

MODEL: BSP02-D

BSP02.xls Revision No: 03 Date: April 24, 2021

PID BASED MOTOR SPEED CONTROL TRAINER



FEATURES

- Robust and sturdy construction
- Easy and versatile operation
- Incorporates standard industrial components
- Can be interfaced with any standard PID

DESCRIPTION

The trainer is designed to teach and familiarize students with PID application especially in case of DC/AC Motor Speed Control. A 12 VPMDC motor/Induction motor is used. Speed of the motor is sensed and corresponding signal is fed to the PID. The PID is used as a PID controller. Output of the PID is given to the final control element that controls the speed of the motor.

The trainer can be interfaced with any standard PID having Analog input and output. The PID can be supplied if specifically asked for.



INSTRUCTION MANUAL

Self explanatory operating manuals are provided with each system. Detailed theory as well as practical exercises is also included in the manual.

EXPERIMENTS

1. To study the speed control of the DC motor using PID

COMPONENTS

- 1. 12 V PMDC Motor or 230V 0.25HP AC Motor
- 2. RPM sensor
- 3. RPM Transmitter
- 4. Final control element
- 5. Digital Speed Indicator
- 6. Control Panel
- 7. PID

OPTIONAL

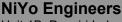
Motor loading arrangement

MODELS

- BSP02-D-1: DC Motor based system
- BSP02-D-2: AC Motor based system

SERVICES REQUIRED

Electric supply 230 V AC, 50 Hz,



Unit 1B, Devgiri Industrial Estate, S. No. 17/1B Plot No. 14, Kothrud, Pune 411 029 INDIA, Tel-91 20 2546 5004, 2546 8051, 2546 7296 Telefax - 91 20 2546 8051 e-mail- sales@niyoindia.com Web: www.niyoindia.com





