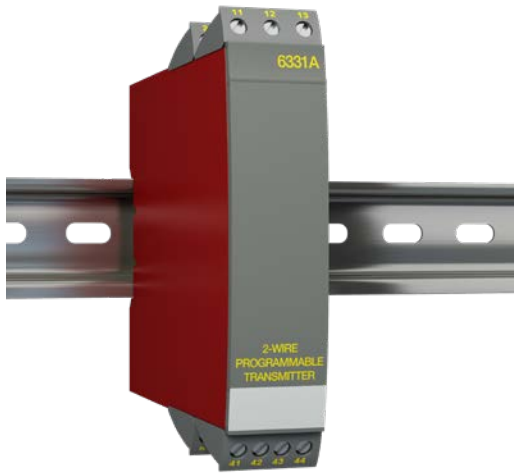


2-WIRE UNIVERSAL DIN RAIL TRANSMITTER



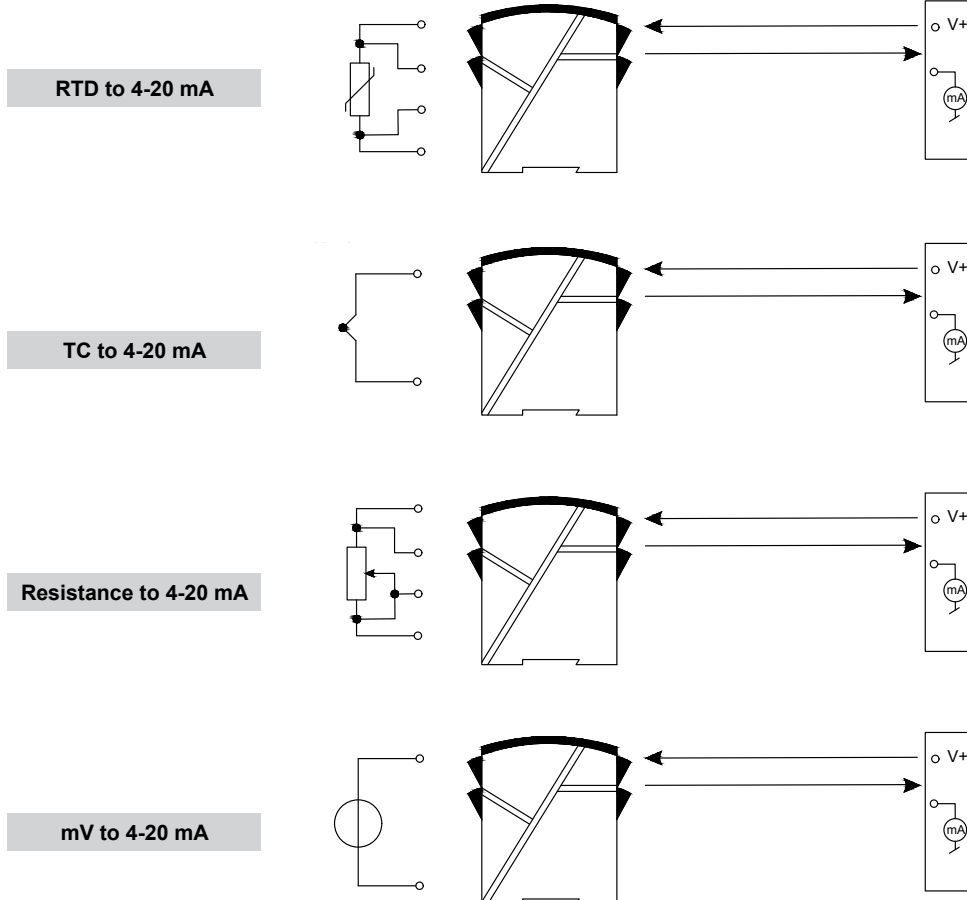
TCX-6331A



FEATURES / BENEFITS

- RTD, TC, Ohm, or mV input
- Extremely high measurement accuracy
- Galvanic isolation
- Programmable sensor error value
- 1- or 2-channel version

ORDER YOUR TRANSMITTER: Use the part number: **TCX-6331A**



TRANSMITTERS

2-WIRE UNIVERSAL DIN RAIL TRANSMITTER

SPECIFICATIONS

Environmental Conditions	
Operating Temperature	-40°C to +85°C
Storage temperature	-40°C to +85°C
Calibration Temperature	20...28°C
Relative humidity	< 95% RH (non-condensing)
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 EN 60715/35 mm
Wire size	0.13...2.08 mm ² AWG 26...14 stranded wire
Screw terminal torque	0.5 Nm
Common Specifications	
Supply voltage	7.2...35 VDC
Power dissipation, per channel	0.17...0.8 W
Isolation voltage, test / working	1.5 kVAC / 50 VAC
Response time (programmable)	1...60 s
Voltage drop	7.2 VDC
Warm-up time	5 min.
Signal / noise ratio	Min. 60 dB
Accuracy	Better than 0.05% of selected range
EEPROM error check	< 3.5 s
Signal dynamics, input	20 bit
Signal dynamics, output	16 bit
Effect of supply voltage change	< 0.005% of span / VDC
EMC immunity influence	< ±0.5% of span
Extended EMC immunity: NAMUR NE21, A criterion, burst	< ±1% of span

Input Specifications	
Max. offset	50% of selected max. value
RTD type	Pt100, Ni100, lin. R
Cable resistance per wire	5 Ω max.
Sensor current	Nom. 0.2 mA
Effect of sensor cable resistance (3-/4-wire)	< 0.002 Ω / Ω
Sensor error detection	Yes
TC input types	B, E, J, K, L, N, R, S, T, U, W3, W5, LR
Cold junction compensation	< ±1.0°C
Sensor error detection	Yes
Sensor error current: When detecting / else	Nom. 33 μA / 0 μA
Linear resistance min...max	0 Ω...5000 Ω
Voltage input Measurement range	-12...800 mV
Min. measurement range (span)	5 mV
Input resistance	10 MΩ
Output Specifications	
Current output Signal range	4...20 mA
Min. signal range	16 mA
Load (@ current output)	≤ (V _{supply} - 7.2) / 0.023 [Ω]
Load stability	≤ 0.01% of span / 100 Ω
Sensor error indication	Programmable 3.5...23 mA
NAMUR NE43 Upscale/ Downscale	23 mA / 3.5 mA
Updating time of span	440 ms = of the presently selected range
Observed Authority Requirements	
EMC	2014/30/EU
EAC	TR-CU 020/2011
Approvals	
ATEX 2014/34/EU	KEMA 10ATEX0005 X
IECEX	DEK 14.0047 X