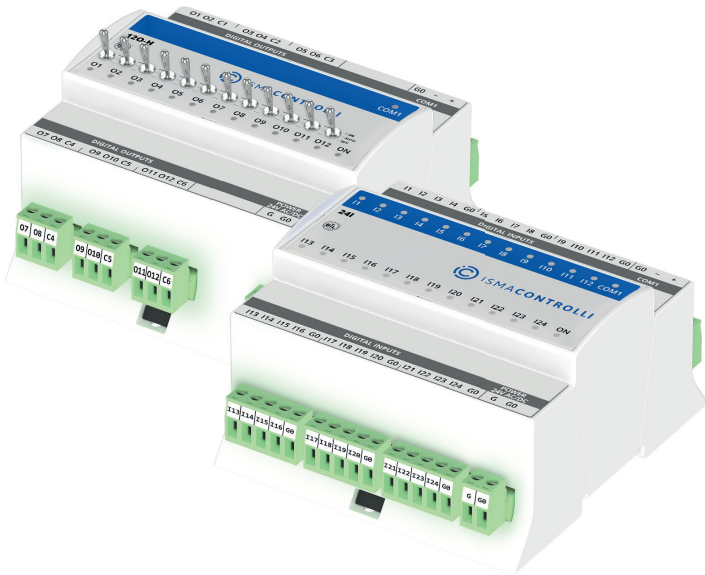


MAX-RS Series

Multiprotocol I/O Modules



| MODEL | DESCRIPTION |
|--------------|---|
| iSMA-B-24I | I/O module with 24 digital inputs and RS485 BACnet MS/TP and Modbus RTU/ASCII communication |
| iSMA-B-12O-H | I/O module with 12 digital outputs, HOA switches, and RS485 BACnet MS/TP and Modbus RTU/ASCII communication |



APPLICATION AND USE

MAX I/O Modules are a powerful addition to any building automation system, providing ultimate control and monitoring capabilities. The MAX-RS series offers a range of modules, including a 24 digital inputs module and a 12 digital outputs module with hand control, both featuring open protocols such as BACnet and Modbus.

The 24 digital inputs module is designed for monitoring data in data centers and HVAC applications. Its compact design allows for multiple inputs to be packed into one housing, resulting in shorter engineering time, faster integration, and easier commissioning.

The 12 digital outputs module is ideal for HVAC applications, allowing for a direct control of up to 3 A loads per single digital output. With HOA switches, manual override of each output is possible, ensuring ultimate control.

All MAX-RS series modules are equipped with commonly used types of I/Os in building automation, and support open communication protocols including Modbus RTU/ASCII and BACnet MS/TP selectable by a DIP switch. The modules are designed to create distributed control systems by extending the capabilities of building controllers like AAC20, iSMA-B-J8, or MAC36NL with inputs and outputs using serial bus connections.

The modules are addressed using rotary switches, which facilitate and accelerate the process of commissioning the system. The modules support open communication standards, allowing them to be installed in both new and completed installations as part of an existing BMS. The built-in mini USB allows for the initial configuration of the unit without a power supply.

FEATURES

- MAXimum benefits of different sets of I/Os
- BACnet MS/TP, BACnet Slave, and Modbus RTU/ASCII, selected with a DIP switch
- RS485 communication port, half-duplex
- Digital inputs work as fast counters up to 100 Hz
- LEDs indicate the status of inputs and outputs
- Digital outputs 230 V AC max. 3 A allow for a direct control without additional relays
- Simple and fast addressing from 0 to 99 using rotary switches
- BTL certified
- UL recognized component according to UL 60730-1 and CAN/CSA-E60730-1

TECHNICAL SPECIFICATION

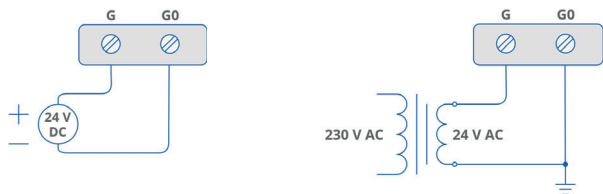
| DESCRIPTION | | MAX-RS I/O MODULES |
|--------------|-------------------------|-----------------------------------|
| Power supply | Voltage | 24 V AC/DC \pm 20% |
| | Number of inputs | 24 (24I) |
| | Type | Dry contact or fast pulse counter |
| | Maximum input frequency | 100 Hz saved in the EEPROM memory |

The performances stated in this sheet can be modified without any prior notice.

