

# Controller



## JD, JZT, ZLK, ZTK Control Equipment of Electromagnetic Speed-adjustable Motor

### 1. General

The controller of electromagnetic speed-adjustable motor of JD, JZT, ZLK, ZTK series, are design product of ministry of machine-building industry of nationwide combination(unity), which applies to the speed adjustment control of speed-adjustable motor(slip motor), and achieves continuously viable of constant torque. The controller applied only to slip motor, not suitable with ordinary motor.

### 2. Type designation

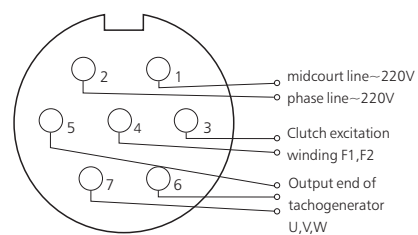
JD、JZT、ZLK、ZTK □□-□

- : 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 relative speed variation(mechanical property hardness) ≤2.5%  
Relative speed variation = rated speed/rotate speed under 5% loading to rotate speed under 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) 1 mm<sup>2</sup> copper conductor with 0.55kW~40kW and 1.5mm<sup>2</sup> copper conductor with 45kw-90kw; U, V, W conductors are select and use (recommend) 0.75mm<sup>2</sup> or 1mm<sup>2</sup> copper conductor.

### 3.7 Manual ordinary type

Table 1

Model No.	JD <sub>2</sub> A-11	JD <sub>2</sub> A-40	JD <sub>2</sub> 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 <sub>2</sub> <sup>1</sup> B-11	JD <sub>2</sub> <sup>1</sup> B-40	JD <sub>2</sub> <sup>1</sup> 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.

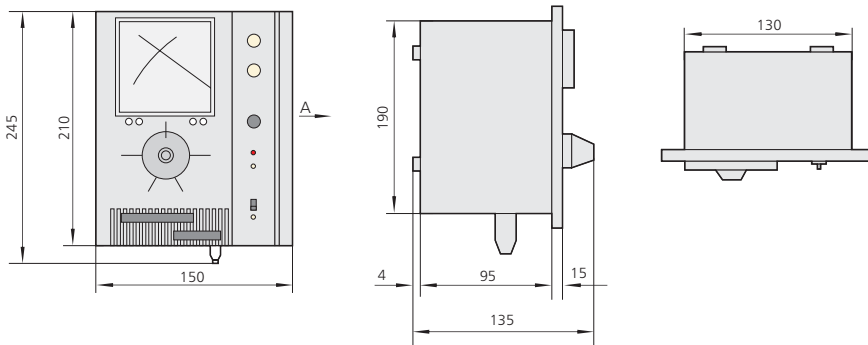
3.9 JZT,ZLK-1,ZTK-1 technical parameter

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

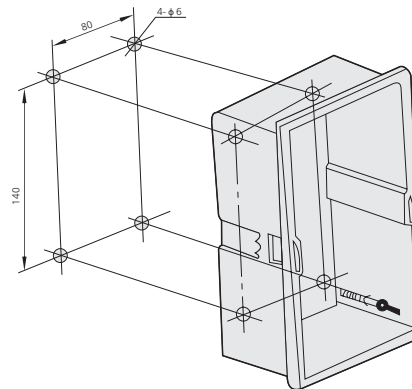
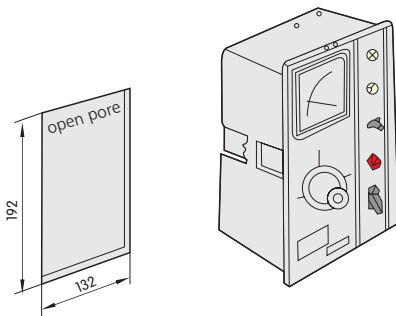
4. Overall and mounting dimensions

JD<sub>2</sub><sup>1</sup>A,JD<sub>2</sub><sup>1</sup>B-type external dimensions



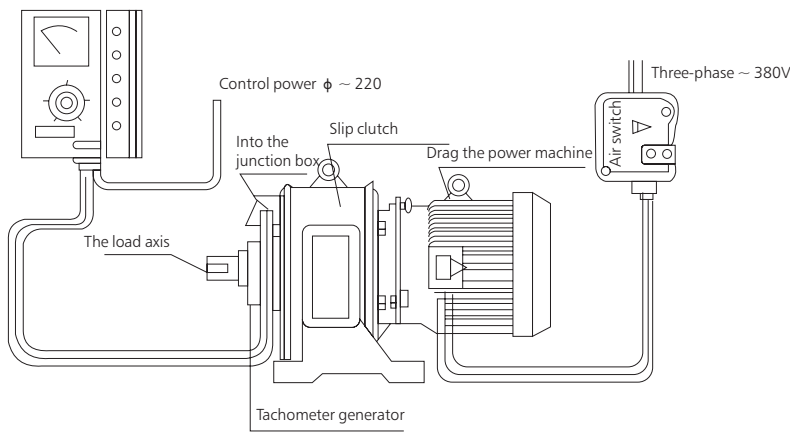
JD<sub>2</sub><sup>1</sup>A,JD<sub>2</sub><sup>1</sup>B-type plate embedded-type installation and the size of the holes controller

JD<sub>2</sub><sup>1</sup>A,JD<sub>2</sub><sup>1</sup>B-type used for wall-hung type installation size

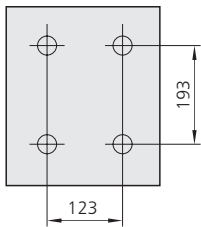


# Controller

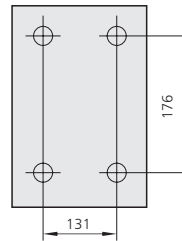
Link connecting control casing and asynchronous motor with electromagnetic speed regulation



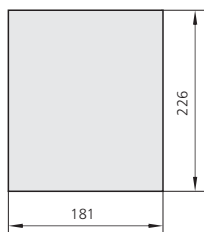
ZTK, ZLK wall-hung type installation size



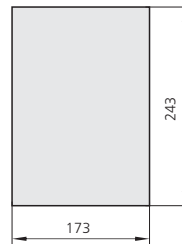
JZT wall-hung type installation size



Size of ZTK, ZLK plate embedded-type opening



Size of JZT plate embedded-type opening



## 5. Ordering instruction

- 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.

