KOLLMORGEN™

Digital Servoamplifier
SERVO**STAR**® 200

DANAHER MOTION

*Helping you build a better machine, **faster.***

SERVO**STAR**® 200

Danaher Motion's Kollmorgen SERVO**STAR**® 200 brushless servo drives push high performance servo technology into lower power applications than was previously possible without having to compromise on reliability or package size. Couple a SERVO**STAR**® 200 drive with a Kollmorgen AKM servo motor for a complete servo control solution designed to excel in applications such as semiconductor fabrication, electronic assembly, packaging, medical, and woodworking equipment.

Kollmorgen SERVO**STAR**® 200 servo drives are the first all digital industrial drives with a velocity loop bandwidth up to 800 Hz offering unmatched system throughput and simplified tuning. High resolution (24 bit) feedback and high performance 3–5 kHz current loop bandwidth provide smooth motion and rapid start and stop action to optimize machine performance. Smart feedback and industry leading high bandwidth deliver fast and accurate commissioning by eliminating the need for servo loop tuning in most applications.

Separate "Keep Alive" power input allows rapid recovery from emergency stop conditions.

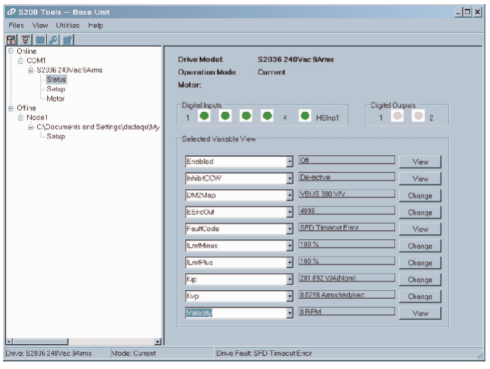
Optically isolated inputs/outputs, positive locking connectors and full fault protection promise long machine life and immunity to accidental damage. A single motor power/feedback cable simplifies connectivity. All connectors and LED status indicators are easily accessible from the front of the drive.

Highlights

- DC or AC input voltage:
  DC type: 20 V ... 90 V
  AC type: 110 $V_{-10\%}$ ... 240 $V^{+10\%}$, 50/60 Hz
- Highest performance all digital servo in the industry
- Fully configurable via RS232 interface
- Operation from a PC via setup software
- Easy set up and tuning with Smart Feedback Device
- Optimized performance with AKM motors
- Rugged optically isolated I/O
- UL508C recognition, CE (EN50178, EN61800-3)
- Very compact footprint
- Full fault protection
- Torque and Velocity control standard
- Optional CANopen or DeviceNet Position Control

WINDOWS™ Graphical User Interface (GUI)

The new Graphical User Interface is designed to expedite the set up process. Although most applications will work with the default parameter that are set automatically during power up, it may be necessary to adjust some of the user parameters to fully utilize all of the drive functionality and to optimize servo loop tuning. If you are familiar with Windows Explorer and tree structures this GUI is designed to make your life simple now that is "Easy to Use".



Increased Machine Throughput and Longer Life

Servo system performance is synonymous with machine throughput. The SERVO**STAR**® 200 family takes servo performance to new heights.

- Industry-leading current loop bandwidth up to 5 KHz and velocity loop bandwidth up to 800 Hz means machine throughput can be increased by as much as 2 to 3 times.
- Robust design including full fault protection, locking connectors and optical isolation promise greater machine "up-time".
- Smooth motion, a benefit of sinusoidal current control and high resolution (24 bit) feedback minimizes harsh torque disturbances that can cut short the life of mechanical components.
- Both the AC and the DC input drives are equipped with separate control power input to speed recovery from "E-Stop" conditions.

Reduced Engineering and Support Time

Simplified tuning, friendly Graphical User Interface and shared components with Stepper products.

- Windows-based Graphical User Interface models the tree format found in Explorer so learning is quick and easy.
- Easy to debug with full fault diagnostics reduce engineering support time.
- Shares option cards, electrical I/O, and GUI components with the P7000 stepper drive family reducing the time required to learn new products.

Drive Names

DC Drive

Modular micro servodrive for operation with servomotors. This device is powered at 20 V DC to 90 V DC.

