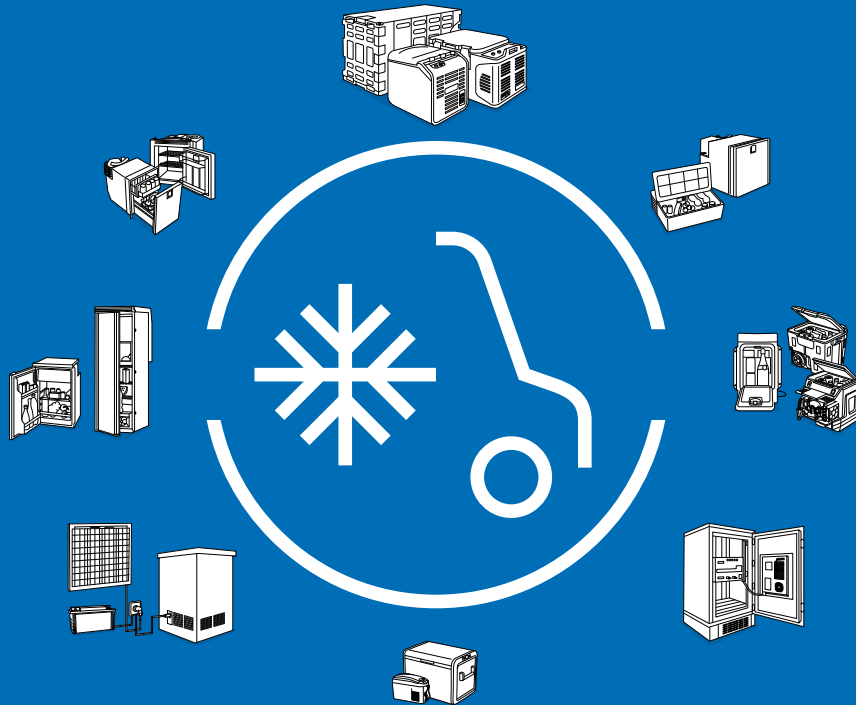


Secop strives to be the first choice for partners searching for leading-edge refrigeration solutions and premium customer experience.

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

DC-POWERED COMPRESSORS FOR MOBILE COOLING

SECCP



Stable

Portable beyond limits and reliable operation even when tilted up

12 | 24 | 48V DC Compressors

Applicable for mobile applications and multiple voltages with minimum energy consumption and maximum performance



Variable Speed
Efficiency



Premium
Controllers



BD35F/50F/80F, BD35/50K, BD250GH.2, BD350GH

BD35F/50F/80F for 12/24 V DC power supply can be used in mobile refrigerators and freezers with refrigerant R134a. The BD250GH.2 and the BD350GH compressors in 12/24 or 48V DC versions are R134a HBP compressors used for mobile spot cooling systems or telecommunication cooling. BD35/50K (R600a) and BD80/100CN (R290) are compressors that use HFC-free refrigerants. The BD50K offers 25% additional cooling capacity compared to the BD35K compressor. All compressors are equipped with an electronic unit with built-in protection against shortages, operation outside temperature limits, and destructive battery discharge. The advanced micro-controller technology enables new functions such as an electronic thermostat, fan speed, ECO function, alarm log, event log, and software main switch. Thanks to an extensive voltage rate the BD compressors are ideal for operation by solar power. The exceptionally low-starting current eliminates the need for batteries if an ice bank is used for energy storage. When storing the converted sun energy in ice packs, the cabinet can be kept at desired temperatures

both night and day. This feature offers numerous uses in areas without power supply such as for the storage and transportation of vaccines, drugs, ice cream stands in holiday resorts, food preservation under off road conditions, and refrigerators in boats to name only a few.

BD35F-HD.2, BD250GH.2-HD (Heavy Duty)

BD35F-HD.2, BD250GH.2-HD (48V) are special versions which can handle extreme vibrations

BD35F-B, BD35K-B (Bus-optimized)

The BD35F-B and the BD35K-B are special versions optimized for rough vehicle motions, especially in buses.



TOOL4COOL® Software

Tool4Cool® is a unique PC software tool that enables you to precisely configure your Secop BD compressors to your cooling systems. Via microprocessor-based controllers, Tool4Cool® gives you easy access to all parameters. These can be changed, monitored, downloaded or uploaded to get the optimum performance out of your cooling system.

