MORNSUN

Active Single channel Analog signal **Isolation barrier (Vin & Vout)** T55/56/65/66 B



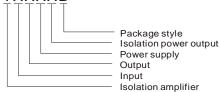
APPLICATIONS

Analog signal isolating barrier, is a signal conditioner with electrical insulation between input and output, which can receive the standard or non-standard analog signal input from the scene, and transmit a standard output signal to the control room or DCS, to get three-port isolated among power supply, input and output. It is designed for translating signals of apparatus in hazardous area, isolating and transforming these signals into standard signals which can be accepted by industry computer, DCS, PLC, or user-specified special signals. It is widely used in the industrial measurement systems, medical electronic equipment, electrical equipment etc. We adopt high efficiency magnetism and electricity isolated technology to achieve signal isolation, with characteristics of high output accuracy, good linearity and low temperature drift.

FEATURES

- Three port Isolation(input, output, power supply)
- High accuracy (0.1% F.S.)
- High linearity (0.1% F.S.)
- Isolation voltage(2500VDC/60S)
- High frequency response(15KHz)
- Low temperature drift(35PPM/℃)
- Industry class(Operation temp.: -25℃ to +71℃)
- High reliability(MTBF>500,000 hours)

MODEL SELECTION TXXXXB



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PRODUCT PROGRAM

| | Part Number | Power Supply | Input | Output | Isolation Power Output | Channels |
|-------------------------------------------------------------------------|----------------|--------------|-------|--------|---------------------------|----------|
| | T6630B | 24V | 0-5V | 0-5V | NONE | 1 |
| | T5630B | 24V | 0-10V | 0-5V | NONE | 1 |
| | T5533B | 24V | 0-10V | 0-10V | 24V | 1 |
| | T5530B | 24V | 0-10V | 0-10V | NONE | 1 |
| Note: We could also offer customer design for special input and output. | | | | | | |

| ELECTRICAL CHARACTERISTICS | | | | | |
|--------------------------------|-------------------|---------------------------|--|--|--|
| | Power Supply | (Nominal Power Supply)±5% | | | |
| Power Supply Data | Power Dissipation | ≤2W | | | |
| | Power Protection | Reverse protection | | | |
| Isolation Power Output Data | Output Voltage | (Nominal)±10% | | | |
| | Output Current | ≤25mA | | | |
| Input Data | Input Signal | See above | | | |
| | Input Impedance | ≥10MΩ | | | |
| 100 | Overload | ≤15V | | | |
| Output Data | Output Signal | See above | | | |
| | Load | >1KΩ(At Output = MAX) | | | |

| TRANSMISSION CHARACTERISTICS | | | | |
|------------------------------|------------------------------|--|--|--|
| Offset | 0.1%F.S. | | | |
| Gain Error | 0.1%F.S. | | | |
| Temperature Drift | 0.0035%F.S./℃ (-25℃ to +71℃) | | | |

ISOLATION CHARACTERISTICS Galvanic Isolation Three port Isolation(input, output, power supply) Isolation Voltage 2.5KVDC (Tested for 1minute and 1mA max, humidity < 70%) Insulation 100MΩ, 500VDC(Among signal input ,signal output, power supply Resistance and isolation power output)

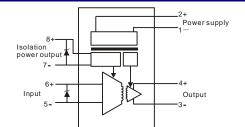
| OTHER CHARACTERISTICS | | | | |
|----------------------------|-------------------------------------------------------------------------------------------------------|--|--|--|
| Ambient | Operation temperature:-25℃ to +71℃ | | | |
| temperature | Transport and Storage temperature:-50 $^\circ\!\mathrm{C}$ to +105 $^\circ\!\mathrm{C}$ | | | |
| Package | 35mm DIN-rail package | | | |
| Safety Class | IP20(IEC60529 / EN60529) | | | |
| EMC compliance | GB/T 18268(IEC61326-1) | | | |
| Weight | About 60g | | | |
| Application environment | No dusts, gases of fiercely vibration, impulsion or gases that may erode to the components surrounded | | | |

Note:

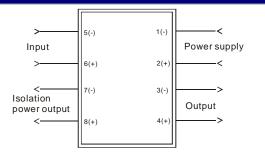
1 .All specifications measured at TA=25°C, humidity<75%, nominal input voltage and rated output load unless otherwise specified.

2. Only typical models listed, specifications of custom product may be different. Please contact our service people directly for certain conditions.

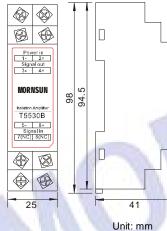
SINGLE CHANNEL SCHEMATIC DIAGRAM



APPLICATION CIRCUIT DIAGRAM



PACKAGING SIZE AND TERMINAL DESCRIPTION

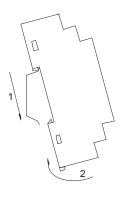


| 1- | Power supply- | | |
|----|-------------------------|--|--|
| 2+ | Power supply+ | | |
| 3— | Output- | | |
| 4+ | Output+ | | |
| 5- | Input- | | |
| 6+ | Input+ | | |
| 7- | Isolation power output- | | |
| 8+ | Isolation power output+ | | |
| | | | |

n Tolerance:±0.5

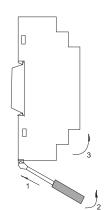
INSTALLATION

- DIN35mm standard rail installation
- 1. Upside of the instrument card in the rail;
- 2. Push underside of the instrument into the rail.



DISASSEMBLY

- Use a screwdriver (Width of edge≤6mm), cut in the metal card lock from the underside;
- Boost up the screwdriver and prize the metal card lock downwards;
- 3. Pull the instrument out of the rail.



CONNECTION

- 1. Cross section area of wiring: 0.5mm²-2.5 mm²;
- 2. Multi-strand wire, the length of bare wire is about 8mm, fixed by the M4 bolt.

Application Note

- Please read the user manual carefully before using. If any questions please contact our technical support department.
- 2. Please do not use this product in hazardous area.
- The power supply of this product should be DC power source. It is forbidden to use 220VAC power supply.
- 4. To avoid equipment invalidation, or any failure, users' disassembling this product is forbidden.

AFTER SERVICE

- Products are carefully inspected and controlled before going out from our factory. If they operated abnormally or there were anything wrong in the inner parts, please contact with our agents near you or technical support in our company as soon as possible.
- 3 years warranty since the delivery date. During the period of quality guarantee, our company will repair or change free of charge if product has any quality problem in the process of normally using.