

# Panasonic QB86C18GAX5: The Reliable Powerhouse of Tropical Refrigeration

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[Mbsmpro.com](http://Mbsmpro.com), Compressor, [QB86C18GAX5](#), [1/4 hp](#), [Panasonic](#), Cooling, [R134a](#), 201 W, 1Ph, 220-240V 50Hz, [LBP](#), RSIR, -35°C to -15°C, Freezing

## Technical Specifications Table

Feature	Details
<b>Model</b>	<a href="#">QB86C18GAX5</a>
<b>Utilisation</b>	<a href="#">LBP</a> (Low Back Pressure)
<b>Domaine</b>	Freezing / Deep Cooling
<b>Oil Type and Quantity</b>	Ester Oil (POE) / 230 ml
<b>Horsepower (HP)</b>	<a href="#">1/4 HP</a>
<b>Refrigerant Type</b>	<a href="#">R134a</a>
<b>Power Supply</b>	220-240V / 50Hz / 1PH
<b>Cooling Capacity BTU</b>	686 BTU/h (approx. 201W)
<b>Motor Type</b>	RSIR (Resistance Start – Induction Run)
<b>Displacement</b>	8.6 cm <sup>3</sup>
<b>Winding Material</b>	Copper
<b>Pressure Charge</b>	0.4 to 1.1 Bar (Suction Side)
<b>Capillary Recommendation</b>	0.036" / 0.042" (Dependent on cabinet size)
<b>Refrigerator Models</b>	Large domestic side-by-side, Chest Freezers, Display Chillers
<b>Temperature Function</b>	-35°C to -15°C
<b>Fan Requirement</b>	Optional (Static cooling usually sufficient)
<b>Commercial Use</b>	Light Commercial / Domestic High-Capacity
<b>Amperage (RLA)</b>	1.1A – 1.3A
<b>LRA (Locked Rotor Amps)</b>	8.0A
<b>Type of Relay</b>	PTC Relay
<b>Capacitor</b>	N/A (Standard RSIR)

## Compressor Cross-Reference (Same Gas – R134a)

1. Embraco: [EGAS80HLR](#) / [FFI8.5HAK](#)
2. Danfoss/Secop: [TLES8.7F](#) / NLE8.8FT
3. LG: [MA88LAEP](#)
4. Tecumseh: [THG1374YS](#)

5. **Samsung:** [SK182H-L2U](#)

## Compressor Cross-Reference (Alternative Gas – R600a)

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1. **Panasonic:** [QB86C18GAX5](#) ([R134a](#) specific, use **QB91** series for R600a equivalent)
2. **Embraco:** EM2X1121U
3. **Secop:** NLE11KK
4. **Jiaxipera:** NT1114Y
5. **Donper:** LU111CY

In the demanding world of refrigeration, the [Panasonic](#) QB series has established itself as a benchmark for durability and thermal resilience. The [QB86C18GAX5](#), a [1/4 HP](#) unit, is a staple in high-capacity domestic refrigerators and light commercial freezers. Designed to operate under Low Back Pressure ([LBP](#)) conditions, this compressor is particularly favored in regions with high ambient temperatures due to its superior heat dissipation and robust motor design.

## Performance and Efficiency

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With a displacement of 8.6cc, the [QB86C18GAX5](#) strikes a perfect balance between power consumption and cooling velocity. It provides a cooling capacity of approximately 201 Watts (686 BTU/h), which is the sweet spot for large family refrigerators or chest freezers. The RSIR (Resistance Start – Induction Run) motor ensures a simple electrical setup, reducing the points of failure compared to systems requiring complex start/run capacitors.

## Comparison: Panasonic vs. Embraco & Secop

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While the **Embraco** [EGAS80HLR](#) is often cited as a direct competitor, the [Panasonic QB86C18GAX5](#) often wins on mechanical silence. [Panasonic](#)'s internal damping system is specifically engineered to reduce “knocking” sounds during the start-stop cycle. Compared to the **Secop** [TLES8.7F](#), the [Panasonic](#) unit tends to handle voltage fluctuations slightly better, a critical factor for field technicians working in areas with unstable power grids.

## Professional Installation & Maintenance Tips

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- **Oil Sensitivity:** This compressor uses POE (Ester) oil. This oil is extremely hygroscopic (absorbs moisture quickly). Never leave the compressor open to the atmosphere for more than 10 minutes during installation.
- **Vacuuming Protocol:** A deep vacuum is non-negotiable. Moisture mixed with POE oil creates acid that will etch the copper windings and lead to a “grounded” compressor.
- **Filter Drier Replacement:** Always use a high-quality 20g or 30g drier. Given the [1/4 HP](#) power, a larger drier ensures a cleaner system for a longer lifespan.

**Focus Keyword:** [Panasonic QB86C18GAX5](#) Compressor [1/4 HP](#) [R134a](#) Specs

**SEO Title:** [Mbsm](#).pro – [Panasonic QB86C18GAX5](#) Compressor: [1/4 HP](#), [R134a](#), Technical Data

**Meta Description:** Full technical review of the [Panasonic QB86C18GAX5](#) compressor. [1/4 HP, R134a](#), 201W cooling capacity. Ideal for domestic refrigerators and freezers. Find equivalents and installation tips.

**Slug:** [panasonic-qb86c18gax5-compressor-1-4hp-r134a-specifications](#)

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**Excerpt:** The Panasonic QB86C18GAX5 is a [1/4 HP](#) reciprocating compressor engineered for high-efficiency Low Back Pressure ([LBP](#)) applications. Using [R134a](#) refrigerant and a displacement of 8.6cc, it delivers a cooling capacity of 201W. This guide provides technicians with essential technical data, including amperage, displacement, and a comprehensive cross-reference list for modern repairs.

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