

## PRODUCT DATASHEET

# ES-SD-C21-S001-V006

## Industrial Motion Controller

Medium Power Servo Drives | Medium-Power Servo Drive Series - ES-SD-C21-S001

### Product Overview

Industrial Motion Controller with logic Supply Voltage 18 to 30 VDC, 1 A, peak Output Current A / 25 A and communication Protocol RS232; RS485; Pulse train.

### Key Specifications

| PARAMETER                     | VALUE                               | UNIT |
|-------------------------------|-------------------------------------|------|
| Logic Supply Voltage          | 18 to 30 VDC, 1 A                   |      |
| Peak Output Current           | A / 25                              | A    |
| Communication Protocol        | RS232; RS485; Pulse train           |      |
| Weight                        | kg / 2.4                            | kg   |
| Cooling Method                | Forced-air cooling                  |      |
| Rated Output Power            | 3000                                | W    |
| Servo Drive AC Supply Voltage | 3-phase 380 VAC -20%/+15%, 47-63 Hz |      |
| Atmospheric Pressure          | 86-106 kPa                          |      |
| Braking Absorption Voltage    | 680 ± 5                             | V DC |

## Technical Specifications

| PARAMETER                        | SPECIFICATION                                                                                                         | UNIT |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------|------|
| ELECTRICAL                       |                                                                                                                       |      |
| Logic Supply Voltage             | 18 to 30 VDC, 1 A                                                                                                     |      |
| Peak Output Current              | A / 25                                                                                                                | A    |
| Rated Output Power               | 3000                                                                                                                  | W    |
| Servo Drive AC Supply Voltage    | 3-phase 380 VAC -20%/+15%, 47-63 Hz                                                                                   |      |
| Protection Functions             | Overvoltage, undervoltage, motor I <sup>2</sup> T overtemperature, short-circuit and drive overtemperature protection |      |
| Overvoltage Alarm Voltage        | 700 ± 5                                                                                                               | V DC |
| Undervoltage Alarm Voltage       | 400 ± 5                                                                                                               | V DC |
| Braking Absorption Voltage       | 680 ± 5                                                                                                               | V DC |
| MECHANICAL                       |                                                                                                                       |      |
| Weight                           | kg / 2.4                                                                                                              | kg   |
| INTERFACES                       |                                                                                                                       |      |
| Communication Protocol           | RS232; RS485; Pulse train                                                                                             |      |
| Position-loop sampling frequency | 1                                                                                                                     | kHz  |
| Analog input sampling frequency  | 4                                                                                                                     | kHz  |
| Input impedance                  | 200 kΩ                                                                                                                |      |

## Technical Specifications

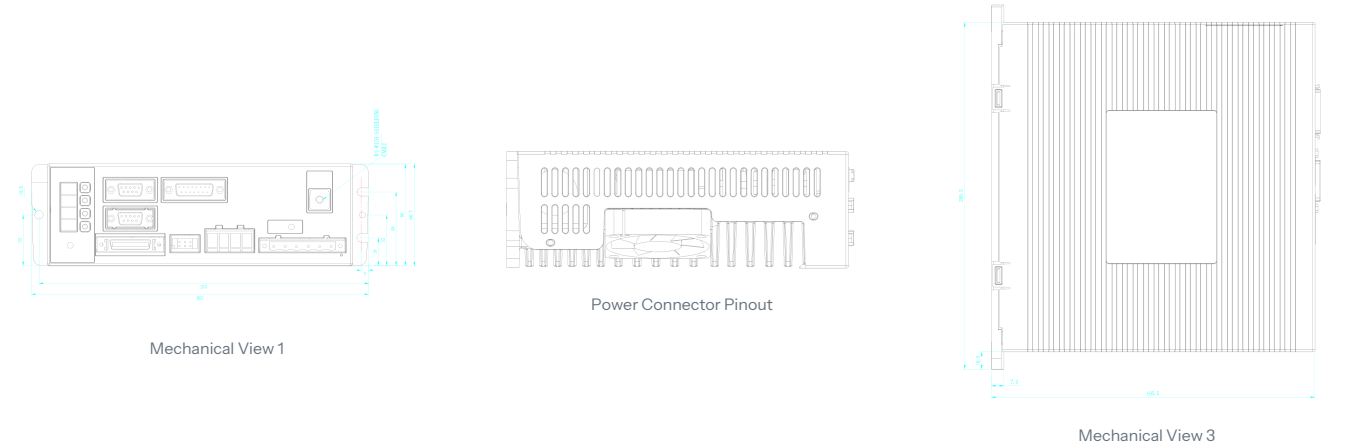
| PARAMETER                       | SPECIFICATION                       | UNIT |
|---------------------------------|-------------------------------------|------|
| INTERFACES                      |                                     |      |
| Speed-loop sampling frequency   | 4                                   | kHz  |
| Current-loop sampling frequency | 16                                  | kHz  |
| Input impedance                 | 200 k $\Omega$                      |      |
| Input sampling frequency        | 4                                   | kHz  |
| ENVIRONMENTAL                   |                                     |      |
| Cooling Method                  | Forced-air cooling                  |      |
| Atmospheric Pressure            | 86-106 kPa                          |      |
| Operating Temperature           | 0-40                                | °C   |
| Relative humidity               | 5-95                                | % RH |
| Storage Temperature             | -10 °C-70 °C                        |      |
| SAFETY                          |                                     |      |
| STO Support                     | No / false                          |      |
| ADDITIONAL SPECIFICATIONS       |                                     |      |
| Continuous output current       | 7                                   | A    |
| Protection rating               | IP20                                |      |
| Supply voltage                  | 3-phase 380 VAC -20%/+15%, 47-63 Hz |      |

# Dimensional & Integration Overview

## Mechanical Overview

| PARAMETER | VALUE    | UNIT |
|-----------|----------|------|
| Weight    | kg / 2.4 | kg   |

## Dimensional Drawings



## 2D Drawing Dimensions & Callouts

| VIEW              | FIELD                                            | VALUE                                      |
|-------------------|--------------------------------------------------|--------------------------------------------|
| Mechanical View 1 | Left local vertical dimension                    | 35.5 mm                                    |
|                   | Left vertical mounting or edge spacing dimension | 33 mm                                      |
|                   | Right overall height                             | 66.7 mm                                    |
|                   | Right vertical height dimension                  | 66 mm                                      |
|                   | Right local vertical dimension                   | 48 mm                                      |
|                   | Bottom inner width                               | 215 mm                                     |
|                   | Bottom overall width                             | 220 mm                                     |
| Mechanical View 3 | Overall height                                   | Overall height 209.5 mm                    |
|                   | Bottom local vertical offset                     | Bottom local vertical offset 10.5 mm       |
|                   | Left bottom local horizontal offset              | Left bottom local horizontal offset 7.5 mm |
|                   | Main body width                                  | Main body width 195.5 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.