



MODE CONVERTER MODULE

>> MOCX SERIES <<

- » Adaptable input to any type of sensor with pulse output.
- » Optical isolation between inputs and outputs.
- » Push-pull outputs with short circuit protection.
- » HTL output power range with reverse polarity protection.
- » Pluggable terminal blocks.

MAIN FEATURES

The Mode Converter Module (MOC) allows the user to enter with signals of different types of sensors and adjust the output to the signal used by the controller. This adaptation of signals also has the ability to adapt between input and output levels, from TTL to HTL or vice versa and separating them galvanically.

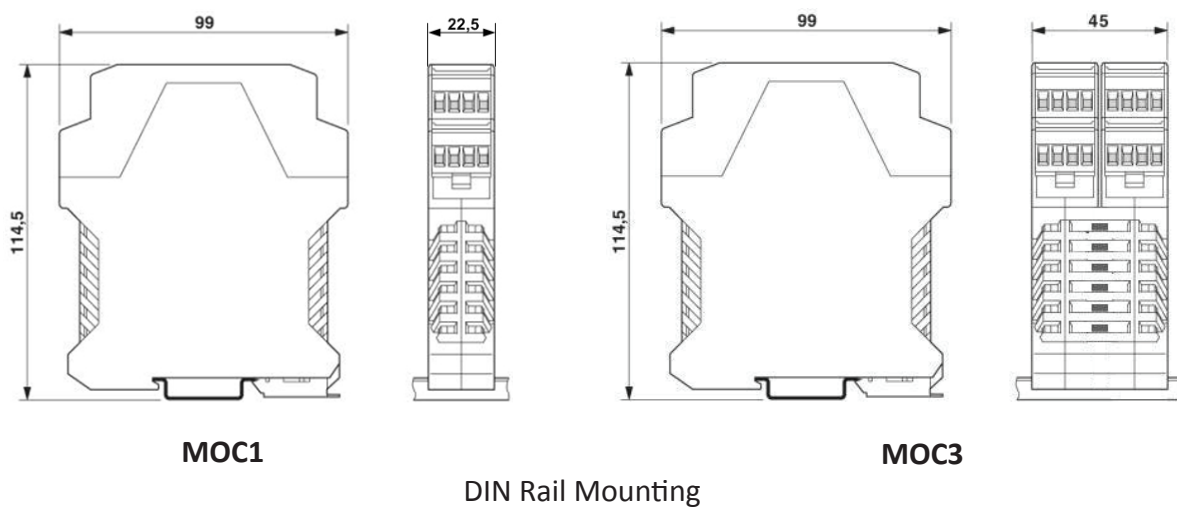
The signal types accepted by the input are: quadrature, pulse and direction, and Up/Down. In turn, the output can be configured in any of three modes that input accepts. In this way, and by the setting of the dipswitch configuration, you can generate all possible combinations of input/output according to the user's needs, adapting any type of sensor to the controller.

Also, the MOC allows change of levels, outputs multiplication and signal regeneration when the wire length is too extensive.

