

NZM1-4 molded case circuit-breakers up to 1600 A

NZM1-4 molded case circuit-breakers



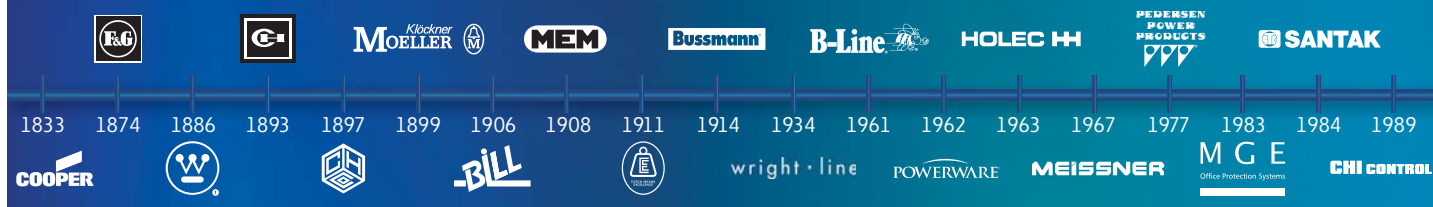
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NZM1-4 molded case circuit-breakers



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NZM1,2,3,4 up to 1600A

Description

Safe and reliable electric energy allocation, continuity and control for industrial, construction and machinery manufacturing. Innovative protection concepts, and communication functions with fault diagnosis

NZM series breakers

- Compact structure, 4 kinds of structures
- 3 pole and 4 pole
- Rated current up to 1600A
- Variety of installation
- Without derating at 50°C
- Comply for IEC, U/CSA, CCC

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Auxiliary contacts, trip indication auxiliary contacts

- The same type of auxiliary contacts installed in different locations, with different functions
- Reducing the model type, reducing inventory request
- Direct card installed, saving installation costs

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Rotary handles with door interlock

- Different models have a uniform hole size
- Automatic adjustment, position the center
- Side of the control functions, saving installation space of the main switch

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Remote operation

- Closing a short delay, 60~100 ms
- Lock, seal, ensuring safe operation

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Diagnostic Software NZM-XPC-SOFT

- Troubleshooting
- Data logging and debugging features
- In the operation can be load analysis

Website:

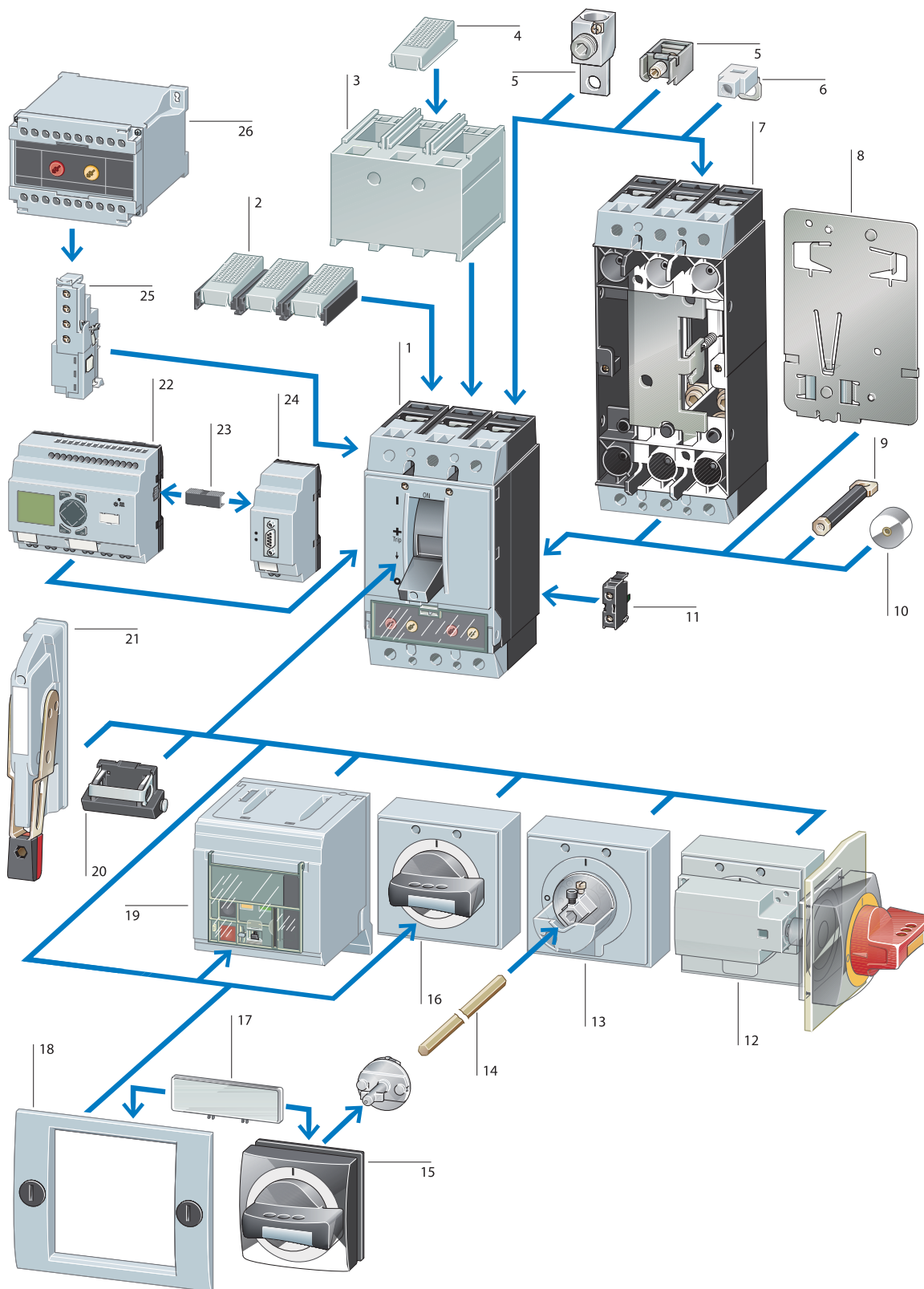
<http://www.moeller.net/en/support/serviceresult.jsp>



1.1 NZM1-4 molded case circuit-breakers

System overview

Circuit-breakers, switch-disconnectors



Circuit-breakers, switch-disconnectors

Circuit-breakers	1
Rated uninterrupted current up to 1600A	
Switching capacity 25, 50, 100, 150 kA at 415 V	
Adjustable releases for overload and short-circuit	
Adjustable time selectivity	
Ground-fault protection	
Protection of systems,cables, motors,generators	
3pole and 4pole, IEC/EN 60947	
Switch-disconnectors	1
Rated uninterrupted current up to 1600A	
Can be tripped remotely with undervoltage or shunt release	
3pole and 4pole IEC/EN 60947	

Add-on functions

Standard auxiliary contacts	11
Switch with the main contacts	
Performs signalling and interlock functions	
Trip-indicating auxiliary contacts(HIA)	11
General trip indication'+', when tripped by voltage release, overload release or short-circuit release	
Early-make auxiliary contacts	25
For interlock and load-shedding circuits	
Voltage release	25
Voltage release	
• Non-delay	
• delay	
shunt release	
Insulated enclosures	10
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Door coupling rotary handles	13, 15
• Lockable	
• With door interlock	
Main switch rotary handles for side wall installation	12
Extension shaft	14
Can be cut to required length	
Rotary handles	16
Lockable	
Remote operators	19
Three-wire control with automatic reset to the 0 position after the switch has tripped	
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Data management interface (DMI module)	22
Access to diagnostics and operational data	
Acquisition of current values Motor starter function	
Parameterization and control of circuit-breakers with electronic releases	
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Mounting accessories