Compressors R134a R404A/R507* R600a**·R290*** R1234yf****	Capacity [W] at max. speed EN12900 Household/CECOMAF ASHRAE													
	Evaporating temperature [°C]													
	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10	15
BDN45F	-	-	29 36	42 52	47 59	58 72	77 96	98 122	121 150	-	-	-	-	-
BDN45F****	-	-	32 41	45 58	50 65	60 78	78 101	98 127	119 154	-	-	-	-	-
BD1.4F-VSD.2/.3 /-HD	-	-	12 15	23 29	27 34	36 45	52 65	71 88	92 114	116 144	142 177	155 193	172 214	203 254
BD1.4F-VSD.3****	-	-	13 17	24 32	29 38	38 50	54 70	71 93	91 118	111 145	134 174	144 188	158 206	182 239
BD35F /-B /-HD.2	-	-	27 34	36 45	40 51	50 63	70 87	94 117	122 153	-	-	-	-	-
BD50F	-	-	37 46	52 64	58 72	71 88	95 117	123 152	157 194	-	-	-	-	-
BD80F	-	-	55 68	78 96	87 108	105 130	138 170	176 218	221 274	-	-	-	-	-
BD250GH.2	-	-	-	61 76	69 86	87 108	119 148	156 194	200 249	251 311	308 383	336 418	373 465	446 556
BD250GH.2 /-HD (48V)	-	-	-	64 80	73 91	91 113	124 153	162 201	208 257	261 323	322 400	352 437	392 488	472 589
BD350GH (12V)	-	-	-	126 156	139 173	169 209	220 273	282 349	355 440	440 546	540 670	588 731	654 814	786 979
BD350GH (24V)	-	-	-	126 156	139 173	169 209	220 273	282 349	355 440	440 546	540 670	588 731	654 814	786 979
BD350GH (48V)	-	-	-	121 150	135 167	164 203	216 267	277 343	350 434	436 540	535 664	584 725	650 808	781 973
BD220CL*	83 96	121 140	166 193	220 255	240 279	283 328	355 413	439 511	535 624	-	-	-	-	-
BDN50K**	-	-	36 45	50 62	55 68	66 81	83 102	103 127	128 156	-	-	-	-	-
BD35K /-B**	-	-	25 31	36 44	40 49	49 60	65 79	84 102	106 129	-	-	-	-	-
BD50K**	-	-	30 36	42 51	47 57	58 70	77 94	101 123	129 158	162 198	199 244	218 266	242 296	-
BD80CN***	31 35	45 51	62 69	82 91	90 100	105 118	133 148	164 184	-	-	-	-	-	-
BD100CN***	44 49	62 70	83 93	108 120	117 131	137 153	170 190	209 233	-	-	-	-	-	-

Compressors R134a R404A/R507* R600a**·R290*** R1234yf****	Code numbers	Power consumption [W] at max. speed													
		Evaporating temperature [°C]													
		-40	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10	15
BDN45F	109Z0400	-	-	29	36	39	44	52	59	66	-	-	-	-	-
BDN45F****	109Z0400	-	-	33	39	42	47	54	61	67	-	-	-	-	-
BD1.4F-VSD.2/.3 /-HD	109Z0206 /209 /250 /251	-	-	27	34	36	41	48	55	61	68	75	77	81	87
BD1.4F-VSD.3****	109Z0209	-	-	30	37	40	44	51	57	63	68	74	76	78	83
BD35F /-B /-HD.2	101Z0200 /204 /205 /216	-	-	35	41	44	49	57	66	75	-	-	-	-	-
BD50F	101Z1220 /0203	-	-	45	57	61	68	80	91	104	-	-	-	-	-
BD80F	101Z0280	-	-	66	83	89	100	118	138	161	-	-	-	-	-
BD250GH.2	101Z0406	-	-	-	65	69	78	91	104	117	132	150	158	170	194
BD250GH.2 /-HD (48V)	101Z0405 /410	-	-	-	72	77	85	99	113	128	143	160	167	177	196
BD350GH (12V)	102Z3015	-	-	-	140	149	168	197	228	259	292	325	340	358	391
BD350GH (24V)	102Z3016	-	-	-	122	129	144	169	194	221	248	276	288	303	330
BD350GH (48V)	102Z3031	-	-	-	131	139	155	181	208	236	265	294	307	323	352
BD220CL*	102Z3020	121	147	173	200	209	227	255	284	314	-	-	-	-	-
BDN50K**	109Z0420	-	-	34	42	44	49	56	63	70	-	-	-	-	-
BD35K /-B**	101Z0211 /214	-	-	34	41	44	48	54	60	67	-	-	-	-	-
BD50K**	101Z0213	-	-	42	50	53	59	68	77	86	94	103	107	111	-
BD80CN***	101Z0403	47	55	63	72	75	81	89	97	-	-	-	-	-	-
BD100CN***	101Z0401	55	66	78	89	93	100	110	120	-	-	-	-	-	-

