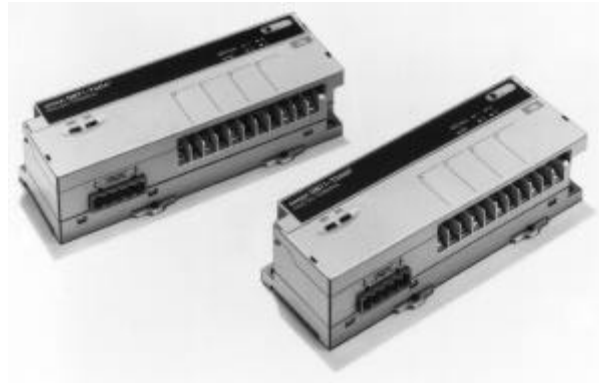


Temperature Input Module

DRT1-TS04□

Converting Temperature Inputs into Binary Data

- Four inputs
- Models for platinum resistance thermometers or thermocouples are available.
- Incorporating wire burnout detecting function.
- All inputs are insulated to one another.



Ordering Information

Classification	I/O points	Model
Temperature Input Module	4 inputs (Occupies 4 input words of the Master)	DRT1-TS04T
		DRT1-TS04P

Specifications

■ Ratings

Input

Item	DRT1-TS04T	DRT1-TS04P
Input type	R, S, K1, K2, J1, J2, T, E, B, N, L1, L2, U, W, and PLII	Pt100, JPt100
Indicator accuracy	(±0.5% of indication value or ±2°C, whichever is larger) ± 1 digit max.	(±0.5% of indication value or ±1°C, whichever is larger) ± 1 digit max.
Conversion time	250 ms/4 points	
Insulation system	Between the input and communications lines: Photocoupler insulation Between temperature input signals: Photocoupler insulation	

Note: The following are exceptions.

K1, T, and N at -100°C max., U, L1, and L2 at ±4°C ± 1 digit max. and R and S at 200°C max.: ±6°C±1 digit max.

B at 400°C max.: Not specified.

W: (±0.5% of indication value or 6°C, whichever is larger) ± 1 digit max.

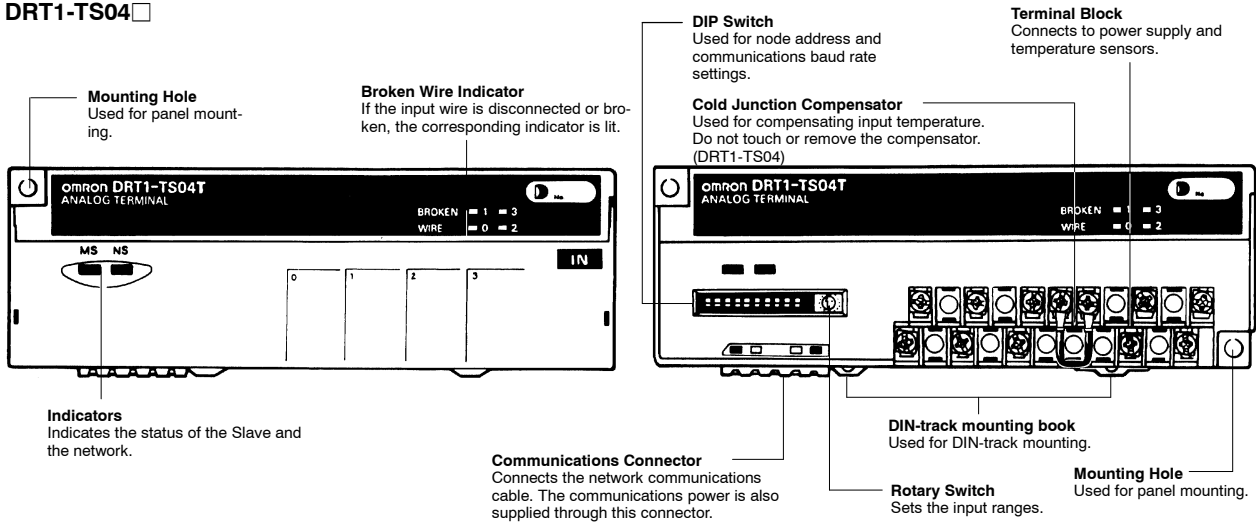
PL2: (±0.5% of indication value or 4°C, whichever is larger) ± 1 digit max.

■ Characteristics

Item	DRT1-TS04T	DRT1-TS04P
Communications power supply voltage	11 to 25 VDC (supplied through communications connector)	
Internal power supply voltage	20.4 to 26.4 VDC (24 VDC +10%/−15%)	
Current consumption	Communications: 30 mA max. at 24 VDC Internal circuit: 130 mA max. at 24 VDC	
Noise immunity	Power supply normal: ±600 V Power supply (common): ±1.5 kV	
Vibration resistance	10 to 55 Hz, 1.5-mm double amplitude	
Shock resistance	Malfunction: 200 m/s ² (approx. 20G) Destruction: 300 m/s ² (approx. 30G)	
Dielectric strength	500 VAC for 1 min between insulated circuits	
Mounting method	M4 screw mounting or 35-mm DIN track mounting	
Mounting strength	50 N (approx. 5 kgf) for 10 s In the DIN track direction: 10 N (approx. 1 kgf) for 10 s	
Terminal strength	Pulling: 50 N (approx. 5 kgf) for 10 s	
Ambient temperature	Operating: 0°C to 55°C (with no icing or condensation) Storage: −25°C to 65°C (with no icing or condensation)	
Ambient humidity	Operating: 35% to 85% (no condensation)	
Weight	230 g max.	160 g max.

