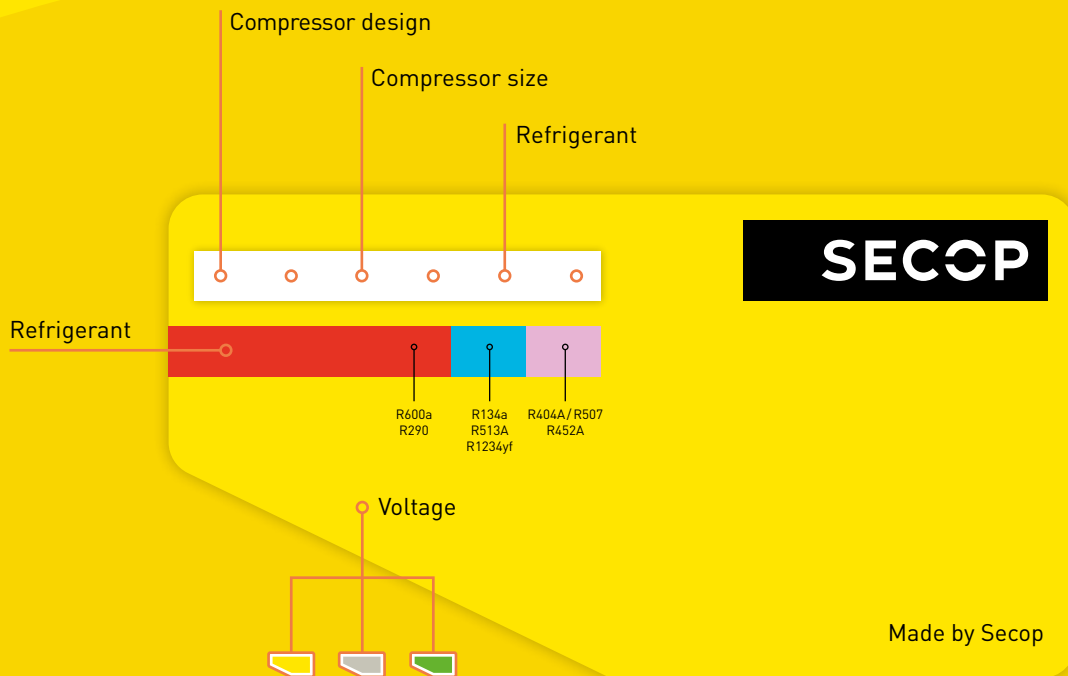


KEY TO COMPRESSOR TYPE DESIGNATION



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

Compressor design	1b Protector location				2 Optimization level						3 Compressor size		4 Application range <small>please refer to data sheet for details</small>	4 Refrigerant	5 Code letter for starting characteristics	6 Generation	
	Internal		External		Low ← Standard → High						Capacity at rating point	Displacement					
	PTC LST	Relay HST	PTC	Relay													
P	L				L	Blank	E ^{a)}	Semi-direct intake	Y ^{a b)}	X ^{a)}	U ^{a)}	20		C = LBP	R22	NOTE: Starting characteristics or Specific conditions cannot be used at the same time	Blank → first generation
T							S	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			
D							E ^{b)}	Semi-direct or direct intake				4, 4.8 5.7, 6.5 7.5, 8.7 9.4, 10		CM = LBP	R22		
N							E	Semi-direct or direct intake				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		CN = LBP/MBP	R290		
F							R	6 7.5 8.5 10 11				GH = Heat pump		R22			
S							C	10 12 15 18 21				DL = HBP		R404A/R507, R407C			
G	S	18 21 26 34	DN = HBP	R290													

