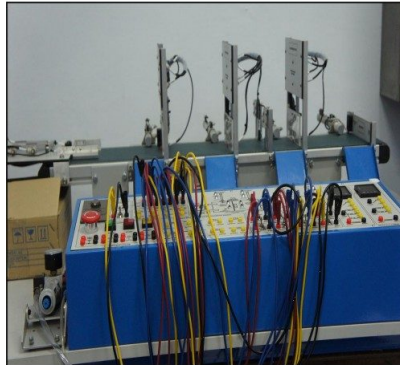




Conveyor System Trainer

Category: Mechatronics · Model reference: MZM-2010



SPECIFICATIONS

Description:

The Conveyor System Trainer is an ideal training system to those who are in charge of automating high volume production lines. The system offers most realistic environment possible to maximize educational efficiency. Pneumatic valves and cylinders, and a PLC are the main components of the simulated environment. The system is based on a belt type conveyor with sensors placed at various locations to detect the size of the object on the belt. When the PLC functions are properly utilized, the obtained information can be processed to generate desired control functions such as determining pass or fail, or separating good parts from bad parts. Time control or parts count can be programmed when a preset counter or a timer is utilized.

The complexity of this system allows further study of PLCs in process Control systems. Students are required to consider in more detail the structure of complete control systems. Complex control scenarios can be developed using combinations of timers and counters with master and zone control functions.

CONVEYOR TRAINER FEATURES:

- Actual conveyor simulation.
- Part selection by logical detection.
- Introduction of pneumatics.
- Realistic simulation of an automated factory
- Object Detection.
- Performing measurement on locating hole positioning
- Easy relocation of sensors, cylinders or the entire system
- 5-Sensor & 4-Air Cylinder Controls with 4-Solenoid Valve
- Sensors detect the physical dimensions of an object placed on the Induction and Opto-electronic sensors.
- Can be interfaced with all PLC types.
- Comprehensive courseware manual.
- Introduction of motion control
- Count and Timer Control.
- Diverse decision making processes.
- Manipulating component.

COMPONENT SPECIFICATION:

The system consists of the following standard items

1. PLC MAIN UNIT

DESCRIPTION	UNITS
1. DC Relay	6
2. Indicators	10
3. Switch	2

2. CONVEYOR UNIT

DESCRIPTION	UNITS
CPU with 240VAC power supply	1
24VDC input	24
Relay contact outputs	16
2K EEPROM memory	1
Programming Console	1
Full programming features back lit, two line LCD display	1
Keypad	1
Hand-held programmer (optional)	1
Connector adapter	1

3. SEQUENCE SWITCH & INDICATOR UNIT

ITEMS	DESCRIPTION
Conveyor Type	Belt MZ First Motion
Belt Size	1000(L) x 150 (W)mm
Base Size	1500(L) x 750(W)mm x 19mm ThK
Conveyor Speed	Auto : 20mm/s to 10mm/z (in 3 steps) Manual : 15mm/s to 40mm (Continually Variable) MZ First Motion Technologies
Object selection & sorting	Pneumatic Cylinder with pneumatic Valve Double Acting with 2-Position Sensor 10 ø – 60 (3øa)10ø-20 (1øa)
Object Detecting	Photo Sensor : 3øa Proximity Sensor : 2øa Micro Switch : 1øa
Object Transfer System	Rejecting : 1 position Sorting : 1 position Interval : 1 position
Conveyor Motor	RPM : 18 (approx.) with Speed Reduction Gear Input Power : AC 220V, 0.17A (Approx.) MZ First Motion – MKA4
Preset	Counter 0000 to 9999 (4 digits)
Preset Timer	0.1 sec to 100 hours
Output Terminal for PLC input	12 Points (Exception Common Terminal)
Input Terminal for PLC output	12 Points (Exception Common Terminal)
Control Modes	Manual & Auto (by PLC)
DC Output (for Solenoid valve & Sensor)	24V, 2A
Operation Conditions	0 to 45C, 85% or Less (R.H)
Input Power	AC 220V,50/60Hz 1-Phasse (or AC 110V,50/60Hz 1-Phase by Order)
Pneumatic Pressure input	1.5kg f/s ² (Approx.)

OPTIONAL UPGRADE:

- Computer Aided Instruction (CAI) program
- To record and manage the student's progress

CONVEYOR Simulation Software

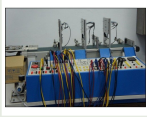
- To improve learning efficiency
- An introduction to software simulation

Country of Origin

Malaysia

Warranty

12 months warranty against manufacturing defects



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