

Features:

- ▣ DC braking with one-way rectification
- ▣ suitable for all asynchronous motors
- ▣ easy mounting, also for retrofitting into existing plants
- ▣ wear-resistant and maintenance-free
- ▣ special voltages up to 600V (20A-devices)
- ▣ special voltages up to 690V (devices from 40A on)
- ▣ integrated braking contactor (devices up to 20A)
- ▣ for snap-mounting onto 35mm top-hat-rail (devices up to 20A)
- ▣ degree of protection IP 20 (BR 230/400 - 10 ... 20)
- ▣ degree of protection IP 00 (BR 230/400 - 40 ... 600)



**Braking Devices
BR 230-10 ... 600
BR 400-10 ... 600**

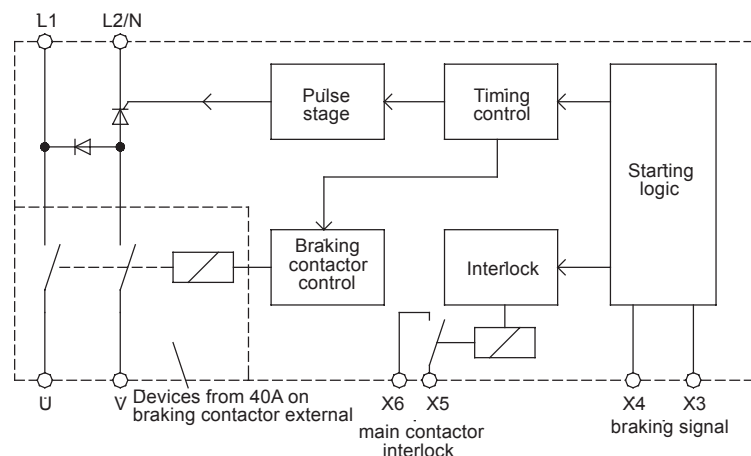


Function:

- ▣ DC braking
- ▣ control via motor contactor
- ▣ 2 separately adjustable parameters
braking current, braking time
- ▣ potential-free output for motor contactor
interlocking during braking
- loadable with 250V/8A
- ▣ potential-free output for braking contactor
(devices from 40A on)
- loadable with 250V/8A

Typical Applications:

- sawing machines
- centrifuges
- wood working machines
- textile machines
- conveying systems

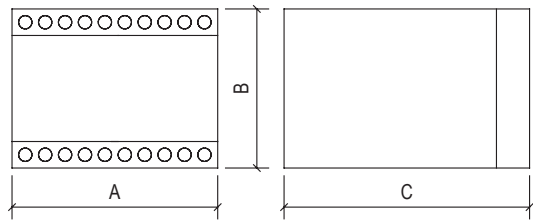


Type designation BR	230-10 400-10	230-20 400-20	230-40 400-40	230-60 400-60	230-100 400-100	230-200 400-200	230-400 400-400	230-600 400-600	
Mains voltage according to DIN EN 50160 (IEC 38)	BR 230 ... 220/240V ±10%		50/60Hz		other voltages upon request				
Power draw of the electronics	6 VA								
Recommended for rated motor currents up to	5A	10A	20A	30A	50A	100A	200A	300A	
Rated device current	10A	20A	40A	60A	100A	200A	400A	600A	
c.d.f. at max. braking current	20%	20%	15%	15%	15%	15%	15%	15%	
I ² t-Value Power semiconductor (A ² s)	40	680	8000	8000	8000	80000	320000	1125000	
Braking voltage	0 ... 130VDC at 220/240V 0 ... 220VDC at 380/415V								
Braking time	2 ... 15sec. (other times upon request)								
Contact rating	relay contact for motor contactor = 6A/250VAC; 6A/30VDC contact for braking contactor = 6A/250VAC; 6A/30VDC								
Delay time for reduction of residual e.m.f.	250ms	250ms	600ms	600ms	1500ms	1500ms	1500ms	1800ms	
max. cross-sectional area	2,5mm ²	2,5mm ²	16mm ²	16mm ²	35mm ²	35mm ²	bolt M8	bolt M10	
Ambient / Storage temperature	0°C ... 45°C / -25°C ... 75°C								
Weight / kg	0,5	0,55	2,4	2,4	2,55	3,55	7,6	13,5	
Order number for	BR 230-...	21600. 22010	21600. 22020	21600. 22040	21600. 22060	21600. 22100	21600. 22200	21600. 22400	21600. 22600
	BR 400-...	21600. 38010	21600. 38020	21600. 38040	21600. 38060	21600. 38100	21600. 38200	21600. 38400	21600. 38600

