

G74HIGH VOLTAGE INVERTER

JD-BP37/38 series high voltage frequency

inverter



Model no.:G74 series High Voltage Inverter

Power range:6kV: 200kW-560kW

10kV: 200kW-1000kW Cooling mode:forced air cooling

Performance features:Based on the design of two quadrant synchronous (including permanent magnet synchronous motor) / asynchronous motor platform, the whole machine integrates control cabinet, power cabinet, transformer cabinet and switching cabinet, which is convenient for on-site installation.

Competitive advantage:small size, saving space; Overall transportation, convenient installation.

Load type: fan and water pump load

Performance characteristics

Vector control & Fast response

Waveform display & Comprehensive recording

Temperature segmentation & Advanced warning

Multi-machine linkage & Power balance

Non-disturbance switching & Avoiding shock

Torque boost & Heavy load startup

Temperature segmentation & Advanced warning

High and low voltage ride-through & Voltage fluctuation without fear

The high-voltage variable frequency speed regulation system, with high-speed DSP as the control core, adopts various advanced control technologies such as space vector technology and power unit series multilevel technology. Its design goals are high reliability, easy operation, high performance, and small size, meeting the needs of users for various load speed regulation, energy saving, and improving production processes. It belongs to the high high high voltage source type frequency converter. Its harmonic index is much lower than the national standard IEE519-2014, with high input power factor and good output waveform quality, and there is no need to use input harmonic filters, power factor compensation devices, and output filters; There are no additional heating, torque ripple, noise, common mode voltage and other issues caused by harmonics in the motor, which can be applied to synchronous motors (including permanent magnet synchronous motors) and asynchronous motors.

二、Product Parameters

Model		JD-BP37/38-F	JD-BP37/38-T
Motor power (kW)		200kW-20000kW(Using 4-pole motors as standard, selecting the motor type for 6-12 pole motors based on current)	200kW-8000kW(Using 4-pole motors as standard,selecting for 6-12 pole motors based on current)
Output	Rated power(kW)	Power operated at rated voltage	Power operated at rated voltage
		200kW-20000kW	200kW-8000kW
	Rated current(A)	Current operated at rated voltage	Current operated at rated voltage
	Overload capacity	Continuous operation at 105%	Continuous operation at 105%
		Permitted for 1 minute at 130%	Permitted for 1 minute at 130%
		Permitted for 3 seconds at 150%	Permitted for 3 seconds at 150%
	Output voltage(kV)	Three phase 0-6kV, 0-10kV	
	Waveform	SPWM sinusoidal wave	
Input	Phase number, frequency, voltage	Three phase ,50Hz/60Hz,6kV(10kV)	
	Allowable fluctuation	Voltage: -10%~+10%,frequency:±5%,-10% ~ -35% continuous operation under derating	
Basic feature	Starting frequency	0—10Hz can set	
	Accuracy	Analog setting: 0.3% of the highest frequency setpoint value (25±10°C). Digital setting: 0.02% of the highest frequency setpoint value (-10~+50°C).	
	Resolution	Analog setting: 0.05% of the highest frequency setpoint value. Digital setting: 0.01Hz (for frequencies below 99.99Hz) and 0.1Hz (for frequencies above 100Hz).	
	Efficiency	>At 98% during rated output	
	Power factor	>0.95	
Control	Acceleration and deceleration time	0.1~6000.0 seconds, with the ability to set acceleration and deceleration times separately	
	Voltage/Frequency Characteristics	Determined by the selected V/F curve	
	PID	Manual setting of PID parameter	
	Additional functions	V/F curve, low-frequency compensation, rated current, current protection threshold settings	
	High-voltage isolation	Electromagnetic coupling, multi-channel optical fiber transmission	
	Control power input	AC 220V 2kVA	
Opera	Operation	Local control (touch screen, cabinet door switch) operation, remote control operation at a distance , upper-level computer operation (optional)	
	Frequency reference	Touch screen digital setpoint, multi-segment speed setpoint, external control analog signal (DC 4~20mA) setpoint	

