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Manufacturer & Exporter · Ambala, Haryana, India

PRODUCT DATA SHEET
Catalogue reference for product evaluation

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Variable Frequency Drive (VFD) Training Kit | SC-VFD 0370

Category: TVET Equipments · **Order Code:** VFD 0370 · **Country of Origin:** India

Product Overview

The Variable Frequency Drive (VFD) Training Kit – SC-VFD 0370 is a drive training panel with a Siemens SINAMICS G120 drive (0.37 kW, PM240-2, CU240E-2 PN, BOP-2) and Siemens switchgear. It includes three contactors, an emergency stop, potentiometers, switches, and status LEDs. All connections are on 4 mm sockets. The guarded 0.37 kW Siemens motor has an incremental encoder of 1 to 10,000 PPR. PROFINET and PROFIBUS cables with PROFIsafe are provided. Safe torque off, a 3-pole MCB with lock-out and tag-out, and SINAMICS Startdrive commissioning software under a room licence are included. The kit is CE marked and covers the Machinery Directive.

View this product online: https://scienticoindia.com/product/variable-frequency-drive-vfd-training-kit-sc-vfd-0370/



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

Technical Specifications

Variable Frequency Drive (VFD) Training Kit – SC-VFD 0370: Technical Specifications

Category	Specification
Motor	Siemens 3-phase, 0.37 kW; sockets; guarded shaft; speed disc
Encoder	Incremental, 1–10,000 PPR
Drive	SINAMICS G120, 0.37 kW
Power Module	PM240-2
Control Unit	CU240E-2 PN
Operator Panel	BOP-2
Safe Torque Off	Included
Contactors	3
Auxiliary Blocks	2 NC and 4 NO
Emergency Stop	Included; via STO
Pushbuttons	Illuminated twin pushbutton, 22 mm
Switches	Selector switches; 4 two-position and 2 three-position
Potentiometers	2
Relay	230 V AC time relay

Category	Specification
Indication	Status LEDs
Communication	PROFINET and PROFIBUS cables with PROFIsafe
Protection	3-pole MCB with lock-out and tag-out
Compliance	CE, including Machinery Directive
Software	SINAMICS Startdrive commissioning; room licence
Terminals	4 mm sockets

Key Features

Key Features

- **Siemens SINAMICS G120:** 0.37 kW drive with PM240-2 power module and CU240E-2 PN control
- **Operator Panel:** BOP-2 for local parameter access
- **Safe Torque Off:** STO safety function integrated
- **Siemens Switchgear:** 3 contactors with auxiliary blocks
- **Emergency Stop:** E-stop integrated with STO
- **Training Controls:** potentiometers, two-position and three-position switches, and status LEDs
- **Guarded Motor:** 0.37 kW Siemens motor with guarded shaft
- **Encoder Feedback:** incremental encoder, 1–10,000 PPR
- **Fieldbus Communication:** PROFINET and PROFIBUS with PROFIsafe
- **Lock-Out Protection:** 3-pole MCB with lock-out and tag-out
- **Commissioning Software:** SINAMICS Startdrive, room licence

Experiments

- V/f control of induction motor speed
- Vector control operation and comparison with V/f control
- Acceleration and deceleration ramp setting
- Speed control using potentiometer and switch inputs
- Encoder feedback and speed measurement
- Emergency stop operation and STO response
- Fault and status indication on the drive and status LEDs
- PLC control of the drive over PROFINET or PROFIBUS
- Safe stop operation with PROFIsafe communication
- Lock-out and tag-out procedure for maintenance

Construction and Design

The Variable Frequency Drive (VFD) Training Kit – SC-VFD 0370 is a drive training panel on a tabletop stand. The SINAMICS G120 drive, switchgear, and controls are mounted on the panel. All connections are brought out to 4 mm sockets. The motor is a guarded 0.37 kW unit with a speed disc and incremental encoder, connected through the panel. The MCB includes a lock-out and tag-out facility.

Software

SINAMICS Startdrive commissioning software is included under a room licence.

Scope of Delivery

- VFD training panel on tabletop stand
- Guarded motor with encoder
- Ethernet and 4 mm cables
- English manual with V/f, vector, ramping and PLC control exercises

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: Which drive is included?
A: The kit uses a Siemens SINAMICS G120 drive rated 0.37 kW, with a PM240-2 power module, CU240E-2 PN control unit, and BOP-2 operator panel.

Q: What control methods can be taught?
A: The manual covers V/f control, vector control, ramping, and PLC control exercises.

Q: How is speed measured?
A: The motor has an incremental encoder with 1 to 10,000 PPR, plus a speed disc.

Q: What safety functions are included?
A: The drive has safe torque off, the emergency stop works through STO, and a 3-pole MCB supports lock-out and tag-out. PROFIsafe communication cables are supplied.

Q: What communication options are available?
A: PROFINET and PROFIBUS cables with PROFIsafe are included, along with Ethernet cables.

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