



## Technical Specification

### Display specifications

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

	MiBRX-6M-1-X-X-230V	MiBRX-6M-X-1-X-X-24VDC
<b>Supply specification</b>		
Supply voltage	90 to 270VAC (50/60Hz)	12 to 30VDC
Sensor source	24V, 50mA	NA
NTC	Yes	
No. of slots	6	

### Input Specifications

<b>Digital input</b>		
No. of inputs	10+1*	12
Input type	PNP	
Input voltage range	5-30V	
Response time	Depends on debounce time & ladder execution time	
Debounce time	10ms	
<b>Fast input</b>		
No. of inputs	1	2
Input type	PNP	
Input frequency	5 kHz	
<b>Analog inputs</b>		
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

<b>Digital output</b>		
No. of outputs	4	-
Contact rating	5A 250VAC/30VDC	-
Response time	10ms	-
Mechanical life	20000000 cycles	-
Contact-Isolation	Yes	-

## Features

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



### Communication

Communication port	Port 1 - RS485 Slave, Port 2 - RS485 Master	Port 1 - RS485 Slave Port 2 - RS485 Master Port 3 - ETHERNET Slave* Port 5 - 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

### 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

\* = 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)
<b>Memory</b>	
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)

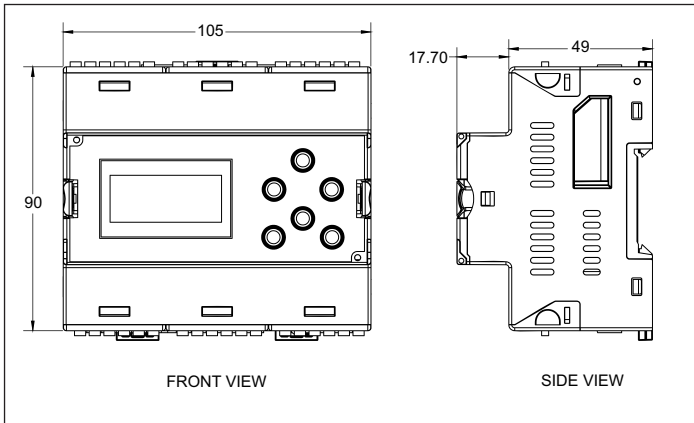
### Environmental specifications

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

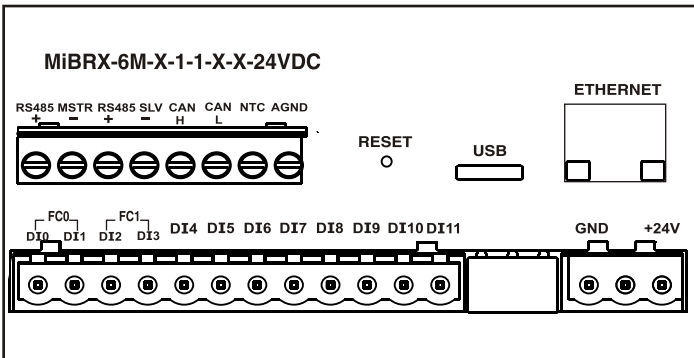
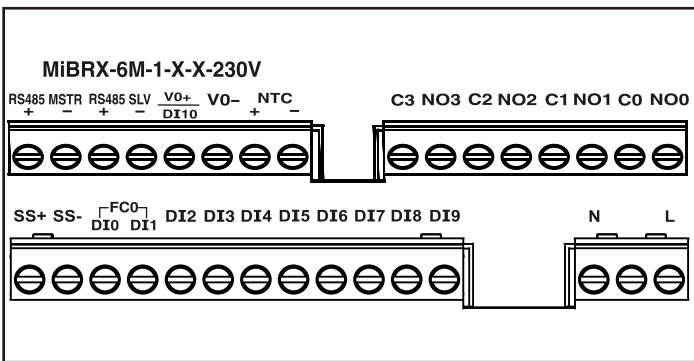
### Mechanical specifications

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

### Dimensions (All are in mm)



### Terminal connection



### Ordering information

Product code	Description	Certification
MiBRX-6M-1-1-1-230V	230V Power supply with master communication & RTC	CE RoHS
MiBRX-6M-2-1-1-0-1-24VDC	24V Power supply with Isolation, Master, ETHERNET & RTC (slave)	CE RoHS

### Supported display modules

Display module	Description	Certification
MiBRX-DSP-6M-8-2-08-A	Integrated 8x2 character LCD Display with 6 keys for MIBRX 6M	CE RoHS
MiBRX-DSP-AP-6M	MiBRX 6M Adapter Plate for independent display	CE RoHS

### Supported I/O cards

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

### Accessories

Accessories for communication	
AC-USB-RS485-02	(Program downloading cable - USB to 2 pin open wire)
ACH-004	(Expansion cable - RJ25 to RJ25)
Power Supplies	
RP-2M-1.1A-24VDC-CE-RoHS	
RPS60-24-CE-RoHS	
RPS120-24-CE-RoHS	
RPS240-24-CE-RoHS	
Windows - Based software for ladder programming - <a href="http://www.selec.com/software">www.selec.com/software</a>	
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