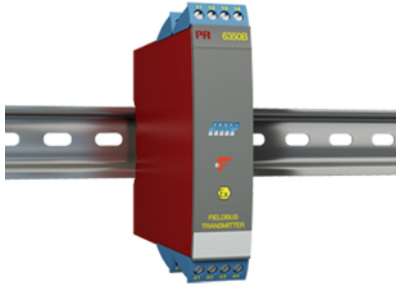


## Profibus PA / Foundation Fieldbus transmitter



### 6350B

- PROFIBUS® PA ver. 3.0
- FOUNDATION™ Fieldbus ver. ITK 4.6
- Automatic switch between protocols
- FISCO-certified
- Basic or LAS capability with F.F.



#### Application

- Linearized temperature measurement with RTD or TC sensor.
- Converts analog mA signals into digital values on the bus communication.
- Difference, average or redundancy temperature measurement with RTD or TC sensor.
- Linear resistance, potentiometer and bipolar mV measurement.

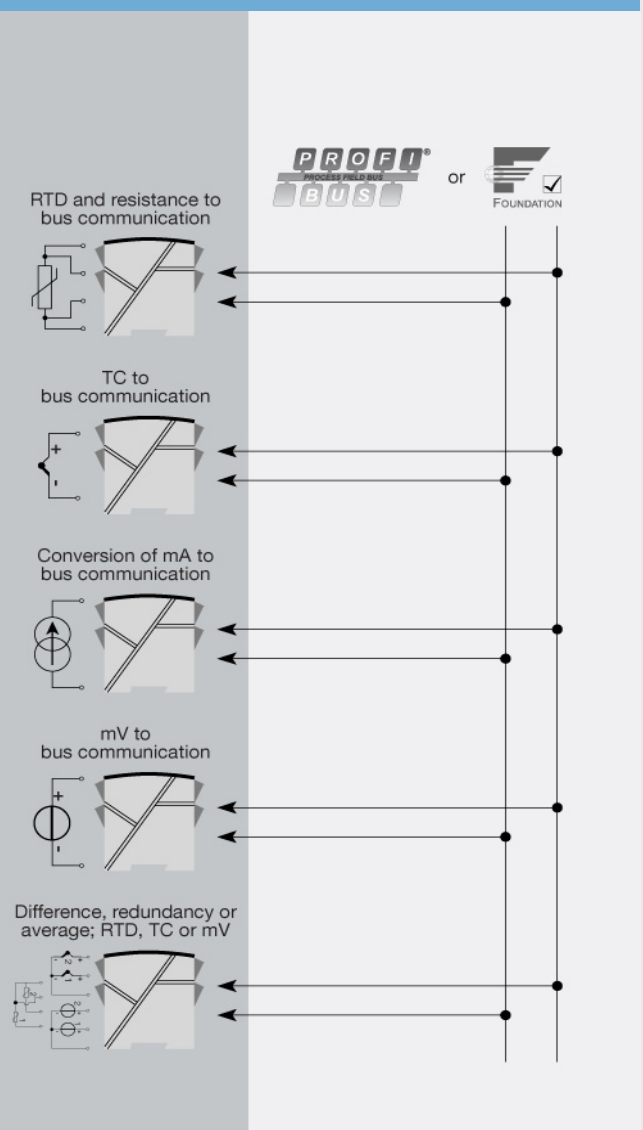
#### Technical characteristics

- Bus transmitter with both PROFIBUS® PA and FOUNDATION™ Fieldbus communication. A unique switch function ensures automatic shift between the two protocols.
- Set-up for PROFIBUS® PA can be done via Siemens Simatic® PDM®, ABB Melody / Harmony and Metso DNA software and for FOUNDATION™ Fieldbus via Emerson DeltaV, Yokogawa CS 1000 / CS 3000, ABB Melody / Harmony and Honeywell Experion software.
- Built-in simulation mode function.
- Polarity-independent bus connection.
- 24 bit A/D converter ensures high resolution.
- PROFIBUS® PA function blocks: 2 analog.
- FOUNDATION™ Fieldbus function blocks: 2 analog and 1 PID.
- FOUNDATION™ Fieldbus capability: Basic or LAS.

#### Mounting / installation

- Mounted vertically or horizontally on a DIN rail. Using the 2-channel version up to 84 channels per meter can be mounted.

