SCIENTICO INDIA
Manufacturer & Exporter · Ambala, Haryana, India

PRODUCT DATA SHEET
Catalogue reference for product evaluation

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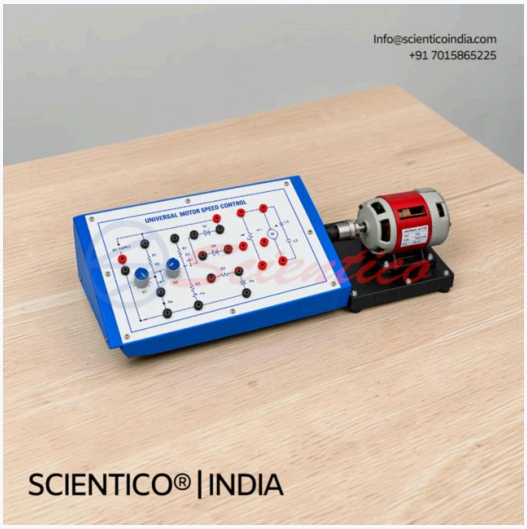
Single-Phase Split-Phase Induction Motor Trainer | SC-SPM 0250

Category: TVET Equipments · **Order Code:** SPM 0250 · **Country of Origin:** India

Product Overview

The Single-Phase Split-Phase Induction Motor Trainer – SC-SPM 0250 is a resistance-start split-phase induction motor rated at 0.37 kW, 230 V AC, 50–60 Hz, 2,820 rpm at 50 Hz. The run winding, start winding, and centrifugal switch are brought out separately to an overhead terminal box with 4 mm safety sockets for educational experiments. The motor mounts on an aluminium base with anti-vibration glides and thermal overload protection. A coupling hub connects to flexible rubber coupling Item 11075. Electronic motor data is provided as a QR code and PDF data sheet. It complies with IEC/EN 60034 and CE standards and is ideal for single-phase motor operation, starting principle, and centrifugal switch studies.

View this product online: https://scienticoindia.com/product/single-phase-split-phase-induction-motor-trainer-sc-spm-0250/



Request a model-specific quotation
Include quantity and delivery country.

Technical Specifications

Single-Phase Split-Phase Induction Motor Trainer – SC-SPM 0250: Technical Specifications

Category	Specification
Power Rating	0.37 kW
Voltage	230 V AC, 50–60 Hz
Current	2.8 A
Poles	2 poles
Speed	2,820 rpm at 50 Hz
Construction	Two shaft ends; aluminium base with anti-vibration glides
Winding Access	Run winding, start winding, centrifugal switch brought out separately
Terminals	Overhead terminal box with 4 mm safety sockets; earth included
Shaft End	Coupling hub for flexible rubber coupling Item 11075
Protection	Thermal overload protector
Motor Data	Electronic nameplate (EDD) as QR code and PDF data sheet
Insulation	Class F
Enclosure	IP20
Standards	IEC/EN 60034; CE marked

Category	Specification
Nameplate	Metal, to IEC/EN 60034

Key Features

Key Features

- **Split-Phase Design:** resistance-start induction motor without capacitors
- **Rated Power:** 0.37 kW at 230 V AC, 50–60 Hz, 2.8 A
- **Accessible Windings:** run and start windings and centrifugal switch brought out separately
- **Centrifugal Switch:** visible terminal for switching experiments
- **Plug-In Connections:** 4 mm safety sockets in overhead terminal box
- **Thermal Overload Protection:** built-in protection included
- **Anti-Vibration Base:** aluminium base with glides for stability
- **Standard Shaft:** coupling hub compatible with Item 11075 flexible rubber coupling
- **Electronic Nameplate:** QR code and PDF data sheet readable on any device
- **Compliance:** IEC/EN 60034 and CE standards

Experiments

- Split-phase motor starting principle and phase shift between windings
- Centrifugal switch operation and timing during acceleration
- Run winding and start winding current and voltage during start-up
- Effect of auxiliary winding resistance on starting torque
- No-load and full-load operation characteristics
- Speed-torque curve measurement
- Thermal overload protection operation and reset
- Single-phase motor efficiency measurement
- Capacitor addition experiments (external capacitor, if applied)
- Bearing wear inspection and lubrication effects

Construction and Design

The Single-Phase Split-Phase Induction Motor Trainer – SC-SPM 0250 has a rotor with a resistance-start split-phase design. The run winding, start winding, and centrifugal switch are brought out to an overhead terminal box with 4 mm safety sockets. The motor mounts on an aluminium base with anti-vibration glides. A thermal overload protector is included. The shaft has two ends and a coupling hub compatible with flexible rubber coupling Item 11075.

Scope of Delivery

- Motor on base plate with coupling hub
- English manuals, wiring diagrams and maintenance schedule

Ordering & Delivery

- Send the product name, quantity, delivery country and destination with your enquiry.
- Production schedule, freight, payment terms and export documents are confirmed in the written quotation.

Frequently Asked Questions

Q: What is the power rating of this motor?
A: The Single-Phase Split-Phase Induction Motor Trainer – SC-SPM 0250 is rated at 0.37 kW, 230 V AC, 50–60 Hz, 2,820 rpm at 50 Hz, with a current of 2.8 A.

Q: Does this motor use a starting capacitor?
A: No. This is a resistance-start split-phase motor with no starting or running capacitor. The starting torque is developed by phase displacement between the run and start windings created by resistance.

Q: Can I observe the centrifugal switch operation?
A: Yes. The centrifugal switch is brought out separately to the overhead terminal box, allowing you to observe and measure its switching action during start-up and run phases.

Q: Are the run and start windings accessible?
A: Yes. Both the run winding and start winding are brought out separately to 4 mm safety sockets in the overhead terminal box for experiments and measurements.

Q: Is thermal overload protection included?
A: Yes. The Single-Phase Split-Phase Induction Motor Trainer – SC-SPM 0250 includes thermal overload protection and has Class F insulation rated to 155°C.

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