

Protected VARAN Digital Mixed Module

PVDM 087



The protected VARAN Digital Mixed Module PVDM 087 has four digital outputs +24 V/2 A (positive switching) and four digital inputs. In- and outputs are galvanically separated from the VARAN bus. Inputs and outputs have a separate supply. The outputs are also back-readable. There are also diverse diagnostic functions available in this module. Input filters are available to suppress noise signals occurring in the signal lines.

Next to the I/O connectors, LEDs show the signal status as well as the error status. The VARAN Out port allows the construction of the VARAN bus in a line structure. The component has IP67 protections.

Interfaces

Interfaces	1x VARAN In (M12) (maximum length: 100 m) 1x VARAN Out (M12) (maximum length: 100 m)
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Digital Outputs

Number of outputs	4
Short-circuit proof	yes
Galvanic isolation	yes (60 V)
Maximum continuous current load/ channel	4 A (50 % of on time)
Maximum total current	4 A (50 % of on time) 2 A (100 % of on time)
Voltage drop over power supply (output current 4 A)	≤ 1 V
Residual current (inactive)	≤ 0.1 mA
Turn-on delay	< 300 μs
Turn-off delay	< 300 μs
Status display	yellow LEDs

Digital Inputs

Number of inputs	4	
Galvanic isolation	yes (60 V)	
Input voltage	typically +24 V	maximum +30 V
Maximum sensor supply current	80 mA per input	
Signal level	low: < +5 V	high: > +15 V
Switching threshold	typically +11 V	
Input current	typically 6 mA at +24 V	
Maximum allowable residual current	0.1 mA	
Input delay	typically 6 ms	
Status display	yellow LEDs	

Electrical Requirements

Bus supply voltage	18-30 V DC	
I/O supply	18-30 V DC	
Current consumption of the bus supply	typically 85 mA	maximum 100 mA
Current consumption of I/O supply	depends on the load of the digital outputs and the current capacity on the sensor supply: maximum 4 A	

Article Number and Miscellaneous

Article number	14-108-087	
Software macro	PVDM0850_IM	
Dimensions	30 x 175 x 32.8 mm (W x H x D)	
Standard	UL 508 (E247993)	

Environmental Conditions

Storage temperature	-20 ... +85 °C	
Operating temperature	0 ... +60 °C	
Mounting position	any	
EMC stability	in accordance with EN 61131-2	
Shock resistance	EN 60068-2-27	150 m/s ²
Protection type	EN 60529	IP67