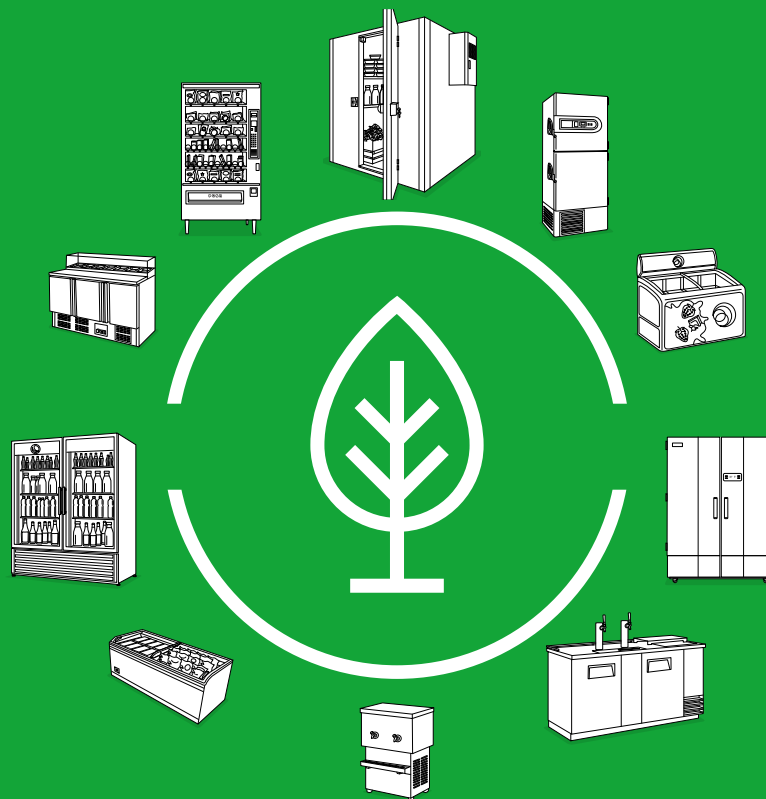


Secop is the first choice for partners looking for leading-edge refrigeration solutions and a premium customer experience.

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

SECCOP

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 1.61 COP	432 W 1.66 COP	476 W 1.59 COP	556 W 1.42 COP	614 W 1.60 COP	745 W 1.57 COP	893 W 1.58 COP	916 W 1.63 COP	1114 W 1.76 COP	1228 W 1.60 COP	1446 W 1.82 COP	1774 W 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 2.08 COP	414 W 2.08 COP	495 W 2.10 COP	597 W 2.05 COP	704 W 1.97 COP	752 W 1.98 COP	872 W 1.89 COP	981 W 2.01 COP	1060 W 1.97 COP	1267 W 2.04 COP	1501 W 1.98 COP	1762 W 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 1.22 COP	213 W 1.21 COP	274 W 1.22 COP	324 W 1.11 COP	386 W 1.18 COP	448 W 1.17 COP	462 W 1.23 COP	569 W 1.27 COP	783 W 1.12 COP	921 W 1.13 COP
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Compressor	KLF4.0CND	KLF4.8CND	KLF5.6CND	KLF6.6CND	KLF7.7CND	NLE8.8CN	NLE10CN	NLE11CNL	SCE18CNLX	SCE21CNLX
to ... R290	183 W 1.48 COP	230 W 1.50 COP	273 W 1.55 COP	337 W 1.51 COP	385 W 1.52 COP	431 W 1.57 COP	486 W 1.47 COP	540 W 1.52 COP	793 W 1.51 COP	953 W 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



Max.
Performance



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 1331 W (ASHRAE LBP). At medium back pressure (MBP), the evaporating temperatures range from -25°C to +10°C, with a cooling capacity of 2440 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	KLF4.0CNS	KLF4.8CND	KLF4.8CNS	KLF5.6CND	KLF5.6CNS	KLF6.6CND	KLF6.6CNS	KLF7.7CND	KLF7.7CNS	KLF7.7CNQX	KLF8.6CND	KLF4.0CND (low)	KLF4.8CND (low)
Code number	106H2401	106H2403	106H2500	106H2503	106H2600	106H2603	106H2700	106H2703	106H2800	106H2803	106H2809	106H2900	106H2408	106H2508
Code number [pre-assembled start equipment]	106H2411	–	106H2510	–	106H2610	–	106H2710	–	106H2810	–	–	106H2910	–	–
Approvals	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE	VDE	VDE, CCC	VDE, CCC

