



# SERVOSTAR™ CD-Lite *Current & Velocity Drivers and UV Drivers* **Servo Amplifier**

## Description

The SERVOSTAR™ CD-Lite is a new economic addition to the SERVOSTAR™ family. Designed primarily for current loop applications, this amplifier provides SERVOSTAR™ compatible high performance fully digital Current Loop control. Digital control brings with it all the advantages of ease of use, eliminating the need for fiddling with potentiometers. Since the control loop parameters are stored digitally, there will be no drift in performance over time. Operating modes of the current and velocity drive enable internal sinusoidal commutation from a  $\pm 10\text{Vdc}$  command. UV operating modes enable internal current loop from two external commutation analog comand signals.

### Current & Velocity Drivers

- Digital current loop
- Digital velocity loop
- Encoder or resolver feedback

### CD-Lite

- 3 to 20 Amps continuous CD-Lite current
- Self protecting power stage
- PWM switching frequency up to 16kHz
- Supports Kollmorgen's wide range of motor solutions
- Optional 24VDC input, to separate logic power from main power
- Easy tuning and setup using MOTIONLINK® for WINDOWS™
- Easy programing utilizing a Personality Module



## Power Block Ratings

Model	Output Continuous Current Per Phase (RMS/Phase) @ 45°C	Output Peak Current Per Phase (RMS/Phase)	AC Line Input Voltage	Rated Input Power (kVA)	Rated Output Continuous Power (kVA)	Regen. Option
Lx03	3 Amp.	9 Amp. (0.5 sec)	115(1phase)	0.44	0.35	ERH-26
			230(1phase)	0.89	0.7	
			230(3phase)	1.4	1.1	
Lx06	6 Amp.	18 Amp. (0.5 sec)	115(1phase)	0.89	0.7	ERH-26
			230(1phase)	1.8	1.4	
			230(3phase)	2.8	2.2	
Lx10	10 Amp.	20 Amp. (2 sec)	230(3 phase)	4.6	3.5	ERH-26
Lx20	20 Amp.	40 Amp. (0.5 sec)	230(3 phase)	9.2	7.0	ERH-26

# SERVOSTAR™CD-Lite *Current & Velocity Drivers and UV Drivers* Servo Amplifier

## Features

### Operational Modes Current & Velocity Drive

- ±10VDC analog command with internal sinusoidal commutation
- Current mode: SERVOSTAR CD compatible current loop parameters
- Velocity mode: SERVOSTAR CD compatible PDFFF velocity controller, with programmable velocity controller output filter
- Encoder equivalent output

### Motor Feedback for Current and Velocity Drive

- Incremental encoder: A/B/Z with HED (Hall Effect Device)
- Incremental encoder: A/B with HED
- HED only
- Resolver

### Operational Modes UV Drive

- Two ±10VDC analog external commutation commands
- Current mode: SERVOSTAR CD compatible current loop parameters

### Robust Design

- Fully isolated electronics
- Fault Protection against output phase to phase short circuit, over-voltage, under-voltage, over-current, over-temperature (motor and drive), feedback loss
- Current foldback ( $I^2t$ ) provides protection against drive over-heating
- Can be optionally used with the Kollmorgen Regeneration Resistor

### Amplifier Configuration

- Use MOTIONLINK® to configure the amplifier
- Use the Personality Module to quickly and easily configure additional amplifiers

### Commonality with the SERVOSTAR

- The CD-Lite is fully compatible with the SERVOSTAR CD servo amplifier, from the command set point of view, the physical size, and the range of available power options.

## Ordering Information

The SERVOSTAR™ CD-Lite model number is built as follows:

Note: some models are not standard, but are available up on request.

