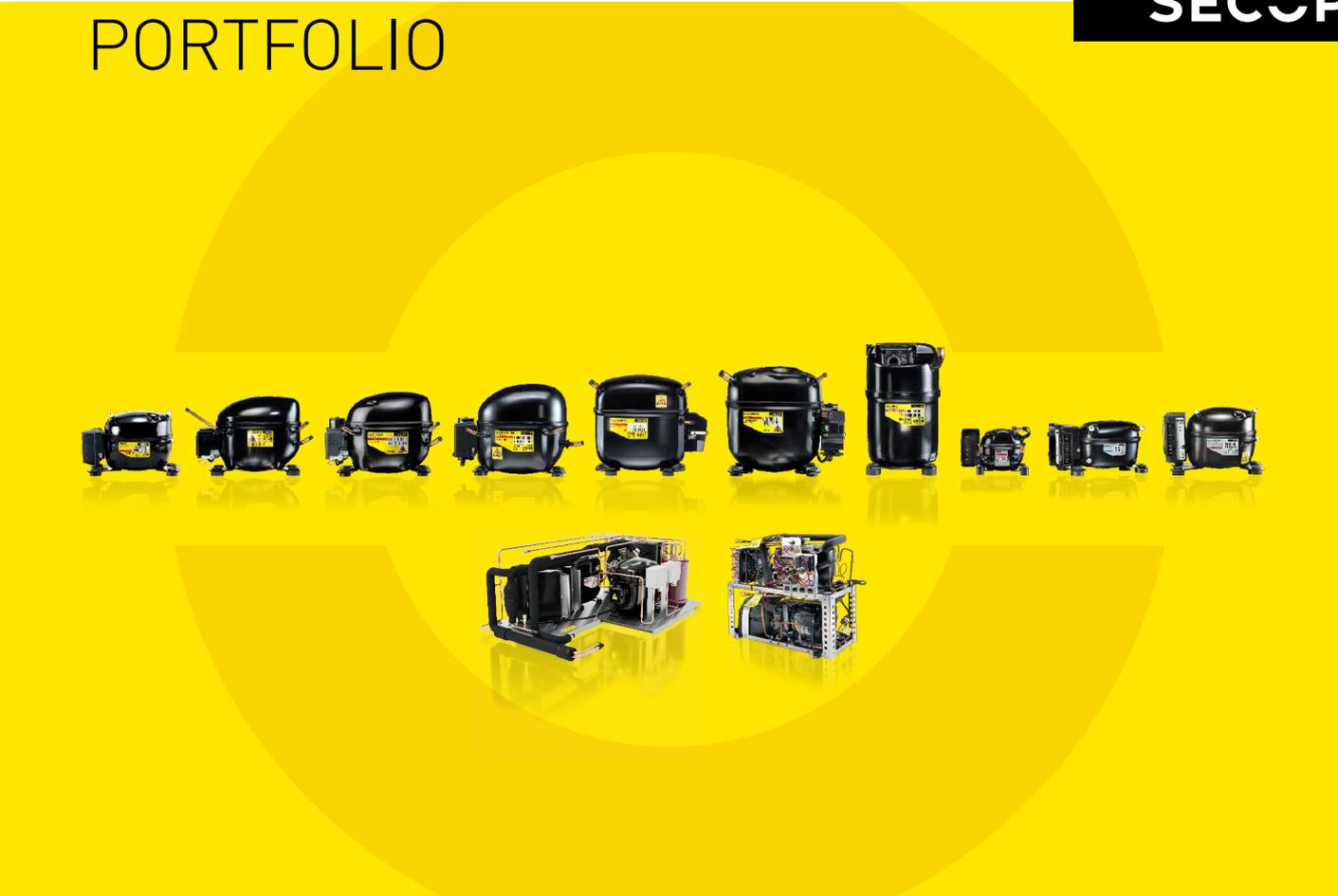


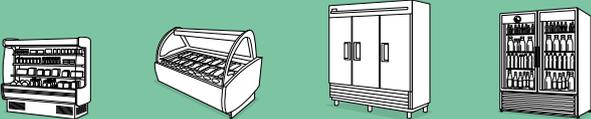
Secop is the first choice for partners searching for leading-edge refrigeration solutions and a premium customer experience.