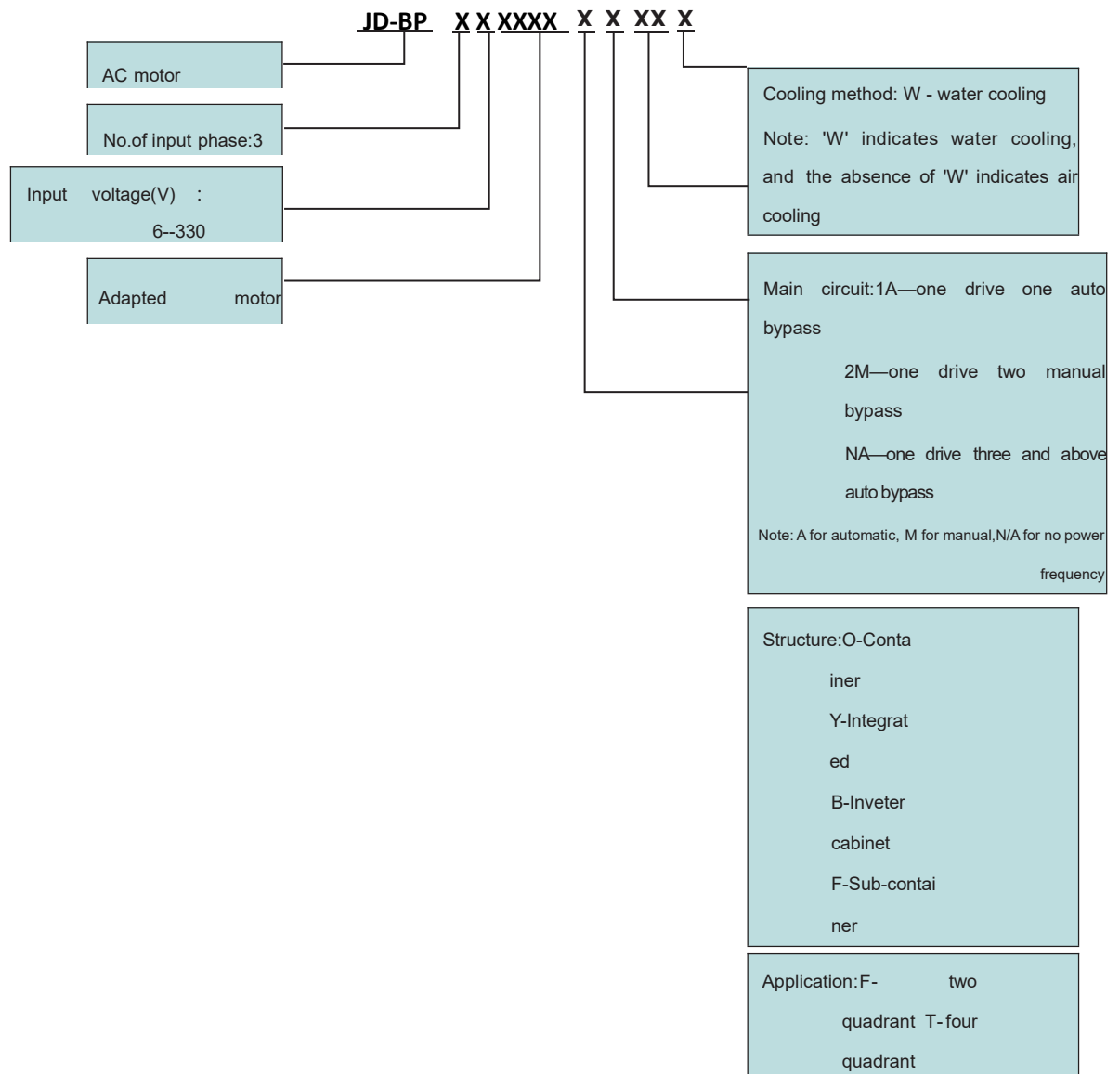
tion	Status output	Relay status output, inverter fault, alarm, run/stop status indicators, etc
	Touch screen	Input/output voltage, input/output current, setpoint, status of each unit, operating status, transformer status, voltage of each unit bus, etc
	Protection function	"Motor overcurrent, system overvoltage/undervoltage, unit overcurrent/overvoltage/overheating, input phase loss, optical fiber communication failure, etc.
Environ ment	Environment	Indoor, free from corrosive or conductive gases, dust, and direct sunlight
	Temperature, humidity	-10°C ~+40°C / 20~90%RH no condensation
	Vibration	5m/ s ² (0.6g or less)
	Storage temperature	-20 to +65°C (suitable for short-term storage, such as during transportation)
	Altitude	≤ 1000m, customizable for altitudes exceeding 1000 meters
Cooling method/IP degree		Forced air cooling /IP31 Liquid cooling/IP40

