

WE HAVE MORE THAN 40 YEARS OF EXPERIENCE IN DEVELOPING DIRECT CURRENT COMPRESSORS AND HELPING CUSTOMERS BENEFIT FROM THE OPPORTUNITIES OF MOBILE REFRIGERATION TECHNOLOGY.

WITH IN-DEPTH KNOWLEDGE OF USE ACROSS VARIOUS APPLICATIONS, WE HAVE EARNED A POSITION AS MARKET LEADER, WORKING WITH OEM CUSTOMERS.

**SECOP**

## BD COMPRESSORS FOR EXTREME CONDITIONS

# 12|24|48

### DIRECT CURRENT COMPRESSORS

APPLICATION ALSO WITH MULTIPLE VOLTAGES WITH MINIMUM ENERGY CONSUMPTION AND MAXIMUM PERFORMANCE

# STABLE

### PORTABLE BEYOND LIMITS

RELIABLE OPERATION EVEN WHEN TILTED UP





## 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 using 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 like: 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 solar energy supply. The exceptionally low starting current eliminates the need for current batteries if an ice bank is used for energy storage. When storing the 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 like storage and transportation of drugs, ice cream stands in holiday resorts, food preservation under off road conditions, 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 especially designed for high end car minibars. It features an optimized noise level and it is also released for refrigerant R1234yf.

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
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					
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						
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
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			

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
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						
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
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			

\*\*\*\*\* Please refer to the individual compressor data sheets for the complete application range.



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

The BD1.4F-VSD.3 (new BD Micro generation with optimized noise level and released for refrigerant R1234yf) is 60% smaller than previous models and weighs in at only 2.3 kilos.

Perfect for 10-30 litre in car / van / boat cabinets or portable boxes that need to fit into tight spaces without compromising storage space. Specially designed for maximum efficiency and reliability 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/ van batteries – as well as the environment. The optimized, low noise motor ensures outstanding performance when you want to provide that extra degree of luxury on the move.

The electronic thermostat (NTC sensor support) provides an accurate temperature while the failure detection allows a 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 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 ***	Code numbers	Electronic units (voltages & 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			Applications	Compressors														
		Variable Speed (VSD) 12-24V DC 101N2100	Variable Speed (VSD) w. 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			✓	Truck refrigerators		✓	✓	✓		✓	✓	✓	✓		✓				
BD1.4F-VSD.3 *	109Z0209	✓			Boat refrigerators		✓		✓			✓	✓	✓	✓	✓	✓			
BD1.4F-VSD-HD	109Z0250	✓			Bus refrigerators		✓		✓	✓		✓	✓			✓				
					Portable boxes		✓		✓			✓	✓	✓	✓					
BD1.4F-VSD.2 (inch connectors)	109Z0206	✓	✓		Car minibars (high end)	✓	✓		✓			✓								
					Car minibars (SUV, MPV)		✓		✓			✓								
BD1.4F-VSD-HD (inch connectors)	109Z0251	✓			Spot cooling [e.g. trucks]													✓	✓	
					Van boxes										✓	✓	✓	✓	✓	✓
					Battery cooling													✓	✓	
					Solar cabinets				✓			✓	✓	✓		✓	✓			
TOOL4COOL® applicable		✓	✓	✓																





#### BD80/100CN

R290, -40°C, -10°C evap. temp.  
Freezer application, solar-powered systems,  
ice cream boxes up to 200 l, 20-164 W / 31-209 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.



#### 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\*.



#### 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\*.



#### 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\*.



#### 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\*.



#### BD35F/50F/80F Basic

R134a, -30°C, +10°C evap. temp.  
All mobile applications for portable boxes, boats, trucks,  
etc., 15-152 W / 20-191 W / 35-221 W cooling capacity\*.



#### 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

## OUR JOURNEY SO FAR

