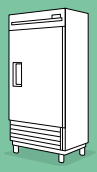
R290 · 200-240 V | 50 / 60 Hz · 208-230 V | 60 Hz · 200-240 V | 50 Hz

SUPERIOR PERFORMANCE UNDER TOUGH WORKING CONDITIONS

SECOP

KL-Series Tropical

Commercial Applications



Masters Voltage Fluctuations

Broad Application Range (LBP & MBP)

New Hermetic Terminal Plug

Optimal Energy Consumption

R290 Green Refrigerant

- → **Premium Robustness for Tropical Conditions**
  The KL-CNT/CNQX types start reliably under low-voltage conditions without reverse rotation or stalling. They handle voltage fluctuations with ease and feature the proven quality of our K-Series, optimized for light commercial applications.
- → **Robust Solution for Food Retail and Food Service Applications**
  Dedicated reliable design for bottle coolers, glass door merchandisers, and ice cream freezers (LBP and MBP applications) and suitable for food service applications
- → **Superior Efficiency**
  High COP and top efficiency for light commercial applications with low GWP refrigerant propane (R290)
- → **Innovative Solution for Flammable Refrigerants**
  Including a patented solution to increase robustness using propane that has been subject to extensive testing at Secop
- → **Easier Application Assembly**
  New terminal board design for additional interconnections
- → **Reduced Noise Level**
  Improved noise and reduced vibration, a new benchmark level for hydrocarbon refrigerants

Secop's new tropical **KL-CNT / CNQX** compressors were developed to offer a reliable, top performing, and cost-effective solution for the next generation of light commercial cabinets using environmentally friendly refrigerant propane and offering high energy efficiency.

The dual-frequency CNT (50/60 Hz) types and single-frequency CNQX (50 Hz) types are designed for regions with harsh, demanding environments, where voltage fluctuations and high ambient temperatures must be considered.

Secop has developed a robust 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 when using propane. The KL-Series comes with a patented hermetic terminal plug designed to increase robustness for usage with flammable refrigerants.

Tropical KL-Series compressors feature a reliable and robust design tailored for commercial applications.
With their wide operating voltage range and capability to start under low-voltage conditions – without reverse rotation or stalling – they provide an exceptional solution for demanding environments.

General		KLF3.0CNT	KLF4.0CNT	KLF4.8CNT	KLF5.6CNT	KLF6.6CNT	KLF7.7CNT	KLF7.7CNQX
Compressor		106H2302*	106H2402	106H2502	106H2602	106H2702	106H2808	106H2809
w. pre-assembled start equipment		106H2312*	106H2412	106H2512	106H2612	106H2712	106H2818	–
Approvals		UL, VDE pending	UL, VDE	UL, KC, CCC, CB	UL, KC, CCC, CB	UL, KC, CCC, CB	UL, KC, CCC, CB	VDE
		*preliminary data						
Application		**R290**						
Application		LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP
Evaporating temperature	°C	-35 to 7.2	-40 to 7.2	-35 to 7.2	-35 to 7.2	-35 to 7.2	-35 to 7.2	-40 to 10
Voltage range / frequency	V/Hz	187-254/50 195-253/60	187-254/50 195-253/60	187-254/50 198-253/60	187-254/50 198-253/60	187-254/50 198-253/60	187-254/50 198-253/60	187-254/50

