



70 x 90 x 66.4mm

Features :

- Compact PLC with built in HMI
- 2 x 8 Character LCD
- Real Time Clock
- RS485 based Communication with MODBUS RTU Protocol
- Serial Printing

Certification : CE

Display Specifications

| | |
|-------------|---|
| Display | 2 x 8 Characters LCD (Green backlight) / LED Indications for Inputs and Outputs |
| No. of Keys | 5 Keys (4 - User configurable)* |

Input Specifications

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|-----------------------|--|
| Digital Input | |
| No. of Digital Inputs | 8 |
| Input Type | PNP |
| Input Voltage Range | 6 - 30V DC |
| Response Time | Typical 2 mSec (Based on Ladder scan time) & 100 µSec for Fast Input |
| Isolation | No |
| Debounce Time | 0 to 255 mSec (Default 10 mSec) |
| Timer Accuracy | 0.1% or 2 mSec (Whichever is greater) |
| Fast Input | |
| No. of Channels | 1 |
| Frequency | 5 KHz |

Output Specifications

| | |
|-------------------------------|---|
| Digital Output - Relay | |
| Digital Outputs | 5 (NO type with 2 COM Points) |
| Contact Rating | 5A @ 240V AC (Resistive) 5A @ 28V DC (Resistive) |
| Isolation | No |
| Response Time | 20 msec |
| Mechanical endurance | 5 x 10 ⁶ |

Communication

| | |
|------------------------|---|
| Communication Port | RS485 [Slave] RS485 [Master] |
| Communication Protocol | MODBUS RTU |
| Connector | RJ25 (Slave) Screw terminal (Master) |
| Supported Expansion* | EXP FLEX 2M |
| Transmission Mode | Half Duplex |
| Transmission Speed | 9600, 19200, 38400, 57600, 115200 bps |
| Parity | None, Odd, Even, Mark, Space |
| Data Bits | 7 or 8 |
| Stop Bits | 1 or 2 |
| Settable Slave | 1 - 255 |

*Expansion is supported only on PLC having Master Communication

Functional Specifications

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|---------------------|--|
| Programming Method | Windows based Software for Ladder Programming and HMI Configuration. |
| Memory | Data Memory : 16 kB Code Memory : 112 kB EEPROM Memory : 1 kB |
| Max. no. of Objects | 2000 (As per Memory) |
| Minimum Scan Time | 200 µSec |
| Typical Scan Time | 2 mSec (Based on Ladder Scan Time) |

Environmental Specifications

| | |
|---------------------------|---------------|
| Operating Temperature | 0 to 55°C |
| Storage Temperature | -20 to 70°C |
| Humidity (Non Condensing) | 10% to 95% RH |

Mechanical Specifications

| | |
|----------|-----------------|
| Mounting | DIN Rail Mount |
| Weight | Approx 240 gms. |

Functional Features

| | |
|-------------------------|--|
| Timer Operational Modes | On Delay, Off Delay, Pulse, Special [Up/Down] Timer, 1 ms timer* |
| Timer Resolution | 1 mSec (Accurate only for 1 mSec Timer block) |
| Counter | Up Counter, Down Counter, Up/Down Counter, Special [Up/Down] Counter |
| Other Blocks | Analog Input, FTC, PIDT, Rampsoak |
| Memory Retention | 10 years (1kB) |
| RTC | Yes (Available In DIGIX-1-1-1-230V) |
| RTC Accuracy | 8 minutes/year & the maximum error is 14 minutes/year |
| Clock Drift | Max 4 sec/day |

