

Secop is the first choice for partners looking for leading-edge refrigeration solutions and a premium customer experience.

Secop delivers advanced refrigeration compressors and controls, providing customers tailored sustainable solutions for light commercial, battery-driven, and special cooling applications.

# ENERGY-OPTIMIZED PROPANE COMPRESSORS



**R290**  
KLF Compressors  
NLE Compressors  
SCE Compressors

**3 GWP**  
Achievable with powerful efficient LBP/MBP compressors, designed for food retail, food service, and medical applications

Stationary Cooling

Medical Cooling

High Efficiency





# SECOP PROPANE SOLUTIONS

Tailored Solutions in Light Commercial Applications for Today and Tomorrow



Food Retail and Food Service



Medical Applications



For more than 25 years, Secop has been developing highly efficient compressors that use hydrocarbons (R290 and R600a) and since 2015, Secop has been improving its successful R290 compressor line with the release of a new generation of propane compressors for LBP and MBP applications.

Given their outstanding versatility and reliability, Secop's new generation of energy-optimized propane compressors achieve maximum performance for an array of refrigeration/freezer applications. The range was recently optimized to also meet the needs in food retail and medical applications and Secop is constantly developing models with higher capacities.

The KLF, NLE, and SCE compressor ranges are tailored for commercial use and capable of replacing products made for high global warming potential (GWP) refrigerants such as R404A and R134a. The efficiency can be further increased with optional run capacitors, if required.

A GWP of three is achievable with our powerful, efficient R290 KLF, NLE, and SCE compressors designed for LBP/MBP applications, such as bottle coolers, ice-cream cabinets, commercial refrigerators, or medical refrigerators and medical ultra low temperature freezers that are suitable for markets with a voltage range of 220V to 240V, 50/60 Hz as well as 115V to 127V, 60 Hz.

The KLF compressor includes an innovative patented hermetic terminal plug. Backed by years of experience with hydrocarbons refrigerants, testing of R290 solutions, and optimization of system conversion from HFC to HC refrigerants, Secop has developed a new design for terminal plugs to prevent root causes for electrical arcs injection with flammable refrigerants. This has set a benchmark in the industry to support the design of reliable systems with new flammable refrigerants.

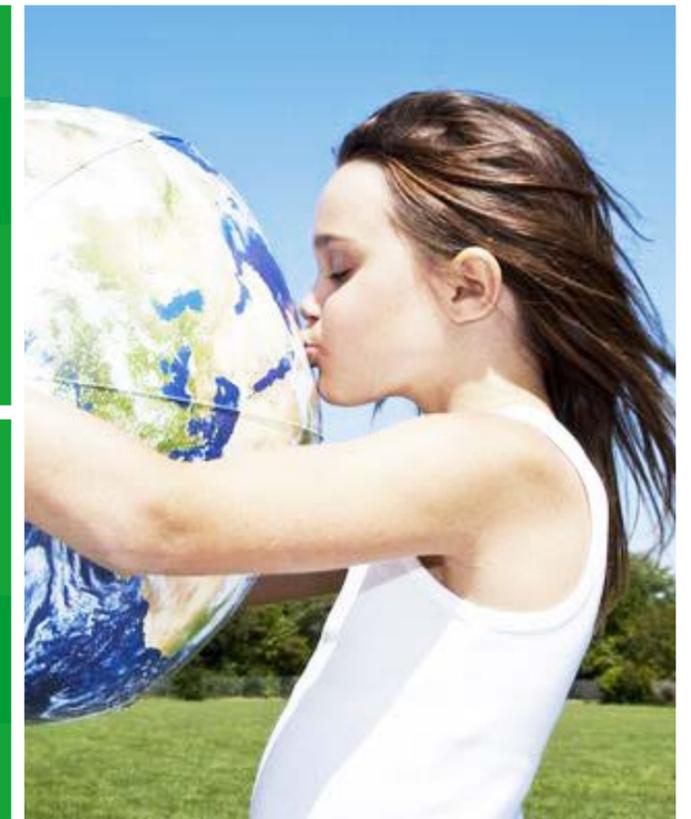
Dual frequency (50/60 Hz) compressors ending in CNT, CNLT, or MNT are designed to support regions that experience harsh and challenging environments and where voltage fluctuations as well as high ambient temperatures need to be taken into account. The ability to start under low voltage conditions without stalling presents an outstanding solution for those harsh environments.

