



touchMATRIX Indicator DX350

Frequency counter, tachometer and speed indicator (HTL) with touchscreen and graphic display

Product Features:

- Multifunctional unit with several operating modes, e. g. speed or position indicator, process meter, counter, timer or stopwatch
- Universal HTL inputs for encoders / sensors with NPN / PNP / NAMUR characteristic
- 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
- Input frequencies up to 250 kHz
- Linearization with 24 control points
- Numerous features, e. g. scaling, filtering, start-up suppression
- 3.78 x 1.89 inch norm panel housing and IP65 protection

Available Options:

- **DX350:** Basic unit with HTL inputs (A, B), 3 control inputs
- **Option AC350:** Power supply 115 ... 230 VAC
- **Option AO350:** 16 bit analog output, 4 control outputs, serial RS232 interface
- **Option CO350:** 4 control outputs, serial RS232 interface
- **Option RL350:** 2 relay outputs

All options can be combined

Technical Specifications:		
Connections:	Connector type:	screw terminal, 1.5 mm ² / AWG 16
Power supply (DC):	Input voltage:	18 ... 30 VDC
	Protection circuit:	reverse polarity protection
	Consumption:	approx. 150 mA (unloaded)
Power supply (AC): (Option AC350)	Input voltage:	115 ... 230 VAC (50 ... 60 Hz)
	Power consumption:	approx. 3 VA (unloaded)
Encoder supply:	DC version:	approx. 1 V lower than the power supply voltage
	Output current:	max. 250 mA
	AC version:	approx. 24 VDC (± 15%)
	Output current:	150 mA @ 45°C / 80 mA @ 60°C
Incremental inputs:	Number of inputs:	2
	Usage:	Tri-State, PNP-, NPN-, Namur encoders / sensors
	Channels:	A, B
	Format:	HTL (Low 0 ... 3 V, High 9 ... 30 V)
	Frequency:	max. 250 kHz
	Load:	max. 6 mA / Ri > 5 kOhm / 470 pF
Control inputs:	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
Analog output: (Option AO350)	Configuration:	current or voltage operation
	Voltage output:	-10...+10 V (max. 2 mA)
	Current output:	0/4 ... 20 mA (burden: max. 270 Ohm)
	Resolution:	16 Bit
	Accuracy:	± 0,1 %
Control outputs: (Option CO350)	Number of outputs:	4
	Format / level:	5 ... 30 V (depends on the COM+ voltage), PNP
	Output current:	max. 200 mA
	Reaction time:	< 1 ms
Relay outputs: (Option RL350)	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
Serial interface: (Option CO350)	Reaction time:	< 5 ms
	Format:	RS232
	Baudrate:	2400 ... 38400 baud
Display:	Configuration:	PC or Printer mode
	Type:	LCD (backlight)
	Display range:	8 digits plus sign (-99999999 ... 999999999)
	Digit height	13 mm height
	Color:	red / green / yellow (switchable)
Housing:	Operation:	resistive touchscreen
	Material:	ABS, UL 94 V-0
	Mounting:	panel cut out
	Dimensions (w x h x d):	96 x 48 x 120 mm / 3.78 x 1.89 x 0.47 inch
	Cut out (w x h):	91 x 43 mm / 3.58 x 1.69 inch
	Protection class:	IP65 (front), IP20 (rear)
Ambient temperature:	Weight:	approx. 200 g
	Operation:	-20°C ... +60°C resp. -4 ... 140°F
Conformity and standards:	Storage:	-25°C ... +70°C resp. -13 ... 158°F
	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