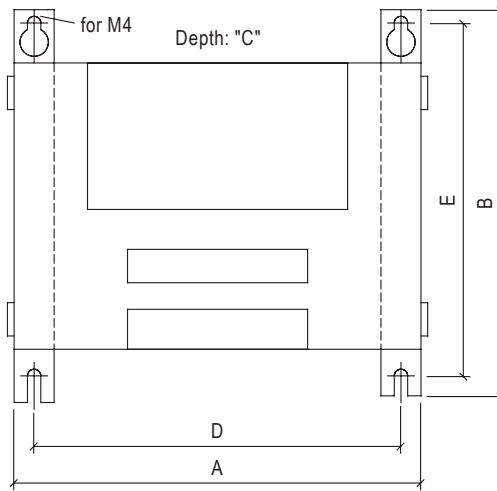
Please observe supplementary sheet with dimensioning rules.

Dimensions:

BR 230-10 ... 20
BR 400-10 ... 20



BR 230-40 ... 600
BR 400-40 ... 600

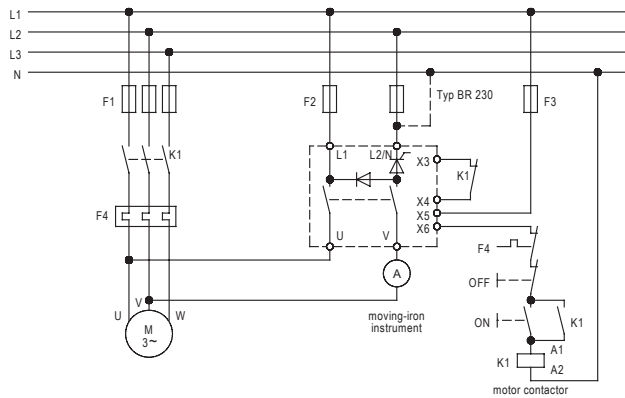


	A	B	C	D	E
BR ... - 10	100	73	120	-	-
BR ... - 20	100	73	120	-	-
BR ... - 40	175	200	172	146	185
BR ... - 60	175	200	172	146	185
BR ... - 100	175	200	172	146	185
BR ... - 200	175	240	172	146	225
BR ... - 400	315	240	172	286	225
BR ... - 600	315	450	211	260	415

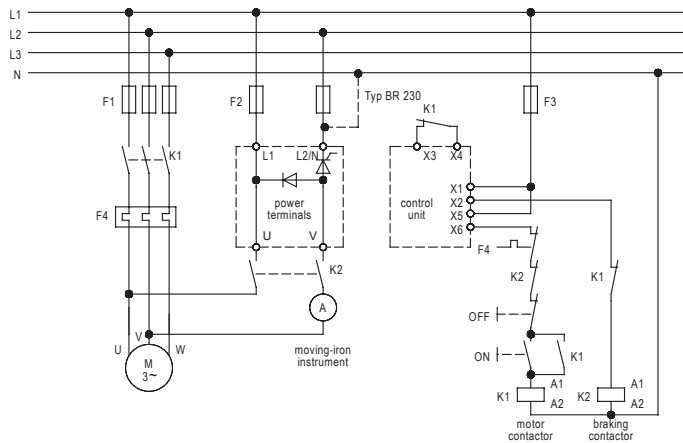
All dimensions in mm.

Connection Diagrams:

BR 230-10 ... 20
BR 400-10 ... 20



BR 230-40 ... 600
BR 400-40 ... 600



Attention:
If, in spite of a long braking time, the braking current is instantly switched off, the braking current is adjusted to a too high value.

EMC
The limit values for emitted interference according to the applicable device standards do not rule out the possibility that receivers and susceptible electronic devices within a radius of 10m are subjected to interference.
If such interference, that is definitely attributable to the operation of the braking devices "BR", occurs, the emitted interference can be reduced by taking appropriate measures.
Such measures are, e.g.:
to connect reactors (3mH) or a suitable mains filter in series before the soft starter, or to connect X-capacitors (0,15µ F) in parallel to the supply voltage terminals.