*R404A/R507 · **R600a · ***R290 · ****R1234yf

BD1.4F-VSD.3, BD1.4F-VSD-HD (BD Micro)

The BD1.4F-VSD.3 (new BD Micro generation with optimized noise level and approved for refrigerant R1234yf) is 60% smaller than previous models and weighs in at only 2.3 kilograms. Perfect for 10-30 liter in car, van, boat cabinets, or portable boxes that need to fit into tight spaces without compromising storage space. This powerhouse of a compressor makes it easier than ever to provide leading-class mobile refrigerators. Enabling the variable speed function increases the system's COP. Low energy consumption is good for car, boat, or van batteries as well as the environment. The optimized, low-noise motor ensures outstanding performance for offering that extra degree of luxury on the go. The electronic thermostat (NTC sensor support) provides an accurate temperature while the failure detection allows fast fault diagnosis. The computer interface makes it easier for customization. BD1.4F-VSD-HD is a special version which can handle extreme vibrations (Heavy Duty).

BDN45F, BDN50K (BD Nano)

Secop's latest innovation for mobile refrigeration is the new BD Nano compressor which is available for low GWP refrigerants R600a and R1234yf as well as for R134a. This compact very low vibrating low noise emitting compressor is the ideal solution for small and silent cooling units. Together with its premium controller, this highly efficient mobile direct current compressor preserves battery life during cooling. Compared to its predecessor models, the BD Nano offers enhanced connectivity and lower EMI, thus making it easier for our customers to meet the stringent standards for equipment approvals, they also achieve a lower TCO. The extreme compact BD Nano provides the same cooling capacity as much bigger BD35F/50F/35K/50K compressors yet with unrivaled efficiency. The BD Nano features some technical innovations such as a new mobile stability concept, an improved lubrication concept, miniaturized new mufflers, a compact housing, a miniaturized new motor, improved valves, and compact versatile controllers, among other things.

PL-BD / TL-BD Compressors R134a R404A/R507* R600a** R290***	Electronic units (voltages & code numbers)											
	Code numbers	Standard 12/24V DC 101N0242	High Speed 12/24V DC 101N0390	AEO 12/24V DC 101N0340	Solar 10-45V DC 101N0420	AC/DC converter 12/24V DC & 100-240V AC 101N0510	Automotive 12/24V DC 101N0680	101N08xxx 12V DC 101N0820-0800 (alt.: 101N0830)	101N8xxx 24V DC 101N0820-0810	101N07xx 24V DC 101N0715	Telecom 48V DC 101N0720	Telecom 48V DC 101N0732
BD35F	101Z0200	✓	-	✓	✓	✓	✓	-	-	-	-	-
BD35F (inch con.)	101Z0204	✓	-	✓	✓	✓	✓	-	-	-	-	-
BD35F-B	101Z0205	✓	-	✓	-	✓	✓	-	-	-	-	-
BD35F-HD.2	101Z0216	✓	-	✓	-	✓	✓	-	-	-	-	-
BD50F	101Z1220	✓	-	✓	-	✓	✓	-	-	-	-	-
BD50F (inch con.)	101Z0203	✓	-	✓	-	✓	✓	-	-	-	-	-
BD80F	101Z0280	-	✓	-	-	-	-	-	-	-	-	-
BD250GH.2	101Z0406	-	✓	-	-	-	-	-	-	-	-	-
BD250GH.2 (48V)	101Z0405	-	-	-	-	-	-	-	-	-	-	✓
BD250GH.2-HD (48V)	101Z0410	-	-	-	-	-	-	-	-	-	-	✓
BD350GH (12V)	102Z3015	-	-	-	-	-	-	✓+✓	-	-	-	-
BD350GH (24V)	102Z3016	-	-	-	-	-	-	✓+✓	-	-	-	-
BD350GH (48V)	102Z3031	-	-	-	-	-	-	-	✓	-	-	-
BD220CL*	102Z3020	-	-	-	-	-	-	✓+✓	-	-	-	-
BD35K /-B**	101Z0211 /214	✓	-	✓	✓	✓	✓	-	-	-	-	-
BD50K**	101Z0213	-	✓	-	-	-	-	-	-	-	-	-
BD80CN***	101Z0403	✓	-	✓	✓	✓	✓	-	-	-	-	-
BD100CN***	101Z0401	-	✓	-	-	-	-	-	-	-	-	-
TOOL4COOL® applicable		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

