

Microswitch

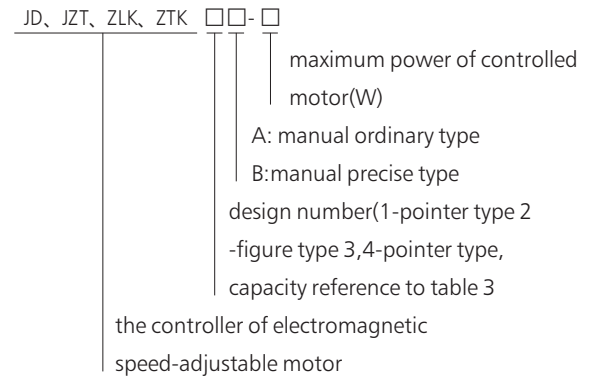


JD, JZT, ZLK, ZTK Electromagnetic Speed-adjustable Motor Control Device

1. General

JD, JZT, ZLK, ZTK series electromagnetic speed-adjustable motor controller is the national union (unified) design product of the former Ministry of Machinery Industry used to control speed governing of the electromagnetic speed-adjustable motor (slip motor) to achieve constant torque stepless speed control. The controller applies only to slip motor instead of ordinary motor.

2. Type designation



3. Operating conditions

3.1 Scope of speed adjustment

Power supply:~220V(±10%), 50Hz or 60Hz,
100r/min~1300r/min

3.2 Rotation speed variation rate (mechanical properties-hardness)

$$\text{Rotation speed variation rate} = \frac{\text{Speed under 5\% load} - \text{Speed under 100\% load}}{\text{Rated speed}} \times 100\%$$

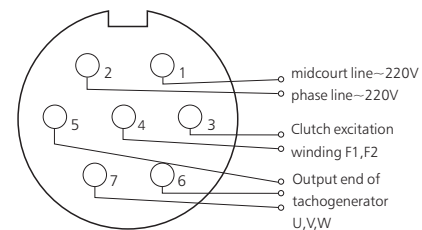
3.3 Steady speed accuracy ≤ 1%

3.4 Maximum output:DC90V,8A

3.5 Controlling motor power:0.55kW~90kW

3.6 voltage speed ratio in three-phase midfrequency of tachogenerator ≥ 2V/100r/min

| Plug number | Connect corresponding name |
|-------------|-------------------------------|
| 1 | midcourt line~220V |
| 2 | phase line~220V |
| 3 | Clutch excitation winding F1 |
| 4 | Clutch excitation winding F2 |
| 5 | Output end of tachogeneratorU |
| 6 | Output end of tachogeneratorV |
| 7 | Output end of tachogeneratorW |



Note:F1,F2 are to select and use (recommend) 1mm² copper conductor with 0.55kW~40kW and 1.5mm² copper conductor with 45kw-90kw;U,V,W conductors are select and use (recommend) 0.75mm² or 1mm² copper conductor.

3.7 Manual ordinary type

Table 1

| Model No. | JD ₂ ¹ A-11 | JD ₂ ¹ A-40 | JD ₂ ¹ A-90 |
|---|--|-----------------------------------|-----------------------------------|
| Supply voltage | ~220V(±10%) 50Hz~60Hz | | |
| Maximum output rating(direct current 90V) | 3.15A | 5A | 8A * |
| Controllable power of motor (kW) | 0.55~11 | 15~40 | 45~90 |
| Tachogenerator | Ratio of transmission of Phase-III i-f voltage is ≥2V/100r/min | | |
| Relative speed variation | ≤2.5% | | |
| Steady velocity precision | ≤1% | | |
| Governor deflection (r/min) | 1300~100 | 1300~100 | 1300~130 |

3.8 Manual accurate type

Table 2

| Model No. | JD ₂ ¹ B-11 | JD ₂ ¹ B-40 | JD ₂ ¹ B-90 |
|---|--|-----------------------------------|-----------------------------------|
| Supply voltage | ~220V(±10%) 50Hz~60Hz | | |
| Maximum output rating(direct current 90V) | 3.15A | 5A | 8A * |
| Controllable power of motor (kW) | 0.55~11 | 15~40 | 45~90 |
| tachogenerator | Ratio of transmission of Phase-III i-f voltage is ≥2V/100r/min | | |
| Relative speed variation | ≤1% | | |
| Governor deflection (r/min) | 1300~100 | 1300~100 | 1300~130 |

*: when it is greater than 8A but less than 12A, the working time shall not be longer than 30min.