#### Connections



**Order:**

| Type  | Galvanic isolation | Channels                 |
|-------|--------------------|--------------------------|
| 6350B | 1500 VAC : 2       | Single : A<br>Double : B |

**Environmental Conditions**

|                              |                      |
|------------------------------|----------------------|
| Specifications range.....    | -40°C to +60°C       |
| Calibration temperature..... | 20...28°C            |
| Relative humidity.....       | < 95% RH (non-cond.) |
| Protection degree.....       | IP20                 |

**Mechanical specifications**

|                              |                                       |
|------------------------------|---------------------------------------|
| Dimensions (HxWxD).....      | 109 x 23.5 x 104 mm                   |
| Weight (1 / 2 channels)..... | 145 / 185 g                           |
| DIN rail type.....           | DIN 46277                             |
| Wire size.....               | 1 x 2.5 mm <sup>2</sup> stranded wire |
| Screw terminal torque.....   | 0.5 Nm                                |

**Common specifications**

|   |                    |
|---|--------------------|
| Supply voltage.....   | 9.0...30 VDC       |
| Internal consumption, per channel.....                      | < 11 mA            |
| Isolation voltage, test.....                                | 1.5 kVAC for 60 s  |
| Isolation voltage, working.....                             | 50 VRMS / 75 VDC   |
| Warm-up time.....   | 30 s               |
| Signal / noise ratio.....                                   | Min. 60 dB         |
| Response time (programmable).....                           | 1...60 s           |
| Updating time.....  | < 400 ms           |
| Execution time, PID controller.....                         | < 200 ms           |
| Execution time, analog input.....                           | < 50 ms            |
| Signal dynamics, input.....                                 | 24 bit             |
| EMC immunity influence.....                                 | < ±0.1% of reading |
| Extended EMC immunity: NAMUR NE 21, A criterion, burst..... | < ±1% of reading   |

**Input specifications**

|   |  |
|---|--|
| RTD input.....  | Pt25...1000, Ni25...1000, Cu10...1000, lin. R, potentiometer |
| Cable resistance per wire (max.), RTD.....              | 50 Ω   |
| Sensor current, RTD.....                                | Nom. 0.2 mA  |
| Effect of sensor cable resistance (3-/4-wire), RTD..... | < 0.002 Ω / Ω  |
| Sensor error detection, RTD.....                        | Yes  |
| Short circuit detection, RTD.....                       | < 15 Ω   |
| TC input: Thermocouple type.....                        | B, E, J, K, L, N, R, S, T, U, W3, W5                         |
| Cold junction compensation (CJC).....                   | < ±0.5°C   |
| Sensor error detection, TC.....                         | Yes  |
| Sensor error current: When detecting / else.....        | Nom. 2 μA / 0 μA   |
| Short circuit detection, TC.....                        | < 3 mV   |
| Bipolar current input: Measurement range.....           | -100...+100 mA   |
| Input resistance, current input.....                    | 10 Ω + PTC < 20 Ω  |
| Bipolar voltage input: Measurement range.....           | -800...+800 mV   |
| Min. measurement range (span), voltage input.....       | 2.5 mV   |
| Input resistance, voltage input.....                    | 10 MΩ  |
| Short circuit detection, voltage input.....             | < 3 mV   |

**Output specifications**

|   |                          |
|---|--------------------------|
| PROFIBUS PA protocol.....                   | Profile A&B, ver. 3.0    |
| PROFIBUS PA protocol standard.....          | EN 50170 vol. 2          |
| PROFIBUS PA address (at delivery).....      | 126                      |
| PROFIBUS PA function blocks.....            | 2 analog                 |
| FOUNDATION™ Fieldbus protocol.....          | FF protocol              |
| FOUNDATION™ Fieldbus protocol standard..... | FF design specifications |
| FOUNDATION™ Fieldbus version.....           | ITK 4.6                  |
| FOUNDATION™ Fieldbus capability.....        | Basic or LAS             |
| FOUNDATION™ Fieldbus function blocks.....   | 2 analog and 1 PID       |

**Approvals**

|              |                   |
|--------------|-------------------|
| ATEX.....    | KEMA 03ATEX1013 X |
| FM.....      | 3015609           |
| CSA.....     | 1418937           |
| GOST R.....  | Yes               |
| GOST Ex..... | Yes               |