Data Sheet

safety - control - motion - interface

AX320 / AX322

Process indicators for normed analog signals - with 2 presets / relays and 2 control inputs

Product Features:

- Two identical models, but with different power supply ranges
- Analog input 0 to +/-10 V (or 2 to 10 V) and 0 to 20 mA resp. 4 to 20 mA
- 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:

- AX320: power supply 10 to 30 VDC
- AX322: power supply 90 to 240 VAC and additional 24 VDC sensor supply output

Technical Specifications:		
Power supply AX320:	Input voltage:	10 ... 30 VDC
	Protection circuit:	reverse polarity protection
	Consumption:	max. 3.5 W
	Connections:	screw terminals, 2.5 mm² / AWG 14
Power supply AX322:	Input voltage:	90 ... 260 VAC - 50 / 60 Hz
	Power consumption:	max. 9 VA
	Connections:	screw terminals, 2.5 mm² / AWG 14
Sensor supply:	Output voltages:	AX320: 15 VDC AX322: 15 VDC and 24 VDC
	Output currents:	AX320: max. 25 mA AX322: max. 30 mA
	Connections:	screw terminals, 1.5 mm² / AWG 16
Measurement signal inputs:	Sampling rate:	10 measurements / s
	Measurement accuracy:	typ. 0.02 % v. Mb
	at 23°C:	max. ≤ 0.05 % v. Mb
	Temperature droop:	< 100 ppm/K
Analog input (voltage:	Input voltages:	- 10 V … +10 V / 0 ... +10 V, +2 V... +10 V (programmable)
	Measuring range:	-10.5 ... +10.5 V
	Resolution:	0.4 mV (+/- 15bit)
	Internal resistance:	1 MOhm
	Maximum voltage:	30 V
	Connections:	screw terminals, 1.5 mm² / AWG 16

Technical Specifications:		
Analog input (current):	Input currents:	0 ... 20 mA resp. 4 ... 20 mA (programmable)
	Measuring range:	-0.5 ... +21 mA
	Resolution:	1 µA (> 14 bit)
	Internal resistance:	22 Ohm + PTC 25 Ohm
	Maximum current:	60 mA
	Connections:	screw terminals, 1.5 mm² / AWG 16
Control inputs:	Number of inputs:	2 optocoupler inputs (MP 1 / MP 2)
	Functions:	programmable
	Characteristic:	PNP, active high
	Signal levels:	LOW = 0 … 2 V, HIGH = 4 … (max.) 30 V
	Connections:	screw terminals, 1.5 mm² / AWG 16
Relay outputs:	Number of outputs:	2 potential free changeovers
	Switching voltage:	max. 250 VAC / 125 VDC, min. 5 VAC / VDC
	Switching current:	max. 5 AAC / ADC, min. 10 mA
	Switching power:	max. 1250 VA / 150 W
	mech. life time (cycles):	1×10^7
	Number of cycles at 5 A / 250 VAC:	5×10^4
	Number of cycles at 5 A / 30 VDC:	5×10^4
	Connections:	screw terminals, 2.5 mm² / AWG 14
Display elements:	Display:	6 digit LED, red
	Digit height:	14 mm / 0.551 inch
	range:	-199 999 … +999 999
	LEDs:	2 red status LEDs
	Functions:	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:	EEPROM
	Data retention:	> 10 years
Housing:	Material:	polycarbonate UL94 V-2
	Mounting:	panel housing according to DIN 43 700, RAL 7021
	Dimensions (w x h x d) :	96 x 48 x 102 mm / 3.779 x 1.889 x 4.016 inch
	Cut out (w x h):	92 x 45 mm / 3.622 x 1.777 inch
	Installation depth:	approx. 92 mm / 3.622 inch (incl. plug-terminals)
	Protection class:	front: IP 65 / rear: IP20
	Weight:	approx. 180 g
	Vibration resistance	
	- EN60068-2-6:	10 … 55 Hz / 1 mm / XYZ, 30 min to each direction
	Shock resistance:	
	- EN60068-2-27:	100G / XYZ, 3 times to each direction
	- EN60068-2-29:	10G / 6 ms / XYZ, 2000 times to each direction
Climatically conditions:	Operating temperature:	-20 °C … +65 °C / -4 °F … 149 °F
	Storage temperature:	-25 °C … +75 °C / -13 °F … 167 °F
	Humidity:	r. F. 93 % at +40° C / 104 °F (not condensing)
	Operation height:	up to 2000 m
Device safety:	Based on:	EN61010 part 1 (according to LV 2006/95/EC)
	Protection class:	Protection class 2
	Application area:	Pollution level 2
Conformity & standards:	EMC 2004/108/EC:	EN 61000-6-2
	Emitted interference:	EN 55011 class B
	Guideline 2011/65/EU:	RoHS-conform