

Model			
Designation	HKK70AA	220-240V/50Hz 1~	Sales code: 16443900

Compressor design

Oil type	Mineral	Refrigerant(s)	R600a
Oil viscosity	5cST	Displacement	6,6cm³ / 0,4cu.in
Oil quantity	162cm³ / 5,5fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1520cm³ / 51,4fl.oz		
Weight	7,9kg / 17,4lbs		
Motor protection	external		
Winding resistance main	31,8Ω (at 25°C)		
Winding resistance aux	24,2Ω (at 25°C)		
Max. winding temp.	130°C / 266°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with HKK70AA

	Conf. 1	Conf. 2
Motorconfiguration	RSCR	RSCR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	187-264V	187-264V
Approvals	VDE	VDE
Starting torque	LST	LST
Note	Various options of connectors are possible - please contact SECOP-Sales.	

Applications with HKK70AA

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

Electrical data - Configurations with HKK70AA

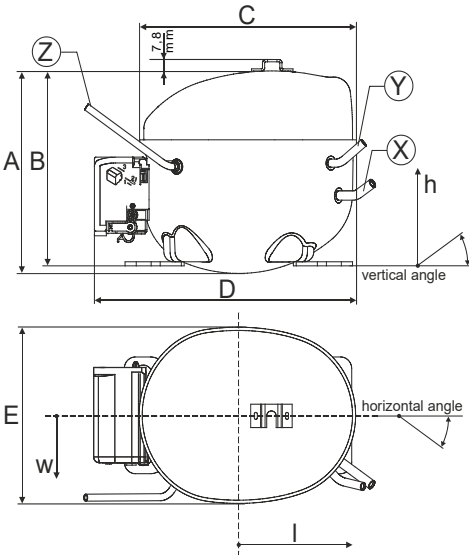
	Conf. 1	Conf. 2
Starting device type	PTC	PTC
Run capacitor	3μF	3μF
Start capacitor	-/-	-/-
LRA (locked rotor amps / 4s/ U(N))		
RLA (rated load amps / 1s/ U(N))	-/-A	-/-A
Cut in current (U(N))		

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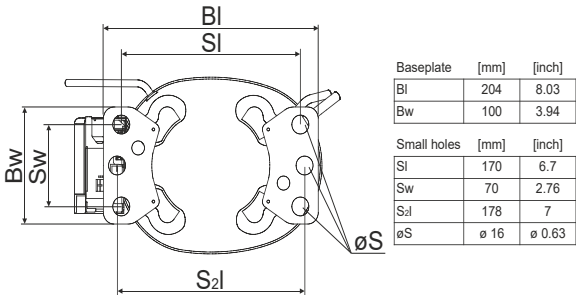
Compressor dimensions

Housing	A Height	166mm / 6,54in
	B Height	159mm / 6,26in
	C Length shell	194mm / 7,64in
	D Length w. cover	238mm / 9,37in
	E Width	151mm / 5,94in

Connectors		Suction X	Discharge Y	Process 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

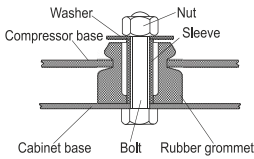


Mounting accessories

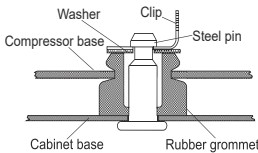
- '4ZN' with rubber grommet
- '4ZN' with rubber grommet and sleeve for M6
- Bolt joint kit
- '4ZN' with Snap on kit

