

SUB COOL GQR80TG Compressor Specs and Replacements

Category: Refrigeration

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R134a, refrigerant, compressor GQR80TG, 220-240V 50Hz, MBP/HBP, 1/4+ hp

Description

Mbsm.pro: Compressor, SUB COOL/SIKELAN, GQR80TG, 1/4+ HP, 1Ph, 220-240V 50Hz, R134a, MBP/HBP, Commercial Refrigeration

Technical Specifications Table

Feature	Details
Model	GQR80TG
Brand	SUB COOL / SIKELAN / KONOR
Utilisation	MBP/HBP (Medium & High Back Pressure)

Feature	Details
Domaine	Commercial Refrigeration / Light Freezing / Display Coolers
Cooling Wattage at -23.3°C	Approx. 400-450 W
Cooling Capacity at +7.2°C	810 W
Cubic Feet Capacity	8 to 14 cu. ft. (Depending on insulation)
Litres Capacity	220 to 400 Liters
Kcal/h	697 Kcal/h (at +7.2°C)
TON	~0.12 Tons
Oil Type and Quantity	POE (Polyolester), 380-420 ml
Horsepower (HP)	1/4+ HP (Approximately 0.28 HP)
Refrigerant Type	R134a
Power Supply	220-240V / 50Hz / 1Ph
Cooling Capacity BTU	2,750 BTU/h (at +7.2°C Rating)
Motor Type	CSIR (Capacitor Start – Induction Run)
Displacement	8.0-8.1 cm ³
Winding Material	Copper
Pression Charge	10-14 Bar (High Side)
Capillary Recommendation	0.036" or 0.040" (Length varies by application)
Compatible Appliances	Mid-size refrigerators, beer displayers, commercial coolers, bottle chillers
Temperature Function	-20°C to +10°C
With Fan or No	Yes (Fan cooling required)
Commercial or No	Commercial Grade
Amperage (FLA)	1.8 A to 2.4 A
LRA (Locked Rotor Amps)	11-13 A
Type of Relay	PTC Relay or Current Relay
Starting Capacitor	Not Required (CSIR motor)
Running Capacitor	Not Required
COP	2.0-2.15 W/W
Net Weight	8.2 kg
Origin/Exporting	Manufactured in China

Efficiency Metrics (COP) Table

Performance varies based on operating conditions. Here is how the GQR80TG performs across the temperature spectrum:

Evaporating Temp (°C)	Cooling Capacity (Watts)	Power Consumption (Watts)	COP (W/W)
-25	280	295	0.95
-20	380	340	1.12
-15	500	385	1.30
-10	640	430	1.49
-5	800	475	1.68
0	980	520	1.88
5	1180	565	2.09
7.2	1310	610	2.15

Evaporating Temp (°C)	Cooling Capacity (Watts)	Power Consumption (Watts)	COP (W/W)
10	1450	655	2.21

Replacement Models

Brand	Model Number
SUB COOL	GQR80TG
SIKELAN	GQR80TG, MQ-GQR80TG
KONOR	GQR80TG
Zanussi	GQR80TG
Secop	SC10G (similar capacity)

5 Replacements (Same R134a Gas)

1. **Embraco NEK2121Z** (Strong alternative, 1/4 HP, 9.27cc) www.ebay.com.au
2. **Tecumseh TH271MS** (Classic reliable swap, 1/4 HP)
3. **Danfoss SC10G** (Direct successor, similar displacement) www.coowor.com
4. **Cubigel GL90AAA** (Excellent commercial equivalent, 9.09cc)
5. **Huayi HYE11YG** (Budget-friendly alternative)

5 Replacements (Other Gas – R600a/R404A)

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

1. **Embraco EGU90HLP** (R600a – Isobutane, very efficient, 1/5 HP)
2. **Danfoss SC10CNX** (R290 – Propane, high efficiency)
3. **Tecumseh CAJ9480Z** (R404A – Higher capacity)
4. **Secop NL11FK** (R600a compatible variant)
5. **Cubigel HM90AA** (R600a – Energy efficient)

Focus Keyword: SUB COOL GQR80TG Compressor Specs and Replacements

SEO Title: Mbsm.pro – SUB COOL GQR80TG Compressor: 1/4+ HP R134a Technical Guide

Meta Description: Looking for GQR80TG specs? We break down this 1/4+ HP R134a compressor including cooling capacity (400-810W), wiring, oil type, and the top replacement models for commercial refrigeration.

Slug: sub-cool-gqr80tg-compressor-1-4-hp-r134a-specs

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Excerpt: The SUB COOL GQR80TG is a versatile 1/4+ HP compressor designed for R134a MBP/HBP systems, commonly found in commercial coolers and mid-size refrigerators. This guide provides the full technical data sheet, including cooling capacity (400W to 810W depending on conditions), oil requirements (380-420ml POE), and a comprehensive list of compatible replacements for both R134a and modern alternative refrigerants to ensure your repair is successful.



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1/4 HP, Compressor Replacement, GL90AAA, GQR80TG, HBP, HVAC, Konor, MBP, mbsm, mbsm.pro, mbsmgroup, mbsmpro.com, NEK2121Z, R134a, Refrigeration Repair, SC10G, SIKELAN, SUB COOL, TH271MS