

MODEL: BSP04

BSP04.exl Revision No: 06 Date: March 9, 2024

TEMPERATURE CONTROL SYSTEM



FEATURES

- Compact and sturdy construction
- Easy and versatile operation
- Self contained system
- Computerised analysis (Optional)
- Incorporates standard industrial components
- Comprehensive instrumentation

DESCRIPTION

Temperature control system is designed to demonstrate various aspects of control engineering using a temperature controlled system. Hot/cold water passing through heat exchanger is controlled to obtain the temperature control. The system incorporates standard industrial components.

INSTRUCTION MANUAL

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



LIST OF EXPERIMENT

- 1. Manual two step control
- 2. Study of P, PI, PD, PID Control NOTE
- 3. Study of sensors
- 4. Study of Control valves
- 5. Study of feedback control system
- 6. Study of E/P Converter

NOTE: If Pneumatic PI controller is ordered supplied in place of electronic PID controller, only PI action can be viewed

COMPONENTS

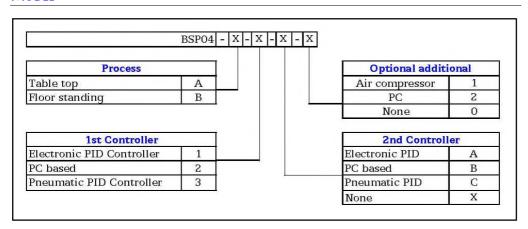
- 1. Sump Tank
- 2. Hot water tank with heater
- 3. Pump
- 4. Heat Exchanger
- 5. Temperature Sensor Transmitter
- 6. Control Valve
- 7. E/P Converter with Filter Regular and Pressure Gauge
- 8. PID Controller (NOTE1)
- 9. Interface Card and Software (NOTE1)

NOTE1: Refer to model selection chart below

SERVICES REQUIRED

- 1. Water supply and drainage arrangement
- 2. Electric supply
- 3. Compressed air

MODEL

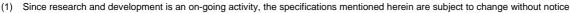


NiYo Engineers

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







(2) Photographs are indicative only.