S20330-VTS: 3 A cont/9 A peak/base Velocity/Torque drive/support Halls or SFD
S20330-CNS: 3 A cont/9 A peak/CANopen/Indexing drive/support Comcoder or SFD
S20330-DNS*: 3 A cont/9 A peak/DeviceNet/Torque drive/support Comcoder or SFD
S20630-VTS: 6 A cont/18 A peak/base Velocity/Torque drive/support Halls or SFD
S20630-CNS: 6 A cont/18 A peak/CANopen/Indexing drive/support Comcoder or SFD
S20630-DNS: 6 A cont/18 A peak/DeviceNet/Torque drive/support Comcoder or SFD

AC Drive

Self contained micro servo drive for operation with servomotors. This device is powered at 120 or 240 V AC.

S20260-VTS: 1.5 A cont/4.5 A peak/base Velocity/Torque drive/support Halls or SFD
S20260-CNS: 1.5 A cont/4.5 A peak/CANopen/Indexing drive/support Comcoder or SFD
S20260-DNS*: 1.5 A cont/4.5 A peak/DeviceNet/Torque drive/support Comcoder or SFD
S20360-VTS: 3 A cont/9 A peak/base Velocity/Torque drive/support Halls or SFD
S20360-CNS: 3 A cont/9 A peak/CANopen/Indexing drive/support Comcoder or SFD
S20360-DNS*: 3 A cont/9 A peak/DeviceNet/Torque drive/support Comcoder or SFD

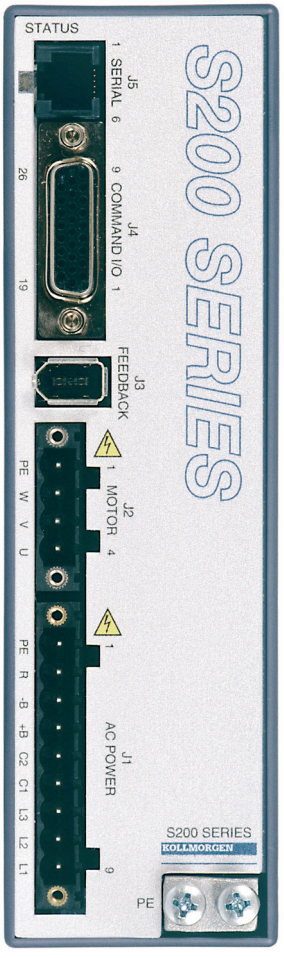
Technical Data

Rated data	DIM	SERVO**STAR**®			
		20330	20630	20260	20360
Rated supply voltage	V	20 ... 90 V DC		0 ... 264 V AC	
Control logic, supply voltage	V	10 ... 90 V DC		85 ... 265 V AC	
Rated output current (rms value, ± 3 %)	A	3	6	1.5	3
Peak output current (± 3 %)	A	9	18	4.5	9
Peak time	s	3	3	3	3
Current loop Bandwidth max.	kHz	5	5	3	3
Velocity loop Bandwidth max.	Hz	800			
Update rate	MHz	1.25			

Dimensions

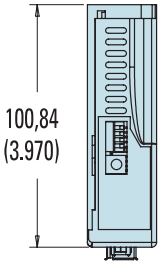
	SERVO**STAR**® 200		
	DC	DC & option	AC
Height	152.4 mm	152.4 mm	175 mm
Width	28.7 mm	48.3 mm	54.8 mm
Depth without connectors	101 mm	101 mm	132 mm
Depth with connectors	~130 mm	~130 mm	~180 mm

(pending)

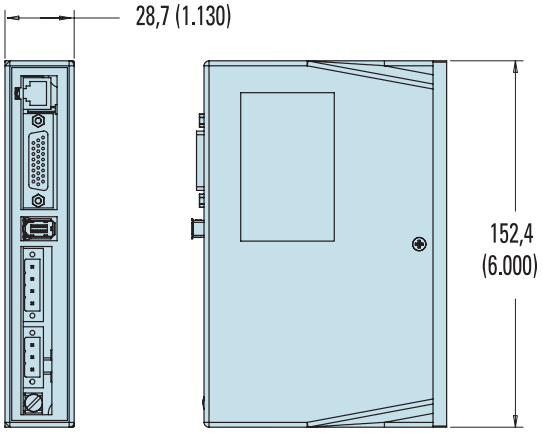


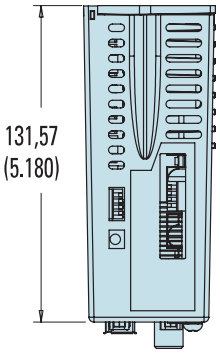
Dimensions

mm (inch)

