

Bear Variable Frequency Drive Datasheet

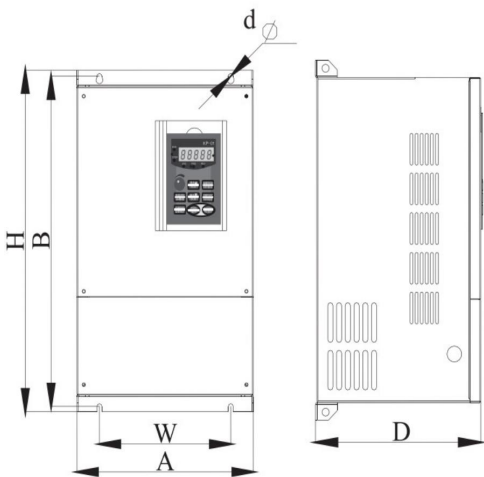


Model	Bear-425	Item No.:	Figure similar
Horsepower	425 hp	Receiver:	Project name:
Rated Data		General tech.specifications	
Input		Power Factor	95%
Number of phase	AC 3PH	Control mode	V/F control, non-PG vector control(SVC) PG vector control (FVC)
Rated power(KW)	315	Efficiency	98%
Voltage range(V)	400~500	Sound pressure level(1m)	50dB
Frequency range(HZ)	47~63	Power loss(KW)	6.3
Rated input current(A)	536	Speed adjusting range	1:100(SVC) 1:1000(FVC)
Power factor	95%	Speed control accuracy	±0.5%(SVC) ±0. 02%(FVC)
Output		V/F control	Line, multiple point , square V/F curve , V/F separation
Number of phase	AC 3PH	Start torque	0.5Hz/100 %
Rated power(KW)	315	Torque boost	Automatic torque boost; manual torque boost 0.1~30%
Voltage range(V)	0~500	DC brake	Supports starting and stopping DC brake
Frequency range(HZ)	0~600	Traverse control	Traverse contro l function:multiple triangular pulse frequency control
Rated output current(A)	527	Fixed length control	Setting length control
Power factor	0.95	Timing control	Setting time range:0~6500min
Input & Output options: 1AC 220V±15%, 3AC 220V±15 % , 3AC 380V±15%, 3AC 660V±10 % , 3AC 1140V±15 %		Overload capacity	120% rated current 60s, 150% rated current 3s
Input terminals	1. 4 programmable digital inputs, 2. volatge input 0~10VDC or current input 0~20mA	Output terminals	1. 4 relay outputs 2. 1 analog output: volatge output 0~10 VDC or current output 0~20mA
Common DC bus: Common DC bus function : multiple inverters can use a common DC bus			
Operation command mode: Keypad control , Terminal control , Serial communication control			
Acceleration and deceleration mode : 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-425	Item No.:	Figure similar
Company Name:		Receiver:	Project name:
Mechanical data		Ambient conditions	
Protection rating	IP65	Cooling	
Net weight(KG)	140	Humidity	Force air cooling
Out size(mm) A	640	Working Temperature	90%RH or less (no-condensation)
Out size(mm) H	1035	Storage Temperature	-10 ~+40°C
Out size(mm) D	390	Storage Environment	-20 ~+60°C
Installation(mm) W	250*250	Vibration	Under 20Hz 9.8m/s(1G), Over 20Hz 5.88m/s (0.6G)
Installation(mm) B	1003	Working Attitude	1000m
Installation(mm) d	11	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