

## ZD Conical Rotor Motor

- Ac Motors
- YEZ, ZD Conical Rotor Motor
- Gearbox
- Construction Machinery and Accessories

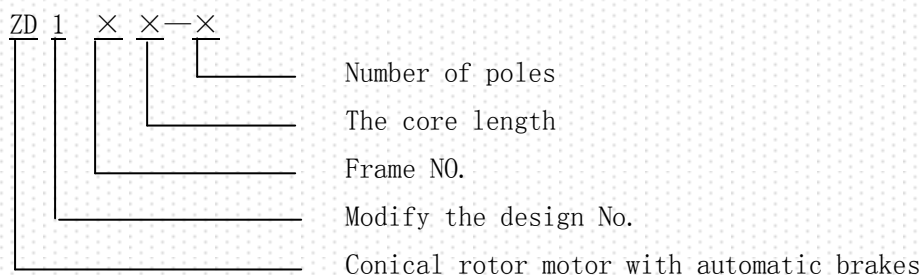


## ✚ ZD Conical Rotor Three-phase Asynchronous Motors

ZD series motor is conical rotor three-phase asynchronous motors which with automatic brakes. It has large starting torque, reliable braking, compact structure, small size, light weight. This series of motors commonly used in hoisting and conveying machinery industries, special mechanical equipment requirements can quickly brake, frequent starting, running alternately positive and negative.



1. Model representation shown as follows:



2. Main Specifications

Standard Power: 380 V, 50 Hz; (customize 220V~480V, 50/60Hz). Installation Type: IMB5

Protection degree: IP44/IP54; Insulation class: B/F; Cooling method: ICO141

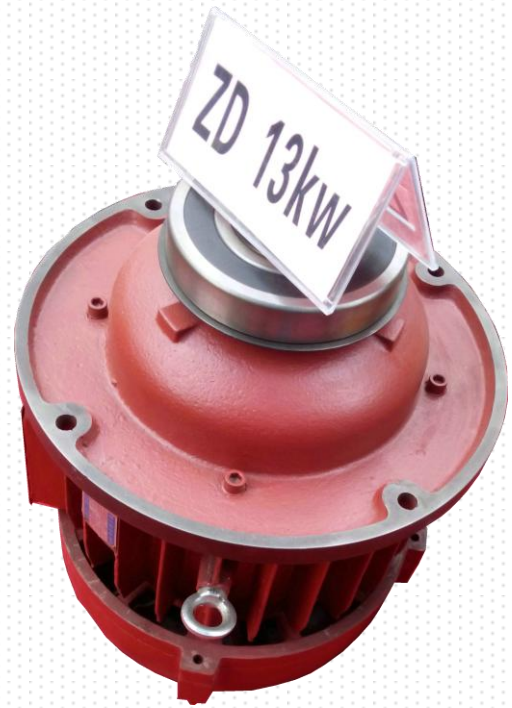
Operating ambient temperature: -25°C — +40°C; Mode of connection: Y wiring method.

Working methods of the motor: S4, JC25% Allowable temperature of winding set: 80K.

