

# **Product Data Sheet**

## **GVM66AA**

### **Variant Code B**\*

### **Revision 3**

## **1 Application**

Application	Refrigerant	Expansion Device	Cooling Type
LBP	R134a	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

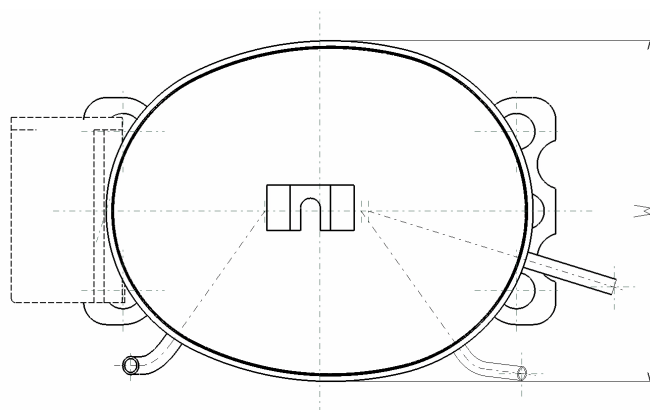
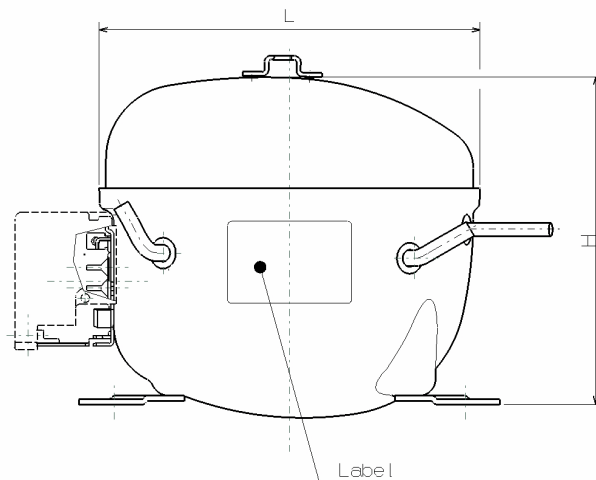
<sup>5</sup> ...max 5% of lifetime

\* ...Variant code according to Label; see General Product Documentation

## 2 Mechanical Data

Displacement	[cm³]	6,6
Net Weight <sup>1</sup>	[kg]	7,9
Oil Type		Ester
Oil Charge	[ml]	183
Oil Viscosity	[cst]	15
Suction muffler		Semi direct
Length L	[mm]	184,5
Width W	[mm]	150
Height H	[mm]	169,5

<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
Rated current / Locked rotor current @ steady state	[A]	1,07 / 5,5
Max. Locked rotor current measured after 4 sec	[A]	13,5 / 6,4
Main wind. Resistance @ 25°C	[Ω]	13,0
Start wind. Resistance @ 25°C	[Ω]	14,8

<sup>1</sup>...@ +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]	-

#### 3.2 Motor Protector

Motor Protector	BDG	Wanbao	Sensata
Type	AE 72 FU x	B88-110 x	4TM 276 NFB YY x
Code	FP	M9	6H

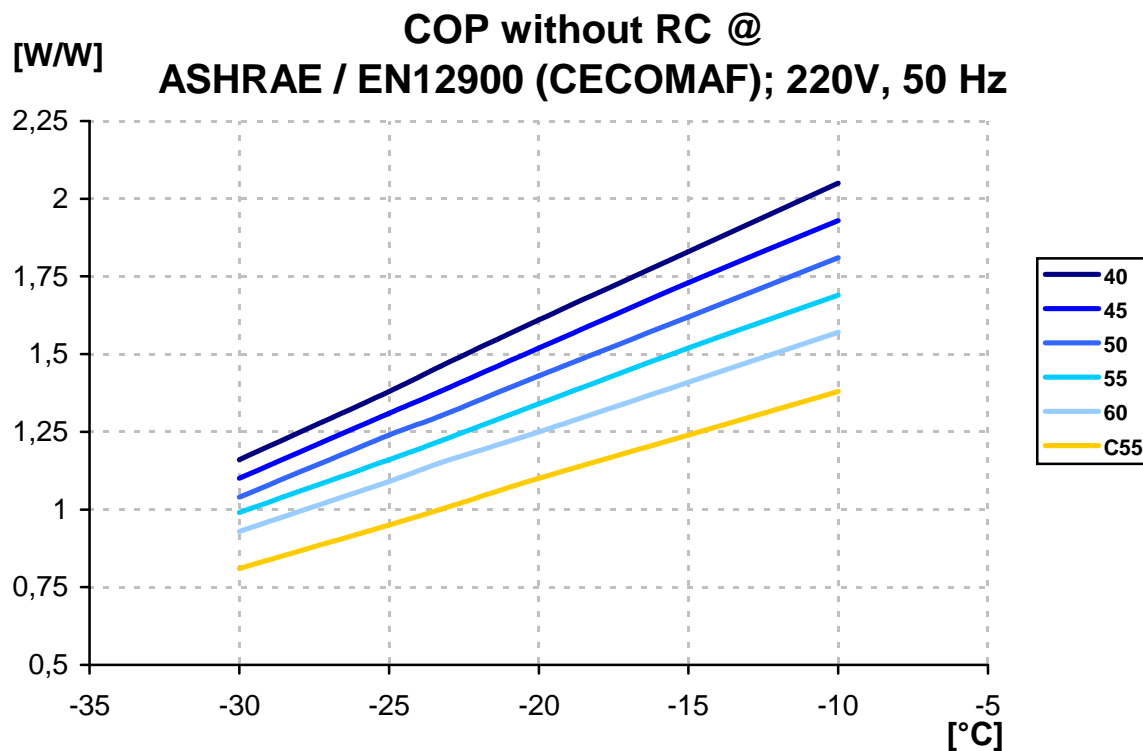
## 4 Performance Data

### 4.1 COP, Cooling Capacity and Input Power

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

Evap. temp. [°C]			-30	-25	-23,3	-20	-15	-10
Condensing temp. @	ASHRAE [°C]	40	1,16	1,38	1,46	1,61	1,83	2,05
		45	1,10	1,31	1,38	1,52	1,73	1,93
		50	1,04	1,24	1,30	1,43	1,62	1,81
		55	0,99	1,16	1,22	1,34	1,52	1,69
		60	0,93	1,09	1,15	1,25	1,41	1,57
	EN12900 (CECOMAF) [°C]	C55	0,81	0,95	1,00	1,10	1,24	1,38

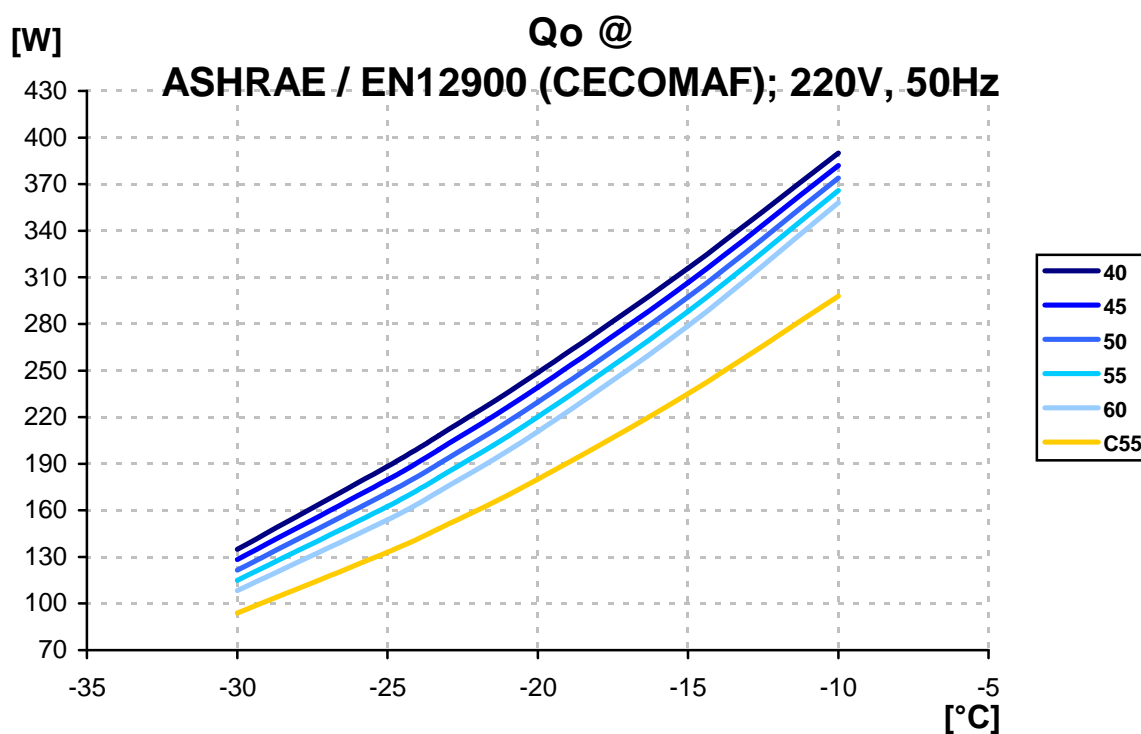
Performance Graph COP without RC:



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

Evap. temp. [°C]			-30	-25	-23,3	-20	-15	-10
Condensing temp. @	ASHRAE [°C]	40	134,9	188,3	208,0	248,6	315,8	390,0
		45	128,3	179,7	199,0	239,1	306,6	382,0
		50	121,6	171,1	190,0	229,7	297,3	374,0
		55	115,0	162,5	181,0	220,2	288,0	366,0
		60	108,4	153,9	172,0	210,8	278,8	358,0
	EN12900 (CECOMAF) [°C]	C55	94,0	133,0	148,0	180,0	235,0	298,0

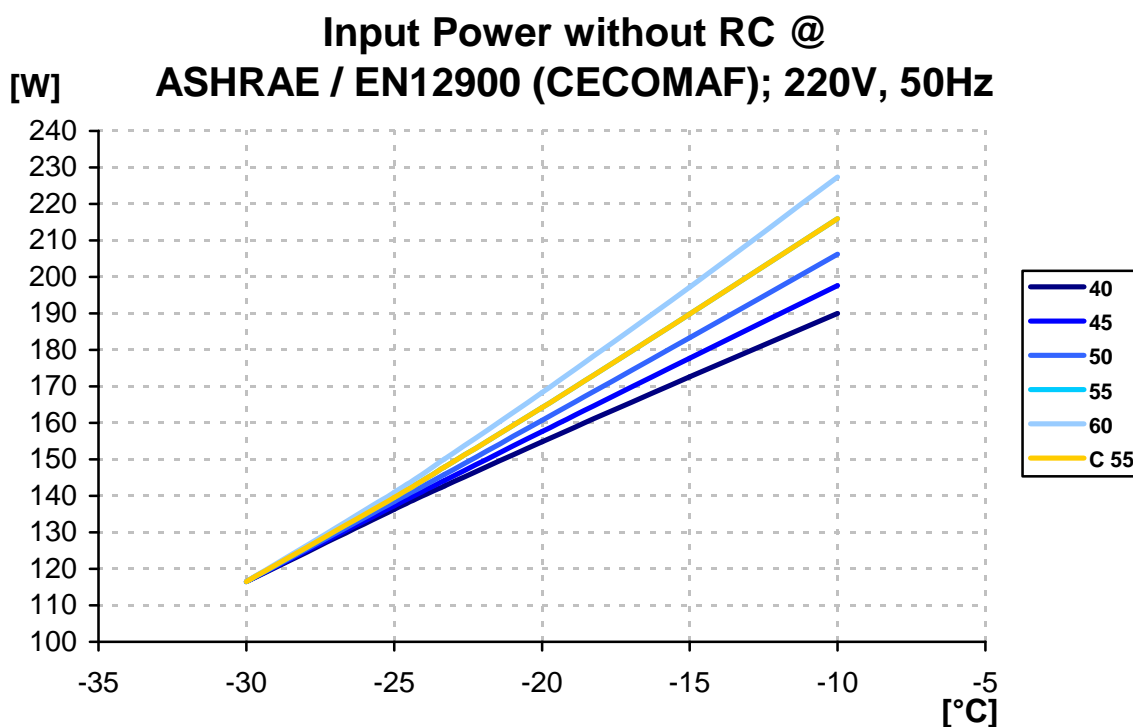
**Performance Graph Cooling Capacity:**



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

Evap. temp. [°C]			-30	-25	-23,3	-20	-15	-10
Condensing temp. @	ASHRAE [°C]	40	116,5	136,3	142,7	154,8	172,6	190,0
		45	116,5	137,3	144,2	157,6	177,7	197,6
		50	116,5	138,4	145,9	160,7	183,3	206,2
		55	116,5	139,6	147,9	164,2	189,8	216,0
		60	116,5	141,0	150,1	168,3	197,2	227,4
	EN12900 (CECOMAF) [°C]	C55	116,5	139,6	147,9	164,2	189,8	216,0

Performance Graph Input Power without RC:



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 +/-7%

Cooling Capacity +/-5%

## 4.2 Rated current @ 55°C condensing temperature

Evaporating temperature	[°C]	-30	-23,3	-10
Rated current without RC	[A]	0,96	1,07	1,29

## 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