

[Changsha Fanli Edusupports Co.,Limited](#)

Add:No.137, Yuelu Street, Changsha City, 410000, Hunan, China

Tel: 0086-731-82201784 Fax: 0086-731-82201784

Email:sales@edusupports.com Web:<https://www.edusupports.com/>

[Motor Driving Control Trainer](#)

[0405010140](#)



[Motor Driving Control Trainer](#) can complete control experiments of AC motor and DC motor. This training system is composed of AC motor, DC motor, frequency converter, coupling, reducer, and etc. Meanwhile, the control unit of [Motor Driving Control Trainer](#) is relay and PLC. As a result, AC DC [Motor Driving Control Trainer](#) in Mechatronics System is an idea teaching equipments for mechanical [engineering](#), automation in universities, colleges, vocational schools, and technical schools to and for:

1. Understand the structure and working principle of mechanical and electrical transmission control
2. Characteristic test of [AC motor and DC motor](#)
3. Relay control experiments of AC motor and DC motor
4. PLC experiments
5. Mechanical transmission experiments

Motor Driving Control Trainer Experimental Contents

1,AC motor experiments

- 1.1.AC motor(time relay control)series rotor resistance start
- 1.2.AC motor start in variable voltage
- 1.3.AC motor jog / automatic control
- 1.4.AC motor cycle work and back to the start
- 1.5.AC motor Y- Δ reduced-voltage start
- 1.6.AC motor reverse connect brake
- 1.7.AC motor (current control)series rotor resistance start
- 1.8.AC motor dynamic braking
- 1.9.AC motor positive and negative turn control
- 1.10.AC Motor variable frequency control
- 1.11.AC motor variable frequency brake

2, DC motor experiments

- 2.1.DC motor positive and negative turn
- 2.2.DC series resistance start
- 2.3.DC motor reduced-voltage start
- 2.4.DC motor variable resistance control
- 2.5.DC motor variable voltage control
- 2.6.DC motor dynamic braking
- 2.7.DC motor power reversal connection
- 2.8.DC motor plugging braking

3, Mechanical transmission experiments

- 3.1. Electromechanical driving system splicing experiments
- 3.2. Chain drive efficiency test
- 3.3.The rotational inertia of the system calculating and testing

4, PLC programmable controller experiments (optional)

- 4.1.Digital quantity(digital value)
- 4.2.Analog signal(analog quantity)
- 4.3.PLC communication

Motor Driving Control Trainer

Main Technical Parameters

<u>Motor Driving Control Trainer</u>	Specification	
SKU	<u>0405010140</u>	
DC Motor	Power Supply	220V
	Power	0.75Kw
	Torque	4.72Nm
	Speed	1500r / min
AC Motor Reducer	Power Supply	380V
	Power	0.75Kw
	Torque	2.3Nm
	Speed	950r / min
Cycloid Speed Reductor	Reduction Ratio	1: 9
	Torque	0-250N.m
Frequency Converter	Power Supply	380V
	Power	0.75Kw
	Output frequency	0.1 ~ 400Hz
Torque and Speed Sensor	Range	0-20N.m
	Tachometer Output	60 pulses/coil
Module	PLC	S7-200 series CPU224
	A/D	Siemens EM235
Torque Sensor	Range	0-20Nm
Load		14kg/pcs
Weight		1kg, 4pcs
Bench Dimensions	L × W × H	1550 × 730 × 1700mm
Transmission Dimensions	L × W × H	1200 × 600 × 50mm
The Height of Transmission Frame		2000mm

*Products and configuration list described herein are subject to changes without notice.