



CP Automation
Keeping industry
in motion

Brake Chopper

BC 2.1 - BC 4.1

For use with:

- Brushless DC controllers
- Frequency inverters
- Battery chargers





Product data

- Worldwide input bus voltage without adjustments, 200 - 440VDC or 450 - 800VDC
- No separate control voltage for the control board necessary
- Emergency stop possible even at power failure, because the control board is powered by the DC bus
- Compact size
- Operating-, fault- and stand-by indication by LEDs
- Easy start up, no adjustments necessary
- Chopper is earth- and short-circuit protected
- Option: "-MS" Parallel or series connection of the brake choppers by means of master/slave function.
- Option: "-RM" Fault output, ready for operation as well as "chopper active" via optocoupler output.
Disable powerstage and trigger signal via optocoupler input.

Technical data

Environment	0-40 °C, less than 90% humidity, not condensed, up to 1000m
Enclosure	IP20
Line voltage	200-440V DC (for controller with 220-250V, $\pm 10\%$, 1 & 3 ph., 50/60Hz) 450-800V DC (for controller with 380-800V, $\pm 10\%$, 3 ph., 50/60Hz)
Chopper voltage	375V DC* (Chopper with 200-440V DC input voltage) 750V DC* (Chopper with 450-800V DC input voltage) *Other voltages are available on demand

Standards



Features

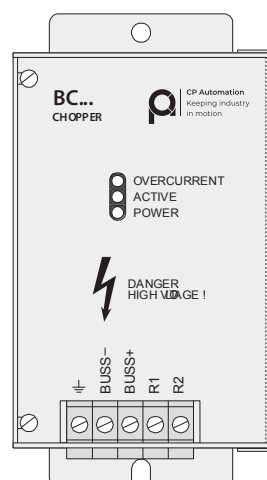
Enclosure IP20

Diagnosis display

Operating, stand-by and fault

Terminals

Chopper must not be
opened for connecting



Switching power supply
No control voltage necessary

Metal case
For optimal noise suppression

Output
Earth- and short-circuit protected

Overview

Brake Chopper 200-440V DC

Type	Part no.	Cont. Power [kW]	Peak power [kW]	Cont. current [A]	Peak current [A]	Fuse [A]	Resistance min. [Ω]
BC 2.1 - 16/5,5	12262-0F01	5,5	16	15	45	50	8,0
BC 2.1 - 24/6	12262-1F01	6,0	24	17	68	63	5,3
BC 3.1 - 32/12	12263-AF01	13	32	35	90	100	4,0
BC 3.1 - 32/22	12263-0F01	22	32	60	90	100	4,0
BC 3.1 - 47/25	12263-1F01	25	47	70	130	125	2,8
BC 3.1 - 65/27	12263-2F01	27	65	75	180	200	2,0
BC 4.1 - 90/33	12264-0F01	33	90	90	240	250	1,6
BC 4.1 - 120/36	12264-1F01	36	120	100	330	335	1,1
BC 4.1 - 185/41	12264-2F01	41	185	110	500	500	0,75

Brake Chopper 450-800V DC

Type	Part no.	Cont. Power [kW]	Peak power [kW]	Cont. current [A]	Peak current [A]	Fuse [A]	Resistance min. [Ω]
BC 2.1 - 33/11	12262-0F00	11	33	15	45	50	16
BC 2.1 - 51/13	12262-1F00	13	51	17	68	63	11
BC 3.1 - 67/26	12263-AF00	26	67	35	90	100	8,5
BC 3.1 - 67/45	12263-0F00	45	67	60	90	100	8,5
BC 3.1 - 97/52	12263-1F00	52	97	70	130	125	5,5
BC 3.1 - 135/56	12263-2F00	56	135	75	180	200	4,2
BC 4.1 - 180/67	12264-0F00	67	180	90	240	250	3,2
BC 4.1 - 250/75	12264-1F00	75	250	100	330	335	2,3
BC 4.1 - 360/100	12264-2F00	100	360	133	480	500	1,5

Accessories

Overcurrent relay (Protection of brake resistor)

