

Pepsi single-door refrigerator, 90 cm, compressor, 1/2 hp hbp

Category: Refrigeration
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Mbsmpro.com, Compressor, Danfoss, SC15G, 104G8525, 1/2 hp, MBP/HBP, R134a, 738 W, 3.1 A, 1Ph 220-240V 50Hz, CSIR, -15°C to +15°C, Commercial Cooling

In the world of commercial refrigeration, the **Danfoss SC15G** stands as a robust pillar of reliability. Precision-engineered in Germany, this compressor is designed to handle the rigorous demands of Medium and High Back Pressure (MBP/HBP) systems. Whether it is powering a large beverage cooler or a professional display cabinet, the SC15G provides the thermal displacement necessary to maintain consistent temperatures even in high-traffic commercial environments. Its heavy-duty construction and high-starting torque make it a preferred choice for field technicians who prioritize longevity over temporary fixes.

Technical Data Sheet

Feature	Specification
Model	Danfoss SC15G (104G8525)
Utilisation (mbp/hbp/lbp)	MBP / HBP
Domaine (Freezing/Cooling)	Cooling (Professional)
Cooling wattage at -10°C	738 Watts
Cubic feet can this compressor cool?	20 - 25 cu.ft
Litres can this compressor cool?	550 - 700 Liters
Kcal/h	635 Kcal/h
Oil Type and quantity	POE, 550 ml
Horsepower (HP)	1/2 HP
Refrigerant Type	R134a
Power Supply	220-240V / 50Hz / 1Ph
Cooling Capacity BTU	2520 BTU/h (at -10°C) / 5050 BTU/h (at +7.2°C)
Motor Type	CSIR (Capacitor Start - Induction Run)
Displacement	15.28 cm³
Winding Material	100% Copper

Feature	Specification
Pression Charge	18 - 24 bar
Capillary	0.042" to 0.050" (Application dependent)
Modele Frigo / Refrigerator	Large Bottle Coolers, Display Cases, Laboratory Fridges
Temperature function	-15°C to +15°C
With fan or no	Fan cooling is Mandatory (250 m³/h)
Commercial or no	Commercial Grade
Amperage in function	3.1 A to 3.5 A
LRA	14.8 A
Type of relay	Electromagnetic / Starting Relay
Capacitor and value	Start Capacitor: 80 µF
Country of origin	Germany

Efficiency Metrics (COP)

Evaporating Temp (°C)	Cooling Capacity (Watts)	Power Consumption (Watts)	COP (W/W)
-15	560	380	1.47
-10	738	425	1.74
-5	950	470	2.02
0	1195	515	2.32
+5	1480	565	2.62
+10	1805	615	2.93
+15	2170	665	3.26

Engineering Insights: SC15G vs. Standard Models

The SC15G belongs to the “SC” family, which features a larger housing compared to the “TL” or “FR” series. This extra internal volume allows for better motor cooling and a higher tolerance for liquid slugging, which is common in commercial settings where doors are frequently opened.

When comparing this to a standard domestic 1/2 HP compressor, the Danfoss SC15G offers a much higher **Starting Torque (HST)**. This means it can start against high head pressures without tripping the protector, a critical feature for systems utilizing thermostatic expansion valves (TXV).

Installation Notices and Benefits

- **Thermal Protection:** This unit requires external forced air cooling. Never install the SC15G in a restricted enclosure without a condenser fan.
- **Lubrication:** The POE oil used is highly sensitive to moisture. Ensure the system is open for the shortest time possible during a compressor swap.
- **Longevity:** Its copper-wound motor provides superior resistance to burnout compared to budget-grade aluminum alternatives.

5 Compressor Replacements (Same Gas: R134a)

1. **Embraco:** NEK6213Z
2. **Tecumseh:** AE4456Y-FZ
3. **Secop:** SC15G (104G8520)
4. **Aspera:** NE6213Z
5. **Huayi:** HYE15YG

5 Compressor Replacements (Other Gas: R404A/R290)

1. **Secop:** SC15CL (R404A) - Note: Oil/Valve change required.
2. **Embraco:** NEK6217GK (R404A)
3. **Cubigel:** MS18TB (R404A)
4. **Secop:** SC15CNX (R290)
5. **Tecumseh:** CAJ9461Z (R404A)

Focus keyword: Danfoss SC15G 104G8525 Compressor 1/2 HP R134a MBP HBP Technical Specifications

SEO Title: Mbsm.pro, Compressor, Danfoss, SC15G, 104G8525, 1/2 hp, R134a, Germany

Meta Description: Full technical review of the Danfoss SC15G 104G8525. A 1/2 HP R134a compressor for commercial MBP/HBP cooling. Includes COP data, wiring specs, and replacement guides.

Slug: danfoss-sc15g-104g8525-1-2hp-r134a-compressor-guide

Tags: Mbsmgroup, Mbsm.pro, mbsmpro.com, mbsm, Danfoss SC15G, 104G8525, 1/2 HP Compressor, R134a, Commercial Refrigeration, Secop Germany, Embraco NEK6213Z, Tecumseh AE4456Y, SC15G Replacement.

Excerpt: The Danfoss SC15G (104G8525) is a high-capacity 1/2 HP compressor designed for R134a commercial cooling applications. Featuring a 15.28cc displacement and German engineering, it excels in MBP/HBP environments like display coolers. This professional guide details its 738W cooling capacity, electrical requirements, and provides a comprehensive cross-reference list for field technicians and engineers.



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