

# Terminal Type AC Current Isolated Transducer (AC Power)

## MODEL TZ-1DA



### Input Specification

Code No.	Input (A)	Input resistance	Input allowable range
1	0 to 1AAC	less than 0.05Ω	less than 7.5A AC (less than 5sec 25AAC)
2	0 to 5AAC		
Y	Other than the above		

For Code No. Y

Limit of specifications

Less than 5 A AC and more than 0 A AC

Span : Less than 5 A AC and more than 1 A AC

Input frequency : 40 to 1000Hz

Note : A measurement error may become larger when higher harmonic wave components of more than input frequency are contained.

### Output Specification

Code No.	Output signal	Allowable Loadresistance
0	0 to 5V DC	More than 2kΩ
1	1 to 5V DC	
2	0 to 10V DC	More than 4kΩ
3	-10 to 10V DC	Negative output: more than 10kΩ
4	-2 to 2VDC	More than 2kΩ Negative output: more than 10kΩ
5	-2.5 to 2.5VDC	
6	-5 to 5VDC	More than 2kΩ
7	0 to 4VDC	
A	4 to 20mADC	Less than 550Ω
B	0 to 20mADC	
Y	Other than the above	

For code No. Y

Limit of specifications

Voltage output : Less than +15 VDC and more than -12 VDC

Minimum span : Less than +27 VDC and more than 0.06 VDC

(Load resistance : 10kΩ at the output exceeding 10V, and a negative output)

(Base accuracy : ±0.25 %F.S and temperature characteristic : ±0.03 %F.S/°C for a span of less than 1V)

Current output : Less than +20 mADC and more than 0 mADC

Minimum span : Less than +20 mADC and more than 1 mADC

Outputs can be reversed for both voltage and current outputs.

### General Specifications

Base Accuracy : ±0.2%F.S (5 to 100%F.S)(25°C±2°C)

±1.0%F.S (0 to 5%F.S)(25°C±2°C)

Power supply variation : ±0.06 %F.S (±0.5% to the input of 0 to 5%)

Load resistance variation : ±0.1 %F.S (±0.5% to the input of 0 to 5%)

Frequency variation : ±3 %F.S (Based on 60Hz)

Temperature characteristic : ±0.02 %F.S/°C

Response time : Less than 700msec (0→90%)

Front adjustments : ±5% for zero and span

Insulation resistance : Between input and output/power supply ;

More than 100MΩ at 500 VDC

Dielectric strength : Between input and output/power supply ;

For 1 min. at 2000VAC

Power supply voltage : 100 to 240VAC ±10 %

Consuming current : Less than 20mA (100VAC at voltage output)

Less than 25mA (100VAC at current output)

Operating ambient temperature : -5 to 50°C

Operating ambient humidity : Less than 90 %RH (No-condensing)

Storage temperature : -10 to 70°C

Storage humidity : Less than 60%RH (No-condensing)

Case material : ABS resin (Black) 94V-2

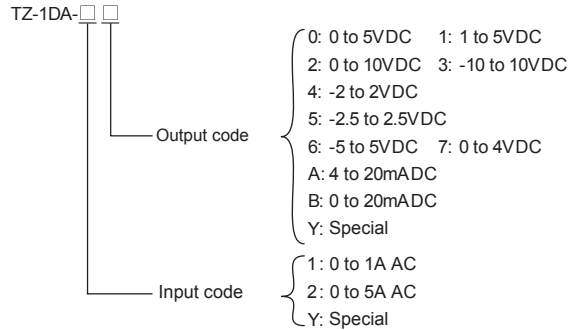
Weight : Approx. 80g

Vibration resistance : Frequency: 10 to 55Hz; amplitude(half): 0.15mm to 10 sweeps of 5 min each in X, Y, and Z directions