Make the switch now to replace R404A and R134a systems with environmentally friendly R290 and save on additional costs by utilizing smaller compressor platforms that provide unique opportunities in your market. Secop not only offers a complete range of highly efficient compressors that work with propane, Secop is also a solution provider that offers technical support and safety upgrades for any type of applications and compressors.



Replace R134a with Environmentally Friendly Natural Refrigerant R290

Save Additional Cost by Utilizing Smaller Compressor Platforms



## Conversion Examples from R134a to R290 (220-240 V/50 Hz)

MBP applications, e.g. beverage coolers, display cabinets, commercial chillers (at ASHRAE MBP conditions)

Evaporating temperature: -6.7°C | Condensing temperature: 54.4°C | Suction gas temperature: 35°C | Ambient temperature: 35°C | Liquid temperature: MBP: 46.1°C

Compressor	NL6.1MF	NF7FX	NF9FX	NF10FX	SC12G	SC15G	SC18G	SC18MFX	SC21MFX	SC12/12G	GS26MFX	SC18/18G
from... R134a	320 W	432 W	476 W	556 W	614 W	745 W	893 W	916 W	1114 W	1228 W	1446 W	1774 W
	1.61 COP	1.66 COP	1.59 COP	1.42 COP	1.60 COP	1.57 COP	1.58 COP	1.63 COP	1.76 COP	1.60 COP	1.82 COP	1.63 COP
	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Compressor	KLF4.0CND	KLF4.8CND	KLF5.6CND	KLF6.6CND	KLF7.7CND	NLE8.8CN	NLE10CN	NLE11MN	NLE12.6MN	SCE15MNX	SCE18MNX	SCE21MNX
to... R290	336 W	414 W	495 W	597 W	704 W	752 W	872 W	981 W	1060 W	1267 W	1501 W	1762 W
	2.08 COP	2.08 COP	2.10 COP	2.05 COP	1.97 COP	1.98 COP	1.89 COP	2.01 COP	1.97 COP	2.04 COP	1.98 COP	2.12 COP

## Conversion Examples from R134a to R290 (220-240 V/50 Hz)

LBP applications, e.g. commercial freezers, ice cream cabinets (at ASHRAE LBP conditions)

Evaporating temperature: -23.3 °C | Condensing temperature: 54.4°C | Suction gas temperature: 32.2°C | Ambient temperature: 32.2°C | Liquid temperature: MBP: 32.2°C

Compressor	NL7F	NL9F	NL11F	SC15F	SC15FT	SC18FTX	SC21G	SC21FTX	SC18/18G	SC21/21G
from... R134a	187 W	213 W	274 W	324 W	386 W	448 W	462 W	569 W	783 W	921 W
	1.22 COP	1.21 COP	1.22 COP	1.11 COP	1.18 COP	1.17 COP	1.23 COP	1.27 COP	1.12 COP	1.13 COP
	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Compressor	KLF4.0CND	KLF4.8CND	KLF5.6CND	KLF6.6CND	KLF7.7CND	NLE8.8CN	NLE10CN	NLE11CNL	SCE18CNLX	SCE21CNLX
to... R290	183 W	230 W	273 W	337 W	385 W	431 W	486 W	540 W	793 W	953 W
	1.48 COP	1.50 COP	1.55 COP	1.51 COP	1.52 COP	1.57 COP	1.47 COP	1.52 COP	1.51 COP	1.61 COP



# MORE DISPLACEMENT, SAME ICONIC SERIES

## THE NEW SCE-PLUS-SERIES



New Hermetic  
Terminal Plug



Broad Application  
Range (LBP & MBP)



High  
Efficiency



Small  
Footprint



R290  
Green Refrigerant



**The new SCE Plus compressor range** brings 23 and 25cc displacement to our legendary S-Series. It combines a compact size with high performance and is optimized for R290 to provide constant energy efficiency.

This solution is perfect for applications such as supermarket refrigerators/freezers, walk-in freezers, double glass door merchandizers, and many others.

