	131	90	131													cecomaf MBP					
	-10	45	20	45	201,8	689	173,7	2,25	7,67	1,93	89,8	0,39	2,59	89,8	0,39	2,59	EN12900 MBP					
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]	EN12900 MBP					
	14	113	68	113													EN12900 MBP					

Performance tables

R600a, 240V/50Hz, eRSCR, static, 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]	-35	-31	55,8	191	48,0	1,07	3,66	0,92	52,1	0,24	0,66
cond. pressure	-30	-22	76,9	263	66,2	1,35	4,62	1,16	56,9	0,26	0,91
pc= 45/113	-25	-13	102,3	349	88,0	1,61	5,49	1,38	63,6	0,29	1,22
return gas temp.	-23	-10	112,0	382	96,3	1,69	5,77	1,45	66,3	0,30	1,33
RGT= 32/90	-15	5	168,2	574	144,7	2,08	7,11	1,79	80,8	0,35	2,01
liquid temp	-5	23	258,7	884	222,7	2,63	8,98	2,26	98,4	0,42	3,11
Tliq= 45/113	0	32	315,0	1076	271,1	2,97	10,16	2,56	105,9	0,45	3,79
[°C / °F]	-35	-31	44,7	153	38,4	0,75	2,57	0,65	59,4	0,27	0,58
cond. pressure	-30	-22	64,4	220	55,5	1,03	3,50	0,88	62,8	0,28	0,84
pc= 55/131	-25	-13	87,8	300	75,5	1,27	4,35	1,09	69,0	0,31	1,14
return gas temp	-23	-10	96,6	330	83,2	1,35	4,61	1,16	71,6	0,32	1,26
RGT= 32/90	-15	5	147,8	505	127,2	1,69	5,79	1,46	87,2	0,38	1,93
liquid temp	-5	23	229,9	785	197,9	2,11	7,19	1,81	109,2	0,47	3,03
Tliq= 55/131	0	32	281,0	960	241,8	2,34	8,00	2,02	120,0	0,51	3,71

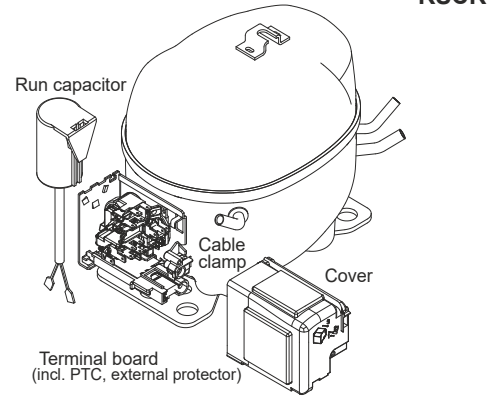
Model

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Configuration

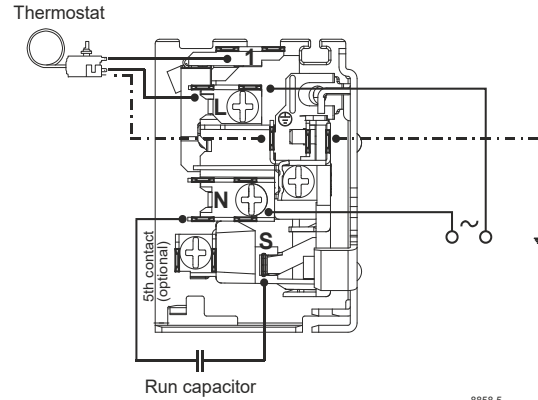
Motor configuration eRSCR
 Power supply (nominal) 208-230V/60Hz 1~
 Refrigerant R600a
 Application LBP+MBP
 Voltage range 195-253V
 Starting torque LST
 Approvals VDE

