

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 : C€

#### **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

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 Life	30000 Cycles

#### 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

## **Functional Specifications**

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

<sup>\*</sup>Usage limited to only 4 Nos

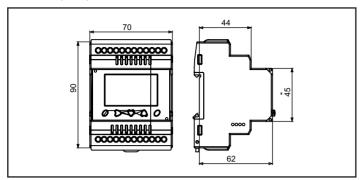
#### **Auxiliary Supply Specification**

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

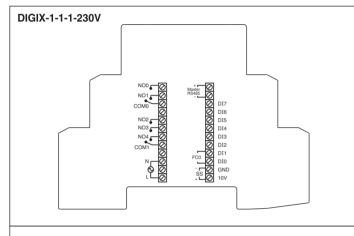
VAR IN\_OUT & VAR OUTPUT types Variables Maximum Retention 25 variables only each of 32 bit @ 110V, @ 24VDC

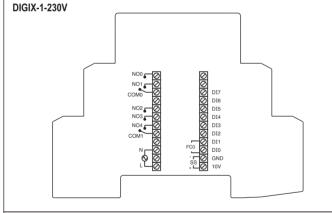
<sup>\*</sup>Expansion is supported only on PLC having Master Communication

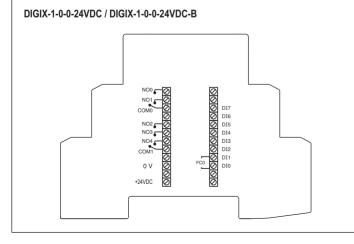
## Dimensions (in mm)



## **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-1-1-230V	PLC – 8DI, 5RO & 230VAC – RTC and Modbus Expansion	(€ RoHS
DIGIX-1-230V	PLC - 8DI, 5RO & 230VAC	C€ RoHS
DIGIX-1-0-0-24VDC	PLC – 8DI, 5RO & 24VDC	<b>C</b> € RoHS in Process

#### Accessories (To be ordered separately)

Accessories (10 be ordered separately)		
Downloading cable	AC - USB - RS485 - 03	
Power Supplies	RP-2M-1.1A-24VDC-CE-RoHS	
	RPS60-24-CE-RoHS	
1 ower oupplies	RPS120-24-CE-RoHS	
	RPS240-24-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)	

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