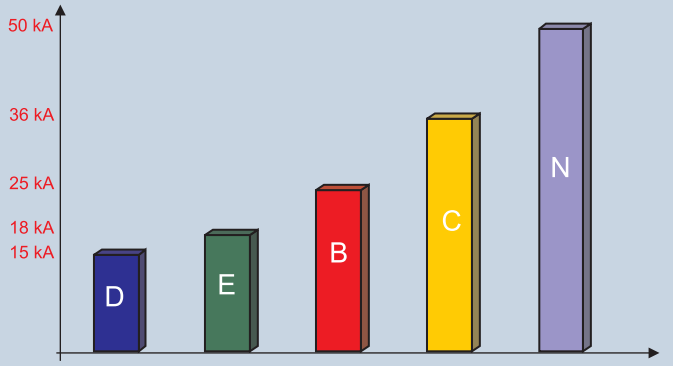
Circuit breakers BZM

Powering Business Worldwide

Optimum and efficient protection for every application



Compact

Simple

Safe

The new BZM

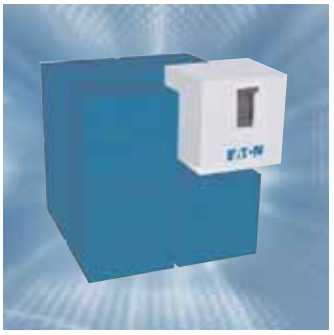
Eaton is a synonym for innovation, product quality, reliability anddecades of experience in the electrical engineering industry. Our productscomply with the latest national and international standards and regulations.

Our Circuit Breaker Division takes pride in expanding the range of circuit breakers by adding the new BZM series designed for the lower LV segment and featuring factory-set thermal and magnetic tripping values. With our new BZM series we offer compact circuit breakers and a wide range of accessories for your business applications in all kinds of trade and industry. Easy handling, enhanced capacities and proven quality in the attractive Eaton design are additional features of this product.

With the BZM1 for up to 125 A and the BZM2 for up to 250 A and the BZM3 for up to 400A, Eaton now also completes its range of products in the segment of circuit breakers, allowing us to cover all kinds of applications and requirements.

Protect your electrical system and cables with our new BZM!

Three advantages for your benefit



Compact

Unbeatable when it comes to saving space: In the range of circuit breakers, the BZM1, BZM2and BZM3 are among the slimmest in their class and can therefore use the valuabledistribution space most efficiently, regardless of whether they are used for energy sub-distribution or as a protection for incoming power in residential or functional buildings.

Simple

Easy to handle:
For a fast starting are thermal and magnetic tripping values already fixed.
The BZM series is absolutely easy to handle and allows for quick installation when executing your jobs.

Safe

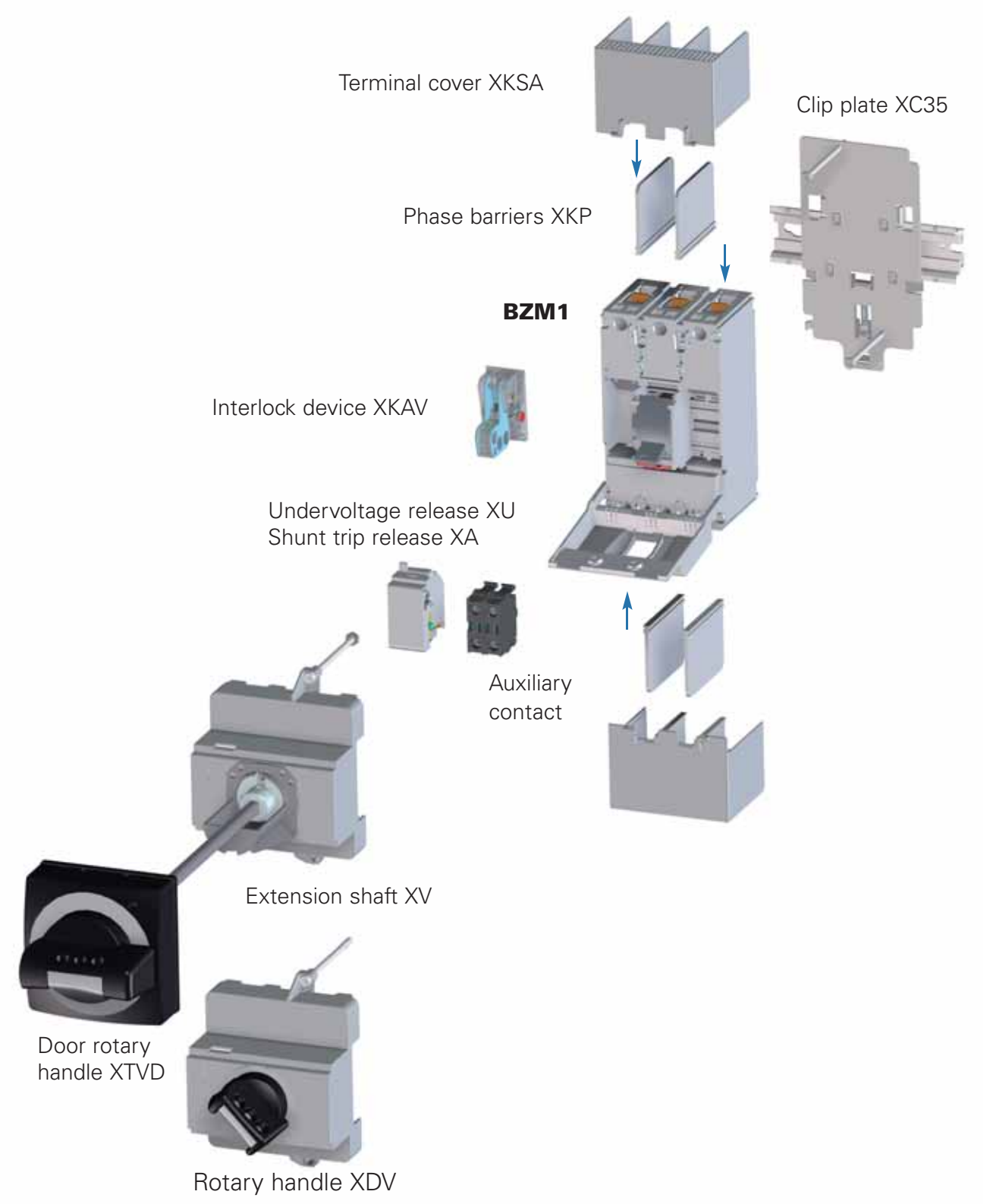
Eaton's switchgears have a worldwide reputation for being the benchmark in low-voltage power distribution. Eaton's quality protects people and assets against shortcircuits and overload, with the BZM series being designed for the 16 to 400 A range in sub-distribution.

Standards

In complying with the IEC/EN 60947-2 standards and pollution degree III (IEC/EN 60947) we not only ensure the material but also the immaterial values of the BZM circuit breaker series. And with our BZM series, we also show consideration for the environment as these circuit breakers conform to the RoHS directives and can be recycled to a large extent. And last but not least - the stylish outfit of the BZM series in the distinctive Eaton design makes these products attractive not only from a technical but also from an aesthetic point of view.

For more information please turn to page 21. (technical data page).

Range overview BZM1



BZM1 - small is powerful

Concentrated technology with a long lifespan

The BZM1 provides protection with rated currents up to 125 A and 36 kA breaking capacity, despite its light weight and slim width of only 25 mm per pole. The star within the circuit breaker family, is available as a 1, 2, 3 or 4-pole device. For a fast starting are thermal and magnetic tripping values already fixed by Eaton. And it has an extremely long lifespan of up to 10,000 mechanical operating cycles. In addition, thanks to its terminal cover, the BZM1 features an IP 10 degree of protection.

Multiple mounting options

Upside-down or horizontal? It is up to you how you wish to mount the BZM1. But regardless of the mounting position and the side you choose for the supply of power, it will always provide the full protective function.

Cable Fixing: Cable lug and box terminal

The proven cable lug with M6 screws and the box terminaltechnology for quick and easy mounting (BZM...-BT): both are included in the standard range of products.

Solutions made to measure

Remote tripping, signalling the switching status or undervoltage releasing in case of security relevent applications - all of this is easy to manage for the BZM1. Thanks to the comprehensive range of accessories, the BZM1 will not only be the perfect match for standard applications, but also the ideal solution for individual handling requirements.

Upon request the BZM1 is also available with a rotary handle (for direct mounting or door coupling).

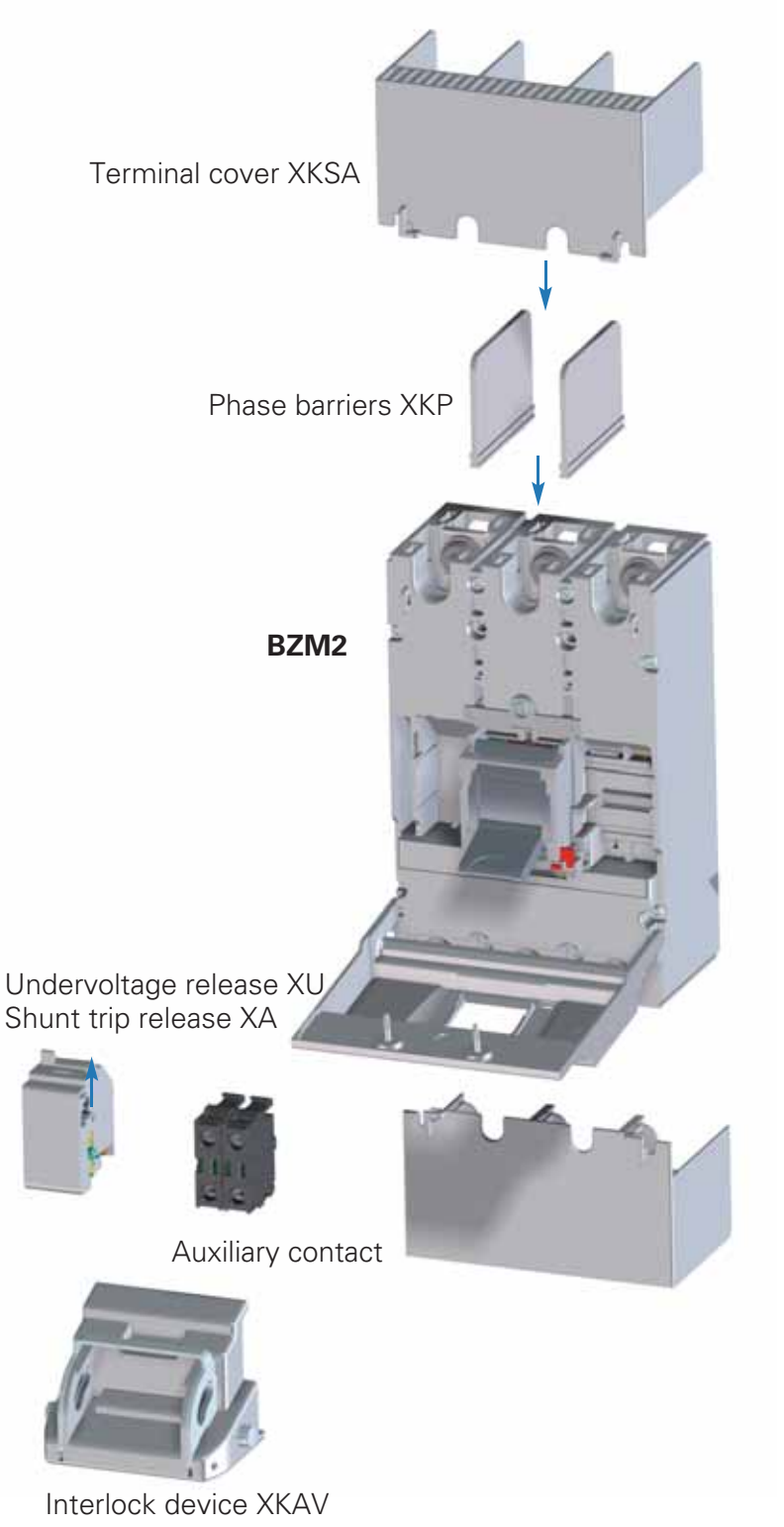
Characteristics / Features

Rated current: 16 A up to 125 A
Breaking Capacity: 15, 18, 25, 36 kA
Cable fixing: Cable lug M6 or Box Terminal (BZM...-BT)
Available poles: 3pole, 4poles
Rated Voltage: 400/415V, 50/60Hz
3-Position lever: Off - Trip - ON
Electrical Supply: Line or Load-Side

BZM1

BZM1... -BT

Range overview BZM2



BZM2 - excellent protection for high-rated current requirements

Technology brought to the point

Eaton's new BZM2 keeps a watchful eye on rated currents ranging from 125 to 250 A and a breaking capacity of 36 kA: it impresses especially with its functionality and robust design.
The 3-pole version (size W x D x H: 105 x 91.5 x 165 mm) with a lifespan of 8,000 mechanical operating cycles makes it a powerful protective device in a compact format.