[illegible]

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	-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	372	663	389	687	456	792	183	336	230	414
Power consumption	W	124	162	123	160	153	199	152	197	177	236	175	236	223	291	221	293	254	357	251	339	242	333	284	396	124	162	153	199
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	1.48	1.95	1.61	2.06	1.64	2.00	1.48	2.08	1.50	2.08
Test conditions	motor configuration	CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR	
	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	-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	215	587	215	602	253	701	100	299	127	371
Power consumption	W	88	140	87	138	118	173	117	171	123	205	122	206	156	253	155	255	185	309	183	297	183	293	199	342	88	140	118	173
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	1.18	1.98	1.17	2.06	1.27	2.05	1.14	2.14	1.07	2.14
Test conditions	motor configuration	CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR	
	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
Suction connector	location/I.D. mm angle material seal	C	8.2 30° Copper Rubber plug		8.2 30° Copper Rubber plug
		D	6.2 35° Copper Rubber plug		6.2 35° Copper Rubber plug
Discharge connector	location/I.D. mm angle material seal	E	6.2 40° Copper Rubber plug		6.2 40° Copper Rubber plug
		Connector tolerance	I.D. mm	±0.09	

General	NLE8.8CN	NLE10CN	NLE11CNL	NLE11MN	NLE12.6CNL	NLE12.6MN
Code number	105H6880	105H6175	105H6174	105H6177	105H6378	105H6377
Approvals	VDE, UL CCC	VDE, UL CCC	VDE, UL CCC	VDE, UL CCC	VDE, CCC	VDE, CCC

Application							
Application		LBP/MBP	LBP/MBP	LBP	MBP	LBP	MBP
Evaporating temperature	°C	-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
Applicable motor configurations		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
Cooling capacity	W	430	751	486	872	540	–	562	981	611	1069	–	1060
Power consumption	W	275	380	331	462	356	–	355	488	375	536	–	537
COP	W/W	1.57	1.98	1.47	1.89	1.52	–	1.58	2.01	1.63	2.00	–	1.97
	motor configuration	CSIR or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR	
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
Cooling capacity	W	256	670	285	781	305	856	–	869	354	945	–	949
Power consumption	W	203	327	232	417	258	436	–	423	266	458	–	462
COP	W/W	1.26	2.05	1.23	1.96	1.18	1.96	–	2.06	1.33	2.06	–	2.05
	motor configuration	CSIR or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR	
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	203
		B	197
Suction connector	location/I.D. mm angle material seal	C	8.2 15° Copper Rubber plug
		D	6.2 25° Copper Rubber plug
Discharge connector	location/I.D. mm angle material seal	E	6.2 21° Copper Rubber plug
		Connector tolerance	I.D. mm



