



## 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)	

MiBRX-6M-1-1-1-230V    MiBRX-6M-2-1-1-0-1-24VDC

### Input Specifications

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	

## 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)



### 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%

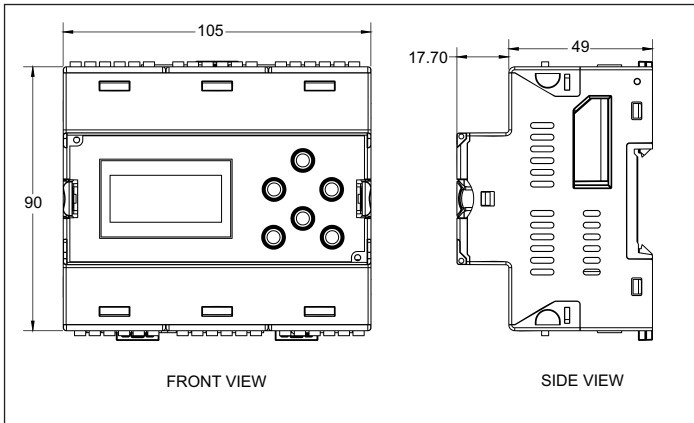
### Mechanical specifications

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

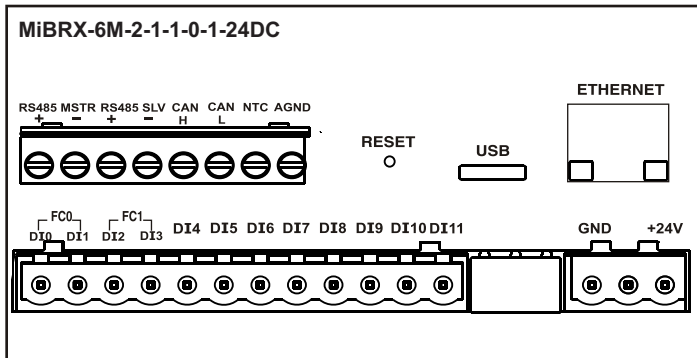
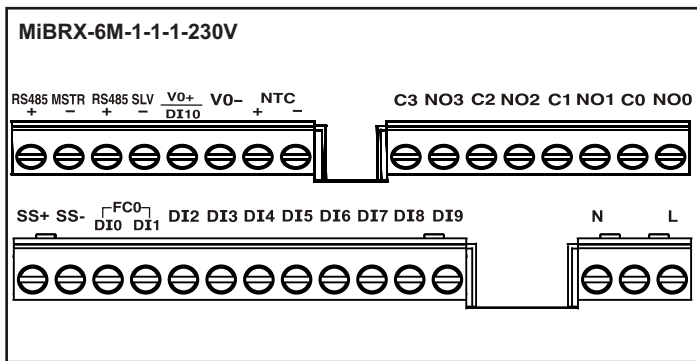
### Supply specification

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)**



**Terminal connection**



**Ordering information**

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

**Supported display modules**

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

**Supported I/O cards**

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

**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](http://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 communication based relay module