Product data sheet
Characteristics

BMXAMM0600
Analog high level IO module, Modicon X80, 4 I, 2 O, 0 to 20mA, 4 to 20mA, 10V positive or negative



Main

Range of product	Modicon X80
Product or component type	Mixed analog I/O module
Electrical connection	20 ways 1 connector
Input output isolation	Non isolated
Input level	High level
Analogue input number	4
Analogue input type	Current 0...20 mA Current 4...20 mA Voltage +/- 10 V Voltage 0...10 V Voltage 0...5 V Voltage 1...5 V

Complementary

Analogue input resolution	12 bits 0...20 mA 12 bits 0...5 V 12 bits 1...5 V 12 bits 4...20 mA 13 bits 0...10 V 14 bits +/- 10 V
Permitted overload on inputs	+/- 30 mA 0...20 mA +/- 30 mA 4...20 mA +/- 30 V +/- 10 V +/- 30 V 0...10 V +/- 30 V 0...5 V +/- 30 V 1...5 V
Input impedance	250 Ohm
Precision of internal conversion resistor	0.1 % - 15 ppm/°C
Type of filter	First order digital filtering by firmware
Fast read cycle time	1 ms + 1 ms x number of channels used
Nominal read cycle time	5 ms for 4 channels

Measurement error	0.25 % of full scale 0...20 mA 25 °C output 0.25 % of full scale 4...20 mA 25 °C output <= 0.35 % of full scale +/- 10 V 0...60 °C input <= 0.35 % of full scale 0...10 V 0...60 °C input <= 0.35 % of full scale 0...5 V 0...60 °C input <= 0.35 % of full scale 1...5 V 0...60 °C input <= 0.5 % of full scale 0...20 mA 0...60 °C input <= 0.5 % of full scale 4...20 mA 0...60 °C input <= 0.6 % of full scale +/- 10 V 0...60 °C output <= 0.6 % of full scale 0...20 mA 0...60 °C output <= 0.6 % of full scale 4...20 mA 0...60 °C output 0.25 % of full scale +/- 10 V 25 °C output 0.25 % of full scale +/- 10 V 25 °C input 0.25 % of full scale 0...10 V 25 °C input 0.25 % of full scale 0...5 V 25 °C input 0.25 % of full scale 1...5 V 25 °C input 0.35 % of full scale 0...20 mA 25 °C input 0.35 % of full scale 4...20 mA 25 °C
Temperature drift	100 ppm/°C +/- 10 V output 100 ppm/°C 0...20 mA output 100 ppm/°C 4...20 mA output 30 ppm/°C +/- 10 V input 30 ppm/°C 0...10 V input 30 ppm/°C 0...5 V input 30 ppm/°C 1...5 V input 50 ppm/°C 0...20 mA input 50 ppm/°C 4...20 mA input
Recalibration	Factory calibrated on outputs Internal on inputs
Minimum crosstalk attenuation	70 DB
Common mode rejection	80 DB
Isolation voltage	1400 V DC between channels and ground 1400 V DC between channels and bus 750 V DC between group of I/O channels
Output level	High level
Analogue output number	2
Analogue output type	Current: 0...20 mA Current: 4...20 mA Voltage: +/- 10 V
Analogue output resolution	11 bits, 0...20 mA 11 bits, 4...20 mA 12 bits, +/- 10 V
Conversion time	<= 2 ms
Maximum conversion value	+/- 11.25 V +/- 10 V output +/- 11.25 V +/- 10 V input 0...30 mA 0...20 mA input 0...30 mA 4...20 mA input +/- 11.25 V 0...10 V input +/- 11.25 V 0...5 V input +/- 11.25 V 1...5 V input 0...24 mA 0...20 mA output 0...24 mA 4...20 mA output
Fallback mode	Predefined Configurable
MTBF reliability	1400000 H
Operating altitude	0...2000 m 2000...5000 m with derating factor
Status LED	1 LED (green) RUN 1 LED per channel (green) channel diagnostic 1 LED (red) ERR 1 LED (red) I/O
Net weight	0.155 Kg
Power consumption in W	2.6 W 24 V DC typical 3.2 W 24 V DC maximum 0.35 W 3.3 V DC typical 0.48 W 3.3 V DC maximum
Current consumption	240 mA at 3.3 V DC

Environment

Vibration resistance	3 gn
Shock resistance	30 gn
Ambient air temperature for storage	-40…85 °C
Ambient air temperature for operation	0…60 °C
Relative humidity	5…95 % at 55 °C without condensation
IP degree of protection	IP20
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
Product certifications	CE[RETURN]RCM[RETURN]CSA[RETURN]EAC[RETURN]Merchant Navy[RETURN]UL
Standards	IEC 61010-2-201 IEC 61131-2 UL 61010-2-201 CSA C22.2 No 61010-2-201
Protective treatment	Standard version

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.500 Cm
Package 1 Width	11.000 Cm
Package 1 Length	11.600 Cm
Package 1 Weight	172.000 G
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	2.882 Kg

Offer Sustainability

Recyclability potential, in %	3
Total lifecycle Carbon footprint	174 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	21.9763878788
Carbon footprint of the manufacturing phase [A1 to A3]	22 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.0224913455
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0457999515
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	151.6382402235
Carbon footprint of the use phase [B2, B3, B4, B6]	152 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.3052009697
Carbon footprint of the end-of-life phase [C1 to C4]	0.3 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	174
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	Abf560dc-15c4-469a-a148-87250e453e56
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w

End of life manual availability	End Of Life Information
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised