

Model			
Designation	HMK12AA	220-240V/50Hz 1~	Sales code: 16229100

Compressor design

Oil type	Mineral	Refrigerant(s)	R600a
Oil viscosity	5cST	Displacement	11,2cm³ / 0,68cu.in
Oil quantity	162cm³ / 5,5fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1560cm³ / 52,7fl.oz		
Weight	9kg / 19,8lbs		
Motor protection	external		
Winding resistance main	15,7Ω (at 25°C)		
Winding resistance aux	12,6Ω (at 25°C)		
Max. winding temp.	130°C / 266°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with HMK12AA

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

Applications with HMK12AA

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

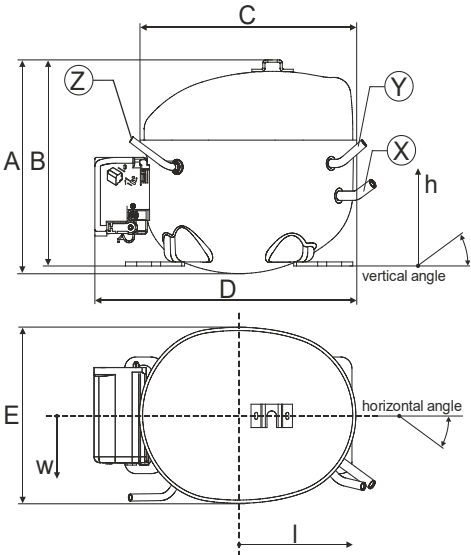
Electrical data - Configurations with HMK12AA

	Conf. 1
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	6,2A
RLA (rated load amps / 1s/ U(N))	1,2A
Cut in current (U(N))	12,9A

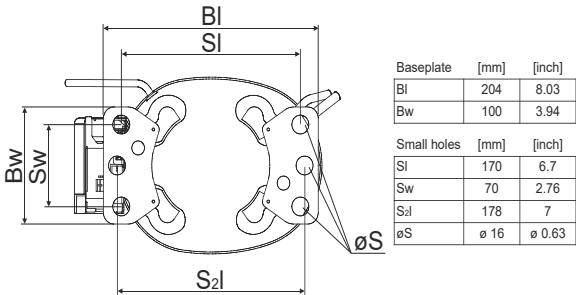
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Compressor dimensions

Housing	A Height	182mm / 7,17in	
	B Height	175mm / 6,89in	
	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



Mounting accessories

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

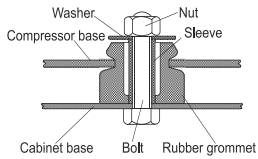
- order code
- 772N
- 768N
- 4ZN + 118-1917 (18)
- 776N

Application notes

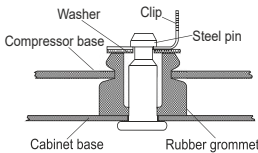
Provision for PE Grounding is located at the PE Stamp on the compressor

Housing with dip-tray fixture (omega bracket).

