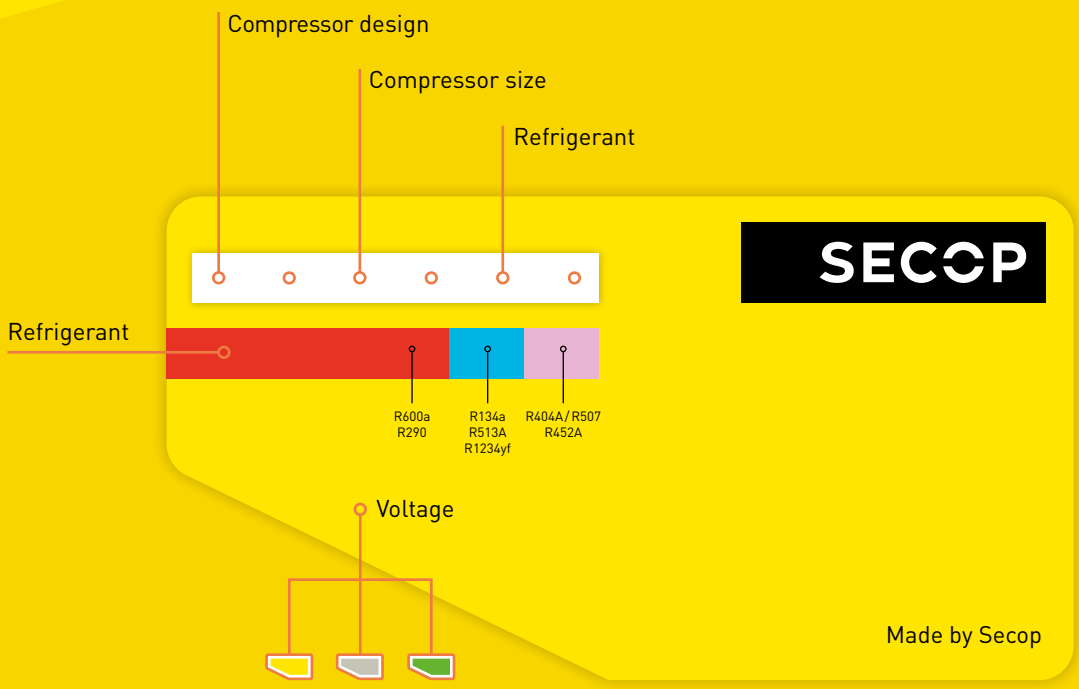
Secop is the first choice for partners looking for leading-edge refrigeration solutions and a premium customer experience.

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

KEY TO COMPRESSOR TYPE DESIGNATION



Stationary Cooling

Mobile Cooling

Medical Cooling

Variable-Speed Drive

Natural Refrigerants

KEY TO AC COMPRESSOR TYPE DESIGNATION

P / T / D / N / F / S / G-Series

1	1b				2						
Compressor design	Protector location				Optimization level						
	Internal		External								
	PTC LST	Relay HST	PTC	Relay	Low ← Standard → High						
P	L				L	Blank	E[a]	Semi-direct intake			
T			T	F			E[b]	S	Y[a][b]	X[a]	
D								Semi-direct or direct intake			
N											U[a]
F	R										
S	C		C				E	Direct intake			
G	S							Semi-direct intake			

3		4		5	6
Compressor size		Application range please refer to data sheet for details	Refrigerant	Code letter for starting characteristics	Generation
Capacity at rating point	Displacement				
20 30 35 50		C = LBP	R22	NOTE: Starting characteristics or Specific conditions cannot be used at the same time	Blank → first generation
	2.5, 3, 4 4.5, 4.8, 5 5.7, 6, 6.5 7, 7.5, 8 8.7, 9, 10	CL = LBP	R404A/R507		
		CM = LBP	R22		
		CN = LBP/MBP	R290		
		CNL = LBP	R290		
		D = HBP	R22		
		DL = HBP	R404A/R507, R407C		
		DN = HBP	R290		
	4, 4.8 5.7, 6.5 7.5, 8.7 9.4, 10	F = LBP/(MBP)	R134a	Blank → universal (principal rule)	.1 → updated first generation
		FT = LBP tropical	R134a		
		G = LBP/MBP/HBP	R134a		
		GH = Heat pump	R134a		
		GHH = Heat pump optimized	R134a		
	5.2, 5.5, 5.7 6, 6.1, 7, 7.3 8.0, 8.4, 8.8, 9 10, 11, 12.6 13, 13.3, 15	K = LBP/(MBP)	R600a	K = LST characteristics (capillary tube)	.2 → second generation
		KT = LBP/(MBP) tropical	R600a		
		MF = MBP	R134a		
		MK = MBP	R600a		
	6 7.5 8.5 10 11	ML = MBP	R404A/R507	X = HST characteristics (expansion valve)	.3 → third generation
		MN = MBP	R290		
	10 12 15 18 21	S = LBP/HBP (service)	R426A R401A/R401B R409A/R409B	S → Specific conditions (refer to data sheet)	.4 → fourth generation
	18 21 26 34	ST = LBP tropical (service)	R426A R401A/R401B R409A/R409B		