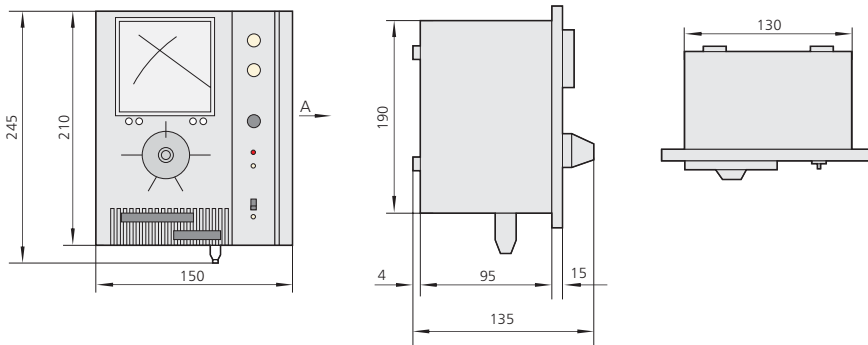
3.9 JZT,ZLK-1,ZTK-1 technical parameter

Table 3

| Model No. | JZT3 | JZT4 | | ZLK-1 | ZTK-1 |
|---|--|----------|----------|----------|----------|
| Supply voltage | ~220V(±10%) 50Hz~60Hz | | | | |
| Maximum output rating(direct current 90V) | 5A | 8A | 5A | 5A | 8A |
| Controllable power of motor (kW) | 0.55~40 | 45~90 | 0.55~40 | 0.55~40 | 45~90 |
| Tachogenerator | Ratio of transmission of Single-phase or phase-III i-f voltage is ≥2V/100r/min | | | | |
| Relative speed variation | ≤2.5% | | | | |
| Governor deflection (r/min) | 1300~100 | 1300~130 | 1300~100 | 1300~100 | 1300~130 |

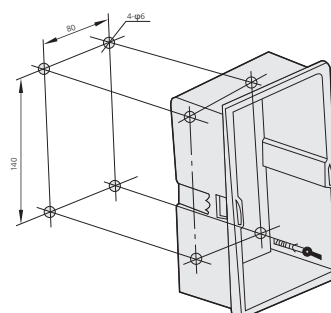
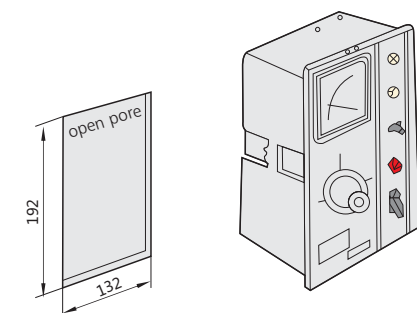
4. Overall and mounting dimensions

JD₂¹A,JD₂¹B-type external dimensions



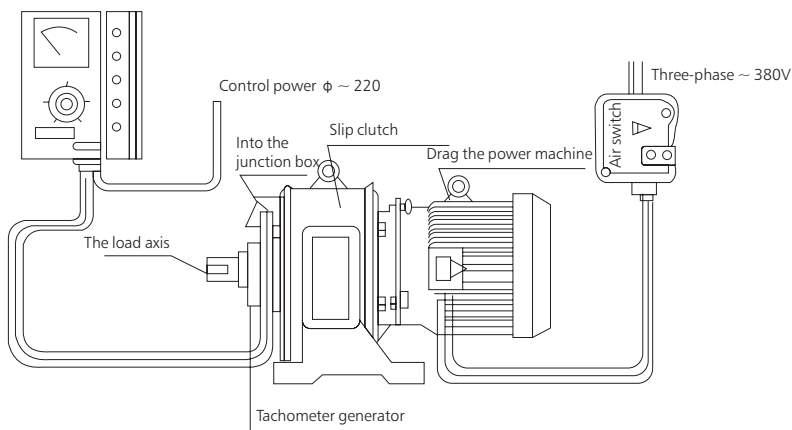
JD₂¹A,JD₂¹B-type plate embedded-type installation and the size of the holes controller

JD₂¹A,JD₂¹B-type used for wall-hung type installation size

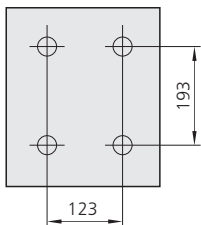


Controller

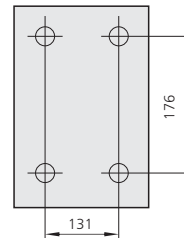
Link connecting control casing and asynchronous motor with electromagnetic speed regulation



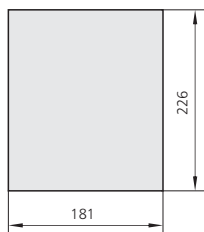
ZTK, ZLK wall-hung type installation size



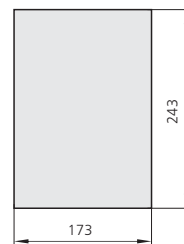
JZT wall-hung type installation size



Size of ZTK, ZLK plate embedded-type opening



Size of JZT plate embedded-type opening



5. Ordering information

- 5.1 When ordering, shall give clear indicate of type,tachometer form,operation type, controlled power of motor and quantity.
- 5.2 If there are other special requirements, shall be indicated
- 5.3 ordering example: 200 JD1A-40, represent JD1A with indicating pointer,manual conventional type, controlled power of motor 40kW
200 of motor controllers with electromagnetic speed regulation.