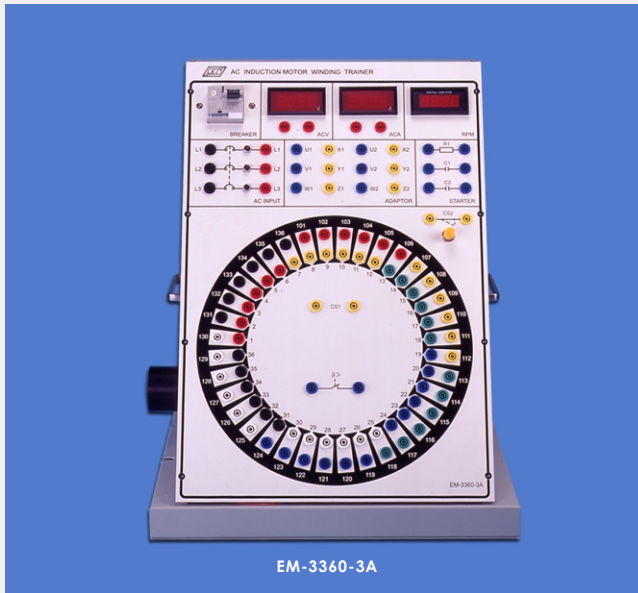




## EM-3360

### AC Induction Motor Winding Training System



EM-3360-3A AC Induction Motor Winding Training System can be configured for various poles as the self-starting three-phase induction motor and single-phase induction motor which is used with the resistor or capacitor starting.

Students can learn the different types of motor winding through the simple winding connection. In addition, with external load torque provided by Magnetic Powder Brake Unit(EM-3320-1C), Brake Controller(EM-3320-1N) and Three-phase Power Supply(EM-3310-1E), students can see the characteristics of different types of motor.

#### ● Features

1. Use 4mm safety socket terminal
2. The clearly- printed winding set codes and colorful wire on top allow user to do winding and operation easily
3. The power input with the motor circuit breaker
4. Easy linking to brake controller unit for measure and draw the characteristics of each winding motor through PC
5. Plug-in panel helps teachers complete the experiments easily and quickly (optional)

#### ● Specifications

1. Induction motor
  - (1) Input voltage :  $3\phi$  220V, 50Hz/60Hz
  - (2) Rated current : 1.2A
  - (3) Output power : 0.3KW
    - a. The motor main body can be connected to the Magnetic Powder Brake Unit by direct couple.
    - b. The motor with thermal switch for overheating protection.
    - c. With single-phase starting resistor, starting capacitor and running capacitor, simulation centrifugal switch.

2. AC Voltmeter : 0 ~ 600V
3. AC Ammeter : 0 ~ 6A
4. Tachometer : 0.1 ~ 9999 rpm

#### ● EM-3340-3B System Transformer

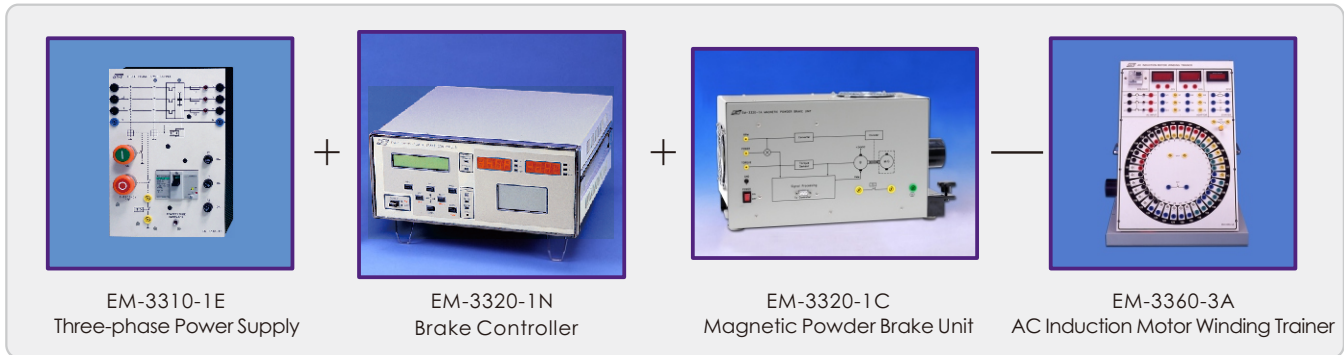
1. Rated power : 1.5KVA
2. Primary : Depend on the local line voltage
3. Secondary :  $3\phi$ , 220V AC
4. Frequency : 50Hz/60Hz

- ※  $3\phi$  power(source) is required while operating this system.
- ※ The System Transformer EM-3340-3B must be included if  $3\phi$  220V is not available.