**Secop SCE Plus compressors offer excellent efficiency, optimized start equipment, are resistant to extreme liquid refrigerant returns, and include a special solution for a safe use of flammable hydrocarbons refrigerants.**

#### Innovation in the Refrigeration Industry

Secop sets new standards in terms of compactness, cooling capacity and reliability with the SCE R290 Plus series. It has been specially developed to support the new IEC approvals for HC refrigerant charges from 150 g to 500 g in commercial refrigeration systems and offers an ultra-compact hermetic compressor solution.

#### Leader in Efficiency and Dimensions

The SCE Plus series stands out thanks to its versatility in different operating conditions. Under low back pressure (LBP) conditions, it operates at evaporating temperatures from -40°C to -5°C and delivers a cooling capacity of 1200 W (ASHRAE LBP). At medium back pressure (MBP), the evaporating temperatures range from -25°C to +10°C, with a cooling capacity of 2100 W (ASHRAE MBP). These compressors are at the top of their class when it comes to efficiency and size.

#### New Electrical Components

The latest starting accessories in the range include a highly integrated relay as well as starting and running capacitors. These components are compact and easy to install and come with integrated PTC and NTC to reduce peak currents and voltage spikes, which increases safety and service life. In addition, the series is equipped with a patented Secop hermetic terminal plug that ensures safe use of the R290 refrigerant to prevent root causes of electrical arcs injection with flammable refrigerants.

#### China Refrigeration Innovation Award 2024 for SCE Plus

When starting the project, our internal technical-driven project name was "SCE Stretch" to describe the addition to the portfolio. After the development phase and after intensive testing we think that the name SCE Plus describes much better that these compressors offer much more benefits than just increasing the displacement.



This new green and efficient SCE Plus range received the "China Refrigeration Innovation Award 2024"

# ENERGY-OPTIMIZED PROPANE (R290) COMPRESSORS: 220-240 V/50 Hz

General	KLF4.0CND	KLF4.0CNDS	KLF4.8CND	KLF4.8CNDS	KLF5.6CND	KLF5.6CNDS	KLF6.6CND	KLF6.6CNDS	KLF7.7CND	KLF7.7CNDS	KLF7.7LNDK	NLE8.8CN	NLE10CN	NLE11CNL	NLE11MN	NLE12.6CNL	NLE12.6MN
Code number	106H2401	106H2403	106H2500	106H2503	106H2600	106H2603	106H2700	106H2703	106H2800	106H2803	106H2801	105H6880	105H6175	105H6174	105H6177	105H6378	105H6377
Approvals	EN60335-1, EN 60335-2-34 with Annex AA IEC/EN 60079-1, IEC/EN 60079-15, CCC* [*excluding KLF4.0CND/S]											EN/UL 60335-2-34 with Annex AA, CCC EN/IEC/UL 60079-1, EN/IEC/UL 60079-15					

Application																		
Application	LBP/MBP	LBP	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	-35 to 7.2	-40 to -15	-35 to 10	-35 to 10	-35 to -10	-30 to 10	-40 to -5	-25 to 10						
Voltage range / frequency V/Hz	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50
Applicable motor configurations	CSIR RSCR	RSIR RSCR	CSIR, RSIR RSCR	CSIR, RSIR RSCR	CSIR RSIR	CSIR, RSIR RSCR	CSIR, RSIR RSCR	CSIR, RSIR RSCR										

Performance Data ASHRAE LBP   ASHRAE MBP - 220V/50Hz - fan cooling																		
Evaporating temperature °C	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7
Cooling capacity W	183	336	177	324	230	414	222	395	273	495	265	477	337	597	326	574	385	704
Power consumption W	1.24	162	123	160	153	199	152	197	177	236	175	236	223	291	221	293	254	357
COP W/W	1.48	2.08	1.44	2.03	1.50	2.08	1.46	2.01	1.55	2.10	1.51	2.02	1.51	2.05	1.47	1.96	1.52	1.97
Test conditions	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																	

