



## SC10

### Servo Controller

- Positioning and speed-/torque regulator
- Digital 4-Q regulator
- Integrated ballast circuit with ballast resistor
- Output for parking brake
- Set value analog
  - +/- 10V DC / 0 ... 10 V DC with direction signal
  - 0/4 ... 20 mA
- Galvanically insulated fieldbus interface:
  - Profibus-DP
  - CANopen DSP402
  - RS485
  - EtherCAT
- Direct status- and diagnostics function through LED's
- Digital In- and Outputs (24V)
- RS232 for parameter setting
- Motor supply 230V AC or 24 - 60 V DC
- Logic supply 24V
- Options:
  - Via switch adjustable bus address/ baud rate
  - Safe Torque Off Category 3 Performance Level e (EN ISO 13849-1)
  - Multiturn absolute encoder processing

**Low Cost**

**CANopen**

**PROFI<sup>®</sup>  
BUS**

**EtherCAT**



# Digital AC-Servo controller SC10

The SC10 is a servo controller for current, speed and positions control of AC servo motors with resolver technology. Optionally a HIPERFACE® interface can be integrated.

A ballast circuit with ballast resistor is already integrated. For higher ballast power an external ballast resistor can be connected.

Optional incremental outputs can simulate an encoder.

An analogue +/-10 V DC signal provides the set value for speed or torque. Alternatively up to 15 positions (driving data records) can be stored and called up over inputs.

An optional field bus interface (Profibus DP, CANopen DSP402, EtherCAT or RS485) permits the direct access to all drive data and functions.

The data storage takes place in a maintenance-free EEPROM, without buffer battery.

3 LEDs and additional status exits provide status and error indication.

Through the very compact building method the equipment needs little place in the control cabinet.

The PC software "ServoLink" makes all necessary adjustments in a comfortably way possible.

## Technical Data

### General:

|                      |  |  |
|----------------------|--|--|
| Ambient temperature: | 0 ... +40°C at rated power                           |  |
| Derating:            | 2%/K at temperatures >40° ... 50°C                   |  |
| Humidity:            | 5 - 85%, non-condensing                              |  |
| Cooling:             | Convection cooling and cooling though mounting plate |  |
| Dimensions:          | 65 x 196 x 118mm (WxHxD)                             |  |

### Power section:

Galvanic insulation from controller section according to VDE 0160, Short cirucuit and earthing proof for min. 2000 incidents.

|                    |                  |                |
|--------------------|------------------|----------------|
| Continuos current: | <u>24-60V DC</u> | <u>230V AC</u> |
| Peak current:      | 10A max.         | 5A max.        |
|                    | 10A max.         | 10A max.       |

### Ballast circuit:

|                          |   |
|--------------------------|---|
| Continuos ballast power: | Automatic ballast threshold processing                                    |
| Peak ballast power:      | 22W internal, 75W total<br>500W 1sec internal, 1,7kW 1sec total (120 Ohm) |

### Controller section:

|                    |  |
|--------------------|--|
| Supply voltage:    | Full electrical isolation from the power section, see above. |
| Power consumption: | 24V DC, unregulated (+20%, -10%)<br>ca. 5 W                  |
| Inrush current:    | $I_{max} = 6A$ for 0,8ms                                     |

## Order code:

|  |  |
|--|--|
| SC10/x.xxx.xxx.xxx   |  |
| <b>Power feed-in</b><br>24 - 60 V DC = 1<br>230V AC = 2  | <b>Custom specific options</b>   |
| <b>Basic version</b><br>Amplifier-Mode, 4/1 dig. I/O = 1<br>PLC-Interface, 8/2 dig. I/O = 2<br>Profibus-DP, 8/2 dig. I/O = 3<br>CANopen, 8/2 dig. I/O = 4<br>RS485, 8/2 dig. I/O = 5<br>EtherCAT, 8/2 dig. I/O = 6 | <b>Safety functions</b><br>0 = None (Standard)<br>1 = Safe Torque Off (Category 3 PL e)  |
| <b>Position aquisition</b><br>Resolver = 4<br>Multiturn Absolute encoder = 5   | <b>Address switches</b> (only with fieldbus)<br>0 = Without (Standard)<br>1 = With address switches  |
|  | <b>I/O-options</b> (only with fieldbus)<br>0 = 8 input / 2 outputs (Standard)<br>1 = 6 inputs / 4 outputs<br>2 = 6 inputs / 2 outputs / analogue input |
|  | <b>Drive for standstill brake</b><br>0 = Without drive for brake<br>1 = With drive for brake (Standard)  |

All data in this folder have an informative character without warranty of characteristics. Changes without previous announcement reserved.

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