Product data sheet

Specifications



Modicon Momentum - high speed counter module base - 6 I / 4 O

170AEC92000

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon Momentum automation platform
Product or Component Type	High speed counter module base
Group of channels	2 groups of 3 discrete inputs 2 groups of 2 discrete outputs
Number of counter	2
Discrete input number	6
Discrete output number	4

Complementary

Discrete input logic	Positive
Discrete input voltage	- 3...30 V DC 24 V DC
Input overvoltage protection	45 V 10 s
Voltage state 1 guaranteed	>= 11 V
Voltage state 0 guaranteed	<= 5 V
Current state 1 guaranteed	>= 2.5 mA
Current state 0 guaranteed	<= 1.2 mA
Discrete output logic	Positive
Discrete output voltage	24 V
Discrete output current	1 A per counter 2 A per module 0.5 A per point
Maximum voltage drop	<0.5 V 0.5 A at state on
Maximum leakage current	1 mA DC 24 V
Surge current	5 A 1 ms
Response time	< 0.1 ms from state 0 to state 1 output circuit < 0.1 ms from state 1 to state 0 output circuit 3 ms from state 0 to state 1 input circuit 3 ms from state 1 to state 0 input circuit
Counting input type	Absolute SSI up, down with 4 sub-modes Incremental up, down, quadrature
Counting input voltage	24 V single ended 5 V differential
Counting frequency	10 kHz single ended 200 kHz differential
Counter inputs resolution	24 bits + sign

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

Counter configuration	Via comm adapter
Marking	CE
Electrical connection	2 connectors for removable terminal blocks
Current consumption	280 mA 24 V DC
DC supply voltage	24 V
Height	5.6 in (141.5 mm)
Width	4.9 in (125 mm)
Depth	1.6 in (40 mm)
Product Weight	0.46 lb(US) (0.21 kg)

Environment

Resistance to electrostatic discharge	4 kV contact IEC 801-2 8 kV on air IEC 801-2
Resistance to electromagnetic fields	9.1 V/m (10 V/m) 80...1000 MHz IEC 801-3
Product Certifications	UL CSA
Protective treatment	TC
Ambient Air Temperature for Operation	32…140 °F (0…60 °C)
Ambient Air Temperature for Storage	-40…185 °F (-40…85 °C)
Relative Humidity	95 % without condensation
Operating altitude	<= 16404.2 ft (5000 m)

Ordering and shipping details

Category	US1PC3118206
Discount Schedule	PC31
GTIN	3595861147744
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.283 in (5.800 cm)
Package 1 Width	7.087 in (18.000 cm)
Package 1 Length	10.315 in (26.200 cm)
Package weight(Lbs)	12.557 oz (356.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	8
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	7.355 lb(US) (3.336 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	441d5619-6318-4bbf-ac83-96d05888ee7e
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
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

Use Longer

Lifetime extension

Repair	No

Use Again

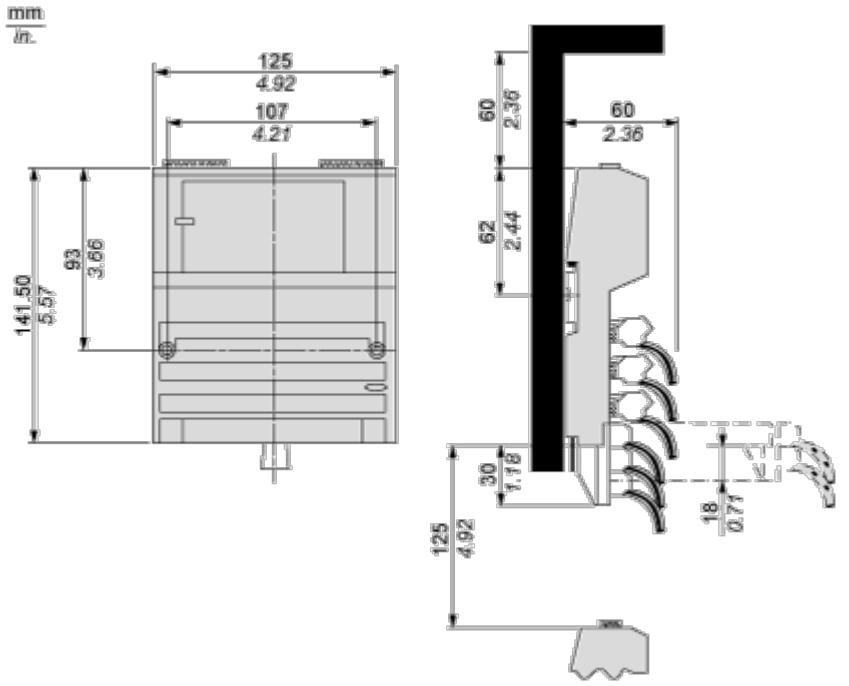
Repack and remanufacture

Circularity Profile	End of Life Information
Take-back	No

Dimensions Drawings

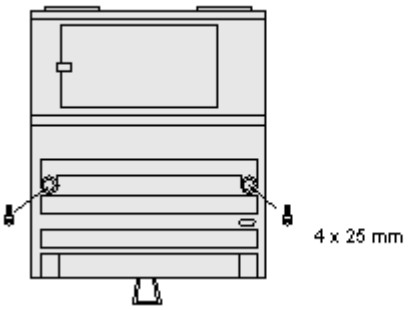
Standard Adapter on a Typical Base

Dimensions



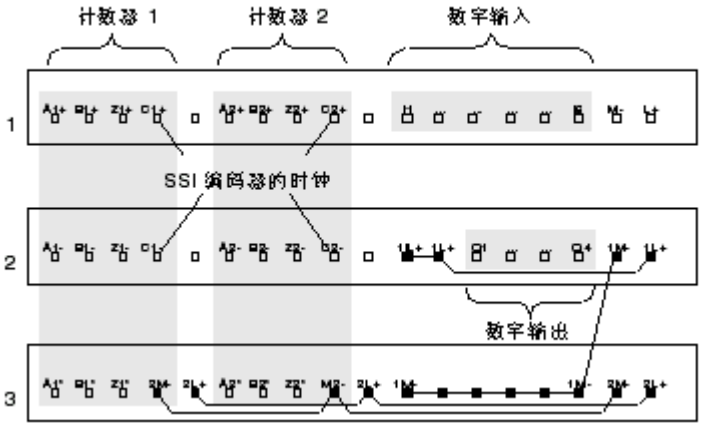
Mounting and Clearance

Mounting on a Wall



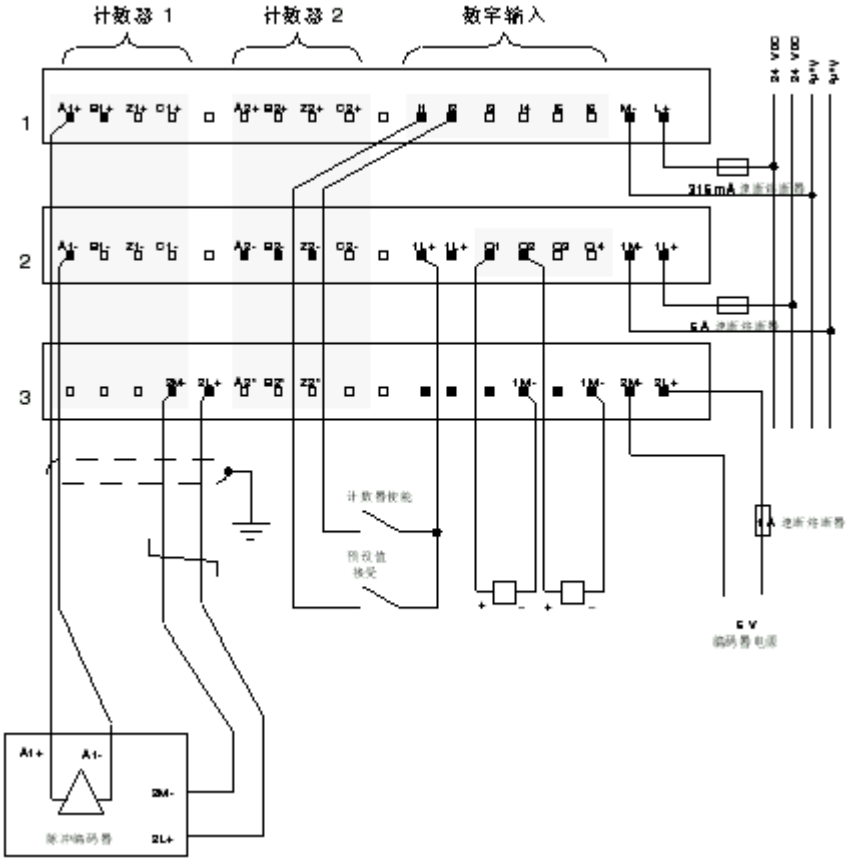
Connections and Schema

Internal Pin Connections

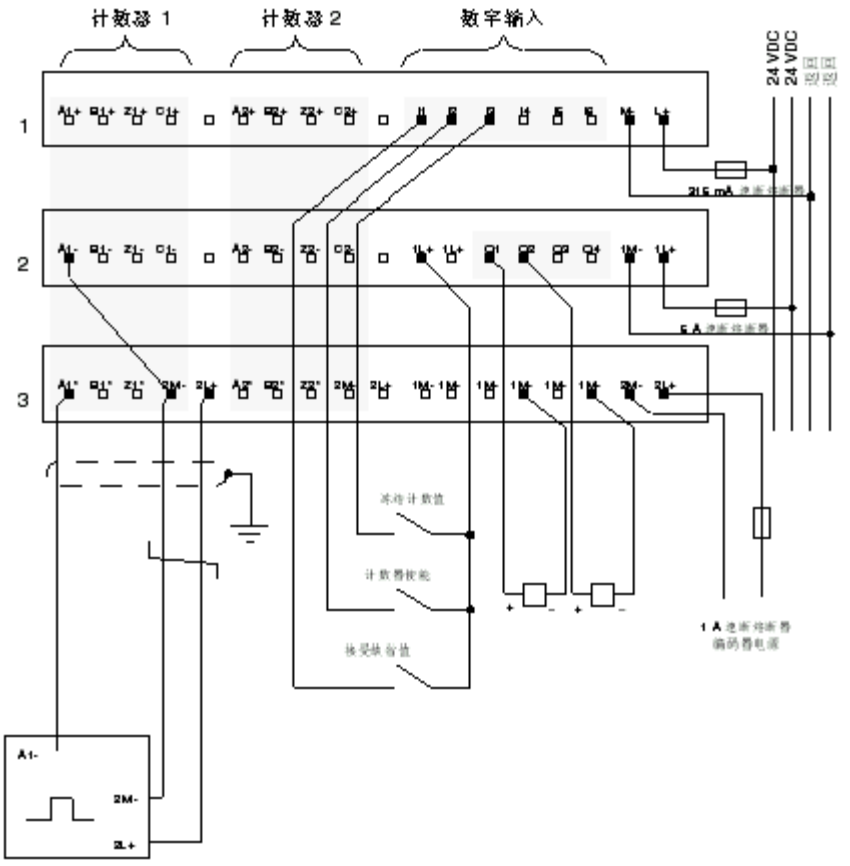


External Wiring Diagrams

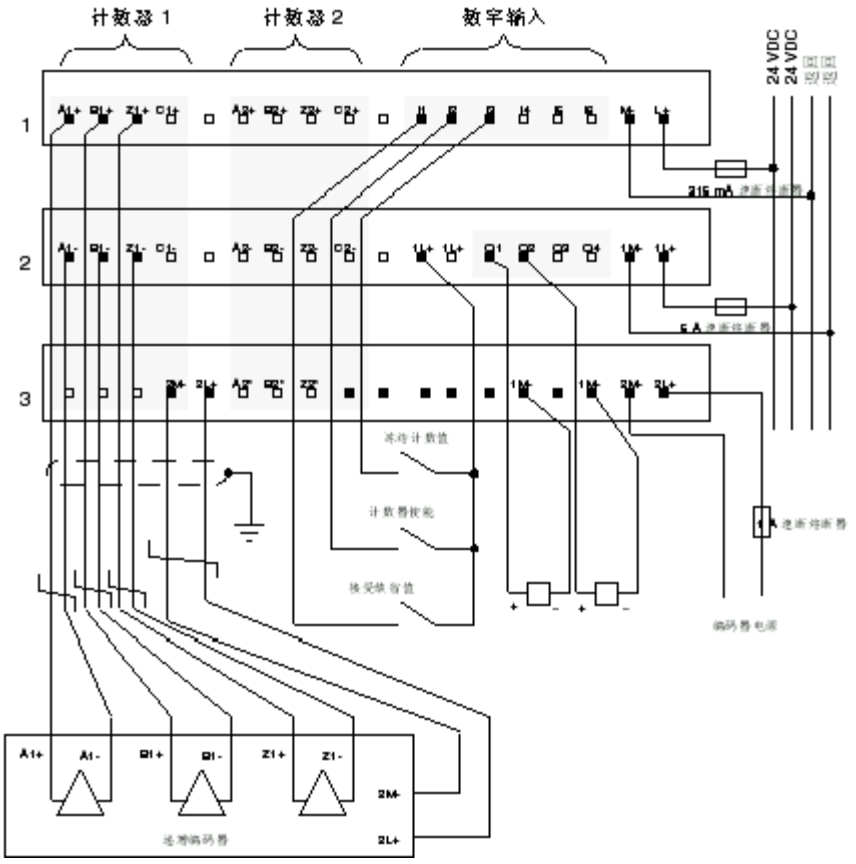
Example for Pulse Encoder (5 V)



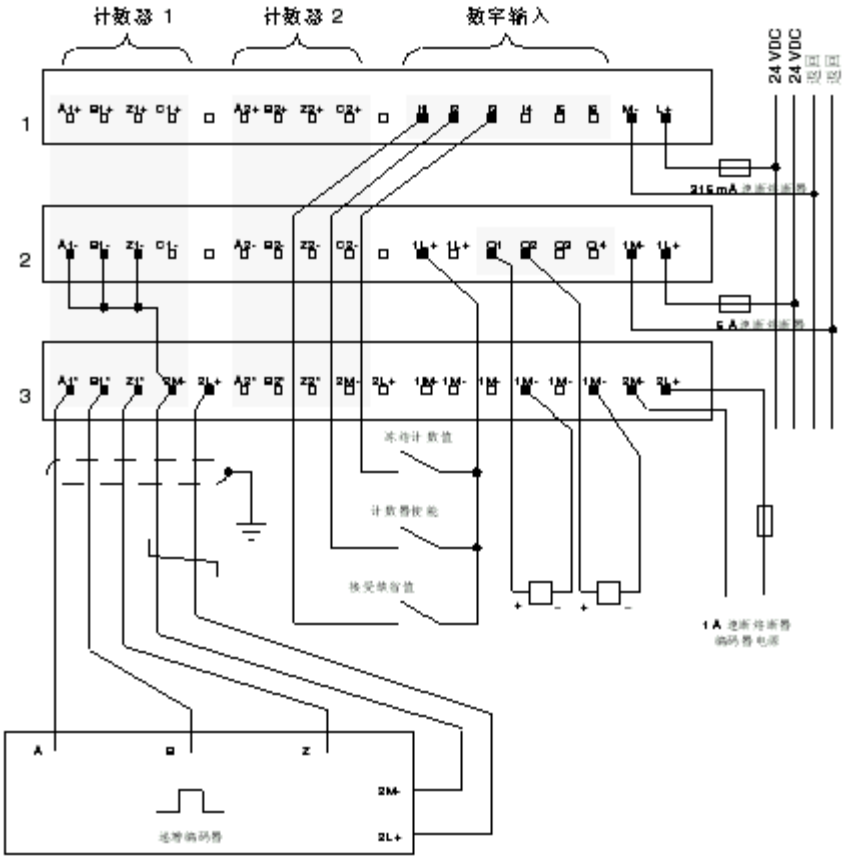
Example for Pulse Encoder (24 V)



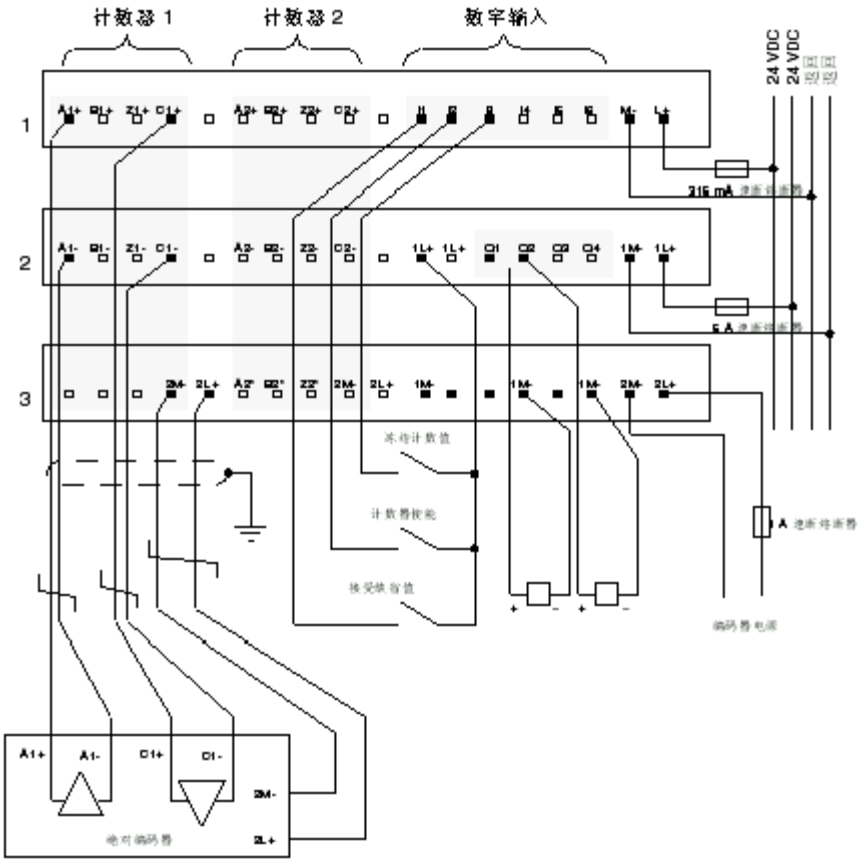
Example for Incremental Encoders (RS 422)



Example for 24 V Pulse Encoder on A, B, and R Lines



Example for Absolute Encoders with Actuators


计数器 1
计数器 2
数字输入
24 VDC
24 VDC
1
2
3
A1+
B1+
Z1+
C1+
A2+
B2+
Z2+
C2+
A1-
B1-
Z1-
C1-
A2-
B2-
Z2-
C2-
1L+
1L+
O1
O2
O3
O4
1M-
1L+
2M-
2L+
1M-
2M-
2L+
216 mA
5 A
A
A1+
A1-
C1+
C1-
2M-
2L+
绝对编码器