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Data Sheet

August 15, 2026

DANAHER MOTION / KOLLMORGEN

Danaher Motion / Kollmorgen SERVOSTAR 610 Digital Servo Amplifier

The Danaher Motion / Kollmorgen SERVOSTAR 610 is a digital servo amplifier designed for precision motion control applications. It delivers high performance and reliability in controlling servo motors. Ideal for industrial automation, robotics, and other demanding applications.



MODEL

**Danaher Motion /
Kollmorgen
SERVOSTAR 610**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

SERVOSTAR 610

LISTING

<https://aumictechlabs.com/products/servostar-610-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Danaher Motion / Kollmorgen SERVOSTAR 610 is a digital servo amplifier engineered for precision motion control in demanding industrial automation, robotics, and specialized applications requiring reliability and accuracy. Technical Specifications Control Modes & Performance Velocity, position, and torque control modes Velocity bandwidth in the kHz range for precise dynamic response Sensorless or sinusoidal commutation with encoder feedback Position resolution dependent on encoder feedback type Switching frequency adjustable across the 4-20 kHz range Electrical Characteristics Dedicated DC bus input for motor power with separate logic supply Over-current, over-voltage, under-voltage, over-temperature, and short-circuit protection Integrated heatsink for thermal management Motor Feedback & Interfaces Supports incremental,

sin/cos, and absolute encoders (EnDat, SSI) Analog ± 10 VDC control inputs for velocity and position commands Digital I/O for limit switches, enable signals, and homing functions Real-time fieldbus options including EtherNet/IP, Profibus DP, CANopen, and DeviceNet RS-232 or RS-485 serial communication for configuration and diagnostics Configurable digital outputs for status, alarms, and motion events Environmental & Installation DIN rail or panel mount configurations Operating temperature range specified Non-condensing humidity environment Compatible with Kollmorgen and third-party servo motors

Key Features Extensive parameterization enables fine-tuning of motion profiles, control loop optimization, and I/O configuration. Real-time diagnostics provide performance monitoring, fault logging, and integrated troubleshooting. Kollmorgen Visualization Builder (KVB) and dedicated SERVOSTAR setup utilities streamline configuration and commissioning workflows.

Typical Applications Industrial automation systems, robotic assemblies, precision positioning platforms, and motion applications where closed-loop servo control and field-level diagnostics are critical.

Compatibility & Integration The SERVOSTAR 610 operates with Kollmorgen and third-party servo motors. Motor voltage and current ratings must align with amplifier specifications. Multiple fieldbus protocols support integration into existing automation networks, while analog and digital I/O accommodate legacy control signals.

Features & description

From manufacturer datasheet

Built-in brake chopper with internal resistor

Integrated CANopen, RS232, and pulse/direction IP20 cabinet mounting Optional DeviceNet, EtherCAT, PROFIBUS DP, and sercos 2 communications Technical Specifications Model: SERVOSTAR 610
Instrument Type: digital servo amplifier Rated Output Current: 10 Arms plus or minus 3% Peak Output Current: 20 Arms for 5 s plus or minus 3% Rated Installed Power: 7 kVA at 480 V Mains Voltage 60 Hz: 3 × 208 V minus 10% to 480 V plus 10% Mains Voltage 50 Hz: 3 × 230 V minus 10% to 480 V plus 10% Dc Link Voltage: 260 to 675 V Continuous Regen Internal: 200 W Continuous Regen External Max: 1.5 kW Peak Regen External Max: 21 kW Body Width: 70 mm Height Without Connectors: 275 mm Depth: 265 mm (273 mm with connectors) Mass Class: approximately 6.13 kg Auxiliary Supply: 24 VDC isolated (minus 0% plus 15%) Canopen Default: 500 kBaud Protection Rating: IP20 Overvoltage Category: III per EN 61800-5-1 Output Stage Frequency Class: 8 kHz class Operating Temperature Full Load: 0 to 45 C Operating Temperature Derated: 45 to 55 C Internal Brake Resistor 601 603 Class: 66 ohm (601/603); 33 ohm on higher ratings as listed Family Current Ratings: 601 1.5 A, 603 3 A, 606 6 A, 610 10 A, 614 14 A, 620 20 A Current Loop Update Family: 62.5 us (SERVOSTAR 600 hardware summaries)

