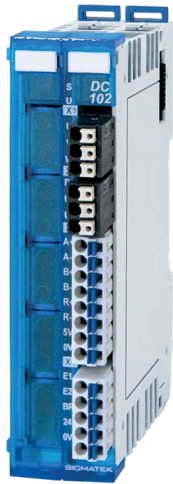


S-DIAS Drive Module DC 102



with 1 motor output stage 10 A
 1 incremental encoder input
 1 holding brake
 2-channel enable input for STO
 (Safe Torque Off)

The S-DIAS DC 102 drive module is used to control a synchronous servo motor with a 48-Volt supply voltage and phase current of up to 10 A. An incremental encoder is available for position feedback. A 24 V output for connecting a holding brake is provided. External Regen brake can also be connected.

Motor Driver Specifications

Type	Synchronous servo motor
Operating voltage	+18-55 V
Maximum continuous current	10 A
Maximum peak current (10 s)	20 A
Output current over the environmental temperature	maximum 10 A continuous current at 45 °C maximum 7.5 A continuous current at 50 °C maximum 5 A continuous current at 55 °C
Controller frequency	16 kHz
PWM frequency	16 kHz
Overload protection	Short circuit cutoff Temperature monitor I ² T monitor Over and under voltage monitor

Incremental Encoder Specifications

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)
Input frequency	maximum 125 kHz
Counter frequency	maximum 500 kHz
Signal evaluation	4x
Counter resolution	32 bits
Encoder power supply	+5 V/0.2 A short circuit protected

Enable Inputs Specifications

Number	2
Input voltage	+24 V
Input voltage range	+18-30 V
Signal level	low: < 5 V high: > 15 V
Switching threshold	typically 11 V
Input current	3 mA at 24 V
Input delay	typically 0.5 ms

Holding Brake Specifications

Output voltage	24 V
Maximum continuous current	500 mA
Short-circuit protection	yes
Maximum switch-off energy (inductive load)	50 mJ

Regen Brake Specifications

Type	external power resistor
Output	GND switching
Maximum current	10 A
Lowest possible resistance	6 Ω
Short-circuit protection	yes
Threshold regen braking on/off	60 V/55 V

