

Product Data Sheet

HKK70AA K3

Revision 1

(Variant Code B)

1 Application

Application	Refrigerant	Expansion Device	Cooling Type
LBP	R600a	Capillary	Static

1.1 Application Conditions

Max. Ambient temp. ¹	[°C]	43
Max. Steady discharge temp. ²	[°C]	120
Max. Peak discharge temp. ^{2, 5}	[°C]	135
Max. Steady condensing temp. ³	[°C]	60
Max. Peak condensing temp. ^{3, 5}	[°C]	70
Max. Winding temp. ⁴	[°C]	130

¹...static

²...measured on discharge tube, 50 mm from the shell

³...measured in the middle of condenser

⁴...calculated out of the measured difference of resistance

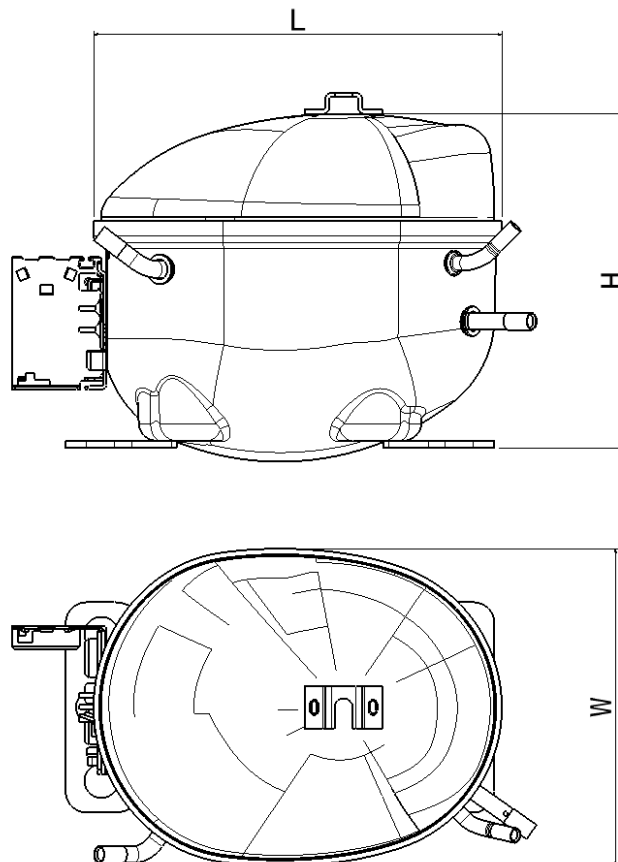
⁵...max 5% of lifetime

Variant code according to Label; see General Product Documentation

2 Mechanical Data

Displacement	[cm³]	6,6
Net Weight¹	[kg]	8,1
Oil Type		mineral
Oil Charge	[ml]	165
Oil Viscosity	[cst]	5
Suction muffler		Semi direct
Free Gas Volume	[cm³]	1520
Length L	[mm]	194,2
Width W	[mm]	151,5
Height H	[mm]	159

¹...Compressor without accessories



3 Electrical Data

Power supply	[V]	220 - 240
Voltage range ¹	[V]	187 - 264
Frequency	[Hz]	50
Phase	[ph]	1
Motor type		RSCR
Locked rotor current @ steady state	[A]	2,6
Max. Locked rotor current / measured after 4 sec	[A]	6,9 / 2,9
Main wind. Resistance @ 25°C	[Ω]	32,8
Start wind. Resistance @ 25°C	[Ω]	32,4

¹...Operating and starting (starting condition @ +43°C windings temperature, 3,5 barA equalized pressure)

All data measured according to EN 60335

3.1 Electrical Component Data

Terminal board		ECC
Starting device	Code	K100
PTC	Type	H
Run Capacitor	[μF]	4

3.2 Motor Protector

Motor Protector	BDG	Senbao
Type	AE 25 FJ x	B43 115 x
Code	F6	MW

4 Performance Data

4.1 Cooling Capacity, COP and Input Power

Performance Table Cooling Capacity @ ASHRAE / EN12900 (CECOMAF); 220V, 50Hz; [W]:

Evap. temp. [°C]		-35	-30	-25	-23,3	-20	-15	-10	
Condensing temp. @	ASHRAE [°C]	40	59,4	84,5	114,3	125,5	148,9	188,1	232,0
		45	57,5	82,0	111,5	122,7	146,0	185,5	230,0
		50	55,6	79,5	108,7	119,8	143,2	183,0	228,0
		55	53,7	77,0	105,9	117,0	141,0	180,4	226,0
		60	51,8	74,5	103,1	114,2	137,5	177,8	224,0
	EN12900 (CECOMAF) [°C]	C55	44,0	63,0	87,0	97,0	116,0	148,0	186,0

Performance Table COP with RC @ ASHRAE / EN12900 (CECOMAF); 220V, 50Hz; [W/W]:

Evap. temp. [°C]		-35	-30	-25	-23,3	-20	-15	-10	
Condensing temp. @	ASHRAE [°C]	40	1,36	1,66	1,96	2,06	2,26	2,56	2,86
		45	1,30	1,58	1,86	1,96	2,14	2,42	2,70
		50	1,24	1,50	1,76	1,85	2,02	2,28	2,54
		55	1,19	1,43	1,66	1,75	1,90	2,14	2,38
		60	1,13	1,35	1,57	1,64	1,78	2,00	2,22
	EN12900 (CECOMAF) [°C]	C55	0,98	1,18	1,38	1,45	1,57	1,77	1,96

Performance Table Input Power with RC @ ASHRAE / EN12900 (CECOMAF); 220V, 50Hz; [W]:

Evap. temp. [°C]		-35	-30	-25	-23,3	-20	-15	-10	
Condensing temp. @	ASHRAE [°C]	40	43,8	51,0	58,4	61,0	65,9	73,5	81,1
		45	44,2	51,9	60,0	62,8	68,3	76,7	85,2
		50	44,6	52,9	61,7	64,8	70,9	80,2	89,6
		55	45,1	54,0	63,6	67,0	73,8	84,3	95,0
		60	45,7	55,2	65,8	69,6	77,1	88,9	101,0
	EN12900 (CECOMAF) [°C]	C55	45,1	54,0	63,6	67,0	73,8	84,3	95,0



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Test Conditions @ 220V/50Hz		ASHRAE	EN12900 (CECOMAF)
Evaporating temp.	[°C]	-23,3	-25
Condensing temp.	[°C]	55	55
Sub cooling temp.	[°C]	32	55
Suction temp.	[°C]	32	32
Ambient temp.	[°C]	32	32

Tolerance Range:

COP	± 5%
Cooling Capacity	± 5%

4.2 Rated current @ 55°C condensing temperature

Evaporating temperature	[°C]	-30	-23,3	-10
Rated current with RC	[A]	0,25	0,31	0,42

5 Reliability Tests

High Temperature CECOMAF GT4 – 002	passed
Wear CECOMAF GT4 – 003	passed
On – Off CECOMAF GT4 – 004	passed
Transport test ASTM D4728	passed