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: 220-240 V/50 Hz

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	VDE, UL, CCC	VDE, CCC	VDE, UL, CCC	VDE, UL, CCC	VDE, CCC	VDE, UL, CCC	VDE, UL, CCC	VDE, UL, CCC	VDE, CCC	CB, VDE, CCC	CB, VDE, CCC	CB, VDE, CCC	CB, VDE, 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
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
Applicable motor configurations	CSIR	CSCR	CSIR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	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	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	
Cooling capacity	W	667	–	664	1277	–	1267	793	–	809	1525	–	1501	953	–	939	–	–	1762	1041	–	–	1909	1178	–	–	2077
Power consumption	W	438	–	410	572	–	622	525	–	495	681	–	760	591	–	630	–	–	833	661	–	–	915	728	–	–	1036
COP	W/W	1.53	–	1.62	2.23	–	2.04	1.51	–	1.63	2.24	–	1.98	1.61	–	1.49	–	–	2.12	1.58	–	–	2.09	1.62	–	–	2.01
Test conditions	motor configuration	CSIR		CSCR		CSIR		CSIR		CSCR		CSIR		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: 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	-35	-10	-35	-10	-35	-10	-35	-10
Cooling capacity	W	357	–	356	1130	–	1122	440	–	436	1348	–	1321	543	–	545	–	–	1572	614	–	–	1698	676	–	–	1850
Power consumption	W	308	–	296	501	–	543	361	–	353	596	–	665	428	–	449	–	–	724	469	–	–	810	511	–	–	874
COP	W/W	1.16	–	1.20	2.26	–	2.07	1.22	–	1.24	2.26	–	1.98	1.27	–	1.22	–	–	2.17	1.31	–	–	2.10	1.32	–	–	2.12
Test conditions	motor configuration	CSIR		CSCR		CSIR		CSCR		CSIR		CSCR		CSIR		CSCR		CSIR		CSCR		CSIR		CSCR		CSIR	
	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
		B	213	231
Suction connector	location/I.D. mm angle material seal	C	10.2 37° Copper Rubber plug	12.9 37° Copper Rubber plug
		D	6.2 37° Copper Rubber plug	6.2 37° Copper Rubber plug
Process connector	location/I.D. mm angle material seal	E	6.2 37° Copper Rubber plug	6.2 37° Copper Rubber plug
Discharge connector	location/I.D. mm angle material seal			
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: 208-230 V / 60 Hz · 220-240 V / 50/60 Hz

General	KLF4.0CNT	KLF4.8CNT	KLF5.6CNT	KLF6.6CNT	KLF7.7CNT	KLF4.0CNT [low]	NLE8.0CNT	NLE8.8CNT	NLE10CNT	NLE11CNLT	NLE11MNT
Code number	106H2402	106H2502	106H2602	106H2702	106H2808	106H2409	105H6073	105H6088	105H6179	105H6109	105H6199
Code no. [pre-assembled start equipment]	–	106H2512	106H2612	106H2712	–	–	–	–	–	–	–
Approvals	UL	UL, KC, CCC, CB	UL, KC, CCC, CB	UL, KC, CCC, CB	UL, KC, CCC, CB	UL	CB, UL	CB, UL	CB, UL	CB, UL	CB, UL

Application												
Application		LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP	MBP
Evaporating temperature	°C	-35 to 10	-35 to 7.2	-35 to 7.2	-35 to 7.2	-35 to 7.2	-35 to 10	-35 to 7.2	-35 to 7.2	-35 to 7.2	-40 to -10	-20 to 7.2
Voltage range/frequency	V/Hz	187-254 / 50	187-254 / 50	187-254 / 50	187-254 / 50	187-254 / 50	187-254 / 50	187-242 / 50	187-253 / 60	187-242 / 50	187-253 / 60	187-242 / 60
		195-253 / 60	198-253 / 60	198-253 / 60	198-253 / 60	198-253 / 60	198-253 / 60	187-253 / 60				
Applicable motor configurations		CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSCR	CSIR, RSIR, RSCR	CSIR, RSIR, RSCR	CSIR, RSIR, RSCR	CSIR, RSIR, RSCR	CSIR, RSIR, RSCR

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	-23.3	-6.7
Cooling capacity	W	236	425	285	519	332	604	408	702	485	834	236	425	441	808	511	914	607	1077	670	–	–	1176
Power consumption	W	145	196	181	248	210	296	262	352	298	403	145	196	291	397	328	447	372	513	405	–	–	583
COP	W/W	1.63	2.18	1.58	2.09	1.58	2.07	1.56	2.00	1.63	2.07	1.63	2.18	1.52	2.04	1.56	2.05	1.63	2.10	1.65	–	–	2.02
Test conditions	motor configuration	CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR	
(without run capacitor)	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	-35	-10
Cooling capacity	W	130	372	161	463	189	538	217	615	270	733	130	372	244	718	299	807	347	947	383	–	–	1038
Power consumption	W	102	168	135	222	156	261	179	306	215	350	102	168	203	341	245	393	269	448	291	–	–	512
COP	W/W	1.27	2.22	1.19	2.09	1.21	2.06	1.21	2.00	1.26	2.10	1.27	2.22	1.20	2.10	1.22	2.05	1.29	2.12	1.32	–	–	2.03
Test conditions	motor configuration	CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR or RSIR	
(without run capacitor)	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
Suction connector	location/I.D. mm angle material seal	C	8.2 30° Copper Rubber plug	8.2 30° Copper Rubber plug
		D	6.2 35° Copper Rubber plug	6.2 35° Copper Rubber plug
Process connector	location/I.D. mm angle material seal	E	6.2 40° Copper Rubber plug	6.2 40° Copper Rubber plug
Connector tolerance	I.D. mm		±0.09	±0.09

