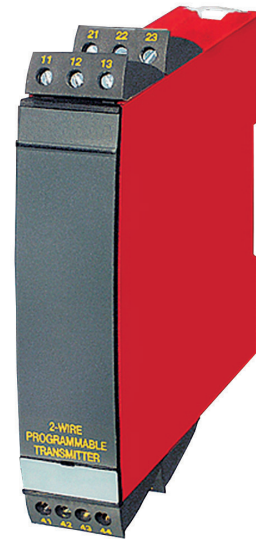


Profibus® PA/Foundation™ Fieldbus Transmitter

Model 6350B

- PROFIBUS® PA Ver. 3.0
- FOUNDATION™ Fieldbus Ver. ITK 4.6
- Automatic Switch Between Protocols
- FISCO Certified
- Basic or LAS Capability with Foundation Fieldbus
- 1 - or 2-Channel Version
- Complies with European ATEX and CSA/FM Requirements for Hazardous Location



Application:

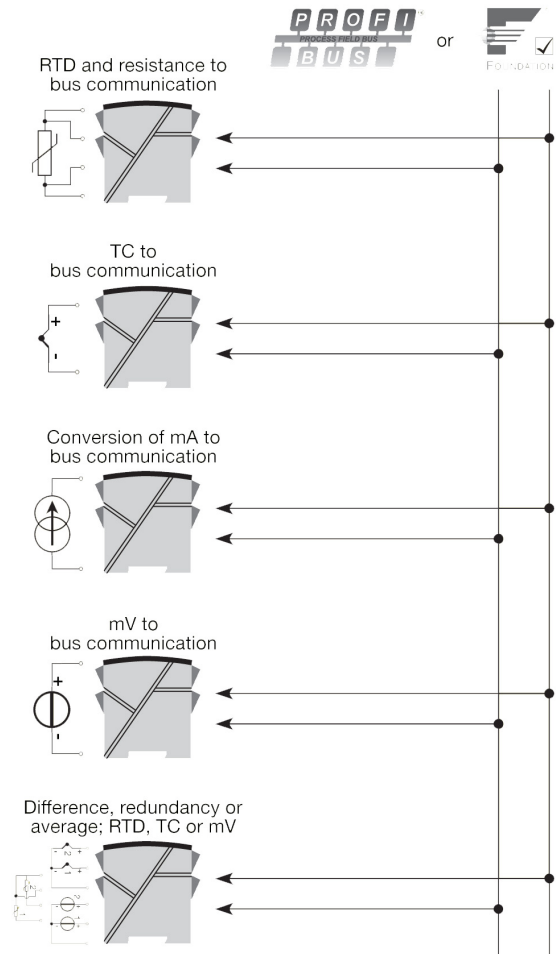
- Linearized temperature measurement with RTD or TC sensor.
- Difference, average or redundant temperature measurement with RTD or TC sensor.
- Linear resistance, potentiometer and bipolar mV measurement.

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.

Mounting/Installation:

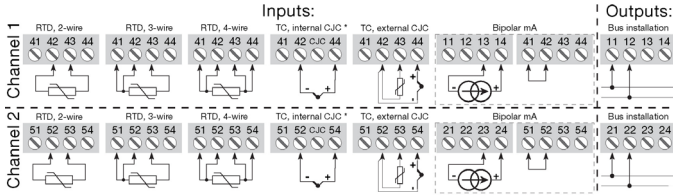
- Mounted vertically or horizontally on a DIN Rail. Using the 2-channel version up to 84 channels per meter can be mounted.



Ideas. Solutions. Success.

Specifications

**Order: 6350B2A (Single Channel)
6350B2B (Dual Channel)**



Electrical Specifications

Specifications Range:

-40°C to +60°C

Common Specifications:

Supply voltage 9...30 VDC
 In FISCO installations 9...17.5 VDC
 Internal consumption per channel < 11 mA
 Isolation voltage, test / operation 1.5 kVAC / 50 VAC
 Signal / noise ratio Min. 60 dB
 Signal dynamics, input 24 bit
 Calibration temperature 20...28°C
 Accuracy, the greater of general and basic values:

General Values		
Input Type	Absolute Accuracy	Temperature Coefficient
mA	≤ ±0.05% of reading	≤ ±0.003% of reading / °C
Other Types	≤ ±0.05% of reading	≤ ±0.002% of reading / °C

Basic Values		
Input Type	Basic Accuracy	Temperature Coefficient
Pt100, Pt1000	≤ ±0.1°C	≤ ±0.002°C/°C
Ni 100...Ni 1000	≤ ±0.15°C	≤ ±0.002°C/°C
Cu 10	≤ ±1.3°C	≤ ±0.02°C/°C
Lin. R	≤ ±0.05 Ω	≤ ±0.002 Ω/°C
mA	≤ ±1 μA	≤ ±0.06 μA/°C
mV	≤ ±10 μV	≤ ±0.2 μV/°C
TC type: E, J, K, L, N, T, U	≤ ±0.5°C	≤ ±0.010°C/°C
TC type: B, R, S, W3, W5	≤ ±1°C	≤ ±0.025°C/°C

