

Speed Controllers

2-Quadrant PWM configurable via PC

SC 1801 S

| Values at 22°C | | SC 1801 S | |
|--|------------|-------------|------|
| Power supply electronic | U_P | 4 ... 18 | V DC |
| Power supply motor | U_{mot} | 1,8 ... 18 | V DC |
| PWM switching frequency ¹⁾ | f_{PWM} | 96 | kHz |
| Efficiency electronic | η | 95 | % |
| Max. continuous output current | I_{cont} | 1 | A |
| Max. peak output current ²⁾ | I_{max} | 2 | A |
| Standby current for electronic (at $U_P=12V$) | I_{el} | 0,018 | A |
| Operating temperature range | | -25 ... +60 | °C |
| Housing material | | Hotmelt | |
| Mass | | 12 | g |

¹⁾ for brushless DC-Motors without Hall sensors: $f_{PWM} = 24$ kHz

²⁾ S2 mode for max. 2s

Interfaces

Configuration of setpoint specifications, operating mode and controller parameters via USB programming adapter for Speed Controller.

Basic features

Speed-controlled operation of:

- DC-Micromotors operated with or without incremental encoders
- Brushless DC-Servomotors operated with digital or analog Hall sensors

- Brushless DC-Servomotors operated without Hall sensors (sensorless Operation)
- Brushless DC-Servomotors operated with digital Hall sensors and incremental encoders
- Brushless DC-Servomotors operated with absolute encoders

Note: For version, see options and connection information.

Range of functions

| | |
|----------------------|--|
| Description | Intermittent operation with up to double the continuous current. Separate voltage supply for motor and electronics. Integrated speed control by means of PI controller. Sensorless operation by evaluating the back electromotive force (EMF). Setpoint input of the speed via PWM or analog voltage value. Switching input for defining the direction of rotation of the motor. Digital output, can be programmed either as frequency output or as error output |
| Additional functions | Integrated current limitation to protect against thermal overload. Can optionally be operated in voltage controller mode or fixed speed mode. |