General	SCE15CNLX	SCE15CNLX	SCE15MNX	SCE15MNX	SCE18CNLX	SCE18CNLX	SCE18MNX	SCE18MNX	SCE21CNLX	SCE21CNLX	SCE21MNIX	SCE23LNIX	SCE23MNIX	SCE25LNIX	SCE25MNIX
Code number	104H8577	104H8588	104H8579	104H8589	104H8878	104H8888	104H8879	104H8889	104H8173	104H8174	104H8151	104H8350	104H8340	104H8440	104H8450
Approvals	CB, UL	CB, UL	CB, UL	CB, UL	CB, UL	CB, UL	CB, UL	CB, UL	CB, UL	CB, UL	UL	UL	UL	UL	UL

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 -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	-25 to 10	-40 to -5	-25 to 10	-25 to 10
Voltage range/frequency	V/Hz	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	187-253 / 60	198-253 / 60	195-254 / 60	195-254 / 60	195-254 / 60
Applicable motor configurations		CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSIR	CSCR	CSCR	CSCR	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	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7	-23.3	-6.7
Cooling capacity	W	769	–	766	–	–	1552	–	1534	910	–	896	–	–	1802	–	1795	1102	–	1088	–	–	2069	1226	–	–	2233	1331	–	–	2440
Power consumption	W	470	–	498	–	–	689	–	743	544	–	580	–	–	817	–	879	669	–	710	–	–	1005	783	–	–	1072	848	–	–	1191
COP	W/W	1.64	–	154	–	–	2.25	–	2.07	1.67	–	1.55	–	–	2.21	–	2.04	1.65	–	1.53	–	–	2.06	1.57	–	–	2.08	1.57	–	–	2.05
Test conditions (without run capacitor)	motor configuration	CSCR		CSIR		CSCR		CSIR		CSCR		CSIR		CSCR		CSIR		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	-35	-10	-35	-10	-35	-10	-35	-10	-35	-10
Cooling capacity	W	416	–	416	–	–	1376	–	1361	495	–	490	–	–	1594	–	1589	602	–	594	–	–	1991	710	–	–	1998	771	–	–	2243
Power consumption	W	342	–	353	–	–	621	–	668	387	–	405	–	–	730	–	785	482	–	509	–	–	875	541	–	–	930	600	–	–	1038
COP	W/W	1.22	–	1.18	–	–	2.22	–	2.04	1.28	–	1.21	–	–	2.19	–	2.03	1.25	–	1.17	–	–	2.17	1.31	–	–	2.15	1.29	–	–	2.16
Test conditions (without run capacitor)	motor configuration	CSCR		CSIR		CSCR		CSIR		CSCR		CSIR		CSCR		CSIR		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	219	236
		B	213	231
Suction connector	location/I.D. mm angle material seal	C	10.2 37°	12.9 37°
			Copper Rubber plug	Copper Rubber plug
Process connector	location/I.D. mm angle material seal	D	6.2 37°	6.5 37°
			Copper Rubber plug	Copper Rubber plug
Discharge connector	location/I.D. mm angle material seal	E	6.2 37°	8.2 37°
			Copper Rubber plug	Copper Rubber plug
Connector tolerance	I.D. mm		±0.09	±0.09

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	KLF4.0CNH (low)
Code number	106H3401	106H3403	106H3500	106H3503	106H3601	106H3603	106H3700	106H3703	106H3802	106H3803	106H3408
Code number (pre-assembled start equipment)	106H3411	106H3413	106H3510	106H3513	106H3611	106H3613	106H3710	106H3713	106H3812	106H3813	–
Approvals	UL, CCC	UL, CCC	UL, CCC	UL, CCC	UL, CCC	UL, CCC	UL, CCC	UL, CCC	UL	UL	UL, CCC