Nomenclature

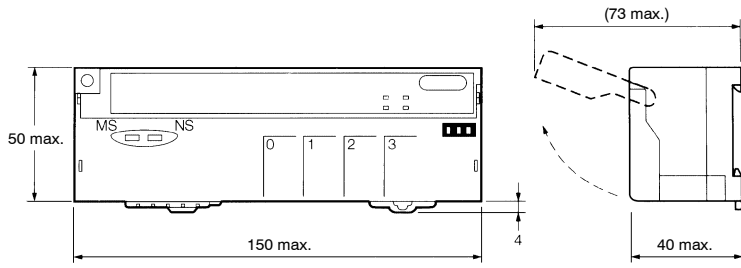
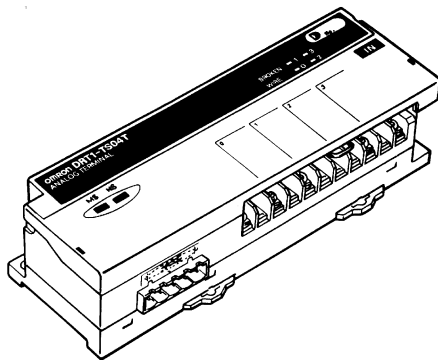
DRT1-TS04



Dimensions

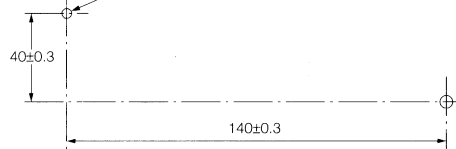
Note: All units are in millimeters unless otherwise indicated.

DRT1-TS04



Mounting Holes

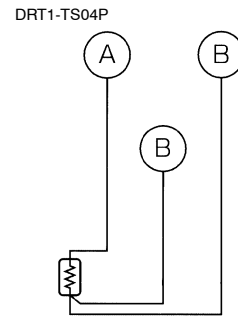
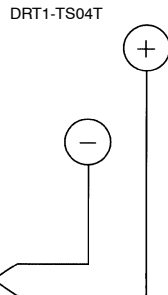
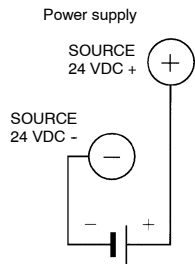
Two, 4.2 dia. or M4



The above mounting dimensions apply to screw mounting.

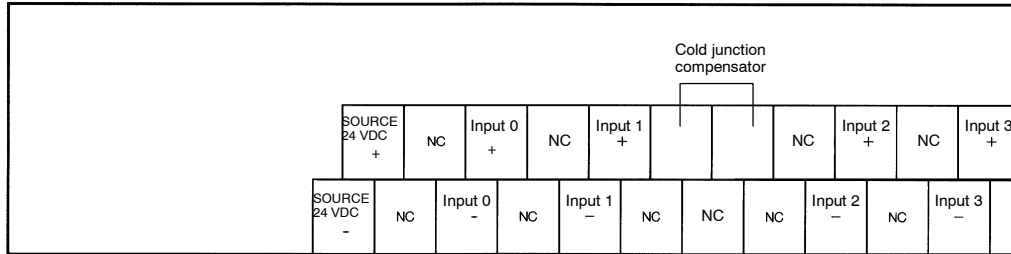
Data and Functions

Wiring

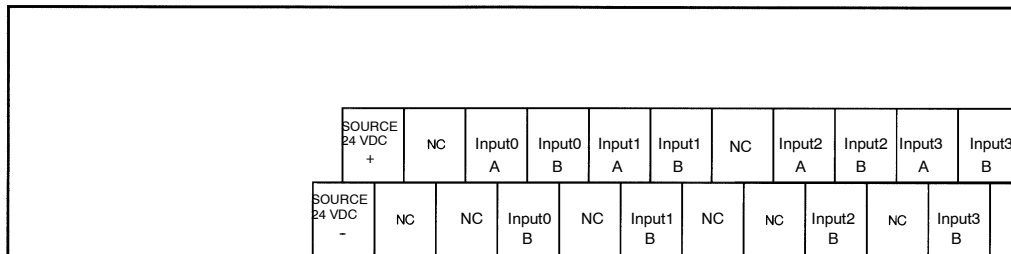


Terminal Arrangement

DRT1-TS04T



DRT1-TS04P



Precautions

Refer to the *DeviceNet Operation Manual (W267)* before using the Module.

Wiring

- Do not touch or remove the cold junction compensator.
- To prevent inductive noise, do not wire power lines or high-tension lines along with or near the cables. Other noise-prevention techniques, such as using shielding or separate conduit/ducting, are also effective.
- Install the Module as far as possible from equipment that generates strong high-frequency signals (such as high-frequency welders) and equipment that generates surges. Such equipment can cause the Module to malfunction.
- Install surge absorbers or noise filters on nearby equipment that generates noise, particularly equipment that has inductive components such as motors, transformers, solenoids, or magnetic coils.
- When using a noise filter in the power supply, check the voltage and current and install the noise filter as close as possible to the Module.

NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.

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