Model
HXK70NG

Sales code:
16512800

Compressor Data

Refrigerant(s)	**R600a**
Refr. charge - tech. limit	**150g / 5.29oz**
Weight	**8.20 kg / 18.08lbs**
Displacement	**7.00 cm3 / 0.43cu.in**
Compressors on pallet	**100**

General – Configurations With HXK70NG

–	**Conf. 1**	**Conf. 2**
Motor configuration	eRSCR	eRSCR
Power supply (nominal)	200-240 V/50 Hz	208-230 V/60 Hz
Number of phases	1	1
Voltage range	170-264 V	195-253 V
Approvals	VDE	VDE
Starting torque	LST	LST
Refrigerant	R600a	R600a
Application	LBP+MBP	LBP+MBP
Long interval pull down	OK	OK

Application Notes

- Electrical equipment is included and pre-assembled to compressor.
- 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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Compressor Design

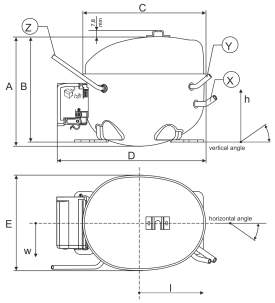
Oil type	**Mineral**	Winding resistance main	**24.3 Ohm**
Oil viscosity	**5cSt**	Winding resistance aux	**13.8 Ohm**
Oil quantity	**165 / 5.58fl.oz**	Max. winding temp.	**130 °C**
Free gas volume comp.	**1,600 cm3 / 54.10fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

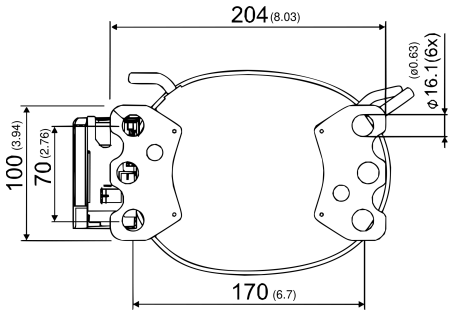
A Height	**174mm / 6.85in**
B Height	**167mm / 6.57in**
C Length shell	**194mm / 7.64in**
D Length w. cover	**238mm / 9.37in**
E Width	**151mm / 5.94in**

Find 3D Model here



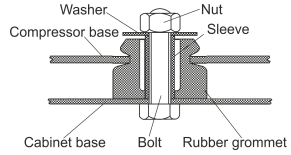
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 6.1–6.2 / 0.24–0.24in	øi 5.1–5.2 / 0.20–0.20in	øi 5.92–6.08 / 0.23–0.24in
Material	CU	CU	CU
Horizontal angle ±2°	45°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	120/71.5/62 / 4.72/2.81/2.44in	112/105.5/62 / 4.41/4.15/2.44in	-140/136/70 / -5.51/5.35/2.76in
Straight tube l. [mm]	13.5 / 0.53in	13.5 / 0.53in	75 / 2.95in

Mounting Accessories

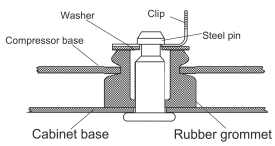


Dimensions in mm [in]

Bolt joint



Snap-on



	one comp.	multi pack
'4ZN' with rubber grommet	–	772N
'4ZN' with rubber grommet and sleeve for M6	–	768N
Bolt joint kit	–	4ZN + 118-1917 (18)
'4ZN' with Snap on kit	–	776N

