# **AC Servo Motor Trainer**



#### FEATURES

- Equipped with Rockwell Automation CSDJ Plus Servo Drive being widely used in industry
- PC-based control and monitoring through the computer software package

## **EXPERIMENTAL CONTENTS**

- Basic setting and operation of AC Servo Drive
- How to set parameters of the servo motor
- How to control the sequence of I/O signals and brake control signals
- Operation of the servo motor by the Line Drive Output
- Servo motor operation practices by the operators
- Multiple speed control practices
- Zero-clamp practices
- Torque control practices

#### **SPECIFICATIONS**

| Power source                 | Single-phase AC 220V (-15% ~ + 10%) , 50/60Hz   |
|------------------------------|---|
| Control method               | PWM control in use of IPM   |
| Encoder                      | 2000 / 2048 / 2500 / 10000 P/R (incremental or absolute)  |
| Ambient temperature          | 0° ~ +50°C (90% R.H)  |
| Vibration / shock resistance | Vibration: 0.5G / Shock: 2G (1G = 9.8m/s2)  |
| Position (output)            | Encoder output: A-phase, B-phase and Z-phase (MC3487 Line Driver)   |
| External input               | Servo ON/OFF, proportional control, forward/reverse rotation prevention, and alarm reset  |
| External output              | Brake control (in rotation), servo alarm/code (3-bit), speed compliance (speed control mode), posi-<br>tion compliance (position control mode), Z-pulse (open collector)                  |
| Protective function          | Overcurrent, overload, overvoltage, overspeed, overheated inverter, CPU error, malfunctioned encoder, and communication disorder  |
| Dynamic brake                | To be activated in case of alarm activation   |
| D/A output (speed)           | Setting value (RPM) at ±1V/SET -08 (Max. ±10V)  |
| D/A output (torque)          | Setting value (%) at ±1V/SET -09 (Max. ±10V)  |
| External indicator LED       | Power ON, Servo Run, Servo Alarm  |
| Operator                     | <ul> <li>Command values such as speed, torque, position and electrical angle</li> <li>Error values</li> <li>Feedback values</li> <li>Offset values</li> <li>Load inertia ratio</li> </ul> |
| PC software                  | All functions of Operator   |
|                              |   |

## STANDARD ACCESSORIES

- Power cord : 1ea
- Connection cable : 1set
- Serial cable (9-Pin, D-SUB) : 1ea
- PC software CD: 1ea
- CSDJ Plus user's manual : 1ea