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Data Sheet

August 15, 2026

DANAHER MOTION / KOLLMORGEN

Danaher Motion / Kollmorgen SERVOSTAR 601 Digital Servo Amplifier

Danaher Motion / Kollmorgen Motion Controllers. Voltage: 400–480 V, Bandwidth: 400 Hz, Current: 1.5 A (model S60100).



MODEL

**Danaher Motion /
Kollmorgen
SERVOSTAR 601**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

SERVOSTAR 601

LISTING

[https://aumictechlabs.c
om/products/servostar-
601-2/](https://aumictechlabs.com/products/servostar-601-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Danaher Motion / Kollmorgen SERVOSTAR 601 is a fully digital servo amplifier engineered for precision motion control in industrial automation and robotics. Part of the SERVOSTAR 600 family, this amplifier delivers closed-loop control of torque, speed, and position for brushless synchronous servomotors through advanced digital control algorithms and multiple feedback options. Technical Specifications Nominal current range: 1.5 to 20 A (standard version) AC input line voltage: 400–480 V, three-phase Maximum closed-loop velocity bandwidth: 400 Hz Switching frequency: 8 kHz Operating temperature: 0–40 °C Power rating: 1 kVA (model S60100) Nominal output current: 1.5 A (model S60100) Motion profile storage capacity: Up to 180 profiles Analog I/O: 2 configurable inputs, 2 configurable outputs Digital I/O: 4 configurable inputs, 2 configurable outputs Resolution: 14-bit Differential input voltage: ±10 V Cable capacitance (max):

30 nF/km Cable output impedance (max): 150 ohms Key Features Digital velocity mode with PI and PDFF control loop options Patented DQ and torque angle control algorithms Pluggable connectors and flexible interface options for simplified installation and setup Rugged resolved or high-accuracy sine encoder feedback Resolver/digitizer support for demanding motion tasks Incremental position output via ROD interface Hardware enable via +24 VDC (connector X3 pin 15) Software enable through Function Key F12 Transient overvoltage rating: 1000 V between outer conductors (<50 μ s), 2000 V between outer conductors and housing (<50 μ s) Typical Applications Brushless synchronous servomotor control in automation systems, precision positioning, and robotics requiring high-accuracy closed-loop operation. Compatibility & Integration Multiple fieldbus interfaces supported: CANopen, PROFIBUS, and SERCOS. Expansion cards available for DeviceNET and EtherCAT. Serial RS-232 connection option.

Features & description

From manufacturer datasheet

Built-in braking circuit with 66 ohm internal resistor class

IP20 protection for cabinet mounting Technical Specifications Model: SERVOSTAR 601 Instrument Type: digital servo amplifier Rated Output Current: 1.5 A Family Models Currents: 601 1.5 A 603 3 A 606 6 A 610 10 A 614 14 A 620 20 A Body Width 601 Class: 70 mm Mass 601 Class: approximately 6.13 kg Mains Voltage: three phase 208 to 480 VAC plus or minus 10 percent Mains Frequency: 50/60 Hz Auxiliary Supply: 24 VDC isolated Current Loop Update: 62.5 us Speed Loop Update: 65/250 us Position Loop Update: 250 us Operating Temperature Full Load: 0 to 45 C Operating Temperature Derated: 45 to 55 C Altitude Derating Start: above 1000 m Protection Rating: IP20 Internal Brake Resistor 601 603 Class: 66 ohm Internal Brake Resistor Higher Class: 33 ohm DC Bus Sharing: supported multi amplifier Main Power Terminal: X0 Control Power Terminal: X4 Brake Resistor Terminal: X8 Peak Variant Contrast: 610-30 30 A peak class Notes Numeric rows from Kollmorgen SERVOSTAR 600 family hardware parameter summaries covering the 601 rating and shared family timing and mains data.

SERVOSTAR601 Characteristics / Specifications

PARAMETER	VALUE
Model	SERVOSTAR 601
Instrument Type	digital servo amplifier
Rated Output Current	1.5 A
Family Models Currents	601 1.5 A 603 3 A 606 6 A 610 10 A 614 14 A 620 20 A
Body Width 601 Class	70 mm
Mass 601 Class	approximately 6.13 kg
Mains Voltage	three phase 208 to 480 VAC plus or minus 10 percent
Mains Frequency	50/60 Hz
Auxiliary Supply	24 VDC isolated
Current Loop Update	62.5 us
Speed Loop Update	65/250 us
Position Loop Update	250 us
Operating Temperature Full Load	0 to 45 C
Operating Temperature Derated	45 to 55 C
Altitude Derating Start	above 1000 m
Protection Rating	IP20
Internal Brake Resistor 601 603 Class	66 ohm
Internal Brake Resistor Higher Class	33 ohm
DC Bus Sharing	supported multi amplifier
Main Power Terminal	X0
Control Power Terminal	X4
Brake Resistor Terminal	X8
Peak Variant Contrast	610-30 30 A peak class
Operating temperature	Full Load: 0 to 45 C

SERVOSTAR601 Specifications

PARAMETER	VALUE
Kollmorgen SERVOSTAR 601 Digital Servo Amplifier	Overview
Applications	Industrial servo axes requiring compact 70 mm amplifiers, multi-axis DC bus sharing, and 208-480 VAC worldwide mains connection.
Key Features	One point five ampere rated output in 70 mm width
Current loop update 62.5 us	Built-in braking circuit with 66 ohm internal resistor class
Technical Specifications	Model: SERVOSTAR 601

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
Altitude Derating Start	above 1000 m
Protection Rating	IP20
Internal Brake Resistor 601 603 Class	66 ohm
Internal Brake Resistor Higher Class	33 ohm
DC Bus Sharing	supported multi amplifier
Main Power Terminal	X0
Control Power Terminal	X4
Brake Resistor Terminal	X8
Peak Variant Contrast	610-30 30 A peak class Notes Numeric rows from Kollmorgen SERVOSTAR 600 family hardware parameter summaries covering the 601 rating and shared family timing and mains data.

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	
Specifications	
PARAMETER	VALUE
Model	SERVOSTAR 601
Instrument Type	digital servo amplifier
Rated Output Current	1.5 A
Family Models Currents	601 1.5 A 603 3 A 606 6 A 610 10 A 614 14 A 620 20 A
Body Width 601 Class	70 mm
Mass 601 Class	approximately 6.13 kg
Mains Voltage	three phase 208 to 480 VAC plus or minus 10 percent
Mains Frequency	50/60 Hz
Auxiliary Supply	24 VDC isolated
Current Loop Update	62.5 us
Speed Loop Update	65/250 us
Position Loop Update	250 us
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Internal Brake Resistor 601 603 Class	66 ohm
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DC Bus Sharing	supported multi amplifier
Main Power Terminal	X0
Control Power Terminal	X4
Brake Resistor Terminal	X8
Peak Variant Contrast	610-30 30 A peak class
Notes	
Numeric rows from Kollmorgen SERVOSTAR 600 family hardware parameter summaries covering the 601 rating and shared family timing and mains data.	

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.