FBs-RTD16

16 Channel RTD Temperature Input Module



Introduction

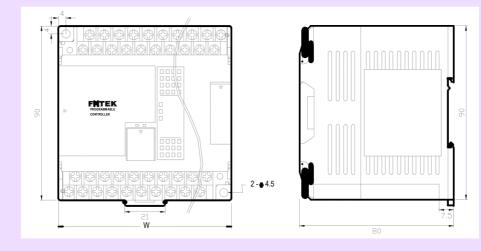
FBs-RTD16 is one of the temperature input modules of FATEK FBs series PLC. It provides 16 channels of RTD temperature

measurement input with 0.1 °C or 1 °C resolution. The scan rate for 0.1 °C resolution is 4 seconds, while the scan rate for 1 °C resolution is 2 seconds. This module provides three-wire connection for RTD temperature sensor, thus can automatically compensate the resistance introduced by the wiring. Total Channels - 16 CH **Resolution**- 0.1 °C or 1 °C I/O Points Occupied -1 RI(Input Register) 8 Discrete Output(DO) Conversion Time- 2 or 4Seconds Accuracy- ±1 % Sensor Type- Pt-100, Pt1000 (JIS or DIN) Software Filter- Moving average Average Samples- 1,2,4,8 configurable Measurement Range-Pt100: -200~850°C Pt1000: -200~600°C Isolation- Transformer(Power) and photo-coupler(Signal) Indicator(s) – 5V PWR LED Supply Power- 24V-15%/+20%, 2VA

Specifications

Internal Power Consumption- 5V, 100mA

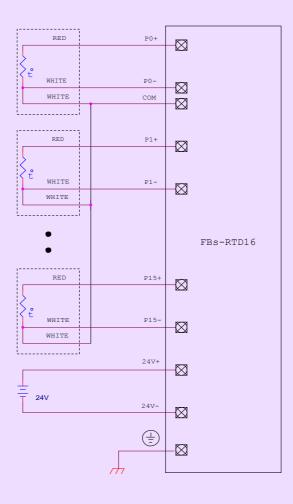
Operating Temperature- 0 ~ 60 °C **Storage Temperature-** −20 ~ 80 °C **Dimensions-** 90(W)x90(H)x80(D) mm



Dimensions



Wiring Diagram



I/O Configuration

Before the temperature value can be retrieved, the user should perform the I/O configuration of temperature module with the help of Winproladder software. The following screen will be shown when perform the I/O configuration

| I/O Configuration MC v4.x Input Setup Temp. Configuration AI Configuration I/O No. Function Input Setup Temp. Configuration AI Configuration X0 Undefined Input Setup Temp. Configuration AI Configuration X0 Undefined Imput Setup Temperature Configuration Fill X1 Undefined Starting Address of Configuration Table: R100 (R100~R108) X2 Undefined Starting Address of Temperature Register: R200 (R200~R245) X3 Undefined Starting Address of Working Register: R300 (R300~R323) X4 Undefined X6 Undefined Init of Temp.: Celsius X5 Undefined X7 Undefined Init of Temp.: Celsius X7 Undefined X8 Undefined Init of Temp.: Celsius Image: No X9 Undefined Y2 R3841 FBs-TC2 K Scan Rate: Normal Scan Rate: Normal |
|--|
| X0 Undefined X1 Undefined X2 Undefined X3 Undefined X4 Undefined X5 Undefined X6 Undefined X7 Undefined X8 Undefined X9 Undefined X1 Undefined X4 Undefined X6 Undefined X7 Undefined X8 Undefined X9 Undefined X10 Undefined |
| X10 Undefined X11 Undefined X12 Undefined X13 Undefined X14 Undefined X15 Undefined X15 Undefined X15 Undefined X16 FBs-RTD16 PT1000-DIN ▼ #5: R3844 FBs-RTD16 PT1000-DIN ¥6: ¥6: Y0 Undefined Y1 Undefined #7: |

The user need to assign a starting register of a contiguous register area for holding temperature reading value and areas for storing the configuration table and working scratchpad and define the sensor type, unit of temperature, scan speed and samples for average. Please refer the advanced manual II for detail explanation.