

# TRANSOMIK<sup>®</sup> B, BC

## Braking choppers

**Suitable for frequency inverters  
in the power range up to 1200 kW**

## User benefits

- ◆ Rapid braking of three-phase induction motors fed by frequency inverters without an integrated braking chopper
- ◆ Elimination of production stops due to unwanted inverter tripping caused by overvoltage in the DC link

## Features

- ◆ Compatible with all frequency inverters with a DC voltage link operating at input voltages up to 3 AC 690 V
- ◆ Simple wiring without control voltage  
- only two cables to the DC link required
- ◆ Integrated braking resistor with TRANSOMIK B
- ◆ External braking resistors with overtemperature protection (OPTION BR) with TRANSOMIK BC
- ◆ Adjustable brake threshold-voltage;
  - TRANSOMIK B: • Factory adjustable
  - TRANSOMIK BC: • Switchable preset values
- ◆ TRANSOMIK BC is especially suitable for quasi-continuous braking duty (e.g. heavy-duty braking for crane drives)
- ◆ Special monitoring functions with TRANSOMIK BC:
  - Heat sink overtemperature trip
  - Monitoring LED's
  - Additional with TRANSOMIK BC2:
    - Electronic overload-monitoring of brake resistor
    - Fault latch with relay output
- ◆ TRANSOMIK BC2 can be paralleled for higher braking powers

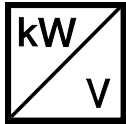


## Applications

Braking of three-phase drives fed from frequency inverters, in particular:

- ◆ Drives with a large inertia, e.g. large fans, centrifuges
- ◆ Drives with requirement for rapid braking, e.g. saws, planing and milling machines
- ◆ Drives for transport, long travel and hoisting applications
- ◆ Retrofit to existing inverters without a braking chopper e.g. to avoid nuisance tripping with link overvoltage
- ◆ Often a price advantage compared to braking choppers of original inverter manufacturer

# TECHNICAL DATA



Available powers and voltages

Type	Rated voltage frequency inverter	Brake voltage threshold	Rated braking power* in kW																
			3,0	6,0	11	22	30	40	55	90	110	160	200	500	550	630	1000	1100	1200
B1	3AC 400...415 V +10%	DC 670 V	●																
B3	3AC 400...415 V +10%	DC 670 V		●		●		●	●										
BC1	3AC 400...460 V +10%	DC 670/770 V			●	●													
BC2/460	3AC 400...460 V +10%	DC 670/770 V				●		●		●		●		●				●	
BC2/575	3AC 480...575 V +10%	DC 840/960 V					●		●		●		●		●				●
BC2/690	3AC 660...690 V +10%	DC 1065/1155V															●		●

\* Peak braking power with repetitive braking at the lower brake voltage-threshold  
Please enquire for other versions

## Peak braking power with infrequent braking

TRANSOMIK B

TRANSOMIK BC1

TRANSOMIK BC2

Cycle time = 120 s, lower / higher brake voltage-threshold

Power	Duty	Duty with fan	Braking resistor			
3,8 kW	5 %	-	integrated		3B1	
5,7 kW	7 %	-	integrated		6B3	
23 kW	3 %	-	integrated		22B3	
40 kW	1,5 %	-	integrated		40B3	
59 kW	1,5 %	-	integrated		55B3	
13 / 15 kW	40 %	-	33 / 39 Ω			11BC1
23 / 27 kW	25 %	-	20 / 22 Ω			22BC1
23 / 27 kW	65 %	100 %	20 / 22 Ω			
47 / 54 kW	35 %	100 %	10 / 11 Ω			
95 / 110 kW	20 %	60 %	4,7 / 5,6 Ω			
175 / 200 kW	20 %	35 %	2,7 / 3,1 Ω			
500 / 580 kW	7 %	30 %	0,9 / 1,0 Ω			
970 / 1100 kW	4 %	30 %	0,47 / 0,54 Ω			
29 / 34 kW	65 %	100 %	24 / 27 Ω			
59 / 67 kW	35 %	100 %	12 / 14 Ω			
120 / 135 kW	20 %	60 %	6 / 7 Ω			
215 / 245 kW	20 %	35 %	3,3 / 3,9 Ω			
570 / 650 kW	7 %	35 %	1,25 / 1,4 Ω			
1100 / 1250 kW	4 %	35 %	0,65 / 0,74 Ω			
670 / 730 kW	7 %	35 %	1,7 / 1,85 Ω			
1300 / 1400 kW	4 %	35 %	0,9 / 1,0 Ω			

## Maximum Peak braking power

Maximum supply voltage:	Brake voltage-threshold:			
2/3AC 230...240 V +10%	DC 385 V		3,8 kW	Please enquire
3AC 400...415 V +10%	DC 670 V		5,7...59 kW	18 kW
3AC 440...460 V +10%	DC 770 V		-	21 kW
3AC 480...500 V +10%	DC 840 V		-	-
3AC 550...575 V +10%	DC 960 V		-	-
3AC 660 V +10%	DC 1065 V		-	-
3AC 690 V +10%	DC 1155 V		-	-
Parallel connection for higher braking powers		not recommended	not recommended	yes

## Fault monitoring function

Overtemperature	ab 22B3	●	●
Electronic monitoring of power loading of braking resistor	-	-	●
Fault latch with relay output and internal or external reset	-	-	●

Optimum drive solutions from 0,25 up to 2000 kW and from 110 up to 690 V



KIMO Industrial Electronics GmbH

Am Weichselgarten 19 D-91058 Erlangen  
Tel. +49 9131-6069-0 Fax +49 9131-6069-35  
E-Mail: sales@kimo.de http://www.kimo.de



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