### ⇒ Technical Parameter

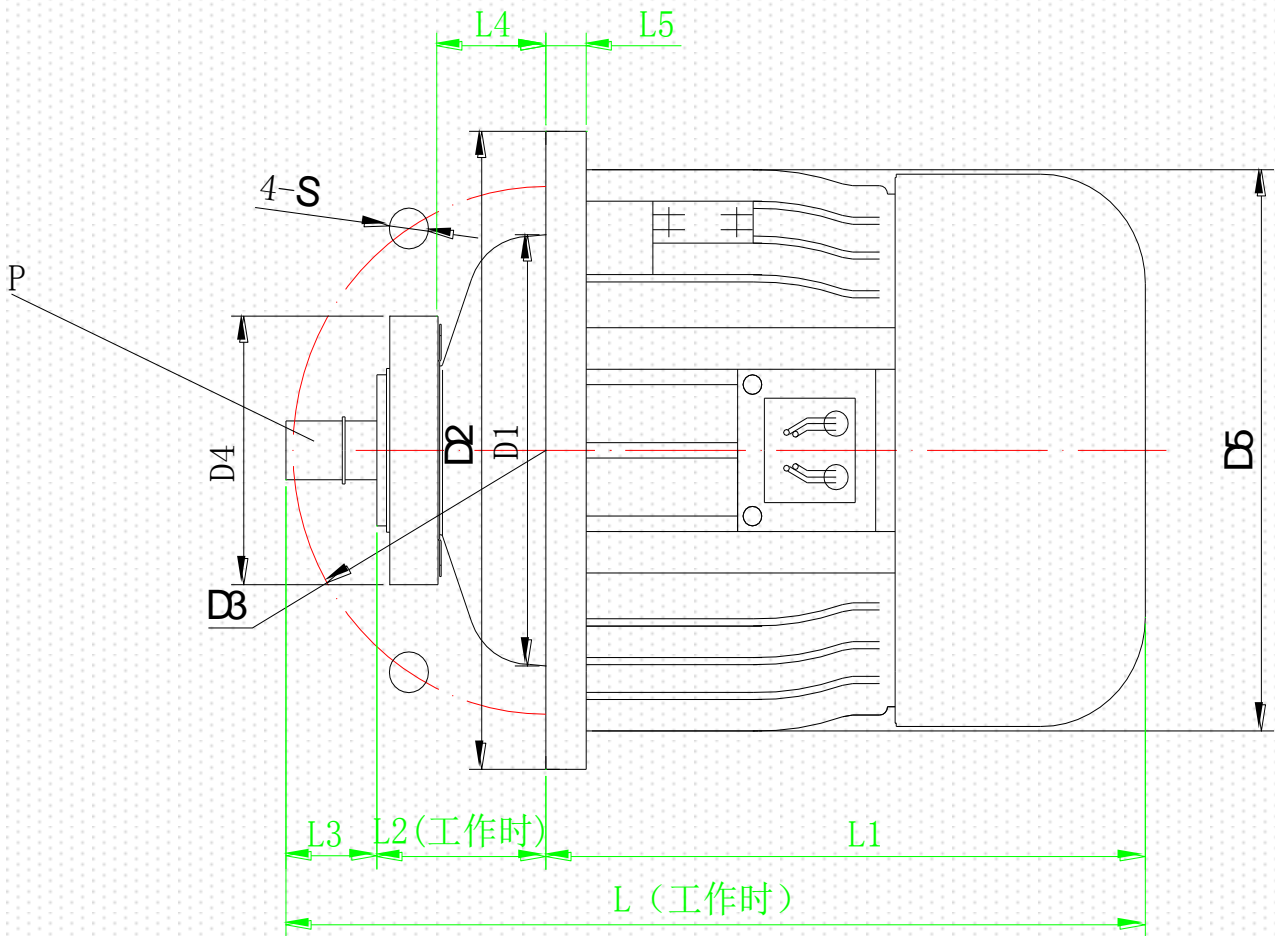
| Type<br>型号            | Power<br>功率 (kw) | Speed<br>转速<br>(r/min) | Currents<br>电流 (A) | Efficiency<br>效率 (%) | Weight<br>重量 (kg) |
|-----------------------|------------------|------------------------|--------------------|----------------------|-------------------|
| ZD <sub>1</sub> 12-4  | 0.4              | 1380                   | 1.25               | 67                   | 13                |
| ZD <sub>1</sub> 21-4  | 0.8              |                        | 2.4                | 70                   | 26                |
| ZD <sub>1</sub> 22-4  | 1.5              |                        | 4.3                | 72                   | 35                |
| ZD <sub>1</sub> 31-4  | 3.0              |                        | 7.6                | 78                   | 58                |
| ZD <sub>1</sub> 32-4  | 4.5              |                        | 11                 | 78                   | 68                |
| ZD <sub>1</sub> 41-4  | 7.5              | 1400                   | 18                 | 79                   | 105               |
| ZD <sub>1</sub> 51-4  | 13               |                        | 30                 | 80                   | 195               |
| ZD <sub>1</sub> 52-4  | 18.5             |                        | 40                 | 81                   | 210               |
| ZDY <sub>1</sub> 21-4 | 0.8              | 1380                   | 2.4                | 70                   | 24                |
| ZDY <sub>1</sub> 22-4 | 1.5              |                        | 4.3                | 72                   | 38                |

