PRODUCT DATASHEET

ES-SD-C01-S010-V003

Industrial Motion Controller

24 60 V Low Voltage Micro Servo Drives | 24-60 V Compact Servo Drive Series - ES-SD-C01-S010

Product Overview

Industrial Motion Controller with logic Supply Voltage 24 V DC, peak Output Current 12 A peak and continuous Output Current Without Auxiliary Heatsink 2.5 Arms.

Key Specifications

PARAMETER	VALUE	UNIT
Logic Supply Voltage	24	V DC
Peak Output Current	12 A peak	
Continuous Output Current Without Auxiliary Heatsink	2.5 Arms	
Communication Protocol	RS232; RS485; Modbus RTU; Pulse	
Control Method	RS232, RS485 and pulse	
Protection Class	IP20	
Weight	0.266	kg
Digital I/O	4 digital inputs; 2 digital outputs; 1 brake output	
Altitude Derating Start	1000 m	

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Continuous Output Current Without Auxiliary Heatsink	2.5 Arms	
ELECTRICAL		
Logic Supply Voltage	24	V DC
Peak Output Current	12 A peak	
Braking Absorption Voltage	73 ±2 V VDC / 73	V DC
Braking Resistor	External braking resistor supported when required by the duty cycle, particularly for rapid start/stop operation	
External Braking Resistor Required	Yes / 1	
Logic Supply Connection Optional	Yes / 1	
Overvoltage Alarm Voltage	86 ±2 V VDC / 86	V DC
Undervoltage Alarm Voltage	18 ±2 V VDC / 18	V DC
Logic Supply Current	1	A
Servo Drive AC Supply Voltage	24 to +70	V DC
Protection Functions	Overvoltage; Undervoltage; Motor overtemperature (I^2T); Short circuit; Drive overtemperature	

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
MECHANICAL		
Weight	0.266	kg
INTERFACES		
Communication Protocol	RS232; RS485; Modbus RTU; Pulse	
Control Method	RS232, RS485 and pulse	
Digital I/O	4 digital inputs; 2 digital outputs; 1 brake output	
Pulse Input Supported	Yes / 1	
Digital Output Count	2	
RS232 Maximum Baud Rate	115.2 kbit/s	
Analog Input Sample Frequency	4	kHz
Analog Input Count	1	
Brake Output Voltage	24	V DC
Digital Input Count	4	
Analog Input Range	-10 to +10	V

Technical Specifications

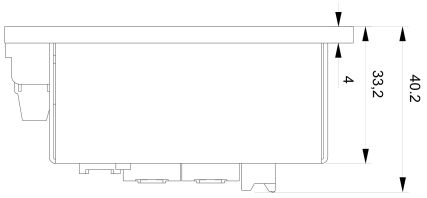
PARAMETER	SPECIFICATION	UNIT
INTERFACES		
Pulse Input Voltage	3.3 to +24	V DC
Feedback Signal Support	2500 P/R incremental differential 5 V encoder; Magnetic encoder	
Analog Input Impedance	200 kΩ	
Brake Output Current	500	mA
ENVIRONMENTAL		
Protection Class	IP20	
Relative humidity	≤90% RH, non-condensing	
Installation Environment	Dry, dust-free enclosed location such as an electrical cabinet	
Operating Temperature	0 to +40	°C
Storage Temperature	-10 to +70	°C
Installation Orientation	Vertical	
Cooling Method	Natural cooling	
Altitude Derating Start	1000	m

Dimensional & Integration Overview

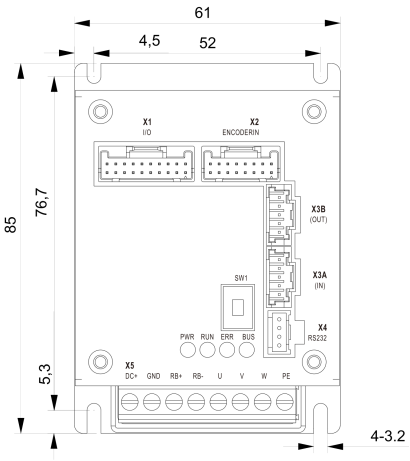
Mechanical Overview

PARAMETER	VALUE	UNIT
Weight	0.266	kg

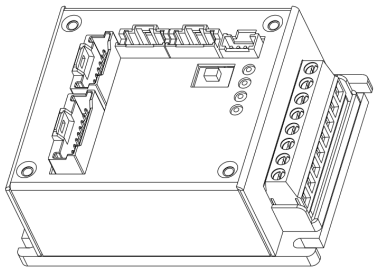
Dimensional Drawings



Mechanical View 1



Mechanical View 2



Mechanical View 3

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Width	4 mm
	Internal height or spacing	33.2 mm
	Total height	40.2 mm
Mechanical View 2	Overall width	61 mm
	Mounting hole offset from edge	4.5 mm
	Center distance	52 mm
	Overall height	85 mm
	Internal height	76.7 mm
	Bottom mounting offset	5.3 mm
	Bottom mounting holes	4 holes × Ø3.2 mm

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01 Specifications are subject to change without notice. Verify the current product configuration before final design release.

02 2D drawings, CAD files and integration documentation are controlled documents and are supplied separately on request.