

# 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
<b>Model</b>	GQR80TG
<b>Brand</b>	SUB COOL / SIKELAN / KONOR
<b>Utilisation</b>	MBP/HBP (Medium & High Back Pressure)
<b>Domaine</b>	Commercial Refrigeration / Light Freezing / Display Coolers
<b>Cooling Wattage at -23.3°C</b>	Approx. 400-450 W
<b>Cooling Capacity at +7.2°C</b>	810 W
<b>Cubic Feet Capacity</b>	8 to 14 cu. ft. (Depending on insulation)
<b>Litres Capacity</b>	220 to 400 Liters
<b>Kcal/h</b>	697 Kcal/h (at +7.2°C)
<b>TON</b>	~0.12 Tons
<b>Oil Type and Quantity</b>	POE (Polyolester), 380-420 ml
<b>Horsepower (HP)</b>	1/4+ HP (Approximately 0.28 HP)
<b>Refrigerant Type</b>	R134a
<b>Power Supply</b>	220-240V / 50Hz / 1Ph
<b>Cooling Capacity BTU</b>	2,750 BTU/h (at +7.2°C Rating)
<b>Motor Type</b>	CSIR (Capacitor Start - Induction Run)
<b>Displacement</b>	8.0-8.1 cm <sup>3</sup>
<b>Winding Material</b>	Copper
<b>Pression Charge</b>	10-14 Bar (High Side)
<b>Capillary Recommendation</b>	0.036" or 0.040" (Length varies by application)

Feature	Details
<b>Compatible Appliances</b>	Mid-size refrigerators, beer displayers, commercial coolers, bottle chillers
<b>Temperature Function</b>	-20°C to +10°C
<b>With Fan or No</b>	Yes (Fan cooling required)
<b>Commercial or No</b>	Commercial Grade
<b>Amperage (FLA)</b>	1.8 A to 2.4 A
<b>LRA (Locked Rotor Amps)</b>	11-13 A
<b>Type of Relay</b>	PTC Relay or Current Relay
<b>Starting Capacitor</b>	Not Required (CSIR motor)
<b>Running Capacitor</b>	Not Required
<b>COP</b>	2.0-2.15 W/W
<b>Net Weight</b>	8.2 kg
<b>Origin/Exporting</b>	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
10	1450	655	2.21

## Replacement Models

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

## 5 Replacements (Same R134a Gas)

1. **Embraco NEK2121Z** (Strong alternative, 1/4 HP, 9.27cc) [www.ebay.com.au](http://www.ebay.com.au)
2. **Tecumseh TH271MS** (Classic reliable swap, 1/4 HP)
3. **Danfoss SC10G** (Direct successor, similar displacement) [www.coowor.com](http://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)

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**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

**Tags:** Mbsmgroup, Mbsm.pro, mbsmpro.com, mbsm, SUB COOL, SIKELAN, KONOR, GQR80TG, R134a, 1/4 HP, MBP, HBP, NEK2121Z, TH271MS, SC10G, GL90AAA, Compressor Replacement, HVAC, Refrigeration Repair, Commercial Refrigeration

**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