



The **AC Motor Control Trainer or AC Drive Trainer (SAP - 53)** outlines the basic of Operation, Construction and Speed Control of AC Motor.

**AC MOTOR SPEED CONTROL TRAINER (SAP - 53)**

**Technical Specification:-**

No.	Item Name	Technical Specifications
1	AC drive with PID controller-	Make: LS / DELTA/EQVT. Model Name: SV004iG5-1F / EQVT. I/P: 1 $\phi$ 230 VAC, O/P: 3 $\phi$ 230 VAC
2	AC Induction Motor-	3 $\phi$ , 230/415 VAC, 0.5 / 1HP, 1500 RPM, Frame 71/80.
3	Proximity Sensor	Type: Inductive, 3 wires, 24 VDC, Sensing Distance: 5 mm, Diameter: 18 mm.
4	RPM Indicator	Supply Voltage: 230 VAC, I/P: 0-1500/3000 rpm (Proximity input), Retransmission O/P: 4-20mA
5	RS-232 to RS-485 Converter	Supply Voltage: 230 VAC, I/P signal: RS-232, O/P signal: RS-485

### Objectives-

- ❖ 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

### 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.

### Instruction Manual-

- ❖ Self explanatory.
- ❖ Operation manuals are provided with each system.
- ❖ The detailed theory and practical exercises are also included in the manual.

**System Dimensions-** 1 Ft. (L) X 1 Ft (W) X 2 Ft. (H)

**Weight:** Approx. 20Kgs

### Services Required-

- ❖ Electric Supply of 1 $\phi$  230 VAC, 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 any notice.



Manufactured/Marketed By  
**SAP ENGINEERS & CONSULTANTS**

Regd. Off. : Shop No. 26-27, 'Srushti', Survey No.82, Near Guru Ganesh Nagar,  
Eklavya College Road (D.P.Road), Kothrud, Pune - 411 038, India

Telephone : (020) 2538 4737

Mobile : +91 94220 88946, +91 9552475082

Fax : (020) 2538 3544

Email : [sales@sapengineers.com](mailto:sales@sapengineers.com)

Website : [www.sapengineers.com](http://www.sapengineers.com) / [www.sapengineers.co.in](http://www.sapengineers.co.in)