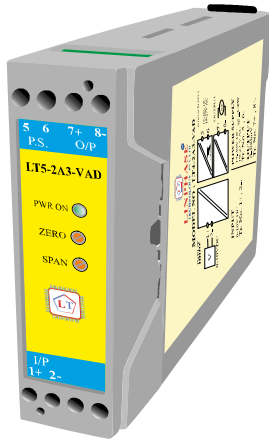


MODEL NAME : THERMOCOUPLE TO VOLTAGE ISOLATOR.
MODEL NO. : LT5-2A3-VAD
5000 Series : FIELD DEVICE ISOLATORS



LINPHASE™
TECHNOLOGY PVT. LTD



Linphase Product portfolio is mainly divided into **4000,5000,6000** Series. Here we discuss about **5000 series** named as Field Device Isolators, as the name suggest Linphase has taken interest in developing various isolators suitable for different variants of field devices, used widely in Process Automation Industry.

As per application and use our products vary in width of enclosure dimensions mainly **17.7mm,22.5mm,45mm and many more.**

We provide wide range of Voltage Supply to Isolators with **SMPS Auxiliary (17 to 30VDC/ 19 to 27VAC & 90 to 253 VDC/VAC) Power Supply.**

5000 Series with 3 Port Galvanic Transformer Isolation (1.5KVAC @ 50Hz) in between 3 (Input/Power/Output) sections.

5000 Series Isolators designed for wide configuration of I/O ranges from Tx (RH,Temp,DPT, 2,3 wired Tx etc), Active (0/4-20mA / 0-10VDC) sources.

These series also have a feature of **Powering the Field Devices** and provide Isolated Output to respective PLC & DCS (as per desired output signal).

5000 Series are Single, Dual, Splitter, Trip Amplifier (Sensor NPN/PNP/NAMUR/Potential Free Contact) Isolators and providing (Relay/Transistor) output as required for the application.

5000 Series include Isolators to convert the signal from **RTD or TC Types** to a analog **4-20mA signal** and provides 3 port galvanic isolation.

5000 Series include **Loop Powered Version** which enables in reducing overall wiring and power consumption with out any alteration in performance.

5000 Series include **HART** compatible isolators dedicated mainly for **2-wire HART programmable devices.**

5000 Series also provide isolators for **Operating Solenoid Valves, Control Valves and also act as Current Dividers .**

FEATURES :

- *Single Channel Analogue (TC) Input to **Voltage** Isolator.
- * Input Reverse Polarity Protected.
- * Voltage (0-10VDC) Output
- * Galvanic Isolation (1.5KVAC) between **Input, Output** and **Power Supply** Section.
- * For Analogue Input from **Thermocouple (Type Like . B, E, J, K, L, N, R, S, T, U, W3, W5, LR) (At Field).**
- * **Cold Junction Compensation** is present internal.
- * Non Polarity Power Supply Connection.
- * Auxiliary Power Supply (24VAC / DC) nominal.

FUNCTION :

- * It is used for Isolating, Converting and Transferring Hazardous Analogue Signal coming from a Thermocouple (Type Like . B, E, J, K, L, N, R, S, T, U, W3, W5, LR) As per customer requirement installed in the Hazardous Area to Safe Area (PLC/DCS).
- * Providing accurate Voltage Signal (0-10VDC) output.
- * It is mainly Din Rail mounted in Control Panel in safe area, Zone 2 .

We reserve the right to make alterations to the technical data, weights, dimensions, designs and products available Dated 10.09.2021 without prior notice. The illustrations cannot be considered binding.

MODEL NAME : THERMOCOUPLE TO VOLTAGE ISOLATOR.
MODEL NO. : LT5-2A3-VAD
5000 Series : FIELD DEVICE ISOLATORS

TECHNICAL & CONNECTION DETAILS :

GENERAL SPECIFICATION

Signal Type : Thermocouple

AUXILIARY POWER SUPPLY SECTION SPECIFICATIONS : Terminals (5, 6)

Non Polarity Connection : Yes.
Power Supply Voltage : 17-30 VDC/ 19-27VAC
Maximum Power Consumption : $\leq 1.2W$.

INPUT SECTION SPECIFICATIONS : Terminals (1+, 2-).

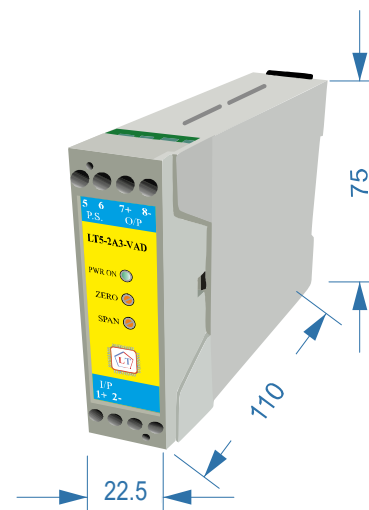
Input : T/C (J)
Min & Max Temp.Range : 0-1200°C
CJC : In Built

OUTPUT SECTION SPECIFICATIONS : Terminals (7+, 8-)

Voltage Range : 0-10VDC(Isolated Signal).
Response Time : $< 7ms$.
Load Resistance : 2K Ω Minimum.
Transmission Accuracy : $+ 0.1\%$

MECHANICAL SPECIFICATIONS :

Dimensions (mm) : 109.5 x 22.5 x 75.
Protection Class : IP 40.
Connection : Screw Terminals.
Weight : Approx. 100 gm.
Colour : Grey.
MOC of Housing : ABS.
Mounting : Din Rail 35mm (Vertical / Horizontal).
Ambient Temperature : $-20^{\circ}C$ to $+60^{\circ}C$.



