



## Features

- ◆ Modular PLC with pluggable display
- ◆ Flexible IO card selection
- ◆ RTC with time switch functions (Optional)



## Technical Specification

### Display specifications

Type	LCD with blue backlight & white font	7 Segment LED
Digits	2 lines x 8 characters (Font size 5x7mm)	6 Digit White + 4 Digit Green
LED banks	---	4 Red
No. of keys	4 Touch keys (3 User configurable)	
No. of slots	2	

### Input specifications

	MIBRX-72-0-X-230V	MIBRX-72-0-X-24V
<b>Digital input</b>		
No. of inputs	3+1*	
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	
Input type	PNP	
Input frequency	5 kHz	
<b>Analog inputs</b>		
No. of channels	1*	2*
Analog type	Voltage	1 Voltage, 1 Current
Range	0-10V	0-10V, 0-20mA
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	3
Contact rating	5A@240VAC/ 30VDC
Response time	10ms
Mechanical life	20000000 cycles
Contact-Isolation	Yes

### Communication

Communication port	1 Ports - RS485 slave
Communication protocol	MODBUS RTU
Connector type	2 Wire
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

### 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
<b>Memory</b>	
Data memory	32Kb
Code memory	240Kb
EPROM	8Kb
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%

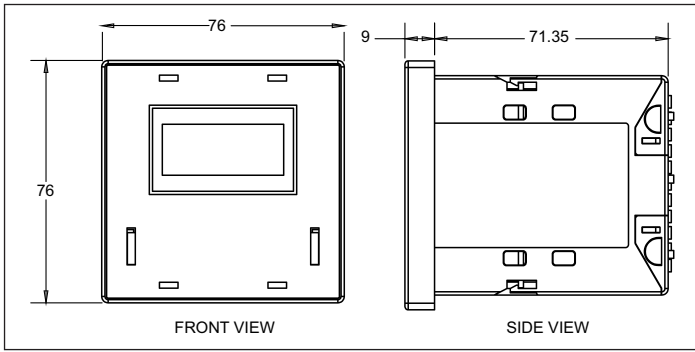
### Mechanical specifications

Mounting type	Panel mount
Weight	330 gms without IO cards

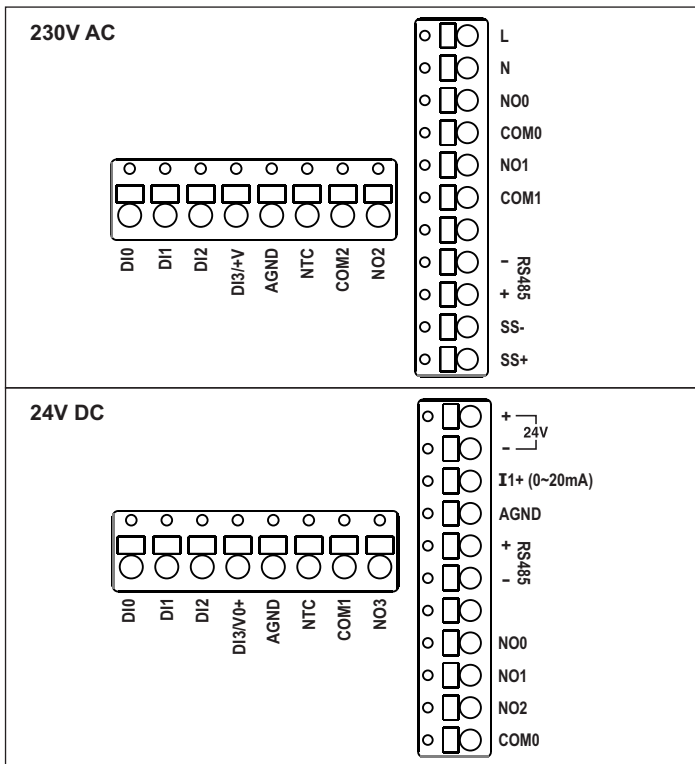
### Supply specification

Supply voltage	90 to 270VAC (50/60Hz)	18 to 30VDC
Power consumption	8W	6W
Sensor source	24V, 50mA	NA

### Dimensions (All are in mm)



### Terminal connection



### Ordering information

Product code	Description	Certification
MIBRX-72-0-1-230V	MiBRX 72x72 Base module - 2 slots, 4DI (incl 1FI, 1AI-V) + 3RO, NTC, RTC - 230V	CE RoHS
MIBRX-72-0-0-230V	MiBRX 72x72 Base module - 2 slots, 4DI (incl 1FI, 1AI-V) + 3RO, NTC - 230V	CE RoHS
MIBRX-72-0-1-24VDC	MiBRX 72x72 Base module - 2 slots, 4DI (incl 1FI, 1AI-V) + 4RO, 1AI-I, NTC, RTC - 24VDC	CE RoHS
MiBRX-72-0-0-24VDC	MiBRX 72x72 Base module - 2 slots, 4DI (incl 1FI, 1AI-V) + 4RO, 1AI-I, NTC - 24VDC	CE RoHS

### Supported display modules

Display module	Description	Certification
MIBRX-DSP-72-7-2-10-B	MiBRX Display 72x72 - 7 Seg (6+4 digit), 4 LED	CE RoHS
MIBRX-DSP-72-8-2-08-B	MiBRX Display 72x72 - LCD (8x2)	CE RoHS

### Supported I/O cards

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