### Features

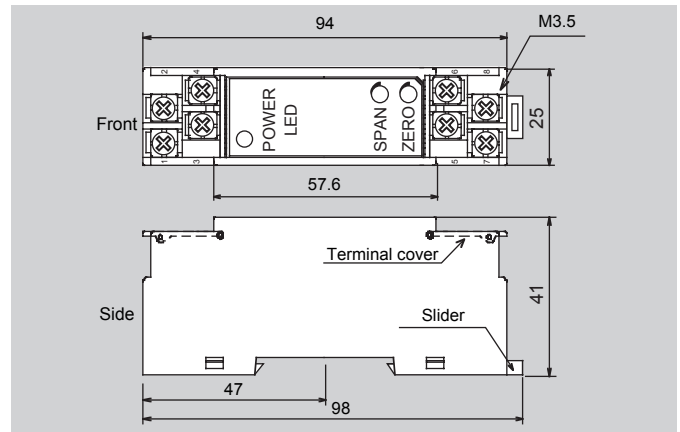
- AC power supply 90 VAC to 240 VAC
- DIN rail mounting
- Input/Output/Power supply isolated

### Ordering Code

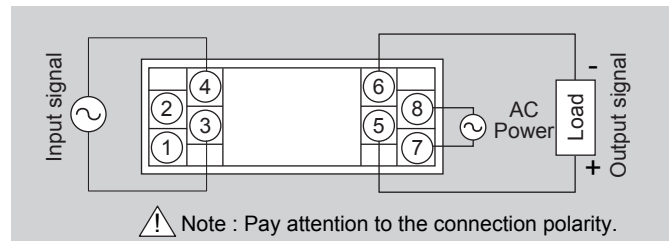


(Example) TZ-1DA - 1A

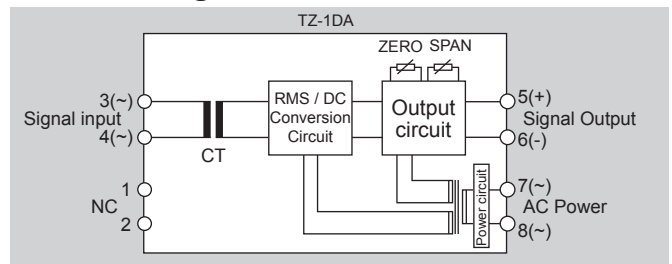
### Dimensions



### Connection Diagram



### Block Diagram



# Terminal Type AC Current Isolated Transducer

## MODEL TZ-5DA



### Input Specification

Code No.	Input (A)	Input resistance	Input allowable range
1	0 to 1AAC	less than 0.05Ω	less than 7.5A AC (less than 5sec 25A AC)
2	0 to 5AAC		
Y	Other than the above		

For Code No. Y

Limit of specifications

Less than 5 A AC and more than 0 A AC

Span : Less than 5 A AC and more than 1 A AC

Input frequency : 40 to 1000Hz

Note : A measurement error may become larger when higher harmonic wave components of more than input frequency are contained.

### Output Specification

Code No.	Output signal	Allowable Loadresistance
0	0 to 5V DC	More than 2kΩ
1	1 to 5V DC	
2	0 to 10V DC	More than 4kΩ
3	-10 to 10V DC	Negative output: more than 10kΩ
4	-2 to 2VDC	More than 2kΩ Negative output: more than 10kΩ
5	-2.5 to 2.5VDC	
6	-5 to 5VDC	More than 2kΩ
7	0 to 4VDC	
A	4 to 20mADC	Less than 550Ω
B	0 to 20mADC	
Y	Other than the above	

For code No. Y

Limit of specifications

Voltage output : Less than +15 VDC and more than -12 VDC

Minimum span : Less than +27 VDC and more than 0.06 VDC

(Load resistance : 10kΩ at the output exceeding 10V, and a negative output)

(Base accuracy : ±0.25 %F.S and temperature characteristic : ±0.03 %F.S/°C for a span of less than 1V)

Current output : Less than +20 mADC and more than 0 mADC

Minimum span : Less than +20 mADC and more than 1 mADC

Outputs can be reversed for both voltage and current outputs.

