Features

- Modular PLC with pluggable display / independant display
- Flexible IO card selection
- Expandable via MODBUS Protocol
- RTC with time switch functions
- Ethernet slave communication (Optional)

Technical Specification

Display specifications

Type	LCD with Blue backlight & White font
Digits	2 lines x 8 characters (Font size 5x7mm)
No. of keys	6 keys (5 User configurable)

Input Specifications

	MiBRX-6M-1-1-1-230V	MiBRX-6M-2-1-1-0-1-24VDC
Digital input		
No. of inputs	10+1*	12
Input type	PNP	
Input voltage range	5-30V	
Response time		
Debounce time	10ms	
Fast input		
No. of inputs	1	2
Input type	PNP	
Input frequency	5 kHz	
Analog inputs	Depends on debounce time & ladder execution time	
No. of channels	1*	-
Analog type	Voltage	-
Range	0-10V	-
Resolution	12 bit	-
Conversion time	100ms	-
Accuracy	0.25%	-

* = 1 Digital input can be configured as analog input (0-10V)

Output specifications

Digital output		
No. of outputs	4	-
Contact rating	5A@240VAC/ 30VDC	-
Response time	10ms	-
Mechanical life	20000000 cycles	-
Contact-Isolation	Yes	-

MODBUS Details

Transmission type	Half duplex
Transmission speed	9600,19200, 38400, 57600, 115200 bps
Data bits	7 or 8
Parity	None, odd, even, space, mark
Stop bits	1 or 2

Communication

Communication port	Port 1 - RS485 slave, Port 2 - RS485 master	Port 1 - RS485 slave Port 2 - RS485 master Port 3 - ETHERNET slave* Port 4 - USB*
Communication protocol	RS485 - MODBUS RTU	RS485 - MODBUS RTU ETHERNET - MODBUS RTU/TCP USB - USB 2.0
Connector type	RS485 - 2 wire	RS485 / CAN - 2 wire ETHERNET - RJ45, USB - micro B

* = Optional as per selected variant

Functional specifications

Programming	Windows based software for ladder programming & HMI config	
Timer operational modes	On delay, Off delay, Pulse, Special (Up / Down) Timer	
Timer resolution	1ms (Only accurate 1ms timer block)	
Counter	Up counter, Down counter, Up-Down counter, Special (Up-Down counter)	
Other blocks	Analog input / output, Time switch, RTC etc	
Memory retention	10 Years	
RTC	Yes (Optional)	
Memory		
Data memory	1 MB	
Code memory	240 KB	480 KB
EPROM	4 KB	
No. of objects	5000	
Min. scan time	200usec	
Typical scan time	1msec (Based on ladder programming)	

Environmental specifications

Operating temperature	5 to 55°C
Storage temperature	-25 to 70°C
Humidity (Non condensing)	10 to 95%

Mechanical specifications

Mounting type	Rail mount	
Weight	270 gms without IO cards	250 gms without IO cards

Supply specification		
Supply voltage	90 to 270VAC (50/60Hz)	18 to 30VDC
Sensor source	24V, 50mA	NA
NTC	Yes	
No. of slots	6	

Dimensions (All are in mm)

FRONT VIEW   SIDE VIEW

Terminal connection
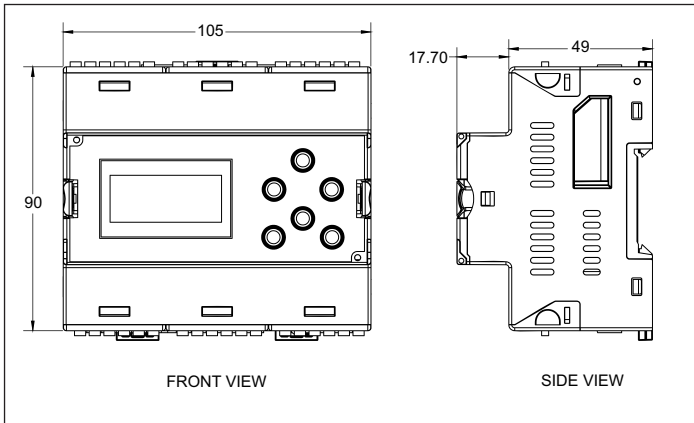
MiBRX-6M-1-1-1-230V
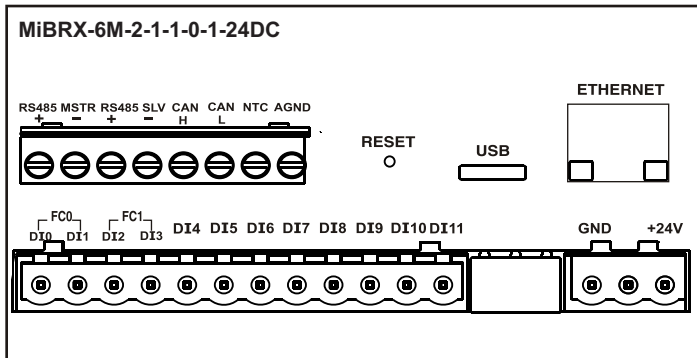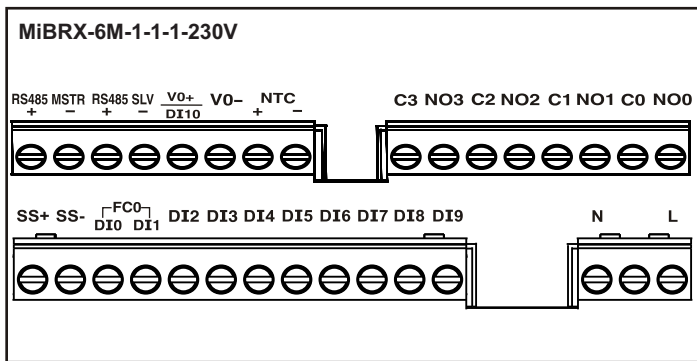
MiBRX-6M-2-1-1-0-1-24DC