Control cable terminals	6
For two terminal locations at top or bottom	
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Standard with control circuit terminal	
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Standard equipment on construction size1	
Flush mounting within the switch housing	
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NZM1-XC75 for 75 mm top-hat rail	
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IP2X protection against contact with finger	4
For cover	

1.2 NZM1-4 molded case circuit-breakers

Product overview

Circuit-breakers

With main switch characteristics to IEC/EN 60204 and Isolator characteristics to IEC/EN 60947, VDE 0660



Rated uninterrupted current I_u =
Rated current I_n
Adjustable overload releases I_r
Adjustable short-circuit releases I_i
Delayed short-circuit releases I_{sd}

Thermomagnetic releases System cable protection

Motor protection

	I_u A	I_u A	I_r A	I_i A	I_u A	I_u A	I_r A	I_i A
Ambient temperature at 100% I_u min./max. -25/+50 °C	20	20	0.8 - 1 × I_n	350	20	20	0.8 - 1 × I_n	350
	25	25	0.8 - 1 × I_n	350	25	25	0.8 - 1 × I_n	350
	32	32	0.8 - 1 × I_n	350	32	32	0.8 - 1 × I_n	10 - 14 × I_n
	40	40	0.8 - 1 × I_n	8 - 10 × I_n	40	40	0.8 - 1 × I_n	8 - 14 × I_n
	50	50	0.8 - 1 × I_n	6 - 10 × I_n	50	50	0.8 - 1 × I_n	8 - 14 × I_n
	63	63	0.8 - 1 × I_n	6 - 10 × I_n	63	63	0.8 - 1 × I_n	8 - 14 × I_n
	80	80	0.8 - 1 × I_n	6 - 10 × I_n	80	80	0.8 - 1 × I_n	8 - 14 × I_n
	100	100	0.8 - 1 × I_n	6 - 10 × I_n	100	100	0.8 - 1 × I_n	NZM1: 8-12.5 × I_n NZM2: 8-14 × I_n
		125	0.8 - 1 × I_n	6 - 10 × I_n		125	0.8 - 1 × I_n	8 - 14 × I_n
		160	0.8 - 1 × I_n	NZM1: 8 × I_n 6 - 10 × I_n		160	0.8 - 1 × I_n	8 - 14 × I_n
		200	0.8 - 1 × I_n			200	0.8 - 1 × I_n	8 - 14 × I_n
		250	0.8 - 1 × I_n			200	0.8 - 1 × I_n	8 - 14 × I_n

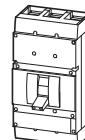
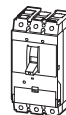
Switching capacity B		NZMB1-A...		NZMB2-A...		NZMB1-M...		NZMB2-M...	
400/415V	kA/cosφ	25	0.25	25	0.25	25	0.25	25	0.25
440V	kA/cosφ	25	0.25	25	0.25	25	0.25	25	0.25
525V	kA/cosφ	15	0.30	15	0.30	15	0.30	15	0.30
Switching capacity C		NZMC1-A...		NZMC2-A...		NZMC1-M...		NZMC2-M...	
400/415V	kA/cosφ	36	0.25	36	0.25	36	0.25	36	0.25
440V	kA/cosφ	30	0.25	30	0.25	30	0.25	30	0.25
525V	kA/cosφ	12	0.5	12	0.5	12	0.5	12	0.5
690V	kA/cosφ	8	0.5	8	0.5	8	0.5	8	0.5
Switching capacity N		NZMN1-A...		NZMN2-A...		NZMN1-M...		NZMN2-M...	
400/415V	kA/cosφ	50	0.25	50	0.25	50	0.25	50	0.25
440V	kA/cosφ	35	0.25	35	0.25	35	0.25	35	0.25
525V	kA/cosφ	20	0.30	25	0.25	20	0.30	25	0.25
690V	kA/cosφ	10	0.50	20	0.30	10	0.50	20	0.30
Switching capacity S		NZMS1-A...		NZMS2-A...		NZMS2-M...			
400/415V	kA/cosφ	70	0.25	70	0.25	70			
440V	kA/cosφ	35	0.25	65	0.25	65			
525V	kA/cosφ	20	0.30	36	0.25	36			
690V	kA/cosφ	10	0.50	20	0.30	20			
Switching capacity H		NZMH1-A...		NZMH2-A...		NZMH2-M...			
400/415V	kA/cosφ	100	0.20	150	0.20	150			
440V	kA/cosφ	35	0.25	130	0.20	130			
525V	kA/cosφ	20	0.30	50	0.25	50			
690V	kA/cosφ	10	0.50	20	0.30	20			

Notes The stated switching capacity values are rated ultimate short-circuit breaking capacities (I_{cu})

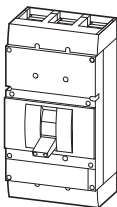
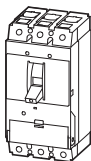
Switch-disconnectors

With main switch characteristics to IEC/EN 60204 and VDE 0113
Isolating characteristics to IEC/EN 60947, VDE 0660

Without overload and short-circuit release



		63-160		160-250		400-630		800-1600
Type N can be triggered with U/A shunt release		PN1-...	N1-...	PN2-...	N2-...	PN3-...	N3-...	N4-...
Rated short-circuit making capacity I_{cm}	kA	2,8	2,8	5,5	5,5	25	25	53
Rated short-time withstand current I_{cw} (1s-1s-current _{rms})	kA	2	2	3.5	3.5	12	12	25



Electronic releases
Systems, cable, selectivity and generator protection

Motor protection

I_u A	I_u A	I_u A	I_r A	I_{sd} A	I_i A	I_u A	I_r A	I_i A
100	250	630	$0.5 - 1 \times I_n$	$2 - 10 \times I_r$	$2 - 12 \times I_n$	90	$0.5 - 1 \times I_n$	$2 - 14 \times I_r$
160	400	800	$0.5 - 1 \times I_n$	$2 - 10 \times I_r$	$2 - 12 \times I_n$	140	$0.5 - 1 \times I_n$	$2 - 14 \times I_r$
250	630	1000	$0.5 - 1 \times I_n$	$2 - 10 \times I_r$	$2 - 12 \times I_n$	220	$0.5 - 1 \times I_n$	$2 - 14 \times I_r$
		1250	$0.5 - 1 \times I_n$	$2 - 10 \times I_r$	$2 - 12 \times I_n$	350	$0.5 - 1 \times I_n$	$2 - 14 \times I_r$
		1600	$0.5 - 1 \times I_n$	$2 - 10 \times I_r$	$2 - 12 \times I_n$	450	$0.5 - 1 \times I_n$	$2 - 14 \times I_r$
						550	$0.5 - 1 \times I_n$	$2 - 14 \times I_r$
						875	$0.5 - 1 \times I_n$	$2 - 14 \times I_r$
						1400	$0.5 - 1 \times I_n$	$2 - 14 \times I_r$

NZMN2-E...		NZMN3-E...		NZMN4-E...		NZMN2-ME...		NZMN3-ME...		NZMN4-ME...	
50	0.25	50	0.25	50	0.25	50	0.25	50	0.25	50	0.25
35	0.25	35	0.25	35	0.25	35	0.25	35	0.25	35	0.25
25	0.25	25	0.25	25	0.25	25	0.25	25	0.25	25	0.25
20	0.30	20	0.30	20	0.30	20	0.30	20	0.30	20	0.30
NZMS2-E...		NZMS3-E...				NZMS2-ME...		NZMS3-ME...			
70	0.20	70	0.20			70	0.20	70	0.20		
65	0.20	65	0.20			65	0.20	65	0.20		
36	0.25	36	0.25			36	0.25	36	0.25		
20	0.30	20	0.30			20	0.30	20	0.30		
NZMH2-E...		NZMH3-E...		NZMH4-E...		NZMH2-ME...		NZMH3-ME...		NZMH4-ME...	
150	0.20	150	0.20	150	0.20	150	0.20	150	0.20	85	0.20
130	0.20	130	0.20	130	0.20	130	0.20	130	0.20	85	0.20
50	0.25	50	0.25	50	0.25	50	0.25	65	0.20	65	0.20
20	0.30	25	0.30	35	0.25	20	0.30	25	0.30	50	0.25

