

Model

Designation	HMK80AA	220-240V/50Hz 1~	Sales code:	16050800
-------------	----------------	-------------------------	-------------	-----------------

Compressor design

Oil type	Mineral	Refrigerant(s)	R600a
Oil viscosity	4,6cSt	Displacement	8,1cm ³ / 0,49cu.in
Oil quantity	162cm ³ / 5,5fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1520cm ³ / 51,4fl.oz		
Weight	7,6kg / 16,8lbs		
Motor protection	external		
Winding resistance main	29,4Ω (at 25°C)		
Winding resistance aux	16,5Ω (at 25°C)		
Max. winding temp.	130°C / 266°F		
Max. discharge temp.	120°C / 248°F		



General - Configurations with HMK80AA

	Conf. 1	Conf. 2
Motor configuration	RSIR	RSIR
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 HMK80AA

	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 HMK80AA

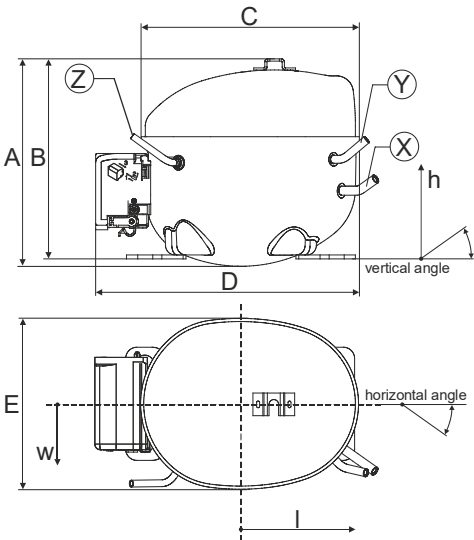
	Conf. 1	Conf. 2
Starting device type	PTC	PTC
Run capacitor	-/-	-/-
Start capacitor	-/-	-/-
LRA (locked rotor amps / 4s/ U(N))	3,55A	3,55A
RLA (rated load amps / 1s/ U(N))	0,8A	0,8A
Cut in current (U(N))	10A	10A

Model			
Designation	HMK80AA	220-240V/50Hz 1~	Sales code: 16050800

Compressor dimensions

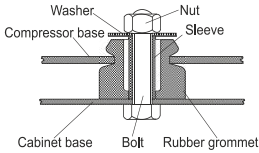
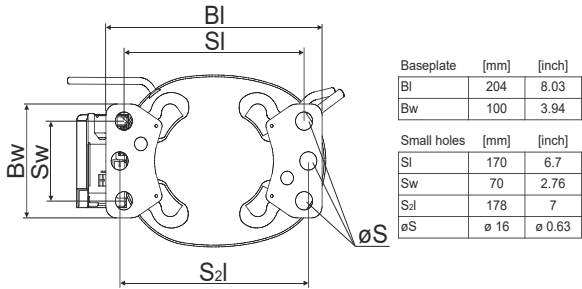
Housing	A Height	174mm / 6,85in
	B Height	167mm / 6,57in
	C Length shell	194mm / 7,64in
	D Length w. cover	238mm / 9,37in
	E Width	151mm / 5,94in

Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 6,16-6,24	øi 5,1-5,2	øi 6,11-6,29
	(i:inside, o:outside) [in]	øi 0,24-0,25	øi 0,2-0,2	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	54°	35°	45°
Vertical angle	±2°	35°	40°	35°
Position l/h/w	[mm]	120/92/57	112/106/81	-86/94/72
	[in]	4,7/3,6/2,2	4,4/4,2/3,2	-3,4/3,7/2,8
Straight tube l.	[mm]	14	14	14
	[in]	0,5	0,5	0,5

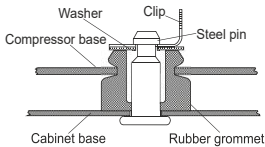


Compressor fixation

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).

