

# Panasonic QB66C13GAX5 Compressor Specs and Replacements

Category: Refrigeration

written by [www.mbsmpro.com](http://www.mbsmpro.com) | February 20, 2026



R134a, refrigerant, compressor QB66C13GAX5, 220V 50Hz, LBP, 1/5 hp

## Description

Mbsm.pro: Compressor, Panasonic, QB66C13GAX5, 1/5 HP, 1Ph, 220-240V 50Hz, R134a, LBP, Refrigeration & Freezing

## Technical Specifications Table

Feature	Details
<b>Model</b>	QB66C13GAX5
<b>Manufacturer</b>	Panasonic (Matsushita Electric Industrial Co., Ltd.)
<b>Manufactured by</b>	Panasonic Refrigeration Devices Malaysia Sdn. Bhd.
<b>Origin</b>	Malaysia
<b>Utilisation</b>	LBP (Low Back Pressure)
<b>Domaine</b>	Domestic Refrigerators / Freezers
<b>Cooling Wattage at -23.3°C</b>	165 W (ASHRAE)
<b>Power Consumption</b>	142 W
<b>Cubic Feet Capacity</b>	8 to 12 cu. ft. (Depending on insulation)
<b>Litres Capacity</b>	200 to 250 Liters (Freezer capacity ~64L)
<b>Kcal/h</b>	142 Kcal/h
<b>TON</b>	~0.047 Tons
<b>Oil Type and Quantity</b>	Mineral Oil or POE, 280-320 ml
<b>Horsepower (HP)</b>	1/5 HP (0.20 HP)
<b>Refrigerant Type</b>	R134a
<b>Power Supply</b>	220-240V / 50Hz / 1Ph
<b>Cooling Capacity BTU</b>	563 BTU/h
<b>Motor Type</b>	RSIR (Resistance Start Induction Run)
<b>Displacement</b>	6.6 cm <sup>3</sup>
<b>Winding Material</b>	Copper
<b>Pression Charge</b>	8-12 Bar (High Side)

Feature	Details
<b>Capillary Recommendation</b>	0.028" or 0.031" (Length varies by application)
<b>Compatible Appliances</b>	Domestic refrigerators, small freezers, beverage coolers
<b>Temperature Function</b>	-35°C to -5°C
<b>With Fan or No</b>	Yes (Fan cooling required for compressor)
<b>Commercial or No</b>	Domestic Grade
<b>Amperage (FLA)</b>	1.1 A
<b>LRA (Locked Rotor Amps)</b>	5.5-6.5 A
<b>Type of Relay</b>	PTC Relay
<b>COP</b>	1.16-1.23 W/W
<b>Evaporating Temperature</b>	-23.3°C
<b>Condensing Temperature</b>	54.4°C
<b>Thermal Protection</b>	Yes (Internal Thermal Protector)
<b>Net Weight</b>	6.5-7.5 kg

## Efficiency Metrics (COP) Table

Performance varies based on operating conditions. Here is how the QB66C13GAX5 performs across the temperature spectrum:

Evaporating Temp (°C)	Cooling Capacity (Watts)	Power Consumption (Watts)	COP (W/W)
-25	145	138	1.05
-20	185	148	1.25
-15	230	158	1.46
-10	280	168	1.67
-5	335	178	1.88
0	395	188	2.10
5	460	198	2.32

## Replacement Models

Brand	Model Number
<b>Panasonic</b>	QB66C13GAX5, QB66C13GPX5
<b>Matsushita</b>	QB66C13GAX5
<b>Panasonic</b>	QB66 series variants

## 5 Replacements (Same R134a Gas)

1. **Embraco NEK6196Z** (Strong alternative, 1/5 HP, 6.5cc)
2. **Tecumseh TH261MS** (Classic reliable swap, 1/5 HP)
3. **Danfoss SC10G** (Similar capacity, 10cc displacement)
4. **Cubigel GL80AA** (Excellent domestic equivalent, 7.8cc)
5. **Huayi HYE11YG** (Budget-friendly alternative, 1/6 HP)

## 5 Replacements (Other Gas - R600a/R404A)

**Note:** Requires complete system flush and expansion valve/capillary adjustment.

1. **Embraco EGU80HLP** (R600a - Isobutane, very efficient, 1/6 HP)
2. **Danfoss SC10CNX** (R290 - Propane, high efficiency)
3. **Tecumseh CAJ9480Z** (R404A - Higher capacity)
4. **Secop NL9FK** (R600a compatible variant)
5. **Cubigel HM80AA** (R600a - Energy efficient)

## Key Features

- Thermally protected compressor [www.mbsm.pro](http://www.mbsm.pro)
- Designed for Low Back Pressure (LBP) applications [okmarts.com](http://okmarts.com)
- Suitable for domestic refrigerators up to 250L capacity [www.mbsm.pro](http://www.mbsm.pro)
- RSIR motor type with PTC relay starting [okmarts.com](http://okmarts.com)
- Evaporating temperature range: -35°C to -5°C [www.aspneumatic.com](http://www.aspneumatic.com)
- Manufactured in Malaysia with Panasonic quality standards
- Energy efficient with COP of 1.19-1.23 [www.scribd.com](http://www.scribd.com)
- Low noise and vibration operation

---

**Focus Keyword:** Panasonic QB66C13GAX5 Compressor Specs and Replacements

**SEO Title:** Mbsm.pro - Panasonic QB66C13GAX5 Compressor: 1/5 HP R134a Technical Guide

**Meta Description:** Looking for QB66C13GAX5 specs? We break down this 1/5 HP R134a Panasonic compressor including cooling capacity (165W), wiring, oil type, and the top replacement models for domestic refrigeration.

**Slug:** panasonic-qb66c13gax5-compressor-1-5-hp-r134a-specs

**Tags:** Mbsmgroup, Mbsm.pro, mbsmpro.com, mbsm, Panasonic, QB66C13GAX5, QB66, Matsushita, R134a, 1/5 HP, LBP, Low Back Pressure, NEK6196Z, TH261MS, SC10G, GL80AA, Compressor Replacement, HVAC, Refrigeration Repair, Domestic Refrigerator, Malaysia

**Excerpt:** The Panasonic QB66C13GAX5 is a reliable 1/5 HP compressor designed for R134a LBP systems, commonly found in domestic refrigerators and freezers up to 250L capacity. This guide provides the full technical data sheet, including cooling capacity (165W at ASHRAE), oil requirements (280-320ml), and a comprehensive list of compatible replacements for both R134a and modern alternative refrigerants to ensure your repair is successful.

---



1/5 hp, Compressor Replacement, Domestic Refrigerator, GL80AA, HVAC, LBP, low back pressure, Matsushita, mbsm, mbsm.pro, mbsmgroup, mbsmpro.com, NEK6196Z, Panasonic, QB66, QB66C13GAX5, R134a, Refrigeration Repair, SC10G, TH261MS