Digital Servoamplifier
SERVOSTAR® 600

KOLLMORGEN®

Because Motion Matters™

SERVOSTAR® 600

Designed for worldwide usability the SERVOSTAR® 600 series of servo amplifiers makes deliberate use of the advantages of digital servo technology. High flexibility of hardware and software, simple operation and big function range even in the standard device are convincing arguments. Innovative techniques combined with an attractive design offer you the solution to just about every drive problem. Combine this with our synchronous servomotors and all the important accessories and you can see that we provide you with completely integrated drive systems.

SERVOSTAR® 610

SERVOSTAR® 614

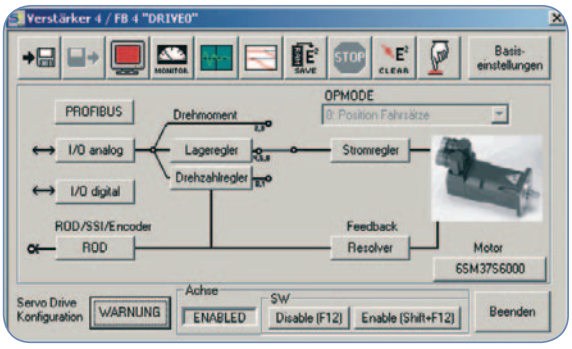
SERVOSTAR® 640

Highlights

- Operation directly from mains supply,
  230V-10% ... 480V+10%, 50 Hz
  208V-10% ... 480V+10%, 60 Hz
- Up to 20 Amps with integral mains filter
- All shield connections directly at the amplifier
- DC-link circuits can be connected in parallel with patented ballast dealing
- Encoder emulation: ROD426- compatible (dec./bin.) or SSI (Gray/binary) selectable
- Feedback from resolver or high resolution sinecosine encoder
- Fully programmable via RS232 interface
- Operation from a PC via setup software (with WINDOWSTM 95/98/2000/ME/NT/XP/Vista/Win7)
- Operation with 2 keys on the amplifier, status monitoring via LED display
- up to 20 Amps suitable for 300mm switchgear cabinets
- Interface integrated for stepper controllers, masterslave operation, electr. gear and CANopen
- Intelligent positioning:
  speed profiles, register control, jolt limiting, daisy chained tasks, absolute and relative tasks, several types of reference traverses
- Multi-Interface slot
  Choose one of these expansion cards additionally to the integrated interfaces:
  PROFIBUS DP, SERCOS, DeviceNet, Ethernet, Single Axis Controller or I/O expansion

WINDOWS™ Setup Software

The WINDOWS™ 95/98/NT/2000/ME/XP/Vista/Win7-compatible operator software offers direct access to all the relevant control parameters of the SERVOSTAR® 600. During commissioning, the control-loop behaviour can be optimized online – while the drive is running. Windows techniques make it possible to display several servo controllers that are linked through the integrated CANopen bus. Integrated oszilloscop functionality, bode plot, a terminal editor for ASCII channel communication, import/export of data sets and predefined parameter sets for amplifier-motor combinations simplify the drives setup.



Technical Data

		SERVOSTAR® 600							
Rated data	DIM	601	603	606	610	614	620	640	670
Rated supply voltage	V~	3 x 208V$_{-10\%}$ ... 480V$^{+10\%}$, 60Hz 3 x 230V$_{-10\%}$ ... 480V$^{+10\%}$, 50Hz							
Rated installed power for S1 operation	kVA	1	2	4	7	10	14	30	50
Rated DC link voltage	V=	260...675							
Rated output current (rms value, ± 3%)	Arms	1,5	3	6	10	14	20	40	70
Peak output current (max. 5s, ± 3%)	Arms	3	6	12	20	28	40	80	140
Continuous power regen circuit (RBint)	W	80	80	200	200	200	200		
Continuous power regen circuit (RBext) max.	kW	0,5	0,5	1,5	1,5	1,5	1,5	6	6
Peak power regen circuit (RBext) max.	kW	21	21	21	21	21	21	45	70

The sizes for 300/400mm switchgear cabinets

	SERVOSTAR® 600			
	601 / 603 / 606 / 610	614	620	640 /670
Height	275 mm	275 mm	275 mm	345 mm
Width	70 mm	100 mm	120 mm	250 mm
Depth	265 mm	265 mm	265 mm	300 mm
Depth with connectors	273 mm	273 mm	273 mm	325 mm

Multi-Interface

CANopen Interface always integrated

A CANopen interface is integrated into the standard instrument. If several SERVOSTAR® 600 are linked together through the CANopen interface, then the entire group can be parameterized and commissioned with the aid of a PC and the WINDOWS™ operator software, without requiring a master.

Transmission procedure:

- CAN standard ISO 11898 (high-speed communication)
- max. 1MBit/s Übertragungsgeschwindigkeit
- Unterstützt die CANopen Standards DS301, DSP402

SERCOS expansion card

The servo amplifi er can be operated through a SERCOS Interface. This expansion card makes it possible to transmit setpoint and actual values with different cycle times (1 to 65 ms) with an additional interpolation of the setpoints within the drive. This enables a synchronization that is exact to the µs, for fast, precise multi-axis control.

Transmission procedure:

- SERCOS standard to IEC 61491
- transmission through interference-proof optical fibres
- baud rate pre-selectable to 2 or 4 MBaud
- optical output power is adjustable

EtherCAT expansion card

- EtherCAT supports cycle times of less than 100 µs on the bus
- CAN application layer over EtherCAT
- No need for address settings
- Baud rate is set automatically
- Plug & Play

PROFIBUS DP expansion card

The servo amplifi er can be operated through a PROFIBUS DP interface.

Transmission procedure:

- PROFIBUS DP to EN 50170
- baud rates 187.5 kBaud to 12 MBaud
- supports the PROFIBUS drive profi le PROFIDRIVE

DeviceNet expansion card

A DeviceNet Interface can be used as an option.

Transmission procedure:

- CAN-Standard ISO 11898 (high-speed communication)
- 500kBit/s max. transmission speed

About Kollmorgen

Kollmorgen is a leading provider of motion systems and components for machine builders. Through world-class knowledge in motion, industry-leading quality and deep expertise in linking and integrating standard and custom products, Kollmorgen delivers breakthrough solutions that are unmatched in performance, reliability and ease-of-use, giving machine builders an irrefutable marketplace advantage.

For assistance with your application needs visit www.kollmorgen.com for a global contact list.

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