



AX321 / AX323

DMS process indicators for strain gauge inputs - with 2 presets / relays and totalizer

Product Features:

- Two identical models, but with different power supply ranges
- DMS signal input for strain gauges (3.3 mV/V, 3.0 mV/V, 2.0 mV/V, 1.5 mV/V and 1.0 mV/V)
- Two relay outputs for limit monitoring (potential-free changeover contacts)
- Two digital multi-function inputs with programmable control function
- Useful supplementary functions like digital filter, linearization, totalizer etc.
- 6 digit LED display (14 mm / 0.55" size) for readout and menu dialogues

Available Devices:

- **AX321:** power supply 10 to 30 VDC
- **AX323:** power supply 90 to 240 VAC and additional 24 VDC sensor supply output

Technical Specifications:

Power supply AX321:	Input voltage:	10 ... 30 VDC
	Protection circuit:	reverse polarity protection
	Consumption:	max. 3.5 W
	Connections:	screw terminals, 2.5 mm ² / AWG 14
Power supply AX323:	Input voltage:	90 ... 260 VAC - 50 / 60 Hz
	Power consumption:	max. 9 VA
	Connections:	screw terminals, 2.5 mm ² / AWG 14
Sensor supply:	Output voltages:	AX321 und AX323: 15 VDC +/- 1 % only AX323: 24 VDC +/- 15 % (additionally)
	Output currents:	AX321: 25 mA bzw. AX323: 30 mA
	Connections:	screw terminals, 1.5 mm ² / AWG 16
Measurement signal inputs:	Sampling rate:	10 measurements / s
	Internal resistance:	1 MOhm
	Max. measurement signal range:	ca. +/- 35 mV
	Max. voltage:	+/- 10 V
	Temperature droop:	< 100 ppm/K

Technical Specifications:		
DMS input:	at 1.5 and 1.0 mV/V: - Resolutions: - Measurement accuracy at 23°C: at 3.3 / 3.0 and 2.0 mV/V: - Resolutions: - Measurement accuracy at 23°C: Connections:	+/- 14 bit typ. 0.05 % v. Mb, max. ≤ 0.2 % v. Mb30 V +/- 15 bit typ. 0.05 % v. Mb, max. ≤ 0.1 % v. Mb30 V screw terminals, 1.5 mm ² / AWG 16
Control inputs:	Number of inputs: Functions: Characteristic: Signal levels: Connections:	2 optocoupler inputs (MP 1 / MP 2) programmable PNP, active high LOW = 0 ... 2 V, HIGH = 4 ... (max.) 30 V screw terminals, 1.5 mm ² / AWG 16
Relay outputs:	Number of outputs: Switching voltage: Switching current: Switching power: mech. life time (cycles) Number of cycles at 5 A / 250 VAC: Number of cycles at 5 A / 30 VDC: Connections:	2 potential free changeovers max. 250 VAC / 125 VDC, min. 5 VAC / VDC max. 5 AAC / ADC, min. 10 mA max. 1250 VA / 150 W 1 x 10 ⁷ 5 x 10 ⁴ 5 x 10 ⁴ screw terminals, 2.5 mm ² / AWG 14
Display elements:	Display: Digit height: range: LEDs: Functions:	6 digit LED, red 14 mm / 0.551 inch -199 999 ... +999 999 2 red status LEDs switching states of alarm 1 / 2 and signalization of the function-group or function
Operating elements:	Front key panel:	5 buttons for operation or setup
Data memory:	Storage medium: Data retention:	EEPROM > 10 years
Housing:	Material: Mounting: Dimensions (w x h x d) : Cut out (w x h): Installation depth: Protection class: Weight: Vibration resistance - EN60068-2-6: Shock resistance: - EN60068-2-27: - EN60068-2-29:	polycarbonate UL94 V-2 panel housing according to DIN 43 700, RAL 7021 96 x 48 x 102 mm / 3.779 x 1.889 x 4.016 inch 92 x 45 mm / 3.622 x 1.777 inch approx. 92 mm / 3.622 inch (incl. plug-terminals) front: IP 65 / rear: IP20 approx. 180 g 10 ... 55 Hz / 1 mm / XYZ, 30 min to each direction 100G / XYZ, 3 times to each direction 10G / 6 ms / XYZ, 2000 times to each direction
Climatically conditions:	Operating temperature: Storage temperature: Humidity: Operation height:	-20 °C ... +65 °C / -4 °F ... 149 °F -25 °C ... +75 °C / -13 °F ... 167 °F r. F. 93 % at +40° C / 104 °F (not condensing) up to 2000 m
Device safety:	Based on: Protection class: Application area:	EN61010 part 1 (according to LV 2006/95/EC) Protection class 2 Pollution level 2
Conformity & standards:	EMC 2014/30/EU: RoHS (II) 2011/65/EU RoHS (III) 2015/863:	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61326-1 EN IEC 63000