Perfect adjustment to any environment

Standard position, horizontal or upside-down: you can select the mounting position just as freely as the side for the incoming power supply.

Conventional connection via cable lug

In line with the common practice for this type of rated current, the connection is established through a cable lug and M8 screws.

Accessories in Eaton style

Upon request and in our usual manner, we provide clever accessories such as auxiliary contacts, shunt trip releases, undervoltage releases or terminal covers.

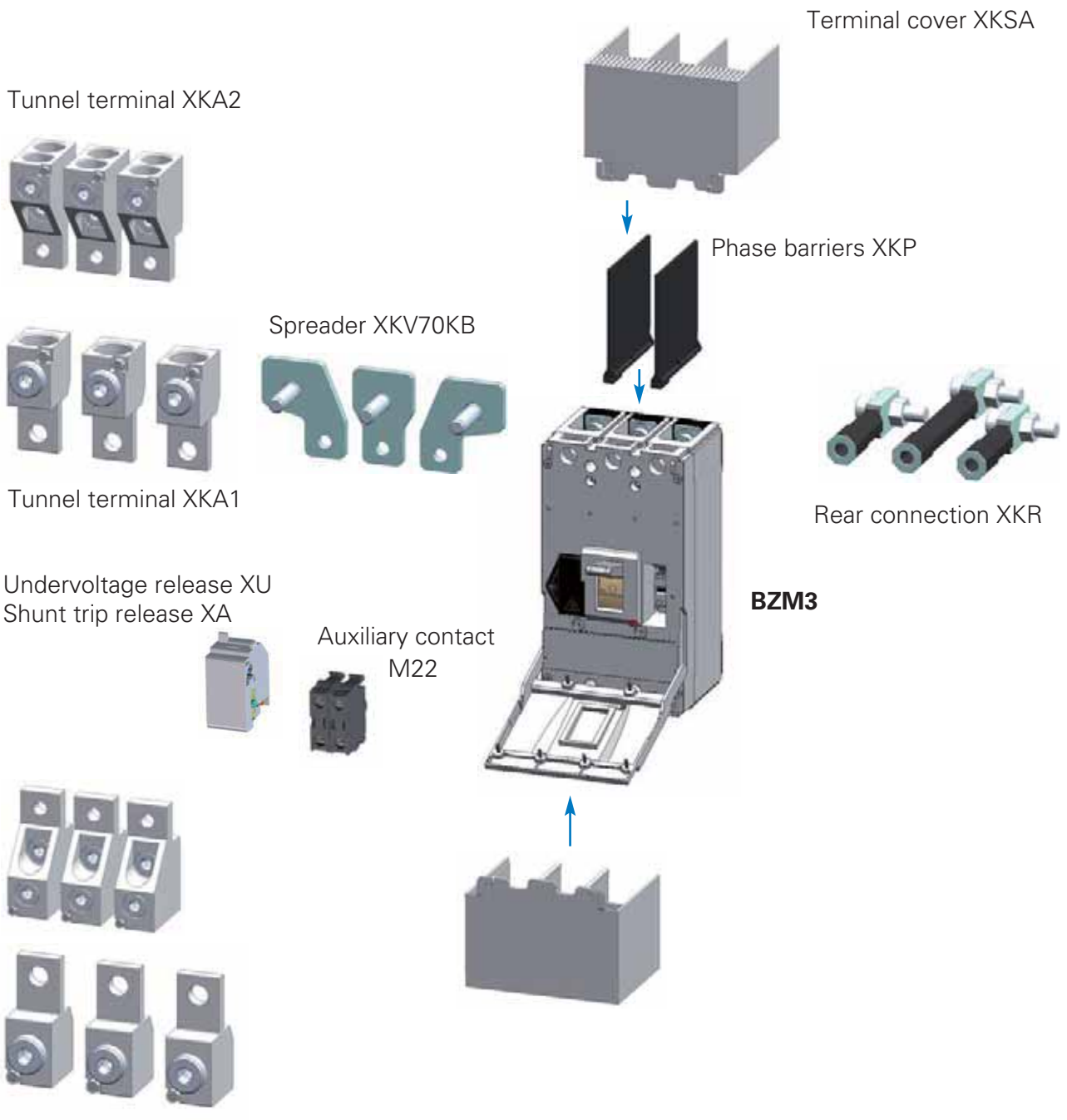
The BZM2 is a specialist in the higher range of rated current and offers everything you could want in terms of reliability, easy handling and compact design!

Characteristics / Features

Rated current: 125 A up to 250 A
Breaking Capacity: 25, 36 kA
Cable fixing: Cable lug M8
Available poles: 3pole
Rated Voltage: 400/415V, 50/60Hz
3-Position lever: Off - Trip - ON
Electrical Supply: Line or Load-Side

BZM2

Range overview BZM3



BZM3 - the perfect high current solution

Strong ratings combined with compact dimensions

The new BZM3 products are the most powerful Circuit Breaker within Eaton's BZM product range. The rated cur-rentis ranging from 250 up to 400 Aand a maximumbreaking capacity of 50kA / 415VAC and 36kA /440VAC. Eaton's BZM3 products - the prefect solution for your highamp applications with a compact size (size W x D x H: 140x 149 x 255 mm)

Simple to use

As commonly known from the BZM1 and BZM2 product range, freely place the product - Standard position, horizon-tal or upside-down. Also the feeding direction can be cho-sen as required.

Cable fixing:it`s simple!

Wether you choose the standard cable lug version withM10 screw or the Tunnel Terminal optionas accessory -the connection of your cable or busbar is quick and simple!

The BZM3 - not just Breaker!

Accessories are very important for the different applica-tions. Therefore also the BZM3 has the perfect accessories range available for you! Not only shunt trip releases, under-voltage releases and auxiliary contacts are part of the accessories range. Also terminal covers, spreaders, tunnel terminals and phase barriers and a rear connection kit is available for this new product range

Characteristics / Features

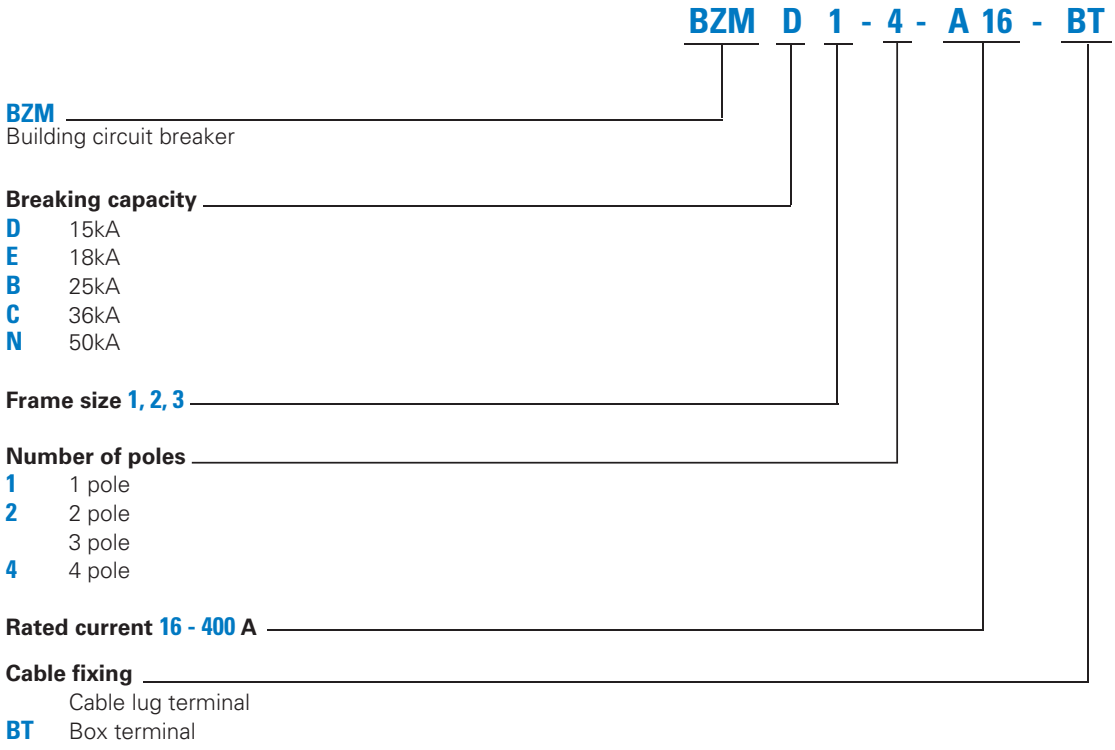
Rated current: 250 up to 400A
Breaking capacity 25, 36 or 50kA / 415VAC
Cable fixing: Cable lug M10 or Tunnel terminal (accessory)
Rated voltage: 440V, 50/60Hz
3-Position lever: Off - Trip - On
Electrical Supply: Line or Load-Side

BZM3

Content

Circuit breakers BZM

BZM types key



1-pole

Protection of systems and cables

Cable lug terminal

Rated current = rated uninterrupted current $I_n = I_u$ A	Short circuit releases I A $I>$	Economy switching capacity 18kA at 240 V 50/60 Hz **Part no.** Article no. 1 of each
16	256 - 384	**BZME1-1-A16** 166250
20	256 - 384	**BZME1-1-A20** 166251
25	320 - 480	**BZME1-1-A25** 166252
32	320 - 480	**BZME1-1-A32** 166253
40	320 - 480	**BZME1-1-A40** 166254
50	480 - 720	**BZME1-1-A50** 166255
63	480 - 720	**BZME1-1-A63** 166256
80	800 - 1200	**BZME1-1-A80** 166257
100	800 - 1200	**BZME1-1-A100** 166258

Box terminal

16	256 - 384	**BZME1-1-A16-BT** 166259
20	256 - 384	**BZME1-1-A20-BT** 166260
25	320 - 480	**BZME1-1-A25-BT** 166261
32	320 - 480	**BZME1-1-A32-BT** 166262
40	320 - 480	**BZME1-1-A40-BT** 166263
50	480 - 720	**BZME1-1-A50-BT** 166264
63	480 - 720	**BZME1-1-A63-BT** 166265
80	800 - 1200	**BZME1-1-A80-BT** 166266
100	800 - 1200	**BZME1-1-A100-BT** 166267