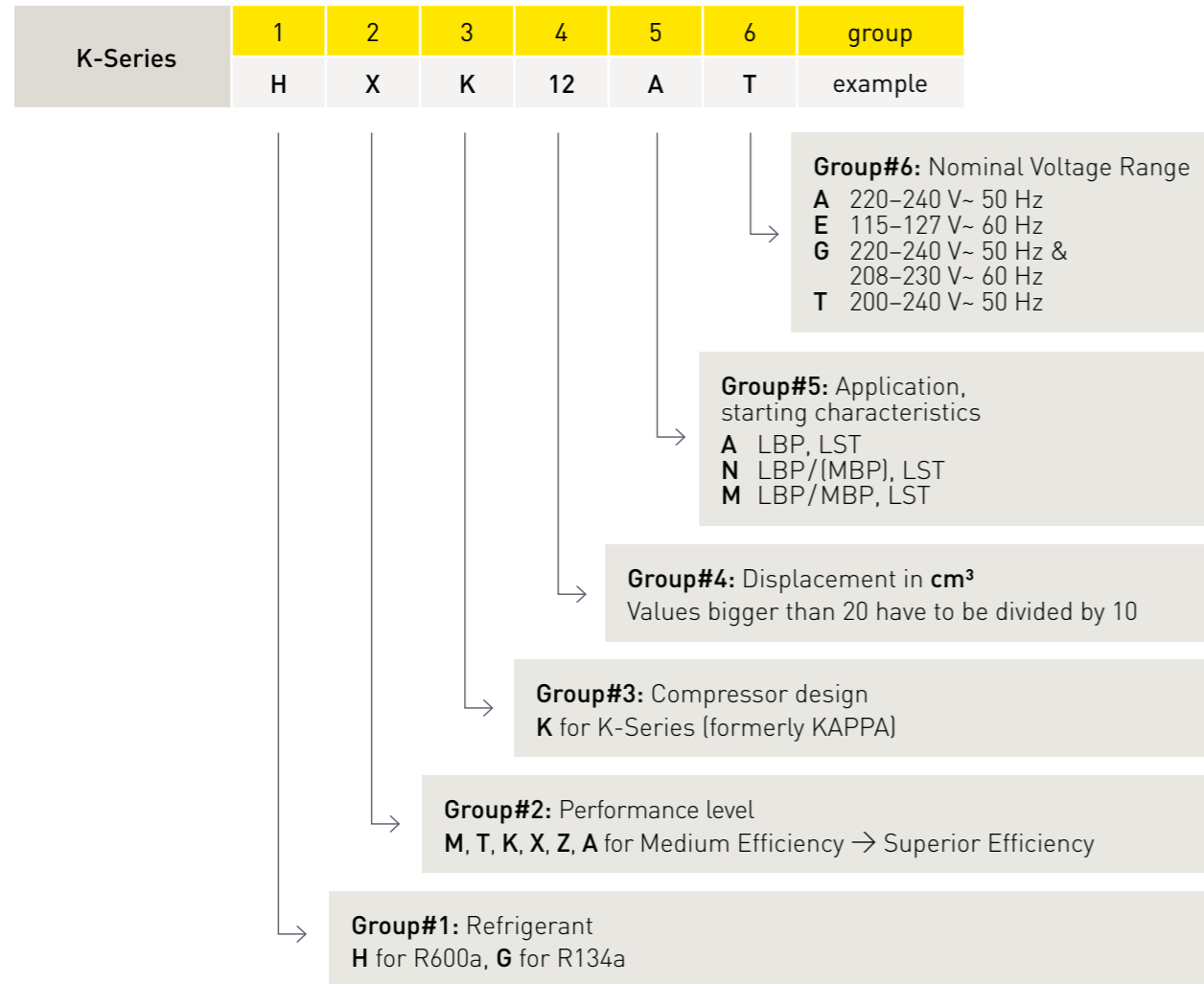
L = Low
Blank = Standard
S = Semi-direct intake
E = Energy-optimized
Y = High energy-optimized +
X = High energy-optimized ++
U = High energy-optimized +++
a) = Run capacitor compulsory
b) = Run capacitor optional

