

## Mine isolation and intrinsically safe VSD

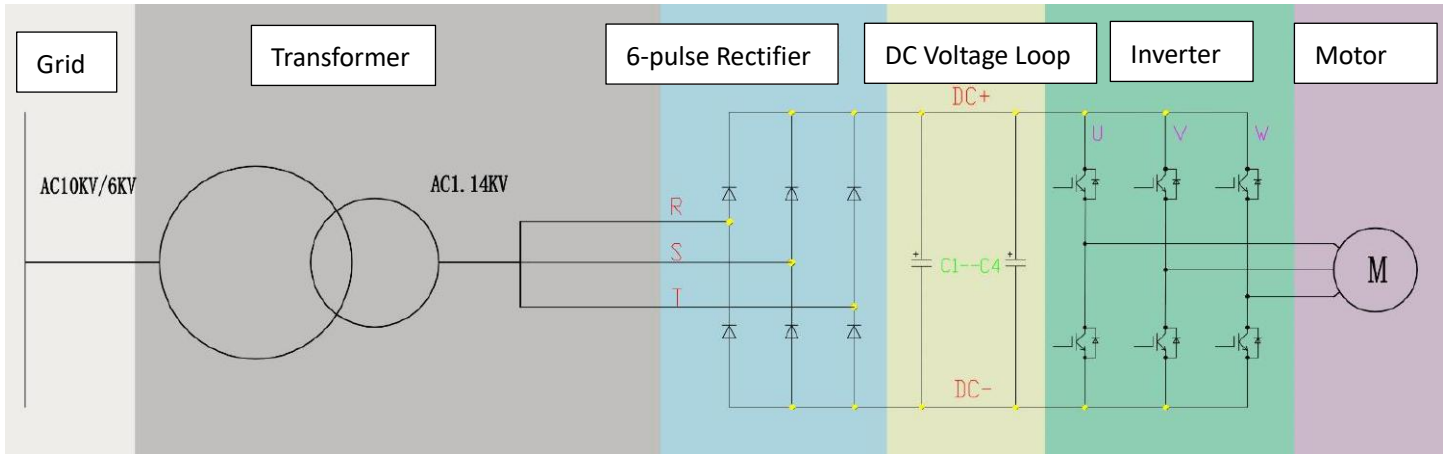
### BPJ1-□×□/1140 series



#### Main technical features:

1. Modular explosion-proof frequency converter and water-cooling system (with anti-condensation device) designed for coal mine site conditions
2. Modular design of control module, with strong universality and saving spare parts storage; It is easy to replace and easy to maintain.
3. Powerful system software, built-in scraper, tape, pump station and other control macro programs, can multi-purpose.
4. Direct torque control, high control accuracy, fast dynamic response and output not less than 2.2 times of rated torque, suitable for heavy starting.
5. CAN bus communication is adopted between multi-drive multi-point devices, realizing multi-device master from on-line, dynamic power balance, and support fiber optic communication to realize remote data transmission and monitoring.
6. Using the non-inductive strapless master, long-life thin film capacitance and excellent electromagnetic design to effectively reduce the input and output harmonics to meet EMC standard requirements, and output cable length of 0 to 1500 meters
7. The frequency converter has the protection function of overload, overpressure, undervoltage, phase-loss, over-heat, power imbalance, short circuit, leakage lock, grounding, etc., which has the function of failure record of power failure.
8. The frequency converter USES ordinary industrial water, and the cooling water board can withstand up to 5 mp.
9. The frequency converter displays a 12-inch display, which can display operation parameters, data curve, fault information, history failure, parameter modification, etc.
10. The frequency converter is equipped with intelligent energy efficiency control, which can be used to determine how much coal can be adjusted automatically by coal flow identification, which can effectively save energy and reduce consumption.

#### Topology structure:



Technical data:

General data	
Power semiconductor devices	IGBT, Diodes
Input side converter	6 pulse /12 pulse diode rectifier (standard), IGBT rectifier (quadrants)
Motor side inverter	IGBT ( PWM )
Drive the quadrant	Drive: two-way rotation (2 quadrant /4 quadrant)
Potential isolation	Fiber optical fiber
Frequency resolution	0.01Hz
Velocity stability	0.07%
Power balance	≤1%
Overload capacity	220%
Topological structure	Voltage source type 2 level
Communication interface	Net, CAN, RS485, profibus
Protection function	Leakage lock, phase unbalance, stall, overload, short circuit, fracture phase, overpressure, underpressure protection.
The Ann parameters	$U_0$ : 12.5VDC; $I_0$ : 1.3A;
Explosion-proof type	Explosion - proof and intrinsically safe type Exd[ib] Mb
Efficiency	The rated working point >98.4%
Protection grade	IP54( Water cooled )