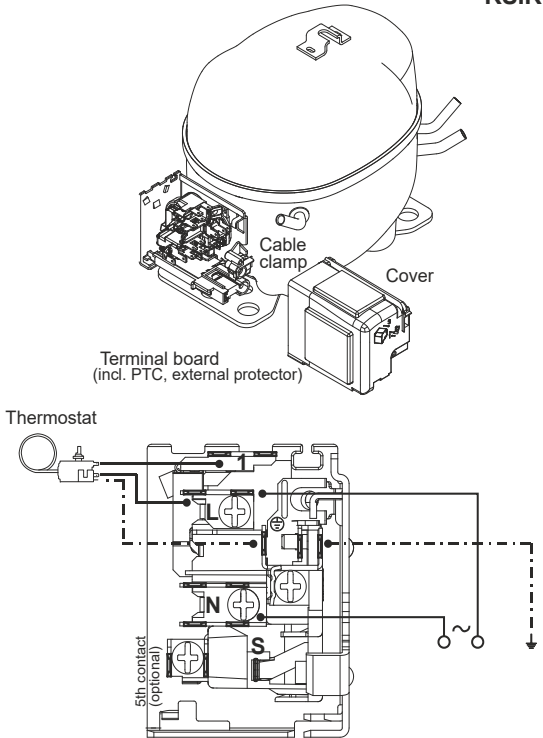
Various options of connectors are possible - please contact SECOP-Sales.

Model					
Designation	HMK80AA	220-240V/50Hz	Conf. 1	Sales code:	16050800

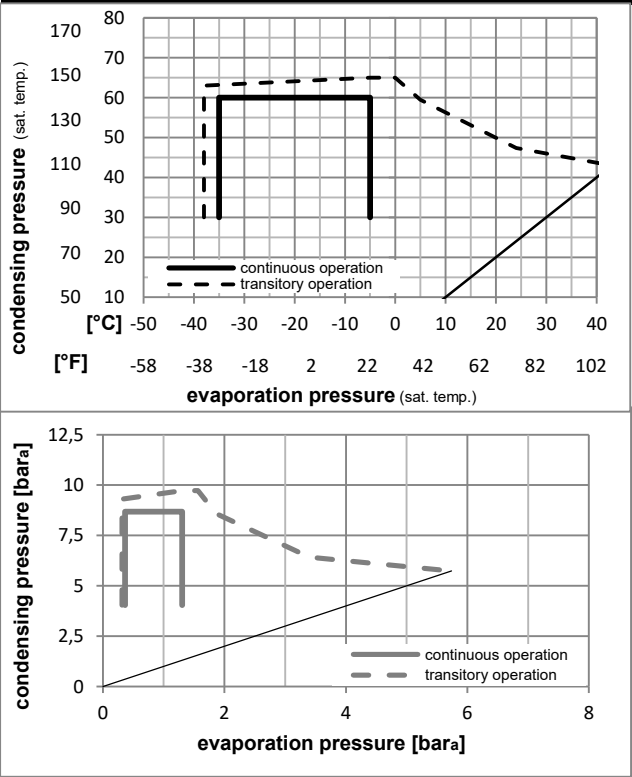
Configuration		Electrical accessories / wiring diagram			
Motor configuration	RSIR	RSIR			
Power supply (nominal)	220-240V/50Hz 1~				
Refrigerant	R600a				
Application	LBP				
Voltage range	187-264V				
Starting torque	LST				
Approvals	VDE				

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)	15163500
Term. Board Cover	15759500
cable clamp	16058100
screw uni en iso 4757	10641201

