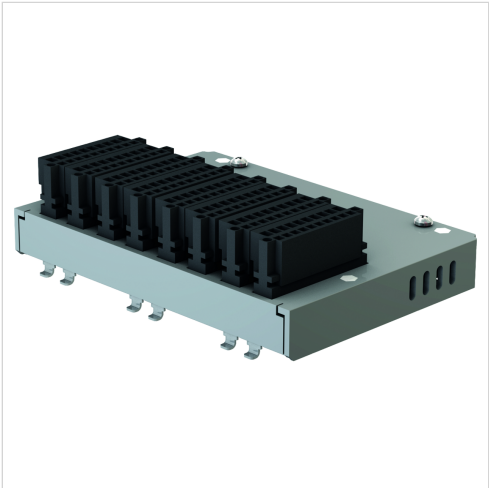


TX-IO-XX03

TX HMI/PLC product series
Plug-in module
20 DI, 12 DO 0.5 A, 4 AI (U, I, RTD, TC), 4 AO (U, I)



Type designation	TX-IO-XX03
Ident-No.	6828201

Technical data

Power supply	
Supply voltage	24 VDC
Admissible range	12 ... 30 VDC
System power supply	From the HMI
System power supply	From the HMI
Voltage supply connection	Pluggable strip with cage clamp terminals
Electrical isolation	optical, 1500 V _{rms}

Features

- Plug-in extension module for use with HMIs from the TX700 and TX800 product series
- I/O module
- 20 digital inputs, 24 VDC, PNP
- 12 digital outputs, 24 VDC, 0.5 A, PNP
- Four analog inputs, U, I, RTD, TC
- Four analog outputs, U, I

Technical data

Nominal system voltage	24 VDC
Voltage supply connection	Pluggable strip with cage clamp terminals
Electrical data	
Short-circuit protection	yes
Digital inputs	
Number of channels	20
Connectivity inputs	3 pluggable strips with spring-type terminals □ 10-pin, 3.5-mm pattern □ (Weidmueller — Omnimate BLZF 3.5/180F)
Input type	PNP
Low-level signal voltage	< 6 V
High level signal voltage	> 12 V
Low level signal current	< 1 mA
High level signal current	> 3 mA
Input delay	0.05 ms (on S inputs), 0.0002 ms (on E inputs)
Sensor supply	24 VDC
Electrical isolation	1500 V _{rms}
Sensor supply (V _{SENS})	24 VDC
Analog inputs	
Number of channels	4
Operating modes	Current, voltage, resistance, thermocouple
Sensor supply	24 VDC
Input resistance	200 Ohm (current input mode), > 10 M Ohm (voltage input mode)
Resolution	12 Bit
Basic fault limit at 23 °C	<0,1 %
Basic fault limit at 25 °C	0.1 %
Analog inputs — voltage operating mode	
Max. input voltage	15 V
Input signal types	4 differential (alternatively 8 AI single-ended, only in voltage mode)
Measuring range	+/-100 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, 0 ... 1 V, 0 ... 10 V
Linearity	0.1 %
Basic error at 25 °C	0.1 %
Repeat accuracy	< 0,2 %

Technical data

Analog inputs — current operating mode	
Max. Eingangsspannung	15 V
Max. input current	20 mA
Load resistance	200 Ω
Input signal types	4 differential inputs, externally powered
Measuring range	0...20 mA, 4...20 mA
Linearity	0.1 %
Basic error at 25 °C	0.1 %
RTD/resistance operating mode	
Temperature unit	°Degree Celsius, °Fahrenheit
Measuring range	-100 ... 850 °C
Connection type	2-, 3-, 4-wire
measurement current	1,2 mA
Repeat accuracy	< 0,1 %
Thermocouple operating mode	
Temperature unit	μ V
Measuring range	E (-270...1000 °C), J (-210...760 °C), K (-270...1370 °C), R (0...1768 °C), S (0...1768 °C), T (-270...400 °C)
Cold junction compensation	External via Pt100 comp. Input (CN4 Pin 1-5)
Basic error at 25 °C	0.1 %
Outputs	
Load resistance, resistive	> 1 k Ω (voltage output), < 0.47 k Ω (current output)
Digital outputs	
Number of channels	12
Connectivity outputs	2 pluggable strips with spring-type terminals □ 10-pin, 3.5-mm pattern □ (Weidmueller — Omnimate BLZF 3.5/180F)
Output type	PNP
Sensor supply (V_{SENS})	24 VDC
Output voltage	24 VDC
Output current per channel	0.5 A
Simultaneity factor	0.23
Actuator power supply	24 VDC externally fed
Electrical isolation	1500 V _{rms}

Technical data

Output delay	0,15 ms
Analog outputs	
Number of channels	4
Operating modes	+/-100 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, 0 ... 1 V, 0 ... 10 V +/-2 mA, +/-10 mA, +/-20 mA
Resolution	12 bit
Sensor supply	24 VDC
Analog outputs — voltage operating mode	
Load resistor	> 1 kΩ
Output signal type	Single-ended
Output signal range	+/-10 V
Linearity	0.15 %
Analog outputs — current operating mode	
Load resistance	< 470 Ω
Output signal type	Active
Output signal range	0...20 mA
Linearity	0.2 %
Mechanical data	
Dimensions	89,3 mm x 125,2 mm x 33,7 mm
Front (W x H x D)	125,2 mm x 89,3 mm x 33,7 mm
Housing material	Metal
Housing color	Silver
Mounting	On HMIs from the TX500 and TX700 product series
Ambient conditions	
Ambient temperature	0...+50 °C
Operating ambient conditions	0...50 °C, 5...85 % rel. humidity, non-condensing
Protection class	IP20
Tests/approvals	
Approvals and certificates	CE, cULus, Class 1, Div. 2, DNV-GL
Comments	
Packaging unit	1