

PRODUCT DATASHEET

ES-SD-C01-S006-V013

Industrial Motion Controller

24 60 V Low Voltage Micro Servo Drives | 24-60 V Compact Servo Drive Series - ES-SD-C01-S006

Product Overview

Industrial Motion Controller with logic Supply Voltage No separate logic-supply input listed V DC, peak Output Current 240 A peak and continuous Output Current Without Auxiliary Heatsink 60 Arms.

Key Specifications

PARAMETER	VALUE	UNIT
Logic Supply Voltage	No separate logic-supply input listed	V DC
Peak Output Current	240 A peak	
Continuous Output Current Without Auxiliary Heatsink	60 Arms	
Communication Protocol	RS232; CANopen	
Control Method	RS232 and CANopen	
Protection Class	IP20 except FD164S power terminals	
Weight	1.68	kg
Digital I/O	4 digital inputs; 2 digital outputs; brake-motor variants use 1 digital output	
Altitude Derating Rate	1.5 % per 100 m	

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Continuous Output Current Without Auxiliary Heatsink	60 Arms	
Supported Motor Power Range	50 to +3000	W
ELECTRICAL		
Logic Supply Voltage	No separate logic-supply input listed	V DC
Peak Output Current	240 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	
Overvoltage Alarm Voltage	70 ±2 V VDC / 70	V DC
Undervoltage Alarm Voltage	18 ±2 V VDC / 18	V DC
Servo Drive AC Supply Voltage	24 to +60	V DC
Protection Functions	Overvoltage; Undervoltage; Motor overtemperature (I ² T); Short circuit; Drive overtemperature	
MECHANICAL		
Weight	1.68	kg
INTERFACES		
Communication Protocol	RS232; CANopen	
Control Method	RS232 and CANopen	
Digital I/O	4 digital inputs; 2 digital outputs; brake-motor variants use 1 digital output	
Pulse Input Supported	No / false	
Digital Output Count	2	
RS232 Maximum Baud Rate	115.2 kbit/s	

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
INTERFACES		
Digital Input Count	4	
Pulse Input Voltage	Not applicable	V DC
Feedback Signal Support	2500 P/R incremental differential 5 V encoder; Magnetic encoder; Resolver	
ENVIRONMENTAL		
Protection Class	IP20 except FD164S power terminals	
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	0 to +40	°C
Storage Temperature	-10 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	3000	m
Altitude Derating Rate	1.5 % per 100 m	
SAFETY		
STO Support	No / false	
CONFIGURATION		
Servo Drive Axis Count	1	
Drive Architecture	Single-axis low-voltage servo drive	

Mechanical View 5

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Total width	145.00mm
	Right section width	80.00mm
	Upper section height	25.00mm
	Left offset	31.00mm
	Connector position	65.13mm
	Fastening screw slot dimension	5.50mm
	Total height	225.20mm
	Right section total height	240.00mm
	Fastening screw mounting hole diameter	Ø5.5mm
	Screw head clearance hole diameter	Ø12mm
	Grounding screw hole specification	M4 thread
	Side fixation hole position	11.50mm
Mechanical View 2	Top edge clearance	3.30 mm
	Hole diameter	Ø5.50 mm (2 holes)
	Hole center-to-center distance	233.40 mm
	Left edge offset	25.20 mm
	Right edge offset	50.20 mm
	Bottom edge clearance	3.30 mm

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 3	Overall Height	50.20 mm
	Datum B	
	Datum A	
Mechanical View 4	View label (English)	Isometric drawing

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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.