Note: 1 piece phase barrier BZM1-XKP included in delivery

2-pole

Protection of systems and cables

	Rated current = rated uninterrupted current $I_n = I_u$ A	Short circuit releases I A $I>$	Domestic switching capacity 15kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each	Economy switching capacity 18kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each	Basic switching capacity 25kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each
Cable lug terminal 	20	256 - 384	**BZMD1-2-A20** 129808	**BZME1-2-A20** 129914	**BZMB1-2-A20** 112585
	25	320 - 480	**BZMD1-2-A25** 129880	**BZME1-2-A25** 129916	**BZMB1-2-A25** 112587
	32	320 - 480	**BZMD1-2-A32** 129882	**BZME1-2-A32** 129918	**BZMB1-2-A32** 112589
	40	320 - 480	**BZMD1-2-A40** 129884	**BZME1-2-A40** 129920	**BZMB1-2-A40** 112591
	50	480 - 720	**BZMD1-2-A50** 129886	**BZME1-2-A50** 129922	**BZMB1-2-A50** 112593
	63	480 - 720	**BZMD1-2-A63** 129888	**BZME1-2-A63** 129924	**BZMB1-2-A63** 112595
	80	800 - 1200	**BZMD1-2-A80** 129890	**BZME1-2-A80** 129926	**BZMB1-2-A80** 112597
	100	800 - 1200	**BZMD1-2-A100** 129892	**BZME1-2-A100** 129928	**BZMB1-2-A100** 112599
Box terminal 	20	256 - 384	**BZMD1-2-A20-BT** 129896	**BZME1-2-A20-BT** 129932	**BZMB1-2-A20-BT** 112605
	25	320 - 480	**BZMD1-2-A25-BT** 129898	**BZME1-2-A25-BT** 129934	**BZMB1-2-A25-BT** 112607
	32	320 - 480	**BZMD1-2-A32-BT** 129900	**BZME1-2-A32-BT** 129936	**BZMB1-2-A32-BT** 112609
	40	320 - 480	**BZMD1-2-A40-BT** 129902	**BZME1-2-A40-BT** 129938	**BZMB1-2-A40-BT** 112611
	50	480 - 720	**BZMD1-2-A50-BT** 129904	**BZME1-2-A50-BT** 129940	**BZMB1-2-A50-BT** 112613
	63	480 - 720	**BZMD1-2-A63-BT** 129906	**BZME1-2-A63-BT** 129942	**BZMB1-2-A63-BT** 112615
	80	800 - 1200	**BZMD1-2-A80-BT** 129908	**BZME1-2-A80-BT** 129944	**BZMB1-2-A80-BT** 112617
	100	800 - 1200	**BZMD1-2-A100-BT** 129910	**BZME1-2-A100-BT** 129946	**BZMB1-2-A100-BT** 112619

Note: 1 piece phase barrier BZM1-XKP included in delivery

3-pole

Protection of systems and cables

Cable lug terminal

Rated current = rated uninterrupted current $I_n = I_u$ A	Short circuit releases I A	Domestic switching capacity 15kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each	Economy switching capacity 18kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each	Basic switching capacity 25kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each	Comfort switching capacity 36kA at 400 V 50/60 Hz **Part no.** Article no. 1 of each
16	256 - 384	**BZMD1-A16** 111526	**BZME1-A16** 111527	**BZMB1-A16** 111528	
20	256 - 384	**BZMD1-A20** 111529	**BZME1-A20** 111530	**BZMB1-A20** 111531	
25	320 - 480	**BZMD1-A25** 111532	**BZME1-A25** 111533	**BZMB1-A25** 111534	
32	320 - 480	**BZMD1-A32** 111535	**BZME1-A32** 111536	**BZMB1-A32** 111537	**BZMC1-A32** 131268
40	320 - 480	**BZMD1-A40** 111538	**BZME1-A40** 111539	**BZMB1-A40** 111540	**BZMC1-A40** 131269
50	480 - 720	**BZMD1-A50** 111541	**BZME1-A50** 111542	**BZMB1-A50** 111543	**BZMC1-A50** 131270
63	480 - 720	**BZMD1-A63** 111544	**BZME1-A63** 111545	**BZMB1-A63** 111546	**BZMC1-A63** 131271
80	800 - 1200	**BZMD1-A80** 111547	**BZME1-A80** 111548	**BZMB1-A80** 111549	**BZMC1-A80** 131272
100	800 - 1200	**BZMD1-A100** 111550	**BZME1-A100** 111551	**BZMB1-A100** 111552	**BZMC1-A100** 131273
125	800 - 1200	**BZMD1-A125** 112491	**BZME1-A125** 112493		

Box terminal

16	256 - 384	**BZMD1-A16-BT** 111553	**BZME1-A16-BT** 111554	**BZMB1-A16-BT** 111555	
20	256 - 384	**BZMD1-A20-BT** 111556	**BZME1-A20-BT** 111557	**BZMB1-A20-BT** 111558	
25	320 - 480	**BZMD1-A25-BT** 111559	**BZME1-A25-BT** 111560	**BZMB1-A25-BT** 111561	
32	320 - 480	**BZMD1-A32-BT** 111562	**BZME1-A32-BT** 111563	**BZMB1-A32-BT** 111564	**BZMC1-A32-BT** 131276
40	320 - 480	**BZMD1-A40-BT** 111565	**BZME1-A40-BT** 111566	**BZMB1-A40-BT** 111567	**BZMC1-A40-BT** 131277
50	480 - 720	**BZMD1-A50-BT** 111568	**BZME1-A50-BT** 111569	**BZMB1-A50-BT** 111570	**BZMC1-A50-BT** 131278
63	480 - 720	**BZMD1-A63-BT** 111571	**BZME1-A63-BT** 111572	**BZMB1-A63-BT** 111573	**BZMC1-A63-BT** 131279
80	800 - 1200	**BZMD1-A80-BT** 111574	**BZME1-A80-BT** 111575	**BZMB1-A80-BT** 111576	**BZMC1-A80-BT** 131280
100	800 - 1200	**BZMD1-A100-BT** 111577	**BZME1-A100-BT** 111578	**BZMB1-A100-BT** 111579	**BZMC1-A100-BT** 131281
125	800 - 1200	**BZMD1-A125-BT** 112497	**BZME1-A125-BT** 112499		

Note: 2 pieces phase barriers BZM1-XKP included in delivery

4-pole

Protection of systems and cables

Cable lug terminal

Box terminal

Rated current = rated uninterrupted current $I_n = I_u$ A	Short circuit releases I A $I>$	Domestic switching capacity 15kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each	Economy switching capacity 18kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each	Basic switching capacity 25kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each
16	256 - 384	**BZMD1-4-A16** 121776	**BZME1-4-A16** 112503	**BZMB1-4-A16** 112505
20	256 - 384	**BZMD1-4-A20** 121778	**BZME1-4-A20** 112507	**BZMB1-4-A20** 112509
25	320 - 480	**BZMD1-4-A25** 121940	**BZME1-4-A25** 112511	**BZMB1-4-A25** 112513
32	320 - 480	**BZMD1-4-A32** 121942	**BZME1-4-A32** 112515	**BZMB1-4-A32** 112517
40	320 - 480	**BZMD1-4-A40** 121944	**BZME1-4-A40** 112519	**BZMB1-4-A40** 112521
50	480 - 720	**BZMD1-4-A50** 121946	**BZME1-4-A50** 112523	**BZMB1-4-A50** 112525
63	480 - 720	**BZMD1-4-A63** 121948	**BZME1-4-A63** 112527	**BZMB1-4-A63** 112529
80	800 - 1200	**BZMD1-4-A80** 121950	**BZME1-4-A80** 112531	**BZMB1-4-A80** 112533
100	800 - 1200	**BZMD1-4-A100** 121952	**BZME1-4-A100** 112535	**BZMB1-4-A100** 112537
16	256 - 384	**BZMD1-4-A16-BT** 121956	**BZME1-4-A16-BT** 112543	**BZMB1-4-A16-BT** 112545
20	256 - 384	**BZMD1-4-A20-BT** 121958	**BZME1-4-A20-BT** 112547	**BZMB1-4-A20-BT** 112549
25	320 - 480	**BZMD1-4-A25-BT** 121960	**BZME1-4-A25-BT** 112551	**BZMB1-4-A25-BT** 112553
32	320 - 480	**BZMD1-4-A32-BT** 121962	**BZME1-4-A32-BT** 112555	**BZMB1-4-A32-BT** 112557
40	320 - 480	**BZMD1-4-A40-BT** 121964	**BZME1-4-A40-BT** 112559	**BZMB1-4-A40-BT** 112561
50	480 - 720	**BZMD1-4-A50-BT** 121966	**BZME1-4-A50-BT** 112563	**BZMB1-4-A50-BT** 112565
63	480 - 720	**BZMD1-4-A63-BT** 121968	**BZME1-4-A63-BT** 112567	**BZMB1-4-A63-BT** 112569
80	800 - 1200	**BZMD1-4-A80-BT** 121970	**BZME1-4-A80-BT** 112571	**BZMB1-4-A80-BT** 112573
100	800 - 1200	**BZMD1-4-A100-BT** 121972	**BZME1-4-A100-BT** 112575	**BZMB1-4-A100-BT** 112577

Note: 3 pieces phase barriers BZM1-XKP included in delivery

Circuit breakers BZM2

3-pole

Protection of systems and cables

Cable lug terminal

Rated current = rated uninterrupted current $I_n = I_u$ A	Short circuit releases / A I >	Basic switching capacity 25kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each	Comfort switching capacity 36kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each
125	1400 - 2100	**BZMB2-A125** 119735	**BZMC2-A125** 121804
160	1400 - 2100	**BZMB2-A160** 116973	**BZMC2-A160** 121805
200	1400 - 2100	**BZMB2-A200** 116974	**BZMC2-A200** 121806
250	1400 - 2100	**BZMB2-A250** 116975	**BZMC2-A250** 121807

Cable lug terminal (without overload release)

250	1400 - 2100	**BZMB2-S250** 131668	

Note: 2 pieces phase barriers BZM2-XKP included in delivery

Cable lug terminal

3-pole

Protection of systems and cables

Rated current = rated uninterrupted current $I_n = I_u$ A	Short circuit releases I A $I>$	Basic switching capacity 25kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each	Comfort switching capacity 36kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each	Normal switching capacity 50kA at 415 V 50/60 Hz **Part no.** Article no. 1 of each
250	2600-3800	**BZMB3-A250** 158276	**BZMC3-A250** 158280	**BZMN3-A250** 158284
320	2600-3800	**BZMB3-A320** 158277	**BZMC3-A320** 158281	**BZMN3-A320** 158285
350	2600-3800	**BZMB3-A350** 158278	**BZMC3-A350** 158282	**BZMN3-A350** 158286
400	2600-3800	**BZMB3-A400** 158279	**BZMC3-A400** 158283	**BZMN3-A400** 158287

Note: 2 pieces phase barriers BZM3-XKP included in delivery

Accessories BZM1

Auxiliary contacts (only for 2, 3 and 4pole)

Description	Part no. Article no.	Std.pack
1 NO	**M22-K10** 216376	20
1 NC	**M22-K01** 216378	20

Phase barrier

Description	Part no. Article no.	Std.pack
	BZM1-XKP 109760	1

Undervoltage release (only 3 and 4pole)

Description	Part no. Article no.	Std.pack
230-240VAC	**BZM1-XU230-240VAC** 158053	1
400-440VAC	**BZM1-XU400-415VAC** 158054	1
24VDC	**BZM1-XU24VDC** 158055	1

Shunt trip release (only 3 and 4pole)

Description	Part no. Article no.	Std.pack
230-240VAC	**BZM1-XA230-240VAC** 158056	1
400-440VAC	**BZM1-XA400-415VAC** 158057	1
24VDC	**BZM1-XA24VDC** 158058	1

Terminal cover (only for 1pole BZM)

Description	Part no. Article no.	Std.pack
for 1pole BZM	**BZM1-1-XKSA** 166268	1
for 2pole BZM	**BZM1-2-XKSA** 112484	1
for 3pole BZM	**BZM1-XKSA** 112482	1
for 4pole BZM	**BZM1-4-XKSA** 112483	1

Rotary handle (only for 2, 3 and 4pole)

Description	Part no. Article no.	Std.pack
	BZM1-XDV 113168	1

Door rotary handle (only for 2, 3 and 4pole)

Description	Part no. Article no.	Std.pack
	BZM1-XTVD 112485	1

Extension axle (only for XTVD)

Description	Part no. Article no.	Std.pack
Length 400 mm	**BZM1-XV4** 112486	1
Length 600 mm	**BZM1-XV6** 112487	1

DIN-rail-adapter

Description	Part no. Article no.	Std.pack
For 2-pole BZM	**BZM1-2-XC35** 112489	1
For 3- a.4-pole BZM	**BZM1-XC35** 112488	1

Cable Lug

Description	Part no. Article no.	Std.pack
35 mm² / M6	**BZM1-XKS35** 113609	10
50 mm² / M6	**BZM1-XKS50** 113750	10

BZM1 Locking Device

Description	Part no. Article no.	Std.pack
	BZM1-XKAV 152899	1

Auxiliary contacts

Description	Part no. Article no.	Std.pack
1 NO	**M22-K10** 216376	20
1 NC	**M22-K01** 216378	20

