

TZ-41 INSTRUCTION MANUAL

**Caution**

- (1) The application of voltage or current exceeding its maximum allowable value to the input terminals may result in instrument damage.
- (2) The supply of power out of its allowable range may cause fire, electric shock or instrument failure.
- (3) The content of this manual may subject to change without prior notice for product improvement.
- (4) This manual is carefully prepared. However, if any question arises, or any mistake, omission or suggestion is found in the content of this manual, contact your nearest our sales agent.
- (5) After read this manual, please keep it as anytime can see.

Outline

This Device is Self-Powered DC Current Isolator.
So Output Current is as same as Input Current.
Especially it is very small size for snap mounting on DIN rail, So that is economic and easy to use.

General Specification

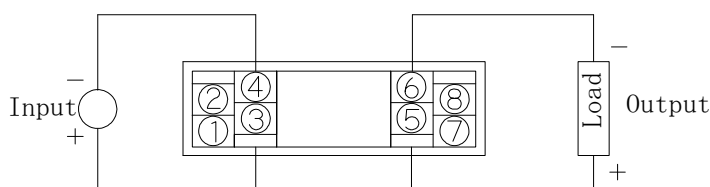
| | |
|---|--|
| Input | : DC Current 0 to 20mA (4 to 20mA) |
| Translation ratio | : 1:1 |
| Overload capacity | : Less than 30mA |
| Time constant | : Approx 50ms(0 to 90%) |
| Allowable load resistance | : Less than 1k Ω |
| Voltage loss across isolation transformer | : Approx 3.3V |
| Ripple in output | : Less than 0.5% F.S |
| Insulated Resistance | : More than 100M Ω at DC 500V between input and output |
| Dielectric strength | : 1 min at 2kV AC between input and output |
| Mechanical design | : Type of snap mount on DIN rail |
| Weight | : Approx. 80g |

Accuracy

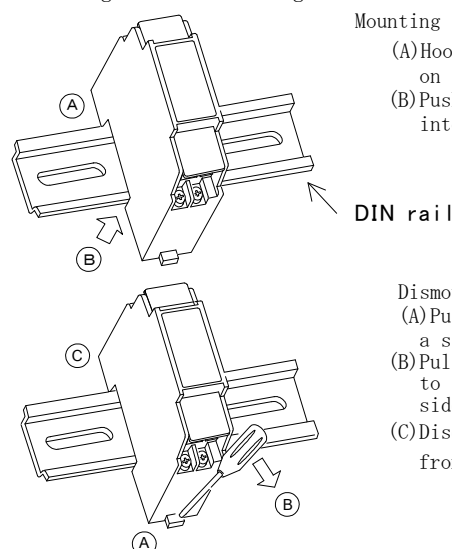
| | |
|---------------------------------------|------------------|
| Reference value | : 20mA |
| Limit of error at reference condition | : Max. 0.1% F.S |
| *Reference condition | |
| Ambient temperature | : 23°C \pm 1°C |
| External resistance | : 250 Ω |

Additional Error

| | |
|-----------------------------------|---|
| Dependence on external resistance | : +0.1%F.S/100 Ω if $R_L < 250\Omega$ +0.3%F.S/100 Ω if $R_L < 50\Omega$ -0.1%F.S/100 Ω if $R_L > 250\Omega$ |
| Temperature influence | : Less than 100ppm/°C (250 \pm 200 Ω) Less than 400ppm/°C (Other than the above) |

Input/Output Connection Diagram**Mounting and Dismounting****Mounting**

- (A) Hook the upper side on the rail.
- (B) Push the lower side into the rail.

**Dismounting**

- (A) Push the slider down with a screwdriver.
- (B) Pull the device toward you to disengage the lower side from rail
- (C) Disengage the upper side from the rail.

Note: If device dislocation may occur after mounting.

It is recommended that fixing metal pieces be used.

If two or more devices are closely mounted, do not contact them each other directly, but insert a spacer between them.

Precautions

- a) Use this device at ambient temperature between -10 and +70°C and in humidity of up to 60%.
- b) Avoid using the device at a location where dust, and chemicals and gases harmful to electric components do not exist.
- c) Do not subject the device to vibration and shock.
- d) In order to lessen an influence by noise, neither bundle input/output and power wires together nor accommodate them in the same duct.

WARRANTY

The warranty period is for one year from the day it was delivered. Trouble occurring in this period and considered to be our fault will be remedied free of charge.

AFTER-SALE SERVICE

This device is delivered after being manufactured, tested and inspected under strict quality control.

However, if any trouble does occur, contact your nearest Watanabe agent, giving as much information on the trouble as possible.

(Please send the faulty device together with details of the trouble in writing.)

Applicable standards

EN61326-1
EMI: Class A
EMS: Industrial locations
Only in the case of lines<30m
EN IEC 63000

watanabe

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