Model

Designation **HMK80AA** **220-240V/50Hz** Conf. 1 Sales code: **16050800**

Optimization + standard conditions

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

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
Return gas temp.					Liquid temp.						Current consumption			
Cooling capacity					COP		EER		P1		I		Ref. mass flow	
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C]	-23	54	32	32	135,9	464	117,0	1,50	5,13	1,29	90,5	0,62	1,46	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	101,7	347	87,5	1,18	4,02	1,01	86,5	0,61	1,33	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	72,6	248	62,5	1,12	3,84	0,97	64,6	0,52	0,88	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-23	49	4,4	49	109,9	375	94,6	1,24	4,24	1,07	88,6	0,61	1,61	ARI540 LBP
[°F]	-10	120	40	120										
[°C]	-23	41	32	32	144,2	493	124,1	1,68	5,74	1,45	85,8	0,60	1,55	AHAM LBP
[°F]	-10	105	90	90										
[°C]	-35	45	32	45	68,1	233	58,6	1,07	3,65	0,92	63,8	0,51	0,81	opt
[°F]	-31	113	90	113										

Performance tables

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

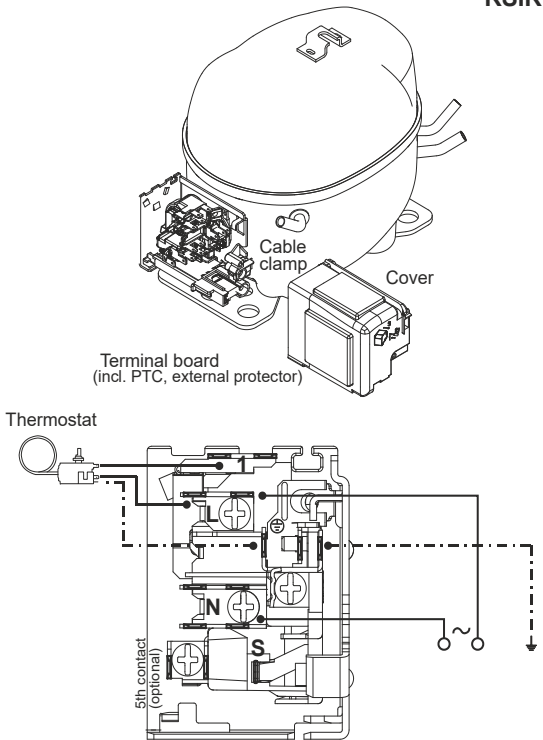
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	68,1	233	58,6	1,07	3,65	0,92	63,8	0,51	0,81
cond. pressure	-30	-22	89,6	306	77,1	1,21	4,14	1,04	73,9	0,55	1,07
pc= 45/113	-25	-13	117,1	400	100,8	1,40	4,77	1,20	83,9	0,59	1,39
return gas temp.	-23	-10	127,8	437	110,0	1,46	5,00	1,26	87,3	0,61	1,52
RGT= 32/90	-20	-4	150,7	514	129,7	1,60	5,47	1,38	94,0	0,64	1,80
liquid temp	-15	5	190,2	650	163,7	1,83	6,24	1,57	104,1	0,69	2,27
Tliq= 45/113	-5	23	287,3	981	247,3	2,31	7,88	1,99	124,6	0,78	3,45
[°C / °F]	-35	-31	54,7	187	47,1	0,88	3,01	0,76	62,1	0,49	0,71
cond. pressure	-30	-22	75,6	258	65,1	1,02	3,48	0,88	74,1	0,55	0,99
pc= 55/131	-25	-13	101,7	347	87,5	1,18	4,02	1,01	86,5	0,61	1,33
return gas temp	-23	-10	111,7	382	96,2	1,23	4,21	1,06	90,7	0,62	1,46
RGT= 32/90	-20	-4	132,9	454	114,4	1,34	4,58	1,15	99,1	0,66	1,74
liquid temp	-15	5	169,4	578	145,8	1,51	5,16	1,30	112,0	0,72	2,22
Tliq= 55/131	-5	23	257,7	880	221,8	1,86	6,34	1,60	138,8	0,85	3,39

