

# S-DIAS Axis Module DC 062(-X)



with 1 motor output stage 6 A  
1 incremental encoder input  
1 holding brake

The S-DIAS DC 062(-X) axis module is used to control a synchronous servo motor with a 48-Volt supply voltage and phase current of up to 6 A. An incremental encoder input 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	brushless, 4-quadrant regulator with position setting
Operating voltage	+24-55 V
Maximum continuous current	6 A
Maximum peak current (10 sec)	15 A
Controller frequency	16 kHz
PWM frequency	16 kHz
Overload protection	Short circuit cutoff Temperature monitor I <sup>2</sup> 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) Incremental encoder signals 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	32 bits
Encoder power supply	+5 V/0.2 A short circuit protected

## Enable Inputs Specifications

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

## Holding Brake Specifications

Output voltage	+24 V DC
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