Ordering information

Product code	Description	Certification
MiBRX-6M-1-1-1-230V	6 Slots, 11DI (incl 1FI, 1AI-V), + 4RO, NTC, RTC, Master- 230V	CE RoHS compliant
MiBRX-6M-2-1-1-0-1 -24VDC	6 Slots, 12DI, 24V Power supply with Isolation, Master- ETHERNET & RTC- 24VDC	CE RoHS compliant

Supported display modules

Display module	Description	Certification
MiBRX-DSP-6M -8-2-08-A	MiBRX Display 6M - LCD (8x2)	CE RoHS compliant
MIBRX-DSP-AP-6M	MiBRX 6M Adapter Plate for independent display	CE RoHS compliant

Supported I/O cards

IO cards	Description	Certification
MiBRX-SC-DI04	MiBRX Slot Card - 4 Digital Inputs	CE RoHS compliant
MIBRX-SC-DI04-ISO	MiBRX Slot Card - 4 Digital Inputs (Isolated)	CE RoHS compliant
MiBRX-SC-DI06	MiBRX Slot Card - 6 Digital Inputs	CE RoHS compliant
MiBRX-SC-DI06-AC	MiBRX Slot Card - 6 Digital inputs (AC)	CE RoHS compliant
MIBRX-SC-DI06-ISO	MiBRX Slot Card - 6 Digital Inputs (Isolated)	CE RoHS compliant
MiBRX-SC-RO03	MiBRX Slot Card - 3 Relay Outputs	CE RoHS compliant
MiBRX-SC-RO04	MiBRX Slot Card - 4 Relay Outputs	CE RoHS compliant
MIBRX-SC-RO04-12V	MiBRX Slot Card - 4 Relay Output (12V)	CE RoHS compliant
MiBRX-SC-RO05	MiBRX Slot Card - 5 Relay Outputs (1.5 A)	CE RoHS compliant
MiBRX-SC-TO04	MiBRX Slot Card - 4 Transistor Outputs	CE RoHS compliant
MiBRX-SC-DI02-RO02	MiBRX Slot Card - 2 Digital Inputs & 2 Relay Outputs	CE RoHS compliant
MIBRX-SC-DI02-RO03	MiBRX Slot Card - 2 Digital Inputs & 3 Relay Outputs	CE RoHS compliant
MIBRX-SC-DI02-TO02	MiBRX Slot Card - 2 Digital Inputs & 2 Transistor Outputs	CE RoHS compliant
MiBRX-SC-DI02-AI01-T	MiBRX Slot Card - 2 Digital Inputs & 1 Analog Input - TC/RTD	CE RoHS compliant
MiBRX-SC-AI02-V	MiBRX Slot Card - 2 Analog Inputs - Voltage	CE RoHS compliant
MiBRX-SC-AI02-V-ISO	MiBRX Slot Card - 2 Analog inputs - Voltage (Isolated)	CE RoHS compliant
MiBRX-SC-AI02-I	MiBRX Slot Card - 2 Analog Inputs - Current	CE RoHS compliant
MIBRX-SC-AI02-I-ISO	MiBRX Slot Card - 2 Analog inputs - Current (Isolated)	CE RoHS compliant
MiBRX-SC-AI02-V-I	MiBRX Slot Card - 2 Analog Inputs - 1 Voltage & 1 Current	CE RoHS compliant
MiBRX-SC-AI02-TC	MiBRX Slot Card - 2 Analog Inputs - Thermocouple	CE RoHS compliant
MiBRX-SC-AI02-TC-ISO	MiBRX Slot Card - 2 Analog inputs - Thermocouple (Isolated)	CE RoHS compliant
MIBRX-SC-AI02-RTD	MiBRX Slot Card - 2 Analog Inputs - RTD	CE RoHS compliant
MIBRX-SC-AI02-RTD-ISO	MiBRX Slot Card - 2 Analog inputs - RTD (Isolated)	CE RoHS compliant
MIBRX-SC-AI02-Pt1000	MiBRX Slot Card - 2 Analog Inputs - PT1000	CE RoHS compliant
MiBRX-SC-AI02-PTC	MiBRX Slot Card - 2 Analog Inputs - PTC	CE RoHS compliant
MiBRX-SC-AI02-NTC	MiBRX Slot Card - 2 Analog Inputs - NTC	CE RoHS compliant
MiBRX-SC-AO01-V/I	MiBRX Slot Card - 1 Analog Output	CE RoHS compliant
MIBRX-SC-AO02-V-I-ISO	MiBRX Slot Card - 2 Analog Outputs (Isolated)	CE RoHS compliant
MiBRX-SC-FI02	MiBRX Slot Card - 2 Fast Inputs (10KHz)	CE RoHS compliant
MiBRX-SC-FO01-TO01	MiBRX Slot Card - 1 Fast Output (10KHz) & 1 Transistor Output	CE RoHS compliant
MiBRX-SC-LC02	MiBRX Slot Card - 2 Analog Inputs - Load Cell (24 Bit)	CE RoHS compliant
MiBRX-SC-DL	MiBRX Slot Card - Datalogging (2MB) & RTC	CE RoHS compliant
MiBRX-SC-WIFI	MiBRX Slot Card - WIFI	CE RoHS compliant
MiBRX-SC-PD	MiBRX Portable Downloader	CE RoHS compliant

Accessories

Accessories for communication AC-USB-RS485-02 (Program downloading cable - USB to 2 pin open wire)	
Power Supplies	
RPS60-24-CE-RoHS	
Window - Based software for ladder programming - www.selec.com/software	
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 communic- ation based relay module