A selection of approved circuit-breakers and switch-disconnectors for world-wide use

1.3

NZM1-4 molded case circuit-breakers

Circuit-breakers

Thermomagnetic releases, 3 pole

System and cable protection

Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range Overload releases	Short-circuit releases, Non-delayed	Switching capacity B 25 kA 415 V 50/60 Hz	Switching capacity C 36 kA 415 V 50/60 Hz
	I_r A 	I_i A 	Part no. Article no.	Part no. Article no.
20	15-20	350	NZMB1-A20 146548	NZMC1-A20 146578
25	20-25	350	NZMB1-A25 146549	NZMC1-A25 146579
32	25-32	350	NZMB1-A32 146560	NZMC1-A32 146580
40	32-40	320-400	NZMB1-A40 146542	NZMC1-A40 146573
50	40-50	300-500	NZMB1-A50 146543	NZMC1-A50 146574
63	50-63	380-630	NZMB1-A63 146544	NZMC1-A63 146575
80	63-80	480-800	NZMB1-A80 146564	NZMC1-A80 146584
100	80-100	600-1000	NZMB1-A100 146567	NZMC1-A100 146587
125	100-125	750-1250	NZMB1-A125 146570	NZMC1-A125 146590
160	125-160	1280	NZMB1-A160 146571	NZMC1-A160 146591
20	15-20	350		
25	20-25	350		
32	25-32	350		
40	32-40	320-400		
50	40-50	300-500		
63	50-63	380-630		
80	63-80	480-800		
100	80-100	600-1000		
125	100-25	750-1250	NZMB2-A125 146648	NZMC2-A125 146659
160	125-60	960-1600	NZMB2-A160 146651	NZMC2-A160 146662
200	160-200	1200-2000	NZMB2-A200 146653	NZMC2-A200 146664
250	200-250	1500-2500	NZMB2-A250 146656	NZMC2-A250 146667
320	250-300	1920-3200		NZMC3-A320 146770
400	320-400	2400-4000		NZMC3-A400 146771
500	400-500	3000-5000		NZMC3-A500 146775

Switching capacity N 50 kA 415 V 50/60 Hz	Switching capacity S 70 kA 415 V 50/60 Hz	Switching capacity H 100 kA 415 V 50/60 Hz	Switching capacity H 150 kA 415 V 50/60 Hz	Std. pack	Note
Part no. Article no.	Part no. Article no.	Part no. Article no.	Part no. Article no.		
NZMN1-A20 146598	NZMS1-A20 146615	NZMH1-A20 146630		1 off	IEC/EN 60947-2,  Comply with ROHS
NZMN1-A25 146599	NZMS1-A25 146616	NZMH1-A25 146631		1 off	Adjustable overload releases I_i • $0.8 - 1 \times I_n$ (Factory setting $0.8 \times I_n$)
NZMN1-A32 146600	NZMS1-A32 146617	NZMH1-A32 146632		1 off	Adjustable short-circuit releases I_i • $6 - 10 \times I_n$ (Factory setting $6 \times I_n$) • NZM...-A40: $8-10 \times I_n$ (Factory setting $8 \times I_n$)
NZMN1-A40 146592	NZMS1-A40 146618	NZMH1-A40 146633		1 off	
NZMN1-A50 146593	NZMS1-A50 146619	NZMH1-A50 146634		1 off	
NZMN1-A63 146594	NZMS1-A63 146620	NZMH1-A63 146635		1 off	Delayed short-circuit releases I_i • 350 A at $I_n = 20-32$ A • 1280 A at $I_n = 160$ A (NZM1)
NZMN1-A80 146604	NZMS1-A80 146622	NZMH1-A80 146640		1 off	Fitted with following terminals:
NZMN1-A100 146607	NZMS1-A100 146624	NZMH1-A100 146643		1 off	• Box terminals 3 pole: NZM1-XKC; NZM2-160-XKC; NZM2-250-XKC
NZMN1-A125 146610	NZMS1-A125 146625	NZMH1-A125 146645		1 off	4 pole: NZM1-4-XKC; NZM2-4-160-XKC; NZM2-4-250-XKC
NZMN1-A160 146611	NZMS1-A160 146626	NZMH1-A160 146646		1 off	• Rear terminal bolts 3 pole: NZM1-XKR; NZM2-XKR 4 pole: NZM1-4-XKR; NZM2-4-XKR
			NZMH2-A20 146722	1 off	
			NZMH2-A25 146723	1 off	
			NZMH2-A32 146724	1 off	Please inquire for other available terminals
	NZMS2-A40 146686		NZMH2-A40 146719	1 off	
	NZMS2-A50 146687		NZMH2-A50 146720	1 off	
	NZMS2-A63 146688		NZMH2-A63 146721	1 off	
	NZMS2-A80 146695		NZMH2-A80 146732	1 off	
	NZMS2-A100 146697		NZMH2-A100 146735	1 off	
NZMN2-A125 146659	NZMS2-A125 146700		NZMH2-A125 146746	1 off	
NZMN2-A160 146662	NZMS2-A160 146705		NZMH2-A160 146751	1 off	
NZMN2-A200 146664	NZMS2-A200 146708		NZMH2-A200 146756	1 off	
NZMN2-A250 146667	NZMS2-A250 146712		NZMH2-A250 146760	1 off	
NZMN3-A320 146770			NZMH3-A320 146822	1 off	
NZMN3-A400 146771			NZMH3-A400 146823	1 off	
NZMN3-A500 146775			NZMH3-A500 146832	1 off	

1.3

NZM1-4 molded case circuit-breakers

Circuit-breakers

Thermomagnetic releases, 3 pole

Motor protection

Rated current = Rated uninterrupted current	Setting range		Maximum motor rating AC-3 400 V 50/60 Hz P kW	Rated operational current AC-3 400 V 50/60 Hz I_e kW	Switching capacity B	Switching capacity C
	Overload releases	Short-circuit releases, Non-delayed			25 kA 415 V 50/60 Hz	36 kA 415 V 50/60 Hz
$I_n = I_u$ A	I_r A	I_i A			Part no. Article no.	Part no. Article no.
Box terminals as accessories						
Screw terminals as accessories						

Notes

Fitted with following terminals:

- Box terminals as accessories
3 pole: NZM1-XKC;
NZM2-160-XKC;
NZM2-250-XKC
4 pole: NZM1-4-XKC;
NZM2-4-160-XKC;
NZM2-4-250-XKC
- Rear terminal bolts
3 pole: NZM1-XKR; NZM2-XKR
4 pole: NZM1-4-XKR; NZM2-4-XKR