Phase barrier

Description	Part no. Article no.	Std.pack
	BZM2-XKP 118720	1

Undervoltage release

Description	Part no. Article no.	Std.pack
230-240VAC	**BZM1-3-XU230-240VAC** 158053	1
400-440VAC	**BZM1-3-XU400-415VAC** 158054	1
24VDC	**BZM1-3-XU24VDC** 158055	1

Shunt trip release

Description	Part no. Article no.	Std.pack
230-240VAC	**BZM1-3-XA230-240VAC** 158056	1
400-440VAC	**BZM1-3-XA400-440VAC** 158057	1
24VDC	**BZM1-3-XA24VDC** 158058	1

Terminal cover

Description	Part no. Article no.	Std.pack
	BZM2-XKSA 118727	1

Interlock Device

Description	Part no. Article no.	Std.pack
	BZM2-XKAV 131669	1

Accessories BZM3

Auxiliary contacts

Description	Part no. Article no.	Std.pack
1 NO	**M22-K10** 216376	20
1 NC	**M22-K01** 216378	20

Phase barrier

Description	Part no. Article no.	Std.pack
	BZM3-XKP 158300	1

Undervoltage release

Description	Part no. Article no.	Std.pack
230-240VAC	**BZM1-3-XU230-240VAC** 158053	1
400-440VAC	**BZM1-3-XU400-415VAC** 158054	1
24VDC	**BZM1-3-XU24VDC** 158055	1

Shunt trip release

Description	Part no. Article no.	Std.pack
230-240VAC	**BZM1-3-XA230-240VAC** 158056	1
400-440VAC	**BZM1-3-XA400-440VAC** 158057	1
24VDC	**BZM1-3-XA24VDC** 158058	1

Terminal cover

Description	Part no. Article no.	Std.pack
	BZM3-XKSA 158305	1

Rear connection

Description	Part no. Article no.	Std.pack
	BZM3-XKR 158301	1

Spreaders (for one side of the breaker)

Description	Part no. Article no.	Std.pack
	BZM3-XKV70KB 158302	1

Tunnel terminal (for one side of the breaker)

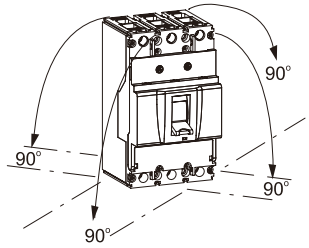
Description	Part no. Article no.	Std.pack
185 mm²	**BZM3-XKA1** 158303	1
240 mm²	**BZM1-XKA2** 158304	1

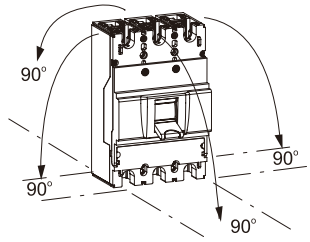
Cable lug

Description	Part no. Article no.	Std.pack
185 mm²	**NZM3-XKS185** 260040	3
240 mm²	**NZM3-XKS240** 260041	3

Mechanical specifications

			Rated current max.125 A BZM1	**Rated current max.250 A** BZM2
Standards			IEC/EN 60947-2	IEC/EN 60947-2
Number of poles			1, 2, 3, 4	3
Device width		mm	1pole:25, 2pole: 50, 3pole: 75, 4pole: 100	3-pole: 105
Frame size		mm	45	45
Socket size		mm	130	165
Device depth		mm	84.7	91,5
Terminals			Lift terminal, ring tongue connector	Ring tongue connector
Terminal capacity lift terminalmm			rigid (solid/stranded) and flexible wire (2.5 - 50)	-
Terminal capacity ring tongue		mm^2	Diameter: max. 15	Diameter: max. 24
Busbar thickness		mm		max. 8
Terminal screw			M6 (Pozidriv PZ2)	M8
Terminal torque		Nm	4	14
Degree of Protection (DIN VDE 0470)			Built-in behind panel IP40	Built-in behind panel IP40
Climatic conditions			acc. to IEC 68-2(25..55°C/90..95% RH)	acc. to IEC 68-2(25..55°C/90..95% RH)
Ambient temperature				
Storage		°C	-35 ... +85	-35 ... +85
Operation		°C	-25 ... +70	-25 ... +70
Mounting Positions			Vertical and 90° in all directions	Vertical and 90° in all directions





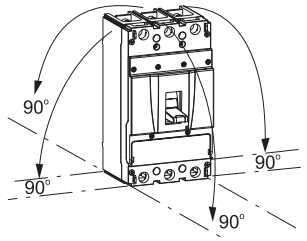
Protection System					
Enclosures			With insulating surround: IP40		With insulating surround: IP40
Number of mechanical operating cycles			> 10.000		> 8.000
Pollution degree			3		3
Electrical specifications					
			1pole	**2,3 and 4pole**	
Maximum LV h.b.c. fuse		A gG/gL	200	200	315
Rated operational voltage	U_e	V AC	230/240, 50/60 Hz	400/415, 50/60 Hz	400/415, 50/60 Hz
Rated current	I_n	A	16 up to 100	16 up to 125	125, 160, 200, 250
Rated impulse withstand voltage	U_{imp}	V	4.000 (1.2/50 µsec)	6.000 (1.2/50 µsec)	6.000 (1.2/50 µsec)
Overvoltage category			III	III	III
Rated insulation voltage	U_i	V	690	690	690
For use in IT electrical power networks		V	230/240	400/415	400/415
Direction of incoming supply			As required	As required	As required
Number of electrical operating cycles			> 1.500	> 1.500	1.000
Tripping characteristic					
Conventional non-tripping current			$I_{nt} = 1.05\ I_n$	$I_{nt} = 1.05\ I_n$	$I_{nt} = 1.05\ I_n$ [1)]
Conventional tripping current			$I_t = 1.30\ I_n$	$I_t = 1.30\ I_n$	$I_t = 1.30\ I_n$
Reference temperature		°C	40	30	30

Notes: [1)] not valid for BZMB2-S250

Technical data BZM3

Mechanical specifications

			Rated current max. 400 A BZM3
Standards			IEC/EN 60947-2
Number of poles			3
Device width		mm	3-pole: 140
Frame size		mm	95
Socket size		mm	255
Device depth		mm	110
Terminals			
Terminal capacity ring tongue			
Terminal capacity Tunnel Terminal XKA1 Copper Cabel/Aluminium cable:		mm^2	max. 350A 1 x 16 - 185
Terminal capacity Tunnel Terminal XKA2 Copper Cable/Aluminium cable:		mm^2	max. 400A 1 x 50 - 240 or 2 x 50 - 240
Busbar thickness		mm	as required
Terminal screw			M10
Terminal torque		Nm	30
Degree of Protection (DIN VDE 0470)			Built-in behind panel IP40
Climatic conditions			acc. to IEC 68-2 (25..55°C / 90..95% RH)
Ambient temperature			
Storage		°C	-35 ... +85
Operation		°C	-25 ... +70
Mounting positions			Vertical and 90° in all directions



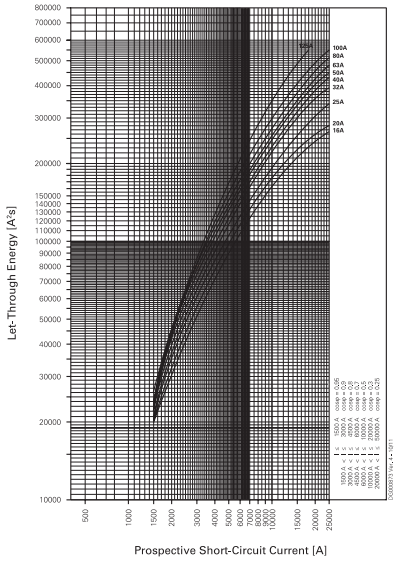
Protection System			
Enclosures			With insulating around: IP40
Number of mechanical operating cycles			> 5.000
Pollution degree			3
Electrical specifications			
Rated operational voltage	U_e	V AC	440, 50/60 Hz
Rated current	I_n	A	250, 320, 350, 400
Rated impulse withstand voltage	U_{imp}	V	8.000 (1.2/50µsec)
Overvoltage category			III
Rated insulation voltage	U_i	V	690
For use in IT electrical power networks		V	440
Direction of incoming supply			As required
Number of electrical operating cycles			> 1.000
Tripping characteristic			
Conventional non-tripping current			$I_{nt} = 1.05\ I_n$
Conventional tripping current			$I_t = 1.30\ I_n$
Reference temperature		°C	40

Switching capacity

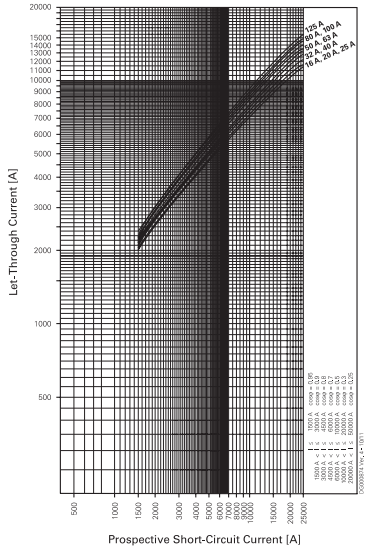
			BZMD1	BZME1	BZMB1	BZMC1	BZMB2	BZMC2
Rated short-circuit breaking capacity								
I_{CU} to IEC/EN 60947 operating sequence								
0-t-CO, 130 V 50/60 Hz	I_{CU}	kA	30	36	50		-	-
0-t-CO, 240 V 50/60 Hz	I_{CU}	kA	30	36	50		-	-
0-t-CO, 400/415 V 50/60 Hz[1)]	**I_{CU}**	**kA**	**15**	**18**	**25**	**36/400VAC**	**25**	**36**
I_{CS} to IEC/EN 60947 operating sequence								
0-t-CO-t-CO, 130 V 50/60 Hz	I_{CS}	kA	15	18	25		-	-
0-t-CO-t-CO, 240 V 50/60 Hz	I_{CS}	kA	15	18	25		-	-
0-t-CO-t-CO, 400/415 V 50/60 Hz[1)]	**I_{CS}**	**kA**	**7.5**	**9**	**12.5**	**18/9*/400VAC**	**12.5**	**9**
Utilization category to IEC/EN 60947-2								
*9kA/400VAC at IN=80, 100A			A	A	A	A	A	A

