

BZM Series Circuit Breakers





Energizing a world that demands more.

We deliver:

- **Electrical solutions** that use less energy, improve power reliability and make the places we live and work safer and more comfortable
- **Hydraulic and electrical solutions** that enable machines to deliver more productivity without wasting power
- **Aerospace solutions** that make aircraft lighter, safer and less costly to operate, and help airports operate more efficiently
- **Vehicle drivetrain and powertrain solutions** that deliver more power to cars, trucks and buses, while reducing fuel consumption and emissions

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EATON

Powering Business Worldwide

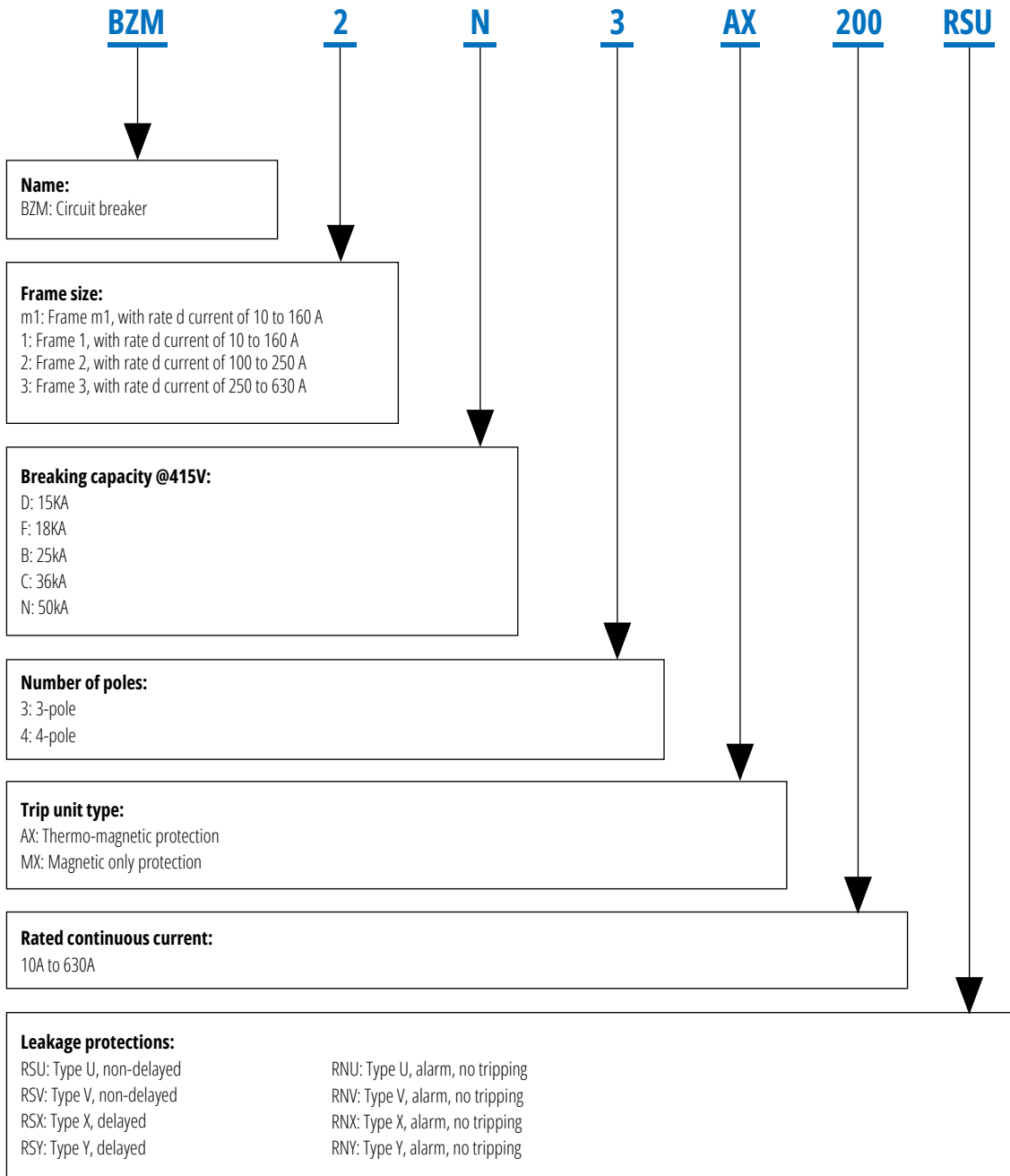
BZM Series Circuit Breakers

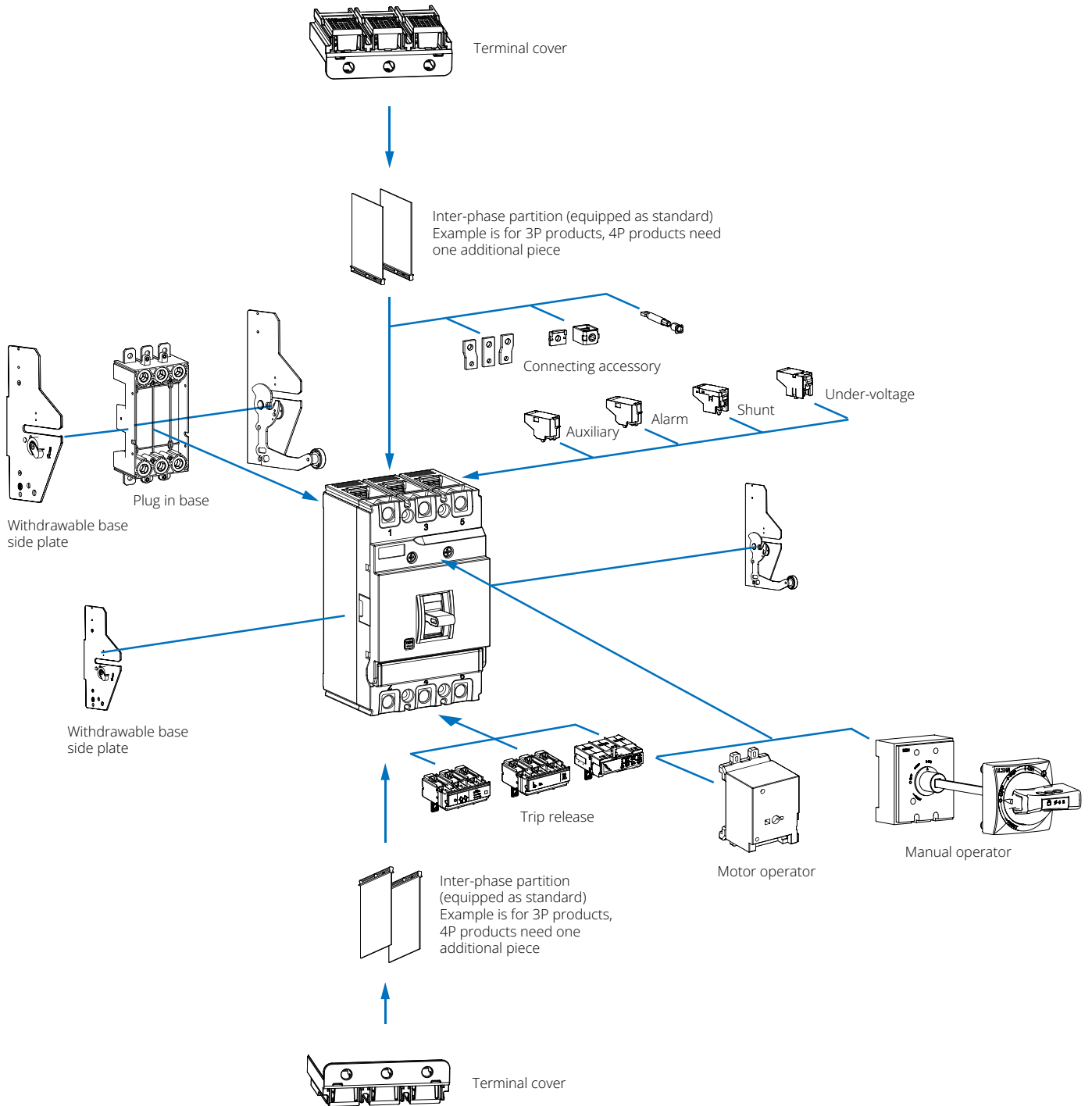


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1.1

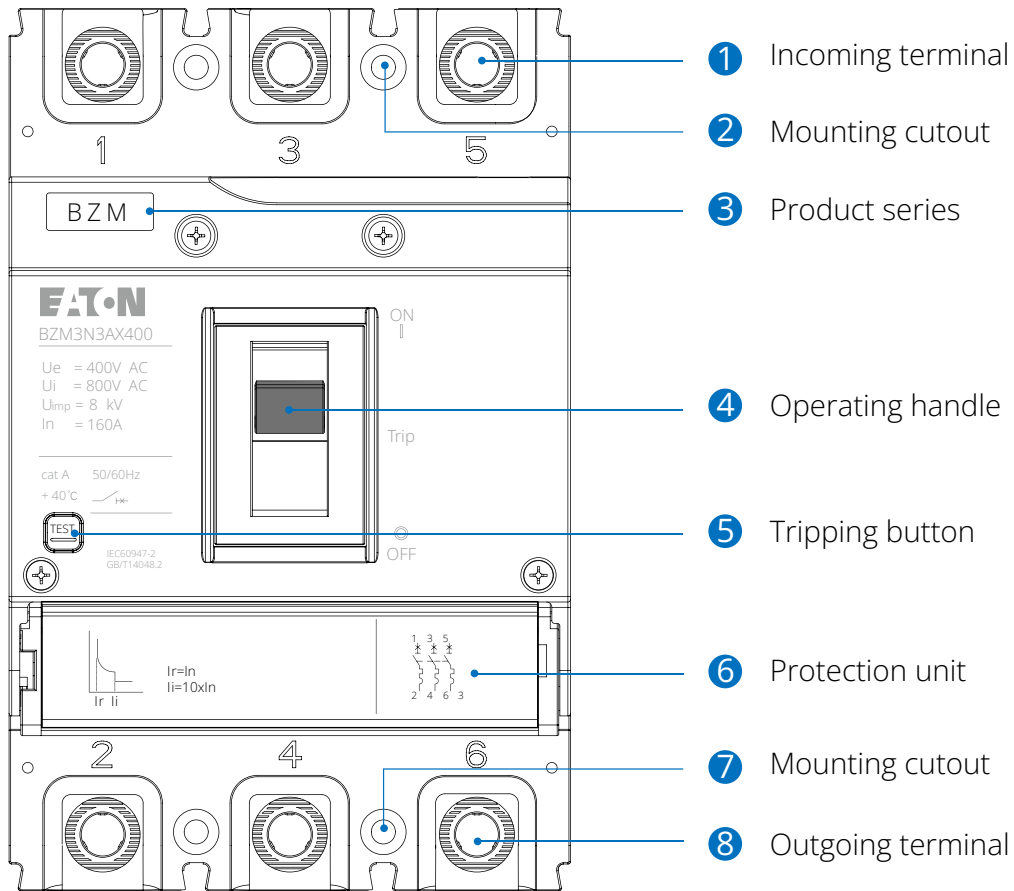
Molded Case Circuit Breakers BZM Model Description





1.2

Molded Case Circuit Breakers BZM System Overview

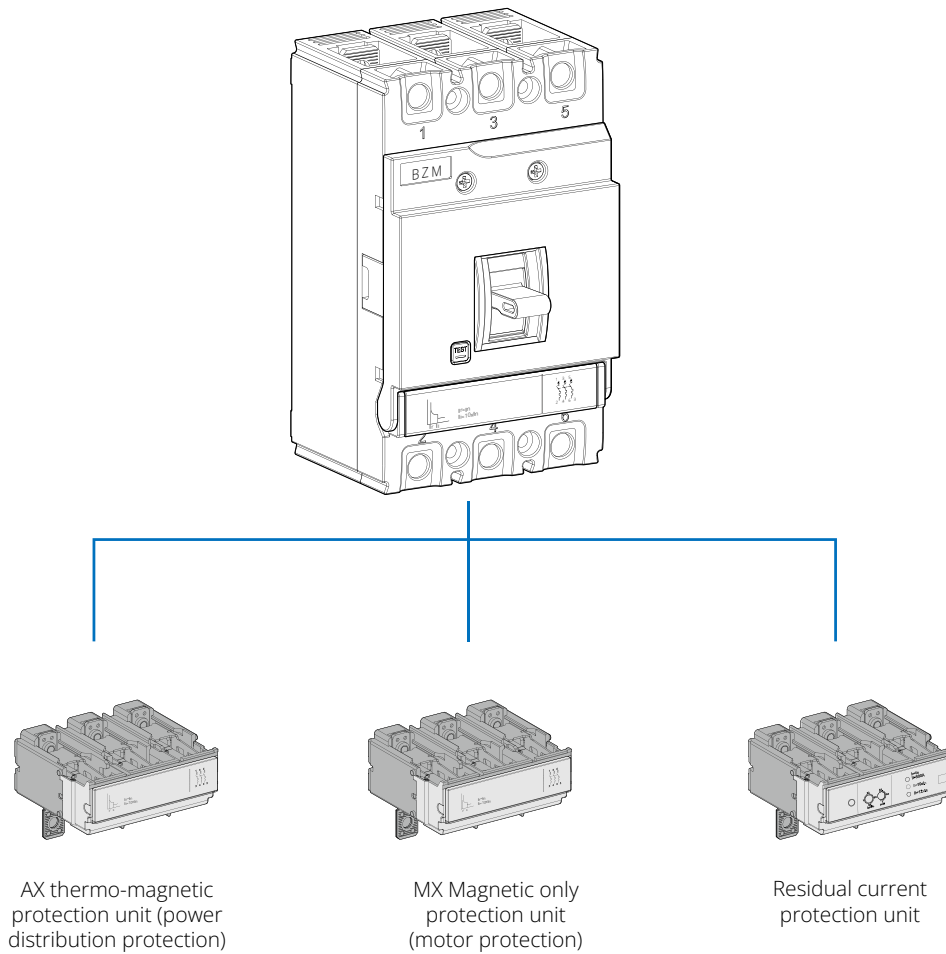


Protection Unit Description



Thanks for modular design concept, the BZM product series offer a variety of protection units such as thermo-magnetic, Magnetic only and residual current.

Different protection units can be selected to protection types.

- Protect distribution cables for transformer power;
- Suitable to protect motors from over-load and short circuit;
- Lower threshold, suitable to protect generators or long cables;





BZM Series Thermo-Magnetic MCBs (AX: Thermo-Magnetic and MX: Magnetic only)




		BZMm1	BZM1
			
		3P/4P	3P/4P
Control	Manual Operator	■	■
	Motor Operator	■	■
Wiring	Front panel wiring	■	■
	Rear panel wiring	■	■
	Plug in	■	■
	Withdrawable	—	—
Electrical performance complies with IEC 60947-2 and GB/T 14048.2			
Rated current of trip unit In (A)		16 20 25 32 40 50 63 80 100 125 140 160	16 20 25 32 40 50 63 80 100 125 140 160
Rated insulation voltage (V)		Ui	AC690
Rated impulse withstand voltage (kV)		Uimp	8
Rated operating voltage (V)		Ue	AC400/AC415
Circuit breaker type		D F B	C N
Rated ultimate short circuit breaking capacity (kA)	Icu AC 50/60 Hz	400/415V	15 18 25
	690V	—	—
Rated operational short circuit breaking capacity (kA)	Ics AC 50/60 Hz	400/415V	15 18 25
	690V	—	—
Rated ultimate short circuit making capacity (kA)	Icm AC 50/60 Hz	400/415V	31.5 37.8 52.5
	690V	—	—
Utilization category		A	A
Operating cycles	Mechanical	20000	20000
	Electrical	AC400V/AC415V	8000
No maintenance		AC690V	5000
Protection units			
Protection units		Thermo - magnetic	Thermo - magnetic
Over-load protection	Long delay	I _r (I _n ×...)	■
	Short delay	I _{sd} (I _r ×...)	—
Short circuit protection	Instantaneous	I _i (I _n ×...)	■
	Ground protection	I _g (I _n ×...)	—
Indication and control accessories			
Alarm switch		■	■
Auxiliary switch		■	■
Shunt release		■	■
Under-voltage release		■	■
Mounting			
Accessories	Wiring terminal	■	■
	Inter-phase partition	■	■
Storage temperature		-40°C ~ +70°C	-40°C ~ +70°C
Operating temperature		-40°C ~ +70°C	-40°C ~ +70°C

Notes:

- When selecting the thermo-magnetic molded case products, the plug-in wirings of the BZM1 frame featuring plug in wiring as its wiring method and rated current (In) of 160A must be derated to 140A, that is, the BZM2 frame must be selected for circuit breakers with its rated current (In) higher than 140A but equal to and smaller than 250A.
- When selecting the thermo-magnetic molded case products, the plug-in wirings of the BZM3 frame featuring plug in wiring as its wiring method and rated current (In) of 630A must be derated to 570A.
- When selecting the thermo-magnetic molded case products, the withdrawable wirings of the BZM3 frame featuring withdrawable wiring as its wiring method and rated current (In) of 630A must be derated to 570A.
- The circuit breaker can operate at ambient temperature from -40°C to +70°C, and the average value for 24 hours does not exceed 35°C. When the ambient temperature is from +40°C to +70°C, derating must be used by customers; refer to the Temperature Derating Coefficient Table for more details.

BZM2			BZM3		
					
3P/4P			3P/4P		
■			■		
■			■		
■			■		
■			■		
■			■		
—			■		
100 125 140 160 180 200 225 250			250 315 350 400 500 630		
AC800			AC800		
8			8		
AC400/AC415/AC690			AC400/AC415/AC690		
B	C	N	B	C	N
25	36	50	25	36	50
—	—	10	—	—	10
25	36	50	25	36	50
—	—	10	—	—	10
52.5	75.6	105	52.5	75.6	105
—	—	21	—	—	21
A			A		
20000			15000		
10000			8000		
3000			2000		
Thermo - magnetic			Thermo - magnetic		
■			■		
—			—		
■			■		
—			—		
■			■		
■			■		
■			■		
■			■		
■			■		
■			■		
-40°C ~ +70°C			-40°C ~ +70°C		
-40°C ~ +70°C			-40°C ~ +70°C		

BZM Series Residual Current MCBs

		BZM1	BZM2	BZM3
				
		3P/4P	3P/4P	3P/4P
No. of poles	Manual Operator	■	■	■
	Motor Operator	■	■	■
Wiring	Front panel wiring	■	■	■
	Rear panel wiring	■	■	■
	Plug in	■	■	■
	Withdrawable	—	—	■
Electrical performance complies with IEC 60947-2 and GB/T 14048.2				
Rated current of trip unit I _n (A)		10 16 20 25 32 40 50 63 80 100 125 140 160	100 125 140 160 180 200 225 250	250 315 350 400 500 630
Rated insulation voltage (V)		U _i AC1000	AC1000	AC1000
Rated impulse withstand voltage (kV)		U _{imp} 8	8	8
Rated operating voltage (V)		U _e AC400	AC400	AC400
Circuit breaker type		N	N	N
Rated ultimate short circuit breaking capacity (kA)		I _{cu} AC 50/60 Hz 400V 50	50	50
Rated operational short circuit breaking capacity (kA)		I _{cs} AC 50/60 Hz 400V 50	50	50
Rated ultimate short circuit making capacity (kA)		I _{cm} AC 50/60 Hz 400V 105	105	105
Utilization category		A	A	A
Operating cycles	No maintenance			
	Mechanical	25000	25000	10000
	Electrical	AC400V 10000	10000	8000
Rated residual action current I _{Δn} (A)	Type AC residual current protection	RSU 0.03/0.05/0.1/0.3	0.03/0.05/0.1/0.3	—
		RNU/RSX/RNX 0.05/0.1/0.3	0.05/0.1/0.3	—
		RSV/RNV/RSY/RNY 0.1/0.3/0.5/1.0	0.1/0.3/0.5/1.0	0.1/0.3/0.5/1.0
Rated residual non acting current I _{Δno}		1/2 I _{Δn}	1/2 I _{Δn}	1/2 I _{Δn}
Rated residual short circuit making (breaking) capacity I _{Δm}		1/4 I _{cu}	1/4 I _{cu}	1/4 I _{cu}
Protection units				
Protection units		Thermo - magnetic	Thermo - magnetic	Thermo - magnetic
Over-load protection	Long delay	I _r (I _n ×...)	■	■
	Short delay	I _{sd} (I _n ×...)	—	—
Short circuit protection	Instantaneous	I _i (I _n ×...)	■	■
	Ground protection	I _g (I _n ×...)	—	—
Ground protection		■	■	■
Indication and control accessories				
Alarm switch		■	■	■
Auxiliary switch		■	■	■
Shunt release		■	■	■
Under-voltage release		■	■	■
Mounting				
Accessories	Wiring terminal	■	■	■
	Inter-phase partition	■	■	■
Storage temperature		-40°C ~ +70°C	-40°C ~ +70°C	-40°C ~ +70°C
Operating temperature		-40°C ~ +70°C	-40°C ~ +70°C	-40°C ~ +70°C

Notes:

- When selecting the thermo-magnetic molded case products, the plug in wirings of the BZM1 frame featuring plug in wiring as its wiring method and rated current (I_n) of 160A must be derated to 140A, that is, the BZM2 frame must be selected for circuit breakers with its rated current (I_n) higher than 140A but equal to and smaller than 250A,
 - When selecting the thermo-magnetic molded case products, the plug in wirings of the BZM3 frame featuring plug in wiring as its wiring method and rated current (I_n) of 630A must be derated to 570A;
 - When selecting the thermo-magnetic molded case products, the withdrawable wirings of the BZM3 frame featuring withdrawable wiring as its wiring method and rated current (I_n) of 630A must be derated to 570A;
 - The circuit breaker can operate at ambient temperature from -40°C to +70°C, and the average value for 24 hours does not exceed 35°C.
- When the ambient temperature is from +40°C to +70°C, derating must be used by customers; refer to the Temperature Derating Coefficient Table for more details.

