X-DIAS Digital Output Module
XTO 161

with 16 short-circuit proof digital outputs

The X-DIAS Digital Output Module XTO 161 has 16 short-circuit-proof digital outputs (+24 V/0.5 A) in two supply groups. The supply voltage of each group is monitored for undervoltage.

Digital Output Specifications

Number	16
Short-circuit proof	yes
Maximum continuous current load allowed per channel	0.5 A
Maximum total current (per group of 8 channels)	4 A (100 % duty cycle) 3 A (100 % duty cycle) at 55 °C ambient temperature
Maximum total current (entire module)	8 A (100 % Power-on time) 6 A (100 % duty cycle) at 55 °C ambient temperature
Maximum braking energy of outputs (inductive load)	maximum 1 joule/channel
Residual current (off)	≤ 10 µA
Turn-on delay	< 200 µs
Turn-off delay	< 200 µs
Galvanical separation	no

Electrical Requirements

Voltage supply from S-DIAS bus	+24 V DC ±20 % (SELV/PELV) UL: NEC Class 2	
Protection class	III	
Current consumption on the S-DIAS bus (+24 V supply)	typically 13 mA	maximum 17 mA
Supply for I/Os	+24 V ±20 %	
Current consumption I/O supply	corresponds to the load of the digital outputs	

Voltage Monitoring

Supply voltage +24 V I/O 1 & 2	supply voltage > 19.2 V (DC OK - LED lights up green)

Article Number and Miscellaneous

Article number	21-007-161	
Dimensions	12.5 x 101.8 x 62.7 mm (W x H x D)	
Printed circuit board coating	no	
Approvals	CE	yes
	UL	designed according to UL
	Functional Safety	no
	UKCA	no

Environmental Conditions

Storage temperature	-40 ... +85 °C	
Environmental temperature	-25 ... +60 °C	
Humidity	0-95 %, non condensing	
Installation altitude above sea level	0-2000 m without derating > 2000 m up to a maximum of 5000 m with derating of the maximum environmental temperature by 0.5 °C per 100 m	
Operating conditions	pollution degree 2	
Noise emission	≤ 70 dB	
EMV-resistence	EN 61000-6-2 (industrial area)	
EMV-noise generation	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 (147.15 m/s²)
Protection type	EN 60529/NEMA 250	IP20/Type1