Please inquire for other available terminals

Switching capacity N

50 kA

415 V 50/60 Hz

Switching capacity S

70 kA

415 V 50/60 Hz

Switching capacity H

150 kA

415 V 50/60 Hz

Part no. Article no.	Part no. Article no.	Part no. Article no.	Std. pack	Note	
NZMN1-M40 146601		NZMH1-M40 146636	1 off	IEC/EN 60947-4-1 and IEC/EN60947-2,  Comply with ROHS	
NZMN1-M50 146602		NZMH1-M50 146637	1 off	The circuit-breakers fulfill all requirements for utilization category AC-3.	
NZMN1-M63 146603		NZMH1-M63 146638	1 off		
NZMN1-M80 146606		NZMH1-M80 146641	1 off	Adjustable overload releases I_t • 0.8 - 1 × I_n (Setting factory 0.8 × I_n) • NZM...1-M... With phase failure protection • Trip class 10A	
NZMN1-M100 146609		NZMH1-M100 146644	1 off	Adjustable short-circuit releases I_s • 8-14 × I_n (Setting factory 12 × I_n) • NZM...-M32: 10 - 14 × I_n (Setting factory 12 × I_n) • NZM...1-M100: 8 - 12.5 × I_n (Setting factory 12 × I_n)	
	NZMS2-M20 146689	NZMH2-M20 146726	1 off		
	NZMS2-M25 146690	NZMH2-M25 146727	1 off	Fixed instantaneous value I_i • 350 A, When I_n = 20-25A	
	NZMS2-M32 146691	NZMH2-M32 146728	1 off		
	NZM S2-M40 146692	NZMH2-M40 146729	1 off	Tripping class	Tripping time T_p with load on all poles of 7.2 times set current value.
	NZMS2-M50 146693	NZMH2-M50 146730	1 off		
	NZMS2-M63 146694	NZMH2-M63 146731	1 off		
	NZMS2-M80 146696	NZMH2-M80 146733	1 off		
	NZMS2-M100 146698	NZMH2-M100 146736	1 off		
NZMN2-M125 146670	NZMS2-M125 146701	NZMH2-M125 146747	1 off		
NZMN2-M160 146676	NZMS2-M160 146706	NZMH2-M160 146752	1 off		
NZMN2-M200 146680	NZMS2-M200 146711	NZMH2-M200 146759	1 off		

1.3

NZM1-4 molded case circuit-breakers

Circuit-breakers

Thermomagnetic releases, 3 pole

- Short-circuit protection**
Motor protection in conjunction with overload relay
- With short-circuit releases
 - Without overload releases I_t

Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range	Maximum motor rating AC-3 400 V 50/60 Hz P kW	Rated operational current AC-3 400 V 50/60 Hz I_e kW	Switching capacity B 25 kA 415 V 50/60 Hz Part no. Article no.	Switching capacity C 36 kA 415 V 50/60 Hz Part no. Article no.	Switching capacity N 50 kA 415 V 50/60 Hz Part no. Article no.	
	Short-circuit releases, Non-delayed I_t A 						
Box terminals as accessories 	40	320-560	18.5	36	NZMB1-S40 146545	NZMC1-S40 146576	NZMN1-S40 146595
	50	400-700	22	41	NZMB1-S50 146546	NZMC1-S50 146577	NZMN1-S50 146596
	63	504-882	30	55	NZMB1-S63 146547	NZMC1-S63 146572	NZMN1-S63 146597
	80	640-1120	37	68	NZMB1-S80 146565	NZMC1-S80 146585	NZMN1-S80 146605
	100	800-1250	55	99	NZMB1-S100 146568	NZMC1-S100 146588	NZMN1-S100 146608
Screw terminals as accessories 	40	320-560	18.5	36			
	50	400-700	22	41			
	63	504-882	30	55			
	80	640-1120	37	68			
	100	800-1400	55	99			
	125	1000-1750	55	99	NZMB2-S125 146647	NZMC2-S125 146658	NZMN2-S125 146669
	160	1280-2240	75	134	NZMB2-S160 146650	NZMC2-S160 146661	NZMN2-S160 146672
	200	1600-2500	110	196	NZMB2-S200 146654	NZMC2-S200 146665	NZMN2-S200 146678
	250	2000-3500	132	231		NZMC3-S250 146772	NZMN3-S250 146779
	320	2560-4480	160	279		NZMC3-S320 146773	NZMN3-S320 146780
	400	2800-5000	200	349		NZMC3-S400 146774	NZMN3-S400 146781
	500	3000-5000	250	437		NZMC3-S500 146776	NZMN3-S500 146789

Notes Please refer to page 8 or page 93 for the terminals

**Switching
capacity S
70 kA**
415 V 50/60 Hz

**Switching
capacity H
100 kA**
415 V 50/60 Hz

**Switching
capacity H
150 kA**
415 V 50/60 Hz

Part no. Article no.	Part no. Article no.	Part no. Article no.	Std. pack	Note																															
NZMS1-S40 146614	NZMH1-S40 146627		1 off	IEC/EN 60947-4-1 and IEC/EN60947-2,  Comply with ROHS Adjustable short-circuit releases I_i • 8-14 × I_n (Setting factory 12 × I_n) • NZM...1-S100, NZM...2-S200: 8 - 12.5 × I_n (Setting factory 12 × I_n) No overload releases I_f																															
NZMS1-S50 146612	NZMH1-S50 146628		1 off																																
NZMS1-S63 146613	NZMH1-S63 146629		1 off																																
NZMS1-S80 146621	NZMH1-S80 146639		1 off																																
NZMS1-S100 146623	NZMH1-S100 146642		1 off																																
		NZMH2-S40 146716	1 off	Product selection Selection of circuit-breakers without overload release when combining for instance with ZEV electronic motor-protective relays: <table><tr><th></th><th>I_n (A)</th><th>Maximum permissible tripping class</th></tr><tr><td rowspan="5">NZM...1-S...</td><td>40</td><td>30</td></tr><tr><td>50</td><td>30</td></tr><tr><td>63</td><td>30</td></tr><tr><td>80</td><td>20</td></tr><tr><td>100</td><td>15</td></tr><tr><td rowspan="8">NZM...2-S...</td><td>40</td><td>30</td></tr><tr><td>50</td><td>30</td></tr><tr><td>63</td><td>30</td></tr><tr><td>80</td><td>30</td></tr><tr><td>100</td><td>30</td></tr><tr><td>125</td><td>30</td></tr><tr><td>160</td><td>20</td></tr><tr><td>200</td><td>10</td></tr></table>		I_n (A)	Maximum permissible tripping class	NZM...1-S...	40	30	50	30	63	30	80	20	100	15	NZM...2-S...	40	30	50	30	63	30	80	30	100	30	125	30	160	20	200	10
	I_n (A)	Maximum permissible tripping class																																	
NZM...1-S...	40	30																																	
	50	30																																	
	63	30																																	
	80	20																																	
	100	15																																	
NZM...2-S...	40	30																																	
	50	30																																	
	63	30																																	
	80	30																																	
	100	30																																	
	125	30																																	
	160	20																																	
	200	10																																	
		NZMH2-S50 146717	1 off																																
		NZMH2-S63 146718	1 off																																
		NZMH2-S80 146725	1 off																																
		NZMH2-S100 146734	1 off																																
NZMS2-S125 146699		NZMH2-S125 146745	1 off																																
NZMS2-S160 146702		NZMH2-S160 146748	1 off																																
NZMS2-S200 146707		NZMH2-S200 146753	1 off																																
		NZMH3-S250 146824	1 off																																
		NZMH3-S320 146825	1 off																																
		NZMH3-S400 146826	1 off																																
		NZMH3-S500 146833	1 off																																

1.3

NZM1-4 molded case circuit-breakers

Circuit-breakers

Electronic releases, 3 pole

Rated current =
Rated
uninterrupted
current

Setting range

Overload releases

Short-circuit releases
Non-delayed

Non-delayed

Switching capacity N
50 kA
415 V 50/60 Hz

$I_n = I_u$
A

I_r
A

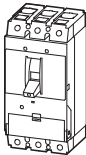
I_i
A

I_{sd}
A

Part no.
Article no.

