

# **Product Data Sheet**

## **GVM57AA**

### **Variant Code G\***

## **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</sup>	[°C]	135
Max. Steady condensing temp. <sup>3</sup>	[°C]	60
Max. Peak condensing temp. <sup>3</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

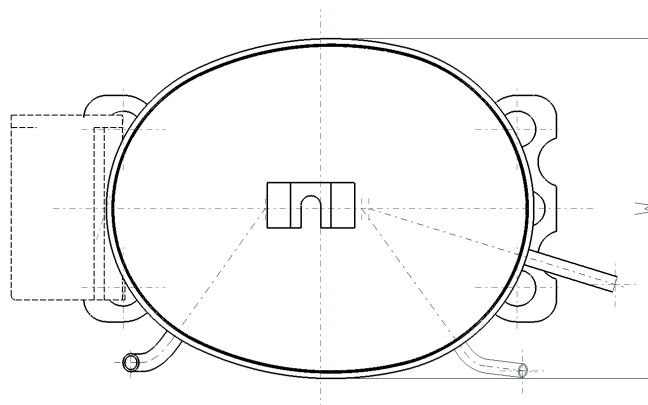
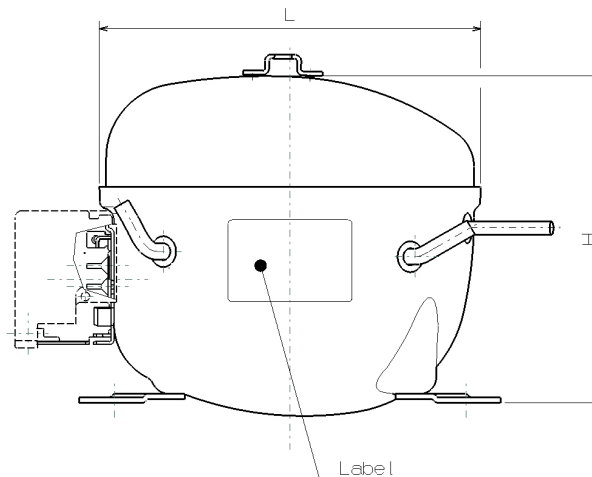
<sup>4</sup>...calculated out of the measured difference of resistance

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

## 2 Mechanical Data

Displacement	[cm <sup>3</sup> ]	5,73
Net Weight <sup>1</sup>	[kg]	7,8
Oil Type		Ester
Oil Charge	[ml]	163
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>		187 – 264
Frequency	[Hz]	50
Phase	[ph]	1
Motor type		RSIR
Rated current / Locked rotor current @ steady state	[A]	0,87 / 4,77
Max. Locked rotor current measured after 4 sec	[A]	15,3 / 5,84
Main wind. Resistance @ 25°C	[Ω]	19,0
Start wind. Resistance @ 25°C	[Ω]	10,2

<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 T.
Type	AE15BU x	B80-120 xx	4TM 265 NFB YY xx
Code	FC	MH	6F