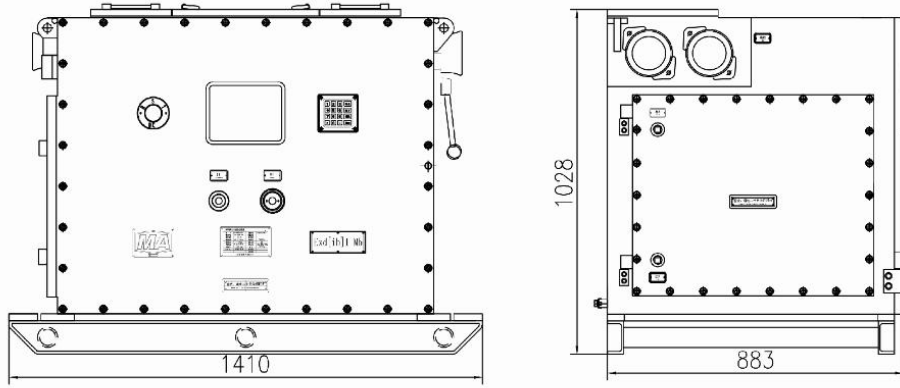
Model number	The input voltage	The output power	The output current	The output circuit	External dimension ( mm )	weight (Kg)	Quadrants
BPJ1-4×630/1140	1140V	4×630kW	4×375 A	4	3286×967×1198	4100	2
BPJ1-4×500/1140	1140V	4×500kW	4×310 A	4	3286×967×1198	4000	2
BPJ1-4×400/1140	1140V	4×400kW	4×260 A	4	3286×967×1198	4000	2
BPJ1-3×1000/1140	1140V	3×1000kW	3×(2×300) A	3	3286×967×1198	4156	2

**BPJ1-□×□/1140 Series selection manual**

BPJ1-3×800/1140	1140V	3×800kW	3× (2×240) A	3	3286×967×1198	4156	2
BPJ1-3×710/1140	1140V	3×710kW	3× (2×212) A	3	3286×967×1198	4156	2
BPJ1-3×630/1140	1140V	3×630kW	3×375 A	3	2411×967×1198	3230	2
BPJ1-3×500/1140	1140V	3×500kW	3×310 A	3	2411×967×1198	3230	2
BPJ1-3×400/1140	1140V	3×400kW	3×260 A	3	2411×967×1198	3230	2
BPJ1-2×1000/1140	1140V	2×1000kW	2× (2×315) A	2	2411×967×1198	3230	2
BPJ1-2×800/1140	1140V	2×800kW	2× (2×240) A	2	2411×967×1198	3130	2
BPJ1-2×710/1140	1140V	2×710kW	2× (2×212) A	2	2411×967×1198	3130	2
BPJ1-2×630/1140	1140V	2×630kW	2×375 A	2	2411×967×1198	3100	2
BPJ1-2×500/1140	1140V	2×500kW	2×310 A	2	2411×967×1198	3050	2
BPJ1-2×400/1140	1140V	2×400kW	2×260 A	2	2411×967×1198	3050	2
BPJ1-1000/1140	1140V	1000kW	2×300 A	1	2411×967×1198	3000	2
BPJ1-800/1140	1140V	800kW	2×240 A	1	2411×967×1198	3000	2
BPJ1-710/1140	1140V	710kW	2×212 A	1	2411×967×1198	3000	2
BPJ1-630/1140	1140V	630kW	375A	1	1600×1063×1300	2500	2
BPJ1-500/1140	1140V	500kW	310A	1	1600×1063×1300	2500	2
BPJ1-400/1140	1140V	400kW	240A	1	1420×930×1040	1690	2
BPJ1-315/1140	1140V	315kW	186A	1	1420×930×1040	1690	2
BPJ1-4×630/1140K	1140V	4×630kW	4×375 A	4	3286×967×1198	4100	4
BPJ1-4×500/1140K	1140V	4×500kW	4×310 A	4	3286×967×1198	4100	4
BPJ1-4×400/1140K	1140V	4×400kW	4×260 A	4	3286×967×1198	4100	4
BPJ1-3×1000/1140K	1140V	3×1000kW	3× (2×300) A	3	3286×967×1198	3986	4
BPJ1-3×800/1140K	1140V	3×800kW	3× (2×240) A	3	3286×967×1198	3986	4
BPJ1-3×710/1140K	1140V	3×710kW	3× (2×212) A	3	3286×967×1198	3986	4
BPJ1-3×630/1140K	1140V	3×630kW	3×375 A	3	3286×967×1198	3986	4
BPJ1-3×500/1140K	1140V	3×500kW	3×310 A	3	3286×967×1198	3986	4
BPJ1-3×400/1140K	1140V	3×400kW	3×260 A	3	3286×967×1198	3986	4
BPJ1-2×1000/1140K	1140V	2×1000kW	2× (2×315) A	2	2411×967×1198	3230	4
BPJ1-2×800/1140K	1140V	2×800kW	2× (2×240) A	2	2411×967×1198	3230	4
BPJ1-2×710/1140K	1140V	2×710kW	2× (2×212) A	2	2411×967×1198	3230	4
BPJ1-2×630/1140K	1140V	2×630kW	2×375 A	2	2411×967×1198	3150	4
BPJ1-2×500/1140K	1140V	2×500kW	2×310 A	2	2411×967×1198	3150	4
BPJ1-2×400/1140K	1140V	2×400kW	2×260 A	2	2411×967×1198	3150	4
BPJ1-1000/1140K	1140V	1000kW	2×300 A	1	2411×967×1198	3500	4
BPJ1-800/1140K	1140V	800kW	2×240 A	1	2411×967×1198	3400	4
BPJ1-710/1140K	1140V	710kW	2×212 A	1	2411×967×1198	3300	4
BPJ1-630/1140K	1140V	630kW	375 A	1	2411×967×1198	3200	4
BPJ1-500/1140K	1140V	500kW	310 A	1	2411×967×1198	3100	4
BPJ1-400/1140K	1140V	400kW	260 A	1	2411×967×1198	3100	4

Specification parameters:

Outline dimensions:



BPJ1-400 (315)/1140外观尺寸图