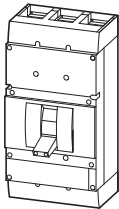
System and cable protection

Screw terminals
as accessories



630	315-630	1260-5040	-	NZMN3-AE630 146799
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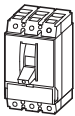
Screw terminals
as accessories



630	315-630	1260-7560	-	NZMN4-AE630 146852
800	400-800	1600-9600	-	NZMN4-AE800 146855
1000	500-1000	2000-12000	-	NZMN4-AE1000 146857
1250	630-1250	2500-15000	-	NZMN4-AE1250 146860
1600	800-1600	3200-19200	-	NZMN4-AE1600 146862

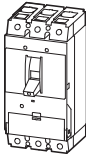
System and cable protection, selectivity protection, motor protection

Screw terminals
as accessories



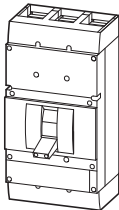
100	50-100	1200	100-1000	NZMN2-VE100 146673
160	80-160	1920	160-1600	NZMN2-VE160 146679
250	125-250	3000	250-2500	NZMN2-VE250 146685

Screw terminals
as accessories



250	125-250	500-2750	250-2500	NZMN3-VE250 146786
400	200-400	800-4400	400-4000	NZMN3-VE400 146787
630	315-630	1260-5040	472-4410	NZMN3-VE630 146803

Screw terminals
as accessories



630	315-630	1260-7560	630-6300	NZMN4-VE630 146854
800	400-800	1600-9600	800-8000	NZMN4-VE800 146856
1000	500-1000	2000-12000	1000-10000	NZMN4-VE1000 146858
1250	630-1250	2500-15000	1250-12500	NZMN4-VE1250 146861
1600	800-1600	3200-19200	1600-16000	NZMN4-VE1600 146864

Notes

Please refer to page101 for terminals.
Please refer to page 119 for ground-fault protection.

Switching capacity S

70 kA

415 V 50/60 Hz

Switching capacity H

150 kA

415 V 50/60 Hz

Part no.

Article no.

Part no.

Article no.

Note

NZMS3-AE630
146818

NZMH3-AE630
146840

IEC/EN 60947-2, 
Comply with ROHS

Adjustable overload releases I_r
• I_n settings: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.925, 0.95, 0.975, 1 (Factory setting 0.8)

R.m.s. value measurement and "thermal memory"

NZMH4-AE630
146866

Adjustable short-circuit releases I_k
• NZM...3-AE250/400:
 I_n settings: 2, 3, 4, 5, 6, 7, 8, 9, 11 (Factory setting 6)
• NZM...3-AE630:
 I_n settings: 2, 3, 4, 5, 6, 7, 8 (Factory setting 6)
• NZM...4-AE...:
 I_n settings: 2, 3, 4, 5, 6, 7, 8, 9, 11, 12 (Factory setting 6)

NZMH4-AE800
146870

NZMH4-AE1000
146876

NZMH4-AE1250
146879

NZMH4-AE1600
146886

NZMS2-VE100
146703

NZMH2-VE100
146749

IEC/EN 60947-2, 
Comply with ROHS

NZMS2-VE160
146709

NZMH2-VE160
146758

Adjustable overload releases I_r
• I_n settings: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.925, 0.95, 0.975, 1 (Factory setting 0.8)

NZMS2-VE250
146715

NZMH2-VE250
146766

R.m.s. value measurement and "thermal memory"

NZMH3-VE250
146834

Adjustable delay setting t_r , to escape from the in-rush current
• 2 – 20 s at $6 \times I_r$ and infinite (without overload release)

NZMS3-VE400
146814

NZMH3-VE400
146835

NZMS3-VE630
146819

NZMH3-VE630
146846

Delayed short-circuit releases I_{sd}
• 2 – 10 s at $6 \times I_r$ and infinite (without overload release)
• NZM 3-VE630: 1.5 - 7 $\times I_r$ (Factory setting $6 \times I_r$)

NZMH4-VE630
146868

Adjustable delay t_{sd}
• Steps: 0, 20, 60, 100, 200, 300, 500, 750, 1000ms (Factory setting 0 ms)

NZMH4-VE800
146871

NZMH4-VE1000
146877

NZMH4-VE1250
146880

NZMH4-VE1600
146888

Adjustable short-circuit releases I_k
• NZM2: Fixed $12 \times I_n$
• NZM...3-VE250/400:
 I_n settings: 2, 3, 4, 5, 6, 7, 8, 9, 11 (Factory setting 6)
• NZM...3-VE630:
 I_n settings: 2, 3, 4, 5, 6, 7, 8 (Factory setting 6)
• NZM...4-VE...:
 I_n settings: 2, 3, 4, 5, 6, 7, 8, 9, 11, 12 (Factory setting 12)

I^2t constant function
• NZM2 fixed OFF
• NZM3, NZM4 switchable

1.3

NZM1-4 molded case circuit-breakers

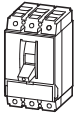
Circuit-breakers

Electronic release, 3 pole

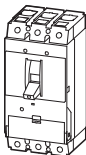
Motor protection

Rated current = Rated uninterrupted current	Setting range		Rated operational power AC-3 at 400 V 50/60 Hz P kW	Rated operational current AC-3 at 400 V 50/60 Hz I_e kW	Switching capacity N 50 kA 415 V 50/60 Hz
$I_n = I_u$ A	Overload releases I_r A	Short-circuit releases I_i A			Part no. Article no.
90	45-90	90-1260	45	81	NZMN2-ME90 146675
140	70-140	140-1960	75	134	NZMN2-ME140 146681
220	110-220	220-3080	110	196	NZMN2-ME220 146683
220	110-220	220-3080	110	196	NZMN3-ME220 146784
350	175-350	350-4900	200	349	NZMN3-ME350 146785
450	225-450	450-6300	250	437	NZMN3-ME450 146796
550	275-550	550-7700	315 ¹⁾	544 ¹⁾	NZMN4-ME 550 146853
875	438-875	875-12250	500 ¹⁾	820 ¹⁾	NZMN 4-ME 875 146859
1400	700-1400	1400-19600	630 ¹⁾	1066 ¹⁾	NZMN4-ME1400 146863

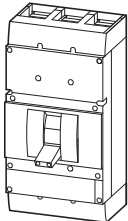
Screw terminals
as accessories



Screw terminals
as accessories



Screw terminals
as accessories



Notes

- Fitted with following terminals:
- Box terminals
3 pole: NZM2-160-XKC, NZM2-250-XKC, NZM3-XKC
4 pole: NZM2-4-160-XKC, NZM2-4-250-XKC, NZM3-4-XKC
 - Rear terminal bolts
3 pole: NZM2-XKR; NZM3-XKR; NZM4-XKR
4 pole: NZM2-4-XKR; NZM3-4-XKR; NZM4-4-XKR
- Please inquire for other available terminals.
- ¹⁾ at 690 V AC NZM...4-ME550: $P = 560$ kW; $I_e = 550$ A
NZM...4-ME875: $P = 600$ kW; $I_e = 588$ A
NZM...4-ME1400: $P = 600$ kW; $I_e = 588$ A

Switching capacity S

70 kA

415 V 50/60 Hz

Switching capacity H

100 kA

415 V 50/60 Hz

Part no. Article no.	Part no. Article no.	Std. pack	Note
NZMS2-ME90 146704	NZMH2-ME90 146750	1 off	Comply with IEC/EN 60947-1 and IEC/EN 60947-2,  Comply with ROHS
NZMS2-ME140 146710	NZMH2-ME140 146754	1 off	Adjustable overload releases I_r • I_r setting: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.925, 0.95, 0.975, 1 (Factory setting 0.8)
NZMS2-ME220 146713	NZMH2-ME220 146762	1 off	R.m.s. value measurement and "thermal memory"
NZMS3-ME220 146812	NZMH3-ME220 146829	1 off	Adjustable delay setting t_r , to escape from the in-rush current • 2 – 20 s at $6 \times I_r$ and infinite (without overload release) Factory setting 10s at $6 \times I_r$
NZMS3-ME350 146813	NZM H3-ME350 146830	1 off	Phase-fault of protection
NZMS3-ME450 146815	NZM H3-ME450 146831	1 off	Adjustable short-circuit releases I_i • I_i setting: 2, 3, 4, 5, 6, 8, 10, 12, 14 (Factory setting 12)
	NZM H4-ME550 146867	1 off	
	NZMH4-ME875 146878	1 off	
	NZM H4-ME1400 146887	1 off	

