

# Product Data Sheet

## HKK80AA 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. <sup>1</sup>	[°C]	43
Max. Steady discharge temp. <sup>2</sup>	[°C]	120
Max. Peak discharge temp. <sup>2,5</sup>	[°C]	135
Max. Steady condensing temp. <sup>3</sup>	[°C]	60
Max. Peak condensing temp. <sup>3,5</sup>	[°C]	70
Max. Winding temp. <sup>4</sup>	[°C]	130

<sup>1</sup>...static

<sup>2</sup>...measured on discharge tube, 50 mm from the shell

<sup>3</sup>...measured in the middle of condenser

<sup>4</sup>...calculated out of the measured difference of resistance

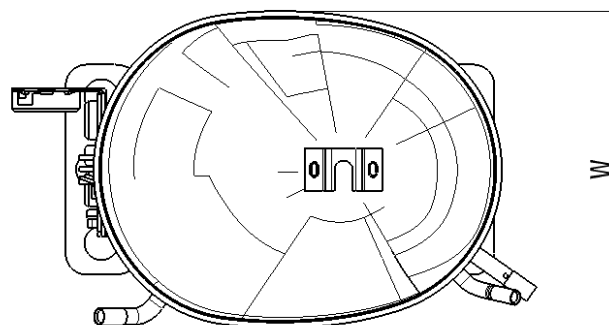
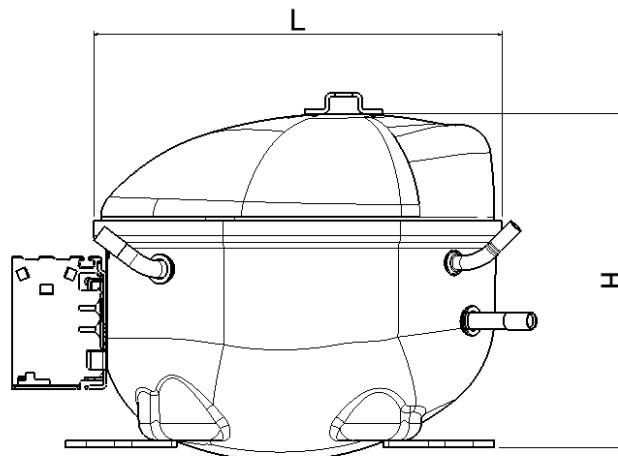
<sup>5</sup>...max 5% of lifetime

Variant code according to Label; see General Product Documentation

### 2 Mechanical Data

Displacement	[cm <sup>3</sup> ]	8,1
Net Weight <sup>1</sup>	[kg]	8,5
Oil Type		mineral
Oil Charge	[ml]	165
Oil Viscosity	[cst]	5
Suction muffler		Semi direct
Free Gas Volume	[cm <sup>3</sup> ]	1540
Length L	[mm]	237,5
Width W	[mm]	151,5
Height H	[mm]	167

<sup>1</sup>...Compressor without accessories



### 3 Electrical Data

<b>Power supply</b>	<b>[V]</b>	220 - 240
<b>Voltage range<sup>1</sup></b>	<b>[V]</b>	187 - 264
<b>Frequency</b>	<b>[Hz]</b>	50
<b>Phase</b>	<b>[ph]</b>	1
<b>Motor type</b>		RSCR
<b>Locked rotor current @ steady state</b>	<b>[A]</b>	3,0
<b>Max. Locked rotor current / measured after 4 sec</b>	<b>[A]</b>	8,6 / 3,5
<b>Main wind. Resistance @ 25°C</b>	<b>[Ω]</b>	25,0
<b>Start wind. Resistance @ 25°C</b>	<b>[Ω]</b>	25,1

<sup>1</sup>...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

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

#### 3.2 Motor Protector

<b>Motor Protector</b>	BDG	Wanbao
<b>Type</b>	AE 24 FW x	B68 120 x
<b>Code</b>	F4	M4

### 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	73,4	101,0	134,0	146,5	172,5	216,3	265,5
		45	71,2	98,0	130,6	143,0	169,0	213,1	263,0
		50	69,0	95,0	127,2	139,5	165,5	209,9	260,5
		55	66,8	92,0	123,0	136,0	162,0	206,7	258,0
		60	64,6	89,0	120,3	132,5	158,5	203,5	255,5
	EN12900 (CECOMAF) [°C]	C55	55,0	76,0	102,0	112,0	133,0	170,0	212,0

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	1,38	1,68	1,97	2,07	2,26	2,56	2,85
		45	1,32	1,60	1,87	1,97	2,15	2,42	2,70
		50	1,27	1,52	1,78	1,87	2,04	2,29	2,55
		55	1,21	1,45	1,68	1,77	1,92	2,16	2,40
		60	1,15	1,37	1,59	1,66	1,81	2,03	2,25
	EN12900 (CECOMAF) [°C]	C55	0,99	1,19	1,40	1,48	1,60	1,78	1,97

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	53,0	60,2	68,0	70,8	76,2	84,6	93,2
		45	53,7	61,2	69,7	72,6	78,6	87,9	97,4
		50	54,5	62,4	71,4	74,7	81,2	91,5	102,1
		55	55,4	63,7	73,4	77,0	84,2	95,6	108,0
		60	56,4	65,1	75,7	79,6	87,5	100,1	113,4
	EN12900 (CECOMAF) [°C]	C55	55,4	63,7	73,4	77,0	84,2	95,6	108,0

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]	0,30	0,37	0,50

## 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