

# XID-P Powered Isolator.

4~20mA to 4~20mA  
24Vdc Powered  
Isolating Transmitter.

## Features.

- Ideal for Isolating a Typical 4~20mA Current Loop.
- Input to Output Isolation 2.5KV.
- Power to Input / Output Isolation 2.5KV.
- High Accuracy 0.03%.
- Reverse Polarity Protected.
- Compact DIN Rail Mount Enclosure.
- Easy to Install.
- Low Cost.

## Ordering Information.

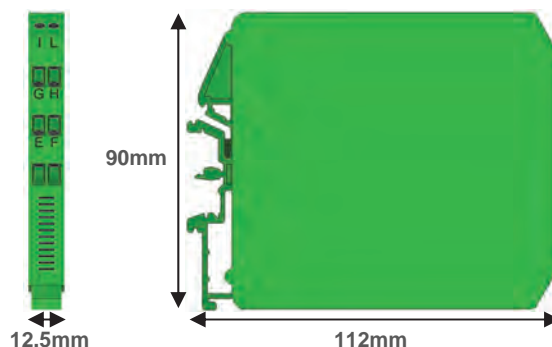
- **XID-P1** One Loop Per Enclosure.



## XID-P Specifications.

Input	4~20mA. Must be inserted into a current loop.
Input Voltage Protection	30Vdc.
Current Protection	PTC.
Output	2 wire 4~20mA.
Output Load Resistance	500Ω Max.
Power Supply	10~30Vdc, 0.8W max (Isolated from Input & Output).
EMC Emissions Compliance	EN 61326-1.
EMC Immunity Compliance	EN 61326-1.
Safety Compliance	EN 61010-1.
Accurate to	<±0.03% of span typical.
Linearity & Repeatability	<±0.03% of span typical.
Ambient Drift	<±0.01%/°C of span typical.
R.F. Immunity	<0.5% Effect of span typical.
Isolation Test Voltages	Between Input and Output: 2.5KV. Between Power and Input / Output 2.5KV. Between the separate XID-P transmitters: 2.5KV.
Working Isolation Voltage	300Vac.
Response Time	<50msec (From 0~90%, 100~10%).
Operating Temperature	-20~70°C.
Storage Temperature	-20~85°C.
Calibration Temperature	20~28°C.
Operating Humidity	5~85%RH Max. Non-Condensing.
Mounting	35mm Symmetrical Mounting Rail.
Dimensions	H=90, W=12.5, D=112mm.

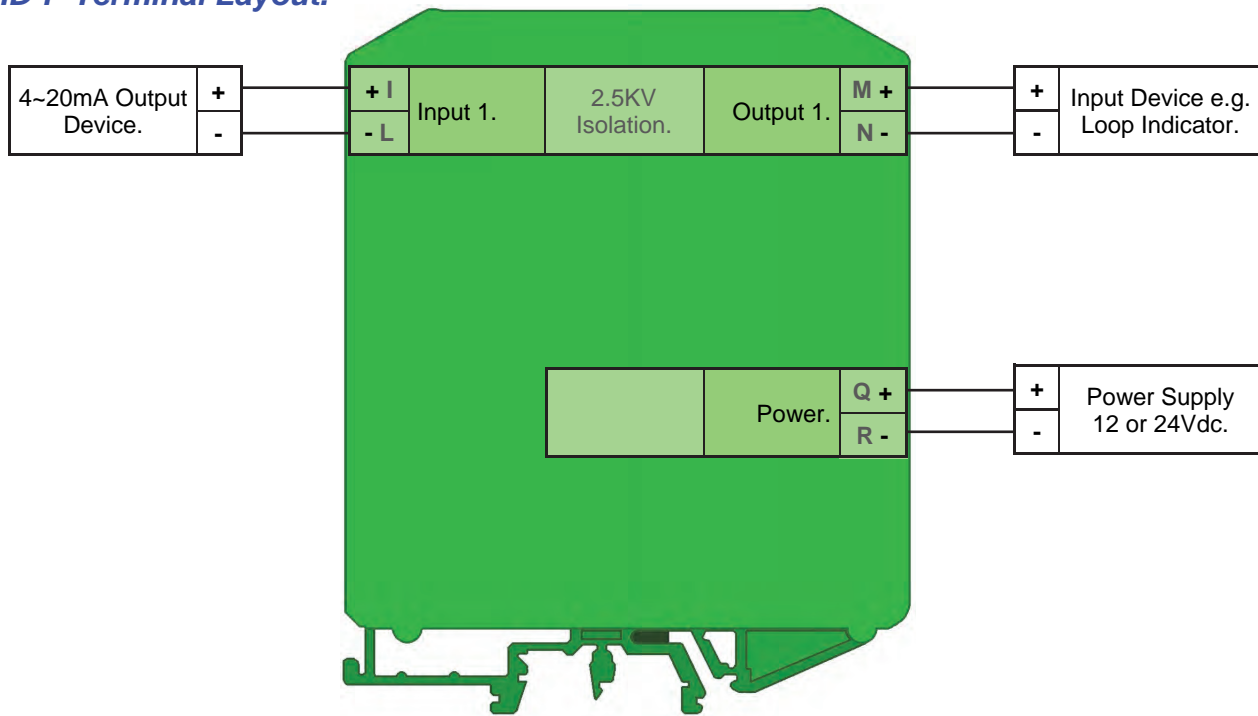
## XID-P Dimensions.



