RTD INPUT MODULE (high resolution)	MODEL	**R5-RSA**

BEFORE USE ....

Thank you for choosing us. Before use, please check contents of the package you received as outlined below.
If you have any problems or questions with the product, please contact our sales office or representatives.

■ PACKAGE INCLUDES:

RTD input module .... (1)

■ MODEL NO.

Confirm Model No. marking on the product to be exactly what you ordered.

■ INSTRUCTION MANUAL

This manual describes necessary points of caution when you use this product, including installation, connection and basic maintenance procedures.

POINTS OF CAUTION

■ HOT INSERTION/REMOVAL OF MODULES

• Removing or replacing modules does not affect other modules on the same backplane. It is possible to replace them without removing the power supply. However, replacing multiple modules at once may greatly change line voltage levels. We recommend that you replace them one by one.

■ GENERAL PRECAUTIONS

• DO NOT set the switches while the power is supplied. The switches are used only for maintenance without the power.

■ ENVIRONMENT

• Indoor use.
• When heavy dust or metal particles are present in the air, install the unit inside proper housing with sufficient ventilation.
• Do not install the unit where it is subjected to continuous vibration. Do not subject the unit to physical impact.
• Environmental temperature must be within -10 to +55°C (14 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

■ WIRING

• Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
• Do not bind these cables together with those in which noises are present. Do not install them in the same duct.
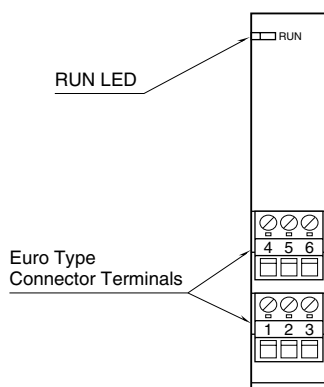
■ AND ....

• The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.
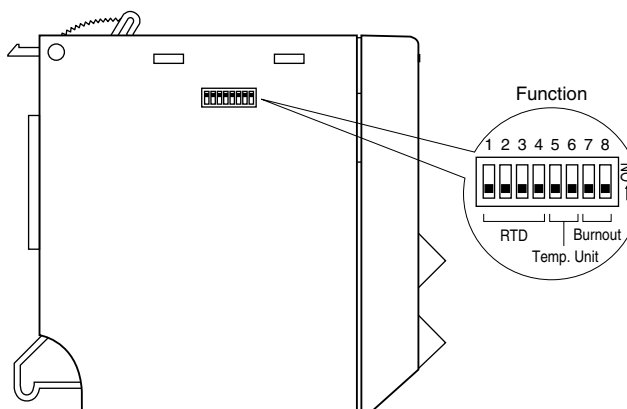
INSTALLATION

Use the Installation Base (model: R5-BS).

COMPONENT IDENTIFICATION

■ **FRONT VIEW**

■ **SIDE VIEW**

RUN LED

Euro Type
Connector Terminals

Function

RTD   Burnout
Temp. Unit

■ **STATUS INDICATOR LED**

RUN indicator: Bi-color (red/green) LED;
Red when the bus A operates normally;
Green when the bus B operates normally;
Amber when both buses operate normally.

■ **SIDE DIP SW**
(*) Factory setting

• **RTD Type: SW1, 2, 3, 4**

SW				RTD
1	2	3	4	
OFF	OFF	OFF	ON	JPt 100 (JIS '89)
ON	OFF	OFF	OFF	Pt 100 (JIS '89)
OFF	ON	OFF	OFF	Pt 100 (JIS '97, IEC) (*)

• **Temperature Unit: SW5, 6**

SW		TEMP. UNIT
5	6	
OFF	OFF	°C (*)
ON	OFF	°F

• **Burnout: SW7, 8**

SW		BURNOUT
7	8	
INPUT 1	INPUT 2	
OFF	OFF	Downscale
ON	ON	Upscale (*)

PC CONFIGURATOR

With configurator software, settings shown below are available.
Refer to the software manual of R5CON for detailed operation.

