

Schneider BME Series Service Manual

BMXSAI0410

1. Description

safety analog input module, Modicon X80, 4 isolated inputs, 4 to 20mA

3. Product Information

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BMXSAI0410

Main

Range of product

Modicon X80

Product or component type

Analog input module

Electrical connection

20 ways 1 connector

Isolation between channels

Isolated

Input level

High level

Analogue input number

4

Analogue input type

Current 4...20 mA

Complementary

Analog/digital conversion

16 bits

Analogue input resolution

13 bits

0...12500 counts

Permitted overload on inputs

25 mA 4...20 mA

Input impedance

286 Ohm

Precision of internal conversion resistor

0.1 % - 15 ppm/°C

Type of filter

Second order digital filtering

Nominal read cycle time

6 ms for 4 channels

Measurement error

<= 0.3 % of full scale 4...20 mA - 25...60 °C

Temperature drift

30 ppm/°C 4...20 mA

Recalibration

Internal

Minimum crosstalk attenuation

120 dB

Digital value format

+/- 32000 in user scale

+/- 10000 by default

Isolation voltage

500 V DC between channels

1500 V DC between channels and ground

1500 V DC between channels and bus

Measurement resolution

2 µA 4...20 mA

Maximum conversion value

0...25 mA 4...20 mA

MTBF reliability

463000 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

0.315 lb(US) (0.143 kg)

Current consumption

200 mA 3.3 V DC

115 mA 24 V DC

Environment

Vibration resistance

3 gn

Shock resistance

15 gn

Ambient air temperature for storage

-40...185 °F (-40...85 °C)

Ambient air temperature for operation

-13...140 °F (-25...60 °C)

Relative humidity

5...95 % 131 °F (55 °C) without condensation

IP degree of protection

IP20

Product certifications

TÜV

CSA

EAC

RCM

UL

ATEX

Merchant Navy

Standards

CSA C22.2 No 61010-2-201

EN/IEC 61131-2

EN/IEC 61010-2-201

UL 61010-2-201

Environmental characteristic

Gas resistant class Gx

Gas resistant class 3C4

Dust resistant class 3S4

Sand resistant class 3S4

Salt resistant level 2

Mold growth resistant class 3B2

Fungal spore resistant class 3B2

Fungal spore resistant class 3B2 IEC 60721-3-3

Packing Units

Unit Type of Package 1

PCE

Number of Units in Package 1

1

Package 1 Height

2.17 in (5.500 cm)

Package 1 Width

7.09 in (18.000 cm)

Package 1 Length

10.24 in (26.000 cm)

Package 1 Weight

12.134 oz (344.000 g)

Unit Type of Package 2

S03

Number of Units in Package 2

Package 2 Height

11.81 in (30.000 cm)

Package 2 Width

11.81 in (30.000 cm)

Package 2 Length

15.75 in (40.000 cm)

Package 2 Weight

7.269 lb(US) (3.297 kg)