Model
HXK70NG Configuration 1

Sales code:
16512800

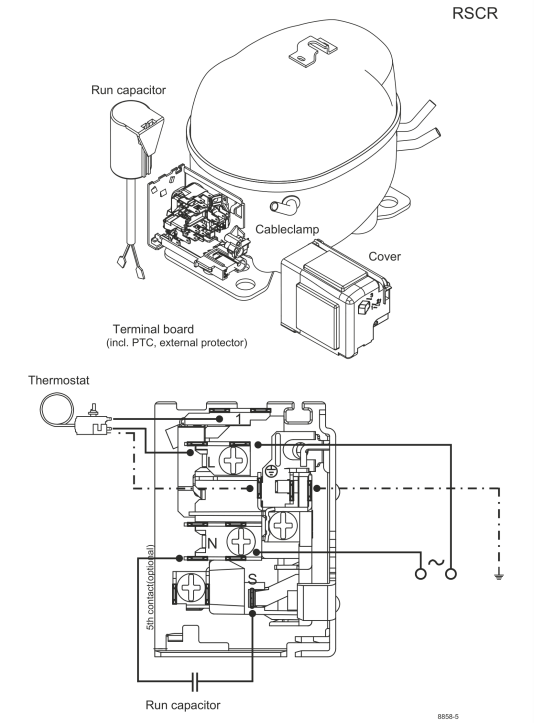
Configuration

Motor configuration	**eRSCR**
Power supply (nominal)	**200-240 V/50 Hz 1~**
Refrigerant	**R600a**
Application	**LBP+MBP**
Voltage range	**170-264 V**
Starting torque	**LST**
Approvals	**VDE**
Starting device type	**e-PTC**
Run capacitor	**4 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**3.6 A**
RLA (rated load amps / 1s/ U(N))	**0.7 A**
Cut in current (U(N))	**8.9 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
static

Electrical Accessories / Wiring Diagram

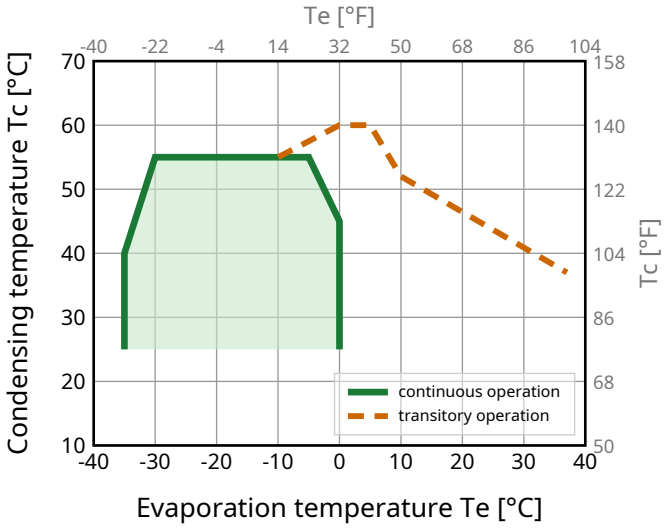


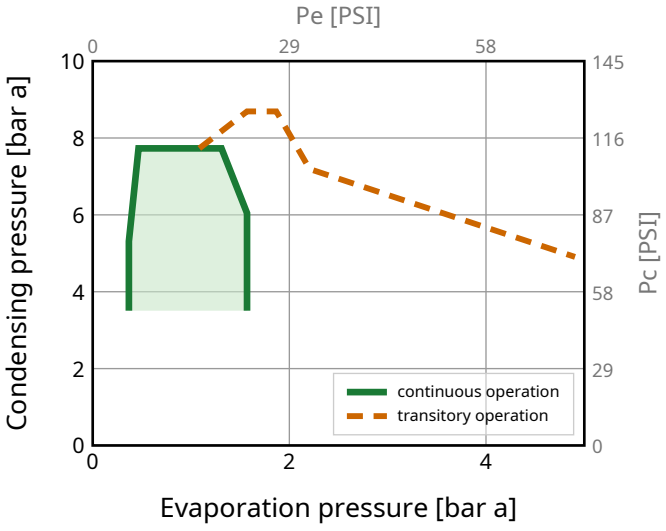
View full size

Components (already pre-assembled)
. terminal board (e-PTC, 4.8mm) 15540500
. run capacitor (4µF, 4.8mm) 11261700
b, d cover + clamp + screws (5VA-compl.) 103N0600

Alternative components
103n2060
b, d cover + clamp + screws (5VA) in bag 103N1060

