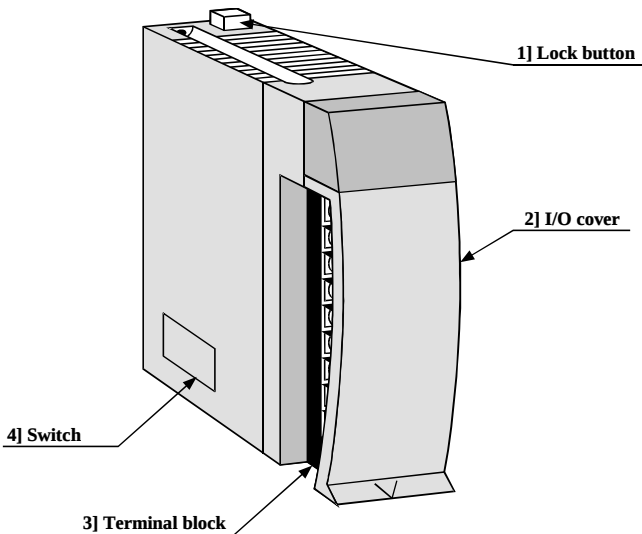
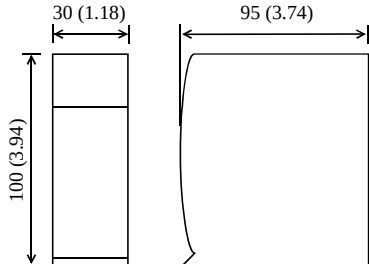


4.17 Resistance Temperature Detective Input Module

		Type	EH-PT4
		Weight	Approx. 0.18 kg (0.4 lb.)
		Dimensions (mm(in.))	
No.	Name	Function	Remarks
1]	Lock button	When dismantling the module from a base unit, press this button and lift up the module. The module can be fixed firmly by a screw (M4, 10 mm (0.39 in.)).	
2]	I/O cover	This is the cover attached to the terminal block area	
3]	Terminal block	This is the terminal block for connecting input signals. The terminal block can be connected or disconnected.	
4]	Switch	This is to set the temperature range.	

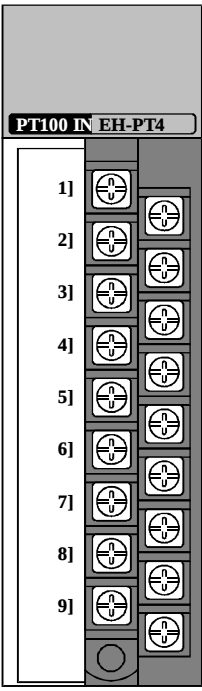
No.	Item	Detailed explanation	Remarks
	Operation explanation	The module receives input signals from RTD element. The CPU module recognizes the status of the loaded module and when it matches the I/O assignment information included in the user program, input information is received according to the contents of the user program.	
	Terminal block	The screws for the terminal block are M3 screws. Use a crimp terminal that fits the screw diameter. The maximum thickness of the cable should be only up to 0.75 mm². (Use 0.5 mm² cable when two crimp terminals are attached to the same terminal.) The recommended crimp terminal is indicated below.  (Recommended)  Care must be exercised when handling the terminal since it may fall off if the screw is loose. Unit: mm (in.)	

Specification table

Item		Specifications
Type		EH-PT4
Applicable temperature-measuring		Platinum temperature-measuring resistor Pt 100 (JIS C 1604-1989)/Pt 1000
Temperature conversion data		Signed 15 bits
Accuracy *1	-20 to 40°C (Pt 100)	$\pm 0.1^{\circ}\text{C}$ @25°C ($\pm 0.5^{\circ}\text{C}$ @ 0 to 55°C)
	-50 to 400°C (Pt 100)	$\pm 0.6^{\circ}\text{C}$ @25°C ($\pm 3^{\circ}\text{C}$ @ 0 to 55°C)
	-50 to 400°C (Pt 1000)	$\pm 0.8^{\circ}\text{C}$ @25°C ($\pm 6^{\circ}\text{C}$ @ 0 to 55°C)
Temperature measuring range		-20 to + 40°C/-50 to + 400°C (2 mA constant current system)
Number of input points		4
Conversion time		Approx. 1 second per 4 values
Insulation	Between value and internal circuit	Photocoupler insulation
	Between values	No insulation
Internal current consumption (5 V DC)		Approx. 160 mA
Externally supplied power		24 V DC
Unused terminal processing		The temperature conversion data for one of the four values is H7FFF.
External wiring register		The maximum total resistance of 4 values is 400 Ω
External wiring		Shielded cable
Additional function		Linearization
Error detection		The temperature conversion data at or below -51°C or at or above 410°C is H7FFF.
Wire breakage processing		The temperature conversion data for one of the four values is H7FFF.
I/O assignment		X4W

*1: The accuracy indicates the value after 10 minutes from the power-up. The value may become slightly higher immediately after the power-up. Also check the temperature-measuring resistor beforehand because it is also subject to error.

*2: Indicates the current terminal wiring in open state. When an open error occurs in the voltage terminal wiring, the data becomes inconsistent.⁷

Terminal layout		Diagram of internal circuit	
		No.	Signal name
			EH-PT4
		1]	b0
		2]	B0
		3]	b1
		4]	B1
		5]	b2
		6]	B2
		7]	b3
		8]	B3
		9]	24 V DC +
		10]	A0
		11]	NC
		12]	A1
		13]	NC
		14]	A2
		15]	NC
		16]	A3
		17]	NC
		18]	24 V DC -
		