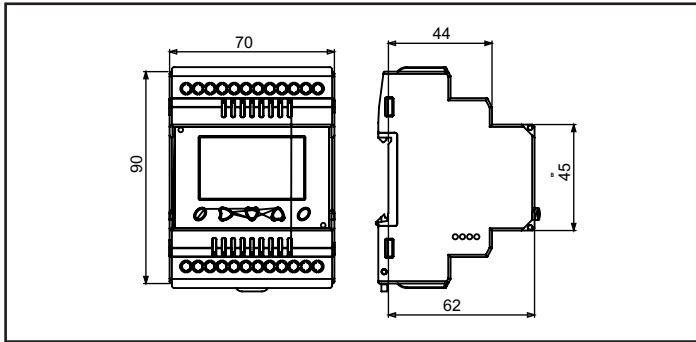
*Usage limited to only 4 Nos

Auxiliary Supply Specification

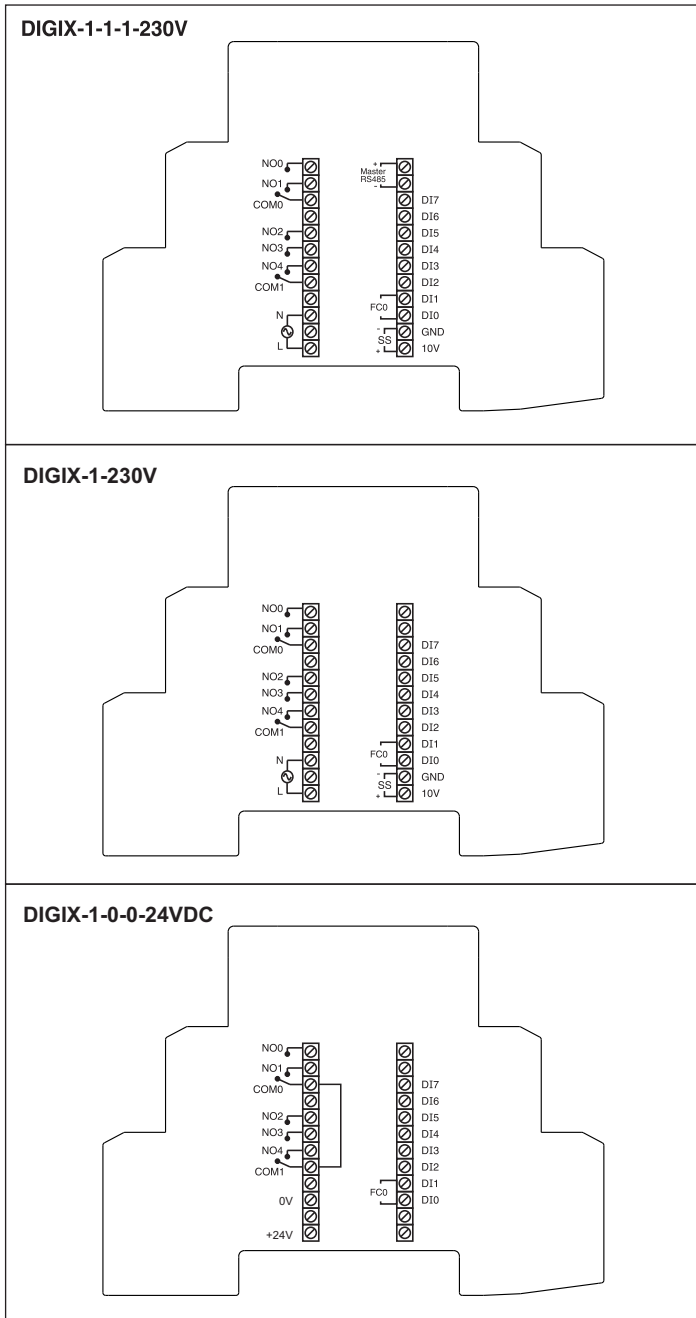
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|-------------------|---------------------------------------|
| Supply Voltage | 90 to 270V AC 50/60 Hz., 18 to 30V DC |
| Power Consumption | 6W Max |
| Source | 10V, 50mA in 230V AC Model Only |

VAR IN_OUT & VAR OUTPUT types Variables Maximum Retention 25 variables only each of 32 bit @ 110V, @ 24VDC

Dimensions (in mm)



Terminal Connections



Port Description

| Port 1 (6 Pin Jack) | |
|---------------------|-------------|
| Pin | Description |
| 1 | RS485 + ve |
| 2 | NC |
| 3 | NC |
| 4 | NC |
| 5 | NC |
| 6 | RS485 - ve |

Ordering Information

| Product Code | Description | Certification |
|--------------------------|--|--------------------|
| DIGIX-1-1-1-230V | PLC – 8DI, 5RO & 230VAC – RTC and Modbus Expansion | CE RoHS |
| DIGIX-1-230V | PLC – 8DI, 5RO- 230VAC | CE RoHS |
| DIGIX-1-0-0-24VDC | PLC – 8DI, 5RO- 24VDC | CE RoHS in Process |

Accessories (To be ordered separately)

| | |
|----------------------------|--|
| Downloading cable | AC-USB-RS485-03 |
| Power Supplies | RPS60-24-CE-RoHS |
| Relay modules | |
| 1) RLYMD-1-S4-1CO-24VDC | 4 Channel 1 change over relay module |
| 2) RLYMD-1-S4-2CO-24VDC | 4 Channel 2 change over relay module |
| 3) RLYMD-2-S8-1CO-24VDC | 8 Channel 1 change over relay module |
| 4) RLYMD-2-S8-2CO-24VDC | 8 Channel 2 change over relay module |
| 5) ERLYMD-2-1-S8-1CO-24VDC | 8 Channel 1 change over communication based relay module |
| Networking | ACH-004 (RJ25 Cable) |
| | AC-IOEXP-03 (Expansion Adaptor) |
| | AC-USB-RS485-02 (USB to RS485 Cable) |