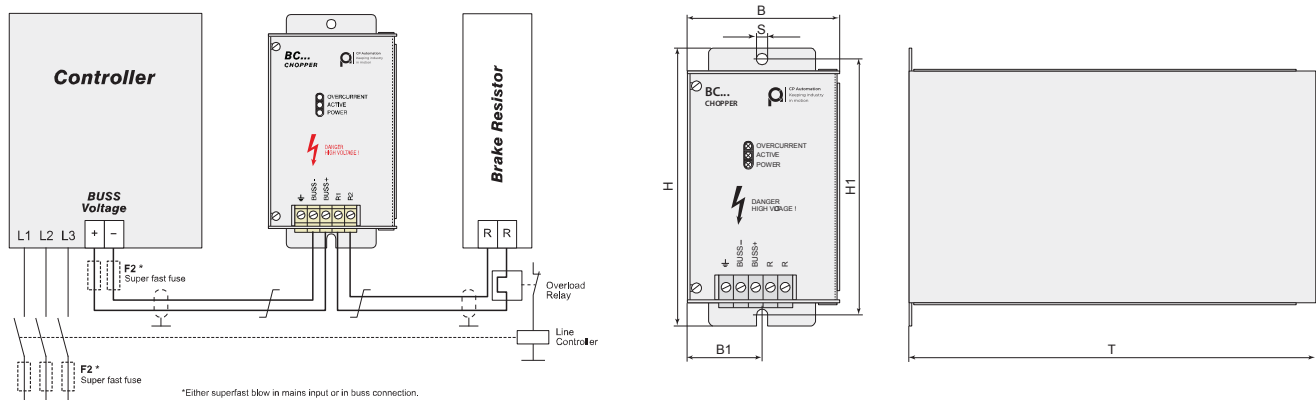
Rated current [A]	0,1-0,16	0,16-0,24	0,24-0,4	0,4-0,6	0,6-1,0	1,0-1,6	1,6-2,4	2,4-4,0	4,0-6,0	6,0-10	10-16	16-24
Part no.	36770-A0	36770-B0	36770-C0	36770-D0	36770-E0	36770-F0	36770-G0	36770-H0	36770-I0	36770-K0	36770-L0	36770-M0

Fuses and fuse breakers

Type	Part no.	Fuse value [A]	Part no. fuse kit	Description
BC 2.1 - 33/11 & BC 2.1 - 15/5,5	12262-0FXX	50	CPA-FK33	Fuse holder, 2 X Fuses, Shrouds
BC 2.1 - 51/13 & BC 2.1 - 24/6	12262-1FXX	63	CPA-FK51	Fuse holder, 2 X Fuses, Shrouds
BC 3.1 - 67/26 & BC 3.1 - 32/13	12263-AFXX	100	CPA-FK67	Fuse holder, 2 X Fuses, Shrouds
BC 3.1 - 67/45 & BC 3.1 - 32/22	12263-0FXX	100	CPA-FK67	Fuse holder, 2 X Fuses, Shrouds
BC 3.1 - 97/52 & BC 3.1 - 47/25	12263-1FXX	125	CPA-FK97	Fuse holder, 2 X Fuses, Shrouds
BC 3.1 - 135/56 & BC 3.1 - 65/27	12263-2FXX	200	CPA-FK135	Fuse holder, 2 X Fuses, Shrouds
BC 4.1 - 180/67 & BC 4.1 - 90/33	12264-0FXX	250	CPA-FK180	Fuse holder, 2 X Fuses, Shrouds
BC 4.1 - 250/75 & BC 4.1 - 120/36	12264-1FXX	355	CPA-FK250	Fuse holder, 2 X Fuses, Shrouds
BC 4.1 - 360/100 & BC 4.1 - 185/41	12264-2FXX	500	CPA-FK360	Fuse holder, 2 X Fuses, Shrouds



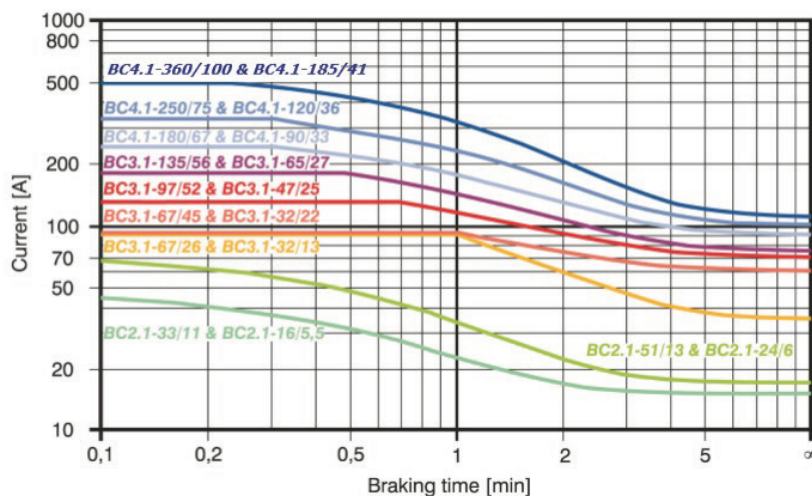
Device connection & dimensions



Type	B	B1	H	H1	T	S
BC 2.1	82,5	40,5	150	138	220	6
BC 3.1	130	64,5	205	193	208	6
BC 4.1	131	64,5	298	280	300	9

All dimensions in mm

Load curve



The load curves allow you to select the right chopper for your application.

The load curves are based on the following cycle times:

BC 2.1: 180s

BC 3.1 & BC 4.1: 360s

Please note that the peak power is limited by the resistance of the motor