SERVOSTAR610 Characteristics / Specifications

PARAMETER	VALUE
Model	SERVOSTAR 610
Instrument Type	digital servo amplifier
Rated Output Current	10 Arms plus or minus 3%
Peak Output Current	20 Arms for 5 s plus or minus 3%
Rated Installed Power	7 kVA at 480 V
Mains Voltage 60 Hz	3 × 208 V minus 10% to 480 V plus 10%
Mains Voltage 50 Hz	3 × 230 V minus 10% to 480 V plus 10%
Dc Link Voltage	260 to 675 V
Continuous Regen Internal	200 W
Continuous Regen External Max	1.5 kW
Peak Regen External Max	21 kW
Body Width	70 mm
Height Without Connectors	275 mm
Depth	265 mm (273 mm with connectors)
Mass Class	approximately 6.13 kg
Auxiliary Supply	24 VDC isolated (minus 0% plus 15%)
Canopen Default	500 kBaud
Protection Rating	IP20
Overvoltage Category	III per EN 61800-5-1
Output Stage Frequency Class	8 kHz class
Operating Temperature Full Load	0 to 45 C
Operating Temperature Derated	45 to 55 C
Internal Brake Resistor 601 603 Class	66 ohm (601/603); 33 ohm on higher ratings as listed
Family Current Ratings	601 1.5 A, 603 3 A, 606 6 A, 610 10 A, 614 14 A, 620 20 A
Current Loop Update Family	62.5 us (SERVOSTAR 600 hardware summaries)

PARAMETER	VALUE
Operating temperature	Full Load: 0 to 45 C

SERVOSTAR610 Specifications

PARAMETER	VALUE
Kollmorgen Danaher SERVOSTAR 610 Digital Servo Amplifier	Overview
Applications	Industrial synchronous, linear, and asynchronous servo axes on worldwide 208-480 VAC three-phase mains with multi-amplifier DC-bus sharing.
IP20 cabinet mounting	Optional DeviceNet, EtherCAT, PROFIBUS DP, and sercos 2 communications
Technical Specifications	Model: SERVOSTAR 610

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Full Load: 0 to 45 C
Operating Temperature	Full Load: 0 to 45 C
Operating Temperature Full Load	0 to 45 C
Operating Temperature Derated	45 to 55 C
Internal Brake Resistor 601 603 Class	66 ohm (601/603); 33 ohm on higher ratings as listed
Family Current Ratings	601 1.5 A, 603 3 A, 606 6 A, 610 10 A, 614 14 A, 620 20 A
Current Loop Update Family	62.5 us (SERVOSTAR 600 hardware summaries) Notes From Kollmorgen SERVOSTAR 600 rated-data tables (601-620 columns) and SERVOSTAR 600 safety/hardware manuals. 610 column values are the model-specific current, kVA, and regen rows.

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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Model	SERVOSTAR 610
Instrument Type	digital servo amplifier
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Internal Brake Resistor 601 603 Class	66 ohm (601/603); 33 ohm on higher ratings as listed
Family Current Ratings	601 1.5 A, 603 3 A, 606 6 A, 610 10 A, 614 14 A, 620 20 A
Current Loop Update Family	62.5 us (SERVOSTAR 600 hardware summaries)

Notes

From Kollmorgen SERVOSTAR 600 rated-data tables (601-620 columns) and SERVOSTAR 600 safety/hardware manuals. 610 column values are the model-specific current, kVA, and regen rows.

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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NIST-traceable calibration · SAM registered ·
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.