1.3 NZM1-4 molded case circuit-breakers

Circuit-breakers

Box terminals as accessories



Thermomagnetic releases, 4 pole

System and cable protection

Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range		Short-circuit releases I_i A	Switching capacity B	Switching capacity C
	Overload releases Phase conductors I_r A	Neutral conductor I_r A		25 kA 415 V 50/60 Hz	36 kA 415 V 50/60 Hz
				Part no. Article no.	Part no. Article no.
20	15-20	15-20	350	NZMB 1-4-A20 146896	NZMC1-4-A20 146906
25	20-25	20-25	350	NZMB 1-4-A25 146897	NZMC1-4-A25 146907
32	25-32	25-32	350	NZMB1-4-A32 146898	NZMC1-4-A32 146908
40	32-40	32-40	320-400	NZMB1-4-A40 146893	NZMC1-4-A40 146903
50	40-50	40-50	300-500	NZMB1-4-A50 146894	NZMC1-4-A50 146904
63	50-63	50-63	380-630	NZMB1-4-A63 146895	NZMC1-4-A63 146905
80	63-80	63-80	480-800	NZMB1-4-A80 146899	NZMC1-4-A80 146909
100	80-100	80-100	600-1000	NZMB1-4-A100 146900	NZMC1-4-A100 146910
125	100-125	100-125	750-1250	NZMB1-4-A125 146901	NZMC1-4-A125 146911
160	125-160	125-160	1280	NZMB1-4-A160 146902	NZMC1-4-A160 146912

Switching capacity N

50 kA

415 V 50/60 Hz

Switching capacity S

70 kA

415 V 50/60 Hz

Switching capacity H

100 kA

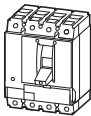
415 V 50/60 Hz

Part no. Article no.	Part no. Article no.	Part no. Article no.	Std. pack	Note
NZMN1-4-A20 146916	NZMS1-4-A20 146923	NZMH1-4-A20 146933	1 off	IEC/EN 60947-2,  Comply with ROHS
NZMN1-4-A25 146917	NZMS1-4-A25 146924	NZMH1-4-A25 146934	1 off	Adjustable overload releases I_r • $0.8 - 1 \times I_n$ (Factory setting $0.8 \times I_n$)
NZMN1-4-A32 146918	NZMS1-4-A32 146925	NZMH1-4-A32 146935	1 off	Set value for neutral conductor is same as set value I_r for main pole.
NZMN1-4-A40 146913	NZMS1-4-A40 146926	NZMH1-4-A40 146936	1 off	Adjustable short-circuit releases I_s • $6 - 10 \times I_n$ (Factory setting $6 \times I_n$) • NZM...1-4-A40: $8 - 10 \times I_n$ (Factory setting $8 \times I_n$)
NZMN1-4-A50 146914	NZMS1-4-A50 146927	NZMH1-4-A50 146937	1 off	Short-circuit releases I_s : • 350 A, when $I_n = 20-32A$ • 1280 A, When $I_n = 160A$ ($8 \times I_n$)
NZMN1-4-A63 146915	NZMS1-4-A63 146928	NZMH1-4-A63 146938	1 off	NZM...1-4-A... • 100% short-circuit and over load protection for 4th pole
NZMN1-4-A80 146919	NZMS1-4-A80 146929	NZMH1-4-A80 146939	1 off	Fitted with following terminals: • Box terminals as accessories, copper 3 Pole: NZM1-XKC; 4 Pole: NZM1-4-XKC • Rear terminal bolts 3 Pole: NZM1-XKR; 4 Pole: NZM1-4-XKR
NZMN1-4-A100 146920	NZMS1-4-A100 146930	NZMH1-4-A100 146940	1 off	
NZMN1-4-A125 146921	NZMS1-4-A125 146931	NZMH1-4-A125 146941	1 off	
NZMN1-4-A160 146922	NZMS1-4-A160 146932	NZMH1-4-A160 146942	1 off	Please inquire for other available terminals.

1.3 NZM1-4 molded case circuit-breakers

Circuit-breakers

Screw terminals
as accessories



Thermomagnetic releases, 4 pole

System and cable protection

Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range		Short-circuit releases I_i A	Switching capacity B 25 kA at 415 V 50/60 Hz Part no. Article no.	Switching capacity C 36 kA at 415 V 50/60 Hz Part no. Article no.
	Overload releases Phase conductors I_r A	Neutral conductor I_r A			
20	15-20	15-20	350		
25	20-25	20-25	350		
32	25-32	25-32	350		
40	32-40	32-40	320-400		
50	40-50	40-50	300-500		
63	50-63	50-63	380-630		
80	63-80	63-80	480-800		
100	80-100	80-100	600-1000		
125	100-25	100-25	750-1250	NZMB2-4-A125 146943	NZMC2-4-A125 146952
160	125-160	125-160	960-1600	NZMB2-4-A160 146944	NZMC2-4-A160 146953
200	160-200	160-200	1200-2000	NZMB2-4-A200 146946	NZMC2-4-A200 146955
250	200-250	200-250	1500-2500	NZMB2-4-A250 146948	NZMC2-4-A250 146957
320	250-320	250-320	1920-3200		NZMC3-4-A320 147011
400	320-400	320-400	2400-4000		NZMC3-4-A400 147013
500	400-500	400-500	3000-5000		NZMC3-4-A500 147015

Switching capacity N
50 kA
at 415 V 50/60 Hz

Switching capacity S
70 kA
at 415 V 50/60 Hz

Switching capacity H
100 kA
at 415 V 50/60 Hz

Part no. Article no.	Part no. Article no.	Part no. Article no.	Std. pack	Note
		NZMH2-4-A20 146992	1 off	IEC/EN 60947-2,  Comply with ROHS
		NZMH2-4-A25 146993	1 off	Adjustable overload releases I_r • $0.8 - 1 \times I_n$ (Factory setting $0.8 \times I_n$)
		NZMH2-4-A32 146994	1 off	Set value for neutral conductor is same as set value I_r for main pole.
		NZMH2-4-A40 146989	1 off	
		NZMH2-4-A50 146990	1 off	Adjustable short-circuit releases I_s • $6 - 10 \times I_n$ (Factory setting $6 \times I_n$)
		NZMH2-4-A63 146991	1 off	Short-circuit releases I_s : • 350 A, when $I_n = 20-32A$
		NZMH2-4-A80 146995	1 off	NZM...2-4-A.....
		NZMH2-4-A100 146996	1 off	100% short-circuit and over load protection for 4th pole
NZMN2-4-A125 146961	NZMS2-4-A125 146975	NZMH2-4-A125 146997	1 off	Fitted with following terminals: • Box terminals as accessories, copper 3 Pole: NZM2-160-XKC, ($\leq 160A$) NZM2-250-XKC (160A-250A)
NZMN2-4-A160 146963	NZMS2-4-A160 146977	NZMH2-4-A160 146999	1 off	4 Pole: NZM2-4-160-XKC, NZM2-4-250-XKC
NZMN2-4-A200 146965	NZMS2-4-A200 146979	NZMH2-4-A200 147001	1 off	• Rear terminal bolts 3 Pole: NZM2-XKR; 4 Pole: NZM2-4-XKR
NZMN2-4-A250 146969	NZMS2-4-A250 146983	NZMH2-4-A250 147005	1 off	
NZMN3-4-A320 147017		NZMH3-4-A320 147051	1 off	
NZMN3-4-A400 147019		NZMH3-4-A400 147053	1 off	
NZMN3-4-A500 147025		NZMH3-4-A500 147057	1 off	

1.3

NZM1-4 molded case circuit-breakers

Circuit-breakers

Electronic releases, 4 pole

System and cable protection

Rated current =
Rated
uninterrupted
current

Setting range

Overload releases

Phase

conductors

I_r

A

Neutral

conductor

I_r

A

Short-circuit

releases

I_i

A

Switching capacity N

50 kA

at 415 V 50/60 Hz

Switching capacity S

70 kA

at 415 V 50/60 Hz

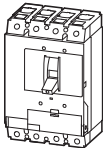
Part no.

