Analogue input module
CPX-AP-I-4AI-U-I-RTD-M12

Part number: 8086606

General operating condition

Data sheet

Feature	Value
Dimensions (W x L x H)	30 x 170 x 35 mm
Type of mounting	On H-rail via accessories With through-hole
Product weight	166 g
Ambient temperature	-20 °C ... 50 °C
Storage temperature	-40 °C ... 70 °C
Relative air humidity	5 - 95% Non-condensing
Degree of protection	IP65 IP67
Note on degree of protection	Unused connections sealed
Corrosion resistance class CRC	1 - Low corrosion stress
Max. cable length	30 m inputs 50 m system communication
LABS (PWIS) conformity	VDMA24364-B2-L
CE mark (see declaration of conformity)	To EU EMC Directive
CE marking (see declaration of conformity)	To UK instructions for EMC
KC mark	KC-EMV
Approval	RCM trademark c UL us listed (OL)
Certificate issuing authority	UL E239998
Note on materials	RoHS-compliant
Material housing	PA PC Die-cast zinc, nickel-plated
Material seals	NBR
Material o-ring	FPM
Diagnostics via LED	Diagnostics per module Status per channel
Diagnostics per internal communication	Wire break Module error Short circuit/overload in sensor supply Parameter errors Parameterisation error Overload at analogue inputs Upper limit value violated Overflow/underflow Lower limit value not observed
Communication interface, function	System communication XF10 IN / XF20 OUT
Communication interface, connection type	2x socket

Feature	Value
Communication interface, connection technology	M8x1, D-coded according to EN 61076-2-114
Communication interface, number of pins/wires	4
Communication interface, protocol	AP
Communication interface, shielding	yes
Power supply, function	Incoming electronics/sensors and load
Power supply, connection type	Plugs
power supply, connection system	M8x1, A-coded to EN 61076-2-104
Power supply, number of pins/wires	4
Power transmission, function	Outgoing electronics/sensors and load
Power transmission, connection type	Socket
Power transmission, connection technology	M8x1, A-coded to EN 61076-2-104
Power transmission, number of pins/wires	4
Note regarding operating voltage	SELV/PELV fixed power supplies required Note voltage drop
Nominal DC operating voltage, electronics/sensors	24 V
Permissible voltage fluctuations for electronics/sensors	± 25%
Max. power supply	2 x 4 A (external fuse required)
Intrinsic current consumption at nominal operating voltage for electronics/sensors	Typically 38 mA
Power failure bridging	10 ms
Reverse polarity protection	yes
Electrical connection input, function	Analogue input
Electrical connection input, connection type	4x socket
Electrical connection input, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection input, note on connector system	To achieve compliance with the technical specifications, the opposite side must be screened and designed with gold contact surfaces.
Electrical connection input, number of connections/cores	5
Number of inputs	4
Fuse protection of inputs (short circuit)	Internal electronic fuse per module
Max. residual current of inputs per module	1 A
Electrical isolation of inputs between channels	no
Electrical isolation of inputs between channel - internal communication	yes
Measured variable	Voltage Current Temperature Resistor
Data format	15 bits + prefix Linear scaling
analog input	-10 - 10 V -5 - 5 V 0 - 10 V 0 - 20 mA 0 - 500 Ohm 1 - 5 V 4 - 20 mA
Repetition accuracy	±0.025% at 25°C
Basic error limit at 25 °C	±0.1% for voltage ±0.1% for current ±0.2% for resistor ±0.4% for temperature
Operating error limit related to the ambient temperature range	±0.15% for voltage ±0.15% for current ±0.35% for resistor ±0.9% for temperature