

**Product Name :**

Electric Motor and Transformer Comprehensive Experimental Device

**Product Code :**

CIVIL-ETE-52-0009

**Description :**

Electric Motor and Transformer Comprehensive Experimental Device

**Technical Specification :****Technical parameters of the electric motor and transformer comprehensive experimental device**

Total dimension: 1950×700×1500mm

Input power: three-phase, five-wire 380V±10% 50Hz/60Hz

Output power :

AC 380V Adjustable power safety terminal output

AC 220V Safety terminal isolation output

AC 24V Safety terminal isolation output

DC 220V Safety terminal isolation output

Capacity: &lt; 1.5KVA

**Experiment project of the electric motor and transformer comprehensive experimental device****1. DC motor experiment**

- a) DC generator
- b) DC shunt motor
- c) DC motor start: series resistance start, reduction voltage start
- d) The method of DC motor change veer

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e) DC motor speed regulation characteristic experiment: change the armature loop in resistance, excitation circuit in a resistance, to reduce the armature voltage

## **2. Single-phase transformer experiment**

- a), Single-phase transformer variable ratio K
- b), Single-phase transformer no-load experiment, acquisition of transformer no-load data  $I_0$ ,  $P_0$  and  $U_0$ .
- c), Single-phase transformer short-circuit experiment, acquisition of transformer short-circuit data  $U_K$ ,  $I_K$  and  $R_K$ .
- d), Single-phase transformer load experiment, acquisition of transformer load data  $U_Z = f(I_Z)$ .

## **3. Three-phase transformer experiment**

- a), Three-phase transformer winding polarity measurement
- b), Three-phase transformer coupling group measurement

## **4. Asynchronous motor experiment**

- a), Three-phase winding asynchronous motor stator resistance test
- b), Three phase asynchronous motor no-load experiment: acquisition of no-load voltage  $U_0$ , current  $I_0$ , three-phase power  $P_0$ , draw no load characteristic curve
- c), Three phase asynchronous motor short circuit experiment: acquisition shorted  $U_K$  voltage, current  $I_K$ , power  $P_K$ , draw short circuit characteristic curve
- d), Calculate three phase asynchronous motor parameter
- e), Mechanical properties of three phase asynchronous motor in various operating conditions

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## **Civil Mechanical India**

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