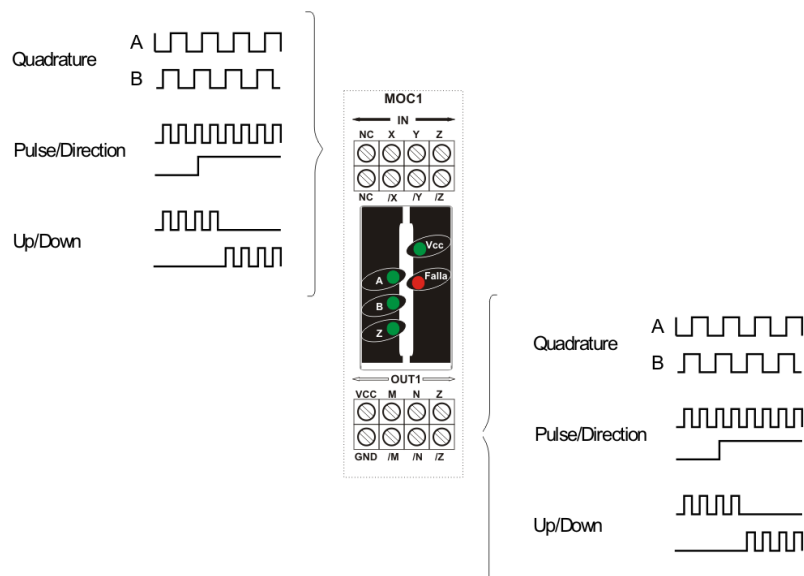
ELECTRICAL FEATURES

| Symbol | Description | Min. | Typ. | Max. | Units |
|--------|---------------------------------|------|----------|------|-------|
| VCCn | Supply Voltage | 12 | 24 | 30 | [V] |
| | Low Voltage Protection | | 10.8 | | [V] |
| | Inputs | | | | |
| | Input Voltage ON (24V Version) | 10 | 24 | 30 | [V] |
| | Input Voltage ON (5V Version) | 3 | 5 | 8 | [V] |
| | Input Voltage OFF (24V Version) | | | 4 | [V] |
| | Input Voltage OFF (5V Version) | | | 2 | [V] |
| | Impedance (24V Version) | | 2760 | | [Ohm] |
| | Impedance (5V Version) | | 560 | | [Ohm] |
| | Outputs | | | | |
| | Outputs Voltage | | VCCn-0.5 | | [V] |
| | Outputs Current | | | 100 | [mA] |
| | Frequency | | | 200 | [KHz] |
| | Input/Outputs Isolation | 1000 | | | [VDC] |

DIMENSIONS

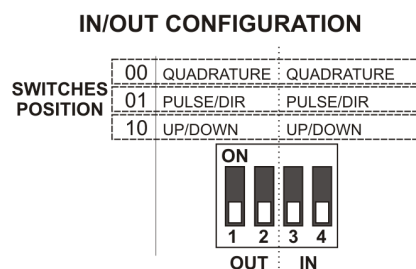


I/O WAVEFORMS



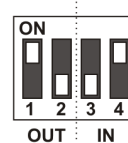
Note: The Z input channel is always copied in the Z output.

DIP SWITCH CONFIGURATION

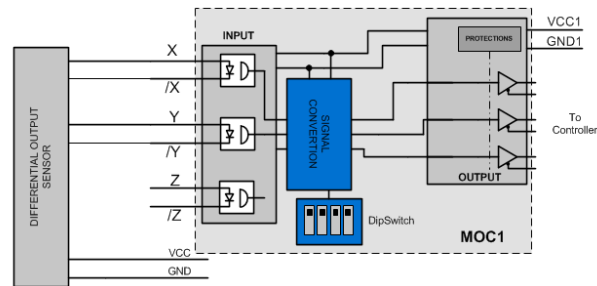


IN/OUT CONFIGURATION EXAMPLE

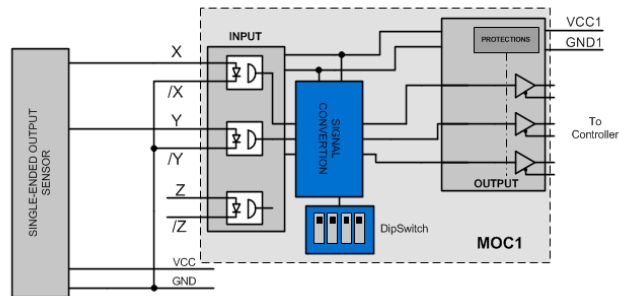
INPUT : PULSE/DIR
OUTPUT : UP/DOWN



DIFFERENTIAL WIRING EXAMPLE



SINGLE-ENDED WIRING EXAMPLE



PRODUCT CODES

| INPUT VOLTAGE | OUTPUT VOLTAGE 1 | OUTPUT VOLTAGE 2 | OUTPUT VOLTAGE 3 | PRODUCT CODES |
|---------------|------------------|------------------|------------------|---------------|
| 5 V | 12-30 VDC | 12-30 VDC | 12-30 VDC | MOC3-0524 |
| 24 V | 12-30 VDC | 12-30 VDC | 12-30 VDC | MOC3-2424 |
| 5 V | 12-30 VDC | 5 VDC | 5 VDC | MOC3-0505 |
| 24 V | 12-30 VDC | 5 VDC | 5 VDC | MOC3-2405 |
| 5 V | 12-30 VDC | NA | NA | MOC1-0524 |
| 24 V | 12-30 VDC | NA | NA | MOC1-2424 |