

Speed Controller

Open Loop

For combination with:
Micro Brushless DC-Motor:
0206

Series SCBL 16002

	SCBL 16002			Units
	Minimum	Typical	Maximum	
Power supply	10	12	16	V DC
Standby current	–	70	–	mA
Output current (U = 12V, TA = 25°C) ¹⁾	–	–	200	mA
Speed range	0	–	100 000	rpm
Output voltage range	0	–	1,4	V _{eff}
Temperature range:				
– Operating temperature	0	–	+ 70	°C
– Storage temperature	- 20	–	+ 80	°C
Amplifier type	analog, microprocessor controlled			
Weight	160 g			

¹⁾ phase current

General description

The Speed Controller type SCBL 16002 is designed to drive the Micro Brushless DC-Motor Type 0206. The drive output is a three-phase sinusoidal signal. This drive method assures constant revolutions even at low speeds. The frequency (i.e. speed) and amplitude can be adjusted with external potentiometers.

In the standard mode all parameters are set by the potentiometers and switches at the controller box.

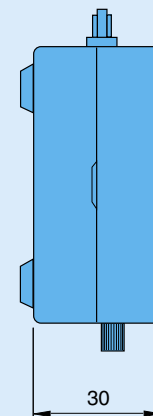
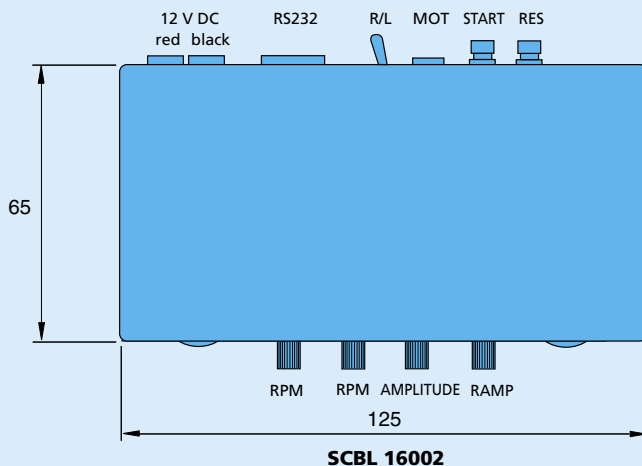
To adequately cover the large speed range from 0 to 100 000 rpm, two potentiometers are provided to set coarse and fine speed adjustments. The output voltage can be adjusted from 0 to 1,4 V_{eff}.

If the motor is overloaded it will lose synchronization like any other synchronous motor.

The motor will stop under this condition and simply vibrate at the driving frequency. This condition is not detected by the amplifier.

To avoid loss of synchronism during start up, the motor speed is ramped up. The ramp rate can be set by the potentiometer.

Dimensional drawings



Scale reduced

Specifications subject to change without notice.