



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

BMXEHC0800

Main

Range of product	Modicon M340 automation platform	
Product or component type	Counter module	
Number of channels	8	
Maximum counting frequency	10000 Hz	
Number of inputs	2 (single mode) 3 (special dual phase mode)	
Input compatibility	19.230 V 2-wire/3-wire proximity sensor incremental encoder with push-pull outputs, 1030 V totem pole	
Input voltage	24 V DC type 3	

Complementary	
Counter functions	Up/down counter 32-bit counter counting Frequency meter Loop (modulo) counting Count events Down counting
Cycle time	5 ms
Isolation voltage	1500 V for 60 s
Input type	High speed
Input voltage limits	30 V
Input current	2 mA at 11 V
Voltage state 1 guaranteed	1130 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	060 °C	
Relative humidity	1095 % without condensation	
IP degree of protection	IP20	
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility	
Protective treatment	TC	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	143 g
Package 1 Height	5.2 cm
Package 1 width	11 cm
Package 1 Length	11.8 cm
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Weight	2.39 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

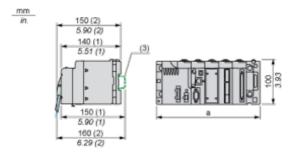
Product data sheet

BMXEHC0800

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

Product data sheet

BMXEHC0800

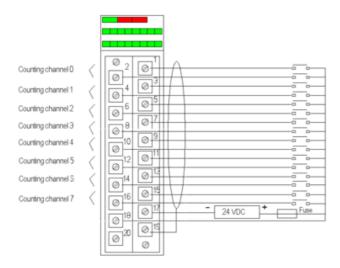
Connections and Schema

Counting Module Wiring

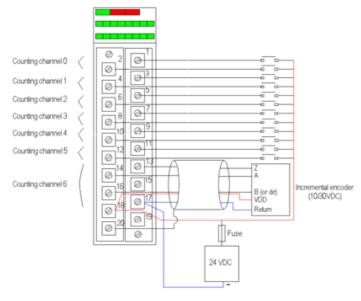
Pin Assignments

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

