

5 YEAR
WARRANTY



RoHS

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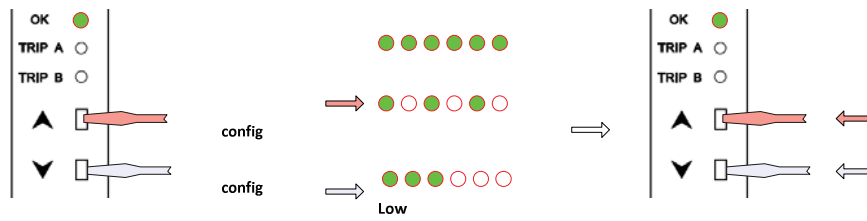
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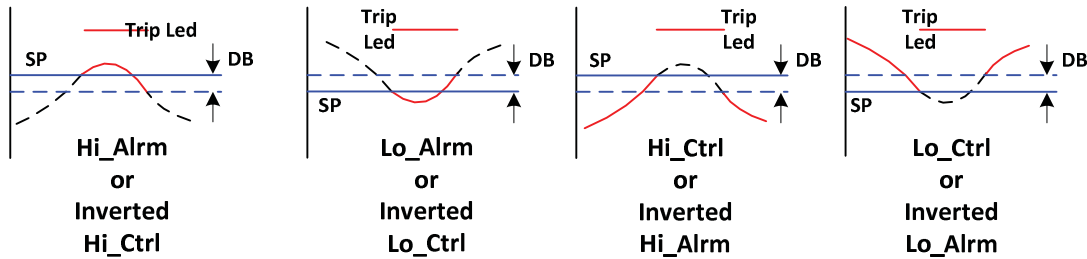
OUTPUT DAMPING

User adjustable damping of the analogue output is provided for both rising and falling signals. The adjustable range is (0 to 250) second for a (0 to 20) mA or (0 to 10) V swing.

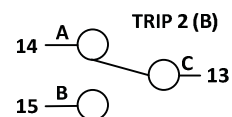
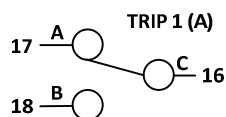
To calculate the maximum rate of change of the output signal divide 20 mA (10 V) by the damping setting, example if the damping is set to 100 seconds the mA output will change at a maximum rate of $(20/100) = 0.2 \text{ mA /Second}$. Use USB_LINK software to configure damping setting.

TRIP OUTPUTS

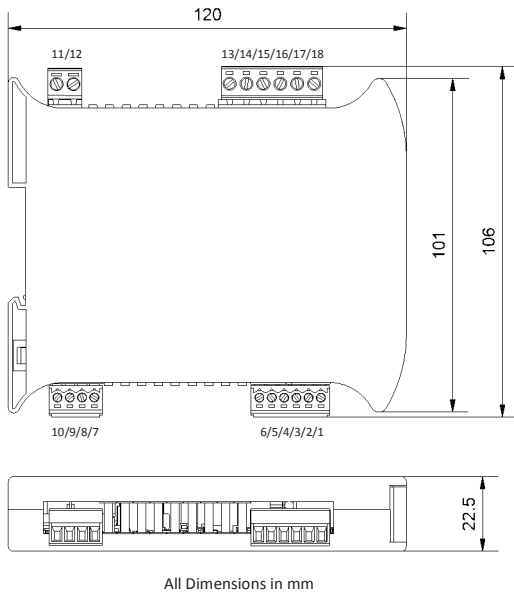
Dual trip change over contacts are available. The contacts are rated at 240 V ac 1 A (Non inductive) 30 V DC 1 A. An external snubber network is recommended when switching inductive circuits. Please ensure the snubber network is rated for the application. Four actions are provided, as detailed in the diagram below. The Alarm actions may also be used for inverted control applications, example the high alarm action can be used to control a cooling fan when used to control the temperature of a heat source. Adjustable setpoint and deadband are provided together with adjustable on and off delays for each trip. The delay range is (0 to 250) Seconds.