L = Low

Blank = Standard

S = Semi-direct intake
E = Energy-optimized
Y = High energy-optimized +
X = High energy-optimized ++
U = High energy-optimized +++

a) = Run capacitor compulsory
b) = Run capacitor optional

Variable Speed Compressors

1	2			3
Compressor design	Optimization level			Compressor size
	Low ← Standard → High			Displacement
DLV		Blank		4.0 5.7
NLV				8.0 10 12.6
SLV			E	12 15 18

4		5	6
Application range please refer to data sheet for details	Refrigerant	Code letter for starting characteristics	Generation
F = LBP/(MBP)	R134a	Blank → universal (principal rule) K = LST characteristics (capillary tube) X = HST characteristics (expansion valve)	Blank → first generation .1 → updated first generation .2 → second generation
K = LBP/(MBP)	R600a		
CL = LBP	R404A/R507		
ML = MBP	R404A/R507		
CN = LBP/MBP	R290		
CNL = LBP	R290		
MN = MBP	R290		

1 The first letter of the denomination (P, T, D, N, F, S, or G) indicates the compressor series. LV or V means variable speed compressor.

1b The second letter for fixed speedcompressors indicates motor protection placing.

2 L, E, Y, X and U mean different energy optimization steps. S means semi direct suction. On all these mentioned types the indicated suction connector has to be used. Using the wrong connector as suction connector will lead to reduced capacity and efficiency.

3 A number indicates the displacement in cm^3, but for PL compressors the number indicates the nominal capacity.
The letter after the displacement indicates which refrigerant must be used as well as the field of application for the compressor.

4 LBP (Low Back Pressure) indicates the range of low evaporating temperatures, typically -10°C down to -35°C or even -45°C, for use in freezers and refrigerators with freezer compartments. MBP (Medium Back Pressure) indicates the range of medium evapo rating temperatures, typically -20°C up to 0°C, such as in cold cabinets, milk coolers, ice machines and water coolers. HBP (High Back Pressure) indicates high evaporating temperatures, typically -5°C up to +15°C, such as in dehumidifiers and some liquid coolers. T as extra character indicates a compressor intended for tropical application. This means high ambient temperatures and capability of working with more unstable power supply.

5 The next letter in the compressor denomination provides information on the starting torque. If, as principal rule, the compressor is intended for LST (Low Starting Torque) and HST (High Starting Torque), the place is left empty.
The starting characteristics depend on the electrical equipment chosen. K indicates LST (capillary tube and pressure equalization during standstill) and X indicates HST (expansion valve or no pressure equalization).

6 The final letter (separated by a dot) mentions the generation of the compressor.

KEY TO AC COMPRESSOR
TYPE DESIGNATION – K-SERIES

K-Series	1	2	3	4	5	6	group
	H	X	K	12	A	T	example

Group#6: Nominal Voltage Range
A 220–240 V~ 50 Hz
E 115–127 V~ 60 Hz
G 220–240 V~ 50 Hz &
208–230 V~ 60 Hz
T 200–240 V~ 50 Hz

Group#5: Application,
starting characteristics
A LBP, LST
N LBP/(MBP), LST
M LBP/MBP, LST

Group#4: Displacement in **cm³**
Values bigger than 20 have to be divided by 10

Group#3: Compressor design
K for K-Series (formerly KAPPA)

Group#2: Performance level
M, **T**, **K**, **X**, **Z**, **A** for Medium Efficiency → Superior Efficiency

Group#1: Refrigerant
H for R600a, **G** for R134a

KEY TO AC COMPRESSOR
TYPE DESIGNATION – NEW SERIES

KL-Series	1	2	3	4	5	6	7	group
	KL	F	6.6	M	N	D	S	example

Group#7: Characteristics
Blank LST or HST
K LST (capillary tube)
X HST (expansion valve)
S Specific Conditions*
*please refer to data sheet for details

Group#6: Nominal Voltage Range*
D 220-240 V~ 50 Hz
H 115-127 V~ 60 Hz
I 208-230 V~ 60 Hz
M 110-115 V~ 50 Hz and 115-127 V~ 60 Hz
(dual frequency types)
N 220-240 V~ 50 Hz and 208-230 V~ 60 Hz
(dual frequency types)
Q 200-240 V~ 50 Hz (tropical)
S 220-240 V~ 60 Hz (tropical)
T 200-240 V~ 50 Hz and 208-230 V~ 60 Hz
(dual frequency types, tropical)
*please refer to data sheet for details

Group#5: Refrigerant
N R290
K R600a
F R134a and/or R513A and/or R1234yf
L R404A/R507 and/or R452A
S others ...

