

BRUSHLESS

Digital

Brake Chopper BC 2.1 - BC 4.1

for use with:

- Brushless DC controllers
- Frequency inverters
- Battery chargers



PRODUCT DATA

HIGHLIGHTS

- Worldwide input Buss 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 LED's
- State of the art IGBT technology
- Easy start up, no adjustments necessary
- Metal case (best EMC performance)
- When the chopper is active, minimal voltage ripple on the DC-bus
- Chopper is earth and short circuit protected
- Option: Parallel- or series connection of the brake choppers by means of master/slave function ready for operation as well as „chopper active“ via optocoupler output. Disable powerstage and trigger signal via optocoupler input.

OVERVIEW

Brake Chopper 200-440V DC

type	part no.	continuous power [kW]	peak power [kW]	continuous 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 - 32/13	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	355	1,1
BC 4.1 - 185/41	12264-2F01	41	185	110	500	500	0,75

Brake Chopper 450-800V DC

type	part no.	continuous power [kW]	peak power [kW]	continuous 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	355	2,3
BC 4.1 - 375/82	12264-2F00	82	375	110	500	500	1,5

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 380-480V, $\pm 10\%$, 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	 



ACCESSORIES

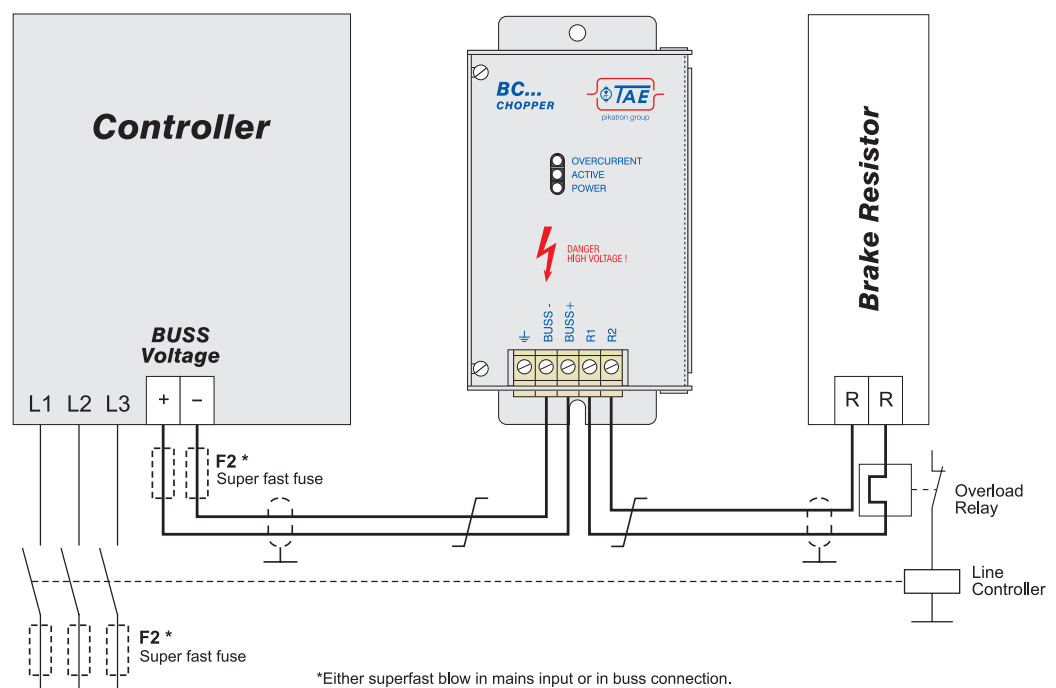
Overcurrent relay (Protection of brake resistor)

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 #	36770-A0	36770-B0	36770-C0	36770-D0	36770-E0	36770-F0	36770-G0	36770-H0	36770-I0	36770-K0	36770-L0	36770-M0

