

S-DIAS Digital Mixed Module DM 108



with 4 digital inputs +24 V/5 ms/3.7 mA
 4 digital outputs +24 V/0.5 A
 2 digital outputs +24 V/0.5 A/back-readable
 4 supply connections +24 V/0.25 A

The S-DIAS DM 108 digital mixed module has four digital inputs (+24 V/3.7 mA/5 ms), four short-circuit proof digital outputs (+24 V/0.5 A) and two short-circuit proof back-readable outputs (+24 V/0.5 A). These can be used as digital inputs (+24 V/3.7 mA/0.5 ms).

Four +24 V/0.25 A supply connections for sensors or actuators. The supply voltage is monitored for under voltage.

Digital Input Specifications

Number	4	
Input voltage	typically +24 V	maximum +30 V
Signal level	low: < +5 V	high: > +15 V
Input current	3.7 mA at +24 V	
Input delay	typically 5 ms	

Digital Output Specifications

Number	4	
Short-circuit proof	yes	
Maximum continuous current load allowed per channel	0.5 A	
Maximum total current (all 4 outputs)	2 A (100 % of on time)	
Maximum braking energy of outputs (inductive load)	maximum 0,1 Joule/channel	
Residual current (off)	≤ 10 µA	
Turn-on delay	< 100 µs	
Turn-off delay	< 150 µs	

Digital Back-readable Output Specifications

Number	2	
Short-circuit proof	yes	
Maximum continuous current load/channel allowed	0.5 A	
Maximum total current (all 2 outputs)	1 A (100 % of on-time)	
Maximum braking energy of the output (inductive load)	maximum 0.1 Joule/channel	
Residual current output (off)	≤ 10 µA	
Turn-on delay	< 100 µs	
Turn-off delay	< 150 µs	
Back-reading input voltage	typically +24 V	maximum +30 V
Back-reading signal level	low: < +8 V	high: > +14 V
Back-reading switching threshold	typically +11 V	
Input current	3.7 mA at +24 V	
Back-reading input delay	typically 5 ms	

Sensor/Actuator Supply Specifications

Sensor/actuator supply	corresponds to the +24 V supply applied at X5	
Short-circuit proof	yes	
Maximum permissible continuous current/supply connection	0.25 A	
Maximum total current (all 4 outgoing supply connections)	1.0 A	

Electrical Requirements

Power supply +24 V	18-30 V DC	
Current consumption of the +24 V supply	corresponds to the load on the digital outputs and sensor/actuator supply (max. 4 A)	
Voltage supply from S-DIAS bus	+5 V	
Current consumption on the S-DIAS bus (+5 V supply)	typically 40 mA	maximum 50 mA

Voltage Monitor

Power supply +24 V	supply voltage > 18 V (DC OK-LED lights green)
--------------------	--

Article Number and Miscellaneous

Artikel number	20-008-108
Dimensions	12.5 x 104.2 x 72 mm (W x H x D)
Standard	CE

Environmental Conditions		
Storage temperature	-20 ... +85 °C	
Environmental temperature	0 ... +55 °C	
Humidity	0-95 %, non-condensing	
Installation altitude above sea level	0-2000 m without derating, > 2000 m with derating of the maximum environment temperature by 0.5 °C per 100 m	
Operating conditions	pollution degree 2	
EMC resistance	in accordance with EN 61000-6-2:2007 (industrial area)	
EMC noise generation	in accordance with EN 61000-6-4 (industrial area)	
Vibration resistance	EN 60068-2-6	3.5 mm from 5-8.4 Hz 1 g from 8.4-150 Hz
Shock resistance	EN 60068-2-27	15 g
Protection type	EN 60529	IP20

Notes