

## 连接图 CONNECTION DIAGRAM

### 标准型 Standard Type

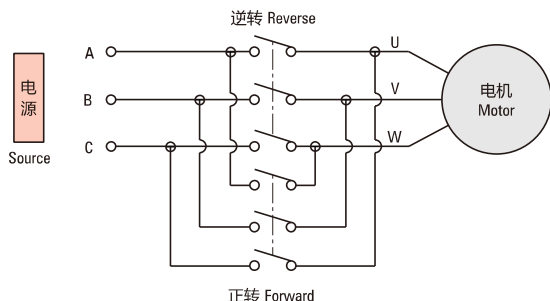


图 chart 符号 Symbol	接线盒 Junction Box
	端子符号 Terminal Symbol
A	U
B	V
C	W

### 单相接线图 Standard Type

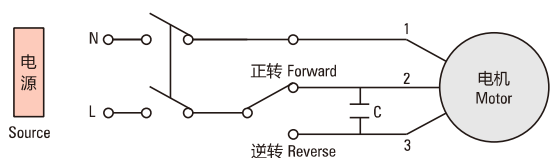


图 chart 符号 Symbol	接线盒 Junction Box 端子符号 Terminal Symbol	对应电机引线 Corresponding Motor Lead
1	U	红 Red
2	V	蓝 Blue
3	W	白 White

### 带电磁制动型 Electromagnetic Brake Type

#### 接线的种类与选择要点 Types and selection of wiring

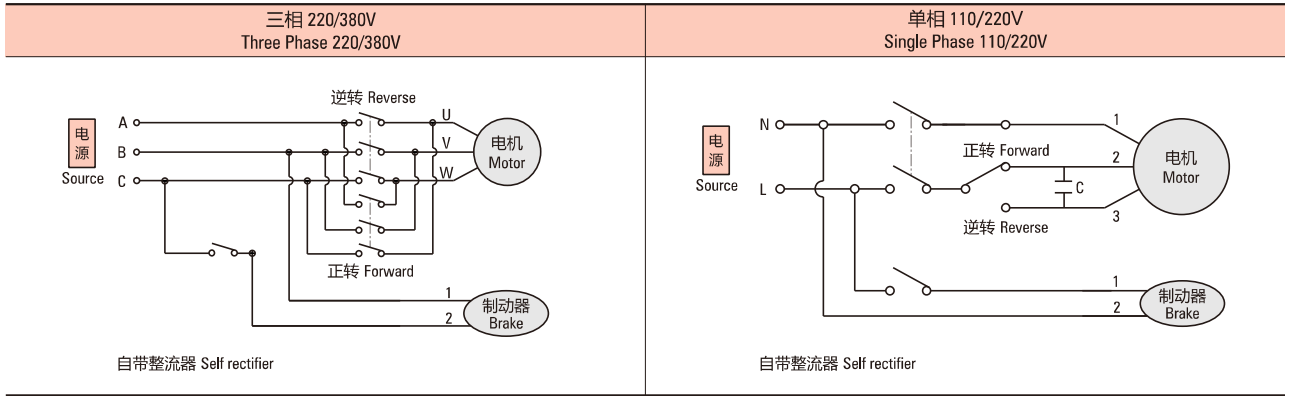
接线 Connection	选择要点 Select Points	变频器 Frequency Converter	升降运转 Lifting Operation	省配线 Provincial Distribution	制动延迟 Brake Delay
交流开关 (A) AC switch (A)	由于电动机与电磁制动部可以使用不同的电路，因此最适合用于变频器驱动。 Because the electric motor and the electromagnetic braking part can use different circuits, the most suitable for the drive of the frequency converter.	⊙ (最合适) (Most suitable)	○ (可以使用) (Can be used)	○	○
交流开关 (B) AC switch (B)	最简单的方法，即配线只靠电源线连接就可运转。配线的数量也相对减少。 The most simple way, that is, only by power cable wiring can run. The number of wiring is also relatively reduced.	× (不能使用) (Out of commission)	× (不能使用) (Out of commission)	⊙	△