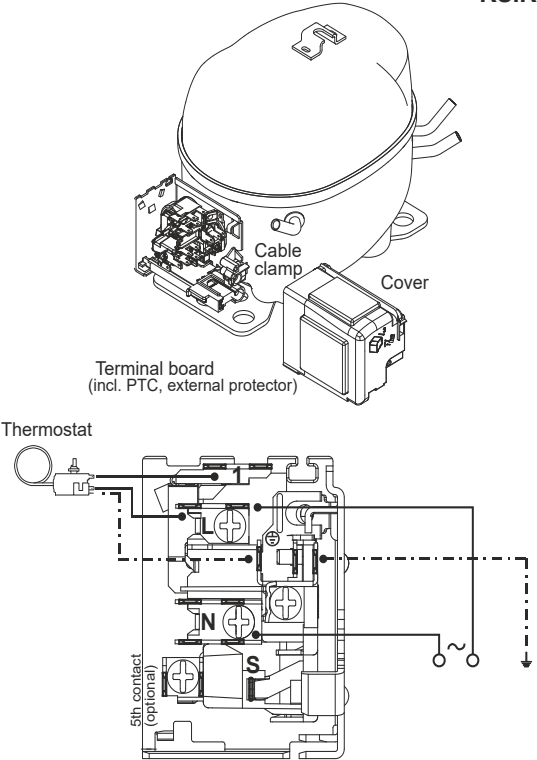
Bolt joint



Snap-on



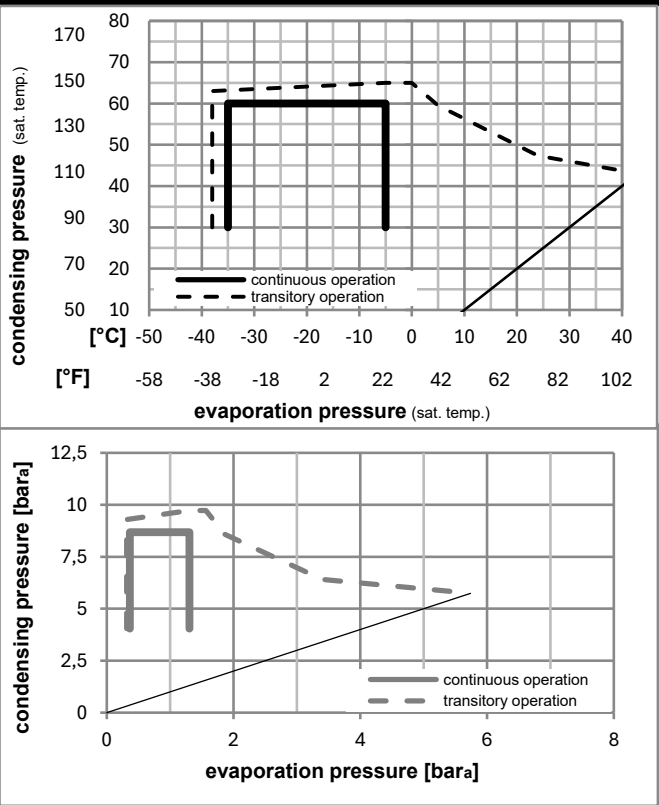
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Configuration	Electrical accessories / wiring diagram			
Motorconfiguration	RSIR			
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R600a			
Application	LBP			
Voltage range	187-264V			
Starting torque	LST			
Approvals	VDE			

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)	15164700	
b cover terminal board	10636401	
. cable clamp	11341000	
. screw - uni6954	10636000	
. screw - uni6954	10636200	
. screw uni en iso 4757	10641201	

Alternative components		
. terminal board (PTC, 6.3mm)	15588600	

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Optimization + standard conditions

R600a, 220V/50Hz, RSIR, 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]				P1				I				ṁ			
[°C]				[°F]				[°C]				[°F]				[W]				[Btu/h]				[kcal/h]				[W]				[A]				[kg/h]			
-23				54				32				32				197,9				676				170,4				1,53				5,23				1,32			
-10				130				90				90				129,2				0,87				2,12				ASHRAE LBP											
-25				55				32				55				149,0				509				128,2				1,20				4,10				1,03			
-13				131				90				131				124,0				0,85				1,94				cecomaf LBP											
-35				40				20				40				93,7				320				80,6				1,08				3,68				0,93			
-31				104				68				104				87,0				0,72				1,14				EN12900 LBP											
-23				49				4,4				49				160,7				549				138,3				1,28				4,37				1,10			
-10				120				40				120				125,5				0,86				2,35				ARI540 LBP											
-23				41				32				32				211,6				723				182,1				1,75				5,99				1,51			
-10				105				90				90				120,7				0,84				2,27				AHAM LBP											
-35				45				32				45				91,7				313				78,9				1,04				3,54				0,89			
-31				113				90				113				88,5				0,71				1,09				opt											

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	91,7	313	78,9	1,04	3,54	0,89	88,5	0,71	1,09
cond. pressure	-30	-22	129,3	442	111,3	1,25	4,26	1,07	103,8	0,77	1,54
pc= 45/113	-25	-13	171,7	586	147,8	1,45	4,95	1,25	118,4	0,83	2,04
return gas temp.	-23	-10	187,2	639	161,1	1,52	5,19	1,31	123,3	0,85	2,23
RGT= 32/90	-20	-4	218,8	747	188,3	1,65	5,64	1,42	132,4	0,89	2,61
liquid temp	-15	5	270,5	924	232,8	1,86	6,34	1,60	145,8	0,96	3,23
Tliq= 45/113	-5	23	387,4	1323	333,4	2,27	7,75	1,95	170,7	1,10	4,65
[°C / °F]	-35	-31	81,6	279	70,2	0,90	3,07	0,77	90,8	0,69	1,06
cond. pressure	-30	-22	112,5	384	96,8	1,05	3,58	0,90	107,3	0,76	1,47
pc= 55/131	-25	-13	149,0	509	128,2	1,20	4,10	1,03	124,0	0,85	1,94
return gas temp	-23	-10	162,7	556	140,0	1,25	4,28	1,08	129,8	0,87	2,12
RGT= 32/90	-20	-4	191,0	652	164,4	1,35	4,62	1,16	141,1	0,93	2,50
liquid temp	-15	5	238,4	814	205,1	1,50	5,13	1,29	158,6	1,01	3,12
Tliq= 55/131	-5	23	349,2	1193	300,5	1,79	6,12	1,54	194,9	1,18	4,60