

Product Data Sheet

GVM44AA

Variant Code G^{*}

Revision 3

1 Application

Application	Refrigerant	Expansion Device	Cooling Type
LBP	R134a	Capillary	Static

1.1 Application Conditions

Max. Ambient temp. ¹	[°C]	43
Max. Steady discharge temp. ²	[°C]	120
Max. Peak discharge temp. ²	[°C]	135
Max. Steady condensing temp. ³	[°C]	60
Max. Peak condensing temp. ³	[°C]	70
Max. Winding temp. ⁴	[°C]	130

¹ ...static

² ...measured on discharge tube, 50 mm from the shell

³ ...measured in the middle of condenser

⁴ ...calculated out of the measured difference of resistance

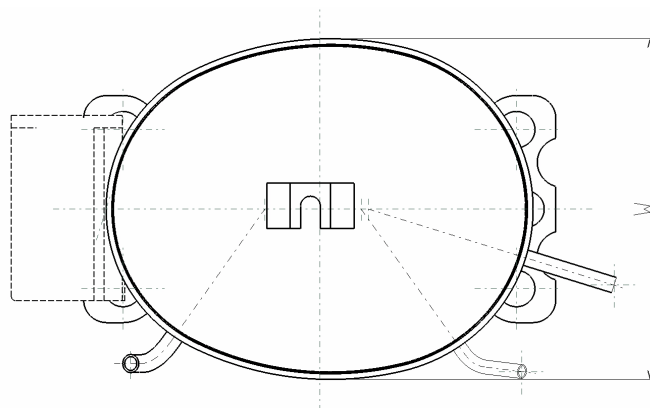
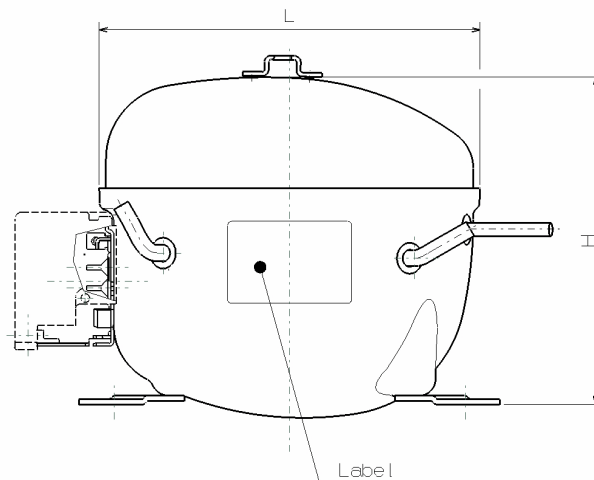
⁵ ...max 5% of lifetime

^{*} ...Variant code according to Label; see General Product Documentation

2 Mechanical Data

Displacement	[cm ³]	4,38
Net Weight ¹	[kg]	7,5
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

¹...Compressor without accessories



3 Electrical Data

Power supply	[V]	220 - 240
Voltage range ¹	[V]	187 – 264
Frequency	[Hz]	50
Phase	[ph]	1
Motor type		RSIR
Rated current / Locked rotor current @ steady state	[A]	0,9 / 3,9
Max. Locked rotor current measured after 4 sec	[A]	11,3 / 4,6
Main wind. Resistance @ 25°C	[Ω]	23,6
Start wind. Resistance @ 25°C	[Ω]	19,2

¹...@ +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 37 FJ x	B59 115 x	4TM 189 NFB YY x
Code	F7	MF	69

