

# Bear Variable Frequency Drive Datasheet

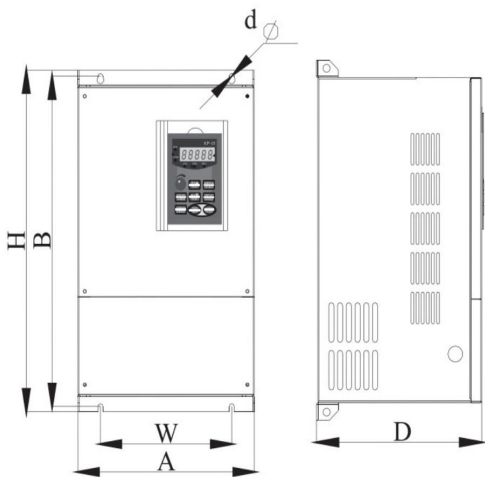


Model	Bear-540	Item No.:	Figure similar
Horsepower	540 hp	Receiver:	Project name:
<b>Rated Data</b>		<b>General tech.specifications</b>	
<b>Input</b>		<b>Power Factor</b>	95%
<b>Number of phase</b>	AC 3PH	<b>Control mode</b>	V/F control, non-PG vector control(SVC ) PG vector control (FVC)
<b>Rated power(KW)</b>	400	<b>Efficiency</b>	98%
<b>Voltage range(V)</b>	400~500	<b>Sound pressure level(1m)</b>	50dB
<b>Frequency range(HZ)</b>	47~63	<b>Power loss(KW)</b>	8
<b>Rated input current(A)</b>	670	<b>Speed adjusting range</b>	1:100(SVC) 1:1000(FVC )
<b>Power factor</b>	95%	<b>Speed control accuracy</b>	±0.5%( SVC) ±0. 02%( FVC)
<b>Output</b>		<b>V/F control</b>	Line, multiple point , square V/F curve , V/F separation
<b>Number of phase</b>	AC 3PH	<b>Start torque</b>	0.5Hz/100 %
<b>Rated power(KW)</b>	400	<b>Torque boost</b>	Automatic torque boost; manual torque boost 0.1~30%
<b>Voltage range(V)</b>	0~500	<b>DC brake</b>	Supports starting and stopping DC brake
<b>Frequency range(HZ)</b>	0~600	<b>Traverse control</b>	Traverse contro l function:multiple triangular pulse frequency control
<b>Rated output current(A)</b>	653	<b>Fixed length control</b>	Setting length control
<b>Power factor</b>	0.95	<b>Timing control</b>	Setting time range:0~6500min
<b>Input &amp; Output options:</b> 1AC 220V±15%, 3AC 220V±15 % , 3AC 380V±15%, 3AC 660V±10 % , 3AC 1140V±15 %		<b>Overload capacity</b>	120% rated current 60s, 150% rated current 3s
<b>Input terminals</b>	1. 4 programmable digital inputs, 2. volatge input 0~10VDC or current input 0~20mA	<b>Output terminals</b>	1. 4 relay outputs 2. 1 analog output: volatge output 0~10 VDC or current output 0~20mA
<b>Common DC bus:</b> Common DC bus function : multiple inverters can use a common DC bus			
<b>Operation command mode:</b> Keypad control , Terminal control , Serial communication control			
<b>Acceleration and deceleration mode :</b> Line or S-curve, 4 types of acceleration/deceleration time with the range of 0.0~6500. 0 s			

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Model	Bear-540	Item No.:	Figure similar
Company Name:		Receiver:	Project name:
Mechanical data		Ambient conditions	
Protection rating	IP65	Cooling	
Net weight(KG)	205	Humidity	Force air cooling
Out size(mm) A	860	Working Temperature	90%RH or less (no-condensation)
Out size(mm) H	1200	Storage Temperature	-10 ~+40°C
Out size(mm) D	400	Storage Environment	-20 ~+60°C
Installation(mm) W	350*350	Vibration	Under 20Hz 9.8m/s(1G), Over 20Hz 5.88m/s (0.6G )
Installation(mm) B	1164	Working Attitude	1000m
Installation(mm) d	15	Standard	CE/ISO9901



## Special Design function for pump control

1. Multi-pump communication through VFD( up to 6 pcs pumps for a booster system)
2. Constant pressure (Keep the pipe network pressure stable)
3. Water pumps trip
4. Master pump cut in/out, standby pumps Cut in/out
5. PTC motor over heat temperature protection(Protect the motor )
6. Pressure/temperature differential control(Widely used for HVAC field)
7. Dry protection (Protect the pump mechanical seal)
8. Lack of phase protection, Overload protection (Protect the electric motor), Over/Under voltage protection
9. Soft start and stop
10. Overflow protection
11. Emergency manual start