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

# PRODUCT PORTFOLIO



 **Stationary Cooling**



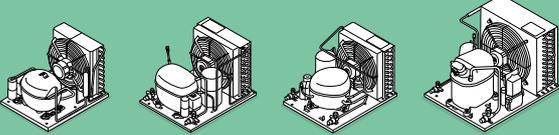
 **Mobile Cooling**



 **Medical Cooling**

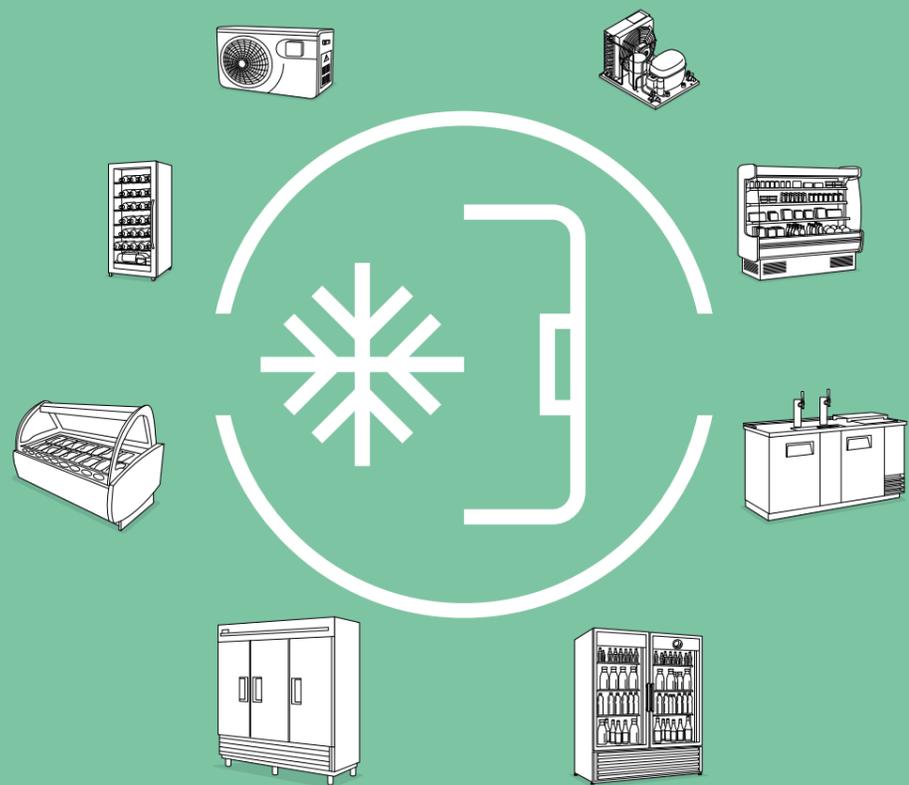


 **Condensing Units**



# STATIONARY COOLING

Refrigeration compressors and solutions for food retail, food service, medical, commercial freezers or coolers, beverage dispensers, special commercial equipment, and selected residential applications



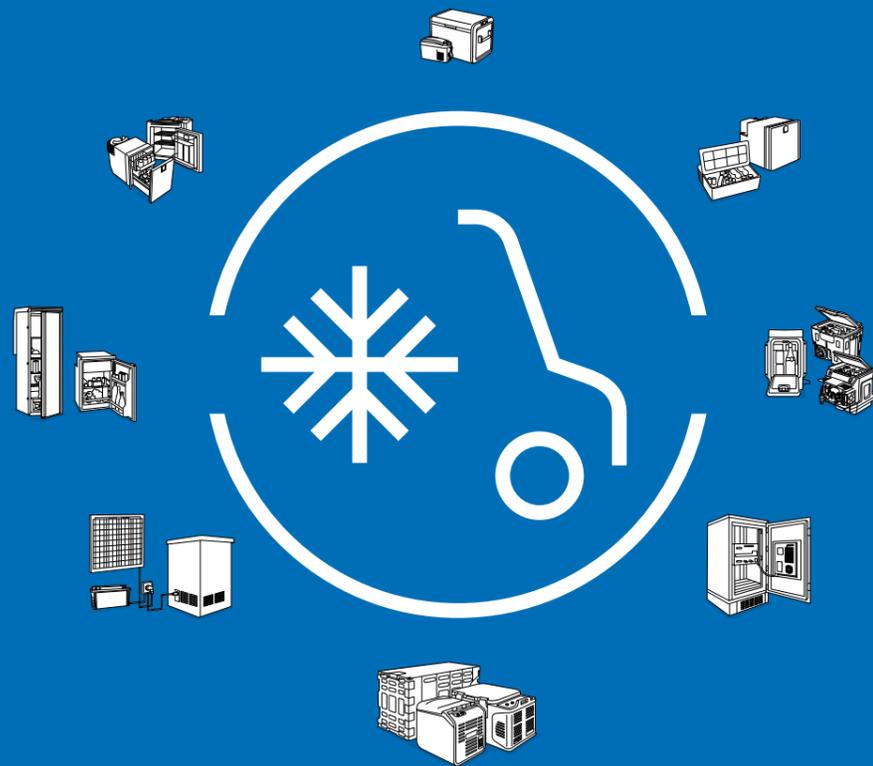
Series	Displacement (cm <sup>3</sup> )	Cooling Capacity			Refrigerants
		LBP (W) ASHRAE	MBP (W) ASHRAE	HBP (W) ASHRAE	
NLV 	7.96 - 14.65	265 - 1250	490 - 2200		R290
SLV/ SLVE 	15.28 - 17.7	403 - 1190	1200 - 2149		R290
P 	1.41 - 2.50	25 - 59	66 - 126	130 - 192	R600a R134a
K 	5.6 - 12.5	92 - 260			R600a R134a
KL 	4 - 8.6	102 - 490	221 - 847	398 - 1080	R290 R134a R513A
N 	6.13 - 14.65	127 - 909	320 - 1557	1400 - 1424	R600a R290 R134a R404A R513A R452A R170
FRK 	4.0 - 8.6	99 - 287	215 - 590	386 - 1031	R134a R513A
S 	10.29 - 25.0	167 - 1331	493 - 2440	923 - 2266	R290 R134a R404A R407C R513A R452A R170
G 	21.2 - 33.8	1207 - 1912	1448 - 3363	2613	R134a R404A R513A