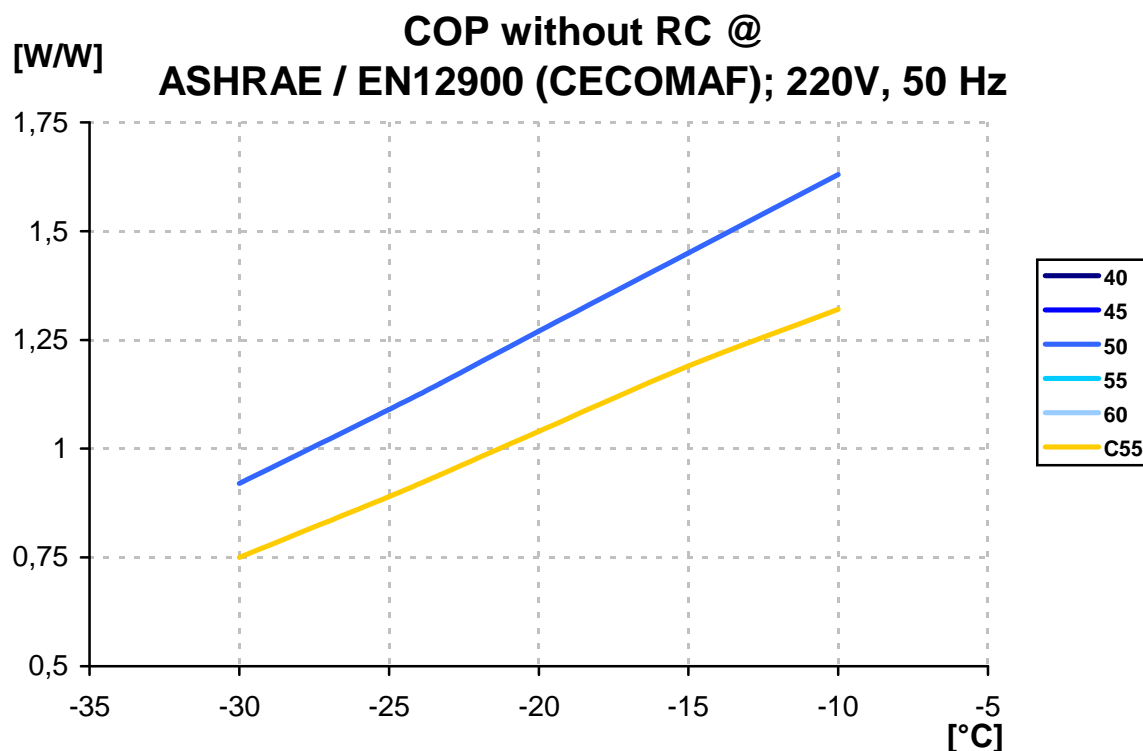
4 Performance Data

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]	55	0,92	1,09	1,15	1,27	1,45	1,63
	EN12900 (CECOMAF) [°C]	C55	0,75	0,89	0,94	1,04	1,19	1,32

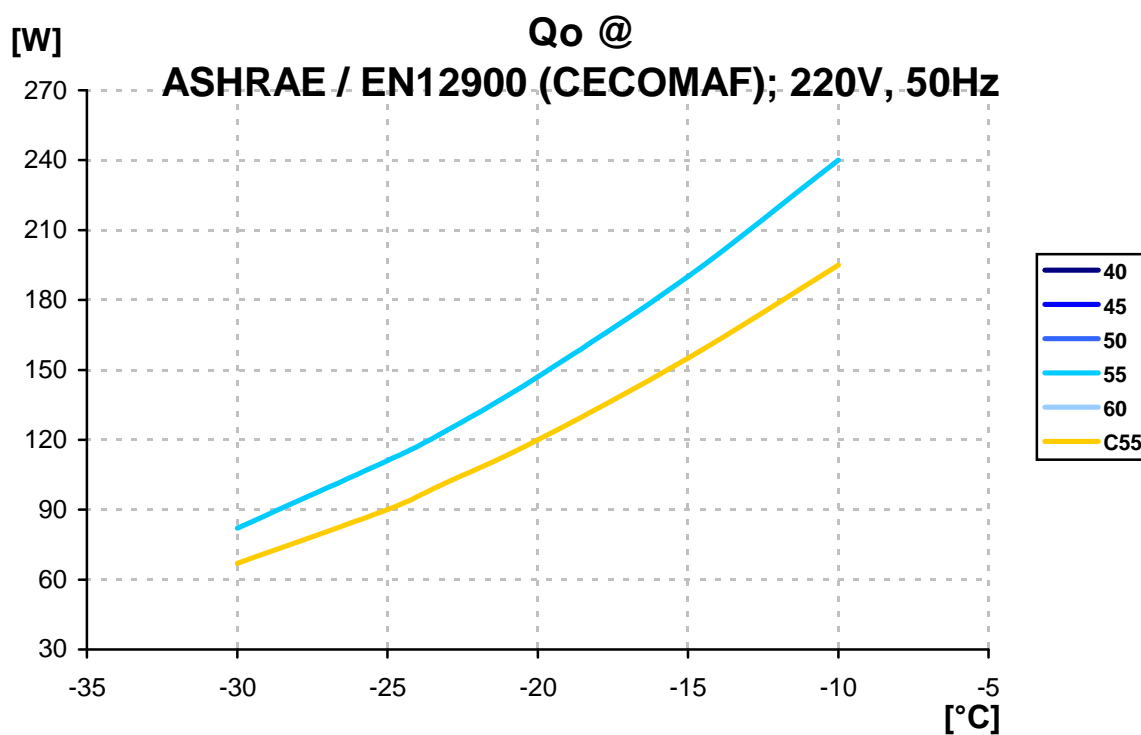
Performance Graph COP without RC:



