

1 Digital Signal to 2 Digital Outputs Valve Controller

12/24 Vdc

1 CAN Port (SAE J1939)

P/N: AX032200

Features

- 1 Digital signal input up to +Vps (ignition switch)
- 2 Digital outputs up to 4A
- 1 CAN port (SAE J1939)
- Operational 8 to 36 Vdc (12 Vdc or 24 Vdc)
- Up to 125° C operation
- Integrated 8-pin connector (TE Deutsch equivalent)
- Compact, fully sealed enclosure, IP67
- Meets the surge requirements of SAE J1445
- Safety critical microcontroller
- Designed for EMC compliance
- Configure with Axiomatic Electronic Assistant



Applications

Ignition switch operated valve controller for on/off valves

Ordering Part Numbers

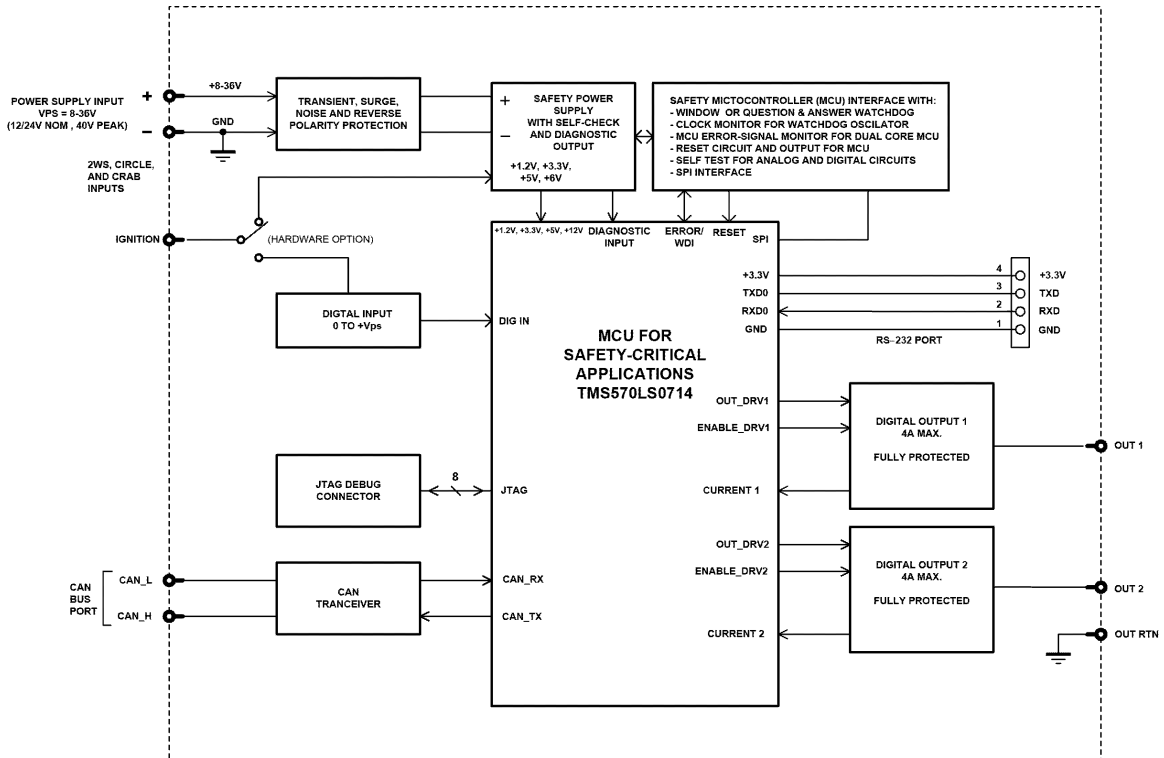
1 Digital Input, 2 Digital Outputs Valve Controller, SAE J1939 with auto-baud-rate detection -
P/N: **AX032200**

1 Digital Input, 2 Digital Outputs Valve Controller, CANopen® - P/N: **AX032201**

Accessories:

Configuration Tool: Axiomatic Electronic Assistant KIT, P/N: **AX070502** or **AX070506K**
Mating Plug KIT: **AX070112**

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 - Nominal	12 V or 24 Vdc nominal; 8...36 Vdc The minimum allowable supply voltage for the power pin is 7 Vdc.
Quiescent Current Draw	122mA @ 12Vdc; 69.5mA @ 24Vdc typical
Surge Protection	Meets the surge requirements of SAE J1445
Reverse Polarity Protection	Provided up to 36V
Undervoltage Protection	Provided at 5V
Overvoltage Protection	Provided at 37V