Performance Data EN 12900 LBP   EN 12900 MBP - 220V/50Hz - fan cooling																		
Evaporating temperature °C	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10
Cooling capacity W	100	299	97	289	127	371	122	355	149	435	144	420	188	523	182	507	223	623
Power consumption W	88.1	140	87	138	118	173	117	171	123	205	122	206	156	253	155	255	185	309
COP W/W	1.14	2.14	1.11	2.09	1.07	2.14	1.05	2.08	1.21	2.12	1.18	2.04	1.20	2.07	1.17	1.99	1.20	2.01
Test conditions	Condensing temperature: LBP: 40°C, MBP: 45°C   Suction gas temperature: LBP: 20°C, MBP: 20°C   Ambient temperature: LBP: 32.2°C, MBP: 32.2°C   Liquid temperature: LBP 40°C, MBP: 45°C																	

Dimensions																							
Height mm	A	182															174	B	175	167	Applicable for the models KLF4.0CND, 106H2408 and KLF4.8CND, 106H2508 with lower top cover		203
Suction connector location/I.D. mm   angle material   seal	C	8.2   30°															Copper   Rubber plug		8.2   15°				
Process connector location/I.D. mm   angle material   seal	D	6.2   35°															Copper   Rubber plug		6.2   25°				
Discharge connector location/I.D. mm   angle material   seal	E	6.2   40°															Copper   Rubber plug		6.2   21°				
Connector tolerance I.D. mm	±0.09																	±0.09					

General	SCE15CNLX	SCE15CNX	SCE15MNX	SCE18CNLX	SCE18CNX	SCE18MNX	SCE21CNLX	SCE21CNLX	SCE21MNX	SCE23LNDX	SCE23MNDX	SCE25LNDX	SCE25MNDX
Code number	104H8548	104H8540	104H8549	104H8848	104H8840	104H8849	104H8163	104H8164	104H8160	104H8320	104H8300	104H8420	104H8400
Approvals	UL/EN 60335-2-34, CCC EN/IEC/UL 60079-1, EN/IEC/UL 60079-15									EN60335-1, EN 60335-2-34 with Annex AA IEC/EN 60079-1, IEC/EN 60079-15, CCC			

Application														
Application	LBP	LBP/MBP	MBP	LBP	LBP/MBP	MBP	LBP	LBP	MBP	LBP	MBP	LBP	MBP	
Evaporating temperature °C	-40 to -5	-40 to 7.2	-25 to 10	-40 to -5	-40 to 7.2	-23 to 7.2	-40 to -5	-45	-5	-25 to 7.2	-40 to -5	-25 to 10	-40 to -5	-25 to 10
Voltage range / frequency V/Hz	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	198-254 / 50	207-242 / 50	198-254 / 50	198-254/50	198-254/50	198-254/50	198-254/50	
Applicable motor configurations	CSIR	CSCR	CSIR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSCR	CSCR	CSCR	CSCR	

Performance Data ASHRAE LBP   ASHRAE MBP - 220V/50Hz - fan cooling														
Evaporating temperature °C	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7
Cooling capacity W	667	-	664	1277	-	1267	793	-	809	1525	-	1501	953	-
Power consumption W	438	-	410	572	-	622	525	-	495	681	-	760	591	-
COP W/W	1.53	-	1.62	2.23	-	2.04	1.51	-	1.63	2.24	-	1.98	1.61	-
Test conditions	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													

Performance Data EN 12900 LBP   EN 12900 MBP - 220V/50Hz - fan cooling														
Evaporating temperature °C	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10
Cooling capacity W	357	-	356	1130	-	1122	440	-	436	1348	-	1321	543	-
Power consumption W	308	-	296	501	-	543	361	-	353	596	-	665	428	-
COP W/W	1.16	-	1.20	2.26	-	2.07	1.22	-	1.24	2.26	-	1.98	1.27	-
Test conditions	Condensing temperature: LBP: 40°C, MBP: 45°C   Suction gas temperature: LBP: 20°C, MBP: 20°C   Ambient temperature: LBP: 32.2°C, MBP: 32.2°C   Liquid temperature: LBP 40°C, MBP: 45°C													

Dimensions																
Height mm	A	219											236.4	B	213	230.6
Suction connector location/I.D. mm   angle material   seal	C	10.2   37°											10.2   37°	Copper   Rubber plug		
Process connector location/I.D. mm   angle material   seal	D	6.2   37°											6.2   37°	Copper   Rubber plug		
Discharge connector location/I.D. mm   angle material   seal	E	6.2   37°											6.2   37°	Copper   Rubber plug		
Connector tolerance I.D. mm	±0.09													±0.09		