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

Evap. temp. [°C]			-30	-25	-23,3	-20	-15	-10
Condensing temp. @	ASHRAE [°C]	55	82	111	122	147	190	240
	EN12900 (CECOMAF) [°C]	C55	67	90	100	120	155	195

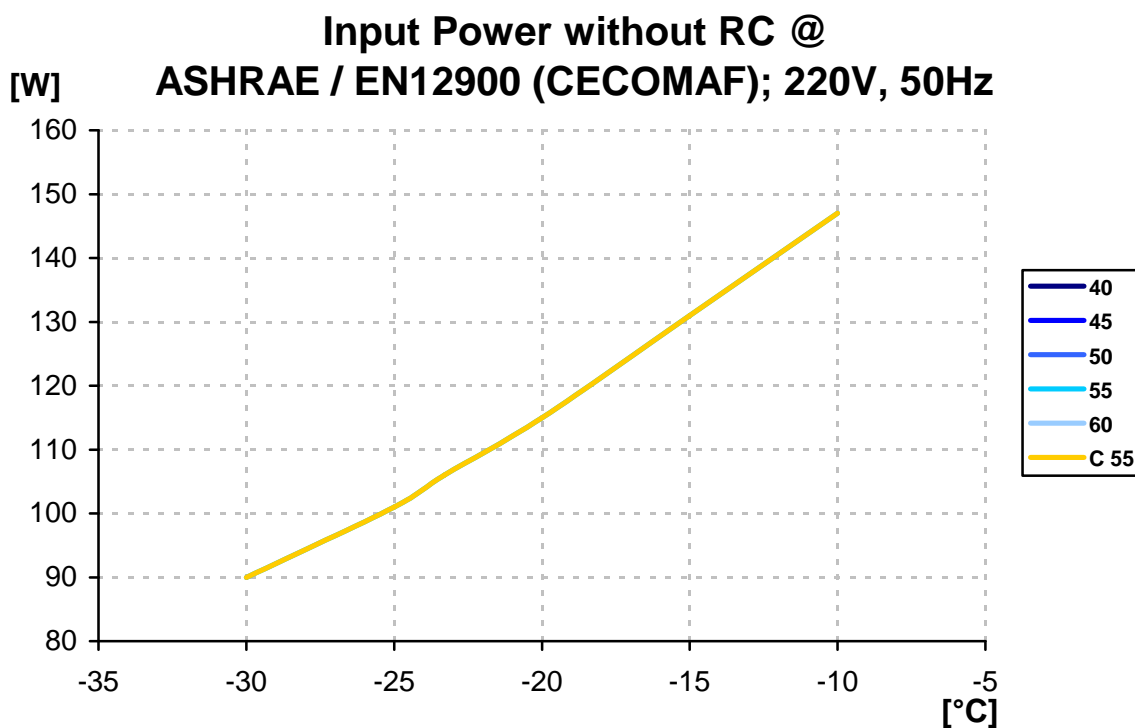
Performance Graph Cooling Capacity:



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]	55	90	101	106	115	131	147
	EN12900 (CECOMAF) [°C]	C55	90	101	106	115	131	147

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]	0,69	0,69	0,84

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