

## BD1.4F-VSD.2 Direct Current Compressor R134a, 12/24V DC



### General

Code number (without electronic units)	109Z0206
Electronic unit - Variable Speed	101N2130, 30 pcs: 101N2131
Approvals	-
Compressors on pallet	180

### Application

Application	LBP/MBP/HBP
Evaporating temperature °F	-20 to 59
Voltage range VDC	9.6 - 17 / 19 - 34
Max. condensing temperature continuous (short) °F	140 (158)
Max. winding temperature continuous (short) °F	257 (275)

### Cooling requirements

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

Remarks on application:

**New generation with optimized noise level during rough vehicle motions.**

### Motor

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

### Design

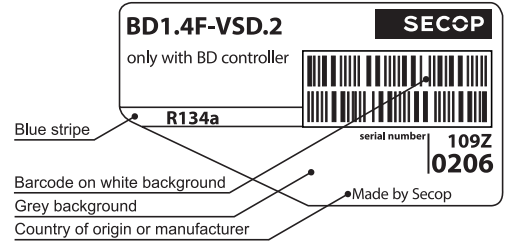
Displacement cu.in.	0.086
Oil quantity (type) fl.oz.	2.64 (polyolester)
Maximum refrigerant charge oz.	2.47
Free gas volume in compressor fl.oz.	17.60
Weight - Compressor/Electronic unit lbs.	4.63 / 0.24

### Standard battery protection settings (refer to 101N2130 Instructions for optional settings)

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

### Dimensions

Height	inch	A	3.79
		B	3.59
		B1	3.46
		B2	0.99
Suction connector	location/I.D. inch   angle	C	0.252-0.259   25°
	material   comment		Cu-plated steel   Al cap
Process connector	location/I.D. inch   angle	D	0.252-0.259   25°
	material   comment		Cu-plated steel   Al cap
Discharge connector	location/I.D. inch   angle	E	0.202-0.205   0°
	material   comment		Cu-plated steel   Al cap
Remarks: <b>inch connectors</b>			



- 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