Application											
Application	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP	LBP/MBP
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
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
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

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
Cooling capacity	BTU/h	779	1429	751	1379	950	1735	918	1672	1157	2080	1118	2004	1355	2451	1310	2362	1626	2873	1514	2678	779	1429
Power consumption	W	153	200	152	198	179	245	177	243	211	289	209	286	246	346	244	342	294	409	297	403	153	200
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	5.08	7.14
Test conditions	motor configuration	CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR		CSIR	
		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
		B	6.89									6.57
Suction connector	location/I.D. in. angle material seal	C	0.320-0.330 30°									0.320-0.330 30°
			Copper Rubber plug									Copper Rubber plug
Process connector	location/I.D. in. angle material seal	D	0.250-0.260 35°									0.250-0.260 35°
			Copper Rubber plug									Copper Rubber plug
Discharge connector	location/I.D. in angle material seal	E	0.250-0.260 40°									0.250-0.260 40°
			Copper Rubber plug									Copper Rubber plug

General	NLE8.0CN	NLE8.8CN	NLE10CN	NLE11CNL	NLE11MN	NLE12.6CNS	SCE15CNLX	SCE15MNX	SCE18CNLX	SCE18CNLX	SCE18MNX	SCE21CNLX
Code number	105H6093	105H6094	105H6194	105H5981	105H5980	105H6392	104H7578	104H7579	104H7878	104H7888	104H7879	104H7178
Code number (pre-assembled start equipment)	105H6095	105H6096	105H6195	105H5983	105H5982	–	–	–	–	–	–	–
Approvals	UL, CCC	UL	UL, CCC	UL, CCC	UL, CCC	UL	UL	UL	UL	UL	UL	UL

Application												
Application	LBP/MBP	LBP/MBP	LBP/MBP	LBP	MBP	LBP/MBP	LBP	MBP	LBP	LBP	MBP	LBP
Evaporating temperature	-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	95-135 / 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, RSIR RSCR	CSIR, RSIR RSCR	CSIR, RSIR RSCR	CSIR RSCR	CSIR RSCR	CSIR RSCR	CSIR CSCR	CSIR CSCR	CSCR	CSIR	CSIR CSCR	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
Cooling capacity	BTU/h	1545	2754	1749	3122	2071	3648	2288	–	2289	4113	750	–	2778	–	–	5236	3220	–	3209	–	–	6129	3715	–
Power consumption	W	288	389	326	439	399	523	413	–	437	589	468	–	508	–	–	750	579	–	615	–	–	845	679	–
EER	BTU/Wh	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 or RSIR		CSIR or RSIR		CSIR or RSIR		CSIR		CSIR		CSIR		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	7.99									8.60
		B	7.76									8.40
Suction connector	location/I.D. in. angle material seal	C	0.320-0.327 15°									0.378-0.385 37°
			Copper Rubber plug									Copper Rubber plug
Process connector	location/I.D. in. angle material seal	D	0.252-0.259 25°									0.252-0.259 37°
			Copper Rubber plug									Copper Rubber plug
Discharge connector	location/I.D. in angle material seal	E	0.252-0.259 21°									0.252-0.259 37°
			Copper Rubber plug									Copper Rubber plug



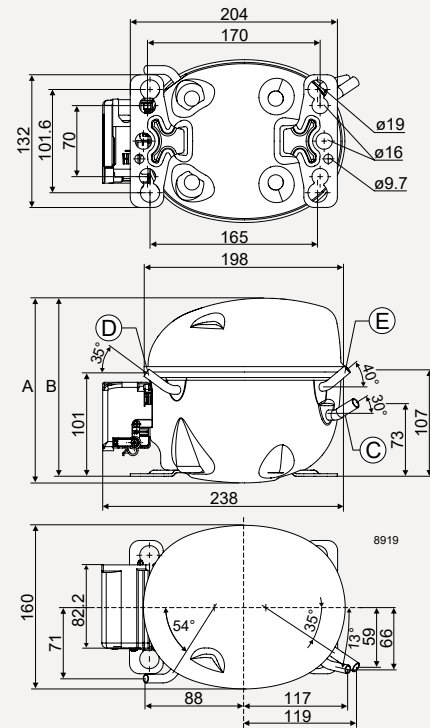
Electrical Equipment:
Motor Systems

RSIR:
Resistant Start, Induction Run
(ePTC)

