

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

# SUPERIOR PERFORMANCE UNDER TOUGH WORKING CONDITIONS

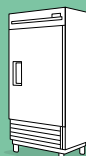
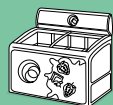
**SECCP**



**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                                       | KLF4.0CNT | KLF4.8CNT       | KLF5.6CNT       | KLF6.6CNT       | KLF7.7CNT       | KLF7.7CNQX |
|-----------------------------------------------|-----------|-----------------|-----------------|-----------------|-----------------|------------|
| Compressor                                    | 106H2402  | 106H2502        | 106H2602        | 106H2702        | 106H2808        | 106H2809   |
| Compressor with pre-assembled start equipment | 106H2412  | 106H2512        | 106H2612        | 106H2712        | 106H2818        | –          |
| Approvals                                     | UL, VDE   | UL, KC, CCC, CB | UL, KC, CCC, CB | UL, KC, CCC, CB | UL, KC, CCC, CB | VDE        |

| Application               | R290    |                            |                          |                          |                          |            |
|---------------------------|---------|----------------------------|--------------------------|--------------------------|--------------------------|------------|
| Application               | LBP/MBP | LBP/MBP                    | LBP/MBP                  | LBP/MBP                  | LBP/MBP                  | LBP/MBP    |
| Evaporating temperature   | °C      | -40 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<br>195-253 / 60 | 187-254/50<br>198-253/60 | 187-254/50<br>198-253/60 | 187-254/50<br>198-253/60 | 187-254/50 |

| Performance Data ASHRAE LBP (fan cooling)                   | 50   60 Hz |                                                                                                                                  |             |             |             | 50 Hz |
|-------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------|
| Evaporating temperature                                     | °C         | -23.3                                                                                                                            | -23.3       | -23.3       | -23.3       | -23.3 |
| Cooling capacity                                            | W          | 189   236                                                                                                                        | 229   285   | 271   332   | 334   408   | 395   |
| Power consumption                                           | W          | 123   145                                                                                                                        | 155   181   | 176   210   | 227   262   | 250   |
| COP                                                         | W/W        | 1.54   1.63                                                                                                                      | 1.48   1.57 | 1.54   1.58 | 1.47   1.56 | 1.58  |
| Test conditions<br>CNT: 230 V, 50/60 Hz, CNQX: 220 V, 50 Hz |            | Condensing temperature: 54.4 °C   Suction gas temperature: 32.2 °C<br>Ambient temperature: 32.2 °C   Liquid temperature: 32.2 °C |             |             |             |       |

| Performance Data ASHRAE MBP (fan cooling)                   | 50   60 Hz |                                                                                                                                |             |             |             | 50 Hz |
|-------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------|
| Evaporating temperature                                     | °C         | -6.7                                                                                                                           | -6.7        | -6.7        | -6.7        | -6.7  |
| Cooling capacity                                            | W          | 357   425                                                                                                                      | 420   520   | 490   604   | 585   702   | 706   |
| Power consumption                                           | W          | 168   196                                                                                                                      | 203   249   | 238   292   | 303   353   | 344   |
| COP                                                         | W/W        | 2.12   2.18                                                                                                                    | 2.07   2.09 | 2.06   2.07 | 1.93   1.99 | 2.05  |
| Test conditions<br>CNT: 230 V, 50/60 Hz, CNQX: 220 V, 50 Hz |            | Condensing temperature: 54.4 °C   Suction gas temperature: 35 °C<br>Ambient temperature: 32.2 °C   Liquid temperature: 46.1 °C |             |             |             |       |

| Performance Data ASHRAE MBP (fan cooling)                    | 50   60 Hz • run capacitor |                                                                                                                                |             |             |             | 50 Hz       |
|--------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|
| Evaporating temperature                                      | °C                         | -6.7                                                                                                                           | -6.7        | -6.7        | -6.7        | -6.7        |
| Cooling capacity                                             | W                          | 358   427                                                                                                                      | 421   511   | 500   616   | 591   709   | 708   845   |
| Power consumption                                            | W                          | 161   187                                                                                                                      | 194   231   | 232   281   | 294   339   | 331   384   |
| COP                                                          | W/W                        | 2.23   2.28                                                                                                                    | 2.17   2.21 | 2.16   2.20 | 2.01   2.09 | 2.14   2.20 |
| Test conditions (with run capacitor)<br>CNT: 230 V, 50/60 Hz |                            | Condensing temperature: 54.4 °C   Suction gas temperature: 35 °C<br>Ambient temperature: 32.2 °C   Liquid temperature: 46.1 °C |             |             |             |             |

| Dimensions          |                                 |   |                                   |
|---------------------|---------------------------------|---|-----------------------------------|
| Height              | mm                              | A | 182   174*                        |
|                     |                                 | B | 175   167*                        |
| Suction connector   | I.D. mm   angle material   seal | C | 8.2   30°<br>Copper   Rubber plug |
| Process connector   | I.D. mm   angle material   seal | D | 6.2   35°<br>Copper   Rubber plug |
| Discharge connector | I.D. mm   angle material   seal | E | 6.2   40°<br>Copper   Rubber plug |
| Connector tolerance | I.D. mm                         |   | ±0.09                             |

\*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