请注意：所谓制动延迟时间是指关闭开关到制动开始的时间，与制动时间不同。

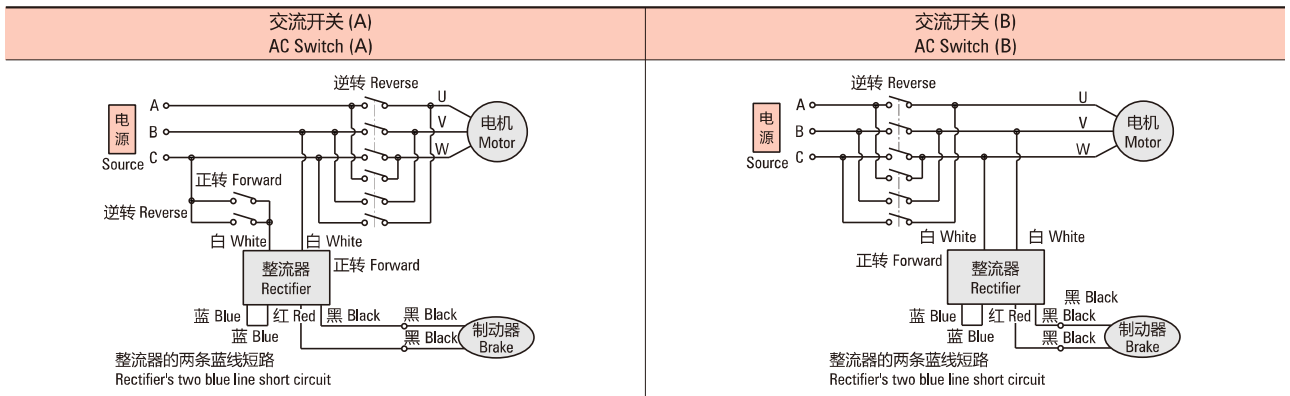
Note: The so-called brake delay time is to turn off the switch to the beginning of the braking time, and the braking time is different.