**Electrical Equipment: Motor Systems**

**RSIR:** Resistant Start, Induction Run (ePTC)

**RSCR:** Resistant Start, Capacitor Run (PTC/ePTC + run capacitor)

**CSIR:** Capacitor Start, Induction Run (relay + start capacitor)

**CSCR:** Capacitor Start, Capacitor Run (relay + start capacitor + run capacitor)

## ENERGY-OPTIMIZED PROPANE (R290) COMPRESSORS: 115-127 V/60 Hz

General	KLF4.0CNH	KLF4.0CNHS	KLF4.8CNH	KLF4.8CNHS	KLF5.6CNH	KLF5.6CNHS	KLF6.6CNH	KLF6.6CNHS	KLF7.7CNH	KLF7.7CNHS	NLE8.0CN	NLE8.8CN	NLE10CN	NLE11CNL	NLE11MN	NLE12.6CNS	SCE15CNLX	SCE15MNX	SCE18CNLX	SCE18CNLX	SCE18MNX	SCE21CNLX																							
Code number	106H3401	106H3403	106H3500	106H3503	106H3601	106H3603	106H3700	106H3703	106H3802	106H3803	105H6093	105H6094	105H6194	105H5981	105H5980	105H6392	104H7578	104H7579	104H7878	104H7888	104H7879	104H7178																							
Code number (pre-assembled start equipment)	106H3411	-	106H3510	-	106H3611	-	106H3710	-	106H3812	-	105H6095	105H6096	105H6195	105H5983	105H5982	-	-	-	-	-	-	-																							
Approvals	UL 60335-2-34, CCC UL 60079-1, UL 60079-15										UL 60335-2-34, CCC UL 60079-1, UL 60079-15					UL 60335-2-34, EAC UL 60079-1, UL 60079-15																													
Application																																													
Application	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP	MBP	LBP/MBP	LBP	MBP	LBP	LBP	MBP	LBP																				
Evaporating temperature	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-40 to 45	-31 to 45	-31 to 45	-31 to 45	-31 to 14	-13 to 50	-40 to 50	-40 to 20	-13 to 50	-40 to 20	-40 to 20	-13 to 50	-40 to 20																		
Voltage range/frequency	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-140 / 60	95-135 / 60	95-135 / 60	103-127 / 60	95-135 / 60	95-135 / 60	103-135 / 60	103-127 / 60	103-127 / 60	103-127 / 60	103-127 / 60	103-127 / 60	103-127 / 60																		
Applicable motor configurations	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSIR RSCR	CSIR, RSIR RSCR	CSIR, RSIR RSCR	CSIR RSCR	CSIR RSCR	CSCR	CSIR	CSCR	CSIR	CSCR																			
Performance Data ASHRAE LBP   MBP · 115V/60Hz · fan cooling																																													
Evaporating temperature	°F	-10	20	-10	20	-10	20	-10	20	-10	20	-10	20	-10	20	-10	20	-10	20	-10	20	-10	20	-10	20	-10	20	-10	20																
Cooling capacity	BTU/h	779	1429	751	1379	950	1735	918	1672	1157	2080	1118	2004	1355	2451	1310	2362	1626	2873	1514	2678	1545	2754	1749	3122	2071	3648	2288	-	2289	4113	750	-	2778	-	-	5236	3220	-	3209	-	-	6129	3715	-
Power consumption	W	153	200	152	198	179	245	177	243	211	289	209	286	246	346	244	342	294	409	297	403	288	389	326	439	399	523	413	-	437	589	468	-	508	-	-	750	579	-	615	-	-	845	679	-
EER	BTU/Wh	5.08	7.14	4.96	6.96	5.31	7.07	5.18	6.89	5.49	7.20	5.35	7.01	5.51	7.09	5.38	6.91	5.53	7.02	5.10	6.64	5.36	7.07	5.38	7.10	5.19	6.98	5.53	-	5.24	6.96	1.60	-	5.39	-	-	6.99	5.56	-	5.22	-	-	7.25	5.47	-
Test conditions	motor configuration	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR	CSIR	CSIR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR			
Condensing temperature: LBP: 130 °F, MBP: 130 °F   Suction gas temperature: LBP: 90 °F, MBP: 95 °F   Ambient temperature: LBP: 90 °F, MBP: 90 °F   Liquid temperature: LBP 90 °F, MBP: 115 °F																																													
Dimensions																																													
Height	inch	A	7.17										6.85	Applicable for the model KLF4.0CNH, 106H3408 with lower top cover										7.99	8.60																				
		B	6.89										6.57											7.76	8.40																				
Suction connector	location/I.D. in.   angle material   seal	C	0.320-0.330   30° Copper   Rubber plug																				0.320-0.327   15° Copper   Rubber plug										0.378-0.385   37° Copper   Rubber plug												
Process connector	location/I.D. in.   angle material   seal	D	0.250-0.260   35° Copper   Rubber plug																				0.252-0.259   25° Copper   Rubber plug										0.252-0.259   37° Copper   Rubber plug												
Discharge connector	location/I.D. in.   angle material   seal	E	0.250-0.260   40° Copper   Rubber plug																				0.252-0.259   21° Copper   Rubber plug										0.252-0.259   37° Copper   Rubber plug												