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

Bolt joint



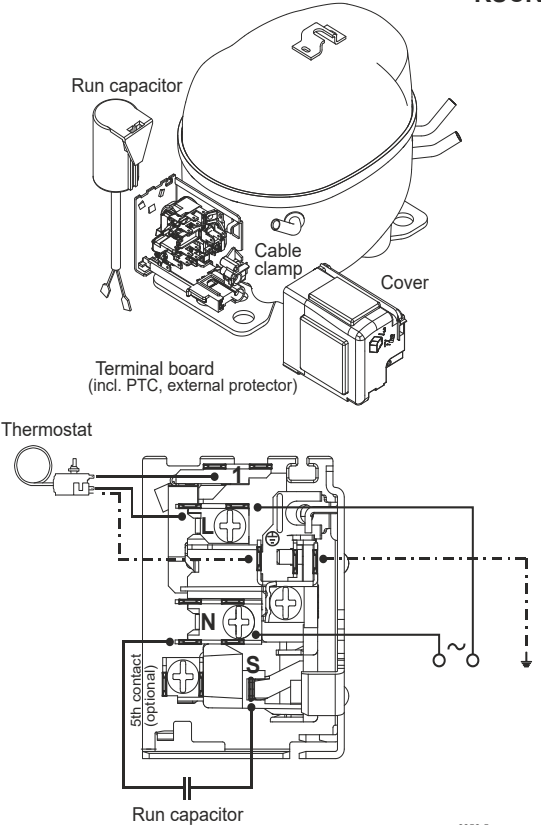
Snap-on



Application notes

- Provision for PE Grounding is located at the PE Stamp on the compressor
- Housing with dip-tray fixture (omega bracket).

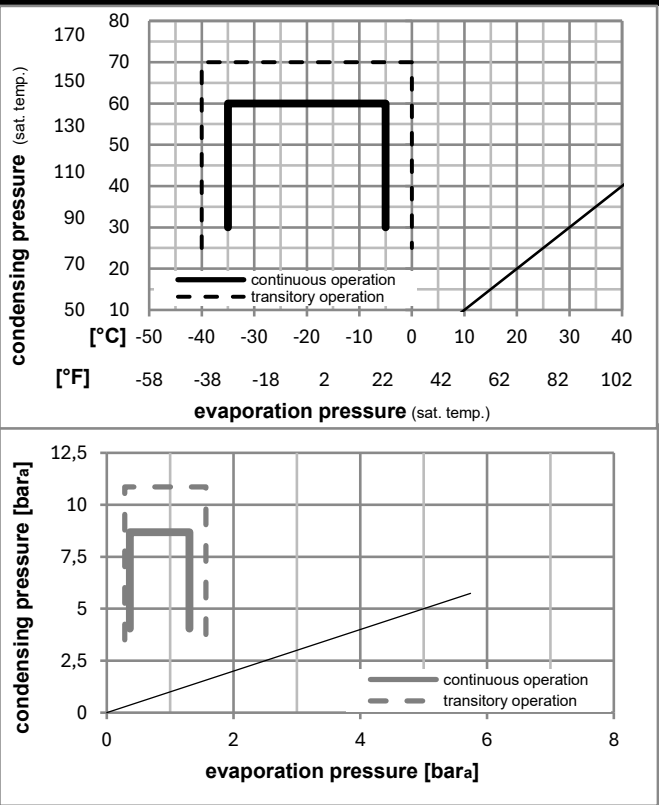
Model				
Designation	HKK70AA	220-240V/50Hz	Conf. 1	Sales code: 16443900

Configuration	Electrical accessories / wiring diagram			
Motorconfiguration	RSCR			
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R600a			
Application	LBP			
Voltage range	187-264V			
Starting torque	LST			
Approvals	VDE			

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		
.	terminal board (PTC, 4.8mm)	15166100
.	run capacitor (3µF, 4.8mm)	10692902
b	cover terminal board	10636401
.	cable clamp	11341000

Alternative components		
.	screw - uni6954	10636000
.	screw - uni6954	10636200
.	screw uni en iso 4757	10641201

Model

Designation	HKK70AA	220-240V/50Hz	Conf. 1	Sales code:	16443900
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Optimization + standard conditions

R600a, 220V/50Hz, RSCR, static, VDE

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption																																																																									
					Return gas temp.						Current consumption																																																																									
					Liquid temp.						Ref. mass flow																																																																									
					Cooling capacity						COP				EER				P1				I				ṁ																																																									
					[W]						[Btu/h]						[kcal/h]						[W/W]						[Btu/Wh]						[kcal/Wh]						[W]						[A]						[kg/h]																															
pe					pc					RGT					Tliq																																																																					
[°C]					-23					54					32					32					116,9						399						100,6						1,74						5,95						1,50						67,1						0,28						1,25						ASHRAE LBP					
[°F]					-10					130					90					90																																																																

[°C]					-25					55					32					55					87,0						297						74,9						1,36						4,64						1,17						64,1						0,27						1,13						cecomaf LBP																							
[°F]					-13					131					90					131																																																																																		

