

**Features:**

- 1 Isolated CAN port, SAE J1939
- 2 Form C NC Relay Outputs
- Operational 4...36 Vdc (12 Vdc or 24 Vdc)
- Plug and play option available
- Programmable with the Axiomatic Electronic Assistant
- DIN rail mount, screw terminals

**Applications:**

- Switch Gear, Power Transfer Switches, Power Technologies

**Ordering Part Numbers:**

I/O Module, 250 kbps SAE J1939: **AX031901**

I/O Module, 500 kbps SAE J1939: **AX031901-01**

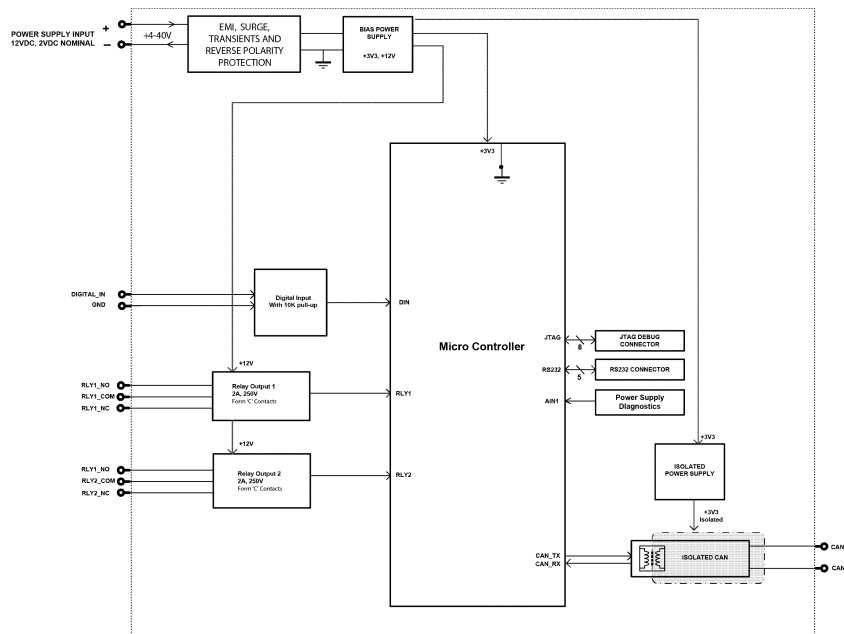
I/O Module, 1 Mbps SAE J1939: **AX031901-02**

**Accessories:**

Axiomatic Electronic Assistant KIT, P/Ns:  
**AX070502, AX070505K, or AX070506K**



**BLOCK DIAGRAM**



## Technical Specifications:

Specifications are indicative and subject to change. Actual performance will vary depending on the application and operating conditions. Users should satisfy themselves that the product is suitable for use in the intended application. All our products carry a limited warranty against defects in material and workmanship. Please refer to our Warranty, Application Approvals/Limitations and Return Materials Process as described on <https://www.axiomatic.com/service/>.

### Power

Power Supply Input	12Vdc or 24 Vdc nominal 4...36 Vdc power supply range
Protection	Reverse polarity protection up to -100V. Under-voltage protection is down to 3.5V. Overvoltage protection is up to 40 V.
Voltage Sags	0.5V for 0.2 seconds 4V continuous

### Outputs

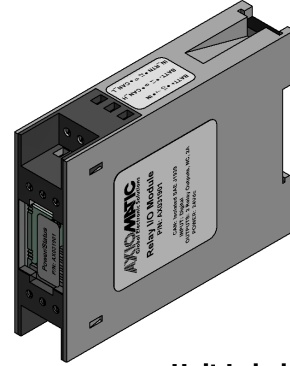
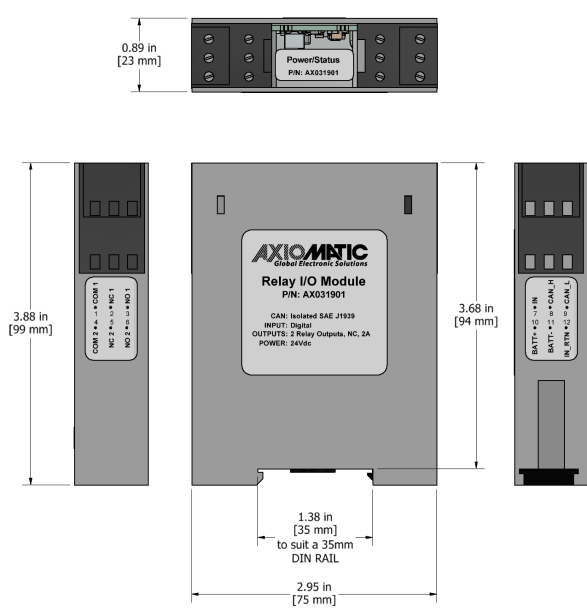
Outputs	2 Form C Relays NC 3 contact pins per output Max. 2A @ 250Vac or 2A @ 30Vdc per contact
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### General Specifications

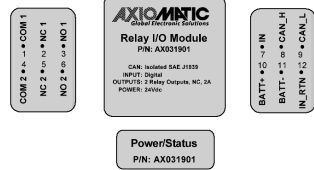
Microcontroller	STM32F103CBT7, 32-bit, 128 Kbytes Flash Program Memory
Isolation	300 Vrms CAN bus Isolation
Typical Quiescent Current	18.47mA @ 12Vdc; 10.28mA @ 24Vdc (During Normal Operation)
Control Logic	Standard embedded software is provided.
Communications	1 Isolated CAN port (SAE J1939) Model AX031901 – 250 kbps baud rate Model AX031901-01 – 500 kbps baud rate Model AX031901-02- 1 Mbps baud rate
LED Indicators	Red and Green LEDs with application-specific responses
Operating Conditions	-40 to 85 °C (-40 to 185 °F)
Storage Temperature	-55 to 125 °C (-67 to 257°F)
Protection	Enclosure: IP40; Terminals: IP20
Weight	0.20 lbs. (0.091 kg)
Enclosure	DR12, 35 mm DIN rail mount Polycarbonate 75 x 98.5 x 22.5 mm (W x H x D) 2.95 x 3.88 x 0.89 inches Refer to the dimensional drawing.
Electrical Connections	12 Screw terminal connections Refer to dimensional drawing for pin out orientation.

Screw Terminal #	Description
1	Relay Output COM 1
2	Relay Output NC 1
3	Relay Output NO 1
4	Relay Output COM 2
5	Relay Output NC 2
6	Relay Output NO 2
7	Digital Input
8	CAN H
9	CAN L
10	Power +
11	Power -
12	Input GND

# Dimensional Drawing



## Unit Labels



Form: TDAX031901-06/02/23