



70 x 90 x 66.4mm

Features:

- Compact PLC with built in HMI
- 2 line 8 character LCD
- Analog Input Available
- Windows based user friendly software for ladder programming & HMI configuration
- RS485 based communication with MODBUS protocol

Display Specifications

Display	2 line X 8 characters LCD (Green backlight)
No. of keys	5 keys (4 - User configurable)

Input Specifications

Digital Input	
No. Of digital input	10 + 2(Optional)
Input Type	PNP
Input Voltage Range	5 - 30V DC
Response Time	Typical 2 ms (Based on ladder scan time) & 100 µsec for fast Input
Isolation between Power supply& Inputs	Yes
Isolation between Inputs & MCU	No
Debounce Time	0 to 255 ms (Default 10 ms)
Timer Accuracy	0.1% or 2ms (Whichever is greater)
Analog Input	
No of Inputs	2(AI0 & 2AI1)(Configurable as Digital input)
Input type	0 -10V
Accuracy at 25 °C	0.5% or 5mV.
Resolution	12 Bits
Conversion time	100msec.
Input Impedence	330k ohms
Destructive Input	20V
Isolation between channels	No
Isolation between Polarity Inversion	Yes
Fast Counter Input	
Input Type	PNP
No. of fast Input channel	1
Max Speed	5kHz

Output Specifications

Digital Output - Relay	
No. of Relay Output	8
Type	Relay
Relay Type	SPST
Contact Rating	NO : 5A [Resistive @230V AC,30V DC]
Operate Time	10ms
Mechanical life	2000000

Communication

Communication Port	RS485 [Slave] RS485 [Master]
Communication Protocol	MODBUS RTU
Connector	Screw Terminal (Slave) Screw Terminal (Master)
Supported Expansion	Yes (Modbus RTU Protocol Based Device)
Transmission Mode	Half duplex
Transmission Speed	9600, 19200, 38400, 57600, 115200
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: 32 kB Code memory: 240 kB EEPROM Memory: 1 kB
Max. no. of Objects	2000 (As per memory)
Minimum Scan Time	200 µsec
Typical Scan Time	2 ms (Based on ladder scan time)

Environmental Specifications

Temperature	Operating : 0 to 55°C Storage : -40 to 70°C
Humidity (non-condensing)	10% to 95% RH

Mechanical Specifications

Mounting	Din Rail mount
Weight	Approx 320 gms

Functional Features

Timer Operational Modes	On Delay, Off Delay, Pulse, Special [Up/Down] Timer, 1 ms Timer*
Timer Resolution	1 ms (Accurate only for 1 msec Timer block)
Counter	Up Counter, Down Counter, Up/Down Counter, Special [Up/Down] Counter
Memory Retention	10 years (1k memory)
RTC	No
Clock Data Retention	NA
Clock Drift	NA

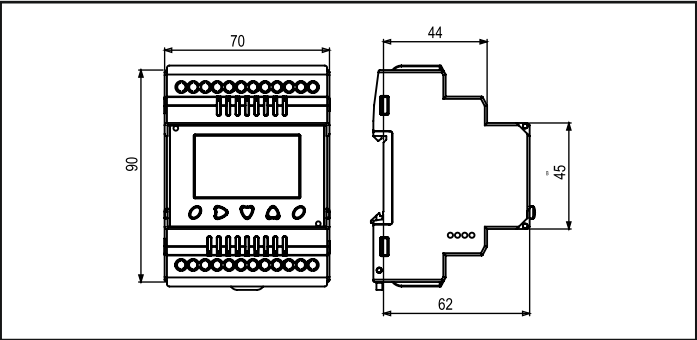
*Usage Limit Only 4 Nos

Auxiliary Supply Specifications

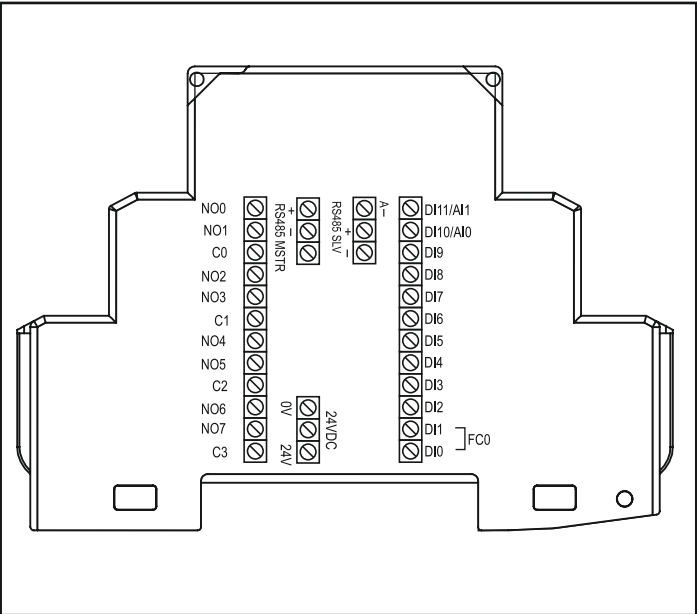
Supply Voltage	24V DC (±20 %)
Power Consumption	4W
Source	NA

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

Dimensions (All dimensions are in mm)



Terminal Connections



RS485 SLV+, - Terminals used for downloading program into PLC

Ordering Information

Order Code	Description
Digix-2-1-0-24V	10+2 DIs, 2AIC(O -10V), 8 RO, RS485 Master, 24VDC, Auxiliary Supply

Accessories (To be ordered separately)

Communication cable	ACH-004 (6 pin to 6 pin RJ25 jack) AC-IOEXP-02 (Port expansion adapter)
Converters	
RS485 to RS232	AC-RS485-RS232-01 (Non Isolated) AC-RS485-RS232-ISO (Isolated)
USB to RS485 (with jack)	AC-USB-RS485-03
USB to RS485 (with wire)	AC-USB-RS485-02