### General Specifications

Base Accuracy : ±0.2%F.S (5 to 100%F.S)(25°C±2°C)  
±1.0%F.S (0 to 5%F.S)(25°C±2°C)

Power supply variation : ±0.06 %F.S (±0.5% to the input of 0 to 5%)

Load resistance variation : ±0.1 %F.S (±0.5% to the input of 0 to 5%)

Frequency variation : ±3 %F.S (Based on 60Hz)

Temperature characteristic : ±0.02 %F.S/°C

Response time : Less than 700msec (0→90%)

Front adjustments : ±5% for zero and span

Insulation resistance : Between input and output/power supply ;  
More than 100MΩ at 500 VDC

Dielectric strength : Between input and output/power supply ;  
For 1 min. at 1500VAC

Power supply voltage : 24VDC ±10 %

Consuming current : Less than 25mA (24VDC at voltage output)  
Less than 40mA (24VDC at current output)

Operating ambient temperature : -5 to 50°C

Operating ambient humidity : Less than 90 %RH (No-condensing)

Storage temperature : -10 to 70°C

Storage humidity : Less than 60%RH (No-condensing)

Case material : ABS resin (Black) 94V-2

Weight : Approx. 80g

Vibration resistance : Frequency: 10 to 55Hz; amplitude(half): 0.15mm  
to 10 sweeps of 5 min each in X, Y, and Z directions

Applicable standards : EN61326-1

Only in the case of lines < 30m.

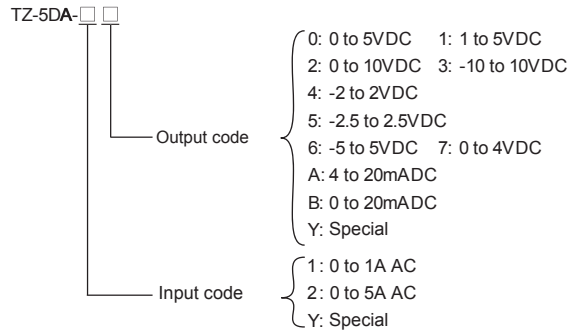
The above standards do not apply to the converter with "Y" specifications.

EN61326-1, EN IEC 63000

### Features

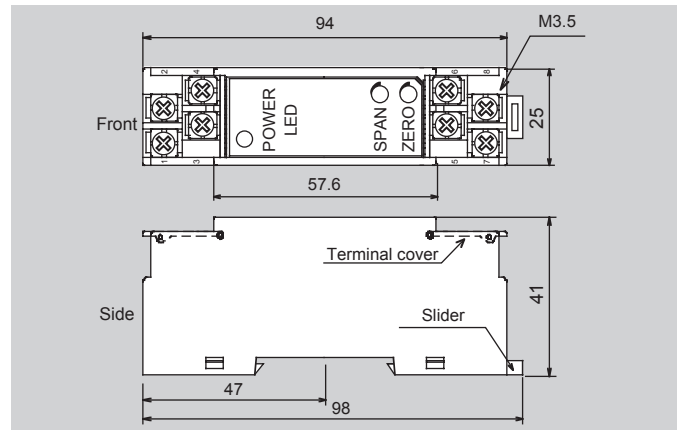
- DC power supply 24V DC
- DIN rail mounting
- Input/Output/Power supply isolated

### Ordering Code

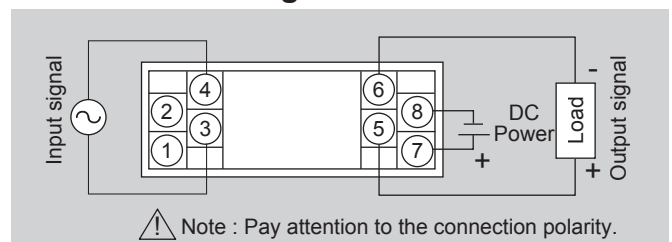


(Example) TZ-5DA - 1A

### Dimensions



### Connection Diagram



### Block Diagram

