



ISOLATOR-MULTIPLIER MODULE

>> MAEX SERIES <<

- » Optical isolation between input and outputs
- » Push-pull outputs with short circuit protection
- » HTL output power range with reverse polarity protection
- » Frequency up to 200KHz
- » TTL or HTL configurable input power supply

MAIN FEATURES

The isolator-multiplier module for encoders (MAE) is the perfect interface between your encoder and the controller, enabling a change of signal levels, increase the quantity of outputs (splitter) and the regeneration of the signal when the cable has a big length.

The input signals of ADE (A-B-Z) may be single-ended or differential in both 5V and 24V. In either case, the inputs are opto-coupled to isolate the outputs of the ADE of the encoder inputs, avoiding problems of electric noise and ground.

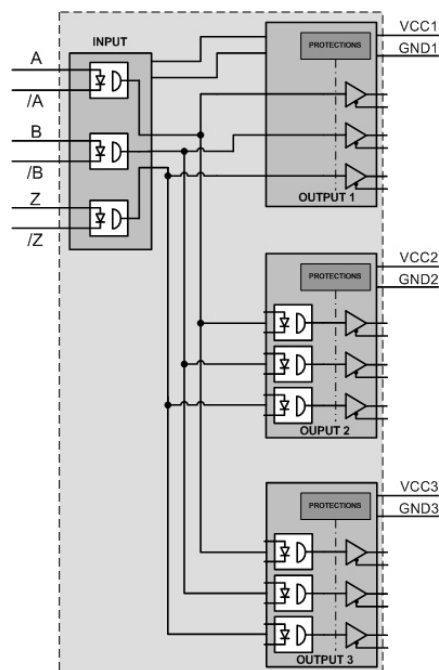
The outputs are push-pull type, have short circuit protection and diagnostics for low power. The power supply range is 12-30 Vdc output (HTL version) or 5V (TTL version), can each deliver 100mA. Each group of outputs has led indicators of 'Vcc' and 'Failure'.

MAE module has two versions: the MAE1 having an input (A-B-Z) and one output (A1-B1-Z1); the MAE3 which has one input and three outputs (A1-B1-Z1) (A2-B2-Z2) (A3-B3-Z3). All outputs have available their inverted signals.

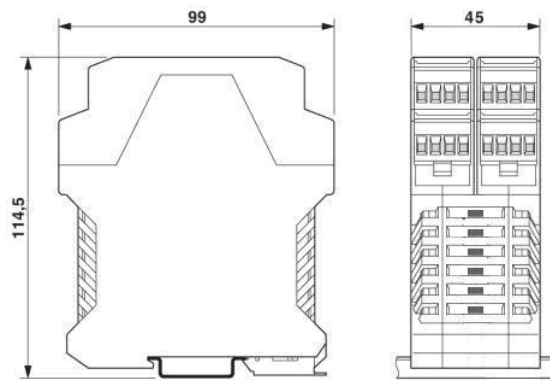
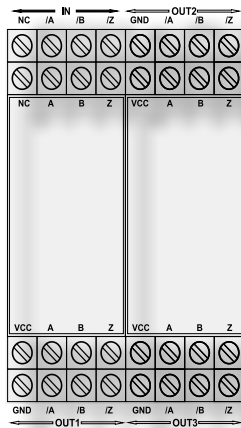
The maximum operating frequency is 200kHz.

TECHNICAL 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 Electricity			100	[mA]
	Frequency			200	[KHz]
	Input/Outputs Isolation	1000			[VDC]

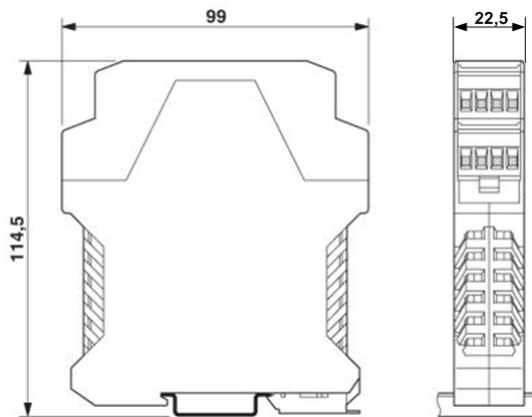
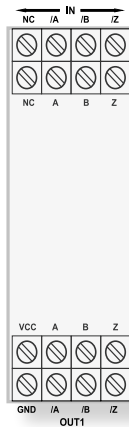


MAE3 WIRING DIAGRAM AND DIMENSIONS



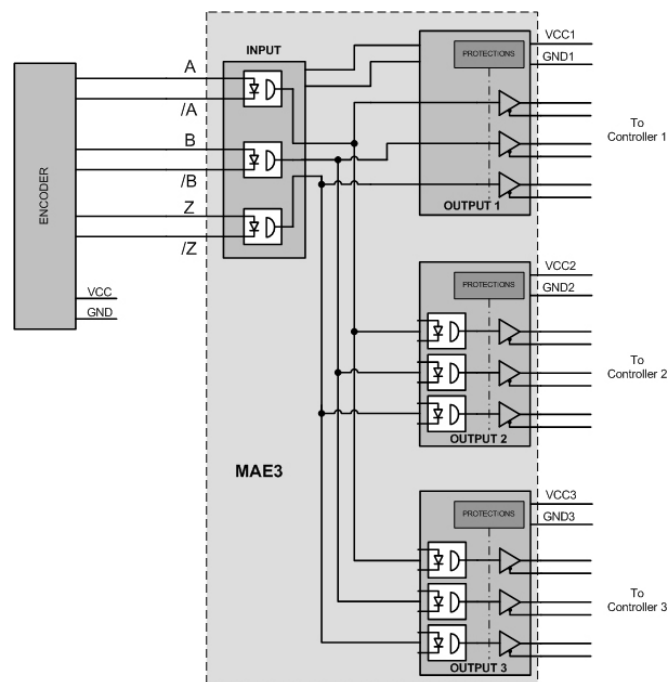
DIN Rail Mounting

MAE1 WIRING DIAGRAM AND DIMENSIONS

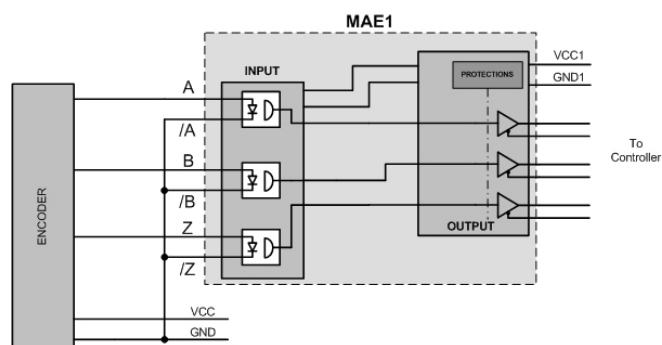


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DIFFERENTIAL WIRING EXAMPLE



SINGLE-ENDED WIRING EXAMPLE



PRODUCT CODES

INPUT VOLTAGE	OUTPUT VOLTAGE 1	OUTPUT VOLTAGE 2	OUTPUT VOLTAGE 3	PRODUCT CODE
5 V	12-30 VDC	12-30 VDC	12-30 VDC	MAE3-0524
24 V	12-30 VDC	12-30 VDC	12-30 VDC	MAE3-2424
5 V	12-30 VDC	5 VDC	5 VDC	MAE3-0505
24 V	12-30 VDC	5 VDC	5 VDC	MAE3-2405
5 V	12-30 VDC	NA	NA	MAE1-0524
24 V	12-30 VDC	NA	NA	MAE1-2424