Residual Current Protection Units

Protection type	Frame	Trip unit type	Current I Δ n (A)	Remark
Residual current protection	BZM1 BZM2	RSU	0.03/0.05/0.1/0.3	Non-delayed
		RSV	0.1/0.3/0.5/1.0	Non-delayed
		RSX	0.05/0.1/0.3	Delayed
		RSY	0.1/0.3/0.5/1.0	Delayed
		RNU	0.05/0.1/0.3	Alarm, no tripping
		RNV	0.1/0.3/0.5/1.0	Alarm, no tripping
		RNX	0.05/0.1/0.3	Alarm, no tripping
		RNY	0.1/0.3/0.5/1.0	Alarm, no tripping
	BZM3	RSV	0.1/0.3/0.5/1.0	Non-delayed
		RSY	0.1/0.3/0.5/1.0	Delayed
		RNV	0.1/0.3/0.5/1.0	Alarm, no tripping
		RNY	0.1/0.3/0.5/1.0	Alarm, no tripping

Residual current		I Δ n	2 I Δ n	5 I Δ n	10 I Δ n
Non-delayed	Max. breaking time	0.08	0.08	0.04	0.04
	Ultimate non-driving time	0.1/0.5/1	0.1/0.5/1	0.1/0.5/1	0.1/0.5/1
Delayed	Max. breaking time	0.5/1.15/2.15	0.35/1/2	0.25/0.9/1.9	0.25/0.9/1.9
	Ultimate non-driving time	0.1/0.5/1	0.1/0.5/1	0.1/0.5/1	0.1/0.5/1

Notes:

1. According to GB14048.2 standard, baseline acting current is 5 I Δ n for non-delayed types, and 2 I Δ n for delayed types;
2. All 0.03A products are non-delayed type (according to national standards).

Residual Current Factory Setting Table

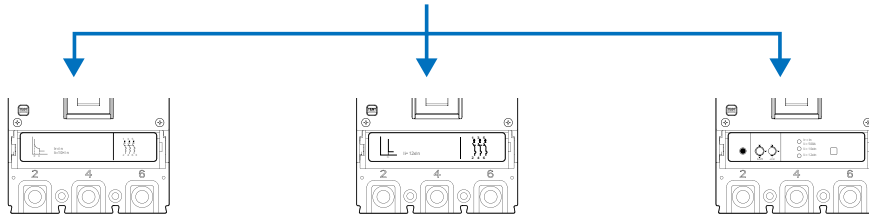
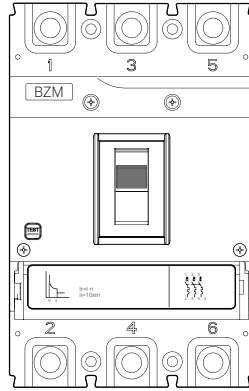
Residual current	Frame level	Trip unit type	Current setting I Δ n (A)	Ultimate non-driving Δ t (S)
Residual current protection	BZM1 BZM2 BZM3	All	0.1	1

Residual Current Labels

The labels are arranged in two columns and four rows. Each label includes a dial with a pointer, a set of radio buttons for current settings (I Δ n), and a checkbox for alarm status.

- RSU: Type U, non-delayed**: Dial 0.03, I Δ n settings: 0.03, 0.05, 0.1, 0.3. Alarm:
- RSV: Type V, non-delayed**: Dial 0.1, I Δ n settings: 0.1, 0.3, 0.5, 1.0. Alarm:
- RSX: Type X, delayed**: Dial 0.05, I Δ n settings: 0.05, 0.1, 0.3. Alarm:
- RSY: Type Y, delayed**: Dial 0.1, I Δ n settings: 0.1, 0.3, 0.5, 1.0. Alarm:
- RNU: Type U, alarm, no tripping**: Dial 0.05, I Δ n settings: 0.05, 0.1, 0.3. Alarm:
- RNV: Type V, alarm, no tripping**: Dial 0.1, I Δ n settings: 0.1, 0.3, 0.5, 1.0. Alarm:
- RNX: Type X, alarm, no tripping**: Dial 0.05, I Δ n settings: 0.05, 0.1, 0.3. Alarm:
- RNY: Type Y, alarm, no tripping**: Dial 0.1, I Δ n settings: 0.1, 0.3, 0.5, 1.0. Alarm:

Protection Unit Overview



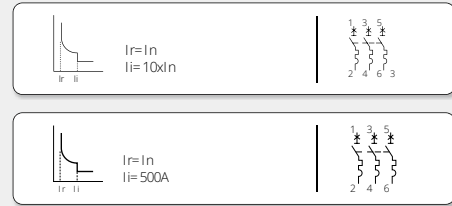
AX: Thermo-magnetic protection unit (power distribution protection)

MX: Magnetic only protection unit (motor protection)

R..: Residual current protection unit

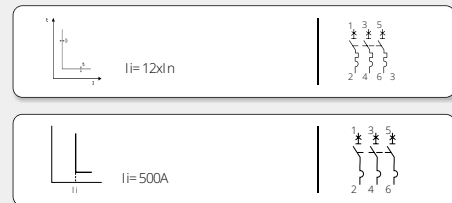
AX: Thermo-magnetic protection unit (power distribution protection)

Thermal fixing: 10-630A rated current
Magnetic fixing: 500...6300A tripping current



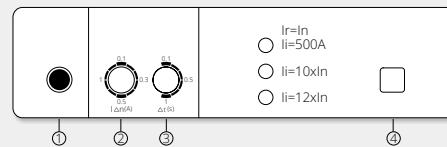
MX: Magnetic only protection unit (motor protection)

Magnetic fixing:
In = 10A to 40A: 500A tripping current
In = 50A to 630A: 600A...7560A tripping current

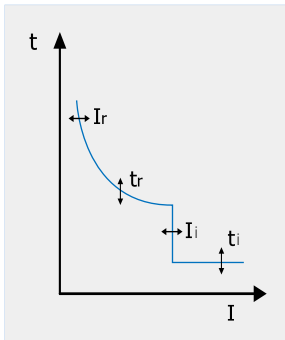


R..: Residual current protection unit

- ① PAL residual current alarm indicator
- ② Rated residual current setting
- ③ Rated residual current time setting
- ④ Residual current test button



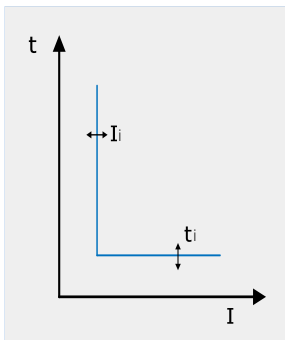
BZM-AX/MX Protection units



AX: Protection Characteristics Data

Rated current (A)	Inverse time acting characteristics at ambient temperature of +40°C		Instantaneous acting current (A)
	Non acting time at 1.05 In (cold state)	Acting time at 1.3 In (hot state)	
In ≤ 63	≥ 1h	< 1h	10 In ± 20%
63 < In ≤ 630	≥ 2h	< 2h	10 In ± 20%

* Note: The instantaneous acting current is 500A±20% for BZM1 of 40A and below.



MX: Protection Characteristics Data

Rated current (A)	Inverse time acting characteristics at ambient temperature of +40°C		Instantaneous acting current (A)
	Non acting time	Acting time	
In ≤ 630	-	-	12 In ± 20%

* Note: The instantaneous acting current is 500A±20% for BZM1 of 40A and below.

Power Consumption

Circuit breaker model	Rated current (A)	3-phase total power consumption (W)	
		Front and rear panel wiring	Plug in and rear panel wiring
BZMm1/BZM1	160	20	24
BZM2	250	35	40
BZM3	630	43	51

Temperature Derating Coefficients

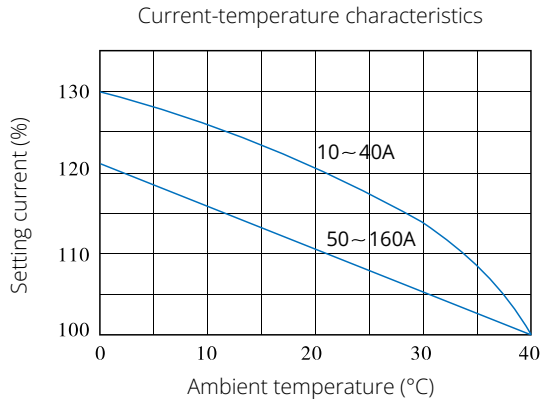
Circuit breaker model	+40°C	+45°C	+50°C	+55°C	+60°C	+65°C	+70°C
BZMm1/BZM1	1.0 In	1.0 In	1.0 In	1.0 In	0.98 In	0.95 In	0.92 In
BZM2	1.0 In	1.0 In	1.0 In	1.0 In	0.98 In	0.95 In	0.92 In
BZM3	1.0 In	1.0 In	1.0 In	1.0 In	0.97 In	0.94 In	0.91 In

High Altitude Derating Coefficients

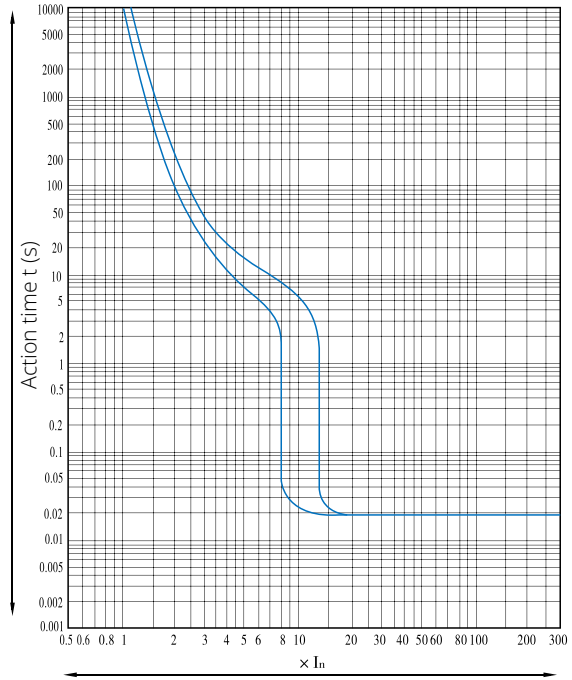
Items	Parameter						
Altitude (m)	2000	2500	3000	3500	4000	4500	5000
Power frequency withstand voltage (V)	3000	3000	2500	2400	2200	2100	2000
Insulation voltage (V)	1000	1000	900	850	800	720	700
Max. operating voltage (V)	690	690	620	580	540	500	460
Short circuit breaking capacity correction factor	1	1	0.9	0.82	0.78	0.75	0.7
Operating current correction factor	1	1	0.98	0.97	0.96	0.95	0.94

BZM Protective Acting Characteristic Curves

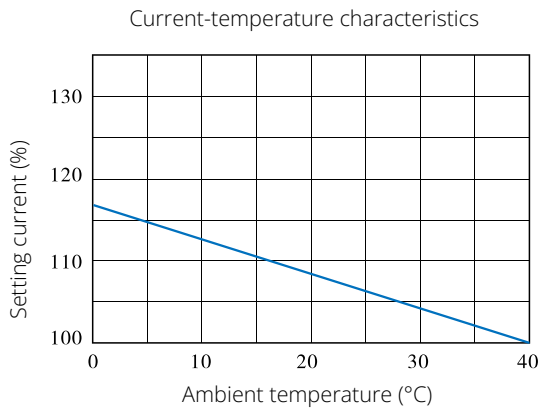
BZM1-AX (Thermo-Magnetic)



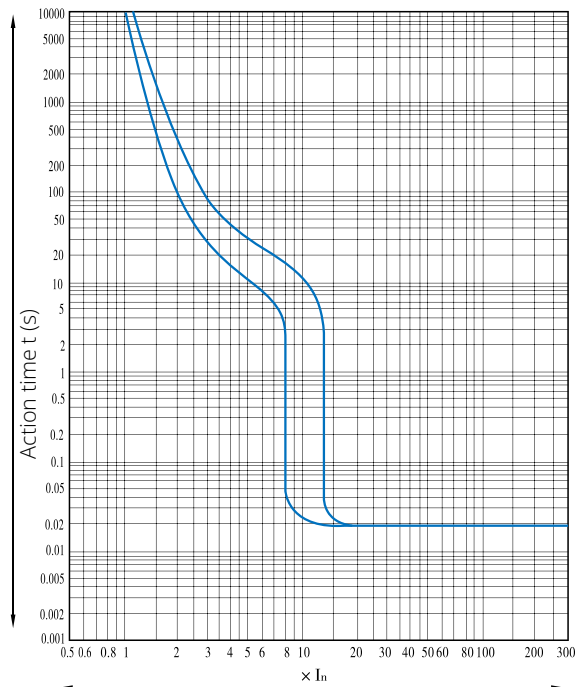
Current-temperature characteristic curve



BZM2-AX (Thermo-Magnetic)



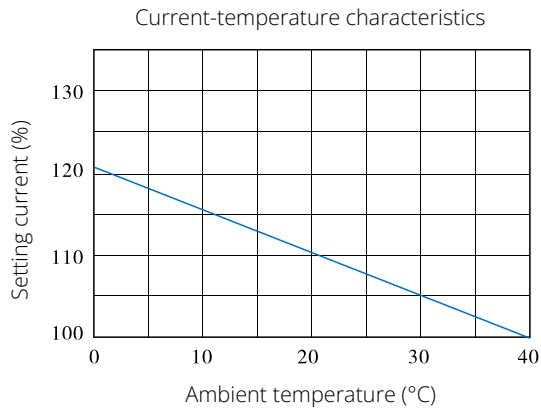
Current-temperature characteristic curve



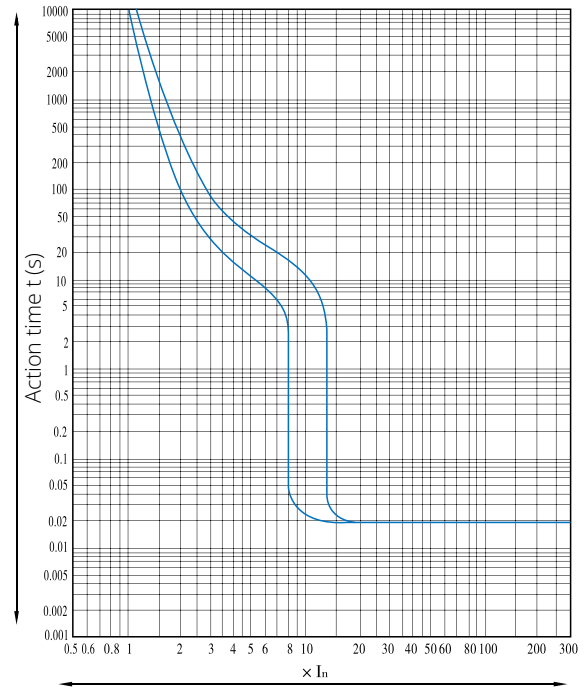
* The BZM residual current products have the same tripping characteristic curve as the thermo-magnetic models.

BZM Protective Acting Characteristic Curves

BZM3-AX (Thermo-Magnetic)



Current-temperature characteristic curve



1.4

Molded Case Circuit Breakers BZM Circuit Breaker's Basic Devices

BZM Thermo-Magnetic Power Distribution Protection

Rated current =
Rated continuous current
 $I_n = I_u$
A

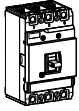
Basic breaking capacity
3P 15 kA
415 V 50/60 Hz
Part No.
Article No.

Basic breaking capacity
4P 15 kA
415 V 50/60 Hz
Part No.
Article No.

Basic breaking capacity
3P 18 kA
415 V 50/60 Hz
Part No.
Article No.

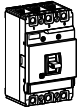
Conventional breaking capacity
4P 18 kA
415 V 50/60 Hz
Part No.
Article No.

BZM1



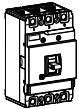
Rated current (A)	Basic breaking capacity 3P 15 kA Part No. Article No.	Basic breaking capacity 4P 15 kA Part No. Article No.	Basic breaking capacity 3P 18 kA Part No. Article No.	Conventional breaking capacity 4P 18 kA Part No. Article No.
10	BZMm1D3AX010 CCB00001	BZMm1D4AX010 CCB00014	BZMm1F3AX010 CCB00053	BZMm1F4AX010 CCB00066
16	BZMm1D3AX016 CCB00002	BZMm1D4AX016 CCB00015	BZMm1F3AX016 CCB00054	BZMm1F4AX016 CCB00067
20	BZMm1D3AX020 CCB00003	BZMm1D4AX020 CCB00016	BZMm1F3AX020 CCB00055	BZMm1F4AX020 CCB00068
25	BZMm1D3AX025 CCB00004	BZMm1D4AX025 CCB00017	BZMm1F3AX025 CCB00056	BZMm1F4AX025 CCB00069
32	BZMm1D3AX032 CCB00005	BZMm1D4AX032 CCB00018	BZMm1F3AX032 CCB00057	BZMm1F4AX032 CCB00070
40	BZMm1D3AX040 CCB00006	BZMm1D4AX040 CCB00019	BZMm1F3AX040 CCB00058	BZMm1F4AX040 CCB00071
50	BZMm1D3AX050 CCB00007	BZMm1D4AX050 CCB00020	BZMm1F3AX050 CCB00059	BZMm1F4AX050 CCB00072
63	BZMm1D3AX063 CCB00008	BZMm1D4AX063 CCB00021	BZMm1F3AX063 CCB00060	BZMm1F4AX063 CCB00073
80	BZMm1D3AX080 CCB00009	BZMm1D4AX080 CCB00022	BZMm1F3AX080 CCB00061	BZMm1F4AX080 CCB00074
100	BZMm1D3AX100 CCB00010	BZMm1D4AX100 CCB00023	BZMm1F3AX100 CCB00062	BZMm1F4AX100 CCB00075
125	BZMm1D3AX125 CCB00011	BZMm1D4AX125 CCB00024	BZMm1F3AX125 CCB00063	BZMm1F4AX125 CCB00076
140	BZMm1D3AX140 CCB00012	BZMm1D4AX140 CCB00025	BZMm1F3AX140 CCB00064	BZMm1F4AX140 CCB00077
160	BZMm1D3AX160 CCB00013	BZMm1D4AX160 CCB00026	BZMm1F3AX160 CCB00065	BZMm1F4AX160 CCB00078

BZM2



100
125
140
160
180
200
225
250

BZM3



250
315
350
400
500
630

Basic breaking capacity 3P 25 kA 415 V 50/60 Hz Part No. Article No.	Basic breaking capacity 4P 25 kA 415 V 50/60 Hz Part No. Article No.	Conventional breaking capacity 3P 36 kA 415 V 50/60 Hz Part No. Article No.	Conventional breaking capacity 4P 36 kA 415 V 50/60 Hz Part No. Article No.	Standard breaking capacity 3P 50 kA 415 V 50/60 Hz Part No. Article No.	Standard breaking capacity 4P 50 kA 415 V 50/60 Hz Part No. Article No.
BZMm1B3AX010 CCB00105	BZMm1B4AX010 CCB00118	BZM1C3AX010 CCB10001	BZM1C4AX010 CCB10014	BZM1N3AX010 CCB10053	BZM1N4AX010 CCB10066
BZMm1B3AX016 CCB00106	BZMm1B4AX016 CCB00119	BZM1C3AX016 CCB10002	BZM1C4AX016 CCB10015	BZM1N3AX016 CCB10054	BZM1N4AX016 CCB10067
BZMm1B3AX020 CCB00107	BZMm1B4AX020 CCB00120	BZM1C3AX020 CCB10003	BZM1C4AX020 CCB10016	BZM1N3AX020 CCB10055	BZM1N4AX020 CCB10068
BZMm1B3AX025 CCB00108	BZMm1B4AX025 CCB00121	BZM1C3AX025 CCB10004	BZM1C4AX025 CCB10017	BZM1N3AX025 CCB10056	BZM1N4AX025 CCB10069
BZMm1B3AX032 CCB00109	BZMm1B4AX032 CCB00122	BZM1C3AX032 CCB10005	BZM1C4AX032 CCB10018	BZM1N3AX032 CCB10057	BZM1N4AX032 CCB10070
BZMm1B3AX040 CCB00110	BZMm1B4AX040 CCB00123	BZM1C3AX040 CCB10006	BZM1C4AX040 CCB10019	BZM1N3AX040 CCB10058	BZM1N4AX040 CCB10071
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BZMm1B3AX063 CCB00112	BZMm1B4AX063 CCB00125	BZM1C3AX063 CCB10008	BZM1C4AX063 CCB10021	BZM1N3AX063 CCB10060	BZM1N4AX063 CCB10073
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BZMm1B3AX160 CCB00117	BZMm1B4AX160 CCB00130	BZM1C3AX160 CCB10013	BZM1C4AX160 CCB10026	BZM1N3AX160 CCB10065	BZM1N4AX160 CCB10078
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BZM2B3AX250 CCB20008	BZM2B4AX250 CCB20016	BZM2C3AX250 CCB20040	BZM2C4AX250 CCB20048	BZM2N3AX250 CCB20072	BZM2N4AX250 CCB20080
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BZM3B3AX315 CCB30002	BZM3B4AX315 CCB30008	BZM3C3AX315 CCB30026	BZM3C4AX315 CCB30032	BZM3N3AX315 CCB30050	BZM3N4AX315 CCB30056
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BZM3B3AX500 CCB30005	BZM3B4AX500 CCB30011	BZM3C3AX500 CCB30029	BZM3C4AX500 CCB30035	BZM3N3AX500 CCB30053	BZM3N4AX500 CCB30059
BZM3B3AX630 CCB30006	BZM3B4AX630 CCB30012	BZM3C3AX630 CCB30030	BZM3C4AX630 CCB30036	BZM3N3AX630 CCB30054	BZM3N4AX630 CCB30060

1.4

Molded Case Circuit Breakers BZM Circuit Breaker's Basic Devices

BZM Magnetic only Motor Protection

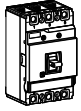
Rated current =
Rated continuous current
 $I_n = I_u$
A

Basic breaking capacity
3P 15 kA
415 V 50/60 Hz
Part No.
Article No.

Conventional breaking capacity
3P 18 kA
415 V 50/60 Hz
Part No.
Article No.

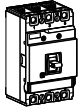
Basic breaking capacity
3P 25 kA
415 V 50/60 Hz
Part No.
Article No.

BZM1



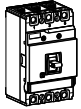
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16	BZMm1D3MX016 CCB00028	BZMm1F3MX016 CCB00080	BZMm1B3MX016 CCB00132
20	BZMm1D3MX020 CCB00029	BZMm1F3MX020 CCB00081	BZMm1B3MX020 CCB00133
25	BZMm1D3MX025 CCB00030	BZMm1F3MX025 CCB00082	BZMm1B3MX025 CCB00134
32	BZMm1D3MX032 CCB00031	BZMm1F3MX032 CCB00083	BZMm1B3MX032 CCB00135
40	BZMm1D3MX040 CCB00032	BZMm1F3MX040 CCB00084	BZMm1B3MX040 CCB00136
50	BZMm1D3MX050 CCB00033	BZMm1F3MX050 CCB00085	BZMm1B3MX050 CCB00137
63	BZMm1D3MX063 CCB00034	BZMm1F3MX063 CCB00086	BZMm1B3MX063 CCB00138
80	BZMm1D3MX080 CCB00035	BZMm1F3MX080 CCB00087	BZMm1B3MX080 CCB00139
100	BZMm1D3MX100 CCB00036	BZMm1F3MX100 CCB00088	BZMm1B3MX100 CCB00140
125	BZMm1D3MX125 CCB00037	BZMm1F3MX125 CCB00089	BZMm1B3MX125 CCB00141
140	BZMm1D3MX140 CCB00038	BZMm1F3MX140 CCB00090	BZMm1B3MX140 CCB00142
160	BZMm1D3MX160 CCB00039	BZMm1F3MX160 CCB00091	BZMm1B3MX160 CCB00143

BZM2



100			BZM2B3MX100 CCB20017
125			BZM2B3MX125 CCB20018
140			BZM2B3MX140 CCB20019
160			BZM2B3MX160 CCB20020
180			BZM2B3MX180 CCB20021
200			BZM2B3MX200 CCB20022
225			BZM2B3MX225 CCB20023
250			BZM2B3MX250 CCB20024

BZM3



250			BZM3B3MX250 CCB30013
315			BZM3B3MX315 CCB30014
350			BZM3B3MX350 CCB30015
400			BZM3B3MX400 CCB30016
500			BZM3B3MX500 CCB30017
630			BZM3B3MX630 CCB30018

**Conventional
breaking capacity
3P 36 kA**

415 V 50/60 Hz

Part No.

Article No.

**Standard breaking
capacity**

3P 50 kA

415 V 50/60 Hz

Part No.

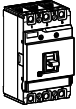
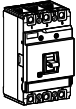
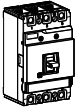
Article No.

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BZM1C3MX016 CCB10028	BZM1N3MX016 CCB10080
BZM1C3MX020 CCB10029	BZM1N3MX020 CCB10081
BZM1C3MX025 CCB10030	BZM1N3MX025 CCB10082
BZM1C3MX032 CCB10031	BZM1N3MX032 CCB10083
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BZM1C3MX100 CCB10036	BZM1N3MX100 CCB10088
BZM1C3MX125 CCB10037	BZM1N3MX125 CCB10089
BZM1C3MX140 CCB10038	BZM1N3MX140 CCB10090
BZM1C3MX160 CCB10039	BZM1N3MX160 CCB10091
BZM2C3MX100 CCB20049	BZM2N3MX100 CCB20081
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BZM2C3MX160 CCB20052	BZM2N3MX160 CCB20084
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BZM2C3MX225 CCB20055	BZM2N3MX225 CCB20087
BZM2C3MX250 CCB20056	BZM2N3MX250 CCB20088
BZM3C3MX250 CCB30037	BZM3N3MX250 CCB30061
BZM3C3MX315 CCB30038	BZM3N3MX315 CCB30062
BZM3C3MX350 CCB30039	BZM3N3MX350 CCB30063
BZM3C3MX400 CCB30040	BZM3N3MX400 CCB30064
BZM3C3MX500 CCB30041	BZM3N3MX500 CCB30065
BZM3C3MX630 CCB30042	BZM3N3MX630 CCB30066

1.4

Molded Case Circuit Breakers BZM Circuit Breaker's Basic Devices

BZM Residual Current Protection (Thermo-Magnetic)

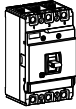
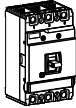
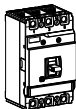
Rated current = Rated continuous current $I_n=I_u$ A	RSU: Type U, non-delayed 3P 50 kA Part No. Article No.	RSU: Type U, non-delayed 4P 50 kA Part No. Article No.	RSV: Type V, non-delayed 3P 50 kA Part No. Article No.	RSV: Type V, non-delayed 4P 50 kA Part No. Article No.		
BZM1 	10	BZM1N3AX010RSU CCB11001	BZM1N4AX010RSU CCCB11014	BZM1N3AX010RSV CCB11053	BZM1N4AX010RSV CCCB11066	
	16	BZM1N3AX016RSU CCB11002	BZM1N4AX016RSU CCB11015	BZM1N3AX016RSV CCB11054	BZM1N4AX016RSV CCB11067	
	20	BZM1N3AX020RSU CCB11003	BZM1N4AX020RSU CCB11016	BZM1N3AX020RSV CCB11055	BZM1N4AX020RSV CCB11068	
	25	BZM1N3AX025RSU CCB11004	BZM1N4AX025RSU CCB11017	BZM1N3AX025RSV CCB11056	BZM1N4AX025RSV CCB11069	
	32	BZM1N3AX032RSU CCB11005	BZM1N4AX032RSU CCB11018	BZM1N3AX032RSV CCB11057	BZM1N4AX032RSV CCB11070	
	40	BZM1N3AX040RSU CCB11006	BZM1N4AX040RSU CCB11019	BZM1N3AX040RSV CCB11058	BZM1N4AX040RSV CCB11071	
	50	BZM1N3AX050RSU CCB11007	BZM1N4AX050RSU CCB11020	BZM1N3AX050RSV CCB11059	BZM1N4AX050RSV CCB11072	
	63	BZM1N3AX063RSU CCB11008	BZM1N4AX063RSU CCB11021	BZM1N3AX063RSV CCB11060	BZM1N4AX063RSV CCB11073	
	80	BZM1N3AX080RSU CCB11009	BZM1N4AX080RSU CCB11022	BZM1N3AX080RSV CCB11061	BZM1N4AX080RSV CCB11074	
	100	BZM1N3AX100RSU CCB11010	BZM1N4AX100RSU CCB11023	BZM1N3AX100RSV CCB11062	BZM1N4AX100RSV CCB11075	
	125	BZM1N3AX125RSU CCB11011	BZM1N4AX125RSU CCB11024	BZM1N3AX125RSV CCB11063	BZM1N4AX125RSV CCB11076	
	140	BZM1N3AX140RSU CCB11012	BZM1N4AX140RSU CCB11025	BZM1N3AX140RSV CCB11064	BZM1N4AX140RSV CCB11077	
	160	BZM1N3AX160RSU CCB11013	BZM1N4AX160RSU CCB11026	BZM1N3AX160RSV CCB11065	BZM1N4AX160RSV CCB11078	
	BZM2 	100	BZM2N3AX100RSU CCB21001	BZM2N4AX100RSU CCB21009	BZM2N3AX100RSV CCB21033	BZM2N4AX100RSV CCB21041
		125	BZM2N3AX125RSU CCB21002	BZM2N4AX125RSU CCB21010	BZM2N3AX125RSV CCB21034	BZM2N4AX125RSV CCB21042
		140	BZM2N3AX140RSU CCB21003	BZM2N4AX140RSU CCB21011	BZM2N3AX140RSV CCB21035	BZM2N4AX140RSV CCB21043
160		BZM2N3AX160RSU CCB21004	BZM2N4AX160RSU CCB21012	BZM2N3AX160RSV CCB21036	BZM2N4AX160RSV CCB21044	
180		BZM2N3AX180RSU CCB21005	BZM2N4AX180RSU CCB21013	BZM2N3AX180RSV CCB21037	BZM2N4AX180RSV CCB21045	
200		BZM2N3AX200RSU CCB21006	BZM2N4AX200RSU CCB21014	BZM2N3AX200RSV CCB21038	BZM2N4AX200RSV CCB21046	
225		BZM2N3AX225RSU CCB21007	BZM2N4AX225RSU CCB21015	BZM2N3AX225RSV CCB21039	BZM2N4AX225RSV CCB21047	
250		BZM2N3AX250RSU CCB21008	BZM2N4AX250RSU CCB21016	BZM2N3AX250RSV CCB21040	BZM2N4AX250RSV CCB21048	
BZM3 		250			BZM3N3AX250RSV CCB31001	BZM3N4AX250RSV CCB31007
	315			BZM3N3AX315RSV CCB31002	BZM3N4AX315RSV CCB31008	
	350			BZM3N3AX350RSV CCB31003	BZM3N4AX350RSV CCB31009	
	400			BZM3N3AX400RSV CCB31004	BZM3N4AX400RSV CCB31010	
	500			BZM3N3AX500RSV CCB31005	BZM3N4AX500RSV CCB31011	
	630			BZM3N3AX630RSV CCB31006	BZM3N4AX630RSV CCB31012	

RSX: Type X, delayed 3P 50 kA	RSX: Type X, delayed 4P 50 kA	RSY: Type Y, delayed 3P 50 kA	RSY: Type Y, delayed 4P 50 kA
Part No.	Part No.	Part No.	Part No.
Article No.	Article No.	Article No.	Article No.
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BZM1N3AX016RSX CCB11106	BZM1N4AX016RSX CCB11119	BZM1N3AX016RSY CCB11158	BZM1N4AX016RSY CCB11171
BZM1N3AX020RSX CCB11107	BZM1N4AX020RSX CCB11120	BZM1N3AX020RSY CCB11159	BZM1N4AX020RSY CCB11172
BZM1N3AX025RSX CCB11108	BZM1N4AX025RSX CCB11121	BZM1N3AX025RSY CCB11160	BZM1N4AX025RSY CCB11173
BZM1N3AX032RSX CCB11109	BZM1N4AX032RSX CCB11122	BZM1N3AX032RSY CCB11161	BZM1N4AX032RSY CCB11174
BZM1N3AX040RSX CCB11110	BZM1N4AX040RSX CCB11123	BZM1N3AX040RSY CCB11162	BZM1N4AX040RSY CCB11175
BZM1N3AX050RSX CCB11111	BZM1N4AX050RSX CCB11124	BZM1N3AX050RSY CCB11163	BZM1N4AX050RSY CCB11176
BZM1N3AX063RSX CCB11112	BZM1N4AX063RSX CCB11125	BZM1N3AX063RSY CCB11164	BZM1N4AX063RSY CCB11177
BZM1N3AX080RSX CCB11113	BZM1N4AX080RSX CCB11126	BZM1N3AX080RSY CCB11165	BZM1N4AX080RSY CCB11178
BZM1N3AX100RSX CCB11114	BZM1N4AX100RSX CCB11127	BZM1N3AX100RSY CCB11166	BZM1N4AX100RSY CCB11179
BZM1N3AX125RSX CCB11115	BZM1N4AX125RSX CCB11128	BZM1N3AX125RSY CCB11167	BZM1N4AX125RSY CCB11180
BZM1N3AX140RSX CCB11116	BZM1N4AX140RSX CCB11129	BZM1N3AX140RSY CCB11168	BZM1N4AX140RSY CCB11181
BZM1N3AX160RSX CCB11117	BZM1N4AX160RSX CCB11130	BZM1N3AX160RSY CCB11169	BZM1N4AX160RSY CCB11182
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BZM2N3AX140RSX CCB21067	BZM2N4AX140RSX CCB21075	BZM2N3AX140RSY CCB21099	BZM2N4AX140RSY CCB21107
BZM2N3AX160RSX CCB21068	BZM2N4AX160RSX CCB21076	BZM2N3AX160RSY CCB21100	BZM2N4AX160RSY CCB21108
BZM2N3AX180RSX CCB21069	BZM2N4AX180RSX CCB21077	BZM2N3AX180RSY CCB21101	BZM2N4AX180RSY CCB21109
BZM2N3AX200RSX CCB21070	BZM2N4AX200RSX CCB21078	BZM2N3AX200RSY CCB21102	BZM2N4AX200RSY CCB21110
BZM2N3AX225RSX CCB21071	BZM2N4AX225RSX CCB21079	BZM2N3AX225RSY CCB21103	BZM2N4AX225RSY CCB21111
BZM2N3AX250RSX CCB21072	BZM2N4AX250RSX CCB21080	BZM2N3AX250RSY CCB21104	BZM2N4AX250RSY CCB21112
		BZM3N3AX250RSY CCB31025	BZM3N4AX250RSY CCB31031
		BZM3N3AX315RSY CCB31026	BZM3N4AX315RSY CCB31032
		BZM3N3AX350RSY CCB31027	BZM3N4AX350RSY CCB31033
		BZM3N3AX400RSY CCB31028	BZM3N4AX400RSY CCB31034
		BZM3N3AX500RSY CCB31029	BZM3N4AX500RSY CCB31035
		BZM3N3AX630RSY CCB31030	BZM3N4AX630RSY CCB31036

1.4

Molded Case Circuit Breakers BZM Circuit Breaker's Basic Devices

BZM Residual Current Protection (Thermo-Magnetic, Alarm, No Tripping)

Rated current = Rated continuous current $I_n=I_u$ A	RNU: Type U, alarm, no tripping 3P 50 kA Part No. Article No.	RNU: Type U, alarm, no tripping 4P 50 kA Part No. Article No.	RNV: Type V, alarm, no tripping 3P 50 kA Part No. Article No.	RNV: Type V, alarm, no tripping 4P 50 kA Part No. Article No.	
BZM1 	10	BZM1N3AX010RNU CCB11209	BZM1N4AX010RNU CCCB11222	BZM1N3AX010RNV CCB11261	BZM1N4AX010RNV CCB11274
	16	BZM1N3AX016RNU CCB11210	BZM1N4AX016RNU CCB11223	BZM1N3AX016RNV CCB11262	BZM1N4AX016RNV CCB11275
	20	BZM1N3AX020RNU CCB11211	BZM1N4AX020RNU CCB11224	BZM1N3AX020RNV CCB11263	BZM1N4AX020RNV CCB11276
	25	BZM1N3AX025RNU CCB11212	BZM1N4AX025RNU CCB11225	BZM1N3AX025RNV CCB11264	BZM1N4AX025RNV CCB11277
	32	BZM1N3AX032RNU CCB11213	BZM1N4AX032RNU CCB11226	BZM1N3AX032RNV CCB11265	BZM1N4AX032RNV CCB11278
	40	BZM1N3AX040RNU CCB11214	BZM1N4AX040RNU CCB11227	BZM1N3AX040RNV CCB11266	BZM1N4AX040RNV CCB11279
	50	BZM1N3AX050RNU CCB11215	BZM1N4AX050RNU CCB11228	BZM1N3AX050RNV CCB11267	BZM1N4AX050RNV CCB11280
	63	BZM1N3AX063RNU CCB11216	BZM1N4AX063RNU CCB11229	BZM1N3AX063RNV CCB11268	BZM1N4AX063RNV CCB11281
	80	BZM1N3AX080RNU CCB11217	BZM1N4AX080RNU CCB11230	BZM1N3AX080RNV CCB11269	BZM1N4AX080RNV CCB11282
	100	BZM1N3AX100RNU CCB11218	BZM1N4AX100RNU CCB11231	BZM1N3AX100RNV CCB11270	BZM1N4AX100RNV CCB11283
	125	BZM1N3AX125RNU CCB11219	BZM1N4AX125RNU CCB11232	BZM1N3AX125RNV CCB11271	BZM1N4AX125RNV CCB11284
	140	BZM1N3AX140RNU CCB11220	BZM1N4AX140RNU CCB11233	BZM1N3AX140RNV CCB11272	BZM1N4AX140RNV CCB11285
	160	BZM1N3AX160RNU CCB11221	BZM1N4AX160RNU CCB11234	BZM1N3AX160RNV CCB11273	BZM1N4AX160RNV CCB11286
	BZM2 	100	BZM2N3AX100RNU CCB21129	BZM2N4AX100RNU CCB21137	BZM2N3AX100RNV CCB21161
125		BZM2N3AX125RNU CCB21130	BZM2N4AX125RNU CCB21138	BZM2N3AX125RNV CCB21162	BZM2N4AX125RNV CCB21170
140		BZM2N3AX140RNU CCB21131	BZM2N4AX140RNU CCB21139	BZM2N3AX140RNV CCB21163	BZM2N4AX140RNV CCB21171
160		BZM2N3AX160RNU CCB21132	BZM2N4AX160RNU CCB21140	BZM2N3AX160RNV CCB21164	BZM2N4AX160RNV CCB21172
180		BZM2N3AX180RNU CCB21133	BZM2N4AX180RNU CCB21141	BZM2N3AX180RNV CCB21165	BZM2N4AX180RNV CCB21173
200		BZM2N3AX200RNU CCB21134	BZM2N4AX200RNU CCB21142	BZM2N3AX200RNV CCB21166	BZM2N4AX200RNV CCB21174
225		BZM2N3AX225RNU CCB21135	BZM2N4AX225RNU CCB21143	BZM2N3AX225RNV CCB21167	BZM2N4AX225RNV CCB21175
250		BZM2N3AX250RNU CCB21136	BZM2N4AX250RNU CCB21144	BZM2N3AX250RNV CCB21168	BZM2N4AX250RNV CCB21176
BZM3 	250			BZM3N3AX250RNV CCB31049	BZM3N4AX250RNV CCB31055
	315			BZM3N3AX315RNV CCB31050	BZM3N4AX315RNV CCB31056
	350			BZM3N3AX350RNV CCB31051	BZM3N4AX350RNV CCB31057
	400			BZM3N3AX400RNV CCB31052	BZM3N4AX400RNV CCB31058
	500			BZM3N3AX500RNV CCB31053	BZM3N4AX500RNV CCB31059
	630			BZM3N3AX630RNV CCB31054	BZM3N4AX630RNV CCB31060

**RNX: Type X, alarm,
no tripping
3P 50 kA**

**RNX: Type X, alarm,
no tripping
4P 50 kA**

**RNY: Type Y, alarm,
no tripping
3P 50 kA**

**RNY: Type Y, alarm,
no tripping
4P 50 kA**

Part No.

Part No.

Part No.

Part No.

Article No.

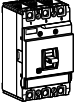
Article No.

Article No.

Article No.

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BZM1N3AX016RNX CCB11314	BZM1N4AX016RNX CCB11327	BZM1N3AX016RNY CCB11366	BZM1N4AX016RNY CCB11379
BZM1N3AX020RNX CCB11315	BZM1N4AX020RNX CCB11328	BZM1N3AX020RNY CCB11367	BZM1N4AX020RNY CCB11380
BZM1N3AX025RNX CCB11316	BZM1N4AX025RNX CCB11329	BZM1N3AX025RNY CCB11368	BZM1N4AX025RNY CCB11381
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BZM1N3AX050RNX CCB11319	BZM1N4AX050RNX CCB11332	BZM1N3AX050RNY CCB11371	BZM1N4AX050RNY CCB11384
BZM1N3AX063RNX CCB11320	BZM1N4AX063RNX CCB11333	BZM1N3AX063RNY CCB11372	BZM1N4AX063RNY CCB11385
BZM1N3AX080RNX CCB11321	BZM1N4AX080RNX CCB11334	BZM1N3AX080RNY CCB11373	BZM1N4AX080RNY CCB11386
BZM1N3AX100RNX CCB11322	BZM1N4AX100RNX CCB11335	BZM1N3AX100RNY CCB11374	BZM1N4AX100RNY CCB11387
BZM1N3AX125RNX CCB11323	BZM1N4AX125RNX CCB11336	BZM1N3AX125RNY CCB11375	BZM1N4AX125RNY CCB11388
BZM1N3AX140RNX CCB11324	BZM1N4AX140RNX CCB11337	BZM1N3AX140RNY CCB11376	BZM1N4AX140RNY CCB11389
BZM1N3AX160RNX CCB11325	BZM1N4AX160RNX CCB11338	BZM1N3AX160RNY CCB11377	BZM1N4AX160RNY CCB11390
BZM2N3AX100RNX CCB21193	BZM2N4AX100RNX CCB21201	BZM2N3AX100RNY CCB21225	BZM2N4AX100RNY CCB21233
BZM2N3AX125RNX CCB21194	BZM2N4AX125RNX CCB21202	BZM2N3AX125RNY CCB21226	BZM2N4AX125RNY CCB21234
BZM2N3AX140RNX CCB21195	BZM2N4AX140RNX CCB21203	BZM2N3AX140RNY CCB21227	BZM2N4AX140RNY CCB21235
BZM2N3AX160RNX CCB21196	BZM2N4AX160RNX CCB21204	BZM2N3AX160RNY CCB21228	BZM2N4AX160RNY CCB21236
BZM2N3AX180RNX CCB21197	BZM2N4AX180RNX CCB21205	BZM2N3AX180RNY CCB21229	BZM2N4AX180RNY CCB21237
BZM2N3AX200RNX CCB21198	BZM2N4AX200RNX CCB21206	BZM2N3AX200RNY CCB21230	BZM2N4AX200RNY CCB21238
BZM2N3AX225RNX CCB21199	BZM2N4AX225RNX CCB21207	BZM2N3AX225RNY CCB21231	BZM2N4AX225RNY CCB21239
BZM2N3AX250RNX CCB21200	BZM2N4AX250RNX CCB21208	BZM2N3AX250RNY CCB21232	BZM2N4AX250RNY CCB21240
		BZM3N3AX250RNY CCB31073	BZM3N4AX250RNY CCB31079
		BZM3N3AX315RNY CCB31074	BZM3N4AX315RNY CCB31080
		BZM3N3AX350RNY CCB31075	BZM3N4AX350RNY CCB31081
		BZM3N3AX400RNY CCB31076	BZM3N4AX400RNY CCB31082
		BZM3N3AX500RNY CCB31077	BZM3N4AX500RNY CCB31083
		BZM3N3AX630RNY CCB31078	BZM3N4AX630RNY CCB31084

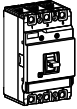
BZM Residual Current Protection (Magnetic only)

Rated current = Rated continuous current $I_n = I_u$ A	RSU: Type U, non-delayed 3P 50 kA Part No. Article No.	RSV: Type V, non-delayed 3P 50 kA Part No. Article No.	RSX: Type X, delayed 3P 50 kA Part No. Article No.	RSY: Type Y, delayed 3P 50 kA Part No. Article No.		
BZM1 	10	BZM1N3MX010RSU CCB11027	BZM1N3MX010RSV CCB11079	BZM1N3MX010RSX CCB11131	BZM1N3MX010RSY CCB11183	
	16	BZM1N3MX016RSU CCB11028	BZM1N3MX016RSV CCB11080	BZM1N3MX016RSX CCB11132	BZM1N3MX016RSY CCB11184	
	20	BZM1N3MX020RSU CCB11029	BZM1N3MX020RSV CCB11081	BZM1N3MX020RSX CCB11133	BZM1N3MX020RSY CCB11185	
	25	BZM1N3MX025RSU CCB11030	BZM1N3MX025RSV CCB11082	BZM1N3MX025RSX CCB11134	BZM1N3MX025RSY CCB11186	
	32	BZM1N3MX032RSU CCB11031	BZM1N3MX032RSV CCB11083	BZM1N3MX032RSX CCB11135	BZM1N3MX032RSY CCB11187	
	40	BZM1N3MX040RSU CCB11032	BZM1N3MX040RSV CCB11084	BZM1N3MX040RSX CCB11136	BZM1N3MX040RSY CCB11188	
	50	BZM1N3MX050RSU CCB11033	BZM1N3MX050RSV CCB11085	BZM1N3MX050RSX CCB11137	BZM1N3MX050RSY CCB11189	
	63	BZM1N3MX063RSU CCB11034	BZM1N3MX063RSV CCB11086	BZM1N3MX063RSX CCB11138	BZM1N3MX063RSY CCB11190	
	80	BZM1N3MX080RSU CCB11035	BZM1N3MX080RSV CCB11087	BZM1N3MX080RSX CCB11139	BZM1N3MX080RSY CCB11191	
	100	BZM1N3MX100RSU CCB11036	BZM1N3MX100RSV CCB11088	BZM1N3MX100RSX CCB11140	BZM1N3MX100RSY CCB11192	
	125	BZM1N3MX125RSU CCB11037	BZM1N3MX125RSV CCB11089	BZM1N3MX125RSX CCB11141	BZM1N3MX125RSY CCB11193	
	140	BZM1N3MX140RSU CCB11038	BZM1N3MX140RSV CCB11090	BZM1N3MX140RSX CCB11142	BZM1N3MX140RSY CCB11194	
	160	BZM1N3MX160RSU CCB11039	BZM1N3MX160RSV CCB11091	BZM1N3MX160RSX CCB11143	BZM1N3MX160RSY CCB11195	
	BZM2 	100	BZM2N3MX100RSU CCB21017	BZM2N3MX100RSV CCB21049	BZM2N3MX100RSX CCB21081	BZM2N3MX100RSY CCB21113
		125	BZM2N3MX125RSU CCB21018	BZM2N3MX125RSV CCB21050	BZM2N3MX125RSX CCB21082	BZM2N3MX125RSY CCB21114
		140	BZM2N3MX140RSU CCB21019	BZM2N3MX140RSV CCB21051	BZM2N3MX140RSX CCB21083	BZM2N3MX140RSY CCB21115
160		BZM2N3MX160RSU CCB21020	BZM2N3MX160RSV CCB21052	BZM2N3MX160RSX CCB21084	BZM2N3MX160RSY CCB21116	
180		BZM2N3MX180RSU CCB21021	BZM2N3MX180RSV CCB21053	BZM2N3MX180RSX CCB21085	BZM2N3MX180RSY CCB21117	
200		BZM2N3MX200RSU CCB21022	BZM2N3MX200RSV CCB21054	BZM2N3MX200RSX CCB21086	BZM2N3MX200RSY CCB21118	
225		BZM2N3MX225RSU CCB21023	BZM2N3MX225RSV CCB21055	BZM2N3MX225RSX CCB21087	BZM2N3MX225RSY CCB21119	
250		BZM2N3MX250RSU CCB21024	BZM2N3MX250RSV CCB21056	BZM2N3MX250RSX CCB21088	BZM2N3MX250RSY CCB21120	
BZM3 	250		BZM3N3MX250RSV CCB31013		BZM3N3MX250RSY CCB31037	
	315		BZM3N3MX315RSV CCB31014		BZM3N3MX315RSY CCB31038	
	350		BZM3N3MX350RSV CCB31015		BZM3N3MX350RSY CCB31039	
	400		BZM3N3MX400RSV CCB31016		BZM3N3MX400RSY CCB31040	
	500		BZM3N3MX500RSV CCB31017		BZM3N3MX500RSY CCB31041	
630		BZM3N3MX630RSV CCB31018		BZM3N3MX630RSY CCB31042		

BZM Residual Current Protection (Magnetic only, Alarm, No Tripping)

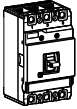
Rated current = Rated continuous current $I_n=I_u$ A	RNU: Type U, alarm, no tripping 3P 50 kA Part No. Article No.	RNV: Type V, alarm, no tripping 3P 50 kA Part No. Article No.	RNX: Type X, alarm, no tripping 3P 50 kA Part No. Article No.	RNY: Type Y, alarm, no tripping 3P 50 kA Part No. Article No.
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BZM1



10	BZM1N3MX010RNU CCB11235	BZM1N3MX010RNV CCB11287	BZM1N3MX010RNX CCB11339	BZM1N3MX010RNY CCB11391
16	BZM1N3MX016RNU CCB11236	BZM1N3MX016RNV CCB11288	BZM1N3MX016RNX CCB11340	BZM1N3MX016RNY CCB11392
20	BZM1N3MX020RNU CCB11237	BZM1N3MX020RNV CCB11289	BZM1N3MX020RNX CCB11341	BZM1N3MX020RNY CCB11393
25	BZM1N3MX025RNU CCB11238	BZM1N3MX025RNV CCB11290	BZM1N3MX025RNX CCB11342	BZM1N3MX025RNY CCB11394
32	BZM1N3MX032RNU CCB11239	BZM1N3MX032RNV CCB11291	BZM1N3MX032RNX CCB11343	BZM1N3MX032RNY CCB11395
40	BZM1N3MX040RNU CCB11240	BZM1N3MX040RNV CCB11292	BZM1N3MX040RNX CCB11344	BZM1N3MX040RNY CCB11396
50	BZM1N3MX050RNU CCB11241	BZM1N3MX050RNV CCB11293	BZM1N3MX050RNX CCB11345	BZM1N3MX050RNY CCB11397
63	BZM1N3MX063RNU CCB11242	BZM1N3MX063RNV CCB11294	BZM1N3MX063RNX CCB11346	BZM1N3MX063RNY CCB11398
80	BZM1N3MX080RNU CCB11243	BZM1N3MX080RNV CCB11295	BZM1N3MX080RNX CCB11347	BZM1N3MX080RNY CCB11399
100	BZM1N3MX100RNU CCB11244	BZM1N3MX100RNV CCB11296	BZM1N3MX100RNX CCB11348	BZM1N3MX100RNY CCB11400
125	BZM1N3MX125RNU CCB11245	BZM1N3MX125RNV CCB11297	BZM1N3MX125RNX CCB11349	BZM1N3MX125RNY CCB11401
140	BZM1N3MX140RNU CCB11246	BZM1N3MX140RNV CCB11298	BZM1N3MX140RNX CCB11350	BZM1N3MX140RNY CCB11402
160	BZM1N3MX160RNU CCB11247	BZM1N3MX160RNV CCB11299	BZM1N3MX160RNX CCB11351	BZM1N3MX160RNY CCB11403

BZM2



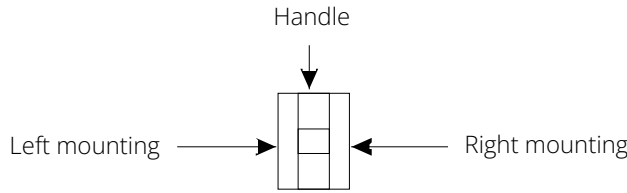
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125	BZM2N3MX125RNU CCB21146	BZM2N3MX125RNV CCB21178	BZM2N3MX125RNX CCB21210	BZM2N3MX125RNY CCB21242
140	BZM2N3MX140RNU CCB21147	BZM2N3MX140RNV CCB21179	BZM2N3MX140RNX CCB21211	BZM2N3MX140RNY CCB21243
160	BZM2N3MX160RNU CCB21148	BZM2N3MX160RNV CCB21180	BZM2N3MX160RNX CCB21212	BZM2N3MX160RNY CCB21244
180	BZM2N3MX180RNU CCB21149	BZM2N3MX180RNV CCB21181	BZM2N3MX180RNX CCB21213	BZM2N3MX180RNY CCB21245
200	BZM2N3MX200RNU CCB21150	BZM2N3MX200RNV CCB21182	BZM2N3MX200RNX CCB21214	BZM2N3MX200RNY CCB21246
225	BZM2N3MX225RNU CCB21151	BZM2N3MX225RNV CCB21183	BZM2N3MX225RNX CCB21215	BZM2N3MX225RNY CCB21247
250	BZM2N3MX250RNU CCB21152	BZM2N3MX250RNV CCB21184	BZM2N3MX250RNX CCB21216	BZM2N3MX250RNY CCB21248

BZM3



250		BZM3N3MX250RNV CCB31061		BZM3N3MX250RNY CCB31085
315		BZM3N3MX315RNV CCB31062		BZM3N3MX315RNY CCB31086
350		BZM3N3MX350RNV CCB31063		BZM3N3MX350RNY CCB31087
400		BZM3N3MX400RNV CCB31064		BZM3N3MX400RNY CCB31088
500		BZM3N3MX500RNV CCB31065		BZM3N3MX500RNY CCB31089
630		BZM3N3MX630RNV CCB31066		BZM3N3MX630RNY CCB31090

Electrical Accessories Combination Mode for (for AX/MX Products)



Legends

◇	Single-auxiliary contact
◆	Double-auxiliary contact
●	Alarm contact
■	Shunt release
▲	Under-voltage release
★	Single-auxiliary alarm contact

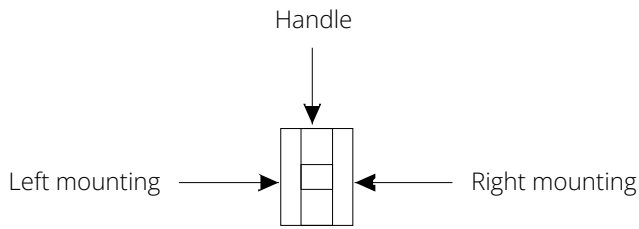
Tripping Method Accessory Code Comparison Table

Accessory code	Accessory name	BZMm1		BZM1		BZM2		BZM3	
		3P	4P	3P	4P	3P	4P	3P	4P
00	N/A	/	/	/	/	/	/	/	/
10	Shunt release	■	■	■	■	■	■	■	■
20	Single-auxiliary contact	◇	◇	◇	◇	◇	◇	◇	◇
30	Double-auxiliary contact	◆	◆	◆	◆	◆	◆	◆	◆
40	Under-voltage release	▲	▲	▲	▲	▲	▲	▲	▲
50	Alarm contact	●	●	●	●	●	●	●	●
60	Single-auxiliary alarm contact	★	★	★	★	★	★	★	★
12	Shunt release + single-auxiliary contact	■◇	■◇	■◇	■◇	■◇	■◇	■◇	■◇
13	Shunt release + double-auxiliary contact	■◆	■◆	■◆	■◆	■◆	■◆	■◆	■◆
14	Shunt release + under-voltage release	■▲	■▲	■▲	■▲	■▲	■▲	■▲	■▲
15	Shunt release + alarm contact	■●	■●	■●	■●	■●	■●	■●	■●
16	Shunt release + single-auxiliary alarm contact	■★	■★	■★	■★	■★	■★	■★	■★
17	Shunt release + single-auxiliary contact + under-voltage release	/	/	/	/	/	/	■◇▲	■◇▲
18	Shunt release + single-auxiliary alarm contact + single auxiliary contact	/	/	/	/	/	/	■★◇	■★◇
19	Shunt release + alarm contact + under-voltage release	/	/	/	/	/	/	■●▲	■●▲
21	Shunt release + single-auxiliary alarm contact + under-voltage release	/	/	/	/	/	/	■★▲	■★▲
22	Two sets of single-auxiliary contacts	◇◇	◇◇	◇◇	◇◇	◇◇	◇◇	◇◇	◇◇
32	Double-auxiliary contact + single-auxiliary contact	◆◇	◆◇	◆◇	◆◇	◆◇	◆◇	◆◇	◆◇
33	Two sets of double-auxiliary contacts	◆◆	◆◆	◆◆	◆◆	◆◆	◆◆	◆◆	◆◆
35	Double-auxiliary contact + alarm contact	◆●	◆●	◆●	◆●	◆●	◆●	◆●	◆●
36	Double-auxiliary contact + single-auxiliary alarm contact	◆★	◆★	◆★	◆★	◆★	◆★	◆★	◆★
42	Under-voltage release + single-auxiliary contact	◇▲	◇▲	◇▲	◇▲	◇▲	◇▲	◇▲	◇▲
43	Under-voltage release + double-auxiliary contact	◆▲	◆▲	◆▲	◆▲	◆▲	◆▲	◆▲	◆▲
23	Under-voltage release + three sets of auxiliary contacts	/	/	/	/	/	/	◇◇◇▲	◇◇◇▲
24	Under-voltage release + single-auxiliary contact + single-auxiliary alarm contact	/	/	/	/	/	/	◇▲★	◇▲★
45	Under-voltage release + alarm contact	●▲	●▲	●▲	●▲	●▲	●▲	●▲	●▲
46	Under-voltage release + single-auxiliary alarm contact	★▲	★▲	★▲	★▲	★▲	★▲	★▲	★▲

Notes for accessory selection: ① The auxiliary switches and alarm switches in the BZMm1, BZM1, BZM2 series all support mounting on the left and right sides of the circuit breaker.

② The alarm switches in the BZM3 series only support mounting on the left side of the circuit breaker, while the auxiliary switches support mounting on the left and right side of the circuit breaker.

Electrical Accessories Combination Mode (For RSU/RSV/RSX/RSY/RNU/RNV/RNX/RNY Residual Current Protection Products)



Legends

- AL: Alarm contact
- AX: Auxiliary contact
- SHT: Shunt release
- UVT: Under-voltage release
- Outgoing lead direction

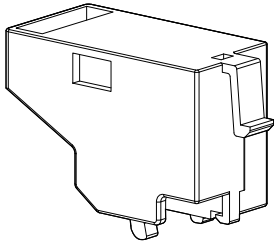
Tripping Method Accessory Code Comparison Table

Accessory name	BZM1		BZM2		BZM3	
	3P	4P	3P	4P	3P	4P
AL: Alarm contact						
AX: Auxiliary contact						
SHT: Shunt release	Note ①	Note ①	Note ①	Note ①	Note ①	Note ①
UVT: Under-voltage release	Note ①	Note ①	Note ①	Note ①	Note ①	Note ①
SHT: Shunt release + UVT: Under-voltage release		Note ①		Note ①		Note ①
AL: Alarm contact + AX: Auxiliary contact						
AL: Alarm contact + SHT: Shunt release		Note ①		Note ①	Note ①	Note ①
AL: Alarm contact + UVT: Under-voltage release		Note ①		Note ①	Note ①	Note ①
AX: Auxiliary contact + SHT: Shunt release		Note ①		Note ①	Note ①	Note ①
AX: Auxiliary contact + UVT: Under-voltage release		Note ①		Note ①	Note ①	Note ①
AX: Auxiliary contact + AL: Alarm contact + SHT: Shunt release		Note ①		Note ①	Note ①	Note ①
AX: Auxiliary contact + AL: Alarm contact + UVT: Under-voltage release		Note ①		Note ①	Note ①	Note ①

Note: a Left mounting is standard for SHT, and right mounting is standard for UVT.

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Molded Case Circuit Breakers BZM Circuit Breaker's Accessories



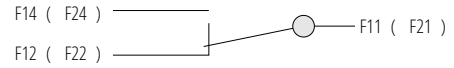
BZM auxiliary contact

Auxiliary Contact (BZM/Z)

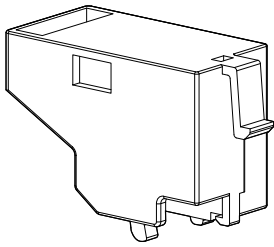
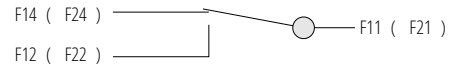
Circuit breaker status

CB in Open position

Auxiliary switch status



CB in Closed position



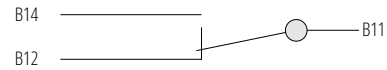
BZM alarm contact

Alarm Contact (BZM/ZA)

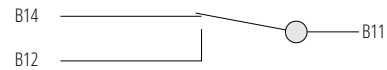
Circuit breaker status

CB in Open and Closed positions

Alarm contact status



CB in Tripped position



Rated Operating Current of Alarm Contact and Auxiliary Contact

Category	Rated current I_{nm}	Conventional thermal current I_{th} (A)	Rated operating current I_e (A)	
			AC400V	DC220V
Auxiliary contact	≤ 250	3	0.3	0.15
	$400 \leq I_{nm} \leq 1000$	3	0.4	2
Alarm contact	$10 \leq I_{nm} \leq 1000$	-	AC220V/1.0A	0.15

Making and Breaking Capacity of Alarm Contact and Auxiliary Contact under Normal Conditions

Utilization category	Making (ON)				Breaking (OFF)				Power-on operations	Operating cycles per minute	Power-on time
	I/I_e	U/U_e	$\cos\phi$	$T_{0.95}$	I/I_e	U/U_e	$\cos\phi$	$T_{0.95}$			
AC-14	10	1	0.7	-	1	1	0.7	-	6050	6	$\geq 0.05s$
DC-13	1	1	-	$6 \times Pe$	1	1	-	$6 \times Pe$			$\geq 0.05s$

Making and Breaking Capacity of Alarm Contact and Auxiliary Contact under Abnormal Conditions

Utilization category	Making (ON)				Breaking (OFF)				Power-on operations	Operating cycles per minute	Power-on time
	I/Ie	U/Ue	cosφ	T _{0.95}	I/Ie	U/Ue	cosφ	T _{0.95}			
AC-14	1	1	0.7	-	1	1	0.7	-			≥ 0.05s
DC-13	1.1	1.1	-	6×Pe	1.1	1.1	-	6×Pe	10	6	≥ 0.05s

Notes:

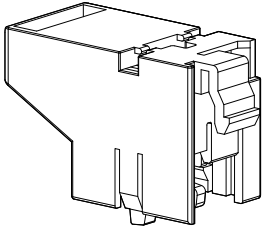
- ① T_{0.95}=6Pe is an empirical formula, where Pe is in "watts" and T_{0.95} is in milliseconds;
- ② When the total operation performance of the circuit breaker is less than 6050 times, the number of power-on operations of the auxiliary contact can be the same as the total operation performance of the circuit breaker;
- ③ The operating frequency and power-on time are allowed to be consistent with the main circuit of the circuit breaker;
- ④ If T_{0.95} is greater than 0.05s, the power-on time is at least T_{0.95}

Auxiliary Contact/ Alarm Contact

Accessory name	Frame	Part No.	Article No.	Remark
Auxiliary Contact/ Alarm	BZMm1	BZMm1/Z L	CCB90001	L: Left mounting R: Right mounting N/A: 80cm long for both left and right lines
		BZMm1/Z R	CCB90002	
		BZMm1/2Z L	CCB90003	
		BZMm1/2Z R	CCB90004	
		BZMm1/ZA L	CCB90005	
		BZMm1/ZA R	CCB90006	
		BZMm1/Z+ZA L	CCB90007	
		BZMm1/Z+ZA R	CCB90008	
	BZM1	BZM1/Z	CCB90009	
		BZM1/2Z	CCB90010	
		BZM1/ZA	CCB90011	
		BZM1/Z+ZA	CCB90012	
	BZM2	BZM2/Z L	CCB90013	
		BZM2/Z R	CCB90014	
		BZM2/2Z L	CCB90015	
		BZM2/2Z R	CCB90016	
		BZM2/ZA L	CCB90017	
		BZM2/ZA R	CCB90018	
		BZM2/Z+ZA L	CCB90019	
		BZM2/Z+ZA R	CCB90020	
BZM3	BZM3/Z	CCB90021		
	BZM3/ZA	CCB90022		
	BZM3/Z+ZA	CCB90023		

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Molded Case Circuit Breakers BZM Circuit Breaker's Accessories



BZM/UVT (Under-Voltage Release)

Under-voltage release (BZM/UVT)

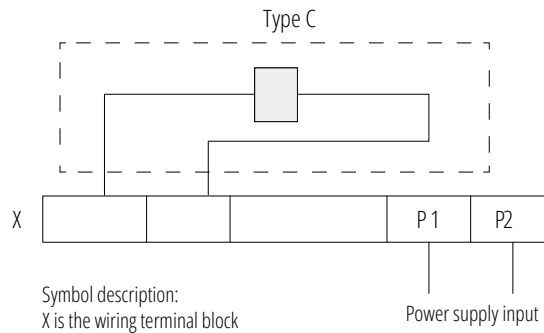
Rated operating voltage AC400V AC230V

Action characteristics

- At 35%-70% of the rated operating voltage, the under-voltage release should reliably trip the circuit breaker
- At 85%-110% of the rated operating voltage, the under-voltage release should ensure that the circuit breaker can be closed
- When lower than 35% of the rated operating voltage, the under-voltage release should prevent the circuit breaker from being closed

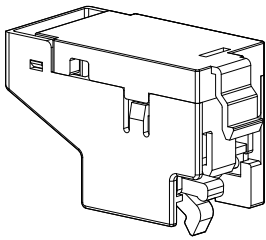
External Module Wiring Diagram of Under-Voltage Release

(in the dotted grid is the internal accessories of the circuit breaker)



Under-voltage release

Accessory name	Frame	Part No.	Article No.	Note
Under-voltage release	BZMm1	BZMm1/UVT 400V	CCB90024	Right mounting
		BZMm1/UVT 230V	CCB90025	
	BZM1	BZM1/UVT 400V	CCB90026	
		BZM1/UVT 230V	CCB90027	
	BZM2	BZM2/UVT 400V	CCB90028	
		BZM2/UVT 230V	CCB90029	
	BZM3	BZM3/UVT 400V	CCB90030	
		BZM3/UVT 230V	CCB90031	



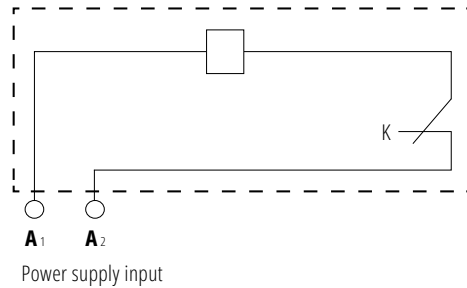
BZM/SHT (Shunt Release)

Shunt release (BZM/SHT)

Rated operating voltage	AC50Hz: 400V, 230V DC: 24V, 220V
Action characteristics	At 70%-110% of the rated control voltage, the shunt release can trip the circuit breaker

Wiring Diagram

(inside the dotted grid is the internal accessory of the circuit breaker)



K, a microswitch connected in series with the coil inside the shunt release, is a normally closed contact. When the circuit breaker is opened, the contact opens itself and closes when closed.

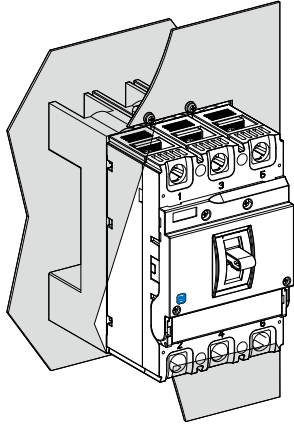
Shunt release

Accessory name	Frame	Part No.	Article No.	Description	Remark
Shunt release	BZMm1	BZMm1/SHT 400V	CCB90032	Line length: 80cm	Left mounting
		BZMm1/SHT 230V	CCB90033	Line length: 80cm	
		BZMm1/SHT DC24V	CCB90034	Line length: 60cm	
	BZM1	BZM1/SHT 400V	CCB90035	Line length: 80cm	
		BZM1/SHT 230V	CCB90036	Line length: 80cm	
		BZM1/SHT DC110V	CCB90037	Line length: 80cm	
		BZM1/SHT DC24V	CCB90038	Line length: 60cm	
		BZM1/SHT DC220V	CCB90039	Line length: 80cm	
		BZM2	BZM2/SHT 400V	CCB90040	Line length: 80cm
	BZM2/SHT 230V		CCB90041	Line length: 80cm	
	BZM2/SHT DC110V		CCB90042	Line length: 80cm	
	BZM2/SHT DC24V		CCB90043	Line length: 60cm	
	BZM2/SHT DC220V		CCB90044	Line length: 80cm	
	BZM3	BZM3/SHT 400V	CCB90045	Line length: 80cm	
		BZM3/SHT 230V	CCB90046	Line length: 80cm	
BZM3/SHT DC220V		CCB90047	Line length: 80cm		
BZM3/SHT DC24V		CCB90048	Line length: 60cm		
BZM3/SHT AC110V/DC110V		CCB90049	Line length: 80cm		

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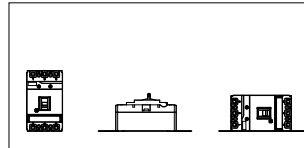
Molded Case Circuit Breakers BZM Circuit Breaker's Accessories

Plug-in Base (BZM/P)



Plug-in Circuit Breaker Advantages

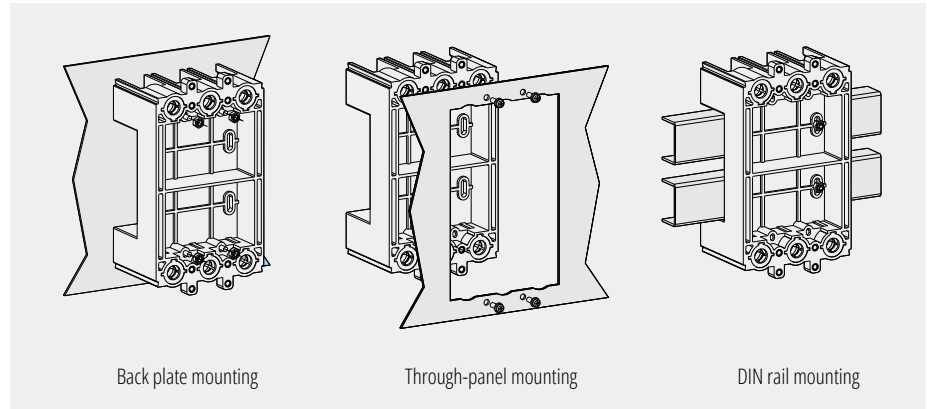
- Enables removal or quick replacement of the circuit breaker without accessing incoming and outgoing wires and mounting base;
- Allows pre-installation of plug-in bases, convenient for users to add circuit breakers later;
- Power circuits can be isolated during back plate mounting or through-panel mounting of the circuit breaker.



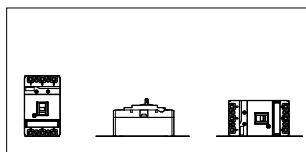
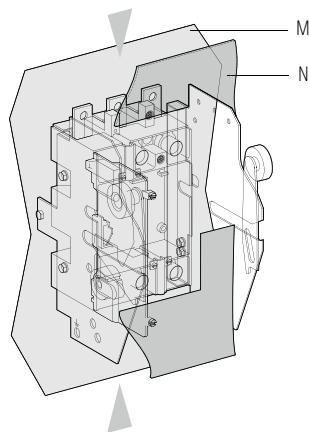
Mounting method

Plug-in Circuit Breaker Configuration

- The plug-in unit is a fixed part of the plug-in circuit breaker;
- It can be mounted directly on the back panel of the switchboard;
- The circuit breaker is mounted on the plug-in unit with fixing screws.



Withdrawable Wiring (BZM/W)



Mounting method

Withdrawable Circuit Breaker Advantages

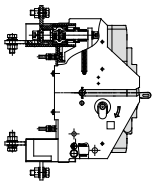
The withdrawable circuit breaker offers the same advantages as the plug-in type and is very easy to operate. The withdrawable circuit breaker has three positions:

- Connected position: power circuit is on;
- Test position: the power circuit is off, to operate on the circuit breaker to check the auxiliary circuit;
- Separated position: The circuit breaker can be removed from the base.

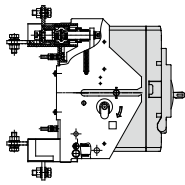
Withdrawable Circuit Breaker Configuration

In the withdrawable circuit breaker configuration, two side panels need to be installed on both the base and circuit breaker. Similar to the plug-in configuration, when racking in or out a circuit breaker, if the circuit breaker is in the closed and ON status, the safety trip device causes the circuit breaker to automatically trip, to enable racking in or out operations in the "Open" position.

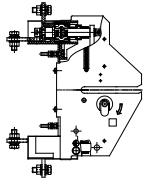
Withdrawable Base (BZM/P)



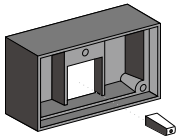
Connected position



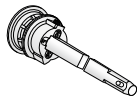
Withdraw a circuit breaker



Withdrawable position



The toggle switch cover, to ensure IP4 protection level when in Connected position and Disconnected position

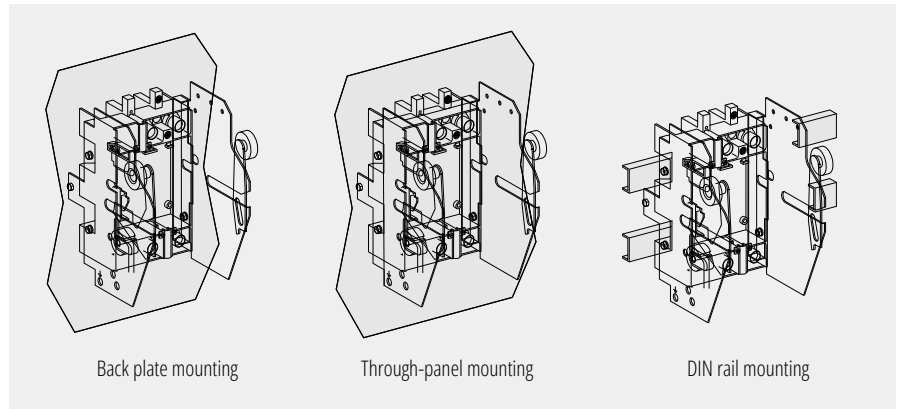


Telescopic shaft

Accessories

The withdrawable device uses the same base as the plug-in type. In addition, it features:

- Drawer auxiliary contacts, indicating the "Connected" position and "Test" position of the circuit breaker;
- 1 to 3 padlocks (5 to 8mm diameter) to lock, allowing:
 - Prevent the circuit breaker from racking in;
 - Lock the circuit breaker in the "Connected" or "Withdrawn" position;
- Ensure the circuit breaker to have appropriate protection level;
- Telescopic shaft for extending the rotary handle. The door can be closed when the device is in the "Connected" position and "Withdrawable" position.



Back plate mounting

Through-panel mounting

DIN rail mounting

Plug-in Base/Withdrawable Base

Accessories name	Frame	Part No.	Article No.	Remark
Rear panel wiring				
Plug-in base	BZMm1	BZMm1-3/P	CCB90073	Rear panel wiring drawer suitable for through-panel mounting and rail mounting
	BZM1	BZM1-3/P	CCB90074	
	BZM2	BZM2-3/P	CCB90075	
	BZM3	BZM3-3/P	CCB90076	
Withdrawable base	BZM3	BZM3-3/W	CCB90077	
Front panel wiring				
Plug-in base	BZMm1	BZMm1-3/P(F)	CCB90078	Front panel wiring suitable for back plate mounting and rail mounting
	BZM1	BZM1-3/P(F)	CCB90079	
	BZM2	BZM2-3/P(F)	CCB90080	
	BZM3	BZM3-3/P(F)	CCB90081	
Withdrawable base	BZM3	BZM3-3/W(F)	CCB90082	

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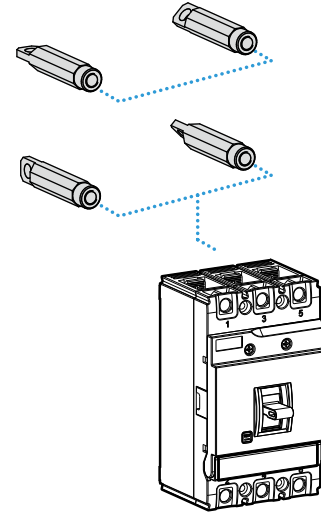
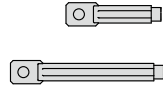
Molded Case Circuit Breakers BZM Circuit Breaker's Accessories

Rear Panel Wiring (BZM/F)

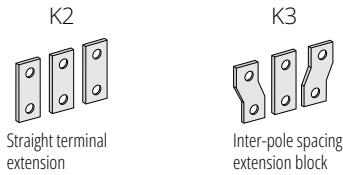
The circuit breaker is mounted on the back plate and can be wired behind the back plate with the rear wiring terminal.

- The rear connection terminals are available in two lengths;
- The busbar can be placed at multiple angles, such as horizontal, vertical or at a 45-degree angle to the horizontal.

Two lengths are available.



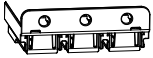
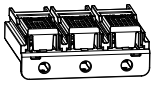
Extension Wiring Block (BZM/K)



- Increase terminal spacing on the circuit breaker according to the incoming devices, to enhance inter-phase insulation.

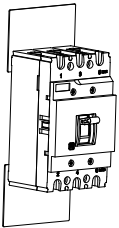
Rear panel wiring / Extension Wiring Block

Accessories name	Frame	Part No.	Article No.	Remark
Rear panel wiring	BZMm1	BZMm1-3/F	CCB90065	Rear panel wiring drawer suitable for through-panel mounting and rail mounting
		BZMm1-4/F	CCB90066	
	BZM1	BZM1-3/F	CCB90067	
		BZM1-4/F	CCB90068	
	BZM2	BZM2-3/F	CCB90069	
		BZM2-4/F	CCB90070	
	BZM3	BZM3-3/F	CCB90071	
		BZM3-4/F	CCB90072	
Extension Wiring Block	BZMm1	BZMm1-3/K2	CCB90083	Front panel wiring suitable for back plate mounting and rail mounting
		BZMm1-4/K2	CCB90084	
		BZMm1-3/K3	CCB90085	
		BZMm1-4/K3	CCB90086	
	BZM1	BZM1-3/K2(AX)	CCB90087	
		BZM1-4/K2(AX)	CCB90088	
		BZM1-3/K3(AX)	CCB90089	
		BZM1-4/K3(AX)	CCB90090	
	BZM2	BZM2-3/K2	CCB90091	
		BZM2-4/K2	CCB90092	
		BZM2-3/K3	CCB90093	
		BZM2-4/K3	CCB90094	
	BZM3	BZM3-3/K2 400A	CCB90101	
		BZM3-4/K2 400A	CCB90102	
		BZM3-3/K2 630A	CCB90103	
		BZM3-4/K2 630A	CCB90104	
		BZM3-3/K3 400A	CCB90105	
		BZM3-4/K3 400A	CCB90106	
	BZM3-3/K3 630A	CCB90107		
	BZM3-4/K3 630A	CCB90108		



Terminal Cover

Accessories name	Frame	Part No.	Article No.	Remark
Terminal cover	BZMm1	BZMm1-3/FP	CCB90127	Each set include: one for incoming end and one for outgoing end
		BZMm1-4/FP	CCB90131	
	BZM1	BZM1-3/FP	CCB90128	
		BZM1-4/FP	CCB90132	
	BZM2	BZM2-3/FP	CCB90129	
		BZM2-4/FP	CCB90133	
	BZM3	BZM3-3/FP	CCB90130	
		BZM3-4/FP	CCB90134	



Insulation Back Plate

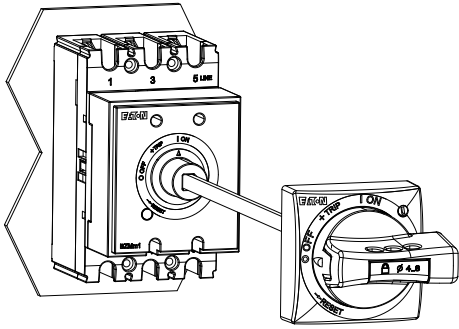
When the circuit breaker adopts fixed front panel wiring, an insulated back plate can be used to increase the creepage distance between the wiring copper bar and back plate.

Accessories name	Frame	Part No.	Article No.	Remark
Insulation back plate	BZMm1	BZMm1-3/IBP	CCB90135	Each set includes 2 pieces
		BZMm1-4/IBP	CCB90139	
	BZM1	BZM1-3/IBP	CCB90136	
		BZM1-4/IBP	CCB90140	
	BZM2	BZM2-3/IBP	CCB90137	
		BZM2-4/IBP	CCB90141	
	BZM3	BZM3-3/IBP	CCB90138	
		BZM3-4/IBP	CCB90142	

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Molded Case Circuit Breakers BZM Circuit Breaker's Accessories

Manual Operator (BZM)



The rotary handle operator features a unique design and driving mechanism. By rotating the handle, the molded case circuit breaker can be closed, opened and re-tripped;

Features of BZM Series Manual Operator:

- The cabinet door cannot be opened after the circuit breaker is closed, that is, the door is interlocked
- The handle can be used with the relevant drawer cabinet, and offers interlocking with the drawer unit's cabinet
- If the rotary handle operator is faulty when in closed status, the cabinet door can be opened by using the emergency unlocking device on the operating handle

Direct Rotary Handle

To distinguish emergency level, the handles are available in two colors:

- Standard: gray + black
- Emergency: yellow + red



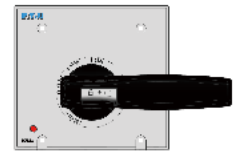
BZMm1



BZM1



BZM2



BZM3



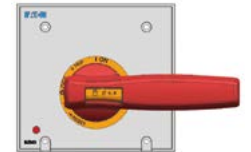
BZMm1



BZM1



BZM2



BZM3

Direct Rotary Handle

To distinguish emergency level, the handles are available in two colors:

- Standard: gray + black
- Emergency: yellow + red



BZMm1



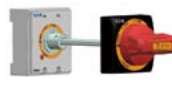
BZM1



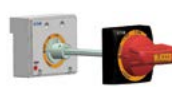
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BZM3



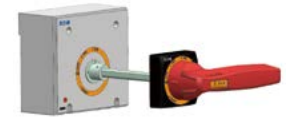
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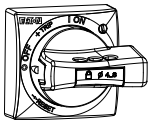
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BZM2

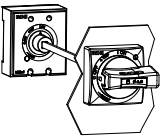


BZM3



Direct Rotary Handle

Accessory name	Frame	Model	Article No.	Remark
Direct rotary handle	Standard	BZMm1	BZMm1/RH	CCB90111
		BZM1	BZM1/RH	CCB90112
		BZM2	BZM2/RH	CCB90113
		BZM3	BZM3/RH	CCB90114
	Emergency	BZMm1	BZMm1/RHR	CCB90115
		BZM1	BZM1/RHR	CCB90116
		BZM2	BZM2/RHR	CCB90117
		BZM3	BZM3/RHR	CCB90118



Door Rotary Handle

Accessory name	Frame	Model	Article No.	Remark	
Door Rotary Handle	Standard	BZMm1	BZMm1/DRH	CCB90119	A 200mm connecting rod is equipped as standard
		BZM1	BZM1/DRH	CCB90120	
		BZM2	BZM2/DRH	CCB90121	
		BZM3	BZM3/DRH	CCB90122	
	Emergency	BZMm1	BZMm1/DRHR	CCB90123	
		BZM1	BZM1/DRHR	CCB90124	
		BZM2	BZM2/DRHR	CCB90125	
		BZM3	BZM3/DRHR	CCB90126	



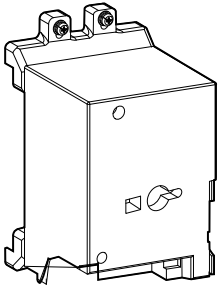
Connecting Rod

Accessory name	Frame	Model	Article No.	Remark
500mm long connecting rod	BZMm1/BZM1/BZM2	BZMm1/1/2-500	CCB90109	A 500mm long connecting rod requires an additional standard manual operating toolki for use
	BZM3	BZM3/4-500	CCB90110	

1.5

Molded Case Circuit Breakers BZM Circuit Breaker's Accessories

Motor Operator (BZM/CD)



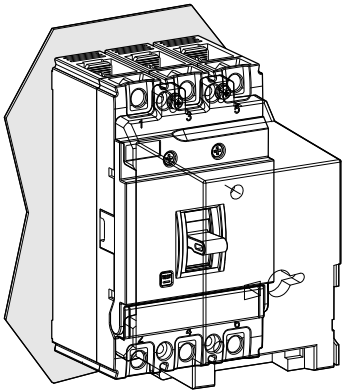
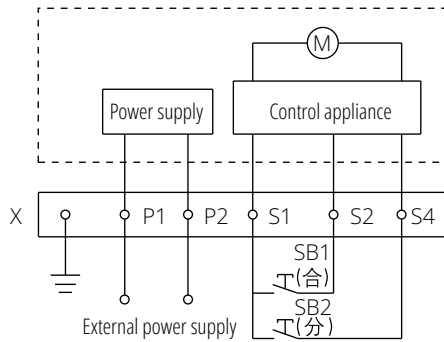
The motor operator is used to remotely control the closing and opening of the circuit breaker. It is composed of an energy storage spring, an opening coil and a closing coil.

The motor operator offers:

- Selectable manual or automatic operation mode
- The manual driving handle is located on the front of the face cover

BZM/CD Type Motor Operator Wiring Diagram

(in the dotted grid is the wiring diagram of the circuit breaker part)



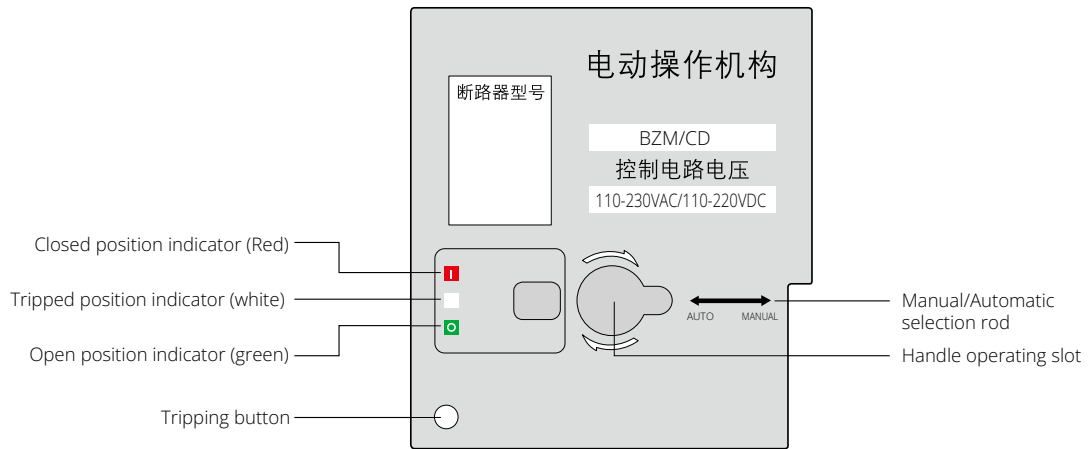
Manual Operation

- Switch the toggle switch to the "Manual" position and the internal power will automatically turn off
- Put the manual driving handle into the handle operating slot on the front of the motor operator, and turn it clockwise
- Counterclockwise rotation is prohibited

Motor Operation

- Automatic switch-on
- The operating frequency should not be more than 3 times/minute
- Use ON/OFF switches within the frequency range
- Do not input ON/OFF signals simultaneously during automatic operation
- If the circuit breaker is equipped with an undervoltage release (UVT), the rated voltage needs to be applied to the UVT before performing motor operations

Motor Operator Outlines



Starting Current, Power and Service Life of BZM/CD Type Motor Operator

Circuit breaker model.	Motor operator model	Starting current (A)	Response time (ms)		Power loss (w)	Life (time)
			Close	Open		
BZMm1	CD	≤ 0.5	310	200	14	14000
BZM1	CD	≤ 0.5	310	200	14	14000
BZM2	CD	≤ 0.5	310	200	14	10000
BZM3	CD	≤ 0.5	500	350	14	10000

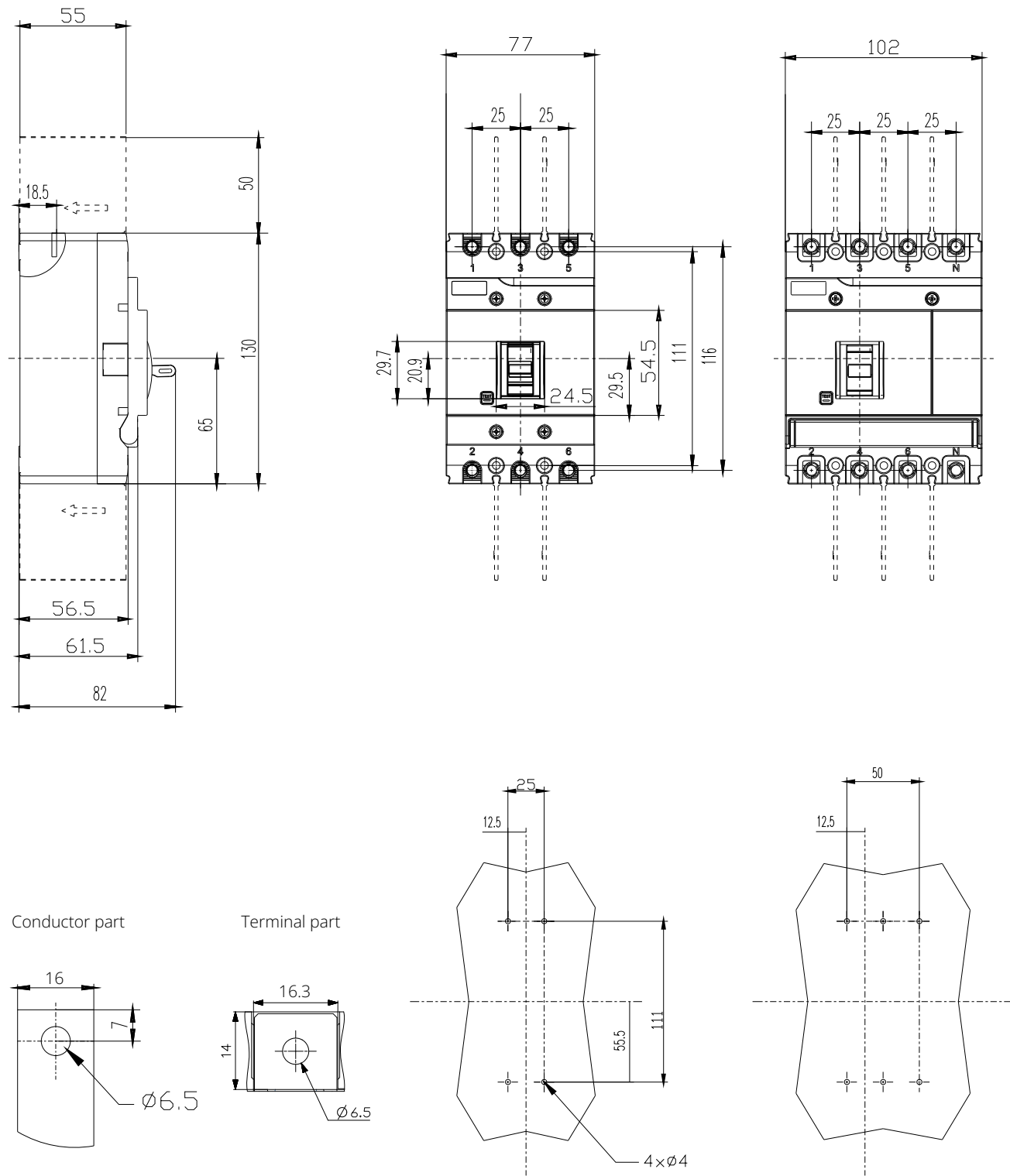
Motor Operator

Accessory name	Frame	Part No.	Article No.	Remark
Motor Operator	BZMm1	BZMm1/CD3 AC230V/DC220V	CCB90050	
		BZMm1/CD3 AC/DC110V	CCB90051	
		BZMm1/CD3 DC24V	CCB90052	
	BZM1	BZM1/CD3 400V	CCB90053	
		BZM1/CD3 AC230V/DC220V	CCB90054	
		BZM1/CD3 AC/DC110V	CCB90055	
		BZM1/CD3 DC24V	CCB90056	
	BZM2	BZM2/CD3 400V	CCB90057	
		BZM2/CD3 AC230V/DC220V	CCB90058	
		BZM2/CD3 AC/DC110V	CCB90059	
	BZM3	BZM2/CD3 DC24V	CCB90060	
		BZM3/CD3 400V	CCB90061	
BZM3/CD3 AC230V/DC220V		CCB90062		
BZM3/CD3 AC/DC110V		CCB90063		
		BZM3/CD3 DC24V	CCB90064	

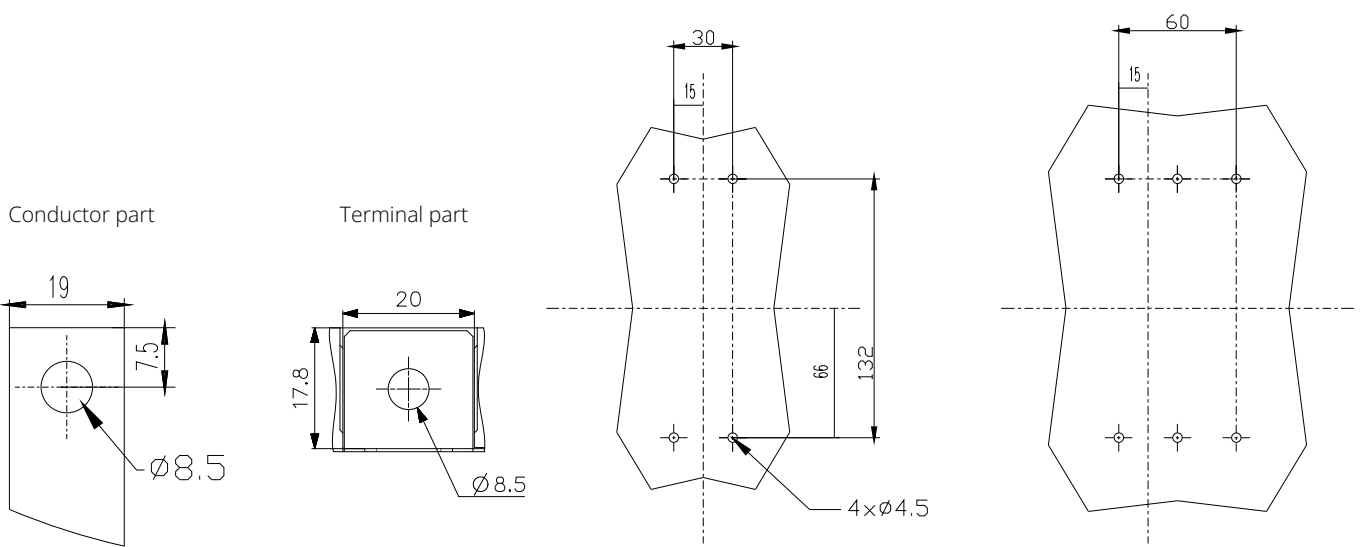
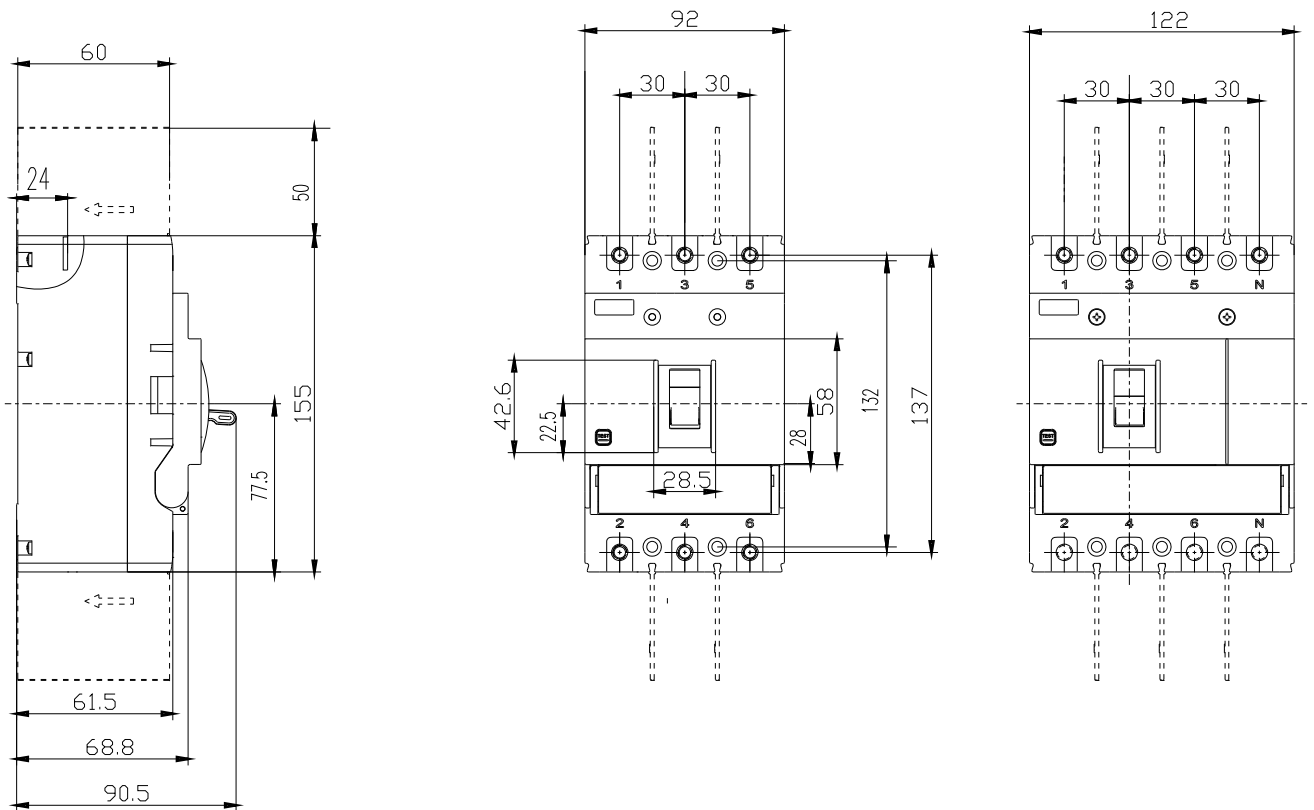
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Molded Case Circuit Breakers BZM Dimensions

Basic Device of BZMm1-AX/MX



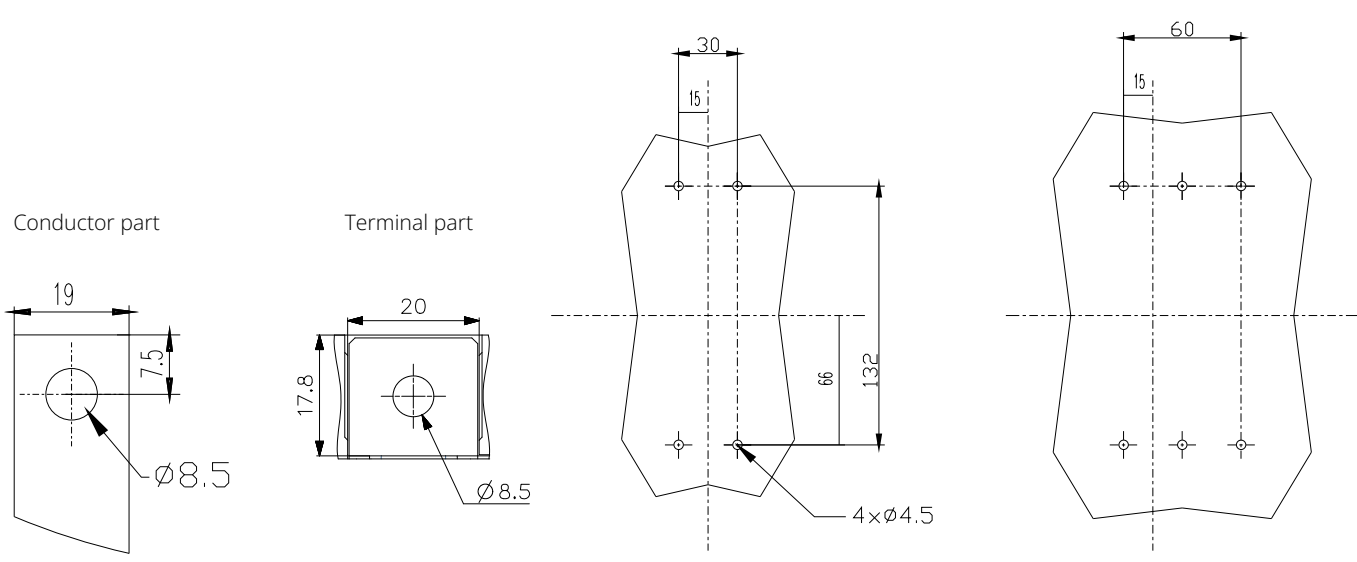
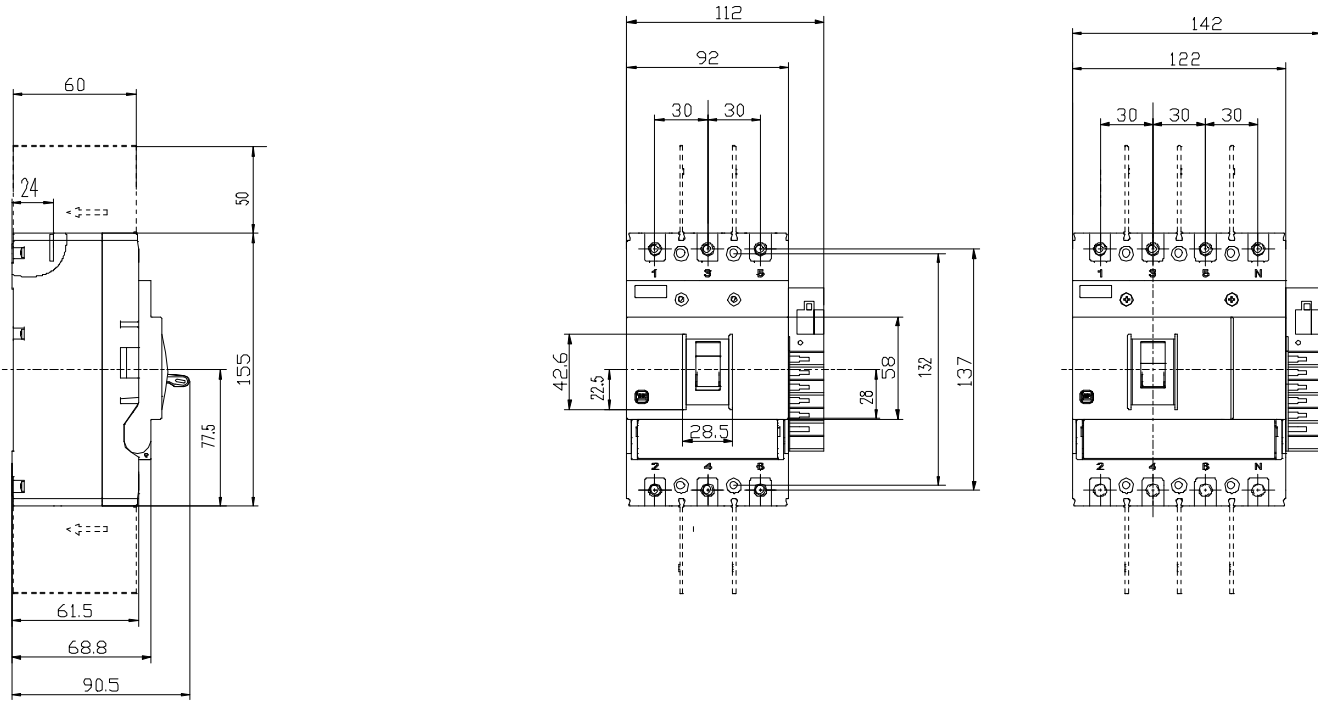
Basic Device of BZM1-AX/MX/RS



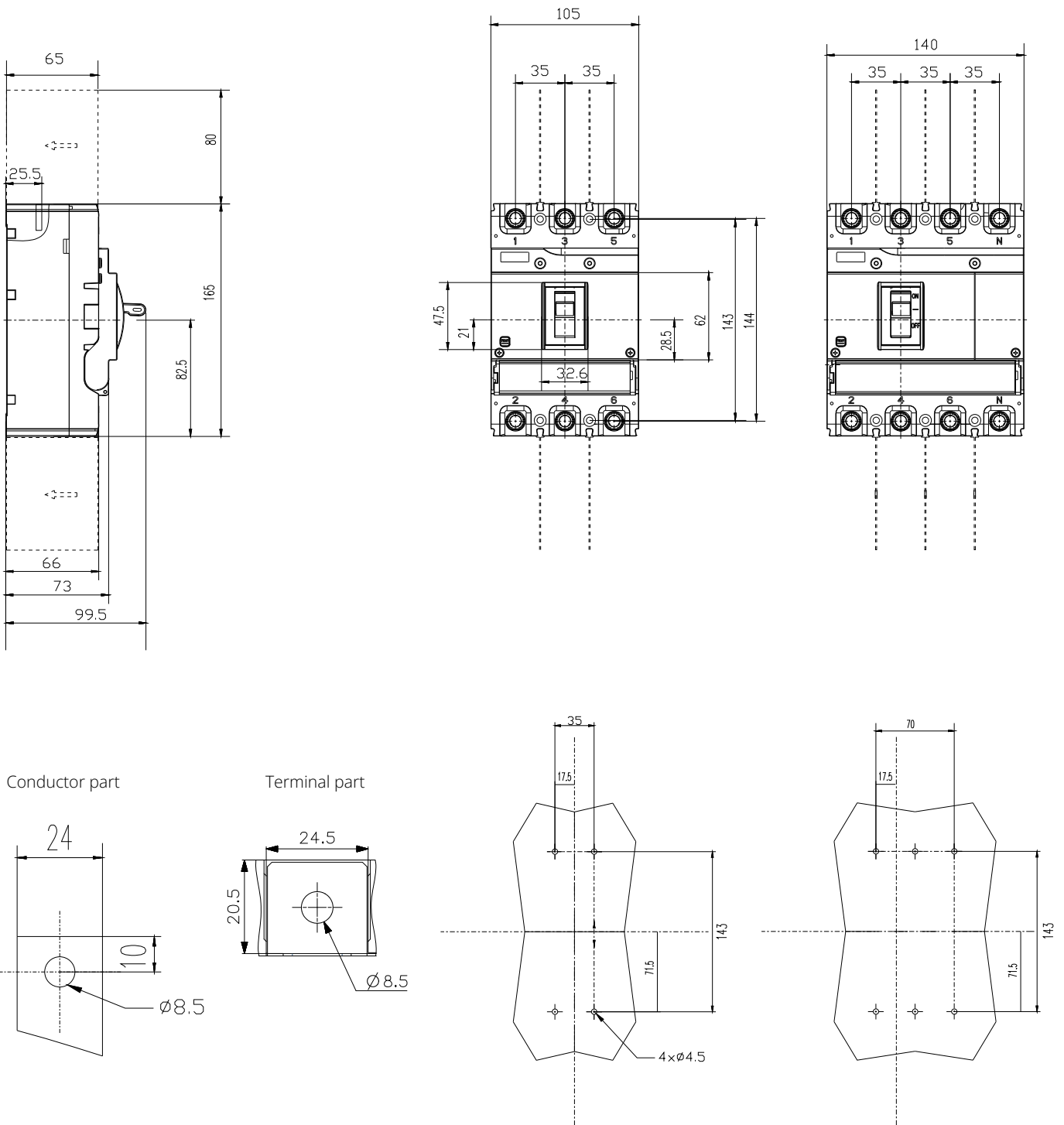
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Molded Case Circuit Breakers BZM Dimensions

Basic Device of BZM1-RN



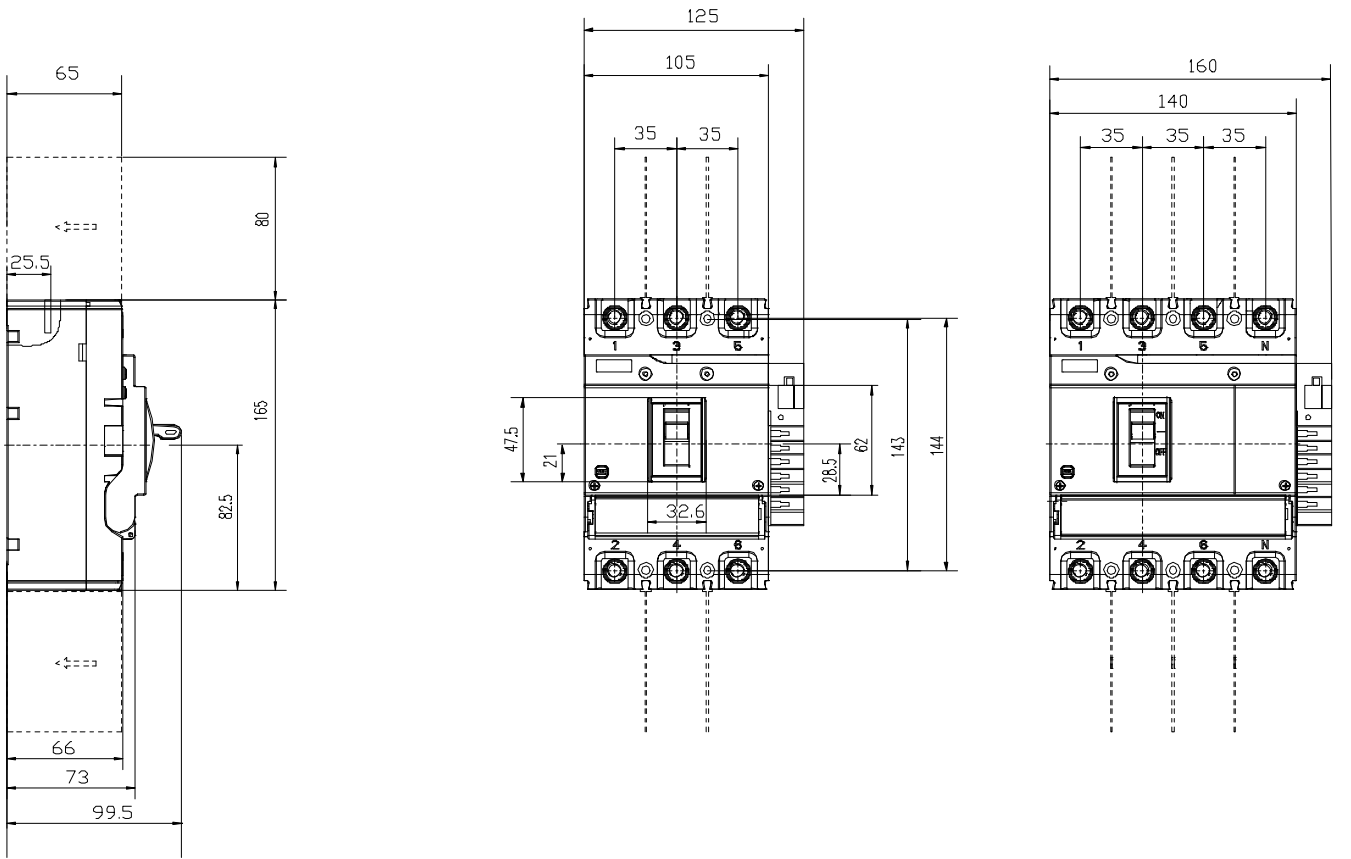
Basic Device of BZM2-AX/MX/RS



1.6

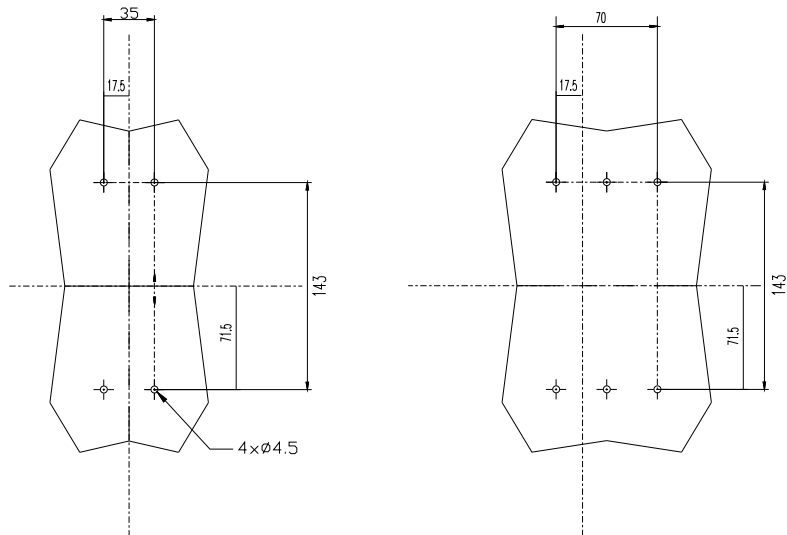
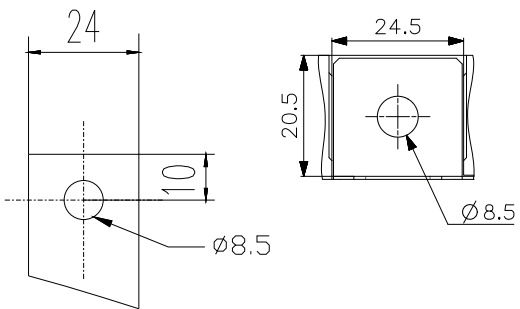
Molded Case Circuit Breakers BZM Dimensions

Basic Device of BZM2-RN

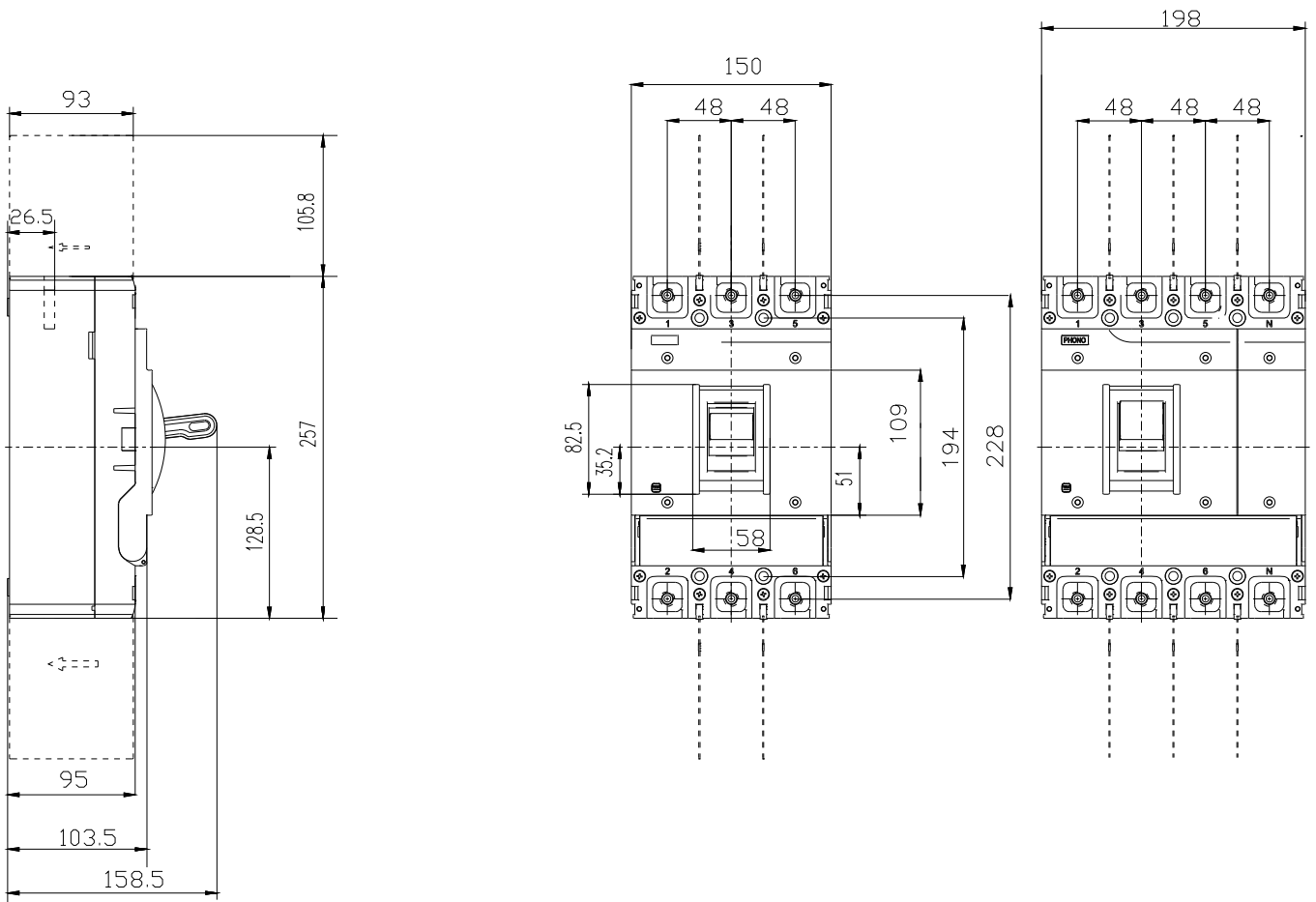


Conductor part

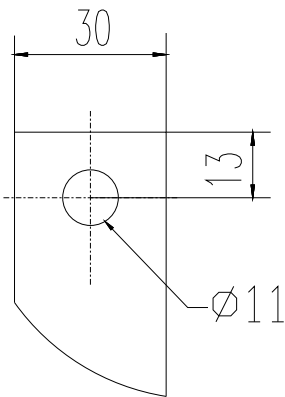
Terminal part



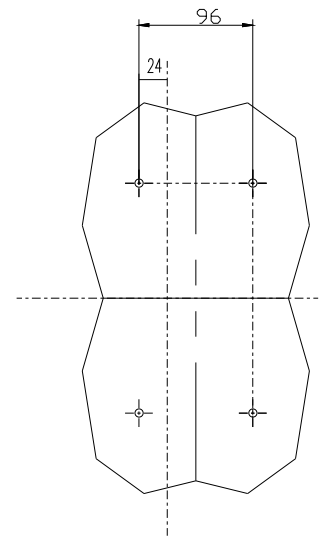
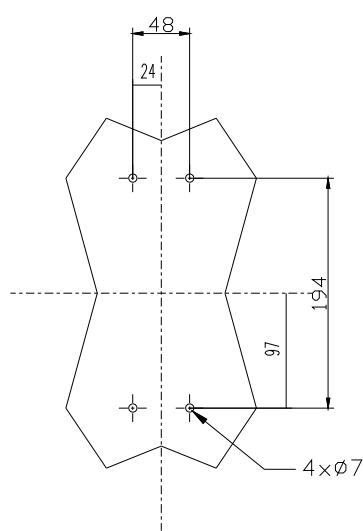
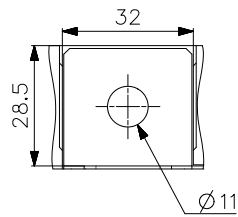
Basic Device of BZM3-AX/MX/RS



Conductor part



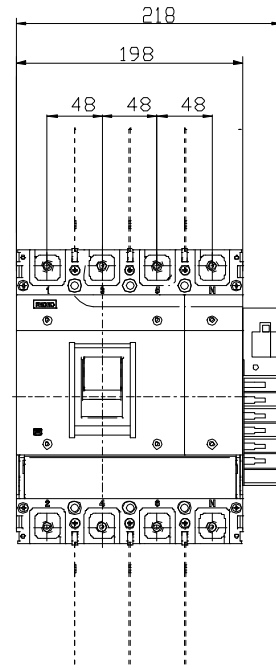
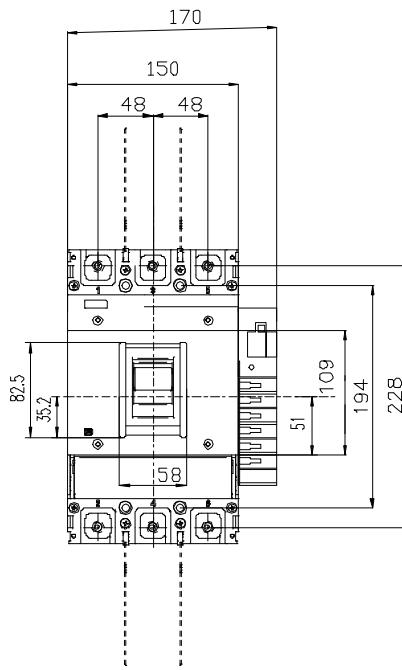
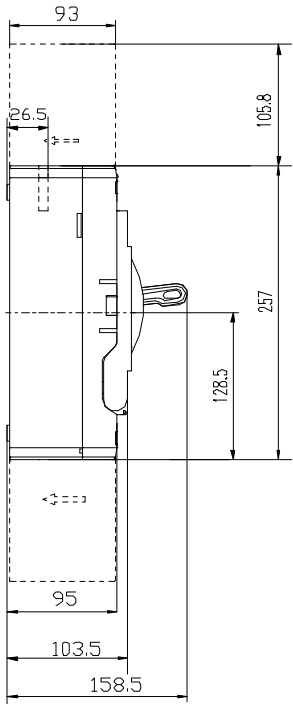
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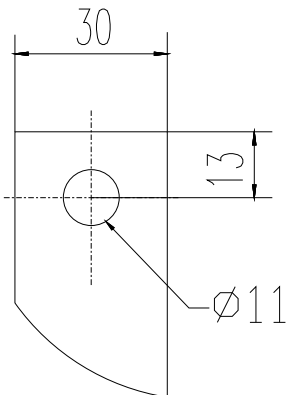
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Molded Case Circuit Breakers BZM Dimensions

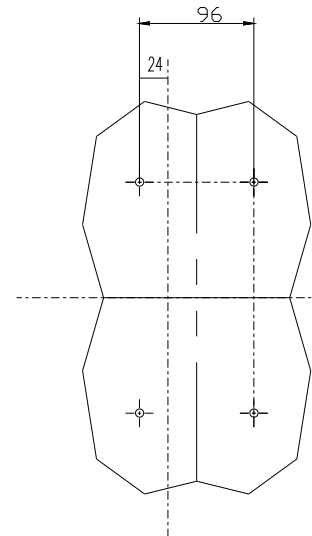
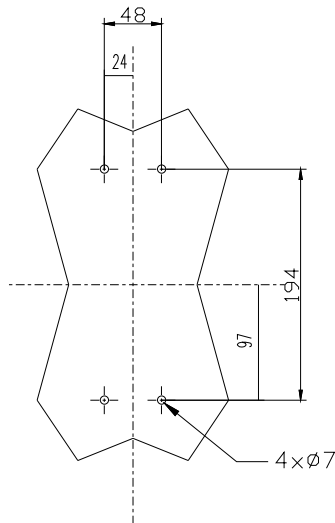
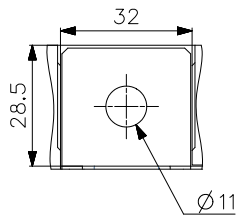
Basic Device of BZM3-RN



Conductor part



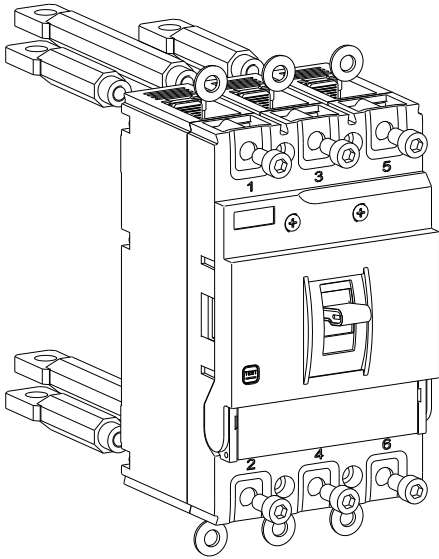
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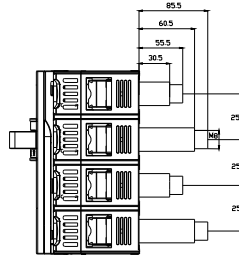
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Molded Case Circuit Breakers BZM Dimensions

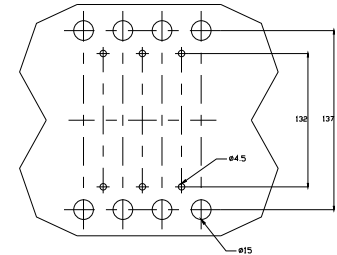
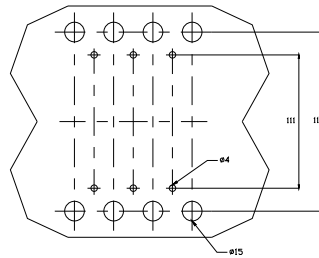
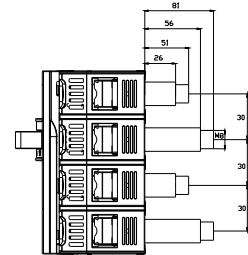
Rear Panel Wiring and Mounting



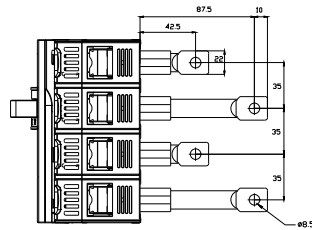
BZMm1



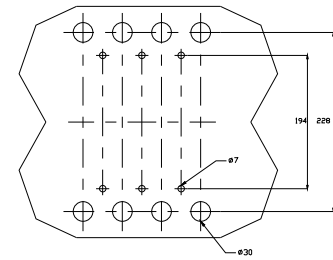
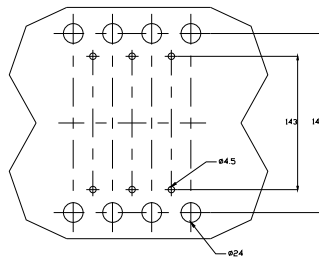
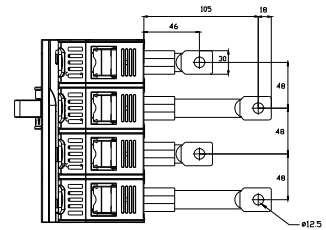
BZM1



BZM2



BZM3



Plug-in Wiring and Mounting

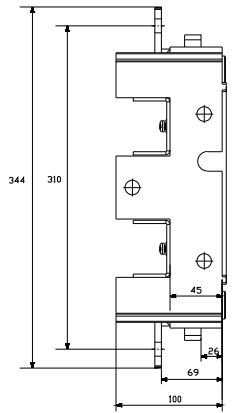
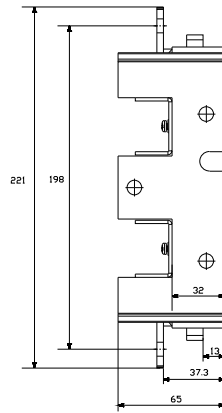
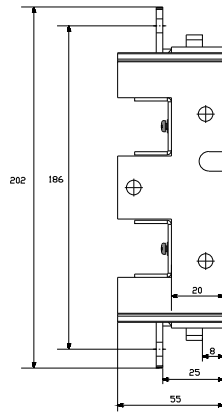
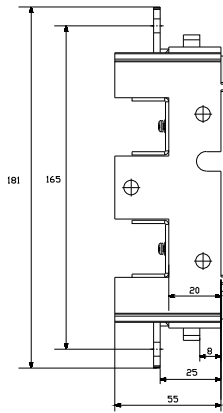
BZMm1

BZM1

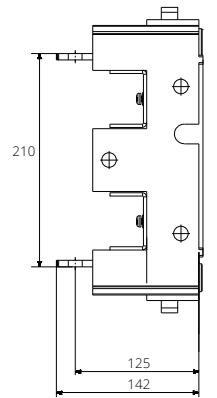
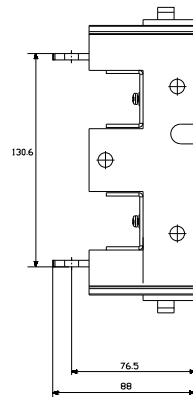
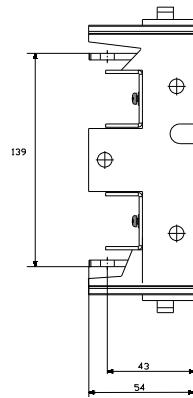
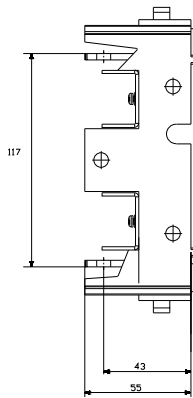
BZM2

BZM3

Front panel



Rear panel

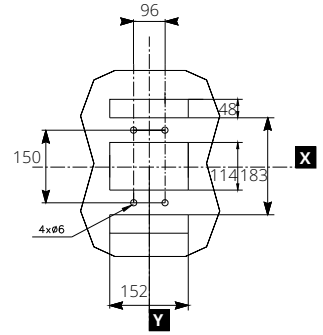
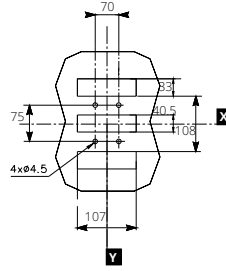
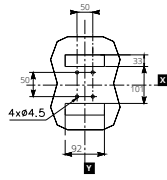
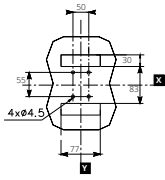
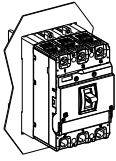


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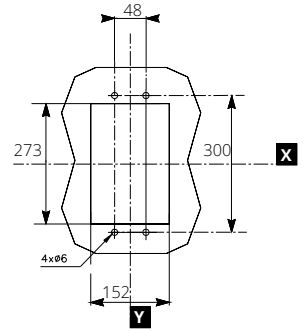
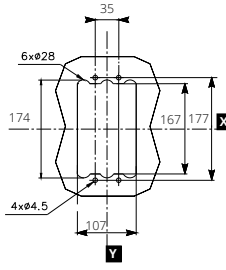
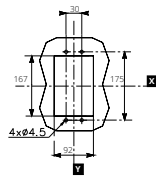
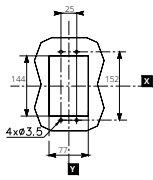
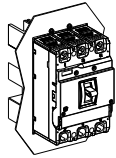
Molded Case Circuit Breakers BZM Dimensions

Plug-in Wiring and Mounting

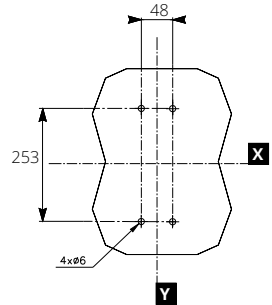
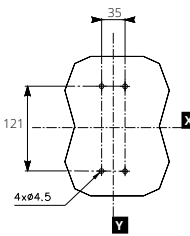
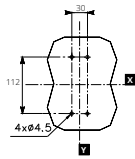
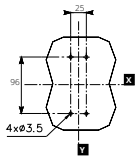
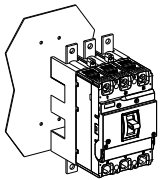
Through-panel mounting (rear panel wiring)



Big cutout through-panel mounting

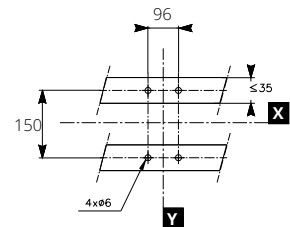
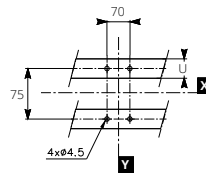
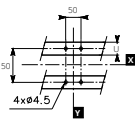
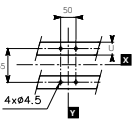
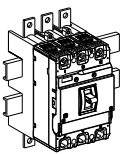


Back plate mounting

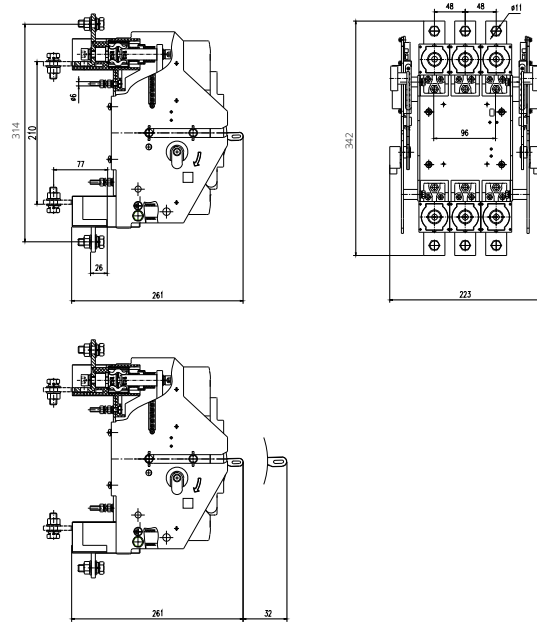
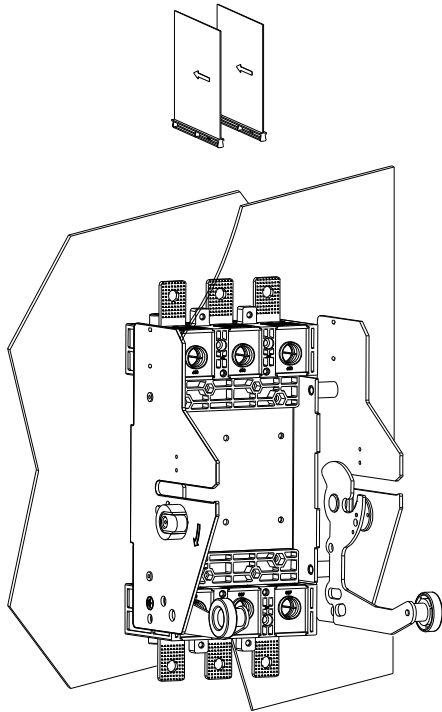


Note: An insulation partition is needed between the mounting back plate and plug in base.

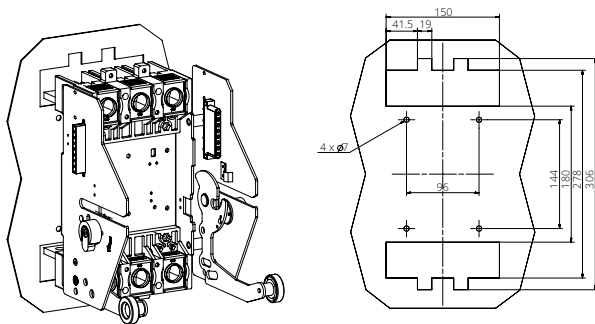
DIN Rail Mounting



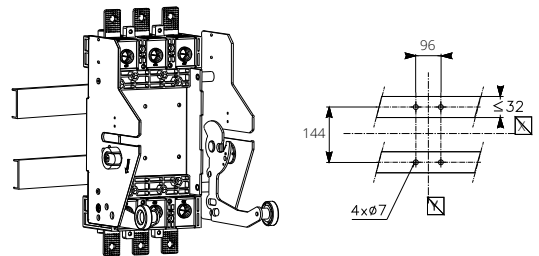
Withdrawable Wiring and Mounting



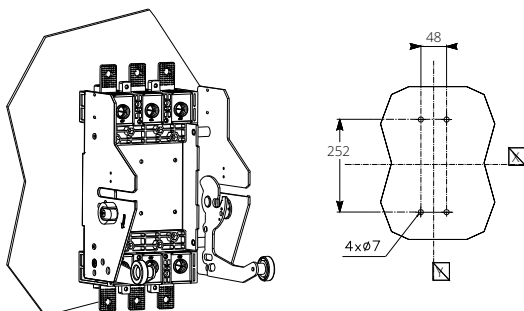
Through-panel mounting



DIN rail mounting



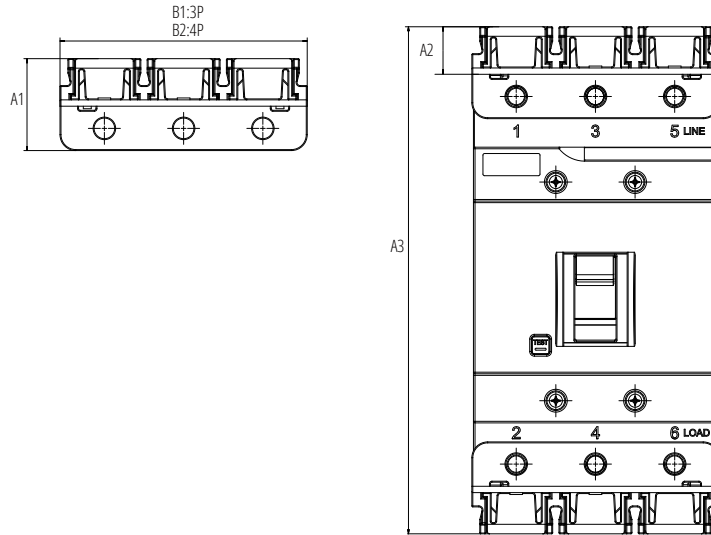
Back plate mounting



1.6

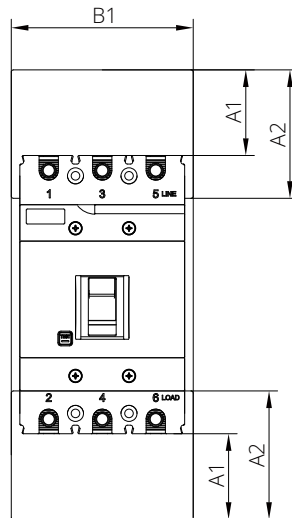
Molded Case Circuit Breakers BZM Dimensions

Terminal Cover



Model	A1	A2	A3	B1	B2
BZMm1	29	15	145	78	103
BZM1	41.7	22.5	177.5	92	122
BZM2	43.5	22	187	105	140
BZM3	76.7	45.2	302.2	150	198.3

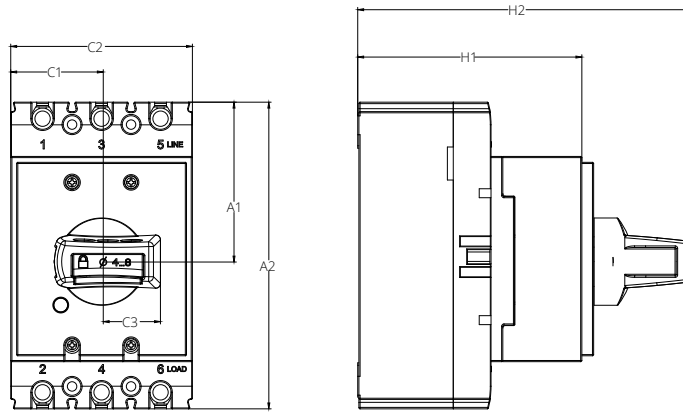
Insulation Back Plate



Model	No. of poles	B1	A1	A2
BZMm1	3P	85	40	60
	4P	100		
BZM1	3P	100	35.5	60
	4P	130		
BZM2	3P	115	41	63
	4P	150		
BZM3	3P	160	47	89
	4P	210		

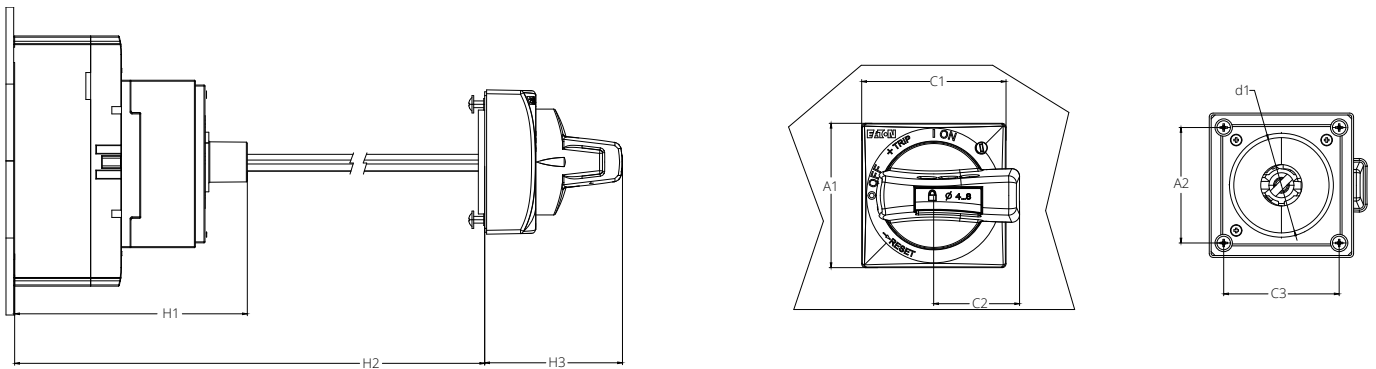
BZM Manual Operator Dimensions

Direct Rotary Handle



Model	C1	C2	C3	A1	A2	H1	H2
BZMm1	38.5	77	24.8	65.5	130	100	141
BZM1	46	92	24.8	72	155	108	149
BZM2	52.5	155	24.8	81.5	165	115.5	156.5
BZM3	75	150	136.4	123.5	257	176.5	245.8

Door Rotary Handle



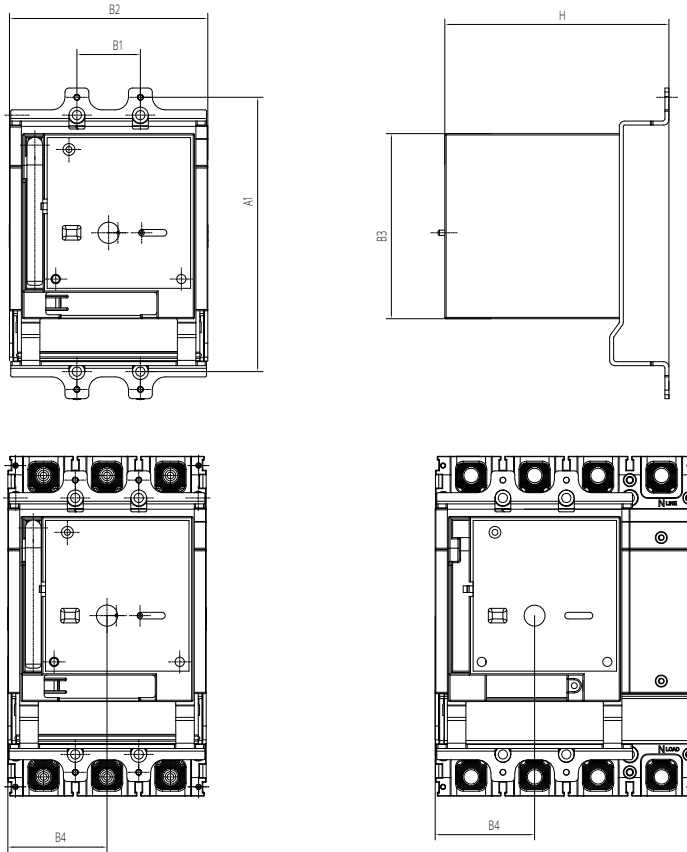
Model	A1	A2	C1	C2	C3	d1	H1	H2	H3
BZMm1	75	60	75	44.5	60	56	122	281.5	72
BZM1	75	60	75	44.5	60	56	130	290	72
BZM2	75	60	75	44.5	60	56	134.5	300.5	72
BZM3	75	60	75	136.4	60	56	199	360	92

Note: The extension rod is 200mm long as standard. The dimensions in the above table are measured against the 200mm reference.

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Molded Case Circuit Breakers BZM Dimensions

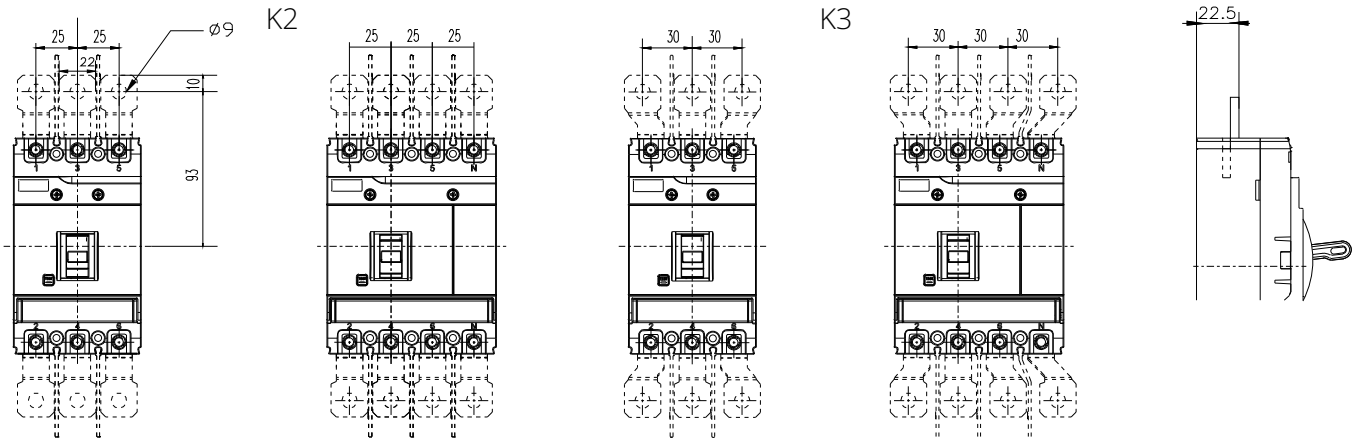
BZM Motor Operator Dimensions



Circuit breaker model for use with	Motor operator	A1	B1	B2	B3	H	B4
BZMm1	BZMm1/CD3	111	25	74	102	95	38.5
BZM1	BZM1/CD3	132	30	90.5	116	95	46
BZM2	BZM2/CD3	143	35	90.5	116	97	52.5
BZM3	BZM3/CD3	221	48	130	140	180.5	75

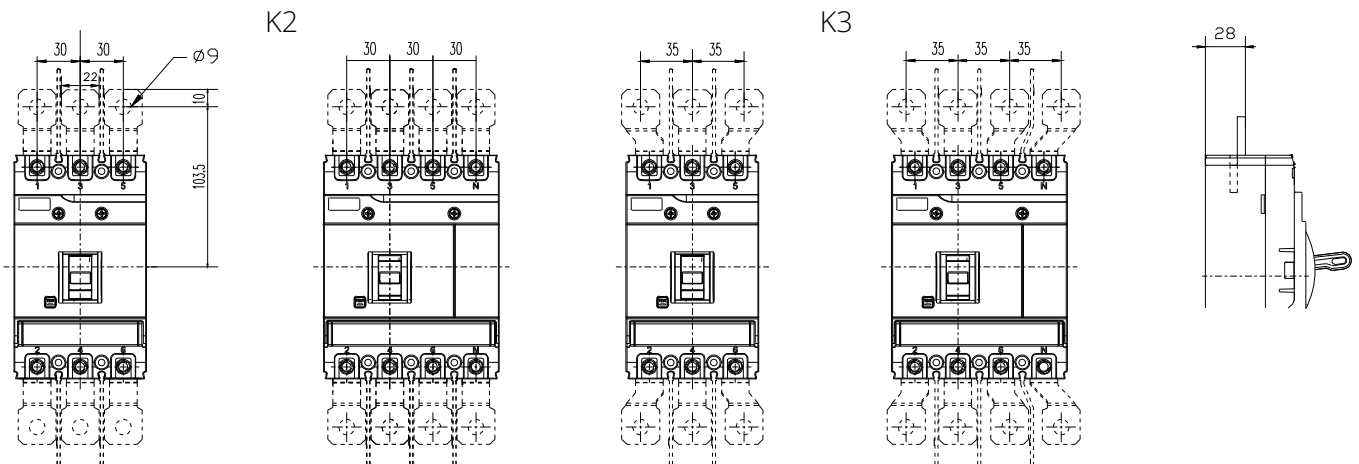
BZMm1-AX Extension Block

(Width x Thickness: 22 x 4mm)



BZM1-AX Extension Block

(Width x Thickness: 22 x 4mm)

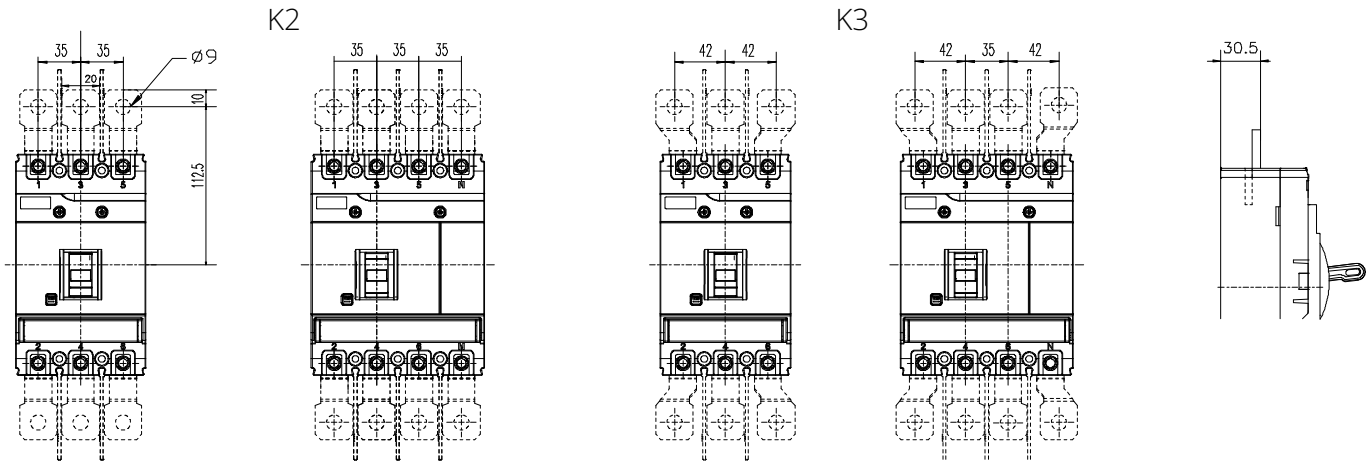


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Molded Case Circuit Breakers BZM Dimensions

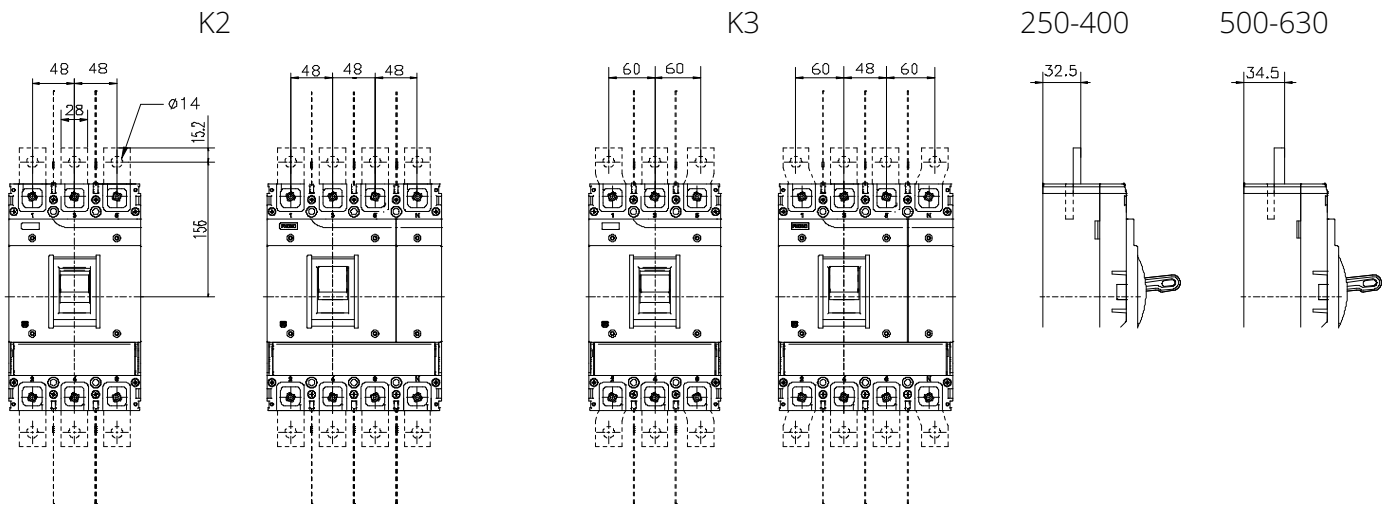
BZM2-AX / MX Extension Block

(Width x Thickness: 20 x 5mm)



BZM3-AX / MX Extension Block

(Width x Thickness: 250-400A: 28 x 6mm; 500-630A: 28 x 8mm)



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