PRODUCT DATASHEET

ES-SD-C01-S008-V006

Industrial Motion Controller

24 60 V Low Voltage Micro Servo Drives | 24-60 V Compact Servo Drive Series - ES-SD-C01-S008

Product Overview

Industrial Motion Controller with logic Supply Voltage 24 V DC, peak Output Current 100 A peak and continuous Output Current Without Auxiliary Heatsink 22 Arms.

Key Specifications

PARAMETER	VALUE	UNIT
Logic Supply Voltage	24	V DC
Peak Output Current	100 A peak	
Continuous Output Current Without Auxiliary Heatsink	22 Arms	
Communication Protocol	RS485; Modbus RTU; CANopen; Pulse	
Control Method	RS485, CANopen and pulse	
Protection Class	IP20; X5 power terminal is IP00	
Weight	0.657	kg
Digital I/O	3 digital inputs; 1 digital output	
Altitude Derating Start	1000 m	

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Continuous Output Current Without Auxiliary Heatsink	22 Arms	
Supported Motor Power Range	200 to +2000	W
ELECTRICAL		
Logic Supply Voltage	24	V DC
Peak Output Current	100 A peak	
Braking Absorption Voltage	63 ±2 V VDC / 63	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	70 ±2 V VDC / 70	V DC
Undervoltage Alarm Voltage	18 ±2 V VDC / 18	V DC
Logic Supply Current	1	A
Servo Drive AC Supply Voltage	24 to +60	V DC

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
ELECTRICAL		
Logic Power Loss	1200	mW
Protection Functions	Overvoltage; Undervoltage; Motor overtemperature (I^2T); Short circuit; Drive overtemperature	
MECHANICAL		
Weight	0.657	kg
INTERFACES		
Communication Protocol	RS485; Modbus RTU; CANopen; Pulse	
Control Method	RS485, CANopen and pulse	
Digital I/O	3 digital inputs; 1 digital output	
Pulse Input Supported	Yes / 1	
Type-C Debug Interface	Yes / 1	
Digital Output Count	1	
Digital Input Count	3	
Pulse Input Voltage	3.3 to +24	V DC
Feedback Signal Support	Multi-turn Tamagawa serial encoder	

Technical Specifications

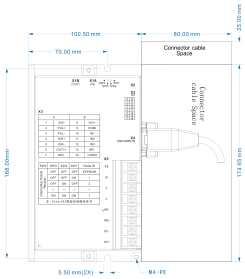
PARAMETER	SPECIFICATION	UNIT
INTERFACES		
Brake Output Current	0.8	A
ENVIRONMENTAL		
Protection Class	IP20; X5 power terminal is IP00	
Relative humidity	≤90% RH, non-condensing	
Installation Environment	Dry, dust-free enclosed location such as an electrical cabinet	
Atmospheric Pressure	86 to +106	kPa
Operating Temperature	-20 to +40	°C
Storage Temperature	-40 to +70	°C
Installation Orientation	Vertical or horizontal	
Cooling Method	Natural cooling	
Altitude Derating Start	1000	m
Maximum Operating Humidity	90	%RH
Maximum Operating Altitude	2000	m

Dimensional & Integration Overview

Mechanical Overview

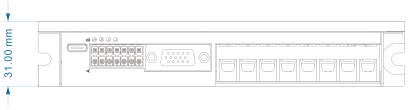
PARAMETER	VALUE	UNIT
Weight	0.657	kg

Dimensional Drawings

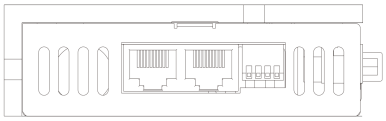


Mechanical View 1

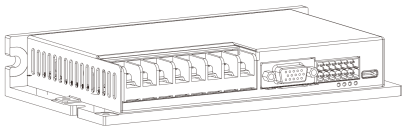
Mechanical View 2



Mechanical View 3



Mechanical View 4



Mechanical View 5

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Drive width (right connector zone)	25.00 mm
	Drive overall length	100.50 mm
	Right connector zone length	80.00 mm
	Left mounting hole spacing	70.00 mm
	Drive overall height	168.00 mm
	Total height (including connectors)	174.65 mm
	Mounting hole diameter (2 places)	Φ5.50 mm (2X)
	Grounding screw hole specification	M4-PE (grounding screw hole)
Mechanical View 2	Upper fixation slot outer locating width	31.00 mm
	Upper fixation slot inner locating dimension	18.00 mm
	Vertical distance between fixation hole positions	168.00 mm
	Lower fixation slot width, two places	5.50 mm, 2X
	View note	Hole position for fixation
Mechanical View 3	Front-view envelope height/thickness	31.00 mm
	Connector area label B	Label B

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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.