

# Product Data Sheet

## HTK12AA 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

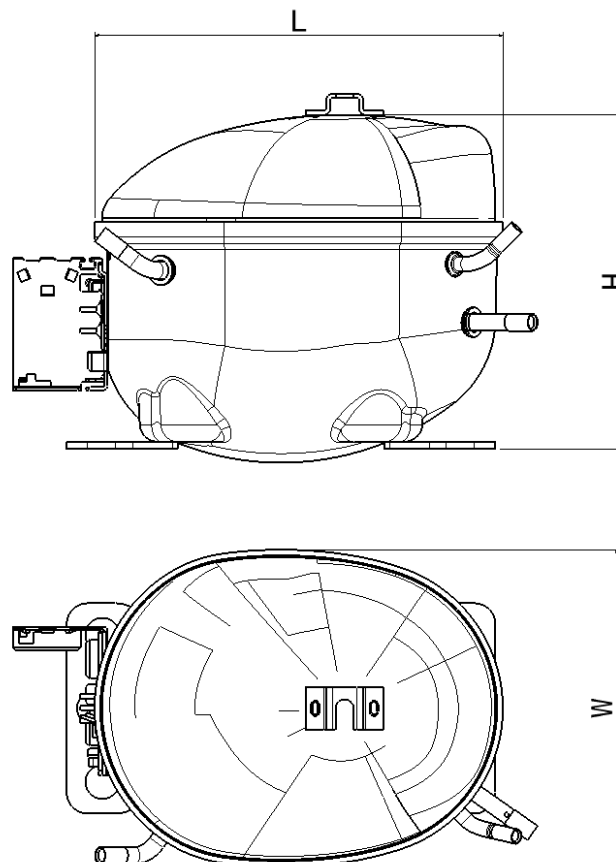
<sup>5</sup> ...max 5% of lifetime

Variant code according to Label; see General Product Documentation

## 2 Mechanical Data

<b>Displacement</b>	<b>[cm<sup>3</sup>]</b>	11,1
<b>Net Weight<sup>1</sup></b>	<b>[kg]</b>	8,4
<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>	1600
<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>	167

<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]	4,8
Max. Locked rotor current / measured after 4 sec	[A]	17,6 / 5,7
Main wind. Resistance @ 25°C	[Ω]	19,3
Start wind. Resistance @ 25°C	[Ω]	13,2

<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	K100
PTC	Type	A
Run Capacitor	[μF]	4; 5

#### 3.2 Motor Protector

Motor Protector	BDG	Wanbao
Type	AE 15 BU x	B 80 120 x
Code	FC	MH

### 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	105,9	146,0	191,7	208,5	243,0	300,0	362,5
		45	103,7	143,0	188,3	205,0	239,5	296,8	360,0
		50	101,5	140,0	184,8	201,5	236,0	293,6	357,6
		55	99,4	137,0	181,4	198,0	232,5	291,0	355,0
		60	97,2	134,0	177,9	194,5	229,0	287,2	352,5
	EN12900 (CECOMAF) [°C]	C55	82,0	113,0	149,0	163,0	191,0	239,0	292,0

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	1,27/1,35	1,51/1,58	1,74/1,81	1,82/1,89	1,98/2,05	2,21/2,28	2,45/2,51
		45	1,24/1,31	1,46/1,53	1,68/1,75	1,76/1,83	1,90/1,97	2,13/2,20	2,35/2,42
		50	1,20/1,27	1,41/1,48	1,62/1,69	1,69/1,76	1,83/1,90	2,04/2,11	2,25/2,33
		55	1,17/1,23	1,37/1,43	1,57/1,63	1,64/1,70	1,76/1,83	1,96/2,03	2,15/2,23
		60	1,14/1,19	1,32/1,38	1,50/1,57	1,57/1,63	1,69/1,76	1,87/1,95	2,05/2,14
	EN12900 (CECOMAF) [°C]	C55	0,97/1,02	1,13/1,18	1,28/1,34	1,34/1,40	1,45/1,50	1,61/1,67	1,77/1,83

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	83,3/78,7	96,9/92,4	110,0/105,7	114,4/110,2	122,9/118,7	135,6/131,5	148,1/144,2
		45	83,8/79,3	97,9/93,5	111,9/107,4	116,6/112,1	125,7/121,3	139,5/135,1	153,2/148,8
		50	84,4/80,0	99,1/94,6	113,9/109,3	118,9/114,3	128,8/124,0	143,8/138,9	158,8/153,7
		55	84,9/80,7	100,3/95,7	116,0/111,2	121,0/116,6	132,1/127,0	148,4/143,0	164,9/159,2
		60	85,6/81,5	101,5/97,0	118,3/113,2	124,2/119,0	135,7/130,2	153,5/147,5	171,5/165,0
	EN12900 (CECOMAF) [°C]	C55	84,9/80,7	100,3/95,7	116,0/111,2	121,0/116,6	132,1/127,0	148,4/143,0	164,9/159,2

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]	0,60	0,65	0,78
Rated current without RC	[A]	0,84	0,87	0,97

## 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