

BD NANO
BDN45F | BDN45F-A
BDN50K | MB3CKV



Compressors	Code number	Description
BDN45F	109Z0400	variable speed drive compressor, mm tube connectors
BDN45F-A	109Z0445	automotive variable speed drive compressor, mm tube connectors
BDN50K (R600a)	109Z0420	variable speed drive compressor, mm tube connectors
MB3CKV (R600a)	109M0860	variable speed drive compressor for medical applications (e.g. Solar Direct Drive), mm tube connectors

Electronic Single Pack	Code number	Description
Leisure	101N2740	for BDN45F, BDN50K, leisure and general purpose ECU, integrated thermostat, NTC, battery programming, intelligent fan control, standby mode, LIN, standalone mode
Automotive	101N2720	for BDN45F-A, automotive standard ECU, integrated thermostat, NTC, compressor temperature protection, intelligent fan control, deep sleep, LIN
Solar 1	101N2742	for MB3CKV (BDN45F, BDN50K are also supported), solar and medical applications (e.g. SDD) ECU, integrated thermostat, NTC, intelligent fan control, standby mode, LIN, standalone mode

Electronic I – Pack	Code number	Description
Leisure	101N2741	for BDN45F, BDN50K, leisure and general purpose ECU, integrated thermostat, NTC, battery programming, intelligent fan control, standby mode, LIN, standalone mode, 40 pcs.
Automotive	101N2721	or BDN45F-A, automotive standard ECU, integrated thermostat, NTC, compressor temperature protection, intelligent fan control, deep sleep, LIN, 40 pcs.
Solar 1	101N2743	for MB3CKV (BDN45F, BDN50K are also supported), solar and medical applications (e.g. SDD) ECU, integrated thermostat, NTC, intelligent fan control, standby mode, LIN, standalone mode, 40 pcs.

The new solar direct drive (SDD) and weak grid power management system designed by Secop consists of the new generation **SDD Power Management Module**, the **MB3CKV** medical version of the BD Nano compressor series, and its dedicated **Solar 1** controller. For more information please refer to our Quick Reference brochure: **Solar Direct Drive and Weak Grid Power Management System** (DES.B.101.L_)

	Item	Code number	Description
Accessories	Temperature sensor, 470 mm, spade connectors	105N9612	accessories
	Temperature sensor, 1000 mm, spade connectors	105N9614	accessories
	Temperature sensor, 1500 mm, spade connectors	105N9616	accessories
	Secop One Wire/LIN gateway with cables	105N9518	accessories

Accessories	Temperature sensor, 470 mm, spade connectors	105N9613	accessories, 200 pcs.
	Temperature sensor, 1000 mm, spade connectors	105N9615	accessories, 100 pcs.
	Temperature sensor, 1500 mm, spade connectors	105N9617	accessories, 100 pcs.

BD NANO R600a



Compressor	Code number	Application	ASHRAE Capacity [W] Tc=54.4°C, Tliq=32.2°C, Tsuc=32.2°C Evaporating temperature [°C]						ASHRAE						Displacement	Compressor Cooling [refer to data sheet]
									LBP rating point -23.3°C / 54.4°C		MBP rating point -6.7°C / 54.4°C		HBP rating point 7.2°C / 54.4°C			
			-35	-15	-5	0	10	15	Cooling capacity	COP	Cooling capacity	COP	Cooling capacity	COP		
			[W]	[W/W]	[W]	[W/W]	[W]	[W/W]								
BDN50K 2300 rpm	109Z0420	L/MBP	–	50.0	79.9	98.4	–	–	31.6	1.48	66.7	1.90	–	–	2.60	S
BDN50K 4500 rpm	109Z0420	L/MBP	–	101.6	156.4	–	–	–	68.1	1.54	131.0	1.95	–	–	2.60	S
MB3CKV 2300 rpm	109M0860	L/MBP	–	50.0	79.9	98.4	–	–	31.6	1.48	66.7	1.90	–	–	2.60	S
MB3CKV 4500 rpm	109M0860	L/MBP	–	101.6	156.4	–	–	–	68.1	1.54	131.0	1.95	–	–	2.60	S

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

Compressor	Code number	Electronic unit	
		Leisure 12–24 V DC 101N2740	Solar 1 12–24 V DC 101N2742
BDN50K	109Z0420	✓	✓
MB3CKV	109M0860	–	✓



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CECOMAF Capacity [W] Tc=55°C, Tliq=55°C, Tsuc=32°C Evaporating temperature [°C]						CECOMAF						Dimensions					Voltage range (refer to data sheet)
						LBP rating point -25°C / 55°C		MBP rating point -10°C / 55°C		HBP rating point 5°C / 55°C		Height [mm]		Connectors location/I.D. [mm]			
-35	-15	-5	0	10	15	Cooling capacity	COP	Cooling capacity	COP	Cooling capacity	COP			Suction	Process	Discharge	
						[W]	[W/W]	[W]	[W/W]	[W]	[W/W]			C [I.D.]	D [I.D.]	E [I.D.]	
-	40.9	65.4	80.5	-	-	23.3	1.16	52.2	1.60	-	-	89.0	82.4	6.20	6.20	5.00	9.6-17, 9.6-34, 19-34 V DC
-	82.8	127.9	-	-	-	50.2	1.20	103.2	1.64	-	-	89.0	82.4	6.20	6.20	5.00	
-	40.9	65.4	80.5	-	-	23.3	1.16	52.2	1.60	-	-	89.0	82.4	6.20	6.20	5.00	9.6-17, 9.6-34, 19-34 V DC
-	82.8	127.9	-	-	-	50.2	1.20	103.2	1.64	-	-	89.0	82.4	6.20	6.20	5.00	

