

BASIC SERVO MOTOR TRAINER

Model Number : GOTT-SERVO-BAS-01

**DESCRIPTION**

The servo drive technology is the control in automation future in electronics & mechatronic technology. Enter into the world of modern drive technology. The GOTT servo trainer is design to teach student, technicians and engineers need to develop skills in handling electrical machines and acquire know-how, function, command, connection configurations, characteristics and in response to various application and function.

FEATURES

- Enables stand-alone operation with key-pad
- Can link to any PLCs for simple drive control system.
- Control commands and motion commands
- User friendly programming language.
- Learn programming environment and debugging functions

GENERAL SPECIFICATION

- Servo controller
- Switching power supply
- Aluminum casing
- Programming cable RS232C/USB
- 3 slot sensor
- Software in CD form
- Instruction manual
- AC servo motor
- 1 axis linear actuator c/w coupling

PRODUCT MODULES**SMART SOFTWARE INTERFACE (MODEL NO: GOTT-SERVOSOFT)****CODE
407-501**

- The user-friendly graphical user interface
- Auto recognition of communication format.
- Quick set up mode and graphical parameter set.
- Auto tuning and manual tuning.
- Resonance point detection using FFT analysis.
- Real time oscilloscope function.
- This software provides functions to configure, set and debug the GOTT-SERVOSOFT user interface

**QUICK SET UP MODE AND GRAPHICAL PARAMETER SET**

- GOTT-SERVOSOFT provides quick set up mode to be able to configure all related function to one operating mode. These screens provide easy navigation and comprehensive interface.
- All the parameters can be visualized on the same page using the Graphical parameter set. This screen provides to expert user remove high flexibility and high effectiveness.

AUTO TUNING

- LEXIUM 23 SET UP provides state of the art auto tuning functionalities offering 2 different modes:
 - Off line Auto tuning: This mode permits to calculate the values of the gain parameters according to the conditions selected by user
 - On line dynamic tuning: This mode provides the best control for your machine by computing dynamically the gain parameters according to the real response of the machine.

RESONANCE POINT DETECTION (FFT ANALYSIS)

- FFT analysis is used to detect the resonance point of the machine. Both Current and velocity can be monitored.
- To perform the FFT analysis, the motor will run in one direction according to the position command and record the behavior of the axis in terms of current or velocity. Once this movement is finished, GOTT-SERVOSOFT will analyze the resonant frequencies and display it as a peak on the oscilloscope screen.
- Notch filter can then be applied to suppress the influence of this resonant Frequency

OSCILLOSCOPE FUNCTIONALITIES

- GOTT-SERVOSOFT is providing a powerful oscilloscope which can be used in 2 different modes:
 - Fast oscilloscope: To monitor evolution of the measured values in real-time
 - Fine oscilloscope: To capture a very accurate moment of the application. This functionality is recording all the information before displaying them therefore the information is more accurate and can be use to make very precise tuning.

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SERVO DRIVERSchneider
Electric

- The range of LEXIUM 23 servo drives is compatible with BCH servo motors constitute a tailored solution for machines across a wide power and functionality range
- LEXIUM 23 servo drives wide power range combined with high performance functionalities and extended choice of BCH servo motors is the best suited package for all applications such as material working, material handling, textile, electronics, packaging and printing
- LEXIUM 23 servo drives comply with EN 50178 and IEC/EN 61800-3 international standards and carry UL (USA) and CE marking
- Applied functionalities: (1)Position Control (2)Speed Control (3)Torque Control (4)Switching Control

SERVO MOTOR

- The motor is 3 phases synchronous motor
- It is equipped with 2 ranges of high quality encoder
- The servo motor has been designed to fit the requirement of nay types of Machines, with 6 different flange sizes 40mm, 60mm, 80mm, 100mm, 130mm & 180mm

EXPERIMENT TOPICS :

- Introduction to motion control
- Connecting trainer into operation
- Interface control with PC
- Configuration of parameter setting
- Use a tuning chart tuning process
- I/O configuration
- Encoder pulse and direction
- Data collection and graph viewing
- Speed, Position and Torque control
- Motion command control
- Absolute and Relative move
- Velocity of movement
- Point to point moves with Linear Axis
- I/O interrupt command and interlock
- Programming sequence and step

Manuals :

- (1) All manuals are written in English
- (2) Model Answer
- (3) Teaching Manuals

General Terms :

- (1) Accessories will be provided where applicable.
- (2) Manual & Training will be provided where applicable.
- (3) Design & specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product.

Warranty :

2 Years

ORDERING INFORMATION :

ITEM	MODEL NUMBER	CODE
BASIC SERVO MOTOR TRAINER	GOTT-SERVO-BAS-01	407-500

*Proposed design only, subject to changes without any notice.