

**Aumictech**

Test &amp; measurement · bought, sold, repaired, calibrated

**Data Sheet**

August 15, 2026

DANAHER MOTION / KOLLMORGEN

# Danaher Motion / Kollmorgen SERVOSTAR 603 Digital Servo Amplifier

Danaher Motion / Kollmorgen Motion Controllers. Current: \*\* 3 A RMS per phase, Current: \*\* 6 A RMS per phase, Voltage: \*\* Up to 675 V maximum.

**MODEL****Danaher Motion /  
Kollmorgen  
SERVOSTAR 603****CALIBRATION****Available on  
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****SERVOSTAR 603****LISTING**<https://aumictechlabs.com/products/servostar-603-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The Danaher Motion / Kollmorgen SERVOSTAR 603 is a fully digital servo amplifier engineered for motion control in industrial automation and robotics. This compact drive delivers advanced commutation technology with PI and PDFF digital control loop options, supporting velocity loop bandwidths up to 400 Hz. The amplifier accepts 3-phase AC input at 230–480 V (50/60 Hz) or 400–480 V, with continuous output of 3 A RMS per phase and peak capability of 6 A RMS per phase. Maximum DC bus link voltage reaches 675 V. Technical Specifications Input Power: 3-phase, 230–480 V at 50/60 Hz or 400–480 V Continuous Current: 3 A RMS per phase Peak Current: 6 A RMS per phase Power Rating: 1.2 kW or 2 kVA (configuration-dependent) DC Bus Link Voltage: Up to 675 V maximum Switching Frequency: 8 kHz or 16 kHz motor current ripple frequency Velocity Loop Bandwidth: Up to 400 Hz maximum closed loop Operating Temperature:

0–40 °C (derated above ambient to 55 °C) Storage Temperature: –25 °C to 55 °C Dimensions: 275 × 265 × 70 mm Weight: 4.2 kg Ingress Protection: IP20 Key Features Patented DQ and Torque Angle Control with advanced sinewave commutation Dual feedback support: resolver or high-accuracy sine encoder Built-in encoder equivalent output eliminates separate position feedback device Memory capacity for up to 180 motion profiles Configurable analog I/O: 2 inputs (±10 V, 12/14-bit resolution), 2 outputs (±10 V, 10-bit resolution) Configurable digital I/O: 4 inputs and 2 outputs standard; optional card supports 14 inputs and 8 outputs RS-232 serial communication Drive status relay with contact closure rated 0.5 A at 24 V Pluggable connectors for straightforward installation Easy-to-tune servo loops Restart lock function (–AS variant) prevents restart until motor stops Typical Applications Industrial automation systems Robotic motion control CNC machine integration Precision positioning Compatibility & Integration The SERVOSTAR 603 operates with servo motors rated at equal or greater voltage. Variants include SERVOSTAR 603-AS, S60300, and S60301-NA. CNC control interface compatible. Available model options span 1.5 to 70 A nominal current range within the SERVOSTAR 600 series.

## 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 603  
Instrument Type: digital servo amplifier Rated Output Current: 3 Arms plus or minus 3% Peak Output Current: 6 Arms for 5 s plus or minus 3% Rated Installed Power: 2 kVA at 480 V Mains Voltage 60 Hz: 3 x 208 V minus 10% to 480 V plus 10% Mains Voltage 50 Hz: 3 x 230 V minus 10% to 480 V plus 10% Dc Link Voltage: 260 to 675 V Continuous Regen Internal: 80 W Continuous Regen External Max: 0.5 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)

## SERVOSTAR603 Characteristics / Specifications

| PARAMETER                             | VALUE                                                     |
|---------------------------------------|-----------------------------------------------------------|
| Model                                 | SERVOSTAR 603                                             |
| Instrument Type                       | digital servo amplifier                                   |
| Rated Output Current                  | 3 Arms plus or minus 3%                                   |
| Peak Output Current                   | 6 Arms for 5 s plus or minus 3%                           |
| Rated Installed Power                 | 2 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             | 80 W                                                      |
| Continuous Regen External Max         | 0.5 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 |

# SERVOSTAR603 Specifications

| PARAMETER                                                | VALUE                                                                                                                                       |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Kollmorgen Danaher SERVOSTAR 603 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 603                                                                                                                        |

# 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. 603 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                        |                                                           |
|---------------------------------------|-----------------------------------------------------------|
| Specifications                        |                                                           |
| PARAMETER                             | VALUE                                                     |
| Model                                 | SERVOSTAR 603                                             |
| Instrument Type                       | digital servo amplifier                                   |
| Rated Output Current                  | 3 Arms plus or minus 3%                                   |
| Peak Output Current                   | 6 Arms for 5 s plus or minus 3%                           |
| Rated Installed Power                 | 2 kVA at 480 V                                            |
| Mains Voltage 60 Hz                   | 3 x 208 V minus 10% to 480 V plus 10%                     |
| Mains Voltage 50 Hz                   | 3 x 230 V minus 10% to 480 V plus 10%                     |
| Dc Link Voltage                       | 260 to 675 V                                              |
| Continuous Regen Internal             | 80 W                                                      |
| Continuous Regen External Max         | 0.5 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)                |

#### Notes

From Kollmorgen SERVOSTAR 600 rated-data tables (601-620 columns) and SERVOSTAR 600 safety/hardware manuals. 603 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](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

788 S 500 E, Pleasant Grove, UT 84062  
[sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341  
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·  
30-day returns  
NAICS 423690 · 811210 · 541380  
Generated August 15, 2026

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