BD MICRO / BD NANO Compressors R134a R600a** R134a/R1234yf****	Code numbers	Electronic units	
		Variable Speed (VSD) 12/24V DC 101N2130	Leisure 12/24V DC 101N2740
		BDN45F****	109Z0400
BDN50K**	109Z0420	-	✓
BD1.4F-VSD.3****	109Z0209	✓	-
BD1.4F-VSD-HD	109Z0250	✓	-
BD1.4F-VSD.2 (inch con.)	109Z0206	✓	-
BD1.4F-VSD-HD (inch con.)	109Z0251	✓	-
TOOL4COOL® applicable		✓	✓

*R404A/R507 · **R600a · ***R290 · ****R134a/R1234yf

APPLICATIONS	Compressors															
	BDN45F	BDN50K	BD1.4F-VSD.2	BD1.4F-VSD-HD	BD35F	BD35F-B	BD35F-HD.2	BD35K /-B	BD50K	BD50F	BD80F	BD80CN	BD100CN	BD250GH.2	BD350GH	BD220CL
Truck refrigerators	✓	✓	✓	✓	-	✓	-	✓	✓	✓	-	✓	-	-	-	-
Boat refrigerators	✓	✓	✓	-	✓	-	-	✓	✓	✓	✓	✓	✓	-	-	-
Bus refrigerators	✓	✓	✓	-	✓	✓	-	✓	✓	-	-	✓	-	-	-	-
RV refrigerators	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	-	✓	-	-	-	-
Portable boxes	✓	✓	✓	-	✓	-	-	✓	✓	✓	✓	-	-	-	-	-
Car minibars (high end)	✓	✓	✓	-	✓	-	-	✓	-	-	-	-	-	-	-	-
Car minibars (SUV, MPV)	✓	✓	✓	-	✓	-	-	✓	-	-	-	-	-	-	-	-
Spot cooling (e.g. trucks)	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	-
Van boxes	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
Battery cooling	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	-
Solar refrigerators	✓	✓	-	-	✓	-	-	✓	✓	-	-	✓	-	-	-	-

**BD80/100CN**

R290, -40°C, -5°C evap. temp.

Freezer applications, solar-powered applications, ice cream boxes up to 200 l, 16-203 W / 20-250 W cooling capacity*.

**BD35F/50F/80F Basic**

R134a, -30°C, +10°C, -5°C (BD80F) evap. temp.

All mobile applications for portable boxes, boats, trucks, solar-powered applications, etc., 16-152 W / 21-191 W / 35-221 W cooling capacity*.

**BD35K Multivoltage and BD50K**

R600a, -30°C, +10°C evap. temp.

Solar-powered applications, etc., 100-250 l coolers, BD35K can be powered with AC and DC, 85-240 V AC 50/60 Hz, 12-24 V DC, automatic selection of AC when available. 13-128 W and 17-242 W cooling capacity*.

**BD35F/50F Multivoltage**

R134a, -30°C, +10°C evap. temp.

All mobile applications for portable boxes, boats, trucks, etc., can be powered with AC and DC, 85-240 V AC 50/60 Hz, 12-24 V DC, automatic selection of AC when available, 16-152 W / 21-191 W cooling capacity*.

**BD1.4F-VSD.3 (BD Micro)**

R134a/R1234yf, -30°C, +15°C evap. temp.

In-car cabinets and all mobile applications for portable boxes, boats, trucks, etc., 10-203 W cooling capacity*.

**BD250GH.2**

R134a, -25°C, +15°C evap. temp.

Designed for cabin cooling in trucks during nighttime, very silent operation, 31-446 W cooling capacity*.

**BDN45F and BDN50K (BD Nano)**

R134a/R1234yf, R600a, -30°C, +5°C evap. temp.

In-car cabinets and all mobile applications for portable boxes, boats, trucks, etc., 14-130 W and 17-146 W cooling capacity*.

**BD350GH**

R134a, -25°C, +15°C evap. temp.

Tailored for spotcooling systems in sleeping compartments in trucks, caravans, golf buggies, etc., 85-786 W cooling capacity*.

* EN12900/CECOMAF conditions: Condensing temp.: 55°C | Suction gas temp.: 32°C | Ambient temp.: 32°C, | Liquid temp.: no subcooling

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SECOP

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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.

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