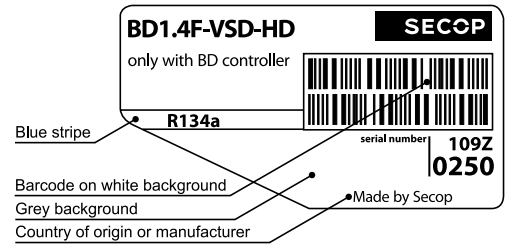


# BD1.4F-VSD-HD

## Heavy Duty Direct Current Compressor

### R134a, 12-24V DC



#### General

Code number (without electronic unit)	109Z0250
Electronic unit - Variable Speed	101N2100, 30 pcs: 101N2101
Approvals	-
Compressors on pallet	180

#### Application

Application	LBP/MBP/HBP	
Evaporating temperature °C	-30 to 15	
Voltage range VDC	9.6 - 17 / 19 - 34	
Max. condensing temperature continuous (short) °C	60 (70)	
Max. winding temperature continuous (short) °C	125 (135)	

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area

#### Cooling requirements

Application	LBP	MBP	HBP
32°C	S	S	S
38°C	S	S	S
43°C	S	S	S

Remarks on application:  
**HD (Heavy Duty) version of the BD1.4F-VSD which can handle extreme vibrations.**  
 For more info please contact: mobile@secop.com.

#### Motor

Motor type	permanet magnet, brushless DC	
Speed rpm	variable speed	
Resistance, all 3 windings (25°C)	mΩ 210	

#### Design

Displacement cm <sup>3</sup>	1.41	
Oil quantity (type) cm <sup>3</sup>	75 (polyolester)	
Maximum refrigerant charge g	150	
Free gas volume in compressor cm <sup>3</sup>	500	
Weight - Compressor/Electronic unit kg	2.1/0.11	

#### Standard battery protection settings (refer to 101N2100 Instructions for optional settings)

Voltage (0.1 steps)			Min. value	Default	Max. value
12V	± 0.3V DC, all values	Cut out	VDC 9.6	10.4	17
		Cut in diff.	VDC 0.5	1.3	10
24V	± 0.3V DC, all values	Cut out	VDC 19	21.3	27
		Cut in diff.	VDC 0.5	1.3	10

#### Dimensions

Height	mm	A	96.25
		B	91.25
		B1	88.00
		B2	25.20
Suction connector	location/I.D. mm   angle	C	6.2   25°
	material   comment	Cu-plated steel   Al cap	
Process connector	location/I.D. mm   angle	D	6.2   25°
	material   comment	Cu-plated steel   Al cap	
Discharge connector	location/I.D. mm   angle	E	5.0   0°
	material   comment	Cu-plated steel   Al cap	
Connector tolerance	I.D. mm	±0.09, on 5.0 +0.12/+0.20	

