Product data sheet

Specifications



Counter module, Modicon M340 automation platform, high speed 8 channels

BMXEHC0800H

Main

Range of product	Modicon M340 automation platform
Product or component type	Counter module
Product specific application	For severe environments
Number of channels	8
Maximum counting frequency	10000 Hz
Number of inputs	2 (single mode) 3 (special dual phase mode)
Input compatibility	19.2…30 V 2-wire/3-wire proximity sensor incremental encoder with push-pull outputs, 10...30 V totem pole
Input voltage	24 V DC type 3

Complementary

Counter functions	Count events Up/down counter Loop (modulo) counting Frequency meter Down counting 32-bit counter counting
Cycle time	5 ms
Isolation voltage	1500 V for 60 s
Input type	High speed
Input voltage limits	19.2...30 V at 60 °C 26.4 V at 70 °C
Input current	2 mA at 11 V
Voltage state 1 guaranteed	11...30 V
Current state 1 guaranteed	>= 6 mA
Voltage state 0 guaranteed	< 5 V
Current state 0 guaranteed	<= 1.5 mA
Electrical connection	1 connector with 20 pins
Current consumption	200 mA at 3.3 V DC bus 80 mA at 24 V DC sensor
Module format	Standard
Net weight	0.113 kg

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Environment

Ambient air temperature for operation	-25…70 °C
Relative humidity	10…95 % without condensation
IP degree of protection	IP20
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility 2014/34/EU - ATEX directive
Product certifications	CE UL CSA RCM EAC Merchant Navy ATEX zone 2/22 IECEx zone 2/22
Standards	EN/IEC 61131-2 EN/IEC 61010-2-201 UL 61010-2-201 CSA C22.2 No 61010-2-201 IACS E10 EN/IEC 61000-6-5, interface type 1 and type 2 EN/IEC 61850-3, location G EN/IEC 60079-0
Environmental characteristic	Gas resistant class Gx conforming to ISA S71.04 Gas resistant class 3C4 conforming to IEC 60721-3-3 Dust resistant class 3S4 conforming to IEC 60721-3-3 Sand resistant class 3S4 conforming to IEC 60721-3-3 Salt resistant level 2 conforming to IEC 68252 Mold growth resistant class 3B2 conforming to IEC 60721-3-3 Fungal spore resistant class 3B2 conforming to IEC 60721-3-3 Hazardous location class I division 2
Protective treatment	Conformal coating

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	155.0 g
Package 1 Height	6 cm
Package 1 width	11 cm
Package 1 Length	11.5 cm
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Weight	2.751 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes

China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Contractual warranty

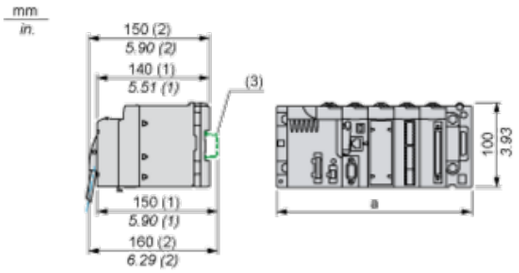
Warranty	18 months

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Dimensions Drawings

Modules Mounted on Racks

Dimensions



(1) With removable terminal block (cage, screw or spring).

(2) With FCN connector.

(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

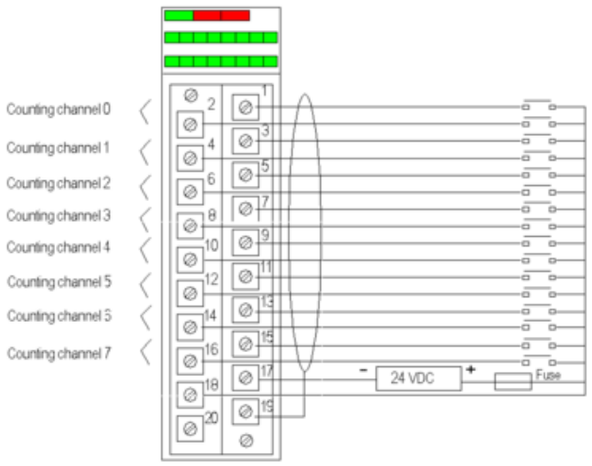
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Counting Module Wiring

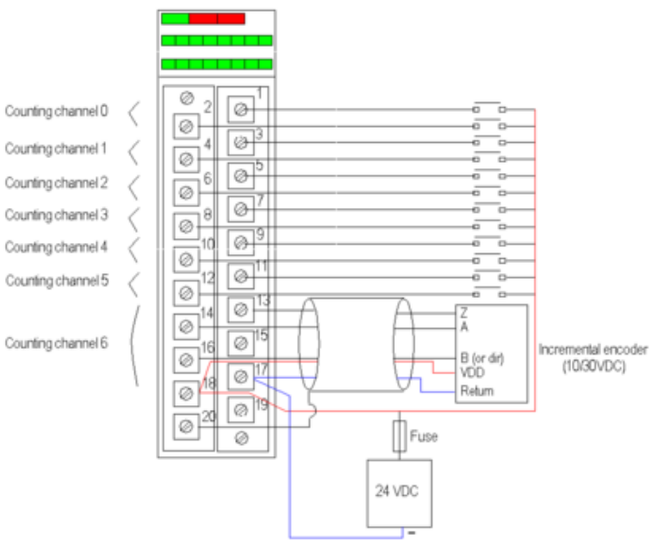
Pin Assignments

IN_A input for channel 0	2	1	IN_AUX input for channel 0
IN_A input for channel 1 or IN_B input for channel 0	4	3	IN_AUX input for channel 1
IN_A input for channel 2	6	5	IN_AUX input for channel 2
IN_A input for channel 3 or IN_B input for channel 2	8	7	IN_AUX input for channel 3
IN_A input for channel 4	10	9	IN_AUX input for channel 4
IN_A input for channel 5 or IN_B input for channel 4	12	11	IN_AUX input for channel 5
IN_A input for channel 6	14	13	IN_AUX input for channel 6
IN_A input for channel 7 or IN_B input for channel 6	16	15	IN_AUX input for channel 7
VDC + power supply for sensors	18	17	Return + 24 V power supply for sensors
Functional earth, for shield continuation	20	19	Functional earth, for shield continuation

Sensor Connection Example



Incremental Encoder Connection Example for Axis Control



Channels 0 to 5 are still used in single mode.

Channel 7 is no longer available.

Recommended Circuit for a Highly Disturbed Environment Using BMXXSP•••• Electromagnetic Protection Kit

