

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

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

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

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

- **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 Keyphrase: [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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