

ROBUST AND RELIABLE EVEN UNDER HARSH CONDITIONS

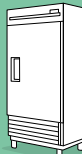
SECCP



FRK-G



Commercial
Applications



Master Voltage
Fluctuations



Broad Application
Range (L/M/HBP)



High Overload
Robustness



Reduced Noise
and Vibration



Excellent
Efficiency

→ Heavy Duty Robustness

FRK-G compressors feature the tried and trusted quality of our FR compressors optimized for light commercial applications and for service and aftermarket use thanks to their insensitivity against intake of liquid refrigerant

→ Robust Solution for Food Retail and Food Service Applications

Dedicated reliable design for bottle coolers, glass door merchandisers, and ice cream freezers and suitable for food service applications (LBP, MBP, and HBP applications)

→ Excellent Efficiency

High COP and top efficiency for light commercial applications

→ Optimized Muffler System

The new muffler feature minimizes the risk of compressor or system damage due to extreme liquid return conditions or oil foaming

→ Easier Application Assembly

New terminal board design for additional interconnections

→ Reduced Noise Level

Improved noise and reduced vibration

Secop's new **FRK-G** compressors are the successors of our legendary FR compressors (F-Series). These were one of the most robust compressors on the market, known for their reliability even under harsh conditions. The designation of the FRK compressors has been adapted to the F-Series to ensure comparability.

Secop has developed the robust new F-Series for commercial refrigeration, which integrates various technical innovations, such as a noise-reducing shell, robust suspension, a robust internal discharge tube, improved valves, optimized motors, and a new muffler for lower noise levels.

FRK-G compressors were developed to offer a reliable, top-performing, and cost-effective solution for the next generation of light commercial cabinets offering high energy efficiency.

FRK-G compressors are dual frequency (50/60 Hz) types and are designed to support regions that experience harsh and challenging environments and where voltage fluctuations as well as high ambient temperatures need to be taken into account.

FRK-G compressors have a muffler system specially developed for heavy duty applications with rapid load changes, extreme liquid return conditions, and oil foaming. It increases the robustness and reliability of the cooling system against this type of overload.

General	FRK5G	FRK6G	FRK7.5G	FRK8.5G	FRK10G	FRK11G
Compressor	106G5453	106G5553	106G5653	106G5753	106G5853	106G5953
Approvals	EN60335-1, EN/UL 60335-2-34 with Annex AA, IEC/EN 60079-1, IEC/EN 60079-15					

Application		R134a					
Application		LBP/MBP/HBP	LBP/MBP/HBP	LBP/MBP/HBP	LBP/MBP/HBP	LBP/MBP/HBP	LBP/MBP/HBP
Evaporating temperature	°C	-35 to 15	-35 to 15	-35 to 15	-35 to 15	-35 to 15	-35 to 10
Voltage range / frequency	V/Hz	187-254/50	187-254/50	187-254/50	187-254/50	187-254/50	187-254/50
Application		LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP
Evaporating temperature	°C	-35 to 10	-35 to 10	-35 to 10	-35 to 10	-35 to 10	-35 to 7.2
Voltage range / frequency	V/Hz	198-253/60	198-253/60	198-253/60	198-253/60	198-253/60	198-253/60

Performance Data ASHRAE LBP (220 V, 50 60 Hz • fan cooling)							
Evaporating temp.	°C	-23.3	-23.3	-23.3	-23.3	-23.3	-23.3
Cooling capacity	W	98 119	126 150	152 187	185 224	214 254	240 286
	BTU/h	336 407	430 511	518 638	632 766	730 867	818 977
Power consumption	W	89 102	103 118	118 140	151 170	165 184	181 213
COP	W/W	1.11 1.17	1.23 1.27	1.28 1.33	1.23 1.32	1.30 1.38	1.32 1.34
EER	BTU/Wh	3.79 3.98	4.19 4.33	4.38 4.56	4.19 4.51	4.43 4.71	4.52 4.59
Test conditions	Condensing temperature: 54.4°C Suction gas temperature: 32.2°C Ambient temperature: 32.2°C Liquid temperature: 32.2°C						

Performance Data ASHRAE MBP (220 V, 50 60 Hz • fan cooling)							
Evaporating temp.	°C	-6.7	-6.7	-6.7	-6.7	-6.7	-6.7
Cooling capacity	W	215 254	271 320	325 385	393 465	438 518	495 591
	BTU/h	734 866	927 1094	1111 1313	1342 1587	1494 1767	1692 2017
Power consumption	W	125 144	149 172	175 204	221 253	240 279	276 331
COP	W/W	1.72 1.76	1.82 1.86	1.86 1.89	1.78 1.83	1.82 1.86	1.80 1.78
EER	BTU/Wh	5.86 6.03	6.23 6.35	6.37 6.45	6.08 6.27	6.22 6.34	6.13 6.10
Test conditions	Condensing temperature: 54.4°C Suction gas temperature: 35°C Ambient temperature: 32.2°C Liquid temperature: 46.1°C						

Performance Data ASHRAE HBP (220 V, 50 60 Hz • fan cooling)							
Evaporating temp.	°C	7.2	7.2	7.2	7.2	7.2	7.2
Cooling capacity	W	386 451	487 570	583 682	702 822	766 906	867 1032
	BTU/h	1320 1541	1664 1946	1993 2329	2396 2807	2615 3093	2960 3524
Power consumption	W	155 180	185 217	220 258	283 326	316 366	357 442
COP	W/W	2.50 2.50	2.63 2.63	2.65 2.65	2.48 2.52	2.42 2.48	2.43 2.34
EER	BTU/Wh	8.54 8.54	8.99 8.97	9.06 9.04	8.46 8.60	8.27 8.46	8.29 7.98
Test conditions	Condensing temperature: 54.4°C Suction gas temperature: 35°C Ambient temperature: 32.2°C Liquid temperature: 46.1°C						

Dimensions			
Height	mm	A	182
		B	175
Suction connector location	I.D. mm angle material seal	C	8.2 30° Copper Rubber plug
Process connector location	I.D. mm angle material seal	D	6.2 35° Copper Rubberplug
Discharge connector location	I.D. mm angle material seal	E	6.2 40° Copper Rubber plug
Connector tolerance	I.D. mm		±0.09
Variants with small baseplates available on request, please contact Secop for further information.			

