



# MINING EXPLOSION PROOF VFD

## Introduction

ZBT series of mining explosion proof VFD is suitable for the place with explosive gas and dust. the product has 380V/660V, 1140V and other voltage grades, which meet the high performance of two quadrant and four quadrant speed regulation requirements for three-phase ac motor with 60-1250 kW power range.

This product has accumulated more than 10 years of research results of frequency conversion technology and over 30 years of industry experience, it is high tech product specially developed for the mining industry which has the requirements of heavy load, large power, poor use conditions etc.

## Application scope: metallic and non-metallic mines, etc.

- vertical/ incline mine hoist
- belt conveyor
- aerial cable way
- emulsion pump station
- scraper conveyor
- endless rope winch electrical control
- fans
- water pumps

## Applicable motor type

- three phase asynchronous motor
- permasyn motor

## Working conditions:

1. altitude less than 1000m ( above sea level need to reduce capacity use);
2. ambient temperature (-10~40)°C;
3. ambient relative humidity is not greater than 95% (25°C);
4. mines with explosive gases (methane) and coal dust;
5. no strong vibration or shock;
6. No corrosive gases which could damage metals and insulating materials;
7. No water droplets and infiltrating;
8. pollution grade: grade 3.



Specification of Mining Explosion Proof VFD

Vol. Grade	Power (kW)	Two quadrants	Four quadrants	Out dimension W*H*D(mm)
660V	60~90	1BP	1DK+1BP	DK:717*919*530 BP:717*919*1030
	110~250			DK:890*1150*691 BP:890*1270*1296
	315~630	1ZL+1NB	1DK+1ZL+1NB	DK:1190*1401*790 BP:1190*1442*1348
	710~800			DK:1190*1401*790 ZL/NB:1190*1442*1348
1140V	110~250	1BP+1LB	1BP+1LB	DK:1190*1401*790 ZL/NB:1190*1442*1348
	315~400		1DK+1BP+1LB	
	500~630	1ZL+1NB+1LB	1DK+1ZL+1NB+1LB	
	710~1250			

1.Cabinet note: DK is filter reactor cabinet. BP is Frequency conversion cabinet, include rectifier and inverter inside. ZL is rectifier cabinet. NB is Inverter cabinet. LB is filter cabinet.  
 2. The cabinet of same power specification is with same cabinet dimension, all cabinets have fast open door structure.