

Product Data Sheet

HKK55AA 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

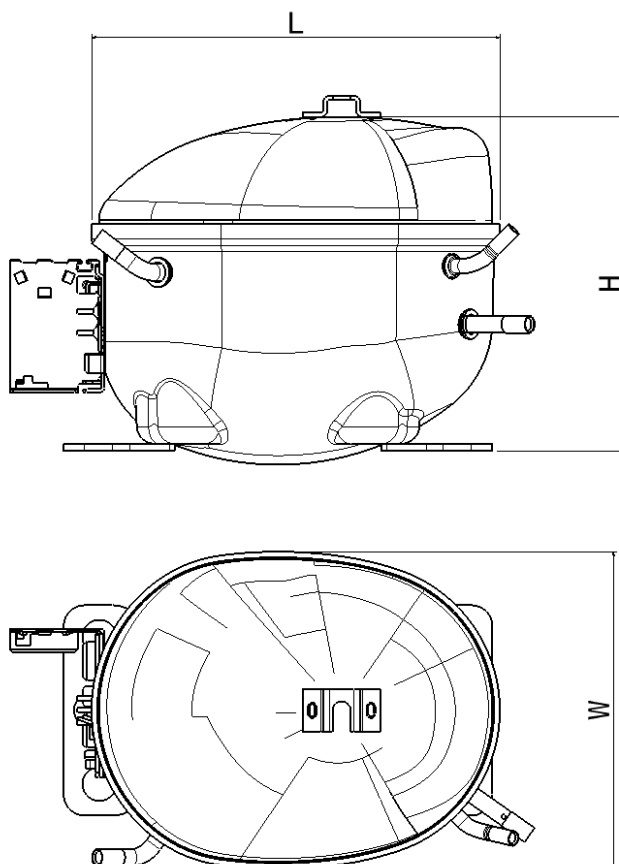
⁵ ...max 5% of lifetime

Variant code according to Label; see General Product Documentation

2 Mechanical Data

Displacement	[cm ³]	5,6
Net Weight ¹	[kg]	8,1
Oil Type		mineral
Oil Charge	[ml]	165
Oil Viscosity	[cst]	5
Suction muffler		Semi direct
Free Gas Volume	[cm ³]	1520
Length L	[mm]	237,5
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]	2,0
Max. Locked rotor current / measured after 4 sec	[A]	6,5 / 2,1
Main wind. Resistance @ 25°C	[Ω]	43,6
Start wind. Resistance @ 25°C	[Ω]	29,6

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]	2

3.2 Motor Protector

Motor Protector	BDG	Wanbao
Type	AE 24 AHS x	B43 115 x
Code	FF	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	48,6	69,5	94,0	103,1	122,0	153,7	189,0
		45	45,3	66,0	90,5	99,7	118,9	151,0	187,0
		50	41,9	62,5	87,1	96,4	115,7	148,3	185,0
		55	38,6	59,0	83,7	93,0	112,5	145,7	183,0
		60	35,2	55,5	80,2	89,6	109,4	143,0	181,0
	EN12900 (CECOMAF) [°C]	C55	32,0	49,0	69,0	78,0	93,0	120,0	150,0

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	1,35	1,64	1,94	2,04	2,24	2,54	2,84
		45	1,26	1,55	1,83	1,93	2,12	2,40	2,69
		50	1,18	1,46	1,73	1,82	2,00	2,27	2,54
		55	1,10	1,36	1,62	1,71	1,88	2,13	2,39
		60	1,02	1,27	1,51	1,59	1,75	2,00	2,24
	EN12900 (CECOMAF) [°C]	C55	0,92	1,13	1,35	1,43	1,55	1,76	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	36,2	42,3	48,4	50,4	54,4	60,5	66,6
		45	35,8	42,6	49,3	51,6	56,1	62,8	69,5
		50	35,4	42,9	50,4	53,0	57,9	65,4	72,8
		55	34,9	43,3	51,7	54,5	60,0	68,3	76,5
		60	34,4	43,8	53,1	56,2	62,3	71,5	80,7
	EN12900 (CECOMAF) [°C]	C55	34,9	43,3	51,7	54,5	60,0	68,3	76,5

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 $\pm 5\%$

Cooling Capacity $\pm 5\%$

4.2 Rated current @ 55°C condensing temperature

Evaporating temperature	[°C]	-30	-23,3	-10
Rated current with RC	[A]	0,22	0,27	0,37

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