■ **CHANNEL INDIVIDUAL SETTING**

PARAMETER	AVAILABLE RANGE	DEFAULT SETTING
Zero Scale	-32000 to +32000	0
Full Scale	-32000 to +32000	10000
Bias [Zero Adj.]	-320.00 to +320.00	0.00
Gain [Span Adj.]	-32000 to +32000	1.0000
Zero Base	Depends on sensor type	0.00
Full Base	Depends on sensor type	0.00

■ **CHANNEL BATCH SETTING**

PARAMETER	AVAILABLE RANGE	DEFAULT SETTING
Limit	No check mark: Limits to the scaling values equivalent to -15 % to +115 %. Check-marked: Limits within Zero Scale to Full Scale.	No check mark

INPUT DATA DESCRIPTIONS

■ **ANALOG DATA (TEMPERATURE DATA)**

16-bit binary data.
With °C temperature unit, raw data is multiplied by 100. For example, 25.5°C is converted into 2550.
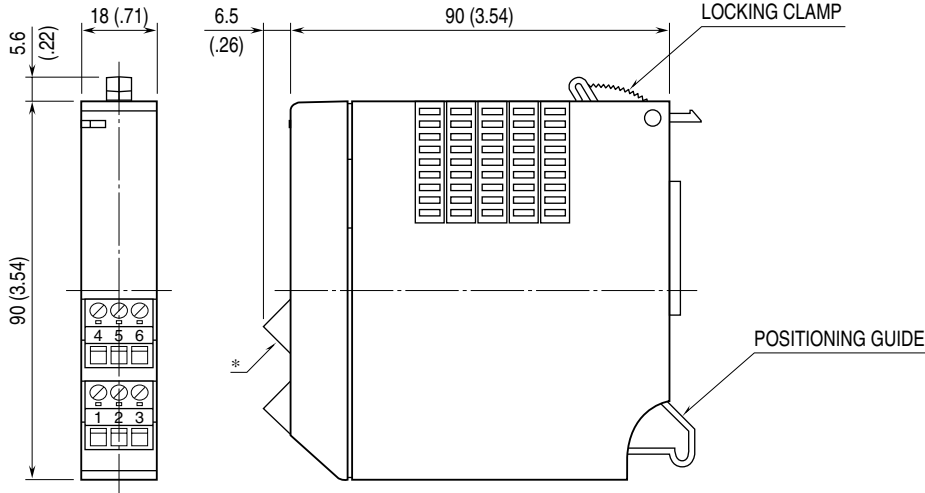With °F temperature unit, raw data is multiplied by 10. For example, 135.4°F is converted into 1354.
Minus temperature is converted into negative values, represented in 2's complements.

```
15                                    0
┌─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┐
└─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┘
```
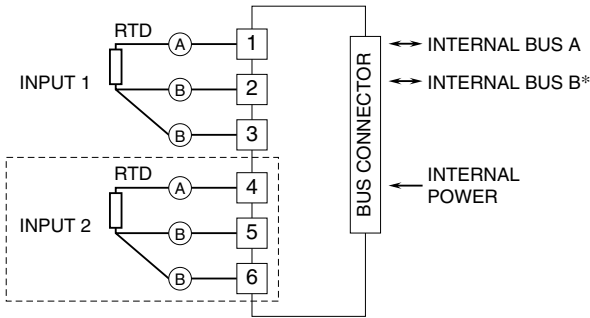
TERMINAL CONNECTIONS

Connect the unit as in the diagram below.

■ **EXTERNAL DIMENSIONS unit: mm (inch)**

*Euro type connector terminals (4, 5 and 6) provided only with 2-ch. option.

■ **CONNECTION DIAGRAM**

*For dual redundant communication.
Note: The section enclosed by broken line is with 2-ch. option.

WIRING INSTRUCTIONS

■ **EURO TYPE CONNECTOR TERMINAL**

Applicable wire size: 0.2 to 2.5 mm²
Stripped length: 7 mm