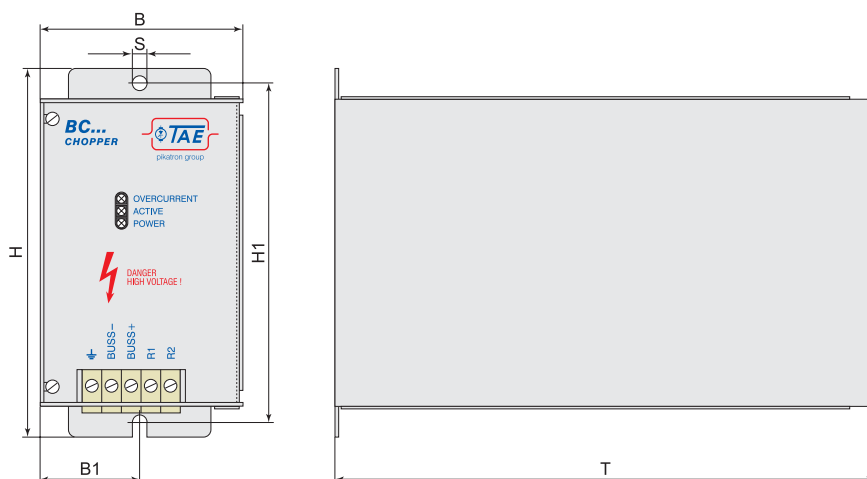
Fuses and fuse breakers

for use with bussloader	part # bussloader	fuse value [A]	part # fuse	part # fuse breaker
BC 2.1-33/11 & BC 2.1-16/5,5	12262-0F..	50	34606-00	34529-00
BC 2.1-51/13 & BC 2.1-24/6	12262-1F..	63	34607-00	34529-00
BC 3.1-67/26 & BC 3.1-32/13	12263-AF..	100	34609-00	34529-00
BC 3.1-67/45 & BC 3.1-32/22	12263-0F..	100	34609-00	34529-00
BC 3.1-97/52 & BC 3.1-47/25	12263-1F..	125	34610-00	34529-00
BC 3.1-135/56 & BC 3.1-65/27	12263-2F..	200	34621-00	34529-01
BC 4.1-180/67 & BC 4.1-90/33	12264-0F..	250	34622-00	34529-01
BC 4.1-250/75 & BC 4.1-120/36	12264-1F..	355	34633-00	34529-02
BC 4.1-375/82 & BC 4.1-185/41	12264-2F..	500	On request	34529-03

DEVICE CONNECTION



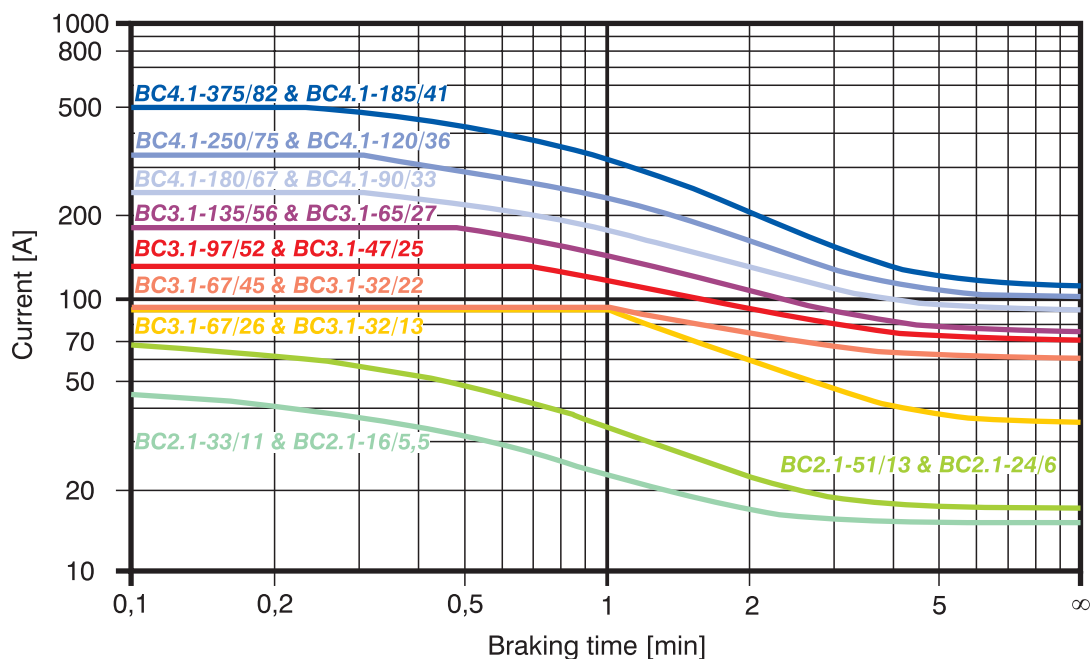
DIMENSIONS



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 resistor.

TAE Antriebstechnik GmbH
Am Kappengraben 20
D-61273 Wehrheim

Phone +49 / (0)60 81 / 95 13-0
Fax +49 / (0)60 81 / 95 13 40

E-Mail: info@tae-antriebstechnik.de

<http://www.tae-antriebstechnik.de>