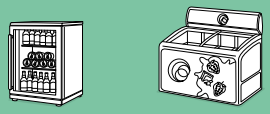
R290 · 220-240 V | 50 / 60 Hz · 208-230 V | 60 Hz

A NEW PREMIUM PROPANE SOLUTION FOR GREEN AND EFFICIENT CABINETS

SECOP

KL-Series

Commercial Applications



New Hermetic Terminal Plug

Broad Application Range (LBP & MBP)

Optimal Energy Consumption

Reduced Noise and Vibration

R290 Green Refrigerant

- **Premium Robustness**
  The KL-Series features the tried and trusted 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 **KL-Series** is based on the very successful K-Series, Secop's core product for residential applications, with more than 50 million units installed.The KL-Series was 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.

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. The dual frequency (50/60 Hz) CNT types 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.

The KL-Series offers a reliable and robust design for commercial applications, specifically designed for R290 hydrocarbon refrigerant. This is the latest improvement on Secop's products for flammable refrigerants and will set a benchmark in the entire industry.

General		KLF4.0CND	KLF4.8CND	KLF5.6CND	KLF6.6CND	KLF7.7CND	KLF4.8CNT	KLF5.6CNT	KLF7.7LNDK
Compressor		106H2401	106H2500	106H2600	106H2700	106H2800	106H2502	106H2602	106H2801
Approvals		EN60335-1, EN 60335-2-34 with Annex AA, IEC/EN 60079-1 IEC/EN 60079-15, CCC* (*excluding KLF4.0CND)					UL 60335-2-34, IEC 60335-2-34 IEC/UL 60079-1, IEC/UL 60079-15		EN 60335-2-34 with Annex AA, CCC

Application		R290							
Application		LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP
Evaporating temperature	°C	-40 to 7.2	-40 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 -15
Voltage range / frequency	V/Hz	198–254/50	198–254/50	198–254/50	198–254/50	198–254/50	187-254/50 & 198-253/60		198–254/50

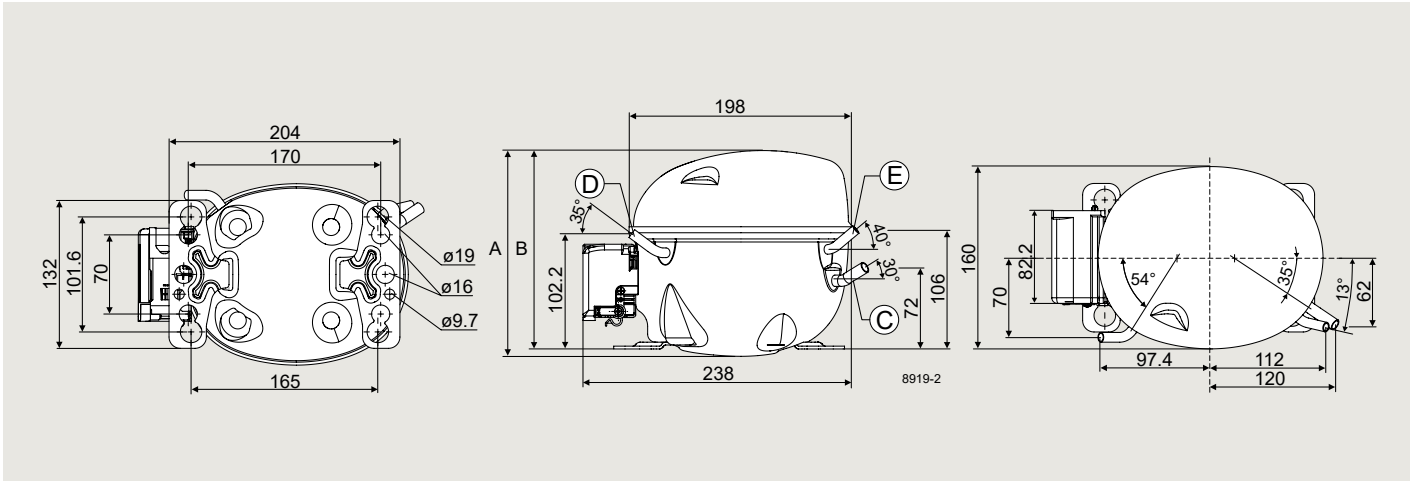
Performance Data ASHRAE LBP		fan cooling					fan cooling (50 | 60 Hz)		(static | fan)
Evaporating temp.	°C	-23.3	-23.3	-23.3	-23.3	-23.3	-23.3	-23.3	-23.3
Cooling capacity	W	183	230	274	337	385	229 | 285	271 | 332	381 | 390
Power consumption	W	124	153	177	223	254	155 | 181	176 | 210	249 | 248
COP	W/W	1.48	1.50	1.55	1.51	1.52	1.48 | 1.57	1.54 | 1.58	1.53 | 1.57
Test conditions CND/LND: 220 V, 50 Hz | CNT: 230 V, 50/60 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		fan cooling					fan cooling (50 | 60 Hz)		(static | fan)
Evaporating temp.	°C	-6.7	-6.7	-6.7	-6.7	-6.7	-6.7	-6.7	– | –
Cooling capacity	W	336	410	495	596	688	420 | 520	490 | 604	– | –
Power consumption	W	162	199	239	296	343	203 | 249	238 | 292	– | –
COP	W/W	2.08	2.06	2.07	2.01	2.00	2.07 | 2.09	2.06 | 2.07	– | –
Test conditions CND: 220 V, 50 Hz | CNT: 230 V, 50/60 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		fan cooling					fan cooling (50 | 60 Hz)		**LBP** (static | fan)
Evaporating temp.	°C	-6.7	-6.7	-6.7	-6.7	-6.7	-6.7	-6.7	-23.3
Cooling capacity	W	337	411	501	598	694	421 | 511	500 | 616	382 | 391
Power consumption	W	157	190	231	282	327	194 | 231	232 | 281	237 | 236
COP	W/W	2.14	2.17	2.17	2.12	2.12	2.17 | 2.21	2.16 | 2.20	1.61 | 1.65
Test conditions (with run capacitor) CND/LNDK: 220 V, 50 Hz | CNT: 230 V, 50/60 Hz		Condensing temperature: LBP: 54.4 °C, MBP: 54.4 °C | Suction gas temperature: LBP: 32.2 °C, MBP: 35 °C Ambient temperature: LBP: 32.2 °C, MBP: 32.2 °C | Liquid temperature: LBP 32.2 °C, MBP: 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 | Rubber plug
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.



Secop GmbH · Lise-Meitner-Str. 29 · 24941 Flensburg, Germany · Tel: +49 461 4941 0 · **www.secop.com**

Produced by Secop | July 2024

DES.N.560.A7.02