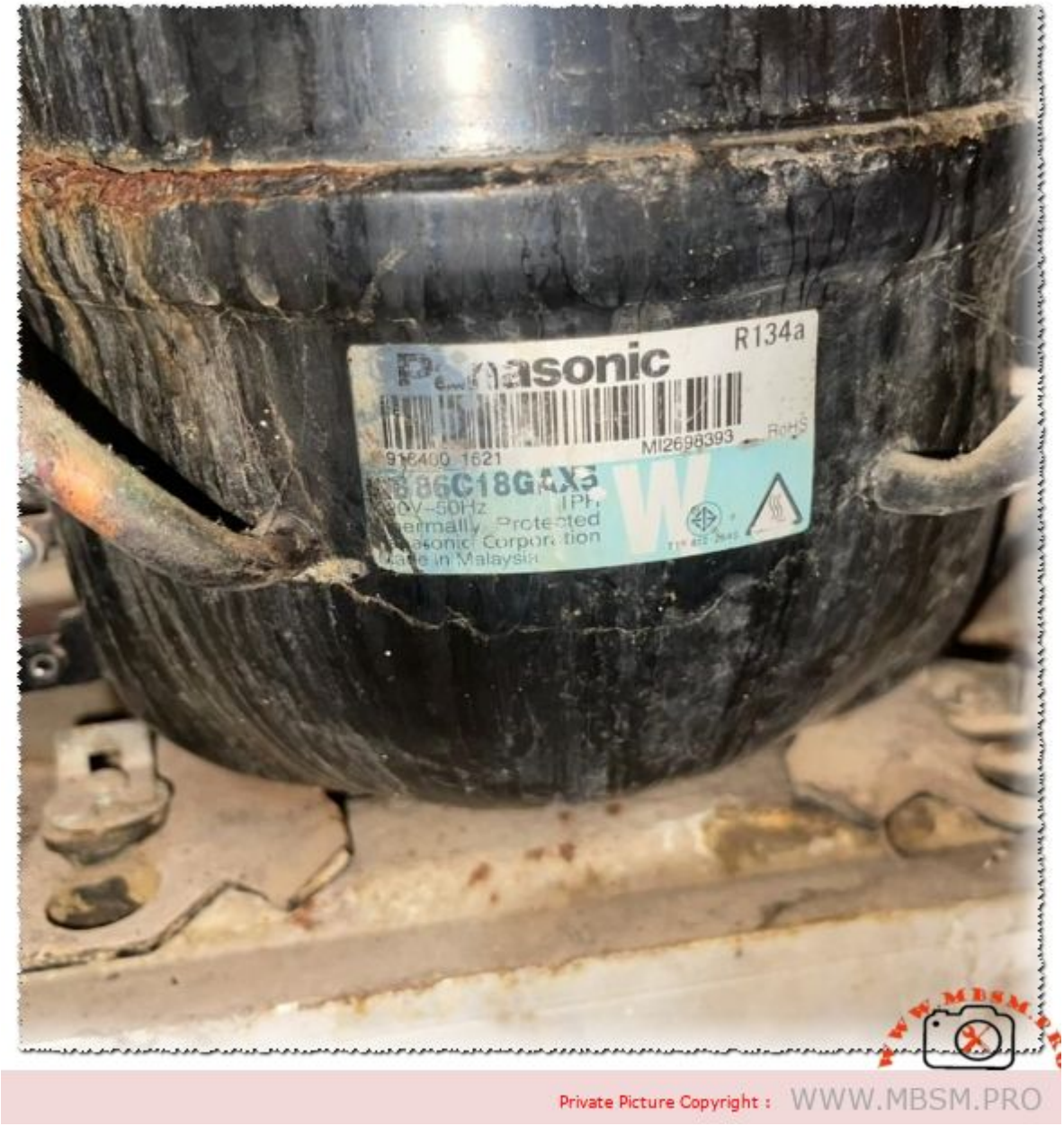
Panasonic QB86C18GAX5: The Reliable Powerhouse of Tropical Refrigeration

Category: Refrigeration
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Mbsmpro.com, Compressor, QB86C18GAX5, 1/4 hp, Panasonic, Cooling, R134a, 201 W, 1Ph, 220-240V 50Hz, LBP, RSIR, -35°C to -15°C, Freezing

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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

Feature	Details
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

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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.