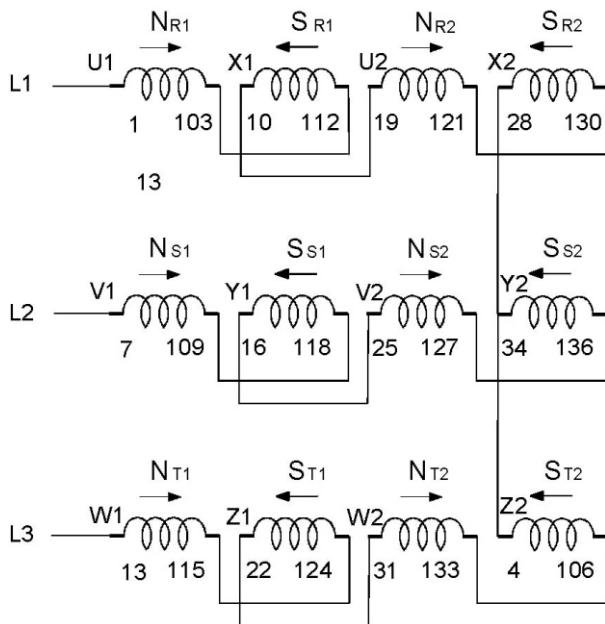


## • Measurement of Different Types Motor Characteristics

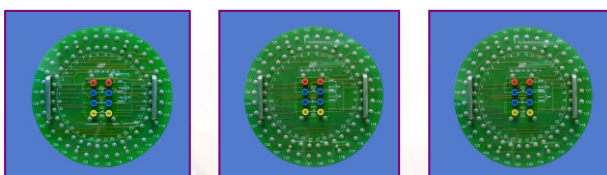


## • Winding Example

Topics : Learning the winding of three-phase 4 pole induction motor



## • Plug-in Panel (Optional)



EM-3360-3A 1Ø-2P-A    EM-3360-3A 1Ø-4P-A    EM-3360-3A 1Ø-6P-A

## • List of Experiment

1. Single-phase 2-pole induction motor
  - With optional panel EM-3360-3A, 1Ø2P-A
  - With EM-3310-1E, EM-3320-1N and EM-3320-1C for external mechanical load:
    - Capacitor start induction motor
    - Capacitor run induction motor
2. Single-phase 4-pole induction motor
  - With optional panel EM-3360-3A, 1Ø4P-A
  - With EM-3310-1E, EM-3320-1N and EM-3320-1C for external mechanical load:
    - Capacitor start induction motor
    - Capacitor run induction motor
3. Single-phase 6-pole induction motor
  - With optional panel EM-3360-3A, 1Ø6P-A
  - With EM-3310-1E, EM-3320-1N and EM-3320-1C for external mechanical load:
    - Capacitor start induction motor
    - Capacitor run induction motor
4. Three-phase 2-pole induction motor
  - With EM-3310-1E, EM-3320-1N and EM-3320-1C for external mechanical load:
    - Series-Wye-Connected induction motor
    - Series-Delta-Connected induction motor
    - Parallel-Wye-Connected induction motor
5. Three-phase 4-pole induction motor
  - With EM-3310-1E, EM-3320-1N and EM-3320-1C for external mechanical load:
    - Series-Wye-Connected induction motor
    - Series-Delta-Connected induction motor
    - Parallel-Wye-Connected induction motor
6. Three-phase 6-pole induction motor
  - With EM-3310-1E, EM-3320-1N and EM-3320-1C for external mechanical load:
    - Series-Wye-Connected induction motor