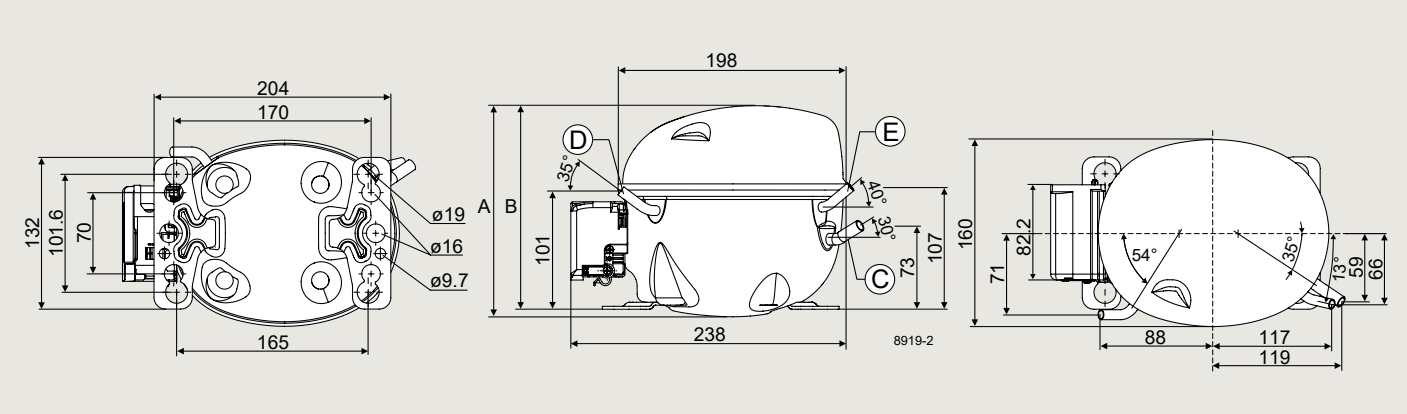
Performance Data ASHRAE LBP		50 | 60 Hz						50 Hz
Evaporating temperature	°C	-23.3	-23.3	-23.3	-23.3	-23.3	-23.3	-23.3
Cooling capacity	W	120 | 146	189 | 236	229 | 285	271 | 332	334 | 408	395 | 484	395
Power consumption	W	92 | 100	123 | 145	155 | 181	176 | 210	227 | 262	255 | 298	250
COP	W/W	1.31 | 1.50	1.54 | 1.63	1.48 | 1.57	1.54 | 1.58	1.47 | 1.56	1.55 | 1.62	1.58
Test conditions (fan cooling) CNT: 230 V, 50/60 Hz, CNQX: 220 V, 50 Hz		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		50 | 60 Hz						50 Hz
Evaporating temperature	°C	-6.7	-6.7	-6.7	-6.7	-6.7	-6.7	-6.7
Cooling capacity	W	248 | 296	357 | 425	420 | 520	490 | 604	585 | 702	705 | 835	706
Power consumption	W	124 | 141	168 | 196	203 | 249	238 | 292	303 | 353	350 | 404	344
COP	W/W	2.01 | 2.09	2.12 | 2.18	2.07 | 2.09	2.06 | 2.07	1.93 | 1.99	2.02 | 2.07	2.05
Test conditions (fan cooling) CNT: 230 V, 50/60 Hz, CNQX: 220 V, 50 Hz		Condensing temperature: 54.4 °C | Suction gas temperature: 35 °C Ambient temperature: 32.2 °C | Liquid temperature: 46.1 °C						

Performance Data ASHRAE MBP		50 | 60 Hz • run capacitor						50 Hz
Evaporating temperature	°C	-6.7	-6.7	-6.7	-6.7	-6.7	-6.7	-6.7
Cooling capacity	W	248 | 297	358 | 427	421 | 511	500 | 616	591 | 709	708 | 845	–
Power consumption	W	120 | 136	161 | 187	194 | 231	232 | 281	294 | 339	331 | 384	–
COP	W/W	2.07 | 2.19	2.23 | 2.28	2.17 | 2.21	2.16 | 2.20	2.01 | 2.09	2.14 | 2.20	–
Test conditions (fan cooling) CNT: 230 V, 50/60 Hz, run capacitor		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 | 169* | 174**
		B	175 | 159* | 167**
Suction connector	I.D. mm | angle material | seal	C	8.2 | 30° Copper | Rubber plug
Process connector	I.D. mm | angle material | seal	D	6.2 | 35° Copper | Rubber plug
Discharge connector	I.D. mm | angle material | seal	E	6.2 | 40° Copper | Rubber plug
Conn. tolerance	I.D. mm		±0.09

*Applicable for KLF3.0CNT (106H2302, 106H2312) with extra low top cover (only available with small baseplates).
**Applicable for the variant KLF4.0CNT (106H2409, 106H2419) with lower top cover
Variants with small baseplates available on request, please contact Secop for further information



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