Article no.

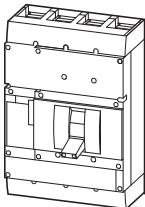
Part no.

Article no.

Screw terminals
as accessories



Screw terminals
as accessories



630	315-630	315-630	1260-5040	NZMN3-4-AE630 147029	NZMS3-4-AE630 147043
800	400-800	400-800	1600-9600	NZMN4-4-AE800 147069	
1000	500-1000	500-1000	2000-12000	NZMN4-4-AE1000 147073	
1250	630-1250	630-1250	2500-15000	NZMN4-4-AE1250 147077	
1600	800-1600	800-1600	3200-19200	NZMN4-4-AE1600 147081	

Notes

Please refer to page 101 for fitted with following terminals.

¹⁾ NZMH4-4-AE...switching capacity :100KA.

²⁾ Please refer to page 119 for ground-fault protection.

Switching capacity H
100 kA¹⁾
at 415 V 50/60 Hz

Part no. Article no.	Note
NZMH3-4-AE630 147063	IEC/EN 60947-2,  Comply with ROHS Adjustable overload releases I_r • I_n setting: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.925, 0.95, 0.975, 1 (Factory setting 0.8) Set value for neutral conductor is same as set value I_r for main pole.
NZMH4-4-AE800 147085	R.m.s. value measurement and "thermal memory"
NZMH4-4-AE1000 147089	Adjustable short-circuit releases I_i • NZM...3-4-AE400; I_n setting: 2, 3, 4, 5, 6, 7, 8, 9, 11 (Factory setting 6)
NZMH4-4-AE1250 147093	• NZM...3-4-AE630; I_n setting: 2, 3, 4, 5, 6, 7, 8 (Factory setting 6)
NZMH4-4-AE1600 147097	• NZM...4-4-AE...; I_n setting: 2, 3, 4, 5, 6, 7, 8, 9, 11, 12 (Factory setting 6) NZM...-4-AE... • 100% short-circuit and over load protection for 4th pole

1.3

NZM1-4 molded case circuit-breakers

Circuit-breakers

Electronic releases, 4 pole

System and cable protection, selectivity protection, motor protector

Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range				Switching capacity B 50 kA at 415 V 50/60 Hz Part no. Article no.
	Overload releases		Short-circuit releases		
	Phase conductors I_r A 	Neutral conductor I_r A 	I_i A 	I_{sd} A 	
100	50-100	50-100	1200	100-1000	NZMN2-4-VE100 146962
160	80-160	80-160	1920	160-1600	NZMN2-4-VE160 146967
250	125-250	125-250	3000	250-2500	NZMN2-4-VE250 146971
400	200-400	200-400	800-4400	400-4000	NZMN3-4-VE400 147023
630	315-630	315-630	1260-5040	472-4410	NZMN3-4-VE630 147031
800	400-800	400-800	1600-9600	800-8000	NZMN4-4-VE800 147071
1000	500-1000	500-1000	2000-12000	1000-10000	NZMN4-4-VE1000 147075
1250	630-1250	630-1250	2500-15000	1250-12500	NZMN4-4-VE1250 147079
1600	800-1600	800-1600	3200-19200	1600-16000	NZMN4-4-VE1600 147083

Switching capacity S

70 kA

at 415 V 50/60 Hz

Switching capacity H

150 kA¹⁾

at 415 V 50/60 Hz

Part no. Article no.	Part no. Article no.	Std. pack	Note
NZMS2-4-VE100 146976	NZMH2-4-VE100 146998	1 off	IEC/EN 60947-2,  Comply with ROHS
NZMS2-4-VE160 146981	NZMH2-4-VE160 147003	1 off	Adjustable overload releases I_r • I_n setting: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.925, 0.95, 0.975, 1 (Factory setting 0.8)
NZMS2-4-VE250 146987	NZMH2-4-VE250 147009	1 off	Set value for neutral conductor is same as set value I_r for main pole.
NZMS3-4-VE400 147037	NZMH3-4-VE400 147059	1 off	R.m.s. value measurement and "thermal memory"
NZMS3-4-VE630 147045	NZMH3-4-VE630 147065	1 off	Adjustable delay setting t_r , to escape from the in-rush current • 2, 4, 6, 8, 10, 14, 17, 20 s, OFF (No overload protection) When $6 \times I_r$ (Factory setting 10s) • NZM...3-4-VE630: 2 - 14s, When $6 \times I_r$, OR OFF (No overload protection)
	NZMH4-4-VE800 147087	1 off	Delayed short-circuit releases I_{sd} • I_r setting: 2, 3, 4, 5, 6, 7, 8, 9, 10 (Factory setting 6) • NZM...3-4-VE630: $1.5-7 \times I_r$ (Factory setting $6 \times I_r$)
	NZMH4-4-VE1000 147091	1 off	Adjustable delay t_{sd} • Steps: 0, 20, 60, 100, 200, 300, 509, 750 1000ms (Factory setting 0ms)
	NZMH4-4-VE1250 147095	1 off	Adjustable short-circuit releases I_i • NZM2 fixed $12 \times I_n$ • NZM...3-4-VE400: I_n setting: 2, 3, 4, 5, 6, 7, 8, 9, 11 (Factory setting 6) • NZM...3-4-VE630: I_n setting: 2, 3, 4, 5, 6, 7, 8 (Factory setting 6) • NZM...4-4-VE...: I_n setting: 2, 3, 4, 5, 6, 7, 8, 9, 11, 12 (Factory setting 12)
	NZMH4-4-VE1600 147099	1 off	NZM...-4-VE... • 100% short-circuit and over load protection for 4th pole I^2t constant function • NZM2 fixed OFF • NZM3, NZM4 switchable (Factory setting OFF)

¹⁾ NZMH4-4-VE...switching capacity:100KA

²⁾ Please refer to page 119 for ground-fault protection
Please refer to page 97 for available terminals

1.4

NZM1-4 molded case circuit-breakers

Switch-disconnectors

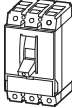
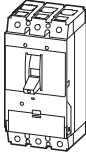
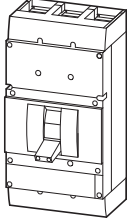
Switch-disconnectors, 3 pole

Rated current =
Rated
uninterrupted
current

Short-circuit
protection, max. fuse
gL-characteristic

2 switch
positions I , 0;
Can not be equipped with
trip-indicating auxiliary
contact M22-K..

3 switch positions I, +, 0
Can be remotely operated with shunt
release XU/XA, remote operator XR,
Can be equipped with trip-indicating
auxiliary contact M22-K..