Action	Normal	Trip	Temperature Range Error	Power off
Hi_Alrm / Inverted Hi_Ctrl Lo_Alrm / Inverted Hi_Ctrl				
Hi_Ctrl / Inverted Hi_Alrm Lo_Ctrl / Inverted Lo_Alrm				



MECHANICAL INSTALLATION



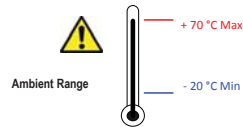
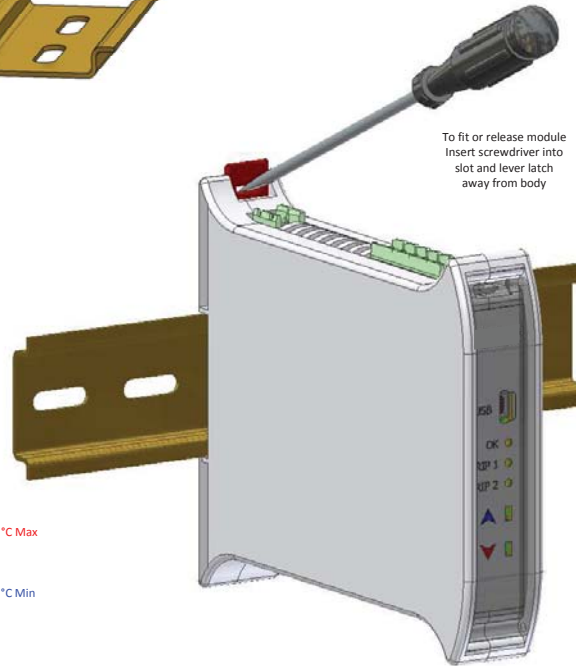
MOUNTING

- 1 Screwdriver
- 2 EN60715 DIN RAIL



Enclosure

Style DIN Rail Mount
 Material Blend PC/ABS self extinguishing
 Terminals Screw terminal
 Cable 2.5 mm Max
 Colour Grey



ELECTRICAL INSTALLATION

⚠️ TURN OFF SUPPLY BEFORE WORKING ON ANY ELECTRICAL CONNECTION

INPUT CONNECTION
 For cable length < 3 Metres no screen or twisted pair required.
 Thermocouple inputs must use correct compensation cable.
 PT100 inputs all three wires must be equal length (resistance).
 Max input cable length 30 metres.

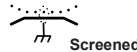
Screened Cable



Twisted Pair Cable



TC Compensation Cable



Screwdriver



ANALOGUE OUTPUT CONNECTION
 For cable length < 3 metres no screen or twisted pair required.
 Use twisted pair or screened for current output (3 to 1000) metres.
 Voltage output use screened cables (3 to 30) metres, cable lengths > 30 metres not advised.

TRIP OUTPUT CONNECTION
 Trip outputs are isolated from each other.
 Max switching current (1 A @ 240 V ac, 1 A @ 30 V dc)
 Non Inductive

SUPPLY CONNECTION
 Supply input is not polarity sensitive.
 Max supply 240 V ac or 240 V dc

Temperature

Process

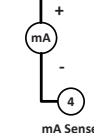
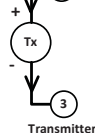
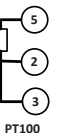
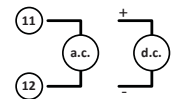
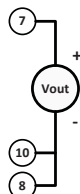
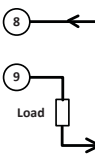
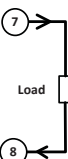
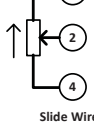
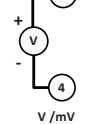
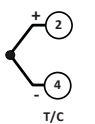
Current Internal Powered

Current Externally Powered

Voltage

TRIP 2(B)

TRIP 1(A)



WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **61 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **five (5) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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