Variable Speed Compressors

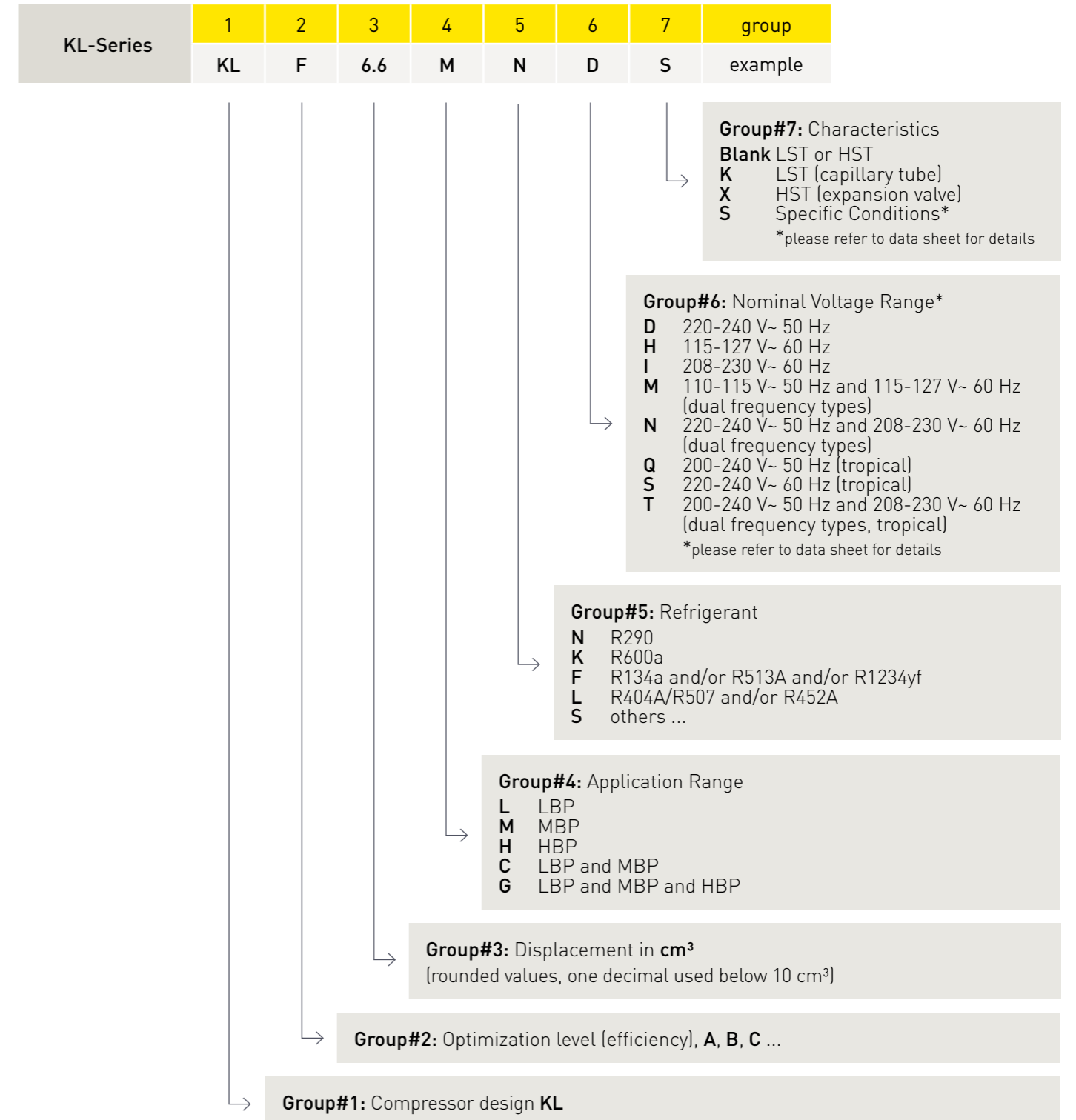
Compressor design	2 Optimization level		3 Compressor size		4 Application range <small>please refer to data sheet for details</small>	4 Refrigerant	5 Code letter for starting characteristics	6 Generation
	Low ← Standard → High		Displacement					
DLV	Blank			4.0 5.7	F = LBP/(MBP)	R134a	Blank → universal (principal rule)	Blank → first generation
NLV				8.0 10 12.6	CL = LBP	R404A/R507		
SLV				E	12 15 18	CN = LBP/MBP		
					CNL = LBP	R290	K = LST characteristics (capillary tube)	.1 → updated first generation
					MN = MBP	R290	X = HST characteristics (expansion valve)	.2 → second generation

- 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.
- The second letter for fixed speed compressors indicates motor protection placing.
- 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.
- A number indicates the displacement in cm³, 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.
- 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 evaporating 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.
- 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).
- The final letter (separated by a dot) mentions the generation of the compressor.