三、Product size

Model	Power rating	Dimension and weight			Weight (kg)
		Width (mm)	Depth (mm)	Height (mm)	
JD-BP38-250F	250 kW/10kV	2000	1500	1900	2160
JD-BP38-280F	280 kW/10kV	2000	1500	1900	2220
JD-BP38-315F	315 kW/10kV	2000	1500	1900	2290
JD-BP38-355F	355 kW/10kV	2000	1500	1900	2350
JD-BP38-400F	400 kW/10kV	2000	1500	1900	2440
JD-BP38-450F	450 kW/10kV	2000	1500	1900	2500
JD-BP38-500F	500 kW/10kV	2000	1500	1900	2560
JD-BP38-560F	560 kW/10kV	2000	1500	1900	2640
JD-BP38-630F	630 kW/10kV	2000	1500	1900	2720
JD-BP38-710F	710 kW/10kV	2000	1500	1900	2790
JD-BP38-800F	800 kW/10kV	2000	1500	1900	2860
JD-BP38-900F	900 kW/10kV	2000	1500	1900	2980
JD-BP38-1000F	1000 kW/10kV	2000	1500	1900	3100
JD-BP38-1120F	1120 kW/10kV	2800	1700	2120	4320
JD-BP38-1250F	1250 kW/10kV	2800	1700	2120	4600
JD-BP38-1400F	1400 kW/10kV	2800	1700	2120	5090
JD-BP38-1600F	1600 kW/10kV	2800	1700	2120	5200
JD-BP38-1800F	1800 kW/10kV	2800	1700	2120	5580
JD-BP38-2000F	2000 kW/10kV	2800	1700	2120	5720
JD-BP38-2250F	2250 kW/10kV	4200	1700	2420	9380
JD-BP38-2500F	2500 kW/10kV	4200	1700	2420	9380
JD-BP38-2800F	2800 kW/10kV	4500	1700	2420	10900
JD-BP38-3250F	3250 kW/10kV	4500	1700	2420	11300
JD-BP38-4000F	4000 kW/10kV	4500	1700	2420	11900
JD-BP38-4500F	4500 kW/10kV	4500	1700	2420	12500
JD-BP38-5000F	5000 kW/10kV	8100	1700	2620	13975

