

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

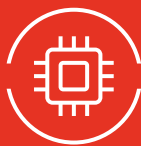
Portable beyond limits and reliable operation even when tilted up

12 | 24 | 48 V DC Compressors

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



VARIABLE
SPEED DRIVE



PREMIUM
CONTROLLERS



BD COMPRESSORS BRING COMFORT AT WORK AND LEISURE

The direct current compressors **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 48 V 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.

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.

Second to none – even cooling “without power supply”

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.

BD1.4F-AUTO.3 (BD Micro)

The BD1.4F-AUTO.3 is the latest generation of BD Micro compressors specially designed for high-end car minibars.

It features an optimized noise level and is also approved for refrigerant R1234yf.

BD1.4F-VSD.3 (BD Micro Variable Speed Drive)

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.

BD35F-HD.2, BD250GH.2-HD, BD1.4F-VSD-HD (Heavy Duty)

BD35F-HD.2, BD250GH.2-HD (48V) and BD1.4F-VSD-HD and are new 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.

BD50K (Isobutane, R600a)

The new BD50K offers 25% additional cooling capacity compared to the BD35K compressor.



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
BD1.4F-AUTO.3	-	-	-	16 20	19 24	26 32	37 47	51 64	67 84	85 106	105 131	-	-	-
BD1.4F-AUTO.3****	-	-	-	17 23	21 27	27 35	39 50	52 68	67 87	83 108	100 130	-	-	-
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	392 498	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	-	-	-	-	-
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
BD1.4F-AUTO.3	109Z0106	-	-	-	24	26	29	34	39	45	50	56	-	-	-
BD1.4F-AUTO.3****	109Z0106	-	-	-	26	28	31	36	41	46	51	55	-	-	-
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	-	-	-	-	-
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

COMPRESSORS R134a R404A/R507* R600a** R290***	Electronic units (voltages & code numbers)												
	Code numbers	Standard 12-24V DC 101N0212	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 101N0650	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		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

COMPRESSORS R134a R134a/R1234yf****	Code numbers	Electronic units			Compressors															
		Variable Speed (VSD) 12-24V DC 101N2100	Variable Speed (VSD) with AC/DC converter 12-24V DC & 100-240V AC 101N5100	Automotive 12V DC 101N1010	BD1.4F-AUTO.3	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	
BD1.4F-AUTO.3****	109Z0106	-	-	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BD1.4F-VSD.3****	109Z0209	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BD1.4F-VSD-HD	109Z0250	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BD1.4F-VSD.2 (inch connectors)	109Z0206	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BD1.4F-VSD-HD (inch connectors)	109Z0251	✓	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓
TOOL4COOL® applicable		✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

**BD80/100CN**

R290, -40°C, -10°C evap. temp.

Freezer applications, solar-powered applications, ice cream boxes up to 200 l, 20-164 W / 31-209 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*.

**BD35K Multivoltage and BD50K**

R600a, -30°C, +10°C evap. temp.

Solar-powered applications, etc., 100-250 l coolers, 13-242 W cooling capacity*. 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.

**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, 15-152 W / 20-191 W cooling capacity*.

**BD1.4F-AUTO.3 and BD1.4F-VSD.3**

R134a/R1234yf, -30°C, +5 and +15 / 0°C evap. temp.

In-car cabinets and all mobile applications for portable boxes, boats, trucks, etc., 14-108 W and 7-218 W / 5-85 W cooling capacity*.

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

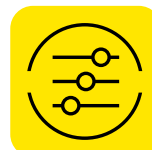
R134a, -30°C, +10°C evap. temp.

All mobile applications for portable boxes, boats, trucks, solar-powered applications, etc., 15-152 W / 20-191 W / 35-221 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*.

**TOOL4COOL®**
Flexible Control Settings**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.

* 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 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 has a long track record of successful projects to adopt energy efficient and green refrigerants that feature innovative solutions for both compressors and control electronics.



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