[°C]					-35					40					20					40					53,8						184						46,3						1,22						4,18						1,05						44,0						0,19						0,66						EN12900 LBP																													
[°F]					-31					104					68					104																																																																																								

[°C]					-23					49					4,4					49					94,7						324						81,5						1,46						5,00						1,26						64,7						0,27						1,38						ARI540 LBP																													
[°F]					-10					120					40					120																																																																																								

[°C]					-23					41					32					32					124,6						426						107,3						2,00						6,84						1,72						62,2						0,26						1,34						AHAM LBP																													
[°F]					-10					105					90					90																																																																																								

[°C]					-35					45					32					45					51,7						176						44,5						1,17						4,00						1,01						44,1						0,20						0,61						opt																																			
[°F]					-31					113					90					113																																																																																														

Performance tables

R600a, 220V/50Hz, RSCR, 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	51,7	176	44,5	1,17	4,00	1,01	44,1	0,20	0,61
cond. pressure	-30	-22	73,7	252	63,4	1,42	4,84	1,22	52,1	0,22	0,88
pc= 45/113	-25	-13	100,3	342	86,3	1,66	5,66	1,43	60,5	0,25	1,19
return gas temp.	-23	-10	110,3	377	94,9	1,74	5,93	1,49	63,5	0,27	1,31
RGT= 32/90	-20	-4	131,3	448	113,0	1,89	6,47	1,63	69,4	0,29	1,57
liquid temp	-15	5	166,8	570	143,5	2,13	7,28	1,83	78,3	0,32	1,99
Tliq= 45/113	-5	23	250,9	857	215,9	2,63	8,97	2,26	95,6	0,39	3,01
[°C / °F]	-35	-31	44,1	151	38,0	0,97	3,30	0,83	45,6	0,20	0,57
cond. pressure	-30	-22	63,3	216	54,4	1,16	3,97	1,00	54,4	0,23	0,82
pc= 55/131	-25	-13	87,0	297	74,9	1,36	4,64	1,17	64,1	0,27	1,13
return gas temp	-23	-10	96,1	328	82,7	1,42	4,86	1,23	67,5	0,28	1,25
RGT= 32/90	-20	-4	115,3	394	99,2	1,55	5,29	1,33	74,4	0,30	1,51
liquid temp	-15	5	148,1	506	127,4	1,74	5,93	1,49	85,3	0,34	1,94
Tliq= 55/131	-5	23	227,0	775	195,3	2,11	7,21	1,82	107,5	0,41	2,99

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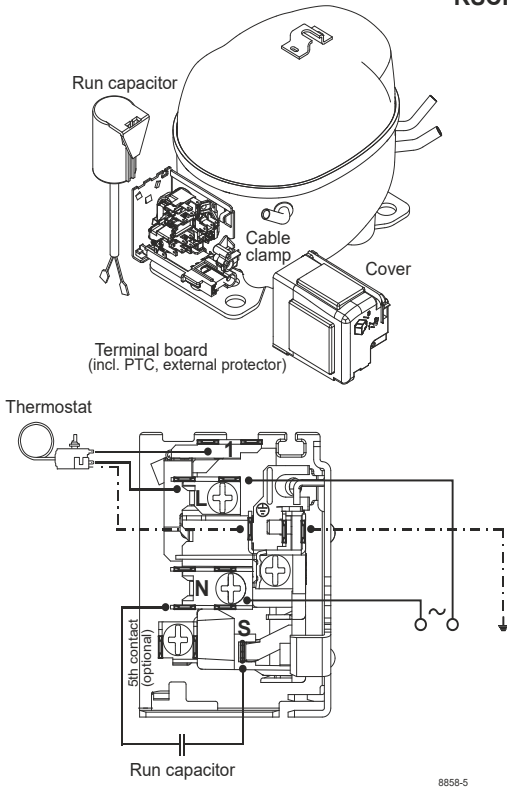
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Motorconfiguration	RSCR	RSCR		
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Application	LBP			
Voltage range	187-264V			
Starting torque	LST			
Approvals	VDE			

