S-DIAS SSI Interface Module
SI 021

with 2 SSI absolute value encoders

The S-DIAS SI 021 SSI interface module can evaluate two absolute value encoders via the S-DIAS interface.

The SSI interface is designed for SSI encoders (e.g. absolute angle encoded length measurement rods...). Non-coded and Gray coded (Gray code is internally converted to binary) sensors are supported.

SSI Absolute Value Encoder Specifications

Number	2
Encoder	Absolute value encoder with RS422 interface
SSI signal level	RS422 Inputs: 330 Ω bus termination, per 1.2 kΩ resistor spread against to 5 volts and mass Outputs: 330 Ω bus termination, without spread
Data transfer speed	125 kHz, 250 kHz, 500 kHz, 1 MHz (configurable)
Encoder resolution	maximum 32 bits
Coding	binary/gray
Status LED	yes

Electrical Requirements

Voltage supply from S-DIAS bus	+24 V	
Current consumption on the S-DIAS bus (+24 V power supply) without SSI encoders	typically 28 mA at +18 V typically 24 mA at +24 V typically 21 mA at +30 V	maximum 33 mA at +18 V maximum 28 mA at +24 V maximum 25 mA at +30 V
Current consumption on the S-DIAS bus (+24 V power supply) with two SSI encoders	typically 33 mA at +18 V typically 27 mA at +24 V typically 23 mA at +30 V	maximum 39 mA at +18 V maximum 32 mA at +24 V maximum 27 mA at +30 V

Article Number and Miscellaneous

Article number	20-022-021
Dimensions	12.5 x 104.2 x 72 mm (W x H x D)
Standard	UL 508 (E247993)
Approvals	UL, cUL, CE

Environmental Conditions

Storage temperature	-20 ... +85 °C	
Environmental temperature	0 ... +60 °C	
Humidity	0-95 %, non-condensing	
Operating conditions	pollution degree 2 altitude up to 2000 m	
EMC resistance	in accordance with EN 61000-6-2 (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