Electrical accessories / wiring diagram

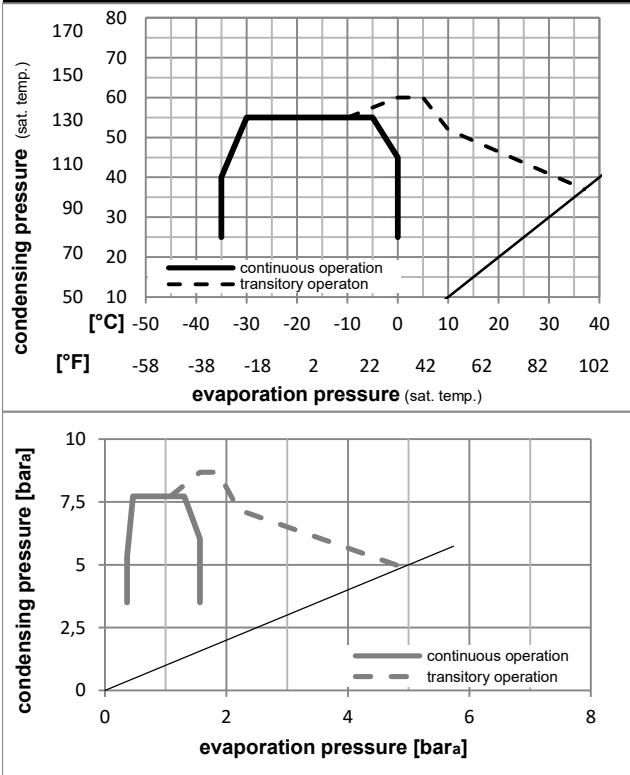


Ambient/ machine room temperatures minimum /maximum

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



Operation pressure range



Components (incl. and pre. assemb.)

- . terminal board (e-PTC, 4.8mm) 15540500
- . run capacitor (4μF, 4.8mm) 11261700
- 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 **HXK70NG** **208-230V/60Hz** Conf. 2 Sales code: **16512800**

Optimization + standard conditions

R600a, 230V/60Hz, eRSCR, static, VDE

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	Power consumption			ASHRAE LBP	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]			P1	I	m		
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23	54	32	32	138,9	474	119,6	1,67	5,69	1,43	83,3	0,38	1,49	ASHRAE LBP
	[°F]													
	-10	130	90	90										
	-25	55	32	55	103,8	355	89,4	1,29	4,40	1,11	80,7	0,37	1,35	cecomaf LBP
	[°F]													
	-13	131	90	131										
	-35	40	20	40	70,7	241	60,8	1,30	4,45	1,12	54,2	0,26	0,86	EN12900 LBP
	[°F]													
	-31	104	68	104										
	-7	54	35	46	275,3	940	237,0	2,23	7,60	1,92	123,7	0,55	3,28	ASHRAE MBP
	[°F]													
	20	130	95	115										
	-10	55	32	55	217,3	742	187,0	1,88	6,43	1,62	115,4	0,51	2,85	cecomaf MBP
	[°F]													
	14	131	90	131										
	-10	45	20	45	236,2	807	203,3	2,25	7,68	1,93	105,1	0,47	3,03	EN12900 MBP
	[°F]													
	14	113	68	113										

Performance tables

R600a, 230V/60Hz, eRSCR, static, VDE

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]		[Btu/Wh]	[kcal/Wh]			
[°C / °F]	-35	-31	66,6	227	57,3	1,14	3,89	0,98	58,5	0,28	0,79
cond. pressure	-30	-22	91,2	311	78,5	1,40	4,78	1,20	65,2	0,31	1,08
pc= 45/113	-25	-13	120,6	412	103,8	1,63	5,58	1,41	73,8	0,34	1,44
return gas temp.	-23	-10	131,8	450	113,4	1,71	5,84	1,47	77,0	0,36	1,57
RGT= 32/90	-15	5	197,1	673	169,6	2,09	7,13	1,80	94,4	0,43	2,35
liquid temp	-5	23	302,7	1034	260,5	2,63	8,97	2,26	115,3	0,51	3,63
Tliq= 45/113	0	32	368,4	1258	317,1	2,96	10,13	2,55	124,3	0,55	4,44
[°C / °F]	-35	-31	53,4	182	45,9	0,78	2,65	0,67	68,8	0,32	0,69
cond. pressure	-30	-22	76,6	262	65,9	1,05	3,58	0,90	73,2	0,34	1,00
pc= 55/131	-25	-13	103,8	355	89,4	1,29	4,40	1,11	80,7	0,37	1,35
return gas temp	-23	-10	114,1	390	98,2	1,36	4,65	1,17	83,8	0,38	1,49
RGT= 32/90	-15	5	173,4	592	149,2	1,69	5,78	1,46	102,4	0,46	2,27
liquid temp	-5	23	268,4	917	231,0	2,08	7,11	1,79	128,9	0,57	3,53
Tliq= 55/131	0	32	327,6	1119	281,9	2,30	7,86	1,98	142,4	0,63	4,33