

2VID/24VAC

Dual Voltage to Current Driver Module (24 Vac/dc)

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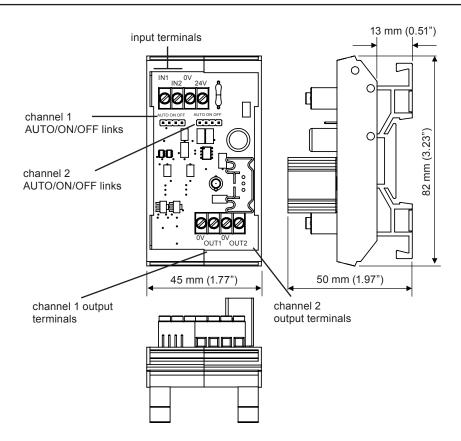
Description

The Voltage to Current Driver is a two channel output interface which converts two 0 to 10V signals into two 0 to 20 mA outputs. It can act as an interface between an IQ controller and any device requiring 0 to 20 mA inputs. There are manual override links for each output which can select AUTO, ON (20 mA), or OFF (0 mA), and can be used to aid commissioning. Field wiring is facilitated by rising cage clamp type terminals.

Features

- Dual channel 0 to 10V/0 to 20 mA converter.
- AUTO/ON/OFF manual override links.
- 4 to 20 mA can be achieved by controller strategy.
 - Standard DIN rail mounting.
- Rising cage clamp terminals.
 - 24 Vac/dc supply.

Physical



2VID/24VAC Data Sheet

FUNCTIONALITY

The 2VID converts two 0 to 10 V voltage channels into two 0 to 20 mA current channels.

Mounting: The 2VID is designed to be mounted on a standard DIN rail.

Power connection: The interface's power connection is made to a 24 Vdc (e.g. IQ's auxiliary supply) or 24 Vac supply (isolated or earthed to IQ earth) using the 0 V and 24 V connections.

AUTO/ON/OFF: For commissioning purposes each channel may be switched ON (20 mA), OFF (0 mA), or back to Auto (controlled by its input) using its AUTO/ON/OFF link. The ON/OFF override positions only work if the appropriate input is disconnected. Each AUTO/ON/OFF link can be replaced by a SPDT switch.

Connections: 1 part screw terminals for 0.5 to 2.5 mm² cross section area (20 to 14 AWG) cable are used for inputs, outputs, and power connection. All terminals are rising cage clamp type. Each AUTO/ON/OFF link may be replaced by a 4 in line connector for connection of a switch

INSTALLATION

The 2VID should be mounted in a protective case close to the IQ controller. The procedure involves:

Mount the 2VID in position
Set AUTO/ON/OFF links
Set IQ analogue output channel for voltage
Wire the 2VID to the controller
Wire the 2VID to the HVAC equipment
Connect the 24 V supply
Check interface operation

The installation procedure is covered in the 2VID (24 Vac/dc) Installation Instructions (TG200484).

DISPOSAL

COSHH (Control of Substances Hazardous to Health - UK Government Regulations 2002) ASSESSMENT FOR DISPOSAL OF the 2VID. No parts affected.

RECYCLING .

All plastic and metal parts are recyclable. The printed circuit board may be sent to any PCB recovery contractor to recover some of the components for any metals such as gold and silver.



WEEE Directive:

At the end of their useful life the packaging, and product, and battery (if fitted) should be disposed of by a suitable recycling centre.

Do not dispose of with normal household waste.

Do not burn.

ORDER CODES

2VID/24VAC 1 off 2VID module for DIN rail mounting

SPECIFICATIONS

ELECTRICAL

Supply Voltage :24 Vdc or Vac ± 20 %.

Supply current

24 Vac :135 mA 24 Vdc :55 mA

Input signal :0 to 10 Vdc (<1 mA per channel).

Output signal :0 to 20 mA.

Input/Output

Conversion :± 5 % accuracy. Output load :0 to 600 Ω

Manual override :linkable AUTO/ON/OFF.

MECHANICAL

Dimensions :82 mm (3.23") x 45 mm (1.77") x 50 mm

(1.97").

Connectors :Single part with rising cage clamp

terminals for 0.5 to 2.5 mm² cross section area (20 to 14 AWG) cable.

DIN rail :Top hat profile (DIN 46277-3, EN50022,

BS5584:1978)

ENVIRONMENTAL

Safety :EN61010.

Ambient limits

 $\begin{array}{lll} storage & & :-10 \ ^{\circ}C \ (14 \ ^{\circ}F) \ to \ +70 \ ^{\circ}C \ (158 \ ^{\circ}F) \\ operating & & :-10 \ ^{\circ}C \ (14 \ ^{\circ}F) \ to \ +50 \ ^{\circ}C \ (122 \ ^{\circ}F) \\ \end{array}$

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