Secop stationary cooling compressors are available for all worldwide AC mains supply standards.



# MOBILE COOLING

DC-powered or battery-driven compressors specifically designed for mobile cooling solutions: automotive (trucks, cars, bus), recreations vehicles, portable boxes, medical, solar, and special applications



Series	Displacement (cm <sup>3</sup> )	Cooling Capacity			Refrigerants
		LBP (W) ASHRAE	MBP (W) ASHRAE	HBP (W) ASHRAE	
BD Nano	1.42 - 2.60	28 - 69	62 - 131		R134a R1234yf R600a
BD Micro	1.41	13 - 34	42 - 94	83 - 173	R134a R1234yf
BD-P	2.0 - 3.0	29 - 71	65 - 223	115 - 390	R600a R290 R134a R1234yf

0 - 10      0 - 300      0 - 500      0 - 1000

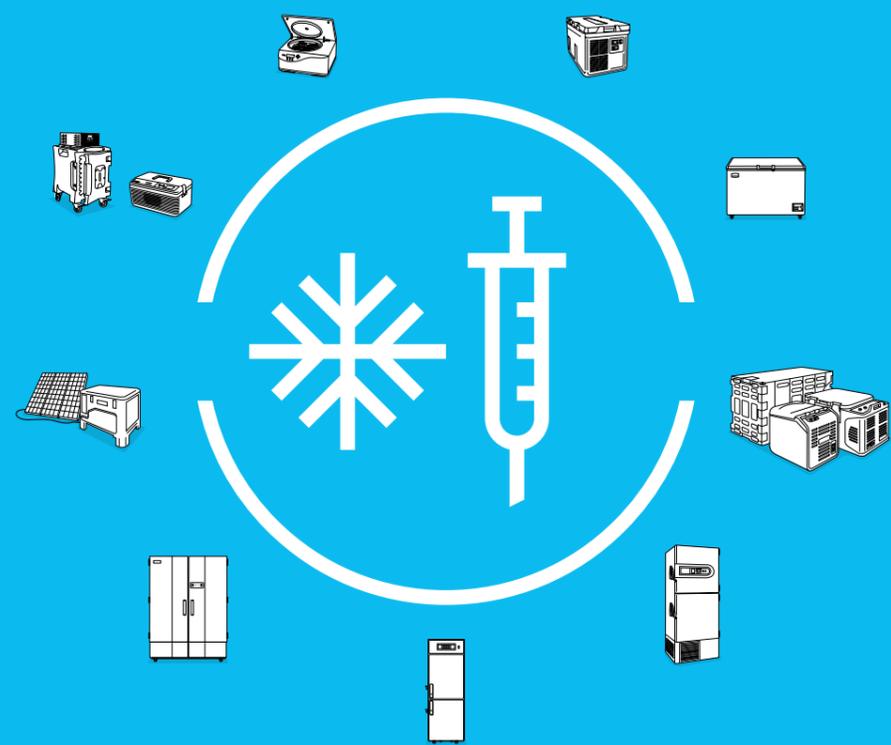


Secop mobile cooling compressors are available for a variety of DC voltage ranges and certain controllers even feature an AC option for various mains supply.



