

# § BOX TRANSDUCER § SENSOR TRANSDUCER POTENTIOMETER TRANSDUCER

## POTENTIOMETER TRANSDUCER

RTT2-82A/ RTT2-83A (DC110V power source)

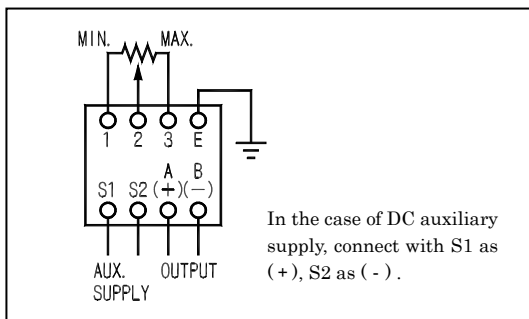
### Use

By replacing mechanical angle and displacement with resistance value change as input, then insulates and converts the input to a DC signal in proportion to displacement.

### Features

1. Withstand voltage 2, 000V AC (between input/ output/ auxiliary supply/ earth).
2. Impulse withstand voltage 5kV 1.2/50 $\mu$ s (electric circuit/earth), positive/ negative polarity 3 times each is guaranteed.
3. With output line surge protection (2, 000A,  $\pm$ 8/20 $\mu$ s), can transmit an output directly to a distant place.
4. Constant voltage/current output.

### Connection diagram



### Adjustment range of output signal

Output can be adjusted within input range 0-100 %. Output can be adjusted up to  $\pm$ 15% by BIAS adjustment and MAX adjustment. If range of use is beyond above-mentioned, specify actual range of use and potentiometer total nominal resistance value.

### Specified current

Specified current is a current flowing into a thermal resistance. Change of resistance value can be measured by voltage drop caused by the specified current.



**RTT2-82A**  
(120 × 56 × 130mm/800g)

### Specification and performance

Total nominal resistance value	Input (specified current)	External resistance	Output	Auxiliary supply	Common specification
50	A: 0-50 $\Omega$ (10mA)	12.5 /line	1: DC0-100mV ( 200 )	1: AC100V $\pm$ 15%, 50/60Hz	Tolerance: $\pm$ 0.5%
80	B: 0-80 $\Omega$ (10mA)	12.5 /line	2: DC0-1V ( 200 )	2: AC110V $\pm$ 15%, 50/60Hz	Response time: 1sec. ( $\pm$ 1%)
100	C: 0-100 $\Omega$ (10mA)	25 /line	3: DC0-5V ( 1k )	3: AC200V $\pm$ 15%, 50/60Hz	Consumption VA: AC power source 3.5VA
135	D: 0-135 $\Omega$ (10mA)	25 /line	4: DC 0-10V ( 2k )	4: AC220V $\pm$ 15%, 50/60Hz	DC power source 3.5W
200	E: 0-200 $\Omega$ (10mA)	25 /line	5: DC1-5V ( 1k )	5: DC24V $\pm$ 15%	DC110V4.5W
400	F: 0-400 $\Omega$ (7.5mA)	25 /line	A: DC0-1mA ( 10k )	6: DC48V $\pm$ 15%	Weight: 800g
500	G: 0-500 $\Omega$ (6mA)	25 /line	B: DC0-5mA ( 2k )	7: DC110V (88-143V)	
1k	H: 0-1k $\Omega$ (3mA)	25 /line	C: DC0-10mA ( 1k )	8: other than those above	
2k	I: 0-2k $\Omega$ (1.5mA)	25 /line	D: DC0-16mA ( 600 )		
3k	J: 0-3k $\Omega$ (1mA)	25 /line	E: DC1-5mA ( 2k )		
5k	K: 0-5k $\Omega$ (0.6mA)	25 /line	F: DC4-20mA ( 500 )		
10k	L: 0-10k $\Omega$ (0.3mA)	25 /line	G: other than those above		
-	O: other than those above	-			

Open of current output: even if the current output terminal is used in a state of regular open, there is no problem.

Also, a voltage of approx. 15V occurs on the output terminal.

DC 110V power: Type is RTT2-83A.

### Built-in external conducting wire resistance compensating circuit

When each resistance values are equal of wire which is connected to potentiometer and transducer, resistance values can be compensated. However those value become error when resistance values are different, Use this product in the range of the table above considering wire dispersion.

### Purchase specifications