Notes [1)] for BZM1 1pole 230/400 V, 50/60Hz

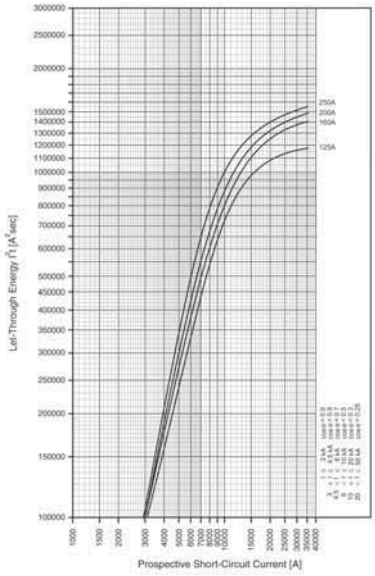
Let-through energy BZM1



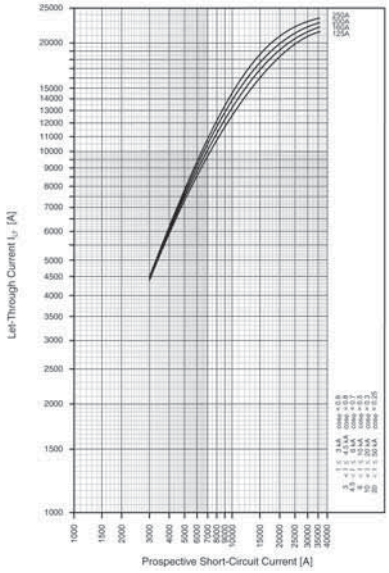
Let-through current BZM1



Let-through energy BZM2



Let-through current BZM2

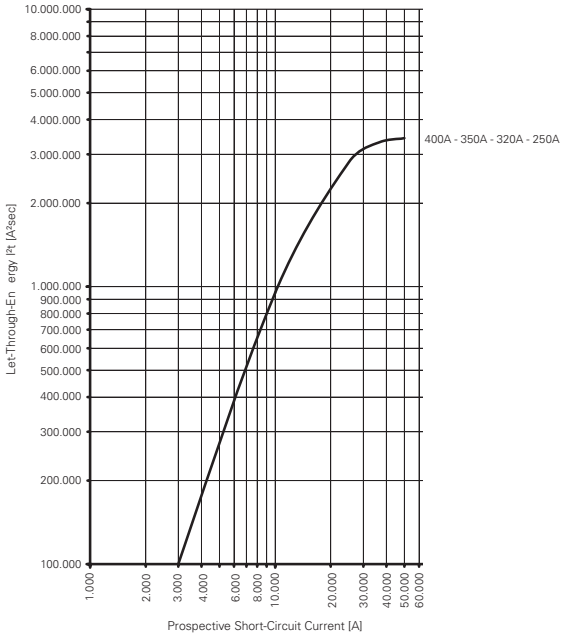


Technical data BZM3

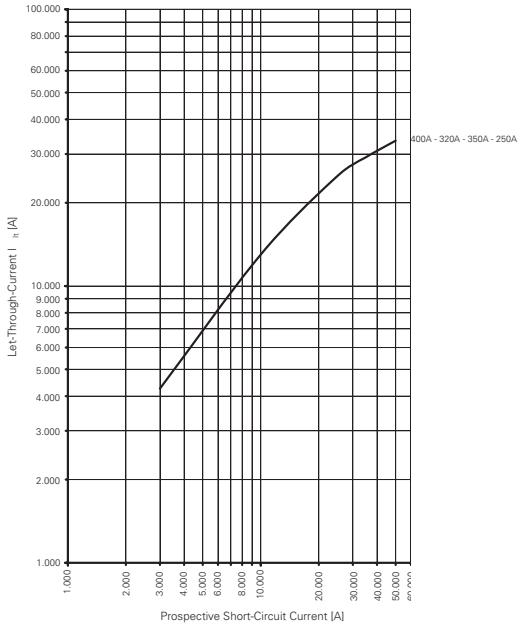
Switching capacity

			BZMB3	BZMC3	BZMN3
Rated short-circuit breaking capacity					
I_{cu} to IEC/EN 60947 operating sequence					
O-t-CO, 240 V 50/ 60 Hz	Icu	kA	50	85	100
O-t-CO, 400/415 V 50/60 Hz	**Icu**	**kA**	**25**	**36**	**50**
O-t-CO, 440 V 50/ 60 Hz	Icu	kA	20	25	36
I_{cs} to IEC/EN 60947 operating sequence					
O-t-CO, 240 V 50/ 60 Hz	Icu	kA	25	42,5	50
O-t-CO-t-CO, 400/415 V 50/60 Hz	**Ics**	**kA**	**12.5**	**18**	**25**
O-t-CO, 440 V 50/ 60 Hz	Icu	kA	10	12,5	18
Utilization category to IEC/EN 60947-2			A	A	A

Let-through energy BZM3



Let-through current BZM3



Between incoming circuit-breaker NZM (B)(C)(N)(H) and outgoing circuit-breaker BZM (D)(E)(B)(C)

			Incoming circuit-breaker							
			NZM1				NZM2			
		I_n	up to 160A				up to 250A			
		I_{cu} (415 V)	25k	36k	50k	100k	25k	36k	50k	100k
Outgoing circuit breaker										
	I_{cu} (415 V)									
BZMD1	15 kA	up to 125 A	18	25	36	40	18	25	36	50
BZME1	18 kA	up to 125 A	20	30	40	50	20	30	40	70
BZMB1	25 kA	up to 125 A	25	36	50	70	25	36	50	100
BZMC1*	36 kA*	up to 100 A*	25*	36*	50*	70*	25*	36*	50*	100*
BZME2	18 kA	up to 250 A	-	-	-	-	20	30	40	70
BZMB2	25 kA	up to 250 A	-	-	-	-	-	36	50	100
BZMC2	36 kA	up to 250 A	-	-	-	-	-	-	60	100

* I_{cu}(400 V)

Technical data

Back-up protection PLHT / BZM(B)(C)(D)(E)1

	PLHT-I $_n$/1(2,3,4)/B(C) + BZMB1
I_n [A]	U_e = 230/400 V, U_e = 240/415 V
20	18 kA(BZMB1-A125) 25 kA(BZMB1-A16...-A100)
25	
32	
40	
50	
63	
80	
100	
125	

	PLHT-I $_n$/1(2,3,4)/B(C)+ BZMC1
I_n [A]	U_e = 230/400 V
20	25 kA
25	
32	
40	
50	
63	
80	
100	

	PLHT-I $_n$/1(2,3,4)/B(C) + BZMD1
I_n [A]	U_e = 230/400 V, U_e = 240/415 V
20	15 kA
25	
32	
40	
50	
63	
80	
100	
125	

	PLHT-I $_n$/1(2,3,4)/B(C) + BZME1
I_n [A]	U_e = 230/400 V, U_e = 240/415 V
20	18 kA
25	
32	
40	
50	
63	
80	
100	
125	

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U_e = 400/415V: I_{CU} (BZMD1) = 15 kA (acc. to IEC/EN 60947-2)
U_e = 400/415V: I_{CU} (BZME1) = 18 kA (acc. to IEC/EN 60947-2)
U_e = 400/415V: I_{CU} (BZMB1) = 25 kA (acc. to IEC/EN 60947-2)
U_e = 400V: I_{CU} (BZMC1) = 36 kA (acc. to IEC/EN 60947-2)

U_e = 240/415V: I_{CU} (PLHT-20..63/1..4/B,C,D) = 25 kA (acc. to IEC/EN 60947-2)
U_e = 240/415V: I_{CU} (PLHT-80/1..4/B,C,D, PLHT-100/1..4/B,C) = *20 kA (acc. to IEC/EN 60947-2)*
U_e = 240/415V: I_{CU} (PLHT-100/1..4/D, PLHT-125/1..4/B,C) = 15 kA (acc. to IEC/EN 60947-2)

Back-up tests acc. to IEC/EN 60947-2, App. A.6: U = 1.05*U_e (O - t - CO)

Back-up protection PLHT / BZM(B)(C)2

	PLHT-I $_n$/1(2,3,4)/B(C) + BZMB2
I_n [A]	U_e = 230/400 V, U_e = 240/415 V
20	25 kA
25	
32	
40	
50	
63	
80	
100	
125	

	PLHT-I $_n$/1(2,3,4)/B(C) + BZMC2
I_n [A]	U_e = 230/400 V, U_e = 240/415 V
20	25 kA
25	
32	
40	
50	
63	
80	
100	
125	

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U_e = 400/415V: I_{CU} (BZMD2) = 15 kA (acc. to IEC/EN 60947-2)
U_e = 400/415V: I_{CU} (BZME2) = 18 kA (acc. to IEC/EN 60947-2)
U_e = 400/415V: I_{CU} (BZMB2) = 25 kA (acc. to IEC/EN 60947-2)
U_e = 400/415V: I_{CU} (BZMC2) = 36 kA (acc. to IEC/EN 60947-2)

U_e = 240/415V: I_{CU} (PLHT-20..63/1..4/B,C,D) = 25 kA (acc. to IEC/EN 60947-2)
U_e = 240/415V: I_{CU} (PLHT-80/1..4/B,C,D, PLHT-100/1..4/B,C) = 20 kA (acc. to IEC/EN 60947-2)
U_e = 240/415V: I_{CU} (PLHT-100/1..4/D, PLHT-125/1..4/B,C) = 15 kA (acc. to IEC/EN 60947-2)

Back-up tests acc. to IEC/EN 60947-2, App. A.6: U = 1.05*U_e (O - t - CO)

Back-up protection FAZ/PLSM / BZM(B)(C)(D)(E)1

FAZ/PLSM-I $_n$ /1(1N,2,3,3N,4)/B(C)(D) + BZMB1

	U_e = 230/400 V, U_e = 240/415 V		
I_n [A]	Type B	Type C	Type D
0.16	x		x
0.25			
0.5			
0.75			x
1	25 kA(up to -A100) 18 kA(up to -A125)		
1.5			
1.6			
2			
2.5			
3			
3.5			
4			
5			
6			
8			
10			
12			
13			
15			
16			
20			
25			
32			
40			
50			
63			

FAZ/PLSM-I $_n$ /1(1N,2,3,3N,4)/B(C)(D) + BZMC1

	U_e = 230/400 V		
I_n [A]	Type B	Type C	Type D
0.16	x		x
0.25			
0.5			
0.75			x
1	20 kA		
1.5			
1.6			
2			
2.5			
3			
3.5			
4			
5			
6			
8			
10			
12			
13			
15			
16			
20			
25			
32			
40			
50			
63			

FAZ/PLSM-I $_n$ /1(1N,2,3,3N,4)/B(C)(D) + BZMD1

	U_e = 230/400 V, U_e = 240/415 V		
I_n [A]	Type B	Type C	Type D
0.16	x		x
0.25			
0.5			
0.75			x
1	15 kA		
1.5			
1.6			
2			
2.5			
3			
3.5			
4			
5			
6			
8			
10			
12			
13			
15			
16			
20			
25			
32			
40			
50			
63			

U_e = 400/415V: I_{CU} (BZMD1) = 15 kA (acc. to IEC/EN 60947-2)
U_e = 400/415V: I_{CU} (BZME1) = 18 kA (acc. to IEC/EN 60947-2)
U_e = 400/415V: I_{CU} (BZMB1) = 25 kA (acc. to IEC/EN 60947-2)
U_e = 400V: I_{CU} (BZMC1) = 36 kA (acc. to IEC/EN 60947-2)

FAZ/PLSM-I $_n$ /1(1N,2,3,3N,4)/B(C)(D) + BZME1

	U_e = 230/400 V, U_e = 240/415 V		
I_n [A]	Type B	Type C	Type D
0.16	x		x
0.25			
0.5			
0.75			x
1	18 kA		
1.5			
1.6			
2			
2.5			
3			
3.5			
4			
5			
6			
8			
10			
12			
13			
15			
16			
20			
25			
32			
40			
50			
63			

U_e = 240/415V: I_{CU} (PLSM all types except D50, D63) = 15 kA (acc. to IEC/EN 60947-2)
U_e = 240/415V: I_{CU} (PLSM type D50, D63) = 10 kA (acc. to IEC/EN 60947-2)
Back-up tests acc. to IEC/EN 60947-2, App. A.6: U = 1.05*U_e (O - t - CO)

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Technical data

Back-up protection FAZ/PLSM / BZM(B)(C)2

FAZ/PLSM-I $_n$/1(1N,2,3,3N,4)/B(C)(D) + BZMB2

I_n [A]	U_e = 230/400 V, U_e = 240/415 V		
	Type B	Type C	Type D
0.16	x		x
0.25			
0.5			
0.75			x
1	20 kA		
1.5			
1.6			
2			
2.5			
3			
3.5			
4			
5			
6			
8			
10			
12			
13			
15			
16			
20			
25			
32			
40			
50			18 kA
63			

U_e = 400/415V: I_{CU} (BZMB2) = 25 kA (acc. to IEC/EN 60947-2)
U_e = 400/415V: I_{CU} (BZMC2) = 36 kA (acc. to IEC/EN 60947-2)

FAZ/PLSM-I $_n$/1(1N,2,3,3N,4)/B(C)(D) + BZMC2

I_n [A]	U_e = 230/400 V, U_e = 240/415 V		
	Type B	Type C	Type D
0.16	x		x
0.25			
0.5			
0.75			x
1	20 kA		
1.5			
1.6			
2			
2.5			
3			
3.5			
4			
5			
6			
8			
10			
12			
13			
15			
16			
20			
25			
32			
40			
50			18 kA
63			

