

SAP E&C AC MOTOR SPEED CONTROL TRAINER
i.e. AC DRIVE TRAINER (SAP-53)



The AC Motor Control Trainer or AC Drive Trainer outlines the basic of Operation, Construction and Speed Control of AC Motor.

SYSTEM COMPONENTS:

- ❖ **AC drive with PID controller:** - Model Name: SV004iC5-1F, I/P: Single Phase 230 VAC, O/P: 3 ϕ 230 VAC, Motor rating: 0.4 kW / 0.5 HP.
- ❖ **AC Induction Motor:** - 3 ϕ , 230 VAC, 0.5 HP, 3000 RPM, Frame 71.
- ❖ **Proximity Sensor:** - Type: Inductive, 3 wires, 10-30 VDC, Sensing Distance: 7-10 mm, Diameter: 18 mm.
- ❖ **RPM Indicator:** - Supply Voltage: 230 VAC, I/P: 0-3000 rpm (Proximity input), O/P: 4-20mA.
- ❖ **RS-232 to RS-485 Converter:** - Supply Voltage: 230 VAC, I/P signal: RS-232, O/P signal: RS-485

FEATURES:

- ❖ The self-contained unit.
- ❖ Modern industrial components are used for operating.
- ❖ Comprehensive training manual supplied.
- ❖ Optional components are available to allow fault operation.
- ❖ Computer Interface facility.
- ❖ SCADA software for graphical user interface (GUI), Digital data display, redundant bi-directional Parameter selection facility, real time trend plotting historical trends, report generation.

OBJECTIVE:

- ❖ Study of operation and construction of A.C. motor.
- ❖ Study of characteristics of A.C. motor.
- ❖ Study of tachometer.
- ❖ Study of AC drives.
- ❖ Characteristics plot of Speed VS Current, and Frequency VS Speed.
- ❖ Study of closed loop control system (speed control).
- ❖ Study of P, PI, and PID controllers.
- ❖ Study of computerized speed control of AC Motor.
- ❖ Study of SCADA software for AC motor speed control application.

INSTRUCTION MANUAL:

Self explanatory operation manuals are provided with each system. Detailed theory as well as practical Exercises are also included in the manual.

SERVICES REQUIRED:

- ❖ Single phase electrical supply of 230V 50Hz.
- ❖ PC Pentium Dual core for SCADA software analysis for computerized control.

NOTE:

All descriptive matter and illustrations are intended to give only a general idea of the equipment. Detailed specifications may be altered at the company's discretion without.

Manufactured / Marketed by	
SAP ENGINEERS AND CONSULTANTS	
Regd. Off.	: Shop No. 26, 27 Srushti, S. No. 82/11+12++33+34, Eklavya Clg Rd (D. P. Road), Kothrud, Pune- 38
Telephone	: (020) 25384737
Mobile	: (+91) 9422088946, 9552475082
Fax	: (020) 25383544
Email	: pravinsdeode@vsnl.net
Website	: www.sapengineers.com / www.sapengineers.co.in