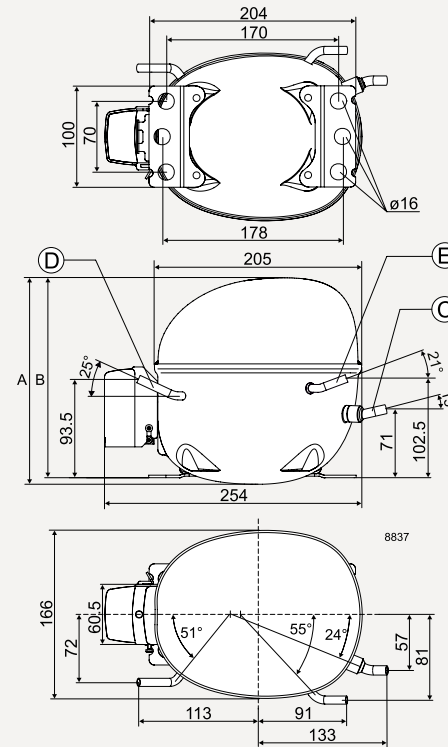
RSCR:
Resistant Start, Capacitor Run
(PTC/ePTC + run capacitor)

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

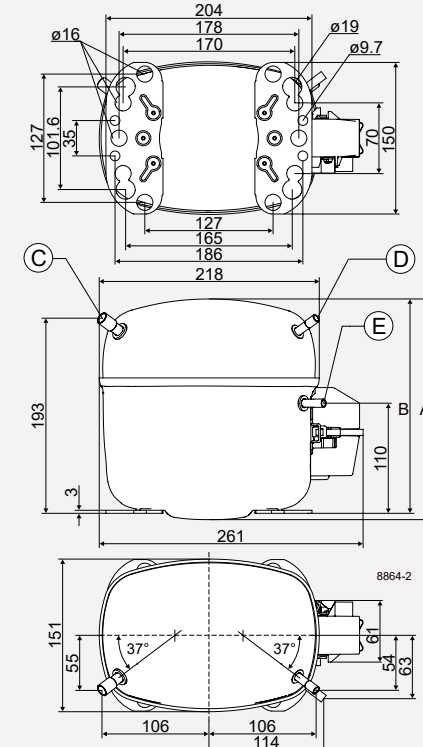
CSCR:
Capacitor Start, Capacitor Run
(relay + start capacitor + run capacitor)



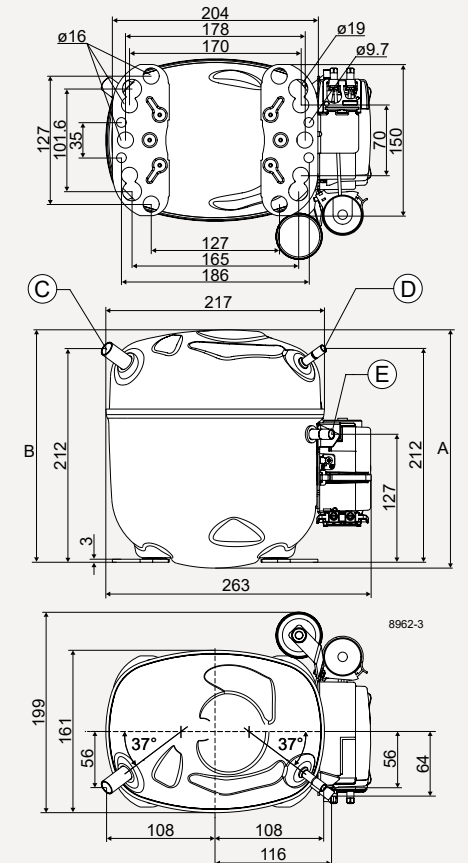
KLF: 200/220-240 V/50 Hz · 208-230 V/60 Hz