## ENERGY-OPTIMIZED PROPANE (R290) COMPRESSORS: 208-230 V / 60 Hz · 220-240 V / 50/60 Hz

General	KLF4.8CNT	KLF5.6CNT	KLF6.6CNT	KLF7.7CNT	NLE8.0CNT	NLE8.8CNT	NLE10CNT	NLE11CNLT	NLE11MNT	SCE15CNLX	SCE15CNLX	SCE15MNX	SCE15MNX	SCE18CNLX	SCE18CNLX	SCE18MNX	SCE18MNX	SCE21CNLX	SCE21CNLX													
Code number	106H2502	106H2602	106H2702	106H2808	105H6073	105H6088	105H6179	105H6109	105H6199	104H8577	104H8588	104H8579	104H8589	104H8878	104H8888	104H8879	104H8889	104H8173	104H8174													
Approvals	UL 60335-2-34, IEC 60335-2-34 IEC/UL 60079-1, IEC/UL 60079-15				UL 60335-2-34, CB/IEC 60335-2-34 IEC/UL 60079-1, IEC/UL 60079-15					UL 60335-2-34, CB/IEC 60335-2-34 IEC/UL 60079-1, IEC/UL 60079-15																						
Application																																
Application	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP	MBP	LBP	LBP	MBP	MBP	LBP	LBP	MBP	MBP	LBP	LBP													
Evaporating temperature	°C	-35 to 7.2	-35 to 7.2	-35 to 7.2	-35 to 7.2	-35 to 7.2	-35 to 7.2	-35 to 7.2	-35 to 7.2	-40 to -10	-20 to 7.2	-40 to -5	-40 to -5	-23.3 to 7.2	-23.3 to 7.2	-40 to -5	-40 to -5	-23.3 to 7.2	-23.3 to 7.2	-40 to -5	-40 to -5											
Voltage range/frequency	V/Hz	187-254 / 50 198-253 / 60	187-254 / 50 198-253 / 60	187-254 / 50 198-253 / 60	187-254 / 50 198-253 / 60	187-242 / 50 187-253 / 60	187-253 / 60	187-242 / 50 187-253 / 60	187-253 / 60	187-242 / 60	187-253 / 60	187-253 / 60	187-253 / 60	187-253 / 60	187-253 / 60	187-253 / 60	187-253 / 60	187-253 / 60	187-253 / 60	198-253 / 60												
Applicable motor configurations	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSIR, RSCR	CSIR, RSIR, RSCR	CSIR, RSIR, RSCR	CSIR, RSIR, RSCR	CSIR, RSIR, RSCR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR												
Performance Data [ASHRAE LBP   ASHRAE MBP · 230V/60Hz · fan cooling																																
Evaporating temperature	°C	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7											
Cooling capacity	W	271	496	332	604	408	702	485	834	441	808	511	914	607	1077	670	-	-	1176	769	-											
Power consumption	W	170	232	212	296	262	352	298	403	291	397	328	447	372	513	405	-	-	583	470	-											
COP	W/W	1.60	2.14	1.56	2.04	1.56	2.00	1.63	2.07	1.52	2.04	1.56	2.05	1.63	2.10	1.65	-	-	2.02	1.64	-											
Test conditions	motor configuration	CSIR	CSIR	CSIR	CSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR												
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: 35 °C   Liquid temperature: LBP 32.2 °C, MBP: 46.1 °C																																
Performance Data [EN 12900 LBP   EN 12900 MBP · 230V/60Hz · fan cooling																																
Evaporating temperature	°C	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10											
Cooling capacity	W	153	441	189	538	217	615	270	733	244	718	299	807	347	947	383	-	-	1038	416	-											
Power consumption	W	127	207	158	261	179	306	215	350	203	341	245	393	269	448	291	-	-	512	342	-											
COP	W/W	1.20	2.13	1.20	2.06	1.21	2.00	1.26	2.10	1.20	2.10	1.22	2.05	1.29	2.12	1.32	-	-	2.03	1.22	-											
Test conditions	motor configuration	CSIR	CSIR	CSIR	CSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSIR or RSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR												
Condensing temperature: LBP: 40 °C, MBP: 45 °C   Suction gas temperature: LBP: 20 °C, MBP: 20 °C   Ambient temperature: LBP: 32.2 °C, MBP: 32.2 °C   Liquid temperature: LBP 40 °C, MBP: 45 °C																																
Dimensions																																
Height	mm	A	182										203										219									
		B	175										197										213									
Suction connector	location/I.D. mm   angle material   seal	C	8.2   30° Copper   Rubber plug										8.2   15° Copper   Rubber plug										10.2   37° Copper   Rubber plug									
Process connector	location/I.D. mm   angle material   seal	D	6.2   35° Copper   Rubber plug										6.5   25° Copper   Rubber plug										6.2   37° Copper   Rubber plug									
Discharge connector	location/I.D. mm   angle material   seal	E	6.2   40° Copper   Rubber plug										6.5   21° Copper   Rubber plug										6.2   37° Copper   Rubber plug									
Connector tolerance	I.D. mm	±0.09										±0.09										±0.09										



