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Data Sheet

August 15, 2026

DANAHER MOTION / KOLLMORGEN

Danaher Motion / Kollmorgen Servostar 310 Servo Amplifier

The Danaher Motion/Kollmorgen Servostar 310 is a servo amplifier designed for precision motion control applications. It provides reliable and efficient power amplification for servo motors, ensuring accurate and responsive performance. Ideal for industrial automation and robotics.



MODEL

**Danaher Motion /
Kollmorgen
Servostar 310**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

Servostar 310

LISTING

[https://aumictechlabs.c
om/products/servostar-
310-2/](https://aumictechlabs.com/products/servostar-310-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Danaher Motion / Kollmorgen Servostar 310 is a digital servo amplifier engineered for precision motion control in industrial automation and robotics. Part of the S300 series, this compact unit delivers reliable power amplification for brushless synchronous servomotors with closed-loop torque, speed, and position control. The Servostar 310 integrates advanced communication protocols, onboard position control with 300 programmable positioning tasks, and flexible feedback options to meet demanding application requirements in manufacturing and automation environments. Technical Specifications Electrical Performance Supply voltage: single-phase 1×115V to 1×230V AC; three-phase 3×115V to 3×230V AC Rated supply voltage (3-phase):

110V (–10%) to 230V (+10%), 50/60 Hz Rated input power: 4 kVA Rated installed power (S1 operation): 1.2 kVA DC link voltage range: 145–360V DC (maximum allowable 450V DC) Rated output current: 10 Arms continuous; 20 Arms peak for up to 5 seconds Output switching frequency: 8 kHz Voltage rise rate: up to 3.3 kV/μs at 230V Feedback & Control Integrated position controller with 300 programmable intelligent positioning tasks Supported feedback types: resolver (up to 36 poles), Hall effect, sine encoder variants, incremental encoder A quad B, ComCoder, and Single Cable Feedback (SFD3/Hiperface DSL) Encoder emulation: incremental (A quad B, decimal/binary) or absolute (SSI, Gray/binary) Communication & Compliance Onboard: EtherCAT® and CANopen Optional: SERCOS II, DeviceNet, SynqNet, Profibus, PROFINET RT RS232 programmability CE, UL, cUL certification EMC: EN55081-2 and EN55082-2 for heavy industrial environments Key Features Mains filter integrated Compact form factor for 200 mm switchgear cabinets (230V types) Direct shield terminations to amplifier Flexible motor voltage accommodation (motor rated voltage ≥ DC-link voltage) Typical Applications Precision motion control, industrial automation, robotics, multi-axis positioning systems Compatibility & Integration Designed for brushless synchronous servomotors with closed-loop control architecture. Mounts directly on rear panel of 200 mm control cabinets. Supports diverse encoder and resolver feedback configurations via onboard communication ports.

SERVOSTAR310 Characteristics / Specifications

PARAMETER	VALUE
Model	SERVOSTAR 310
Order Code	S31061-NA
Instrument Type	digital servo amplifier
Rated Supply Single Phase	1 × 110 V minus 10 percent to 230 V plus 10 percent 50/60 Hz
Rated Supply Three Phase	3 × 110 V minus 10 percent to 230 V plus 10 percent 50/60 Hz
Rated Installed Load	4 kVA at 230 V
Switch On Off Frequency	30 per hour
Max Dc Bus	450 V
Rated Output Current	10 Arms plus or minus 3 percent at 1×115, 1×230, 3×115, and 3×230 V
Peak Output Current	20 Arms for about 5 s plus or minus 3 percent
Output Stage Clock	8 kHz, 16 kHz with 50 percent derating
Du Dt At 1×115 V	3.0 kV/us
Du Dt At 1×230 V	3.3 kV/us
Overvoltage Threshold	235 V at 115 V / 455 V at 230 V
Min Motor Inductance 3×230 V	1.9 mH
Current Controller Bandwidth	greater than 1.2 kHz
Residual Voltage Drop	4 V at rated current
Quiescent Dissipation	12 W output stage disabled
Dissipation At Rated Current	90 W
Mass	2.7 kg
Height Without Connectors	270 mm (279 mm on related rows)
Width	70 mm
Depth Without With Connectors	171 mm / less than 200 mm
Auxiliary Supply	20 to 30 V isolated, 24 V minus 0 percent plus 15 percent with brake
Analog Inputs	plus or minus 10 V, 14/12 bit

PARAMETER	VALUE
Manufacturer	Kollmorgen / Danaher Motion
Family	SERVOSTAR 300 S303/S306/S310
Bandwidth	greater than 1.2 kHz

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Rated Supply Three Phase	3 x 110 V minus 10 percent to 230 V plus 10 percent 50/60 Hz
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Switch On Off Frequency	30 per hour
Max Dc Bus	450 V
Rated Output Current	10 Arms plus or minus 3 percent at 1x115, 1x230, 3x115, and 3x230 V
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Output Stage Clock	8 kHz, 16 kHz with 50 percent derating
Du Dt At 1x115 V	3.0 kV/us
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PARAMETER

VALUE

Family

SERVOSTAR 300 S303/S306/S310

Notes

From Kollmorgen SERVOSTAR 300 Instructions Manual technical data 110/230 V table, S310 column (S31061).
Single-phase nom/peak current can be limited below nominal depending on motor Kt and speed as noted by the OEM.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.