⇒ Photos





⇒ **Installation dimensions**



| Type<br>型号           | Power<br>功率 | Installation Dimensions and Tolerance<br>安装尺寸及公差 |        |      |       |      |     |     |     |    |     |   |
|----------------------|-------------|--|--------|------|-------|------|-----|-----|-----|----|-----|---|
|                      |             | D1   | D2     | D3   | D4    | D5   | L   | L1  | L2  | L3 | S   | P   |
| ZD <sub>1</sub> 31-4 | 3.0kw       | Φ223   | Φ290h9 | Φ260 | Φ65h6 | Φ272 | 423 | 284 | 109 | 30 | Φ13 | 6D-28f <sub>9</sub> -23h <sub>15</sub> -6d <sub>11</sub>  |
| ZD <sub>1</sub> 32-4 | 4.5kw       | Φ233   | Φ320h9 | Φ286 | Φ65h6 | Φ272 | 438 | 310 | 98  | 30 | Φ13 | 6D-28f <sub>9</sub> -23h <sub>15</sub> -6d <sub>11</sub>  |
| ZD <sub>1</sub> 41-4 | 7.5kw       | Φ260   | Φ380h9 | Φ340 | Φ90h6 | Φ328 | 525 | 365 | 120 | 35 | Φ17 | 10D-35f <sub>9</sub> -28h <sub>15</sub> -4d <sub>11</sub> |
| ZD <sub>1</sub> 51-4 | 13kw        | Φ300   | Φ455h9 | Φ415 | Φ95h6 | Φ425 | 647 | 435 | 172 | 40 | Φ17 | 10D-40f <sub>9</sub> -32h <sub>15</sub> -5d <sub>11</sub> |
| ZD <sub>1</sub> 52-4 | 15kw        | Φ300   | Φ455h9 | Φ415 | Φ95h6 | Φ425 | 647 | 435 | 172 | 40 | Φ17 | 10D-40f <sub>9</sub> -32h <sub>15</sub> -5d <sub>11</sub> |
| ZD <sub>1</sub> 52-4 | 18.5kw      | Φ450   | Φ530h9 | Φ490 | Φ95h6 | Φ440 | 711 | 469 | 187 | 55 | Φ17 | 10D-45f <sub>9</sub> -36h <sub>15</sub> -5d <sub>11</sub> |

### ✚ ZDD Cone Rotor Dual Speed Motor

ZDD have fast and slow speeds, its characteristics fit with different load requirements while changing the power level and speed, which can be achieved with reasonable load matching; It can simplify the transmission system and saving energy. It can be widely applied the field which requires two speeds and rapid braking of lifting the transport machinery, machine tools, production lines and other transmission mechanism.



- ✧ Rated voltage : 380V, 50Hz. Protection class: IP44
- ✧ Reference work system :S3, 25% duty cycle, 120 times starts per hour.
- ✧ Cooling method: IC0141 insulation class B/ F

### ⇒ Common Model parameters

| Typ<br>型号  | PWR<br>功率<br>KW | Speed<br>转速<br>r/min | RC<br>额定<br>电流<br>A | Max torque /<br>Rated torque<br>最大转矩/<br>额定转矩 | Start torque /<br>Rated torque<br>起动转矩/<br>额定转矩 | SC<br>起动<br>电流<br>A | EFF<br>效率<br>η | PF<br>功率<br>因素 | MOI<br>转动<br>惯量<br>kg.m <sup>2</sup> | Braking<br>torque<br>制动<br>力矩 | Wg<br>重量<br>kg |
|------------|-----------------|----------------------|---------------------|---|---|---------------------|----------------|----------------|--------------------------------------|-------------------------------|----------------|
| ZDD31-4/16 | 4.5/1.5         | 1380/290             | 12.1                | 3.0/1.8                                       | 3.0/1.8   | 90/20               | 0.85/0.45      | 0.85/0.45      | 0.39                                 | 83 N.m                        | 10             |
| ZDD41-4/16 | 7.5/2.0         | 1380/300             | 19.8                | 3.2/1.4                                       | 3.2/1.4   | 150/40              | 0.85/0.45      | 0.85/0.45      | 0.73                                 | 147 N.m                       | 12             |