Model	Power rating	Dimension and weight			Weight (kg)
		Width (mm)	Depth (mm)	Height (mm)	
JD-BP37-225F	225 kW/6kV	1700	1500	1900	1900
JD-BP37-250F	250 kW/6kV	1700	1500	1900	1960
JD-BP37-280F	280 kW/6kV	1700	1500	1900	1980
JD-BP37-315F	315 kW/6kV	1700	1500	1900	2000
JD-BP37-355F	355 kW/6kV	1700	1500	1900	2125
JD-BP37-400F	400 kW/6kV	1700	1500	1900	2190
JD-BP37-450F	450 kW/6kV	1700	1500	1900	2210
JD-BP37-500F	500 kW/6kV	1700	1500	1900	2380
JD-BP37-560F	560 kW/6kV	1700	1500	1900	2410
JD-BP37-630F	630 kW/6kV	2200	1700	2120	3250
JD-BP37-710F	710 kW/6kV	2200	1700	2120	3385
JD-BP37-800F	800 kW/6kV	2200	1700	2120	3435
JD-BP37-1000F	1000 kW/6kV	2200	1700	2120	3910
JD-BP37-1120F	1120 kW/6kV	2200	1700	2120	4000
JD-BP37-1250F	1250 kW/6kV	3300	1700	2420	4950
JD-BP37-1400F	1400 kW/6kV	3300	1700	2420	5600
JD-BP37-1600F	1600 kW/6kV	3600	1700	2420	6900
JD-BP37-1800F	1800 kW/6kV	3600	1700	2420	7060
JD-BP37-2000F	2000 kW/6kV	3600	1700	2420	7100
JD-BP37-2250F	2250 kW/6kV	3600	1700	2420	7150
JD-BP37-2500F	2500 kW/6kV	3600	1700	2420	7210
JD-BP37-2800F	2800 kW/6kV	3600	1700	2420	7300
JD-BP37-3250F	3250 kW/6kV	4600	1700	2420	11750
JD-BP37-4000F	4000 kW/6kV	5900	1700	2420	11800
JD-BP37-4500F	4500 kW/6kV	6500	1700	2620	12950
JD-BP37-5000F	5000 kW/6kV	6500	1700	2620	13600

4、 Model no. description



For example:

6kV 560kW one-to-one automatic integrated high-voltage inverter for speed

control, named JD-BP37-560FY1A

10kV 1600kW one-to-two manual sub-cabinet style high-voltage inverter for

speed control named JD-BP38-1600FB2M

10kV 2500kW one-to-three automatic containerized water-cooled

high-voltage inverter for speed control named JD-BP38-2500FONAW

适用范围

Power generation	Boiler feed pump, forced draft fan, induced draft fan, condensate pump, circulating water pump, mortar pump, compressor, dust suction fan and booster fan. There are more than 2000 sets of high-voltage frequency converters in the power generation industry.
Petroleum, petrochemical and natural gas	Air compressor, induced draft fan, pipeline pump, water injection pump, oil transfer pump, feed pump, submersible pump, circulating water pump and brine pump. Daqing Oilfield, Shengli Oilfield, Qinghai Oilfield, Liaohe Oilfield and other groups continue to cooperate, and the number of high and low voltage frequency converters exceeds 2500 sets.
Coal and mine	Mine hoist, counter-rotating fan, counter cyclone, axial flow fan, descaling pump, mixing pump, dust removal fan, mud pump, slurry pump, clean water pump, feed pump, drainage pump and medium pump. Shenhua Ningxia coal industry group has more than 100 high-voltage frequency converters.
Metallurgy	Dust removal fan, blast furnace blower, induced draft fan, compression fan, oxygen compressor, forced draft fan, feed pump, feed pump, descaling pump, SO ₂ fan, slag flushing machine, converter, electric furnace, blast furnace, descaling pump and gas compressor.
Cement, building materials	Raw meal grinding induced draft fan, cement grinding fan, sorter fan, kiln induced draft fan, kiln air supply fan, kiln tail exhaust fan, high temperature fan, coal mill, dust removal fan, circulating fan and pressure supply fan.
Municipal	Booster pump, hot water circulating pump, sewage pump, clean water pump, water supply pump, induced draft fan, forced draft fan
Light industry, chemical industry	Booster pump, compressor, axial flow pump, soft water pump, water supply pump, blower, induced draft fan
Others	Air pump test bench, wind tunnel test device