



## touchMATRIX<sup>®</sup> Indicator IX350 / IX355

SSI indicator for absolute encoders, with touchscreen and graphic display

### Product Features:

- Master or Slave operation with clock frequencies up to 1 MHz
- For single turn and multi turn encoders with SSI formats from 10 ... 32 Bit
- 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
- 5 V / 24 V auxiliary output for encoder supply
- Linearization with 24 control points
- Numerous features, e. g. scaling, filtering, bit blanking etc.
- 3.78 x 1.89 inch norm panel housing and IP65 protection

### Available Options:

**IX350:** Basic unit with SSI interface, 3 control inputs, 24 VDC encoder supply

**IX355:** Basic unit like IX350, with open-circuit monitoring, 5 / 24 VDC encoder supply

- 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

Options can be combined

Technical Specifications:		
<b>Connections:</b>	Connector type:	screw terminal, 1.5 mm <sup>2</sup> / AWG 16
<b>Power supply DC:</b>	Input voltage:	18 ... 30 VDC
	Protection circuit:	reverse polarity protection
	Consumption:	approx. 100 mA (unloaded)
	Fuse protection:	extern: T 0.5 A
<b>Power supply AC:</b> (Option AC)	Input voltage:	115 ... 230 VAC (50 ... 60 Hz)
	Power consumption:	approx. 3 VA (unloaded)
	Fuse protection:	extern: T 1.0 A
<b>Encoder supply:</b>	DC version:	24 VDC (approx. 1 V lower than the power supply voltage), max 250 mA
	AC version:	24 VDC (± 15%), (max 150 mA until 45°C / 80 mA by more than 45°C)
<b>Encoder supply:</b> (IX355)	DC version:	24 VDC (approx. 1 V lower than the power supply voltage), max 250 mA or 5 VDC (± 15%), max. 250 mA
	AC version:	24 VDC (± 15%) (max 150 mA until 45°C / 80 mA by more than 45°C) or 5 VDC (± 15%), max. 250 mA
<b>SSI interface:</b>	Number (channels):	1 (Clock, /Clock, Data, /Data)
	Configuration:	Master or Slave
	Format:	Binary or Gray code
	Frequency:	max. 1 MHz
	Resolution:	10 ... 32 Bit
	Load:	max. 2 mA / Ri > 10 kOhm / 47 pF
<b>Control inputs:</b>	Number of inputs:	3
	Format:	HTL, PNP (Low 0 ... 3 V, High 9 ... 30 V)
	Frequency:	max. 10 kHz
	Load:	max. 2 mA / Ri > 15 kOhm / 470 pF
<b>Analog output:</b> (Option AO/AR)	Configuration:	current or voltage operation
	Voltage output:	-10...+10 V (max 2mA)
	Current output:	0/4 ... 20 mA (burden: max. 270 Ohm)
	Resolution / Accuracy:	16 Bit / ± 0,1 %
	Reaction time:	< 150 ms
<b>Control outputs:</b> (Option AO/AR/CO/CR)	Number of outputs:	4
	Format / level:	5 ... 30 V (depends on the Com+ voltage), PNP
	Output current:	max. 200 mA
	Reaction time:	< 1 ms
<b>Relay outputs:</b> (Option RL)	Number of outputs:	2
	Configuration:	potential free changeovers
	AC-Switching capacity:	max. 250 VAC / 3 A / 750 VA
	DC-Switching capacity:	max. 150 VDC / 2 A / 50 W
	Reaction time:	< 20 ms
<b>Serial interface:</b> (Option AO/AR/CO/CR)	Format (Option AO/CO):	RS232
	Format (Option AR/CR):	RS485
	Baudrate:	9600, 19200 or 38400 baud
<b>Display:</b>	Type:	Graphic LCD with backlight
	Display range:	8 digits plus sign (-99999999 ... 99999999)
	Digit height:	13 mm
	Color:	red / green / yellow (switchable)
	Operation:	resistive touchscreen
<b>Housing:</b>	Material:	ABS, UL 94 V-0
	Mounting:	panel
	Dimensions (w x h x d):	96 x 48 x 116 mm / 3.78 x 1.89 x 4.56 inch
	Cut out (w x h):	91 x 44 mm / 3.58 x 1.69 inch
	Protection class:	IP65 (front), IP20 (rear)
	Weight:	approx. 200 g
<b>Ambient temperature:</b>	Operation:	-20 °C ... +60 °C resp. -4 ... 140 °F
	Storage:	-25 °C ... +70 °C resp. -13 ... 158 °F
<b>Conformity and standards:</b>	EMC 2004/108/EC:	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4
	LV 2006/95/EC:	EN 61010-1
	RoHS 2011/65/EU:	EN 50581