Operation Pressure Range





Model
HXK70NG Configuration 1

Sales code:
16512800

Standard Conditions

R600a, 240 V/50 Hz, eRSCR, static

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	**118**	401	101	**1.65**	5.63	71	0.32	1.26	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**88**	300	76	**1.27**	4.34	69	0.31	1.14	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**59**	202	51	**1.20**	4.11	49	0.23	0.72	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**235**	803	202	**2.24**	7.65	105	0.45	2.80	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**186**	634	160	**1.89**	6.46	98	0.42	2.44	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**202**	689	174	**2.25**	7.67	90	0.39	2.59	**EN12900 MBP**

Performance Tables

R600a, 240 V/50 Hz, eRSCR, static

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

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	**56**	190	48	**1.07**	3.66	52	0.24	0.66
-30	-22	**77**	262	66	**1.35**	4.62	57	0.26	0.92
-20	-4	**132**	452	114	**1.84**	6.29	72	0.32	1.58
-10	14	**210**	717	181	**2.34**	7.98	90	0.39	2.52
0	32	**315**	1075	271	**2.97**	10.15	106	0.45	3.79
10	50	**452**	1544	389	**3.93**	13.42	115	0.49	5.49
15	59	**535**	1826	460	**4.63**	15.81	116	0.49	6.53

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

-35	-31	**45**	153	38	**0.75**	2.57	59	0.27	0.58
-30	-22	**64**	220	55	**1.03**	3.50	63	0.28	0.84
-20	-4	**115**	393	99	**1.49**	5.09	77	0.34	1.51
-10	14	**186**	634	160	**1.89**	6.46	98	0.42	2.44
0	32	**281**	959	242	**2.34**	7.99	120	0.51	3.71
10	50	**406**	1386	349	**2.94**	10.03	138	0.58	5.41
15	59	**482**	1644	414	**3.34**	11.39	144	0.61	6.45

Model
HXK70NG Configuration 2

Sales code:
16512800

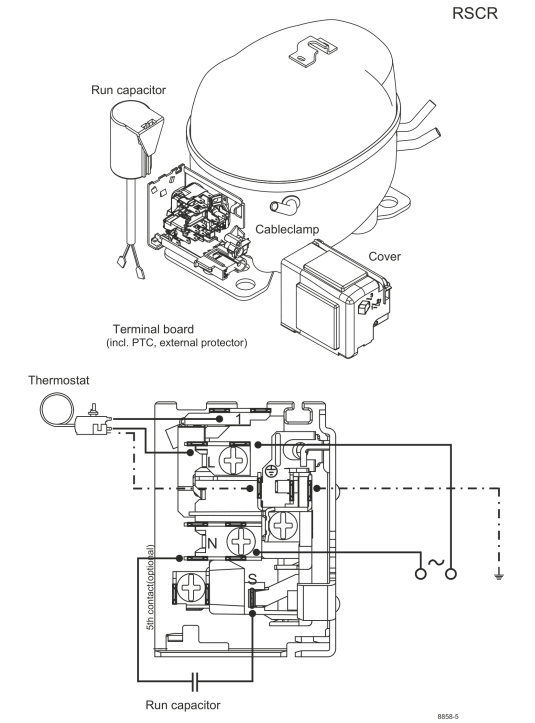
Configuration

Motor configuration	**eRSCR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R600a**
Application	**LBP+MBP**
Voltage range	**195-253 V**
Starting torque	**LST**
Approvals	**VDE**
Starting device type	**e-PTC**
Run capacitor	**4 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**3.6 A**
RLA (rated load amps / 1s/ U(N))	**0.7 A**
Cut in current (U(N))	**8.9 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
static