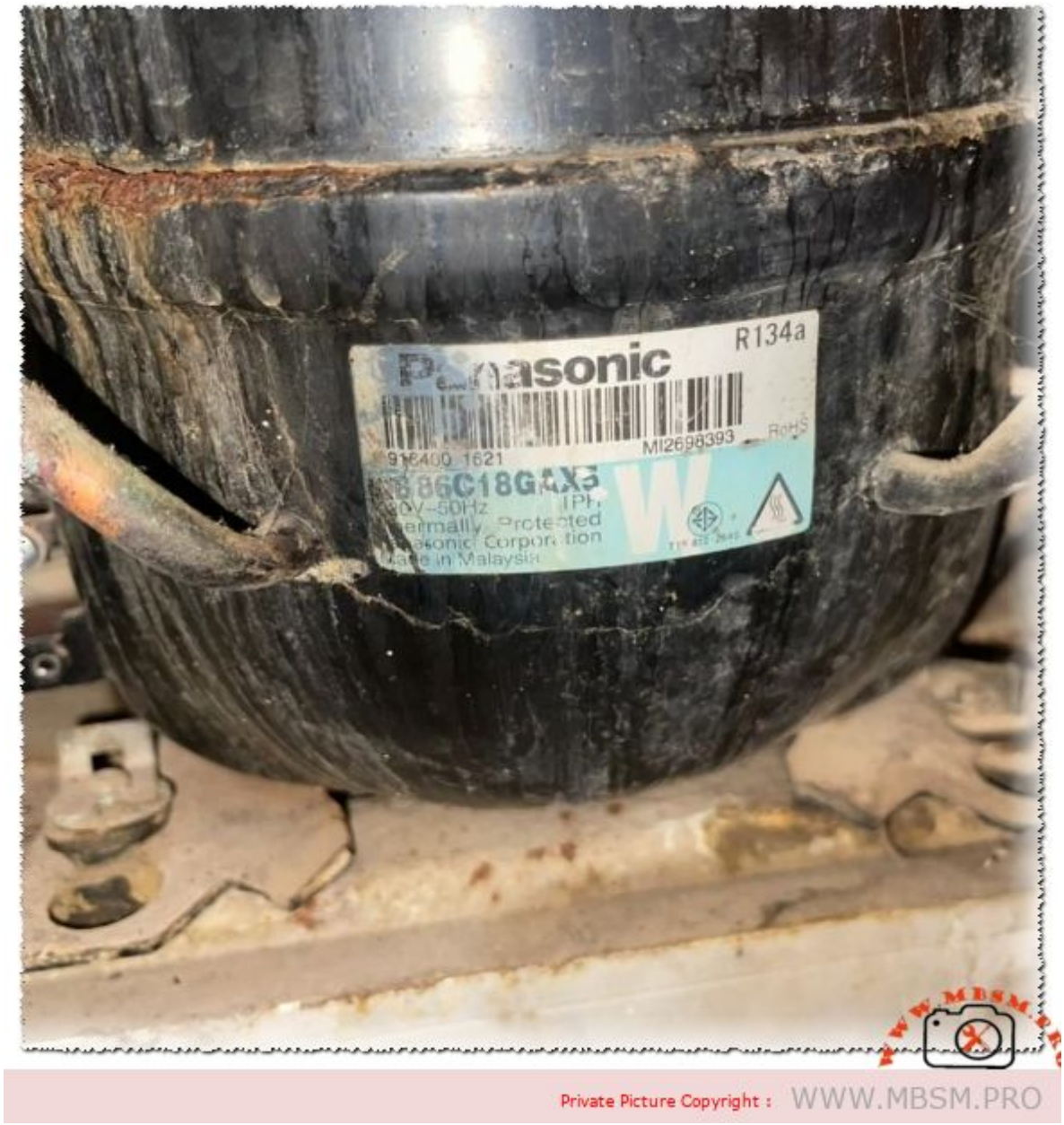
Comparison: Panasonic vs. Embraco & Secop

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
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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
Tags: Mbsmgroup, Mbsm.pro, mbsmpro.com, mbsm, Panasonic, QB86C18GAX5, 1/4 HP, R134a, LBP, EGAS80HLR, FFI8.5HAK, TLES8.7F, MA88LAEP, THG1374YS, SK182H-L2U, Refrigeration Repair, Compressor Replacement.
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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