## 连接方法 Connection Method

### ZDF2系列 Series

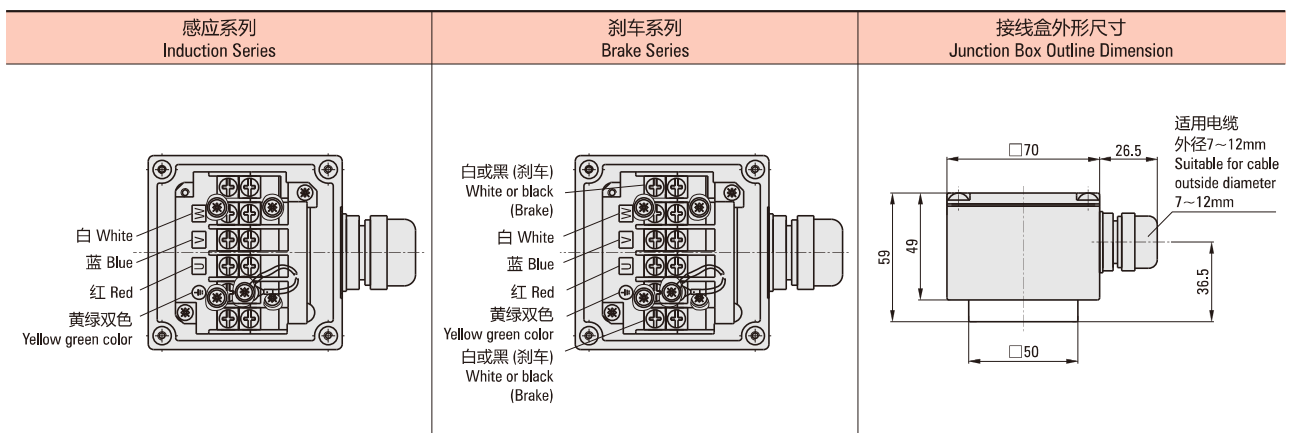


### ZDF3系列 Series



## 端子箱 Terminal Box

### 单相 Single-phase



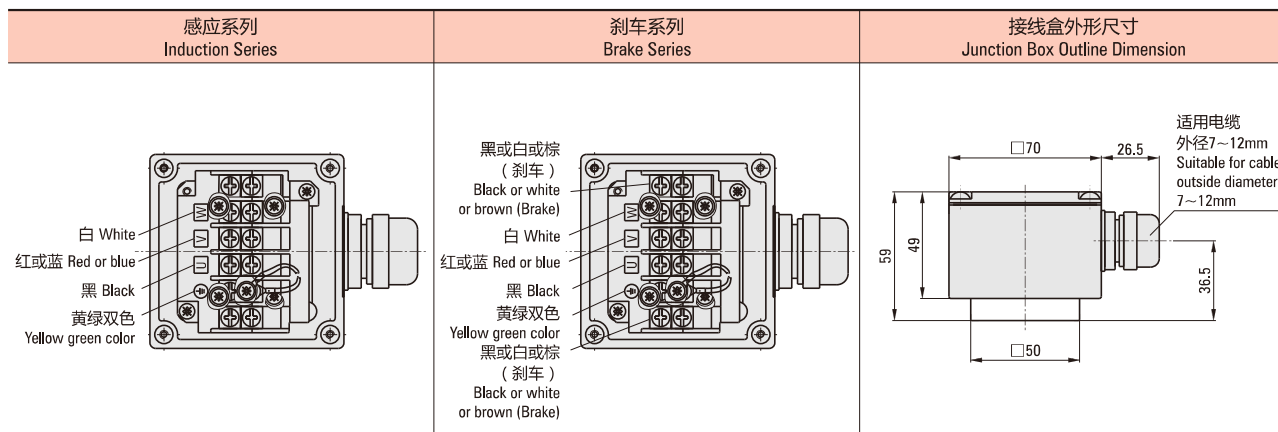
请注意：对于带电磁制动型电动机，电磁制动引线从制动部引出。

Note: For an electric motor with an electromagnetic brake, an electromagnetic braking lead is drawn from the brake part.

## 连接图 CONNECTION DIAGRAM

### 端子箱 Terminal Box

#### 三相 Three-phase



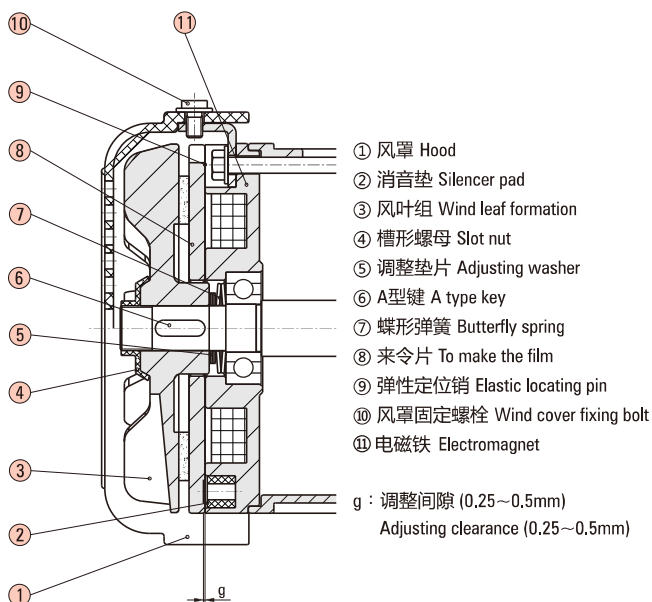
请注意：• 对于带电磁制动型电动机，电磁制动引线从制动部引出。• 白线为F3整流器线，黑、棕为F2整流器线。

Note: • For an electric motor with an electromagnetic brake, an electromagnetic braking lead is drawn from the brake part.

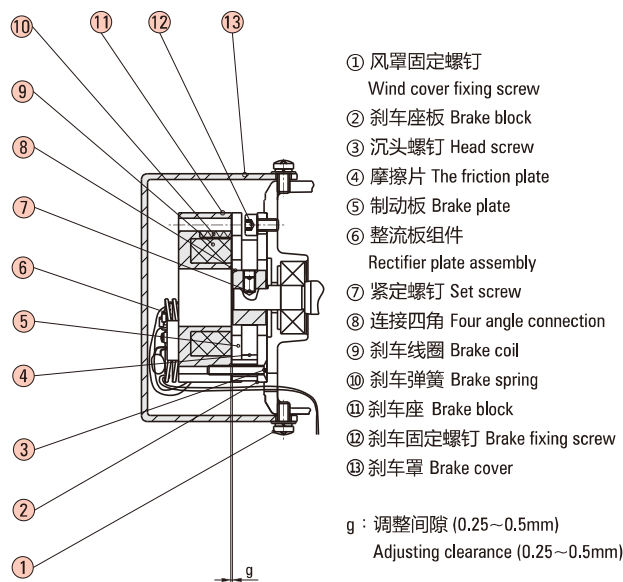
• The white line for F3 rectifier line, black and brown for F2 rectifier line.

### 制动部结构 Brake Part Structure

#### F3制动部结构 F3 brake part structure



#### F2制动部结构 F2 brake part structure



#### 制动部的间隙 Clearance of brake

若长时间使用制动部，间隙会越开越大，导致制动部失效。请进行定期（大约一年或者间隔使用100~150万次）的间隙调整。

If the long time use of the brake, the gap will be more open, leading to the failure of the brake. Please make a regular (About one year or interval using 100~150 million) of the gap adjustment.

