



touchMATRIX[®] Indicator AX350

Process indicator with two 16 bit analog inputs, touchscreen and graphic display

Product Features:

- Operating modes for visualization of input 1, input 2 or combinations of inputs (1+2, 1-2, 1x2, 1:2)
- Two universal 16 bit analog inputs for -10 ... +10 V / 0 ... 10 V / 0 ... 20 mA / 4 ... 20 mA
- High accuracy reference output 10 V for potentiometers > 1 kOhm
- Bright and high-contrast display with event-dependent color variations
- Emulation of a 7-segment display inclusively icons and units
- Intuitive and easy parameterization by plain text and touchscreen
- 24 V auxiliary output for encoder supply
- Totalisator for each input
- Linearization with 24 control points for each input
- Numerous features, e. g. tara, averaging filter, sampling time for each input
- 3.78 x 1.89 inch norm panel housing and IP65 protection

Available Options:

AX350: Basic unit with 2 analog inputs (16 Bit), 3 control inputs

- Option **AC:** Power supply 115...230 VAC
- Option **AO:** 16 bit analog output, 4 control outputs, serial RS232 interface
- Option **AR:** 16 bit analog output, 4 control outputs, serial RS485 interface
- Option **CO:** 4 control outputs, serial RS232 interface
- Option **CR:** 4 control outputs, serial RS485 interface
- Option **RL:** 2 relay outputs
- Option **IO:** IO-Link Device V1.1

Options can be combined

Technical Specifications:		
Connections:	Connector type:	screw terminal, 1.5 mm ² / AWG 16
Power supply DC:	Input voltage: Protection circuit: Consumption: Fuse protection:	18 ... 30 VDC reverse polarity protection approx. 100 mA (unloaded) extern: T 0.5 A
Power supply AC: (Option AC)	Input voltage: Power consumption: Fuse protection:	115...230 VAC ± 10%, 50...60 Hz approx. 3 VA (unloaded) extern: T 1.0 A
Encoder supply:	DC version: Output current:	approx. 1 V lower than the power supply voltage max. 250 mA
	AC version (AC350): Output current:	approx. 24 V (± 15%) 150 mA until 45°C resp. 113°F / 80 mA by more than 45°C resp. 113°F
Reference output:	Output voltage: Accuracy: Load:	10 V ± 0.1 % max. 10 mA
Analog inputs:	Number of inputs: Configuration: Voltage input: Current input: Resolution / Accuracy:	2 current or voltage operation -10 ... +10 V (Ri ≈ 33 kOhm) 0 ... 20 mA / 4 ... 20 mA (Ri ≈ 100 Ohm) 16 bit / ± 0,1 %
Control inputs:	Number of inputs: Format: Frequency: Reaction time: Load:	3 HTL, PNP (Low 0 ... 3 V, High 9 ... 30 V) max. 1 kHz 1 ms max. 2 mA at 24 VDC
Analog output: (Option AO/AR)	Configuration: Voltage output: Current output: Resolution: Accuracy: Reaction time:	current or voltage operation -10...+10 V (max. 2 mA) 0/4... 20 mA (burden: max. 270 Ohm) 16 Bit ± 0,1 % 0°C ... +45°C / ± 0,1 % + 32°F ... + 113°F ± 0,15 % -20°C ... 0°C and +45°C ... +60°C / ± 0,15 % -4°F ... +32°F and +113°F ... +140°F < 10 ms (as of software version: AX35006F)
Control outputs: (Option AO/AR/CO/CR)	Number of outputs: Format / level: Output current: Reaction time:	4 5 ... 30 V (depends on the Com+ voltage), PNP max. 200 mA < 1 ms
Relay outputs: (Option RL)	Number of outputs: Configuration: AC-Switching capacity : DC-Switching capacity: Reaction time:	2 potential free changeovers max. 250 VAC / 3 A / 750 VA max. 50 VDC / 1 A / 50 W < 20 ms
Serial interface: (Option AO/AR/CO/CR)	Format (Option AO/CO): Format (Option AR/CR) Baudrate:	RS232 RS485 9600, 19200 or 38400 baud
IO-Link: (Option IO)	Module / Revision: Bitrate: Port Class:	Device / V1.1 COM 3 Typ A
Display:	Type: Display range: Digit height (single + dual): Digit height (large display): Color: Operation:	Graphic LCD with backlight 8 digits plus sign (-99999999 ... 99999999) 13 mm (0,51 inch) 26 mm (1,02 inch) red/ green / yellow (switchable) resistive touchscreen
Housing:	Material: Mounting: Dimensions (w x h x d): Cut out (w x h): Protection class: Weight:	ABS, UL 94 V-0 panel 96 x 48 x 116 mm / 3.78 x 1.89 x 4.56 inch 91 x 43 mm / 3.58 x 1.69 inch IP65 (front), IP20 (rear) approx. 200 g
Ambient temperature:	Operation: Storage:	-20 °C ... +60 °C resp. -4 °F... +140 °F non condensing -25 °C ... +70 °C resp. -13 °F... +158 °F
Ambient conditions:	Altitude: Humidity: Pollution Degree:	max. 2000 m (6560 ft) above sea level max. 80% relative humidity up to 30°C / 86°F 2
Conformity and standards:	EMC 2014/30/EU: LV 2014/35/EU: (Only for option AC and RL) RoHS (II) 2011/65/EU RoHS (III) 2015/863:	EN 61326-1: 2021 for industrial location EN 55011: 2016 + A1: 2017 + A11: 2020 + A2: 2021 Class A EN 61010-1: 2010 + A1:2019 + AC: 2019-04 EN IEC 61010-2-201: 2018 EN IEC 63000: 2018