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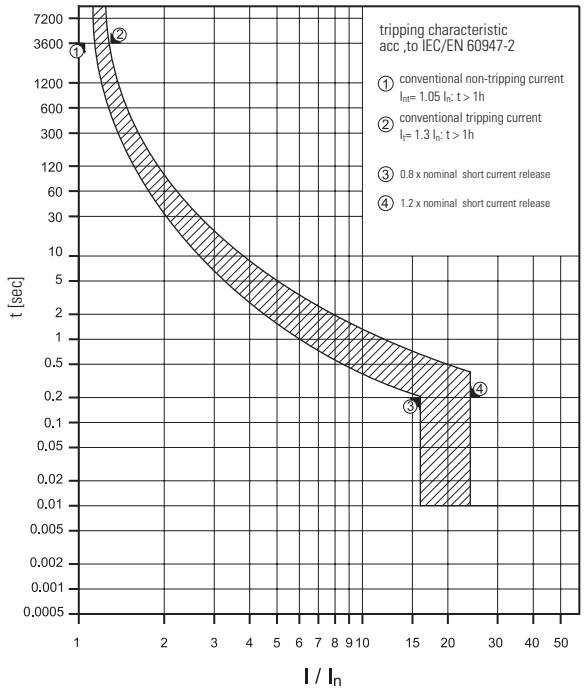
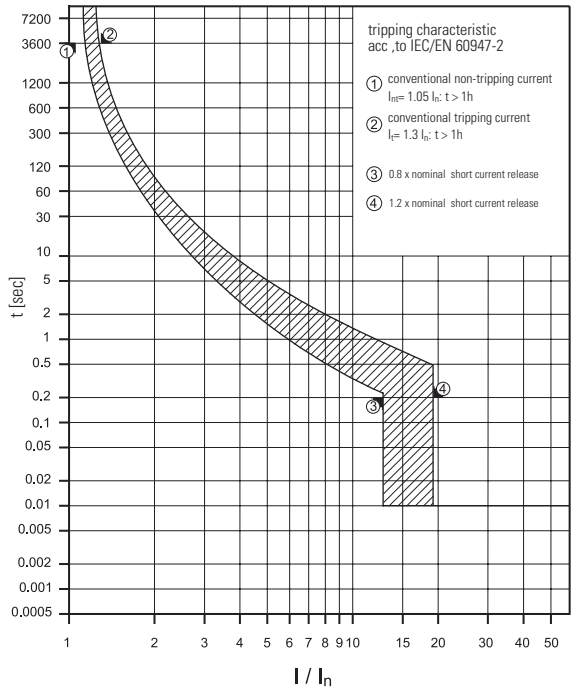
U_e = 240/415V: I_{CU} (PLSM all types except D50, D63) = 15 kA (acc. to IEC/EN 60947-2)
U_e = 240/415V: I_{CU} (PLSM type D50, D63) = 10 kA (acc. to IEC/EN 60947-2)
Back-up tests acc. to IEC/EN 60947-2, App. A.6: U = 1.05*U_e (O - t - CO)

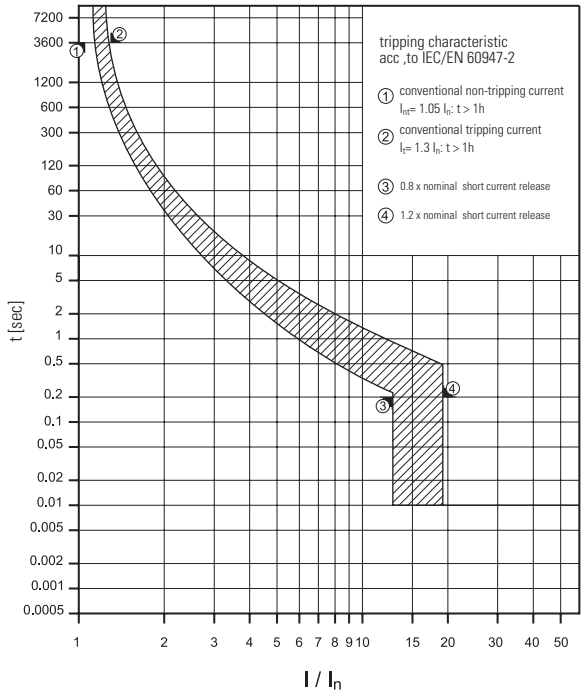
Tripping curve BZM1 16A, 3-pole



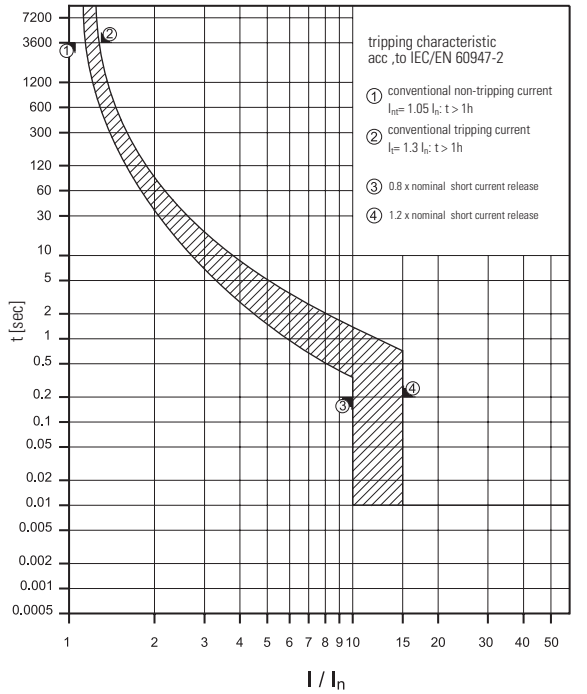
Tripping curve BZM1 20A, 3-pole



Tripping curve BZM1 25A, 3-pole

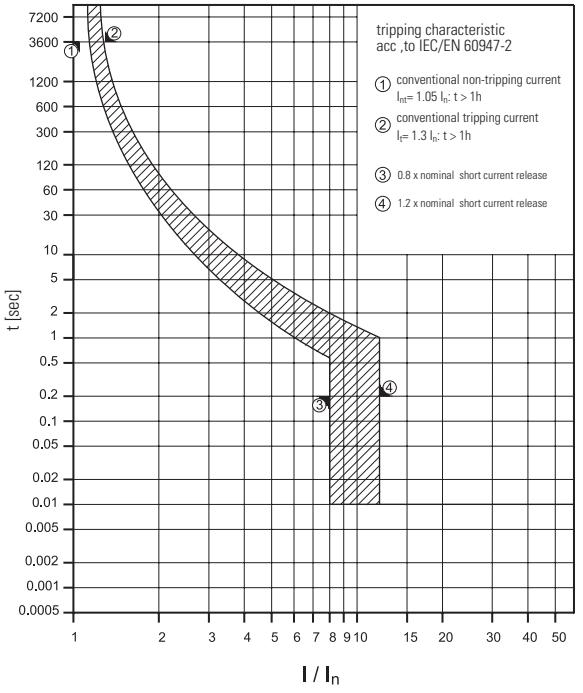


Tripping curve BZM1 32A, 3-pole

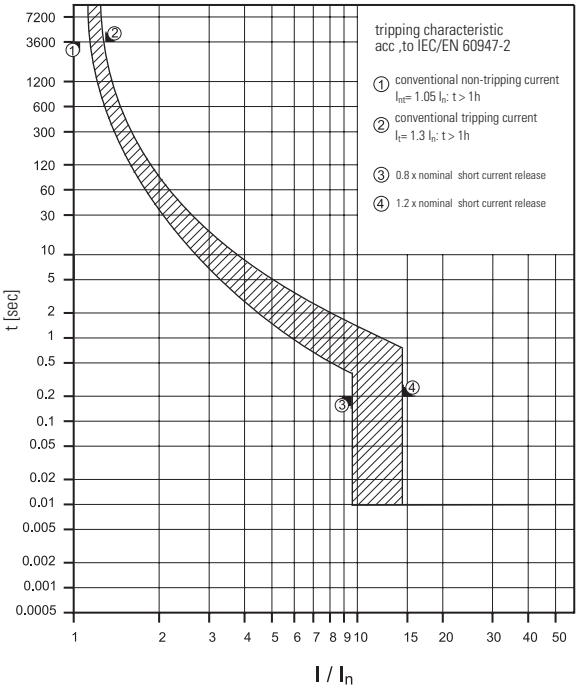


Tripping current curves BZM1

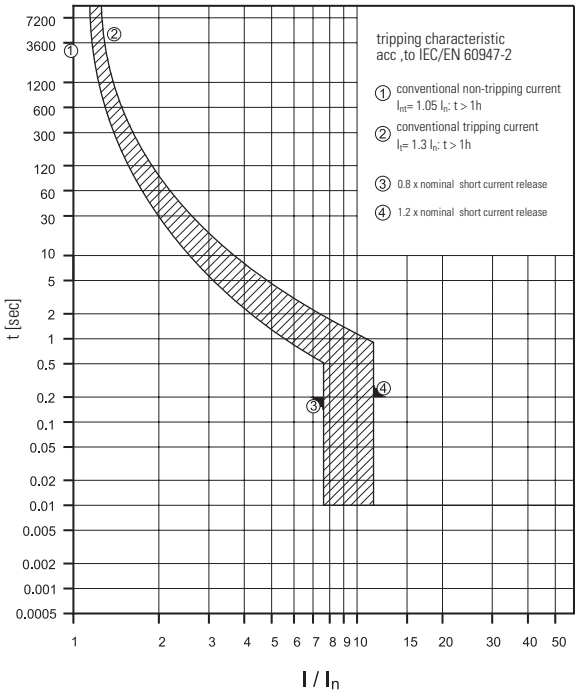
Tripping curve BZM1 40A,3-pole



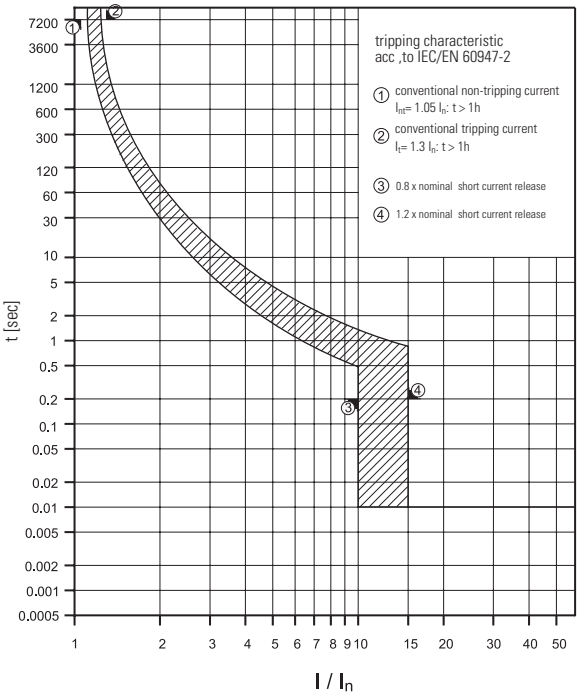
Tripping curve BZM1 50A,3-pole



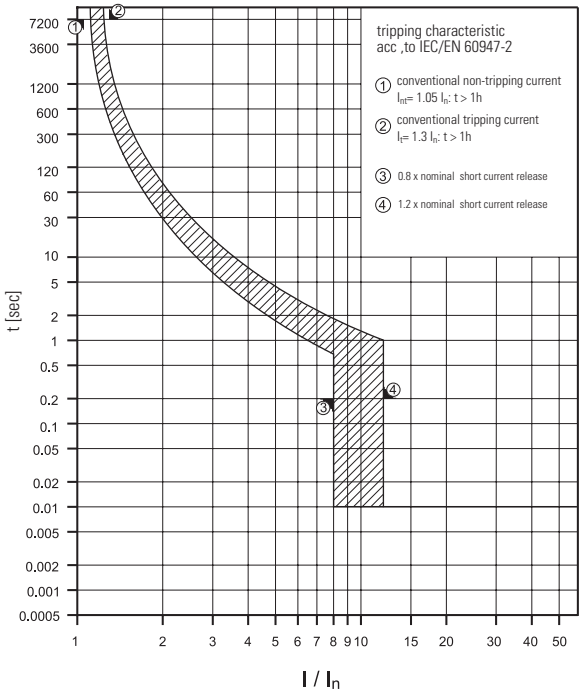
Tripping curve BZM 63A,3-pole



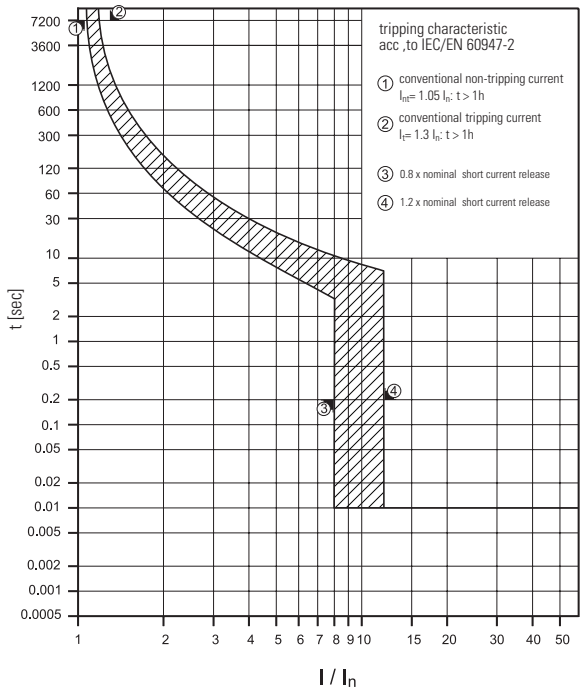
Tripping curve BZM1 80A,3-pole



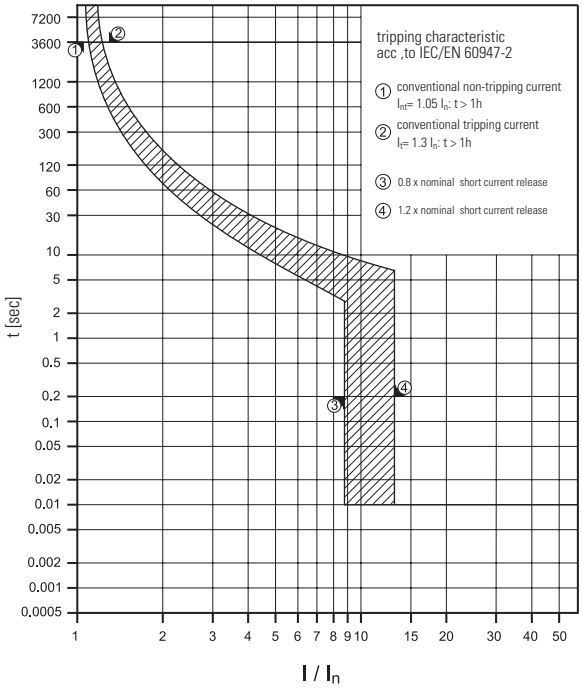
Tripping curve BZM1 100A,3-pole



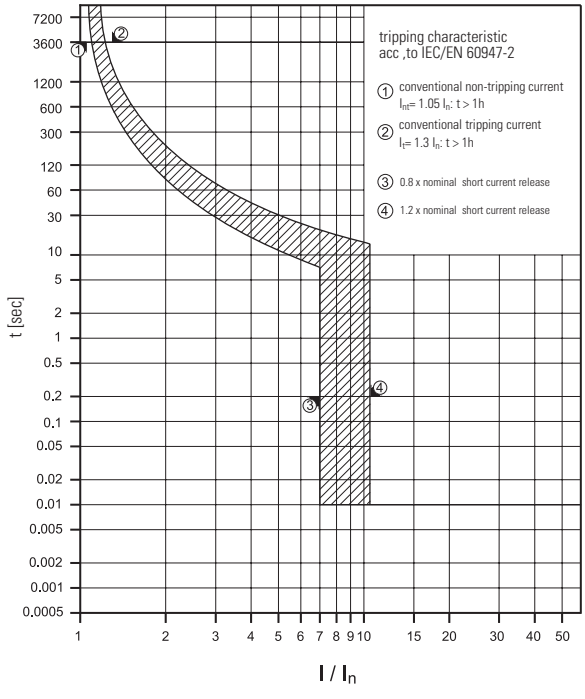
Tripping curve BZM2 125A



Tripping curve BZM2 160A

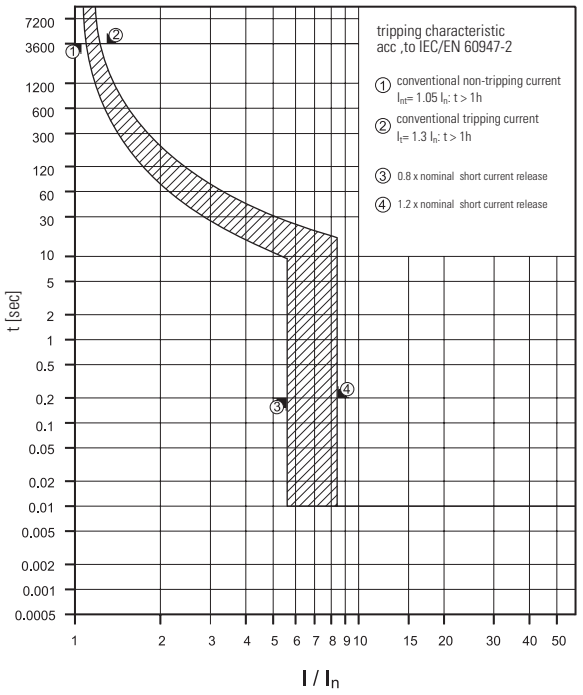


Tripping curve BZM2 200A

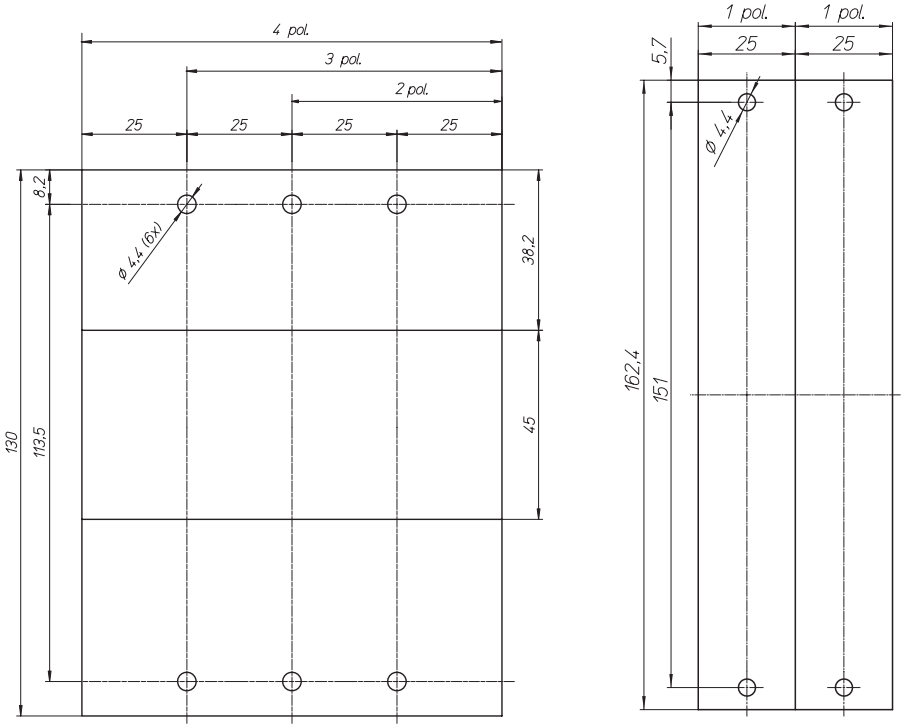


Tripping current curves BZM2
Mounting holes BZM1

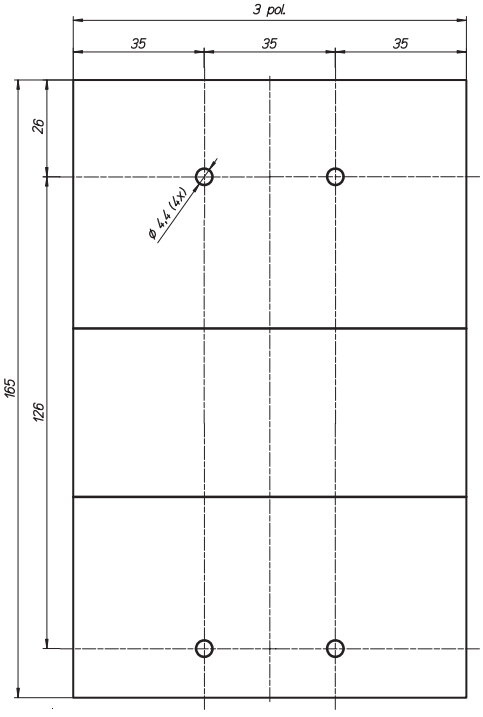
Tripping curve BZM2 250A



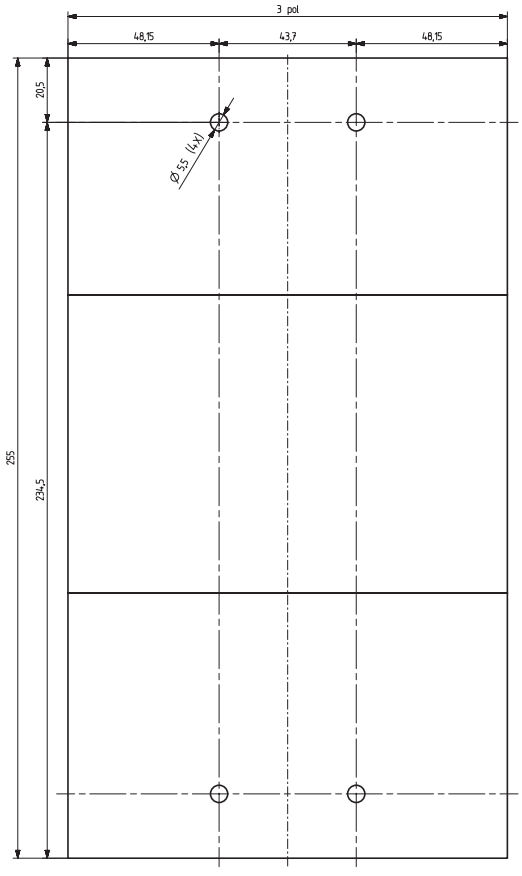
Mounting holes BZM1



Mounting holes BZM2



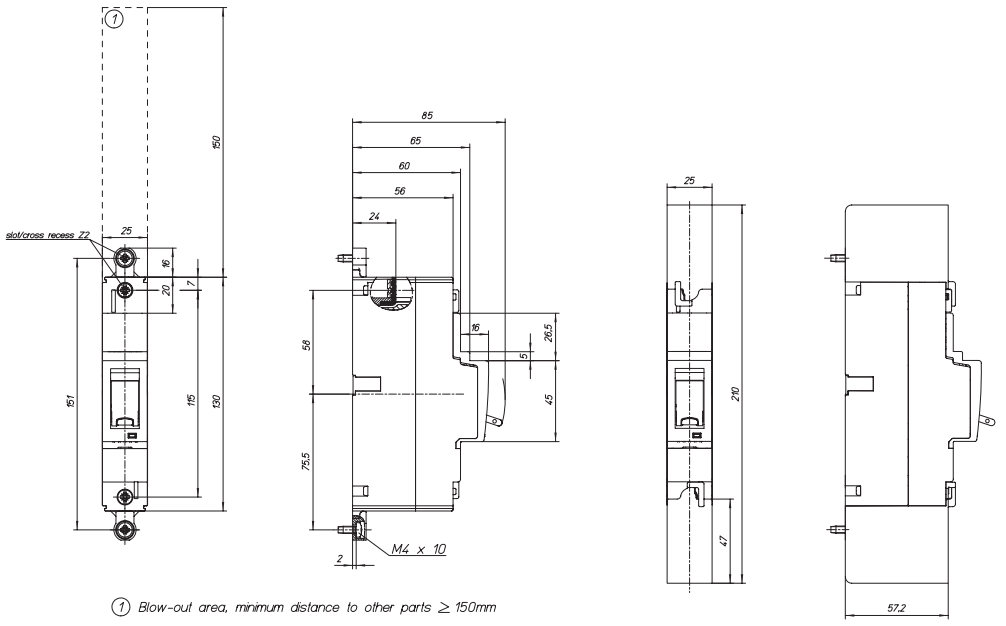
Mounting holes BZM3



All dimensions in mm

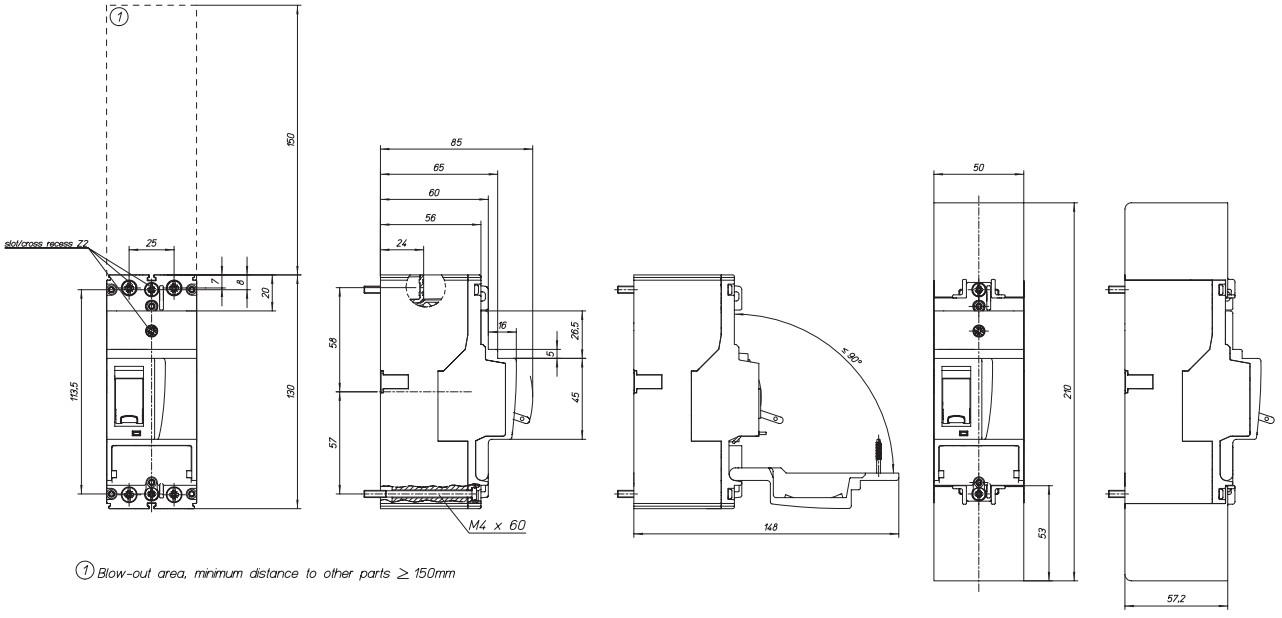
Dimensions BZM1

Circuit breaker BZM1 1-pole



