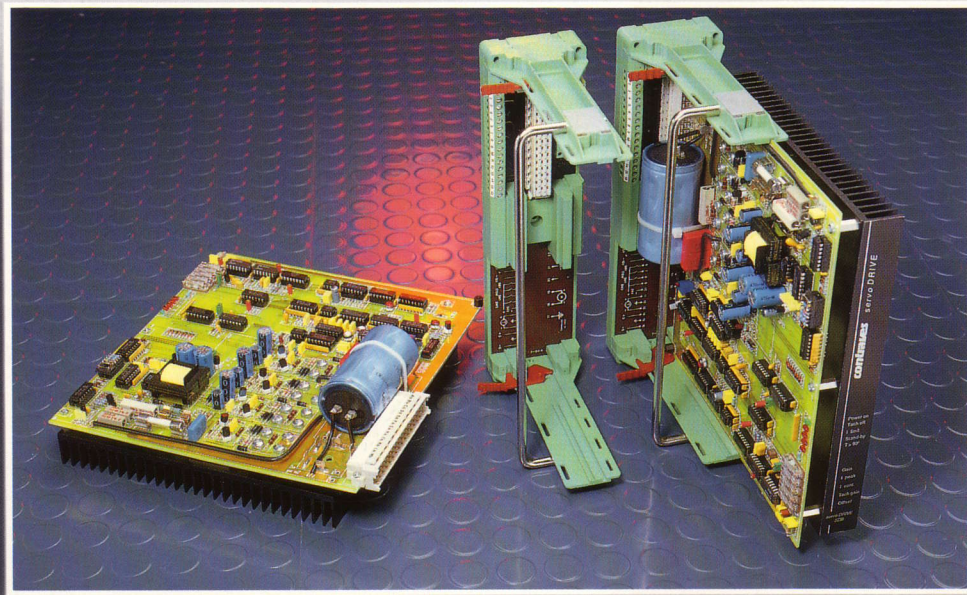


servo DRIVE

contraves

SDB series

Servo-amplifier for DC-motors



Description and technical data

Brief description

The transistorized servo controllers of the SDB series have been developed for regulating the speed of DC servomotors. The compact controller consists of a single PCB in double euroboard format and accommodates the power supply as well as the control and braking circuits.

For wall mounting there is a PCB block with integral connecting terminals.

The controller may be connected to a 3-phase or DC power supply.

All auxiliary voltages needed are provided on the controller.

It is therefore suitable for battery operation too.

The controller has LEDs indicating

- Controller switched on
- Tachometer signal failure
- Current limit reached
- Standby
- Temperature exceeded

Special features

- Speed control by pulse-width modulation (9 kHz) with or without tachometer feedback
- Analog reference input
- Adjustable reference integrator from 0,15 to 1,5 s (optional)
- Opto-isolated inputs for controller enable, two limit switches, reference 0
- + 15 V and -15 V outputs for feeding external circuits (max. 20 mA)
- Relay signalling controller ready
- Protection circuits and monitors
 - Continuous current limit
 - Peak current limit
 - RPM-dependent current limit
 - Tachometer signal
 - Controller temperature
 - Overvoltage
 - Short circuit and earth fault
 - Automatic power limitation when ambient temperature exceeds 45°C

Technical data

Type	Cont. current I_n (A)	Max. current I_{max} (A)	Rated power P at 150 VDC (kW)	Min. armature inductance (mH)
SDB 5	5	10	0,75	3,0
SDB 12	12,5	25	1,9	1,2
SDB 20	20	40	3,0	0,8

Supply voltage 3×40–115 V AC ± 10%
50/60 Hz
or 48–160 V DC

Max. output voltage 150 V DC

Max. reference voltage ± 10 V

Max. admissible tachometer voltage 100 V

Operating temperature range 0–45°C
45–65°C with reduced power: 2%/°K

Control range >1:20'000 (with tachometer feedback)

Control accuracy <0,5% at n_{max}

Weight, incl. PCB block 2.250 kg

Dimensions

