

Accessories

Braking chopper

Series BC 5004

BC 5004			
Power supply		16 ... 50	V
Switching threshold	V_{th}	28 / 56	V
Max. continuous power losses ¹⁾	P_{cont}	10	W
Max. peak current ¹⁾		10	A
Total standby current, max.		20	mA
Temperature range:			
– Operating temperature		-25 ... +60	°C
– Storage temperature		-25 ... +85	°C
– Dimensions (L x W x H)			
		65 x 58 x 22	mm
– Weight			
		160	g

¹⁾ at 22°C ambient temperature

General information

The function of the braking chopper BC 5004 is to limit the supply voltage of 4 quadrant controllers and other ancillary devices such as programming adapters. When braking the drive, a voltage is generated and these controllers can feed this voltage back into the power supply.

Typical power supplies do not have the ability to absorb this energy and this can lead to an overvoltage and damage to the power supply. The braking chopper limits this voltage to an allowable level. The resulting energy losses are converted into heat by the braking resistors. In this way, damage to the power supply and other devices can be prevented.

The braking chopper can be used with 24V and 48V power supplies. The voltage limit can be adjusted using the jumper included with the braking chopper.

Description of jumper setting:

Mode 24V	Jumper between IN1 and IN2 installed for 24V power supply, switching threshold V_{th} 28V
Mode 48V	Jumper between IN1 and IN2 not installed for 48V power supply, switching threshold V_{th} 56V

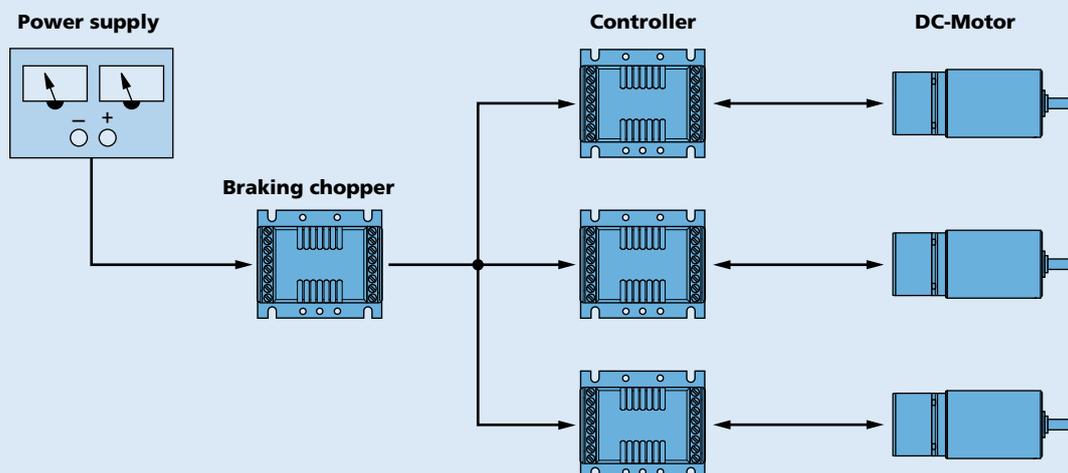
Status description:

The LED's indicate the status of the braking chopper.
LED A (green), LED B (red)

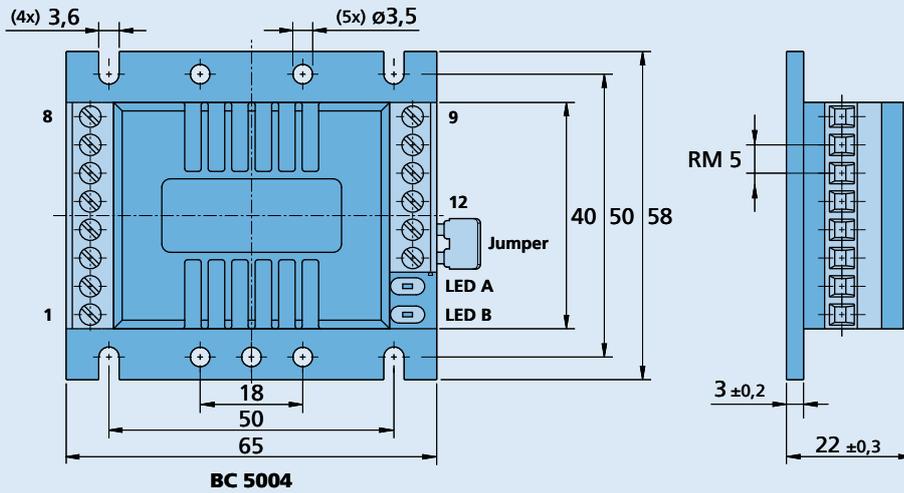
Mode	24V		48V	
	LED A	LED B	LED A	LED B
Not active	On	Off	On	On
Active	Blinking	Off	Blinking	On
Error	On	Blinking	On	Blinking

"Not active"	Switching threshold not reached
"Active"	Switching threshold exceeded; braking chopper limitation on
"Error"	Overload; braking chopper limitation off

Connection diagram



Dimensional drawing



Scale reduced 

Pin assignment

No.	Connection
1	GND
2	GND
3	GND
4	GND
5	U _{mot}
6	U _{mot}
7	U _{mot}
8	U _{mot}
9	U _{mot}
10	U _{mot}
11	GND
12	GND
13	IN 1
14	IN 2