

# **Product Data Sheet**

## **HTK55AA K3**

### **Revision 1**

(Variant Code 3)

## **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

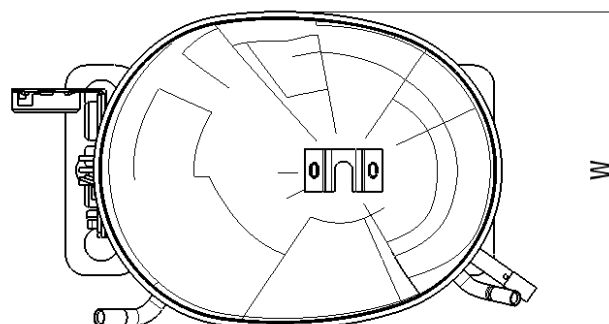
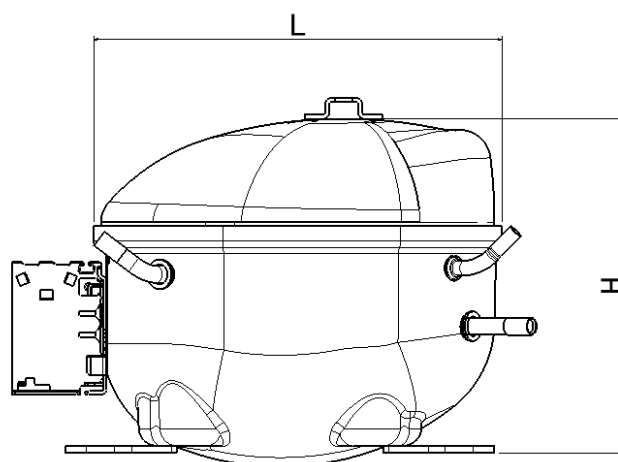
<sup>5</sup> ...max 5% of lifetime

Variant code according to Label; see General Product Documentation

### 2 Mechanical Data

<b>Displacement</b>	<b>[cm<sup>3</sup>]</b>	5.6
<b>Net Weight<sup>1</sup></b>	<b>[kg]</b>	7,8
<b>Oil Type</b>		mineral
<b>Oil Charge</b>	<b>[ml]</b>	165
<b>Oil Viscosity</b>	<b>[cst]</b>	5
<b>Suction muffler</b>		Semi direct
<b>Free Gas Volume</b>	<b>[cm<sup>3</sup>]</b>	1500
<b>Length L</b>	<b>[mm]</b>	237,5
<b>Width W</b>	<b>[mm]</b>	151,5
<b>Height H</b>	<b>[mm]</b>	159

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



### 3 Electrical Data

Power supply	[V]	220 - 240
Voltage range <sup>1</sup>	[V]	187 - 264
Frequency	[Hz]	50
Phase	[ph]	1
Motor type		RSIR/RSCR
Locked rotor current @ steady state	[A]	3,4
Max. Locked rotor current measured after 4 sec	[A]	8,3 / 3,5
Main wind. Resistance @ 25°C	[Ω]	33,4
Start wind. Resistance @ 25°C	[Ω]	28,5

<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

Terminal board		ECC
Starting device	Code	K100LP
PTC	Type	H
Run Capacitor	[μF]	2; 2,5

#### 3.2 Motor Protector

Motor Protector	BDG	Wanbao
Type	AE 23 BY x	B43 115 x
Code	F0	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	45,1	68,0	94,0	103,5	123,0	155,2	190,5
		45	42,9	65,0	90,5	100,0	119,5	152,0	188,0
		50	40,8	62,0	87,1	96,5	116,0	148,8	185,5
		55	38,6	59,0	83,7	93,0	110,0	145,0	183,0
		60	36,4	56,0	80,2	89,5	109,0	142,5	180,5
	EN12900 (CECOMAF) [°C]	C55	32,0	49,0	69,0	77,0	91,0	119,0	150,0

Performance Table COP without/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	1,13 / 1,19	1,43 / 1,50	1,74 / 1,80	1,84 / 1,90	2,04 / 2,10	2,34 / 2,41	2,65 / 2,71
		45	1,08 / 1,13	1,36 / 1,42	1,64 / 1,70	1,74 / 1,80	1,92 / 1,99	2,21 / 2,27	2,49 / 2,56
		50	1,02 / 1,08	1,29 / 1,34	1,55 / 1,61	1,64 / 1,70	1,81 / 1,88	2,07 / 2,14	2,33 / 2,41
		55	0,97 / 1,02	1,21 / 1,27	1,47 / 1,52	1,55 / 1,61	1,70 / 1,77	1,93 / 2,01	2,18 / 2,25
		60	0,92 / 0,96	1,14 / 1,19	1,36 / 1,42	1,43 / 1,50	1,58 / 1,65	1,80 / 1,87	2,02 / 2,10
	EN12900 (CECOMAF) [°C]	C55	0,80 / 0,85	1,01 / 1,05	1,21 / 1,25	1,28 / 1,32	1,40 / 1,47	1,59 / 1,65	1,79 / 1,85

Performance Table Input Power without/with RC @ ASHRAE / EN12900 (CECOMAF); 220V, 50Hz; [W]:

Evap. temp. [°C]		-35	-30	-25	-23,3	-20	-15	-10	
Condensing temp. @	ASHRAE [°C]	40	43,0 / 37,9	48,4 / 45,5	54,1 / 52,2	56,0 / 54,4	59,8 / 58,5	65,5 / 64,4	71,4 / 70,2
		45	42,0 / 37,8	48,5 / 45,8	55,1 / 53,1	57,4 / 55,5	61,8 / 60,1	68,4 / 66,8	75,1 / 73,4
		50	41,0 / 37,8	48,6 / 46,1	56,3 / 54,1	58,9 / 56,8	64,0 / 61,9	71,6 / 69,5	79,3 / 77,1
		55	39,8 / 37,8	48,7 / 46,5	57,0 / 55,2	60,0 / 58,2	66,0 / 62,0	75,3 / 72,0	84,1 / 81,2
		60	38,5 / 37,7	48,9 / 47,0	59,1 / 56,5	62,6 / 59,8	69,3 / 66,2	79,5 / 76,0	89,7 / 85,9
	EN12900 (CECOMAF) [°C]	C55	39,8 / 37,8	48,7 / 46,5	57,0 / 55,2	60,0 / 58,2	66,0 / 62,0	75,3 / 72,0	84,1 / 81,2

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	0,29	0,38
Rated current without RC	[A]	0,37	0,40	0,47

## 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