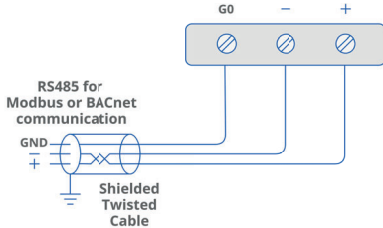
| DESCRIPTION | | MAX-RS I/O MODULES | |
|--------------------|------------------------|-------------------------------------|-------------------|
| Digital outputs | Number of outputs | 12 (12O-H) | |
| | Resistive load (AC1) | 3 A at 230 V AC, 3 A at 30 V DC | |
| | Inductive load (AC3) | 75 VA at 230 V AC, 30 W at 30 V DC | |
| COM1 | RS485 interface | Up to 128 devices | |
| | | Half-duplex | |
| | Communication protocol | Modbus RTU/ASCII, BACnet MS/TP | |
| | Ports | Screw connector | |
| | Baud rate | 2400-115200 | |
| | Address | 0-99 set by a rotary switch | |
| USB1 | USB 2.0 | mini USB type B | |
| Ingress protection | IP rating | IP 20 for indoor installation | |
| Temperature | Storage | -40°C to +85°C (-40°F to +185°F) | |
| | Operating | -10°C to +50°C (14°F to 122°F) | |
| Humidity | Relative | 5 to 95% RH (without condensation) | |
| Screw connectors | Type | Removable screw terminals | |
| | Maximum cable size | 2.5 mm ² (18...12 AWG) | |
| Housing | Material | Self-extinguishing plastic (PC/ABS) | |
| | Mounting | DIN (DIN EN 50022 norm) | |
| Dimensions | Module: | 24I | 12O-H |
| | Width | 106.30 mm/4.19 in | 106.30 mm/4.19 in |
| | Length | 110.00 mm/4.33 in | 110.00 mm/4.33 in |
| | Height | 62.00 mm/2.44 in | 70.00 mm/2.76 in |

WIRING DIAGRAMS

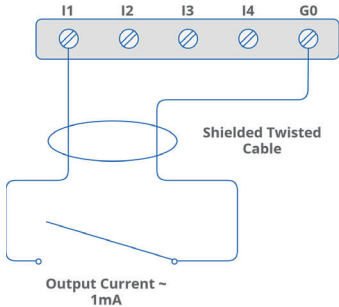
Power Supply



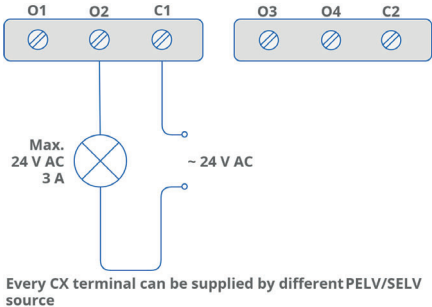
Communication

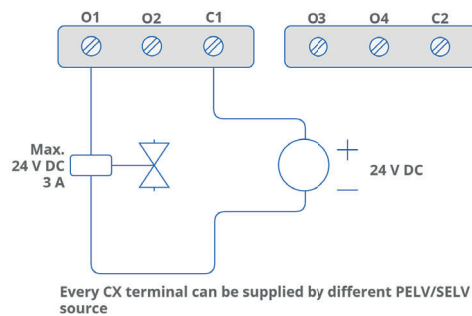
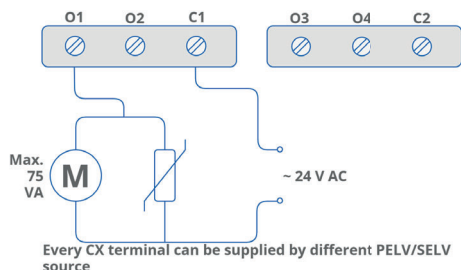