### Electrical Equipment: Motor Systems

**RSIR:**  
Resistant Start, Induction Run (ePTC)

**RSCR:**  
Resistant Start, Capacitor Run (PTC/ePTC + run capacitor)

**CSIR:**  
Capacitor Start, Induction Run (relay + start capacitor)

**CSCR:**  
Capacitor Start, Capacitor Run (relay + start capacitor + run capacitor)



# SECOP GROUP: AROUND THE WORLD



12

international partners for advanced developments

33

laboratories located in Germany, Slovakia, China, U.S.A., and Turkey

150+

R&D engineers and technicians

400+

patents globally

50+

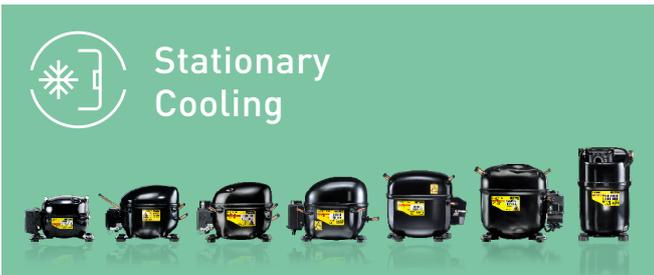
countries with customer support



Secop is the expert for advanced hermetic compressor technologies and cooling solutions in commercial refrigeration. We develop high performance stationary and mobile cooling solutions for leading international commercial refrigeration manufacturers and are the first choice when it comes to leading hermetic compressors and electronic controls for refrigeration solutions for light commercial and DC-powered applications.

Secop was formerly known as Danfoss Compressors and is one of the founding fathers of modern compressor technology with years of experience that goes back to the beginning of the 1950s.

-  **Flensburg:** Sales and R&D
-  **Zlaté Moravce:** R&D, Logistics, and Manufacturing
-  **Turin:** Sales
-  **Tianjin:** Sales, R&D, Logistics, and Manufacturing
-  **Atlanta:** Sales and Logistics



Secop GmbH · Lise-Meitner-Str. 29 · 24941 Flensburg, Germany · Tel: +49 461 4941 0 · [www.secop.com](http://www.secop.com)

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved.