

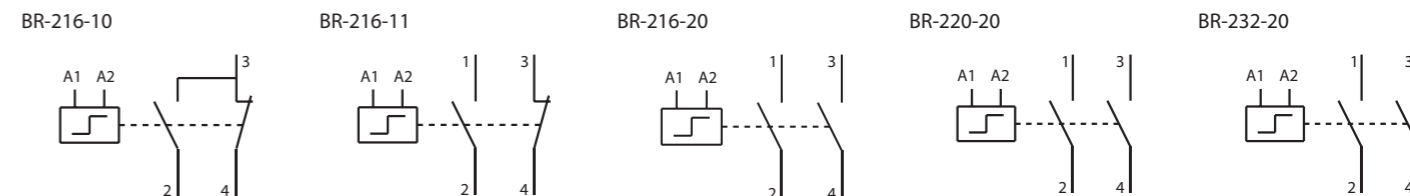


EAN code
 BR-216-10/230V: 8595188168854
 BR-216-11/230V: 8595188168878
 BR-216-20/230V: 8595188168861
 BR-220-10/230V: 8595188168885
 BR-232-20/230V: 8595188168892

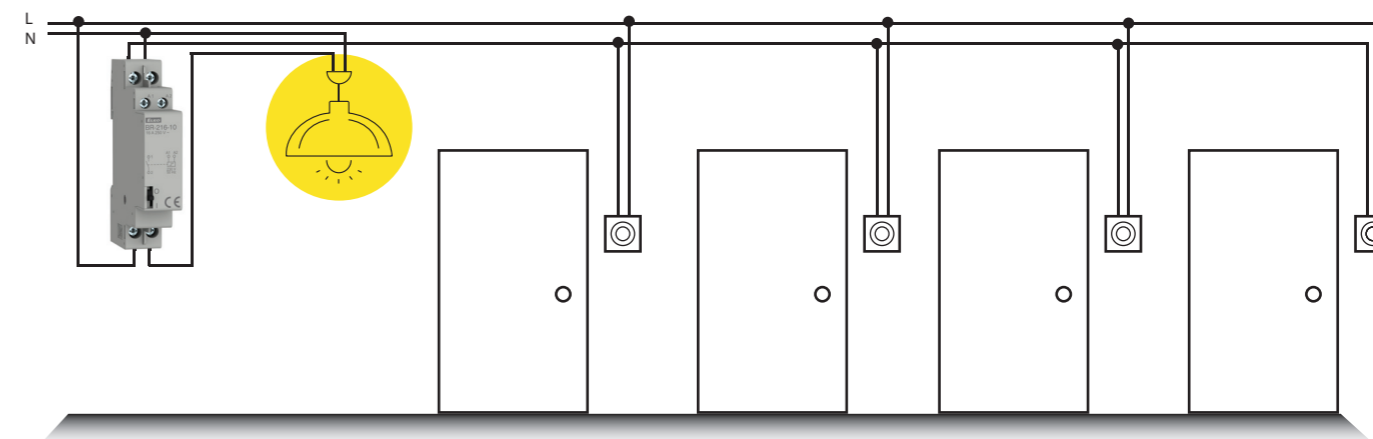
- Bistable relays are used mainly for remote lighting control from multiple places, switching of electric drives, heating ...
- The advantage of these devices is noiseless switching and almost zero consumption energy in closed state (in stand-by position the consumption is zero).
- Designed from 16 A - 32 A ensures trouble-free LED switching lamps with surge currents up to 80 A (BR-232-20).
- In a conventional lighting control installation, a large amount of cables is used but for bistable relays they are used for signal control only 2 wires.
- As a result, the bistable relay provides savings during installation (cable consumption, installation time ...)
- Manual control for BR-220-20 and BR-232-20.