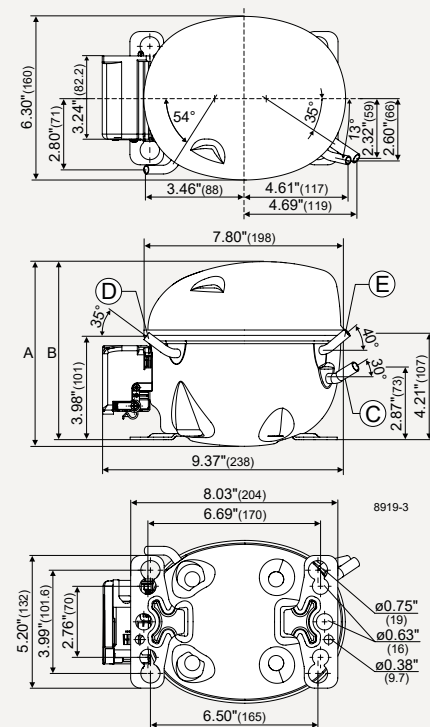
NLE: 220-240 V/50 Hz · 208-230 V/60 Hz



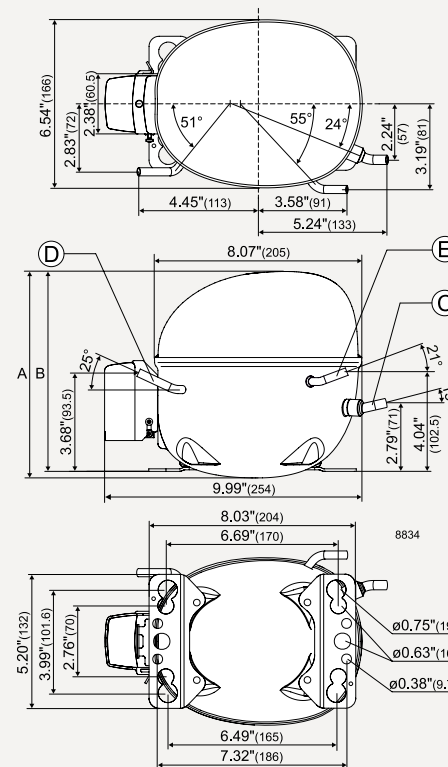
SCE: 220-240 V/50 Hz · 208-230 V/60 Hz



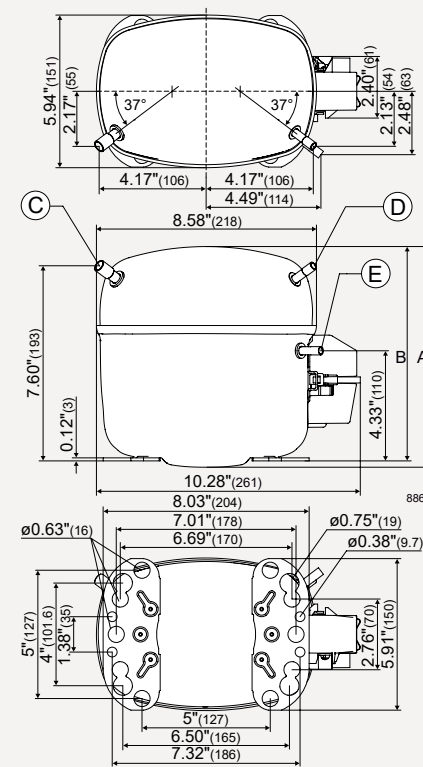
SCE Plus: 220-240 V/50 Hz · 208-230 V/60 Hz



KLF: 115-127 V/60 Hz



NLE: 115-127 V/60 Hz



SCE: 115-127 V/60 Hz

SECOP SUSTAINABLE COOLING SOLUTIONS



Sustainability



High Efficiency

SECOPI GROUP: AROUND THE WORLD

SECOPI

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



Turin: Sales



Atlanta: Sales and Logistics



Zlaté Moravce: R&D, Logistics, and Manufacturing



Tianjin: Sales, R&D, Logistics, and Manufacturing



**Stationary
Cooling**



**Mobile
Cooling**



**Medical
Cooling**



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

Produced by Secop | November 2025

DES.B.050.H19.02