EMC immunity influence < ±0.1% of reading
 Extended EMC immunity:
 NAMUR NE 21, A criterion, burst < ±1% of reading

Max wire size 1 x 1.5 mm² (16 AWG) stranded wire
 Humidity < 95% RH (non-cond.)
 Dimensions (H x B x D) 109 x 23.5 x 104 mm
 Protection degree (encl. / terminal) IP50 / IP20
 Weight (1 / 2 channels) 145 / 185 g

Electrical Specifications, Input: TC / mV Input:

Type	Min. Temperature	Max. Temperature	Standard
B	+400°C	+1820°C	IEC 60584 - 1
E	-100°C	+1000°C	IEC 60584 - 1
J	-100°C	+1200°C	IEC 60584 - 1
K	-180°C	+1372°C	IEC 60584 - 1
L	-200°C	+900°C	DIN 43710
N	-180°C	+1300°C	IEC 60584 - 1
R/S	-50°C	+1760°C	IEC 60584 - 1
T	-200°C	+400°C	IEC 60584 - 1
U	-200°C	+600°C	DIN 43710
W3/W5	0°C	+2300°C	ASTM E988-90
Ext. CJC	-40°C	+135°C	IEC 60751
mV	-800	+800	-----

Cold junction compensation (CJC) < ±0.5°C

Bipolar Current Input:

Measurement range -100...+100 mA
 Input resistance 10 Ω + PTC < 20 Ω

RTD and Linear Resistance Input:

RTD Type	Min. Value	Max. Value	Standard
Pt25...Pt1000	-200°C	+850°C	IEC 60751 / JIS C 1604
Ni25...Ni1000	-60°C	+250°C	DIN 43760
Cu10...Cu1000	-200°C	+260°C	α = 0.00427
Lin. Resistance	0 Ω	10 kΩ	-----
Potentiometer	0 Ω	100 kΩ	-----

Output:

PROFIBUS® PA Connection:

Protocol standard EN 50170 vol. 2
 Address (at delivery) Channel 1 & 2 = 126
 Function blocks 2 analog

FOUNDATION™ Fieldbus Connection:

Capability LAS or Basic
 Function blocks 2 analog and 1 PID

EEx / I.S. Approval*:

KEMA 03ATEX1012 II 3 GD or II 2 (1) GD
 EEx ia IIC or EEx ib[ia] IIC T4...T6
 FISCO

Applicable in zone 0, 1, 2, 20, 21, 22

EEx / I.S. Data*:

Class I, Zone 0, EEx ia IIC, Entity / Fisco				
IS, Class I, Division 1, Group A, B, C, D - Entity / Fisco				
Unit	Barrier where P _a < 0.84 W	Barrier where P _a < 1.3 W	Suitable for FISCO Systems	Suitable for FISCO Systems
U _i	30 VDC	30 VDC	17.5 VDC	15 VDC
I _i	120 mADC	300 mADC	250 mADC	Any
P _i	0.84 W	1.3 W	2.0 W	Any
L _i	1 μH	1 μH	1 μH	1 μH
C _i	2.0 nF	2.0 nF	2.0 nF	2.0 nF
T1...T5	Tamb. < 60°C	Tamb. < 60°C	Tamb. < 60°C	Tamb. < 60°C
T6	Tamb. < 60°C	Tamb. < 45°C	Tamb. < 45°C	Tamb. < 45°C

Zone 1, EEx ib IIC, Entity / Fisco		
IS, Class I, Division 2, Group A, B, C, D Entity / Fisco		
Unit	Barrier where P _a < 5.32 W	FISCO Segment Coupler
U _i	30 VDC	17.5 VDC
I _i	250 mADC	Any
P _i	5.32 W	Any
L _i	1 μH	1 μH
C _i	2.0 nF	2.0 nF
T1...T6	Tamb. < 60°C	Tamb. < 60°C

FM and CSA* IS, Cl. I, Div. 1, Gr. A, B, C, D
 IS, Cl. I, Zone 0/1, Gr. IIC
 IS, Cl. I, Div. 2, Gr. A, B, C, D
 FISCO

GOST R Approval* Certificate available upon request.

Observed Authority Requirements: Standard:

EMC 2004/108/EC
 Emission and immunity EN 61326
 ATEX 94/9/EC EN 50014, EN 50020
 EN 50281-1-1, EN 50284
 IEC 60079-27 (FISCO)
 FM 3600, 3610, 3611
 CSA, CAN / CSA C22.2 No. 142, No. 157
 CAN / CSA E60079-0, -11

Of Span = Of the presently selected range

IS = Intrinsically Safe

FISCO = Fieldbus Intrinsically Safe Concept

*The transmitter is manufactured by PR electronics. All approvals listed are recognized under the PR name.

2300 Walden Avenue, Buffalo, New York 14225
 +1 800 223 2389 (P) | +1 716 684 7433 (F)
 conax@conaxtechnologies.com
 Bulletin 6095, Rev B' ©2020 Conax Technologies 11/20