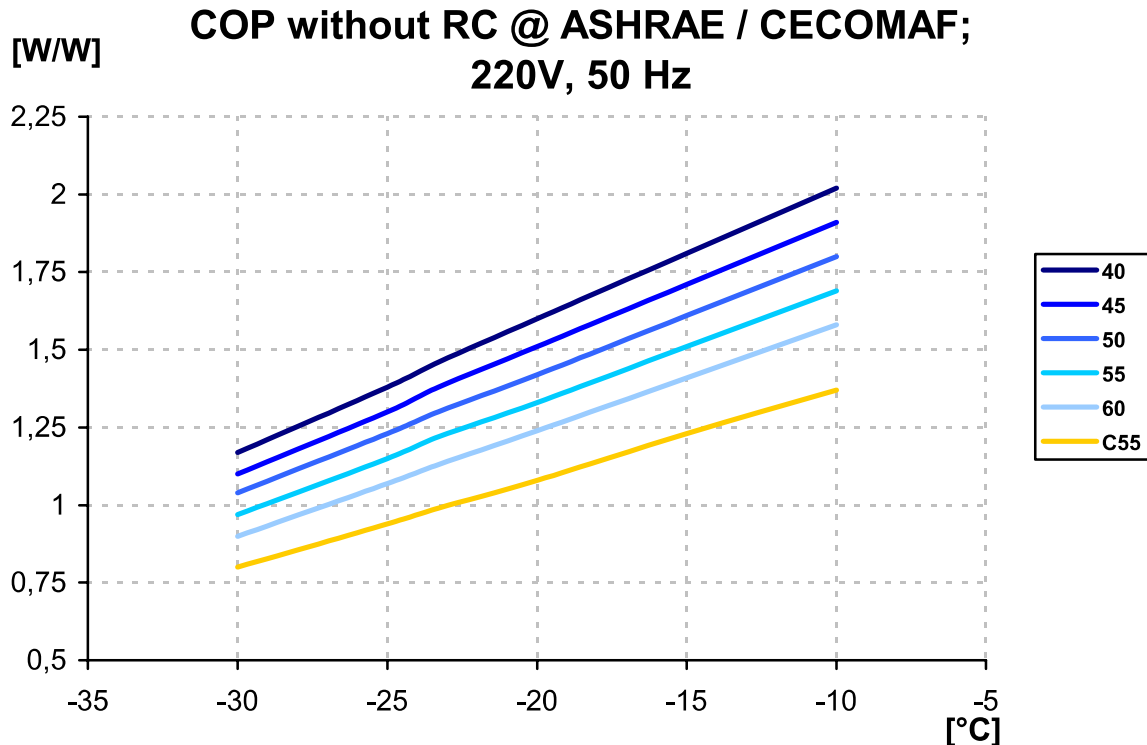
## 4 Performance Data

### 4.1 COP, Cooling Capacity and Input Power according to EN 12900

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

Evap. temp. [°C]		-30	-25	-23,3	-20	-15	-10	
Condensing temp. @	ASHRAE [°C]	40	1,17	1,38	1,46	1,60	1,81	2,02
		45	1,10	1,30	1,38	1,51	1,71	1,91
		50	1,04	1,23	1,30	1,42	1,61	1,80
		55	0,97	1,15	1,20	1,33	1,51	1,69
		60	0,90	1,07	1,13	1,24	1,41	1,58
	CECOMAF [°C]	C55	0,80	0,94	0,99	1,08	1,23	1,37

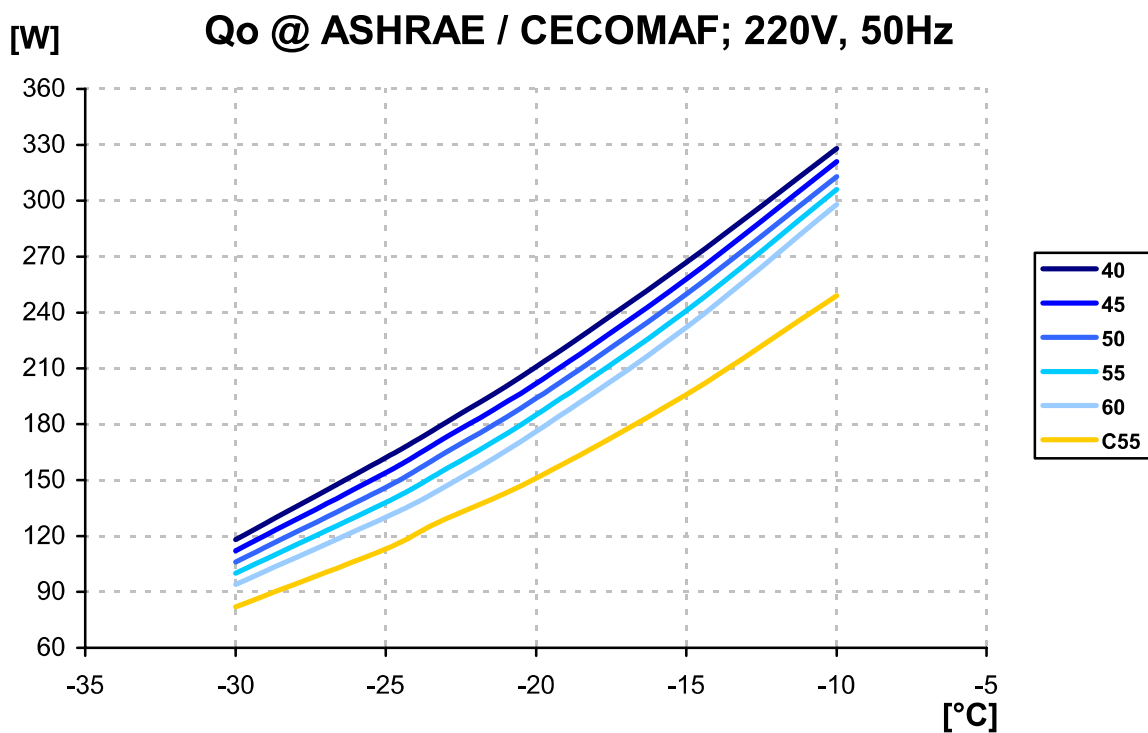
Performance Graph COP without RC:



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

Evap. temp. [°C]		-30	-25	-23,3	-20	-15	-10	
Condensing temp. @	ASHRAE [°C]	40	118	162	178	211	267	328
		45	112	154	170	202	258	321
		50	106	146	162	194	250	313
		55	100	138	153	185	241	306
		60	94	130	144	176	232	298
	CECOMAF [°C]	C55	82	113	127	151	196	249

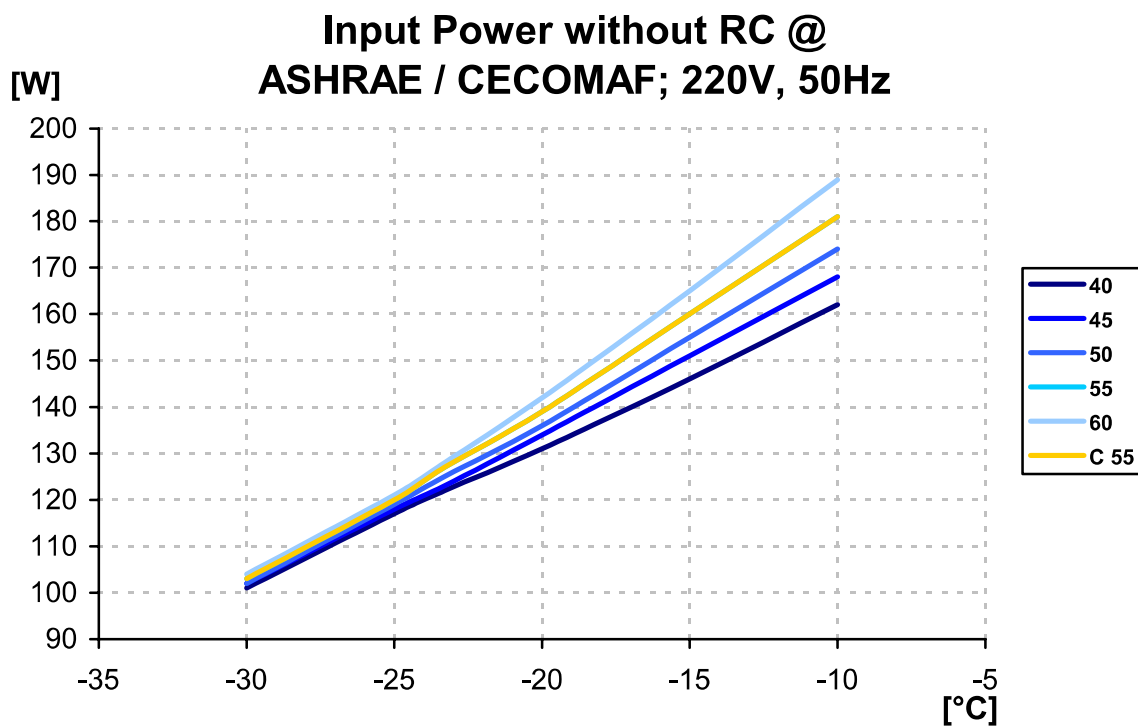
**Performance Graph Cooling Capacity:**



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

Evap. temp. [°C]		-30	-25	-23,3	-20	-15	-10	
Condensing temp. @	ASHRAE [°C]	40	101	117	122	132	145	162
		45	102	118	123	134	151	168
		50	102	119	125	137	155	174
		55	103	120	127	139	160	181
		60	104	121	128	142	165	189
	CECOMAF [°C]	C55	103	120	127	139	160	181

Performance Graph Input Power without RC:



Test Conditions @ 220V/50Hz		ASHRAE	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]	0,78	0,87	1,06