Electrical Accessories / Wiring Diagram

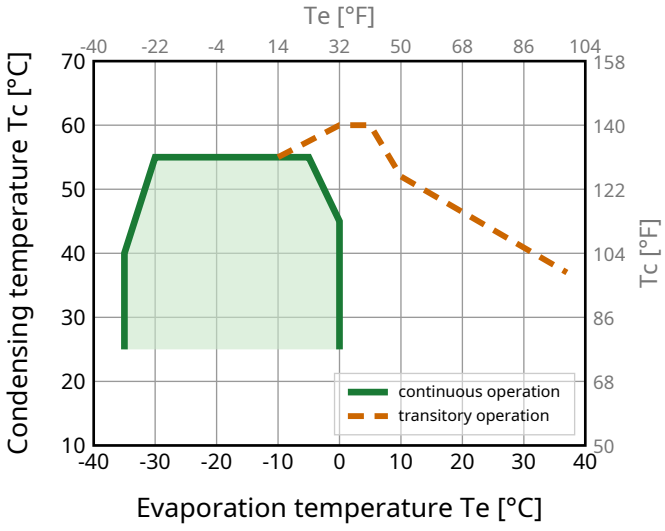


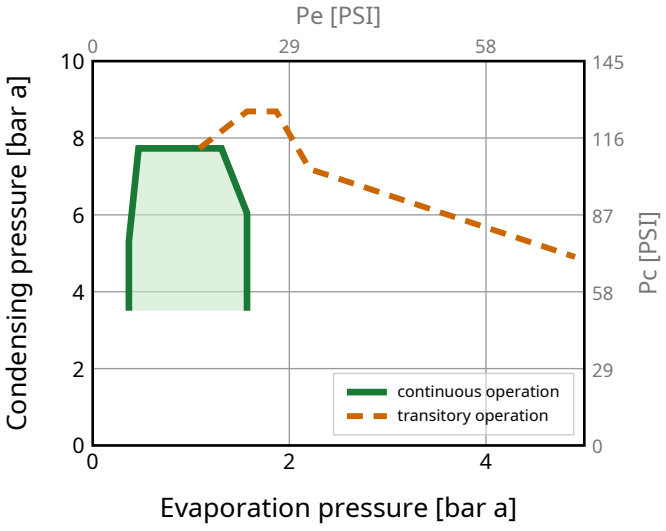
View full size

Components (already pre-assembled)
. terminal board (e-PTC, 4.8mm) 15540500
. run capacitor (4µF, 4.8mm) 11261700
b, d cover + clamp + screws (5VA-compl.) 103N0600

Alternative components
103n2060
b, d cover + clamp + screws (5VA) in bag 103N1060

Operation Pressure Range





Model
HXK70NG Configuration 2

Sales code:
16512800

Standard Conditions

R600a, 230 V/60 Hz, eRSCR, static

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	**139**	474	119	**1.67**	5.68	83	0.38	1.49	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**104**	354	89	**1.29**	4.39	81	0.37	1.35	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**71**	241	61	**1.30**	4.45	54	0.26	0.86	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**275**	937	236	**2.22**	7.58	124	0.55	3.27	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**217**	741	187	**1.88**	6.43	115	0.51	2.85	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**236**	806	203	**2.25**	7.67	105	0.47	3.04	**EN12900 MBP**

Performance Tables

R600a, 230 V/60 Hz, eRSCR, static

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

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	**67**	227	57	**1.14**	3.88	58	0.28	0.79
-30	-22	**91**	311	78	**1.40**	4.77	65	0.31	1.08
-20	-4	**156**	531	134	**1.86**	6.34	84	0.38	1.86
-10	14	**246**	839	211	**2.34**	7.98	105	0.47	2.94
0	32	**368**	1257	317	**2.96**	10.12	124	0.55	4.44
10	50	**530**	1808	456	**3.89**	13.28	136	0.60	6.43
15	59	**627**	2139	539	**4.55**	15.53	138	0.61	7.65

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

-35	-31	**53**	182	46	**0.78**	2.64	69	0.33	0.69
-30	-22	**77**	261	66	**1.05**	3.57	73	0.34	1.00
-20	-4	**136**	463	117	**1.50**	5.11	91	0.41	1.77
-10	14	**217**	741	187	**1.88**	6.43	115	0.51	2.85
0	32	**328**	1118	282	**2.30**	7.85	142	0.63	4.32
10	50	**473**	1614	407	**2.84**	9.68	167	0.73	6.30
15	59	**561**	1914	483	**3.18**	10.86	176	0.78	7.51