Digital Inputs

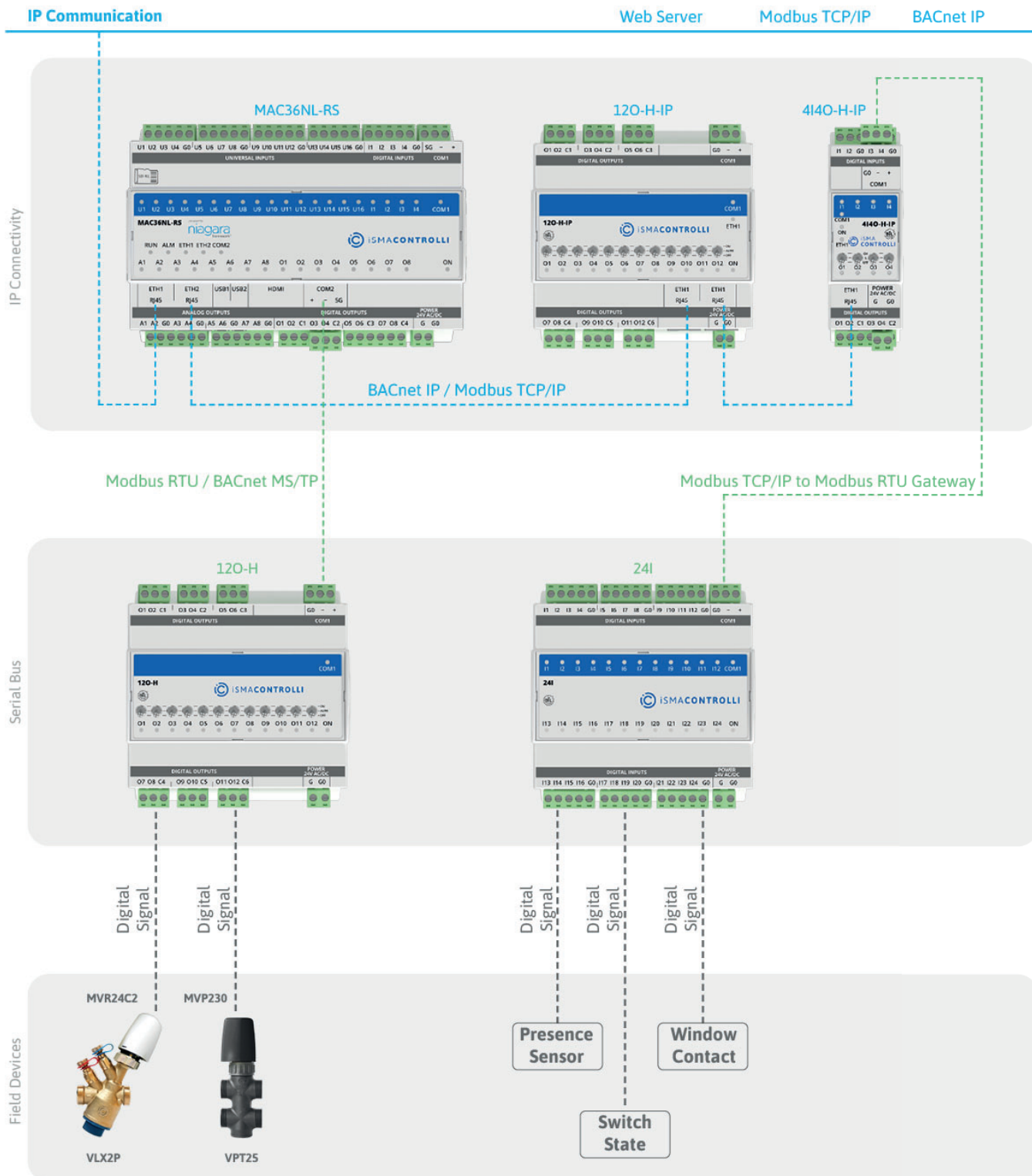


Digital Outputs





APPLICATION EXAMPLE

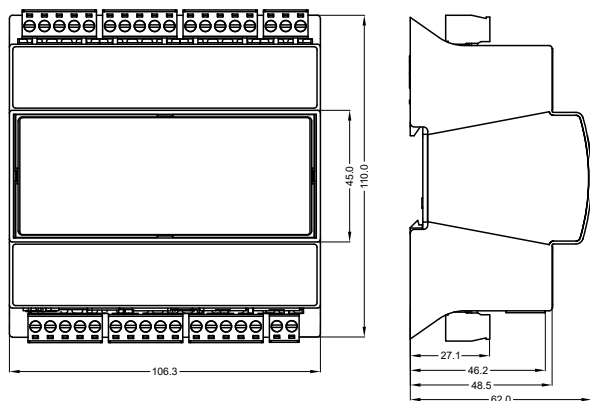




iSMA Configurator - configuration tool for non-programmable iSMA CONTROLI devices

DIMENSIONS [mm]

24I



120-H