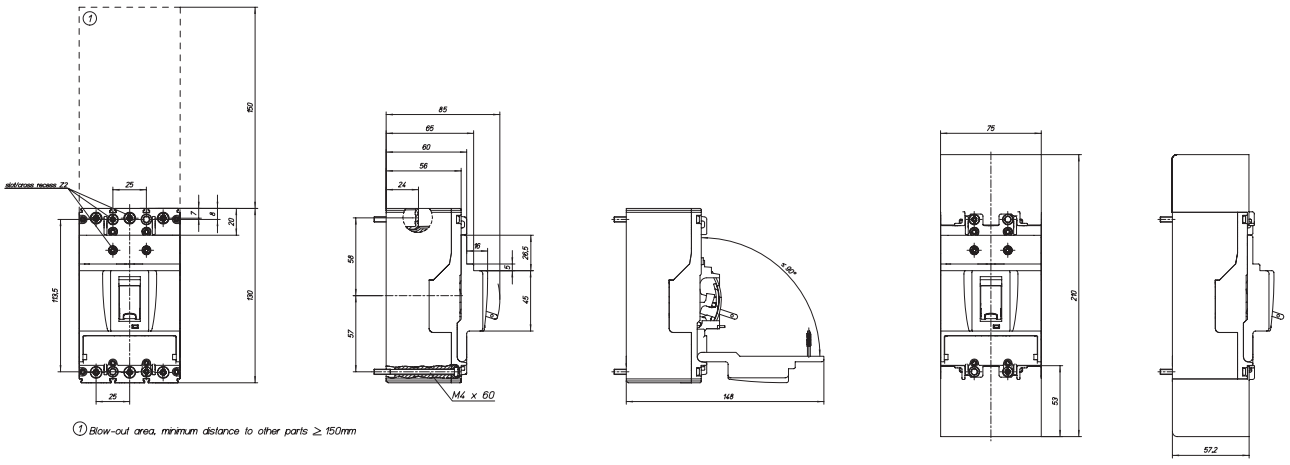
1 Blow-out area, minimum distance to other parts ≥ 150mm

Circuit breaker BZM1 2-pole



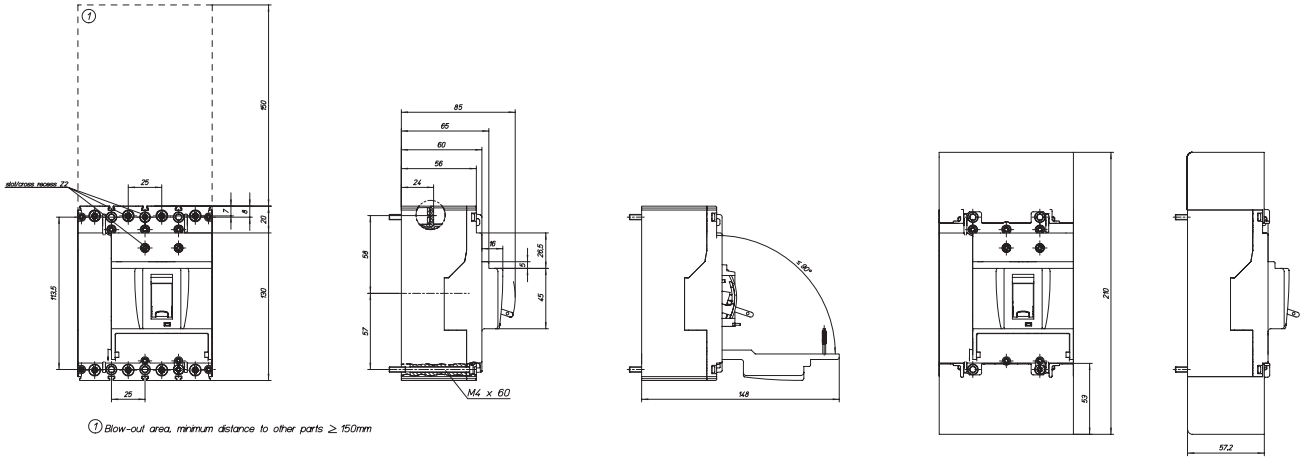
1 Blow-out area, minimum distance to other parts ≥ 150mm

Circuit breaker BZM1 3-pole



1 Blow-out area, minimum distance to other parts ≥ 150mm

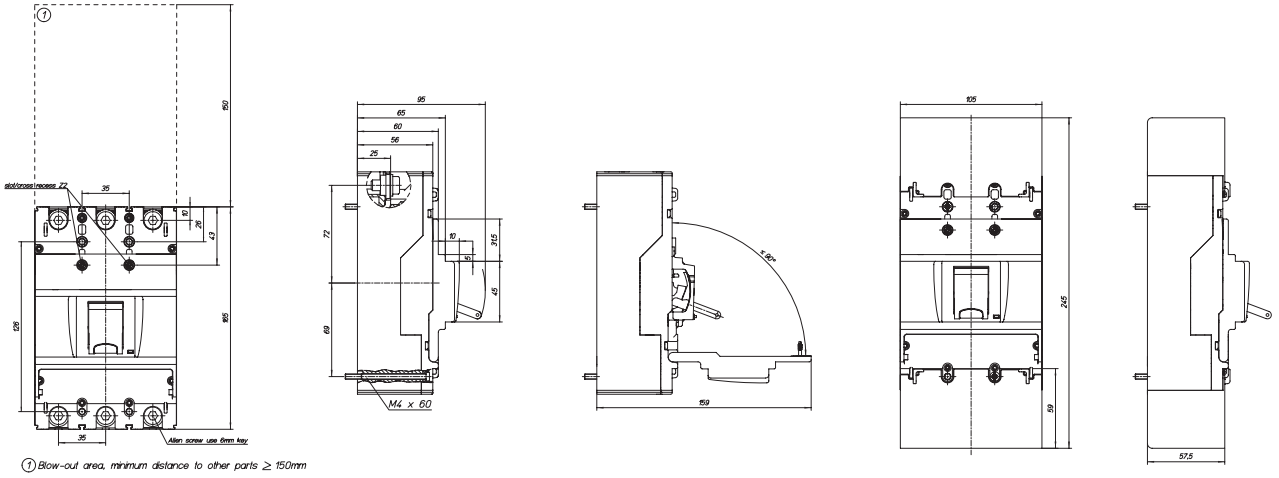
Circuit breaker BZM1 4-pole



1 Blow-out area, minimum distance to other parts ≥ 150mm

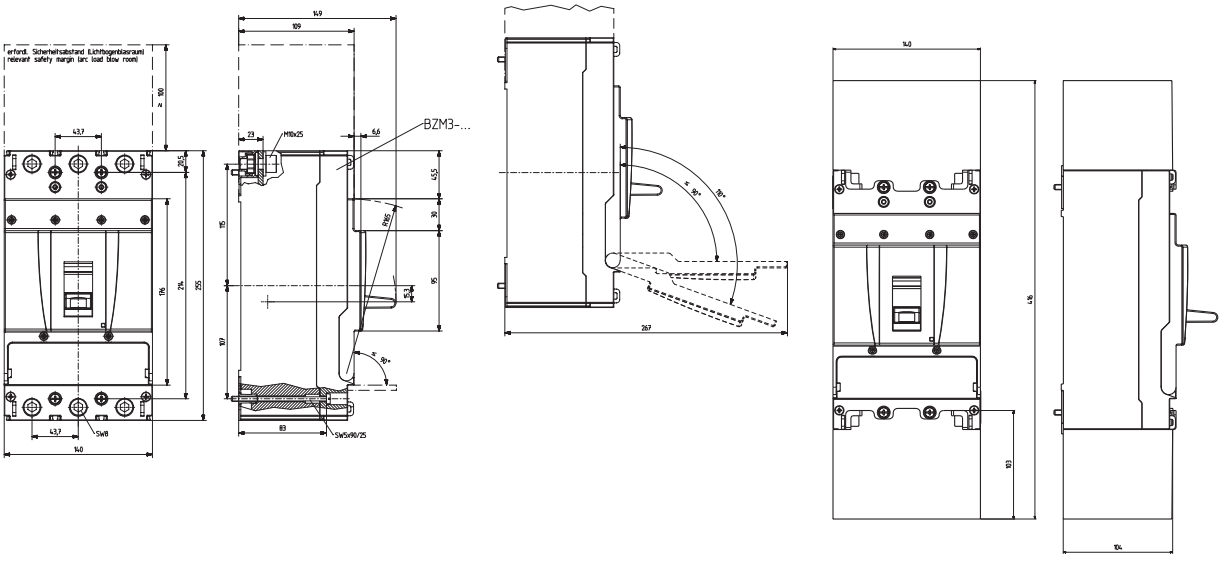
Dimensions BZM2 and BZM3

Circuit breaker BZM2 3-pole



① Blow-out area, minimum distance to other parts ≥ 150mm

Circuit breaker BZM3 3-pole



Note

Note

Note

Eaton is dedicated to ensuring that reliable, efficient and safe power is available when it's needed most. With unparalleled knowledge of electrical power management across industries, experts at Eaton deliver customized, integrated solutions to solve our customers' most critical challenges.

Our focus is on delivering the right solution for the application. But, decision makers demand more than just innovative products. They turn to Eaton for an unwavering commitment to personal support that makes customer success a top priority. For more information, **visit www.eaton.com/electrical.**

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