## A. E. C.

# MDI-4 Four Way Digital Converter

### **Description**

The MDI-4 Module is intended for use with Direct Digital Controllers to convert their 5V Voltage Digital Inputs to 4 V.F.C. Digital Inputs or 4 x 24V AC/DC inputs.

The MDI-4 Module is constructed on a Epoxy Glass Laminate and housed in an industry standard 80mm DIN Rail Mounting. Generous 2.5mm² terminals are provided for the field interconnections.

The MDI-4 Module is CE rated and is RoHS compliant.



#### **Applications**

Applications include the monitoring of plant status signals.

To monitor any true Volt Free Contact run, trip overload and status type digital signals.

To provide a Local LED indication of Input Status.

To provide isolation of the controller from the Harsh Plant Environment, protecting the Controller.

The MDI-4 output can be configured as forward (N.O.) or reverse (N.C.).

#### **Features**

Converts the controllers Input.

Design for DIN rail mounting.

LED status indication.

Rising cage Terminals.

Supplied By

Voltage input version available, 24V AC or DC.

Flame retardant Polyamide DIN mounting.

MDI-4 Data Sheet. Issue 2, Jan 2010 E&OE.

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Specifications MDI-4 Continued

Input Signal: 4 x Volt Free Contact to switch 24V DC @ 15mA.

4 x 24V AC or DC galvanically isolated is available on request.

Output Rating: 0 and 5V DC. +/- 5%

Power Supply: 24V DC @ 50mA (+/-15%)

LED Indication: ON when relay energised.

Output Range: Jumper selectable DA/RA.

D.A, Output contact normally open (N.O). R.A, Output contact normally closed (N.C).

Electrical connections: Rising cage terminals for 0,5 to 2,5mm² cable. Ambient Conditions: -10 to 50°C 0 to 80% RH non-condensing.

Dimensions: 80 x 68 x 40mm.

Weight 82g I.P. Rating: IP00.

Mounting Flame retardant green Polyamide 66 UL 94V0 moulding.

To suit 35mm top hat din rail.

#### **Output Tables**

D.A. Output Selected standard V.F.C. version.

Input	Status	Output	Status
Α	Open	D0-1	0V
	Closed		5V
В	Open	D0-2	0V
	Closed		5V
С	Open	D0-3	VO
	Closed		5V
D	Open	D0-4	0V
	Closed		5V

D.A. Output Selected 24V AC/DC option.

Input	Status	Output	Status
Α	0V	D0-1	0V
	5V		5V
В	OV	D0-2	0V
	5V		5V
С	0V	D0-3	VO
	5V		5V
D	0V	D0-4	VO
	5V		5V

See also the MDI-4 Installation Sheet for wiring detail.

R.A. Output Selected standard V.F.C. version.

Input	Status	Output	Status
Α	Open	D0-1	5V
	Closed		0V
В	Open	D0-2	5V
	Closed		0V
С	Open	D0-3	5V
	Closed		0V
D	Open	D0-4	5V
	Closed		0V

R.A. Output Selected 24V AC/DC option.

Input	Status	Output	Status
Α	0V	D0-1	5V
	5V		0V
В	OV	D0-2	5V
	5V		0V
С	0V	D0-3	5V
	5V		0V
D	0V	D0-4	5V
	5V		0V

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