## 连接图 CONNECTION DIAGRAM

### 与变频器的组合 Combined With Frequency Converter

#### ● 可以使用频率范围 Frequency range can be used

一般请在5~120Hz范围内使用。

(注：当频率低于30Hz时，电机表面温度会较高。)

##### · 超过60Hz高速运转时的注意事项

在超过60Hz的高速运转中，振动、噪音将会增加。

另外转速加快会降低油封的使用寿命。

##### · 低速运转时注意事项

低速运转中，由于电动机的冷却效果低下经常会引起温度的异常上升，请格外注意。

(请将电动机表面温度控制在80°C以下。)

In general, please use the 5~120Hz range.

Note: when the frequency is lower than 30Hz, the surface temperature will be higher

##### · More attention than the 60Hz high speed operation

Vibration and noise will be increased in the high speed operation of more than 60Hz. In addition, the speed will be accelerated to reduce the life of the oil seal.

##### · Low speed operation matters needing attention

Low speed operation, due to the cooling effect of the motor is often caused by the abnormal temperature rise, please pay extra attention to.

(Please control the motor surface temperature below 80°C).

#### ● 电动机的转矩特征（使用限度） Torque characteristics of the motor (Limit)

电动机的转矩特征（使用限度）根据所使用的变频器的种类及控制方法的不同而产生巨大差异。

Torque characteristics of the motor (Use limit) caused great differences according to the types and controlling methods used by different frequency converter.

#### ● 带电磁制动时 With electromagnetic brake

制动部配线请与变频器（变频器的输入侧供电）并联。

(输出侧电压变动可能会引起制动部的运行不稳定状况。)

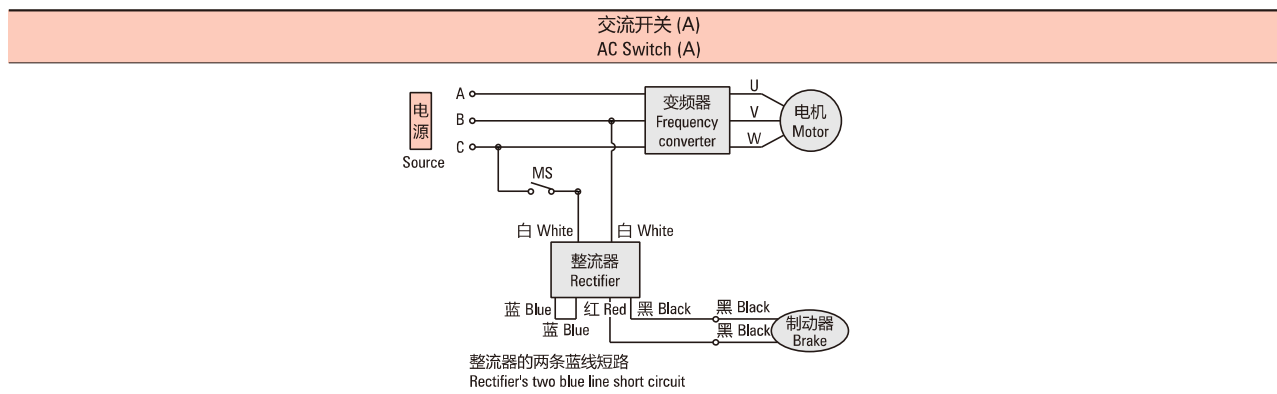
连接图标记如下，请加以参照。

The wiring of the brake unit is in parallel with the input side of the converter (Inverter).

(The output side voltage fluctuation may cause the brake part to run unstable.)

Connection icon in mind as follows, please refer to.

例 Cases:



#### ● 用变频器驱动380V电动机时 When the 380V motor is driven by frequency converter

电动机端子间会发生浪涌电压，可能会导致电动机绝缘性能的劣化。

为防止浪涌电压，一般采用抑制电压增强（输出电抗器）和抑制波高值（输出滤波器）两种方法。

##### · 输出电抗器

配线较短时，可在变频器的输出侧设置AC电抗器，通过抑制电压的增强从而减弱浪涌电压。

如果配线过长则难以抑制电压的高波值。

##### · 输出滤波器

在变频器的输出侧设置滤波器，可以抑制电动机端子电压的高波值。

Surge voltage can occur between the motor terminals, which may lead to deterioration of the insulation performance of the motor.

In order to prevent the surge voltage, by suppressing voltage enhancement (output reactor) and suppress the peak value (output filter) two methods.

##### · Output reactor

Wiring shorter, can be set at the output side of the inverter AC reactor, through the suppression of voltage enhancement to reduce the surge voltage.

If the wiring is too long, it is difficult to suppress the high wave value of voltage.

##### · Output filter

The filter can be arranged at the output side of the frequency converter, which can restrain the high wave value of the terminal voltage of the motor.

上述仅为一般情况，具体事宜请向变频器厂家咨询。 The above is only the general situation, the specific matters, please consult the inverter manufacturers.