# MEDICAL COOLING

Refrigeration compressors and solutions for various vaccine and biomedical cooling requirements including ultra-low temperature models for stationary or mobile appliances providing world-wide safe storage or transport at different temperature levels



Sub Platform	Applications Evap. Temp Range	Cooling Capacity		Test Conditions	Refrigerants
		Displacement (cm <sup>3</sup> )	Cooling Capacity (W)		
MB CKV	Solar Powered Vaccine Refrigerators -30 to 5° C	2.6	66 – 131	ASHRAE MBP	R600a
MN U/UV	Biomedical Freezers -30 to -60 °C	11.15 – 12.55	245 – 538	EN 12900 LBP	R290 HC mixture R404A R452A
MS U/UV	Biomedical Freezers -30 to -60 °C	17.69 – 20.95	316 – 657	EN 12900 LBP	R290 HC mixture R404A R452A
MP UV	Ultra-Low Temperature Freezers -60 to -90 °C	2	26.7 – 47	pe= -90° pc= -35° Tsuc= 20° Tliq= -35° Tamb= 32.2°	R170 R290 HC mixture
MN U/UV	Ultra-Low Temperature Freezers -60 to -90 °C	11.15 – 12.55	182 – 397	pe= -90° pc= -35° Tsuc= 20° Tliq= -35° Tamb= 32.2°	R170 R290 HC mixture
MS U/UV	Ultra-Low Temperature Freezers -60 to -90 °C	17.69 – 20.95	234 – 477	pe= -90° pc= -35° Tsuc= 20° Tliq= -35° Tamb= 32.2°	R170 R290 HC mixture
Mobile ULT Condensing Units	Ultra-Low Temperature Freezers -60 to -90 °C	2x 2	26.7 – 47	pe= -90° pc= -35° Tsuc= 20° Tliq= -35° Tamb= 32.2°	R170 R290
Stationary ULT Condensing Units	Ultra-Low Temperature Freezers -60 to -90 °C	2x 17.69	234 – 477	pe= -90° pc= -35° Tsuc= 20° Tliq= -35° Tamb= 32.2°	R170 R290

Secop recommends using 2-stage cascade systems for the temperature range from -60 °C to -90 °C. These have been developed for highest reliability and product safety at ultra-low temperatures.

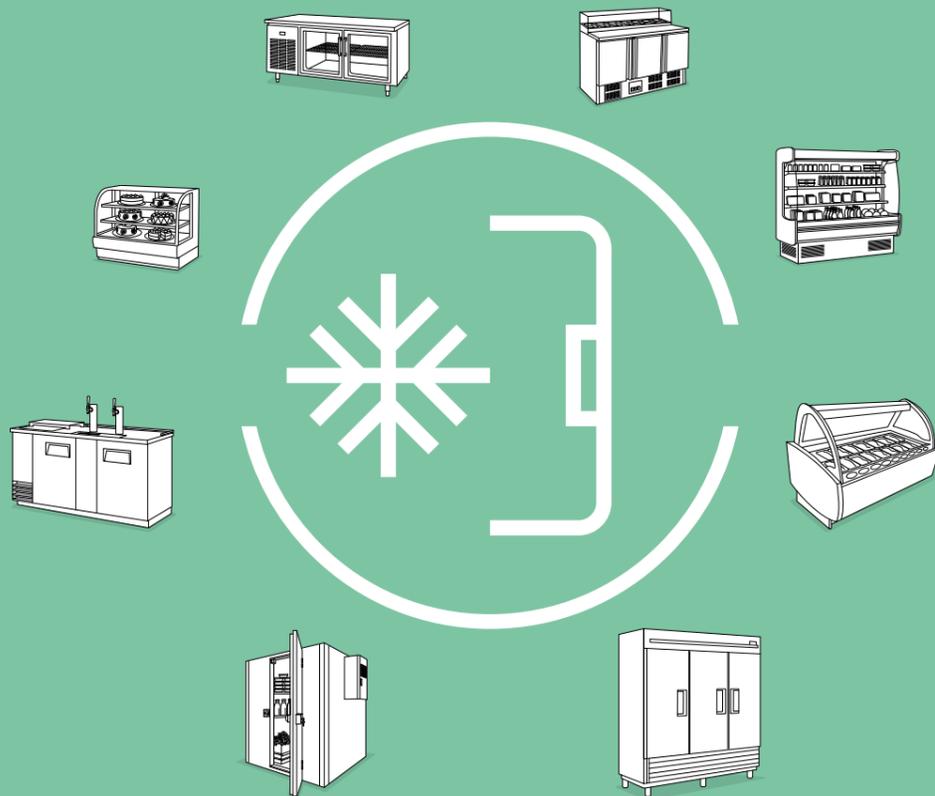


# CONDENSING UNITS

Perfect for installation in tight spaces with a precise, compact design, they allow easy conversion for new drop-in replacement refrigerants.

