

Motive Motor Training Equipment Specification



1 Product Overview

1.1 Overview

The training device includes various types of motors and industrial control components. Through relevant experiments, you can familiarize yourself with the operating characteristics of DC motors and the use of various industrial control components, master the control principles and control methods, and cultivate students' corresponding knowledge and Skills, suitable for higher vocational, higher vocational, secondary vocational schools and technical and vocational schools related teaching and skills training assessment.

1.2 Features

- (1) The training platform adopts aluminum profile column frame structure, the whole is simple and generous, and the universal wheel is installed at the bottom. It can be moved flexibly and can be adjusted independently according to the ground conditions. It is convenient to use and not easy to damage.
- (2) A variety of types of motors, fully equipped, can be used in combination.
- (3) Combination of software and hardware, can complete the training content of a variety of courses
- (4) The training platform has a good security protection system.



2 performance parameters

- (1) Input power: three-phase five-wire system 380V \pm 10% 60Hz
- (2) Dimensions: 1600mm \times 800mm \times 1800mm
- (3) Machine capacity: <2KVA
- (4) Weight: <200kg
- (5) Working conditions: ambient temperature -10 ° C ~ +40 ° C Relative humidity <85% (25 ° C)

3 product composition

3.1 Training table

The training table is supported by aluminum profiles and the universal wheel is attached to the bottom. It can be moved flexibly and can be adjusted independently according to the ground conditions. The desktop is made of 25mm thick high-density substrate, and the surface is treated with high-temperature and high-pressure fireproof board. The structure is firm and the whole is simple and generous.

3.2 Power Box Introduction



1. Total power supply - 4P leakage circuit breaker
2. AC380V three-phase AC output unit
3. Emergency stop unit
4. DC speed control module
5. Brake controller module
6. Intelligent display table straight module
7. European socket



3.3 matching module

(1) Motor module

The training device is equipped with a DC compound motor and a three-phase squirrel cage asynchronous motor. As shown below.



(3) Torque speed transmitter, magnetic powder brake module

The training device is equipped with a torque speed transmitter and a magnetic powder brake. Use the brake controller to adjust the torque of the magnetic powder brake, connect the intelligent display instrument, display the speed, torque and power in real time on the intelligent display device; connect the data acquisition module to display the speed, torque and power in real time on the computer software. Torque speed transmitter, magnetic powder brake module as shown below.

- 1: Torque speed transmitter
- 2: magnetic powder brake
- 3: Torque speed transmitter line box

4 can complete the training content

4.1 compound excitation DC motor experiment

- (1) Motion function and transmission group test
- (2) Static test of motor technical parameters
- (3) Motor control circuit connection and function
- (4) Technical test of sports function

4.2 Motor torque, speed, power measurement experiment

- (1) Hardware connection and display
- (2) Software connection and display



4.3 Three-phase squirrel cage asynchronous motor experiment

- (1) Familiar with the characteristics of three-phase squirrel cage asynchronous motor.
- (2) Master the star start and triangle start method of three-phase asynchronous motor.