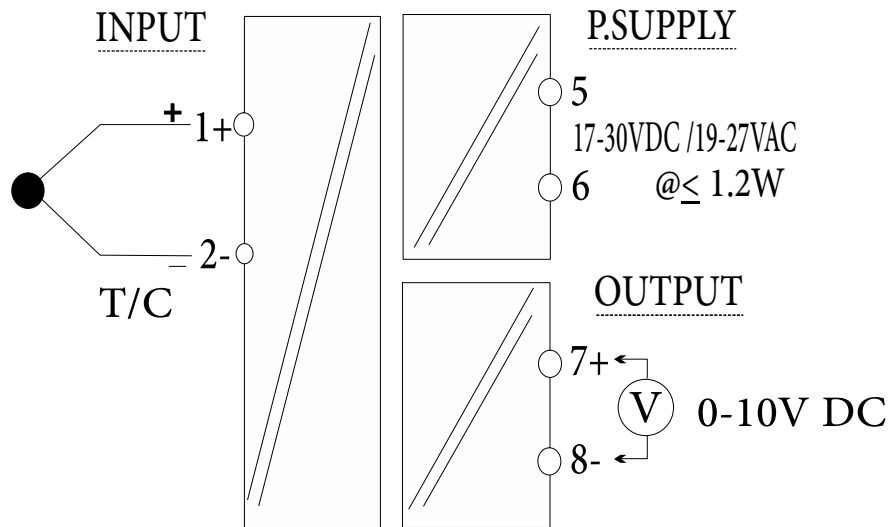
LED INDICATIONS :

Operating Indication : Green.

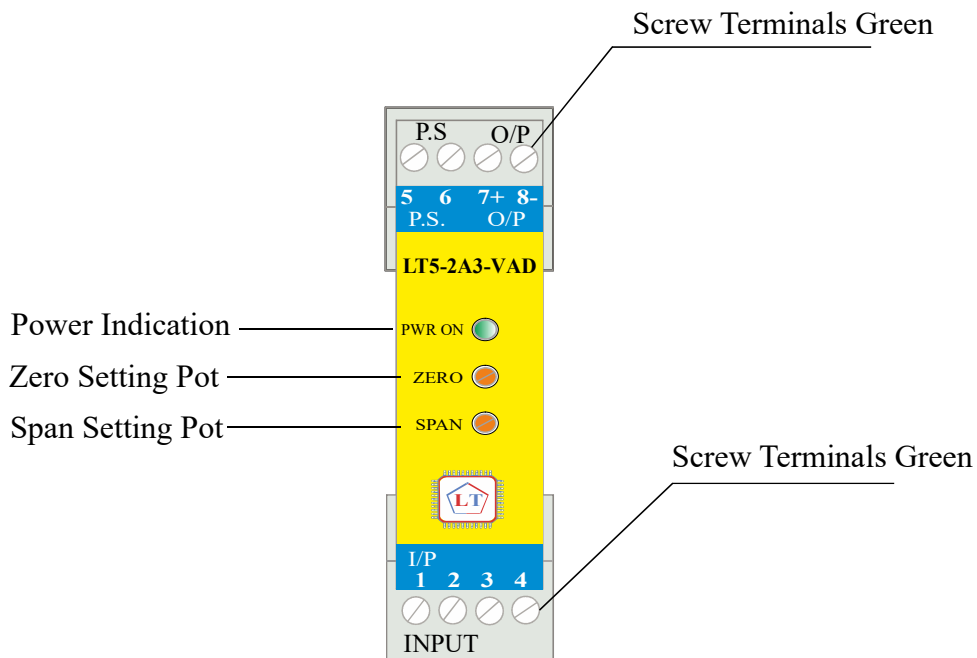
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CONNECTION & WIRING DIAGRAM

MODEL NO :LT5-2A3-VAD



ASSEMBLY



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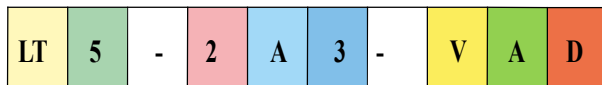
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ORDERING CHART

5000 Series: Sample Model LT5-2A3-VAD



AUXILIARY POWER SUPPLY
A- 110V AC
B- 230AC
D- 17-30VDC / 19-27V AC
U- 99 to 253 VDC / AC

NO OF CHANNELS (OUTPUT)
A- Single
B-Dual
M-Multi

OUTPUT
D-LATCH RELAY
H-HART
I-0/4-20mA
P-PULSE
R- RELAY
S- 0/4-20mA & 0-10VDC
V- 0-10VDC
L- 4-20mA (LOOP POWER)
T- 4-20mA (DRIVE FMD)

INPUT
1 - TRANSMITTER 2 or 3 WIRE or ACTIVE SOURCE 4-20mA/0-20mA
2 - RTD
3 - TC
4 - CONTROL VALVE
5 - SENSOR NAMUR 2 WIRE
6 - SENSOR PNP or NPN or PULSE
7 - SOLENOID VALVE
8 - ACTIVE ANALOG SIGNAL(4-20mA) FROM SAFE AREA

NO OF CHANNELS (INPUT)
A- Single
B-Dual
M-Multi

ENCLOSURE WIDTH CODE
7-17.5mm
2-22.5mm
5-45mm
M-Variable Width

4000, 5000 , 6000, 7000 SERIES

LINPHASE TECHNOLOGY

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