



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

JD、JZT、ZLK、ZTK □ □ □
maximum power of controlled motor(W)
A: manual ordinary type
B: manual precise type
design number(1-pointer type 2-figure type 3,4-pointer type,
capacity reference to table 3
the controller of electromagnetic speed-adjustable motor

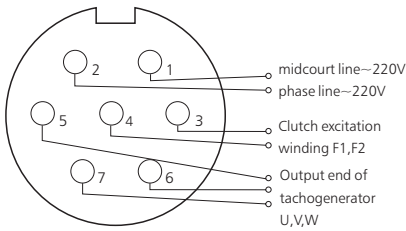
3. Operating conditions

- 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)

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.

Controller

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 2A, the working time shall not be longer than 30min.

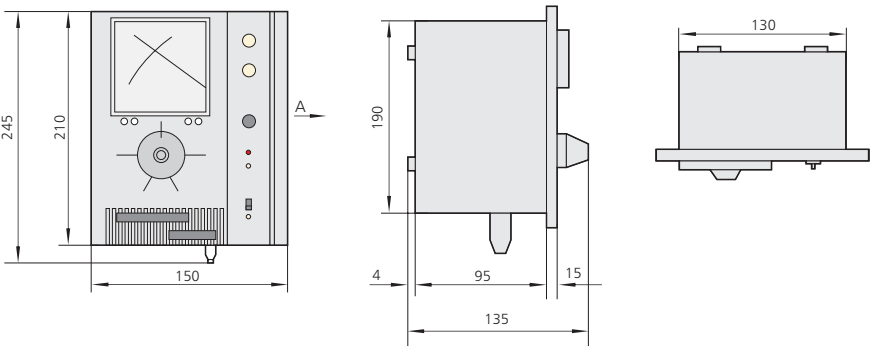
3.9 JZT,ZLK-1,ZTK-1 technical parameter

Table 3

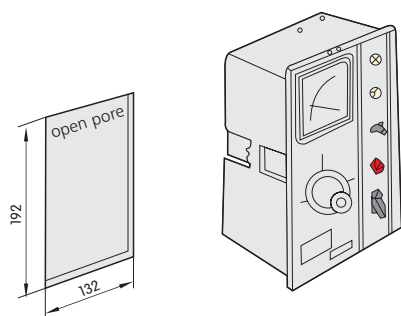
Model No.	JZT3	JZT4		ZLK-1	ZTK-1
Supply voltage	~220V(±10%) 50Hz~60Hz				
Maximum output rating(direct current 90V)	5A	8A	5A	5A	8A
Controllable power of motor (kW)	0.55~40	45~90	0.55~40	0.55~40	45~90
Tachogenerator	Ratio of transmission of Single-phase or phase-III i-f voltage is ≥2V/100r/min				
Relative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

4. Overall and mounting dimensions

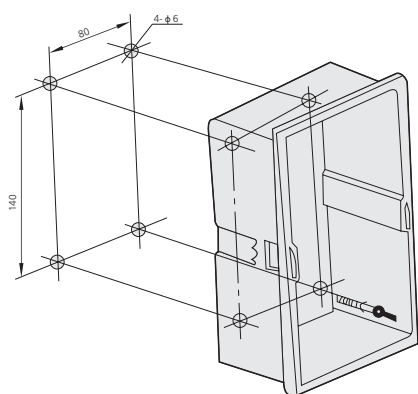
JD₂¹A,JD₂¹B-type external dimensions



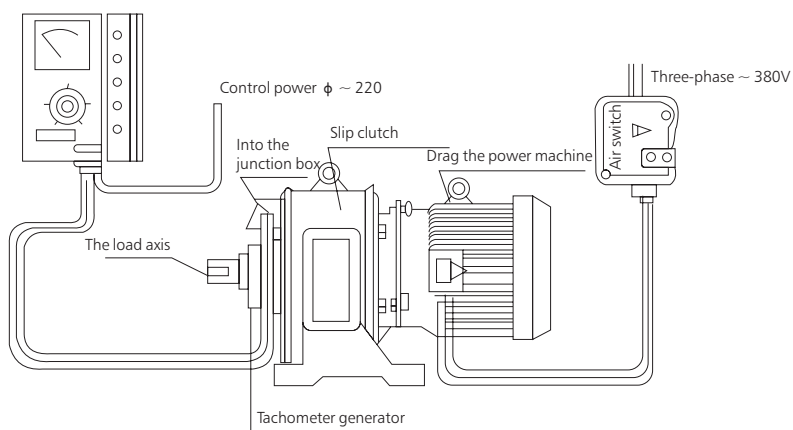
JD₂¹A, JD₂¹B-type plate embedded-type installation and the size of the holes controller



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

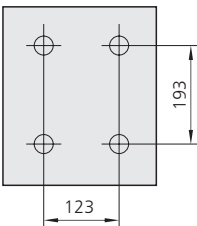


Link connecting control casing and asynchronous motor with electromagnetic speed regulation



Controller

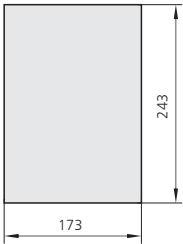
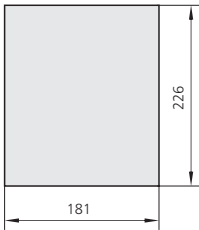
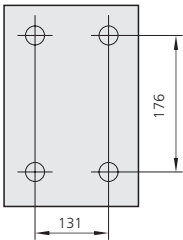
ZTK, ZLK wall-hung type installation size



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.