



### 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

### 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

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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	6.0 cm
Package 1 width	11.0 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	15.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 cm

## Offer Sustainability

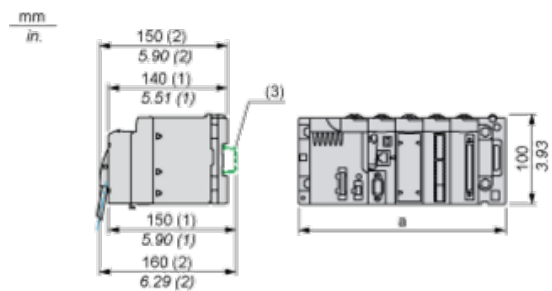
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Contractual warranty

Warranty	18 months
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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.

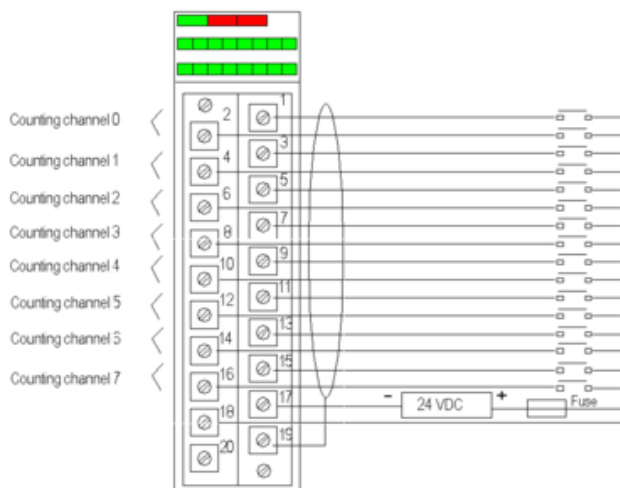
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Counting Module Wiring

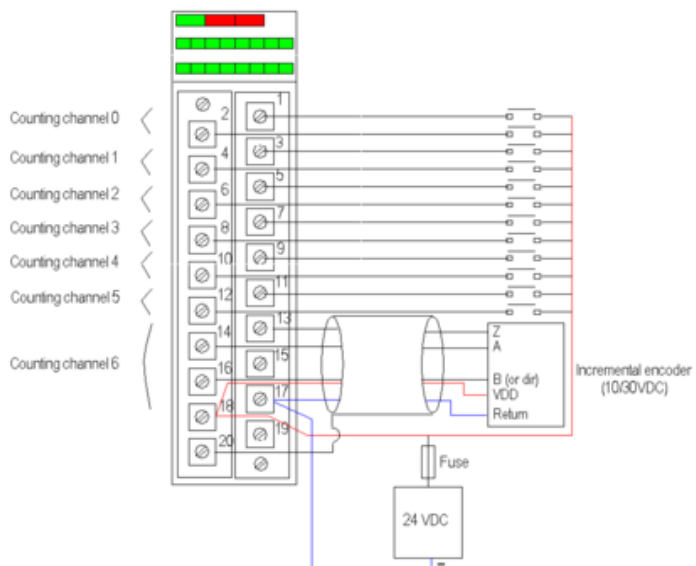
Pin Assignments

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