Input

Input	1 ignition signal input 0 to +Vps Optional input configuration as one digital input with 10K pull-up or pull-down Protected against shorts to Ground or +Vps
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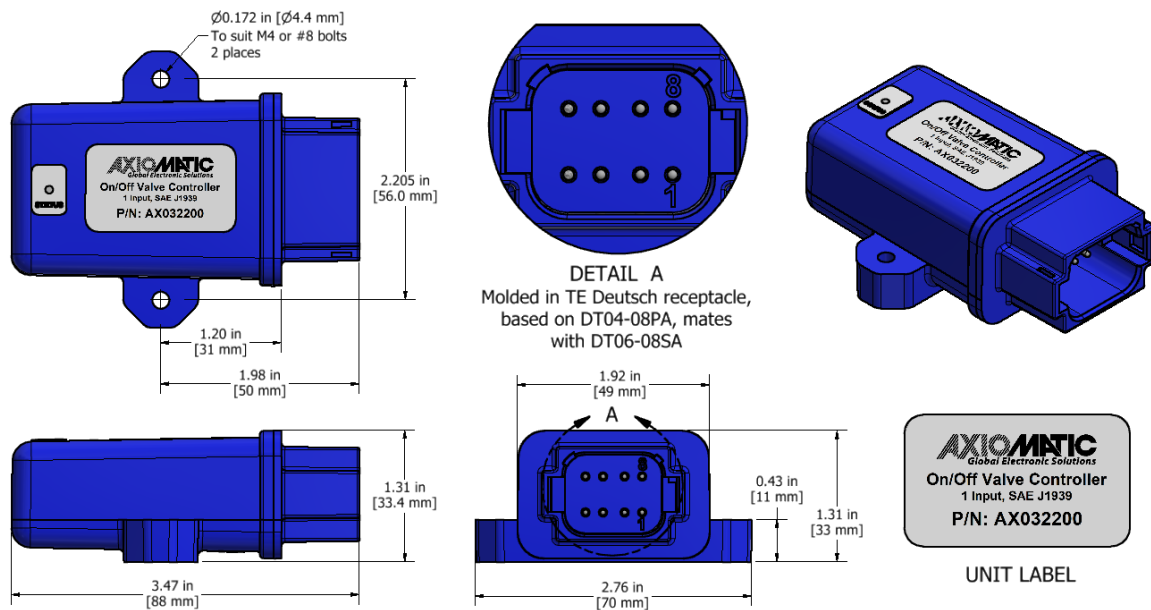
Outputs

Digital Outputs	2 digital outputs (up to 4A sourcing) High Side Current sensing, grounded load Overcurrent protection against shorts to Ground or +Vps Digital On/Off: Sourcing from power supply or off Load at supply voltage must not draw more than 4A.
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General Specifications

Memory	TMS570LS0714; 32-bit, 1024 Kbytes Flash Program Memory																				
Software Platform	Pre-programmed with standard logic. Refer to the user manual.																				
CAN Port	1 CAN (SAE J1939)																				
Operating Conditions	-40 to 125°C (-40 to 257°F)																				
Weight	0.15 lb. (0.068 kg)																				
Protection Rating	IP67																				
Vibration	MIL-STD-202G, Test 204D and 214A (Sine and Random) 10 g peak (Sine); 7.86 Grms peak (Random)																				
Shock	MIL-STD-202G, Test 213B, 50 g																				
Enclosure and Dimensions	Molded Enclosure, integral connector Nylon 6/6, 30% glass Ultrasonically welded 3.47 x 2.75 x 1.31 inches (88.2 x 70.0 x 33.3 mm) L x W x H including integral connector Refer to dimensional drawing.																				
Electrical Connections	Integral 8-pin receptacle (TE Deutsch equivalent P/N: DT04-08PA) 18 AWG wire is recommended.																				
	<table border="1"> <thead> <tr> <th colspan="2">CAN and I/O Connector</th> </tr> <tr> <th>Pin #</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CAN_H</td> </tr> <tr> <td>2</td> <td>CAN_L</td> </tr> <tr> <td>3</td> <td>Output Ground</td> </tr> <tr> <td>4</td> <td>Input</td> </tr> <tr> <td>5</td> <td>Output 1</td> </tr> <tr> <td>6</td> <td>Battery +</td> </tr> <tr> <td>7</td> <td>Battery -</td> </tr> <tr> <td>8</td> <td>Output 2</td> </tr> </tbody> </table>	CAN and I/O Connector		Pin #	Description	1	CAN_H	2	CAN_L	3	Output Ground	4	Input	5	Output 1	6	Battery +	7	Battery -	8	Output 2
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Mating Plug Kit	A mating plug kit is available. Ordering P/N: AX070112 is comprised of 1 DT06-08SA, 1 W8S, 8 0462-201-16141, and 3 114017.																				
User Interface	Axiomatic Electronic Assistant KIT, P/N: AX070502 or AX070506K																				

Dimensional Drawing



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Form: TDAX032200-03/14/2024