Group#4: Application Range
L LBP
M MBP
H HBP
C LBP and MBP
G LBP and MBP and HBP

Group#3: Displacement in **cm³**
(rounded values, one decimal used below 10 cm³)

Group#2: Optimization level (efficiency), **A**, **B**, **C** ...

Group#1: Compressor design **KL**

KEY TO DC COMPRESSOR TYPE DESIGNATION

1	2		3		4	5
Compressor design	Compressor size		Application range please refer to data sheet for details	Refrigerant	Special features (optional, can be used in combination)	Generation
	Capacity at rating point	Displacement				
BD (P/T-Housing)	35 50 80 100 250 350		CN = LBP/MBP CL = LBP F = LBP/MBP/(HBP) GH = (LBP/MBP)/HBP K = LBP/MBP/(HBP)	R290 R404A/507 R134a R134a/R1234yf R134a R600a	–AUTO = automotive –VSD = variable speed drive –HD = heavy duty (can handle extreme vibrations) –B = bus-optimized (optimized for rough vehicle motions) –AM = aftermarket (optimized for aftermarket appliances)	Blank → first generation .2 → second generation .3 → third generation
BD (Micro)		1.4				
BDN (Nano)	45 50				–A = automotive –A-L = automotive-lite	
PBC- (Micro)		1.4				
PBC- (P-Housing)		2.0 2.5				

1 The first letter of the denomination indicates compressor series.
2 For BD Micro compressors a number indicates the displacement in cm^3, but for BD Nano and BD compressors based on P/T housing the number indicates the nominal capacity.
3 The letter after the displacement indicates which refrigerant must be used as well as the field of application for the compressor.
LBP (Low Back Pressure) indicates the range of low evaporating temperatures, typically -10°C down to -35°C or even -45°C.
MBP (Medium Back Pressure) indicates the range of medium evaporating temperatures, typically -20°C up to 0°C.
HBP (High Back Pressure) indicates high evaporating temperatures, typically -5°C up to +15°C.
R134a or **R134a/R1234yf** → **F**: BD Compressors with denominations ending with F are primarily designed for low evaporating temperatures (LBP/MBP) but will also work with high evaporating temperatures (HBP).
R134a → **GH**: Compressors with denominations ending with GH are designed for high evaporating temperatures (HBP).
R290 → **CN**: Compressors with denominations ending with CN are designed for low evaporating temperatures (LBP) and medium evaporating temperatures (MBP).
R404A/R507 → **CL**: Compressors with denominations ending with CL are primarily designed for low evaporating temperatures (LBP).
R600a → **K**: All compressors for R600a have denominations ending with K after the number for displacement or capacity. They are primarily designed for low evaporating temperatures (LBP/MBP) but will also work with high evaporating temperatures (HBP).
4 The next letter in the compressor denomination provides information on special features the BD compres sor offers.
5 The final letter (separated by a dot) mentions the generation of the compressor.

KEY TO MEDICAL COMPRESSOR TYPE DESIGNATION

M Models	1	2	3	4	5	6	7	8	group
	M	P	2		U	V	ULTM		example

Group#7: Generation
Blank first generation
.2 second generation
.3 third generation

Group#6: ULT Development Stage
ULTM Multiple stage ULT
ULTS Single stage ULT
Blank no ULT compressor

Group#5: Nominal Voltage Range*
D 220-240 V~ 50 Hz
H 115-127 V~ 60 Hz
I 208-230 V~ 60 Hz
M 110-115 V~ 50 Hz and 115-127 V~ 60 Hz (dual frequency types)
N 220-240 V~ 50 Hz and 208-230 V~ 60 Hz (dual frequency types)
V VSD controller (electronic unit)
X FSD controller (electronic unit)
*please refer to data sheet for details

Group#5: Refrigerant
N R290
K R600a
F R134a and/or R513A and/or R1234yf
L R404A/R507 and/or R452A
S R170
U universal or mixture

Group#4: Application Range
L LBP
M MBP
H HBP
C LBP and MBP
G LBP and MBP and HBP
Blank ULT compressor (see also **Group#6**)

Group#3: Displacement in **cm^3** (rounded values, no decimals)

Group#2: Compressor design **P**, **K**, **N**, **S**, **G**, **B (BD Nano)**, **M (BD Micro)**

Group#1: M for medical

SECOP GROUP: AROUND THE WORLD

12
international partners for advanced developments

33
laboratories located in Austria, Germany, Slovakia, China, U.S.A., and Turkey

160
R&D engineers and technicians

440
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
- **Gleisdorf:** R&D
- **Zlaté Moravce:** R&D, Logistics, and Manufacturing
- **Tianjin:** Sales, R&D, Logistics, and Manufacturing
- **Atlanta:** Sales and Logistics

Stationary Cooling

Mobile Cooling

Medical Cooling

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