Technical parameters	BR-216-10/11/20	BR-220-20	BR-232-20
Rated current I _n :	16 A	20 A	32 A
Control voltage at 50 Hz:	230 V	230 V	230 V
Standards:	IEC/EN 60669-2-2		
Disconnection of remote control by selector switch (coil: on/off):	no	yes	
Module width:	1		
Number of poles:	2		
Degree of protection:	IP20		
Pollution degree:	3		
Climatic conditions:	95 % relative humidity		
Ambient temperature (open):	-25 °C .. +55 °C (>55 °C .. +70 °C at max. impulse duration which is 1 min)		
Storage temperature:	-30 °C .. +80 °C		
Number of contactors or switches side-by-side: (40 °C .. 55) °C (55 .. 70) °C	AC: no limitation / DC: max. 3 AC: max. 3 / DC: 0		
Noise level (operation):	0 dB (coil voltage is switched off)		
Mechanical endurance:	1.000.000 op. c.		
Weight / Dimensions:	135 g / 17.6 x 90 x 65 mm		
Contact reliability:	>10 V; >100 mA		
Minimum distance of open contacts:	>3 mm		
Overload current withstand capability: 10 s	48 A	56 A	80 A
Rated insulation voltage:	440 V		
Rated impulse withstand voltage:	4 kV		
Rated operational voltage:	440 V		
Rated frequency:	50 / 60 Hz		
Thermal current:	16 A	20 A	32 A
Rated operational current for AC-1, AC-7a and AC-21:	16 A	20 A	32 A
Operational power for AC-1, AC-7a and AC-21: single-phase 230 V:	3.5 kW	4.4 kW	7 kW
Rated operational current for AC-2:	8 A	10 A	16 A
Operational power for AC-2: single-phase 230 V:	1.2 kW	1.5 kW	2.4 kW
Rated operational current for AC-3, AC-7b and AC-23:	5 A	7 A	10 A
Operational power for AC-3, AC-7b and AC-23: single-phase 230 V:	0.37 kW	0.55 kW	1.1 kW
Rated operational current for AC-5a (at 230 V):	16 A		
Rated operational current for AC-5b (at 230 V):	10 A		10 A / 16 A
Rated operational current for AC-6a (at 230 V):	2.8 A	3 A	4.5 A
Switching of capacitors AC-6b and AC-7c (at 230 V):	80 µF	100 µF	150 µF
Tightening torque:	1.2 Nm		
Coil			
Range of control voltage for switch-on:	90 ... 110 %		
Range of control voltage for drop out:	AC: 75 ... 20 % / DC: 75 ... 10 %		
Kind of voltage:	AC or DC		
Frequency of AC control voltage:	AC: 50 or 60 Hz		
Control mode:	remote control with impulse voltage / manual control		
Impulse duration of control voltage:			
minimum	AC: 50 ms / DC: 100 ms		
optimum - recommended	AC: 100 ... 500 ms / DC: 150 ... 500 ms		
maximum (only in case of breakdown of control system)	AC: 1 hodina / DC: 1 minuta		
Minimum duration between two impulses of control voltage:	AC: 150 ms / DC: 500 ms		
Surge immunity withstand voltage 1.2/50 µs acc. to standard IEC/EN 61000-4-5	3 kV		

Connection



Example connection BR-216-10



Lamps Type	Power		Maximum number of lamps per pole at 230 V, 50 Hz		
	P W	I A	BR-216-10/11/20	BR-220-20	BR-232-20
Incandescent lamps and halogen lamps	11	0,05	182	182	318
	15	0,07	133	133	233
	18	0,08	111	111	194
	20	0,09	100	100	175
	25	0,11	80	80	140
	28	0,12	71	71	125
	30	0,13	67	67	117
	33	0,14	61	61	106
	35	0,15	57	57	100
	40	0,17	50	50	88
	42	0,18	48	48	83
	46	0,2	43	43	76
	48	0,21	42	42	73
	50	0,22	40	40	70
	53	0,23	38	38	66
	57	0,25	35	35	61
	60	0,26	33	33	58
	70	0,3	29	29	50
	75	0,33	27	27	47
	77	0,34	26	26	45
80	0,35	25	25	44	
100	0,44	20	20	35	
116	0,5	17	17	30	
120	0,52	17	17	29	
150	0,65	13	13	23	
160	0,7	13	13	22	
200	0,87	10	10	18	
205	0,89	10	10	17	
230	1	9	9	15	
300	1,3	7	7	12	
400	1,74	5	5	9	
500	2,17	4	4	7	
750	3,26	3	3	5	
1000	4,35	2	2	4	
1500	6,52	1	1	2	
2000	8,7	1	1	2	
LED lamps Power supplies for LEDs	-	-	max. 2 A per pole	max. 6 A per pole	max. 12 A per pole