The range is designed and optimized to meet the European Ecodesign Directive.

With high precision manufacturing and 100% quality control of every single unit, they are made to operate in the most demanding environments under all operating conditions.



Series	Displacement (cm³)	Cooling Capacity		Refrigerants
		LBP (W) EN 13215*	MBP (W) EN 13215*	
KL 	4.8 – 7.7	228 – 422	412 – 700	R290
N 	6.1 – 12.6	159 – 582	326 – 996	R134a R513A R404A R452A R290
S 	10.3 – 21.0	590 – 944	752 – 1683	R134a R513A R404A R452A R449A R290
G 	26.3 – 33.8	1275 – 1712	1372 – 1782	R134a R513A R404A R452A R449A

\*Tsubcooling=2 K, Tsuc=20 °C, Tamb=25 °C, LBP: pe=-25 °C, MBP: pe=-10 °C



 Natural Refrigerant

HC models are using our energy-optimized DLE, NLE, and SCE propane (R290) compressors with a very low GWP and maximum performance.

 Alternative refrigerants

HFC models are approved for alternative refrigerants R452A and R513A while selected models are approved for R449A.

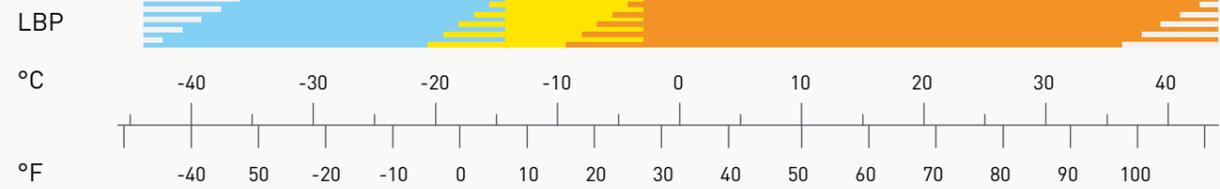
 EU Sustainable Design

Secop's full range of condensing units is designed and optimized to meet the European Ecodesign Directive.

 Natural Refrigerants

# LBP-MBP-HBP

## SECOP LBP\* COMPRESSORS: EVAPORATION PRESSURES



- Normal use: efficiency optimization & continuous operation
- Highload: continuous operation
- Pull down: short time operation (<60min.) after start or defrost

**LBP\*** Low Back Pressure: Indicates the range of low evaporating temperatures, typically -10°C down to -35°C or even -45°C (appliances such as e.g., freezers and refrigerators with freezer compartments)

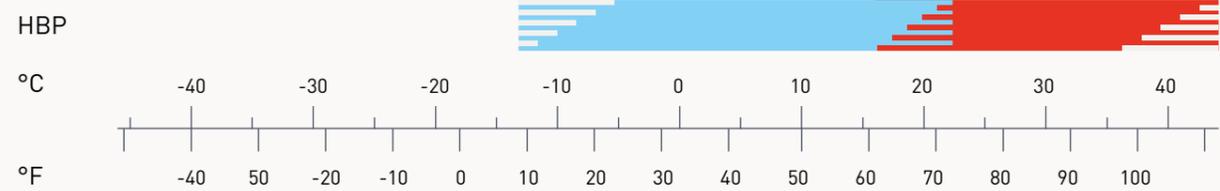
## SECOP MBP\*\* COMPRESSORS: EVAPORATION PRESSURES



- Normal use: efficiency optimization & continuous operation
- Highload: continuous operation
- Pull down: up to some hours after start or reloading

**MBP\*\*** Medium Back Pressure: Indicates the range of medium evaporating temperatures, typically -20°C up to 0°C (appliances such as e.g., cold cabinets, milk coolers, ice machines and water coolers)

## SECOP HBP\*\*\* COMPRESSORS: EVAPORATION PRESSURES



- Normal use: efficiency optimization & continuous operation
- Pull down: up to some hours after start or reloading

**HBP\*\*\*** High Back Pressure: Indicates high evaporating temperatures, typically -5°C up to +15°C, (appliances such as e.g., dehumidifiers, liquid coolers, and heat pumps)



# 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



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