**Product Liability.** This information describes our products. It does not constitute guaranteed properties and is not intended to affirm the suitability of a product for a particular application. Due to on-going research and development, designs, specifications, and documentation are subject to change without notification. Regrettably, omissions and exceptions cannot be completely ruled out. No liability will be accepted for errors, omissions or amendments to this specification. Technical data are always specified by their average values and are based on Standard Calibration Units at 25C, unless otherwise specified. Each product is subject to the 'Conditions of Sale'.

**Warning: These products are not designed for use in, and should not be used for patient connected applications. In any critical installation an independent fail-safe back-up system must always be implemented.**

## XID-P Terminal Layout.



## The Proper Installation & Maintenance of XID-P.

**THE XID-P IS TO BE INSTALLED AND SERVICED BY SERVICE PERSONNEL ONLY. NO OPERATOR / USER SERVICEABLE PARTS.**

All power and signals must be de-energised before connecting any wiring, or altering any Jumpers or Dip Switches.

### Mounting.

- 1) Mount in a clean environment in an electrical cabinet on DIN or EN mounting rail.
- 2) Draft holes must have minimum free air space of 20mm. Foreign matter must not enter or block draft holes.
- 3) Do not subject to vibration or excess temperature or humidity variations.
- 4) Avoid mounting in cabinets with power control equipment.
- 5) To maintain compliance with the EMC Directives the XID-P is to be mounted in a fully enclosed steel cabinet. The cabinet must be properly earthed, with appropriate input/output entry points and cabling.
- 6) Allow 10mm minimum clearance between the XID-P terminals and ANY conductive material.

### Wiring.

- 1) All cables should be good quality overall screened INSTRUMENTATION CABLE with the screen earthed at one end only.
- 2) Signal cables should be laid a minimum distance of 300mm from any power cables.
- 3) For 2 wire current loops and 2 wire voltage signals or 2 wire current signals, Austral Standard Cables B5102ES is recommended. For 3 wire transmitters Austral Standard Cables B5103ES is recommended.
- 4) It is recommended that you do not ground current loops and only use power supplies with ungrounded outputs.
- 5) Lightning arrestors should be used when there is a danger from this source.
- 6) Refer to 'Terminal Layout' diagrams above for connection information.

### Commissioning.

- 1) Once all the above conditions have been carried out and the wiring checked apply power to the XID-P loop and allow five minutes for it to stabilise.
- 2) Take a low reading (approx. 10%) and high reading (approx. 90%) of the variable being measured by the transducer supplying the signal to the XID-P, and ensure that this agrees with the level being indicated by the PLC or indicator, etc., that the XID-P is connected into. Adjust for any differences.

### Maintenance.

- 1) Check the Sensor or Transducer supplying the signal to the XID-P for wear or damage and replace if defective.
- 2) Check the cables connected to the Sensor or Transducer.
- 3) Repeat (2) of Commissioning. Do it regularly - at least once per year.

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