Model					
Designation	HMK80AA	220-240V/50Hz	Conf. 2	Sales code:	16050800

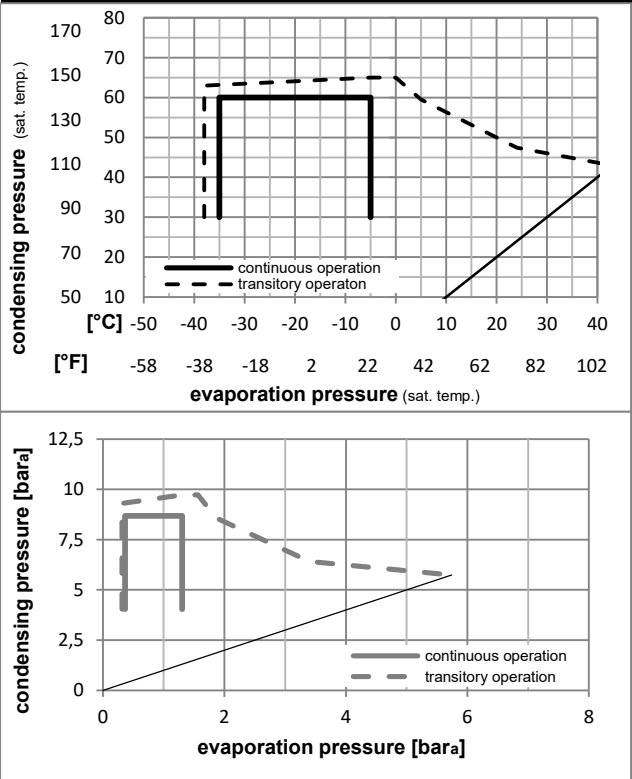
Configuration	Electrical accessories / wiring diagram				
Motor configuration	RSIR	RSIR			
Power supply (nominal)	220-240V/50Hz 1~				
Refrigerant	R600a				
Application	LBP				
Voltage range	187-264V				
Starting torque	LST				
Approvals	VDE				

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, 6.3mm)	15279300
b	cover terminal board	10636401
.	cable clamp	16058100
.	screw - uni6954	10636000
.	screw - uni6954	10636200
.	screw uni en iso 4757	10641201

Model

Designation **HMK80AA** **220-240V/50Hz** Conf. 2 Sales code: **16050800**

Optimization + standard conditions

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

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					135,9					464					117,0					1,50					5,13					1,29					90,5					0,62					1,46					ASHRAE LBP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
[°F]					-10					130					90					90																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

Performance tables

R600a, 220V/50Hz, RSIR, 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	68,1	233	58,6	1,07	3,65	0,92	63,8	0,51	0,81		
cond. pressure	-30	-22	89,6	306	77,1	1,21	4,14	1,04	73,9	0,55	1,07		
pc= 45/113	-25	-13	117,1	400	100,8	1,40	4,77	1,20	83,9	0,59	1,39		
return gas temp.	-23	-10	127,8	437	110,0	1,46	5,00	1,26	87,3	0,61	1,52		
RGT= 32/90	-20	-4	150,7	514	129,7	1,60	5,47	1,38	94,0	0,64	1,80		
liquid temp	-15	5	190,2	650	163,7	1,83	6,24	1,57	104,1	0,69	2,27		
Tliq= 45/113	-5	23	287,3	981	247,3	2,31	7,88	1,99	124,6	0,78	3,45		
[°C / °F]	-35	-31	54,7	187	47,1	0,88	3,01	0,76	62,1	0,49	0,71		
cond. pressure	-30	-22	75,6	258	65,1	1,02	3,48	0,88	74,1	0,55	0,99		
pc= 55/131	-25	-13	101,7	347	87,5	1,18	4,02	1,01	86,5	0,61	1,33		
return gas temp	-23	-10	111,7	382	96,2	1,23	4,21	1,06	90,7	0,62	1,46		
RGT= 32/90	-20	-4	132,9	454	114,4	1,34	4,58	1,15	99,1	0,66	1,74		
liquid temp	-15	5	169,4	578	145,8	1,51	5,16	1,30	112,0	0,72	2,22		
Tliq= 55/131	-5	23	257,7	880	221,8	1,86	6,34	1,60	138,8	0,85	3,39		