



# **VERITAS Engineering**

**Catalog**

**Of**

**Industrial Multiple PLC Trainer**

## **Industrial Multiple PLC Trainer**

**Brand: VERITAS**

**Model: VMPLCT-01**

### **Features:**

Multiple PLC Trainer contain nine different reputed PLC where any two PLC does not use same, It have used seventeen extra input and output modules for interfacing Nine different categories PLC. That's why students can be programming interfacing with input and output load from nine different reputed categories PLC. As a result they are capable to control of machinery from industries where use of PLC.



Picture: Multiple PLC Trainer

## **Technical Specification**

### **Main Structure:**

- Main Voltage : 1 Phase 220V, 50Hz or 60Hz
- Working Table: 1EA
- Working Frame - 3 Step
- Module Storage Cabinet: 2EA
- Electric accessories Storage Cabinet: 1EA
- Air Compressor : 1EA
- Air compressor (basic equipment minimal machine):
  - Voltage: AC 220V(+/-10%), 50Hz or 60Hz, Motor power: 650W
- Nominal volume Air compressor: 9L
  - normal output voltage 0.7 MPa,
  - noise degree: 66 dB
- Dimension :L x W x H (mm):1735 x700 x 1660
- Connection facility 2mm & 4mm Safety Socket

## **PLC Category -01(AL401A-M01)**

- PLC:SIEMENS
- Part Number: 6ED1052-1MD00-0BA8
- Programming Language: Ladder, Functional Flow Chart Diagram
- Built in Ethernet communication
- PLC Power supply: (1 No.)
- PLC Digital Input: 08
- PLC Analog Input: 04 Nos
- PLC Analog Output: 02 Nos
- PLC Digital output: 04
- PLC Display Unit : YES
- PLC Input Voltage: 24VDC, 1Amp
- Permissible range, Lower limit(DC): 20.4V
- Permissible range, Upper limit(DC): 28.8V
- Programming Software: LOGO Soft Comfort or equivalent
- Programming Cable: PLC to PC communication Cable
- Connection facility 2mm & 4mm Safety Socket
- Module Dimension :L x W x H (mm):295 x 225 x 45

## **PLC Category-02 (AL401A-M02)**

- PLC: Mitsubishi
- Parts:FX3U-16MR-DS
- Power Supply: 24VDC
- Input Types:24VDC
- Output Types: Relay
- Communication Options: RS-232 , RS-485, RS-422, USB
- CPU Functions: High speed counters, 32 bit floating point math
- Program Memory Byte (Step): 128 K max. (64,000)
- Ambient Temperature: 0-55 degree C (in operation) -20 (+/-)70 degree C (in storage)
- Ambient Humidity: 5-95percent RH, no condensation (in operation)
- Noise Immunity: 1000 Vpp noise voltage, 1 microsecond pulse width at 30-100Hz
- Digital Input: 8
- Digital Output :8 (Relay)
- Programming Software: Gx-Developer or equivalent
- Programming Cable: SC-09 or equivalent
- Connection facility 2mm & 4mm Safety Socket
- Module Dimension :L x W x H (mm):295 x 225 x 45

## **PLC Category-03 (AL401A-M03)**

- PLC: Fatek
- Parts:- FBs-14MAR
- PLC input: 8 points Digital
- Triggering Power: 24VDC
- (2 points high speed 100KHz & medium speed 20KHz, 4 points medium speed 5KHz);
- PLC Output: 6 points relay
- Communication Port:RS232,USB
- Built-in power supply: SPW14-AC or D12 or D24
- Connection facility 2mm & 4mm Safety Socket
- Module Dimension :L x W x H (mm):295 x 225 x 45

**PLC Category-04 (AL401A-M04)**

- PLC: Omron
- Parts: CPM1A-30CDR-A-V1
- Power Supply=220VAC
- Triggering Voltage:24VDC
- Digital Input=18
- Digital Output=12(Relay)
- Programming Cable: PLC to PC communication Cable
- Connection facility 2mm & 4mm Safety Socket
- Module Dimension :L x W x H (mm):295 x 225 x 45

**PLC Category-05 (AL401A-M05)**

- PLC: Delta
- Parts: dvp10ec00r3
- Power Supply:220VAC
- Triggering Voltage:24VDC
- Digital Input:06
- Digital Output:04(Relay)
- Programming Cable: PLC to PC communication Cable
- Test installation training
- Module Dimension :L x W x H (mm): 295 x 225 x 45

**Accessories:**

- 1 Training Module
- 1 Training Manual
- 4mm safety banana socket

**Experimental List:**

- ❖ The construction of nine different categories PLC.
- ❖ Interfacing method of nine different categories PLC.
- ❖ Programming method of nine different categories PLC.
- ❖ Pick & Place using PLC & Pneumatic Air Suction method.
- ❖ Pick & Place using PLC & Pneumatic Gripper method. Water
- ❖ Pump Control using nine different categories PLC.
- ❖ Fire Indication System using nine different categories PLC.
- ❖ Traffic Light Control using nine different categories PLC.
- ❖ The construction of Pneumatic cylinder.
- ❖ Sequential control of three Pneumatic cylinder using five different categories PLC.
- ❖ The construction of Pneumatic solenoid valve.
- ❖ Control of Pneumatic solenoid valve using PLC.
- ❖ Interfacing of PLC & Pneumatic solenoid valve.
- ❖ The method of Control Relay using PLC.
- ❖ The methods of three phase Induction Motor Starter using PLC
- ❖ Forward-and-reverse operation methods of three phase Induction Motor.



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- ❖ The method of interfacing PLC with Input Switch.
- ❖ The method of interfacing PLC with Input Sensor.
- ❖ Operating method of interfacing proximity sensor with PLC.
- ❖ Operating method of interfacing photo sensor with PLC.
- ❖ Use of Variable Frequency Drive with PLC.
- ❖ Programming method of Variable Frequency Drive with PLC.
- ❖ The construction of Three Phase Induction motor.
- ❖ Interfacing Method of Three Phase Induction motor with VFD & PLC.
- ❖ The construction of Stepper Motor.
- ❖ Interfacing Method of Stepper Motor with PLC.
- ❖ The construction Seven Segment Display.
- ❖ Interfacing Method of Seven Segment Display with PLC.
- ❖ Interfacing Power Supply with nine different categories