

S-DIAS Positioning Module NC 100



- with 4 digital inputs
- 4 digital outputs
- 1 Incremental encoder input

The S-DIAS NC 100 positioning module has four digital outputs, four digital inputs, as well as an incremental encoder (optional TTL or RS422 signal).

With the digital inputs, the signal statuses („0” and „1”) can be read with a +24 V reference. The incremental encoder value can be latched.

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 10 µs	

Digital Output Specifications

Number	4	
Short-circuit proof	yes	
Output voltage	typically +24 V	
Maximum continuous current load allowed per channel	2 A	
Max. total current (complete module)	6 A	
Maximum braking energy of outputs (inductive load)	maximum 0.65 Joules/channel maximum 1.95 Joules/ 4 channels	
Residual current (off)	≤ 12 µA	
Turn-on delay	< 200 µs	
Turn-off delay	< 200 µs	

Incremental Encoder Input Specification

Number of channels	1	
Input signals	Incremental encoder signals RS422 (A, /A, B, /B, R, /R) RS422 signal (120 Ω termination, integrated in the module)	
	Incremental encoder signal TTL (A, B, R) TTL level (1200 Ω Pull-Up, integrated in the module)	
Input frequency	maximum 125 kHz	
Counter frequency	maximum 500 kHz	
Signal evaluation	4X	
Counter resolution	16-bit	
Power supply	+5 V/0.2 A short-circuit protected	

Electrical Requirements

Power supply +24 V	18-30 V	
Current consumption of +24 V power supply	maximum 250 mA/24 V	
Supply voltage digital outputs	18-30 V	
Current consumption of digital output supply	load-dependent	
Voltage supply from S-DIAS bus	+5 V	
Current consumption on the S-DIAS bus (+5 V supply)	typically 40 mA	maximum 50 mA

Article Number and Miscellaneous

Article number	20-011-100	
Dimensions	12.5 x 104.2 x 72 mm (W x H x D)	
Standard	UL 508 (E247993)	
Approvals	UL, cUL, CE	