Ambient/ machine room temperatures minimum /maximum

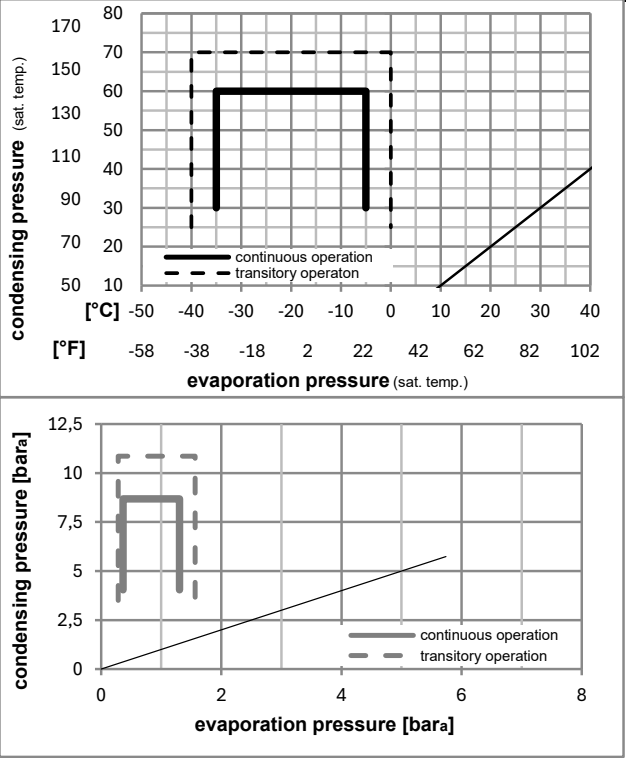
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Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: static



Operation pressure range



Components

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b cover terminal board	10636401
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Alternative components

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. screw - uni6954	10636200
. screw uni en iso 4757	10641201

Model													
Designation	HKK70AA			220-240V/50Hz			Conf. 2			Sales code:		16443900	

Optimization + standard conditions

R600a, 220V/50Hz, RSCR, static, VDE

Evaporating pressure (saturation temperature) Condensing pressure (saturation temperature) Return gas temp. Liquid temp. Cooling capacity COP EER Power consumption Current consumption Ref. mass flow														
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	-23	54	32	32	116,9	399	100,6	1,74	5,95	1,50	67,1	0,28	1,25	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	87,0	297	74,9	1,36	4,64	1,17	64,1	0,27	1,13	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	53,8	184	46,3	1,22	4,18	1,05	44,0	0,19	0,66	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-23	49	4,4	49	94,7	324	81,5	1,46	5,00	1,26	64,7	0,27	1,38	ARI540 LBP
[°F]	-10	120	40	120										
[°C]	-23	41	32	32	124,6	426	107,3	2,00	6,84	1,72	62,2	0,26	1,34	AHAM LBP
[°F]	-10	105	90	90										
[°C]	-35	45	32	45	51,7	176	44,5	1,17	4,00	1,01	44,1	0,20	0,61	opt
[°F]	-31	113	90	113										

Performance tables

R600a, 220V/50Hz, RSCR, 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	51,7	176	44,5	1,17	4,00	1,01		44,1		0,20	0,61
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pc= 45/113	-25	-13	100,3	342	86,3	1,66	5,66	1,43		60,5		0,25	1,19
return gas temp.	-23	-10	110,3	377	94,9	1,74	5,93	1,49		63,5		0,27	1,31
RGT= 32/90	-20	-4	131,3	448	113,0	1,89	6,47	1,63		69,4		0,29	1,57
liquid temp	-15	5	166,8	570	143,5	2,13	7,28	1,83		78,3		0,32	1,99
Tliq= 45/113	-5	23	250,9	857	215,9	2,63	8,97	2,26		95,6		0,39	3,01
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cond. pressure	-30	-22	63,3	216	54,4	1,16	3,97	1,00		54,4		0,23	0,82
pc= 55/131	-25	-13	87,0	297	74,9	1,36	4,64	1,17		64,1		0,27	1,13
return gas temp	-23	-10	96,1	328	82,7	1,42	4,86	1,23		67,5		0,28	1,25
RGT= 32/90	-20	-4	115,3	394	99,2	1,55	5,29	1,33		74,4		0,30	1,51
liquid temp	-15	5	148,1	506	127,4	1,74	5,93	1,49		85,3		0,34	1,94
Tliq= 55/131	-5	23	227,0	775	195,3	2,11	7,21	1,82		107,5		0,41	2,99