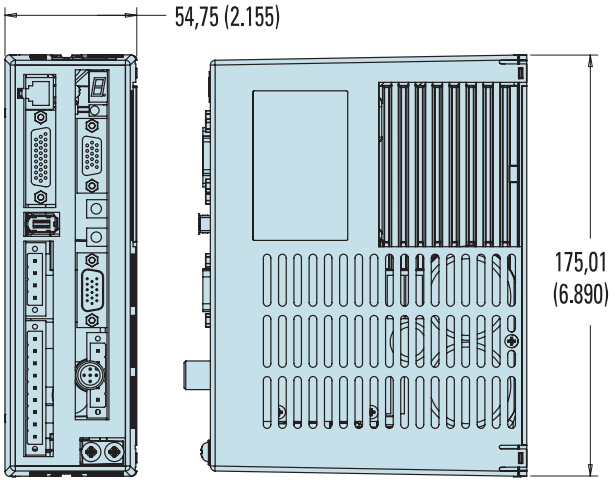


SERVO**STAR**® 200 DC





SERVO**STAR**® 200 AC



KOLLMORGEN™

EUROPE

United Kingdom
Danaher Motion
Chartmoor Road, Chartwell Business Park
Leighton Buzzard, Bedfordshire
LU7 4WG; United Kingdom
Phone: +44 (0)1525 243 243
Fax: +44 (0)1525 243 244
E-mail: salesuk@danahermotion.com

France
Danaher Motion
C.P 80018
12, Rue Antoine Becquerel – Z.I. Sud
F – 72026 Le Mans Cedex 2
France
Phone: +33 (0) 243 50 03 30
Fax: +33 (0) 243 50 03 39
E-mail: sales.france@tollo.com

Germany
Danaher Motion GmbH
Wacholderstr. 40-42
D-40489 Düsseldorf
Germany
Phone: +49 (0) 203 9979-0
Fax: +49 (0) 203 9979 155
E-mail: sales.germany@danahermotion.com

Italy
Danaher Motion srl
Largo Brughetti
I - 20030 Bovisio Masciago
Italy
Phone: +39 0362 594260
Fax: +39 0362 594263
E-mail: info@danahermotion.it

Sweden
Danaher Motion Stockholm AB
Solkraftsvägen 13
SE-135 70 Stockholm
Sweden
Phone: +46 (0) 8-682 64 00
Fax: +46 (0) 8-682 65 80
E-mail: info@danahermotion.se

Switzerland
Danaher Motion SA
La Pierreire 2
1029 Villars-Ste-Croix
Switzerland
Phone: +41 (0) 21 631 33 33
Fax: +41 (0) 21 636 05 09
E-mail: info@danaher-motion.ch

USA, CANADA or MEXICO

Danaher Motion
203A West Rock Road
Radford, VA 24141 USA
Phone: 1-540-633-3400
Fax: 1-540-639-4162
E-mail: DMAC@danahermotion.com

ASIA

China
Danaher Motion
Rm 2205, Scitech Tower
22 Jianguomen Wai Street
Beijing, China, 100004
Phone: +86 10 6515 0260
Fax: +86 10 6515 0263
E-mail: chinainfo@danahermotion.com.cn

Japan
Danaher Motion Japan
2F, Sigma Hatchobori Bldg
2-7-1, Hatchobori, Chuo-ku
Tokyo 104-0032 Japan
Phone: +81-3-6222-1051
Fax: +81-3-6222-1055
E-mail: info@danahermotion.com

200507-12 24Nov06 ENG
Information & specifications subject to change at any time. Printed in Germany.
© Danaher Motion GmbH 2006

DANAHER MOTION

www.danahermotion.com

*Helping you build a better machine, **faster.***