KEY TO AC COMPRESSOR TYPE DESIGNATION – K-SERIES



KEY TO AC COMPRESSOR TYPE DESIGNATION – NEW SERIES

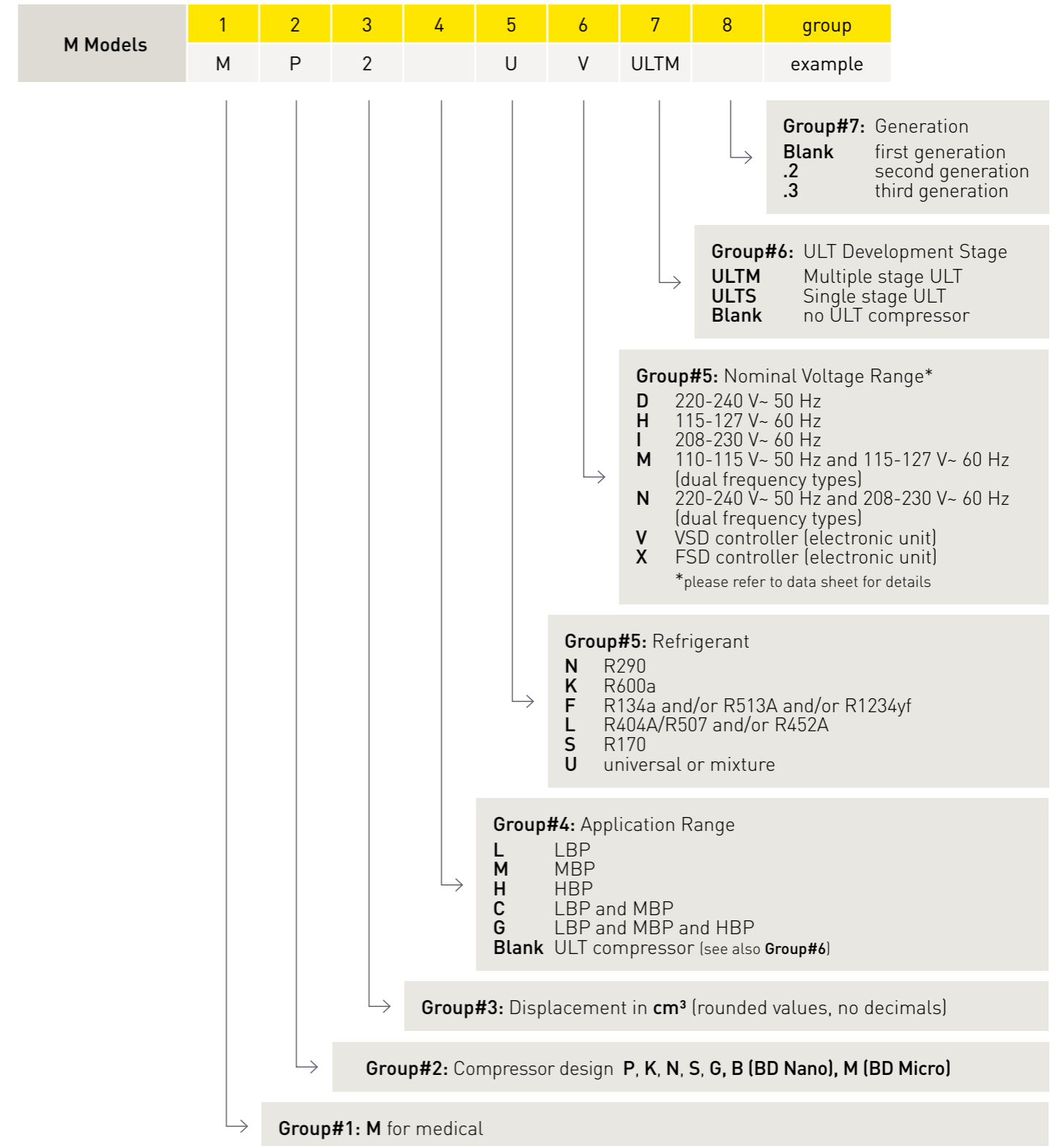


KEY TO DC COMPRESSOR TYPE DESIGNATION

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

- The first letter of the denomination indicates compressor series.
- For BD Micro compressors a number indicates the displacement in cm³, but for BD Nano and BD compressors based on P/T housing 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.
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).
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).
- The next letter in the compressor denomination provides information on special features the BD compressor offers.
- The final letter (separated by a dot) mentions the generation of the compressor.

KEY TO MEDICAL COMPRESSOR TYPE DESIGNATION



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