	$I_n = I_u$ A	A gL	Part no. Article no.	Part no. Article no.	Std. pack
Box terminals as accessories 	63	125	PN1-63 147117	N1-63 147121	1 off
	100	125	PN1-100 147118	N1-100 147122	1 off
	125	125	PN1-125 147119	N1-125 147123	1 off
	160	160	PN1-160 147120	N1-160 147124	1 off
Screw terminals as accessories 	160	250	PN2-160 147133	N2-160 147139	1 off
	200	250	PN2-200 147134	N2-200 147140	1 off
	250	250	PN2-250 147135	N2-250 147141	1 off
Screw terminals as accessories 	400	630	PN3-400 147147	N3-400 147151	1 off
	630	630	PN3-630 147148	N3-630 147152	1 off
Screw terminals as accessories 	800	1600		N4-800 147159	1 off
	1000	1600		N4-1000 147160	1 off
	1250	1600		N4-1250 147161	1 off
	1600	1600		N4-1600 147163	1 off

Notes

With main switch characteristics to IEC/EN 60204 and VDE 0113
Isolating characteristics IEC/EN 60947-3 and VDE 0660
N type dis-connectors can fit with NZM...-XU, NZM...-XA and HIA

Can be remotely operated with NZM...-XR

Please refer to page 92 for more terminals information

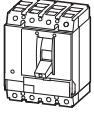
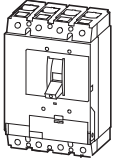
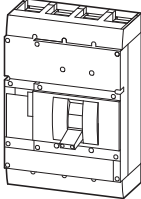
Switch-disconnectors, 4 pole

Rated current =
Rated
uninterrupted
current

Short-circuit
protection, max. fuse
gL-characteristic

2 switch
positions I, 0;
Can not be equipped with
trip-indicating auxiliary
contact M22-K..

3 switch positions I, +, 0
Can be remotely operated with shunt
release XU/XA, remote operator XR,
Can be equipped with trip-indicating
auxiliary contact M22-K..

	$I_n = I_u$ A	A gL	Part no. Article no.	Part no. Article no.	Std. pack
Box terminals as accessories 	63	125	PN 1-4-63 147125	N1-4-63 147126	1 off
	100	125	PN 1-4-100 147127	N1-4-100 147128	1 off
	125	125	PN 1-4-125 147129	N1-4-125 147131	1 off
	160	160	PN 1-4-160 147130	N1-4-160 147132	1 off
Screw terminals as accessories 	160	250	PN2-4-160 147136	N2-4-160 147142	1 off
	200	250	PN2-4-200 147137	N2-4-200 147143	1 off
	250	250	PN2-4-250 147138	N2-4-250 147145	1 off
Screw terminals as accessories 	400	630	PN3-4-400 147149	N3-4-400 147153	1 off
	630	630	PN3-4-630 147150	N3-4-630 147155	1 off
Screw terminals as accessories 	800	1600		N4-4-800 147167	1 off
	1000	1600		N4-4-1000 147168	1 off
	1250	1600		N4-4-1250 147169	1 off
	1600	1600		N4-4-1600 147170	1 off

Notes

With main switch characteristics to IEC/EN 60204 and VDE 0113
Isolating characteristics IEC/EN 60947-3 and VDE 0660
N type dis-connectors can fit with NZM...-XU, NZM...-XA and HIA

Can be remotely operated with NZM...-XR

Please refer to page 92 for more terminals information

1.5

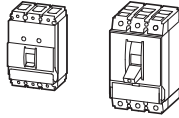
NZM1-4 molded case circuit-breakers

Product overview

Circuit breaker, switch-disconnectors for North America 3 pole

Circuit-breakers

UL/CSA approved to UL 489, CSA-C22.2 No. 5-09
as well as IEC/EN 60947



With main switch characteristics to IEC/EN 60204 and
isolating characteristics to IEC/EN 60947, VDE 0660

Rated uninterrupted current I_u = Rated current I_n
Adjustable overload releases I_r
Adjustable short-circuit releases I_i
Delayed short-circuit releases I_{sd}

Thermomagnetic releases Overload release

Fixed

Adjustable

None

I_u
A

I_u
A

I_r
A

I_u
A

NZM1

NZM2

NZM1

NZM2

$12-1 \times I_n$

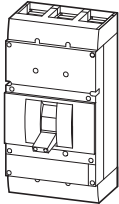
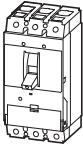
1.2-100

1.6-200

Basic switching capacity ¹⁾			NZMB1-...-NA		NZMB2-...-NA	
NEMA Test Procedure	240 V 60Hz	sym.rms kA	35		35	
	480 V 60Hz	sym.rms kA	25 ²⁾		25	
	600 V 60Hz	sym.rms kA	...		18	
IEC/EN 60947	400/415V	kA/cosφ	25	0.25	25	0.25
	440V	kA/cosφ	25	0.25	25	0.25
	525V	kA/cosφ	15	0.30	15	0.30
Normal switching capacity ¹⁾			NZMN1-...-NA		NZMN2-...-NA	
NEMA Test Procedure	240 V 60Hz	sym.rms kA	85		85	
	480 V 60Hz	sym.rms kA	35 ²⁾		35	
	600 V 60Hz	sym.rms kA	...		25	
IEC/EN 60947	400/415 V	kA/cosφ	50	0.25	50	0.25
	440 V	kA/cosφ	35	0.25	35	0.25
	525 V	kA/cosφ	20	0.30	25	0.25
	690 V	kA/cosφ	10	0.50	20	0.30
High switching capacity ¹⁾			NZMH2-...-NA			
NEMA Test Procedure	240 V 60Hz	sym.rms kA			150	
	480 V 60Hz	sym.rms kA			100	
	600 V 60Hz	sym.rms kA			50	
IEC/EN 60947	400/415 V	kA/cosφ			150	0.20
	440 V	kA/cosφ			130	0.25
	525 V	kA/cosφ			50	0.25
	690 V	kA/cosφ			20	0.30

Notes

- ¹⁾ Switches correspond with both UL/CSA and IEC regulations
IEC switching performance values shown on type label. → Technical data
²⁾ For NZM...1-...-NA 480Y/277V



Electronic releases

Overload release

Fixed			Adjustable			None		Fixed		Adjustable		None		Fixed		Adjustable		Short-circuit releases		Motor protection	
I_u A	I_u A	I_r A	I_u A	I_u A	I_r A	I_u A	I_u A	I_u A	I_u A	I_u A	I_r A	I_u A	I_u A	I_u A	I_r A	I_u A	I_r A	I_{sd} A	I_i A	I_i A	I_i A
150-250	100-250	$0.5-1 \times I_n$	90-220	250-600	250-600	$0.5-1 \times I_n$	220-450	600-1200	800-1200	$0.5-1 \times I_n$	$2-10 \times I_r$	$2-12 \times I_n$	$2-14 \times I_n$								

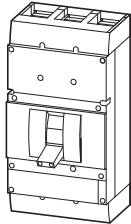
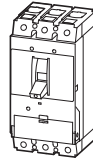
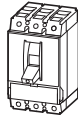
NZMN2-...E...-NA		NZMN3-...E...-NA		NZMN4-...E...-NA	
85		85		85	
35		42		42	
25		35		35	
50	0.25	50	0.25	50	0.25
35	0.25	35	0.25	35	0.25
25	0.25	25	0.25	25	0.25
20	0.30	20	0.30	20	0.30
NZMH2-...E...-NA		NZMH3-...E...-NA		NZMH4-...E...-NA	
150		150		125	
100		100		85	
50		50		50	
150	0.20	150	0.20	100	0.20
130	0.20	130	0.20	85	0.20
50	0.25	65	0.25	65	0.25
20	0.30	35	0.30	50	0.30

Circuit breaker, switch-disconnectors for North America 3 pole

Molded case switch

UL/CSA approved to UL 489, CSA 22.2 No. 5-09
as well as IEC/EN 60947-2 Annex L

With main switch characteristics to IEC/EN 60204, VDE 0113
Isolating characteristics to IEC/EN 60947
Without overcurrent protection
With short-circuit release
Rated uninterrupted current $I_n = I_u$



Switching capacity		NS1-...-NA	NS2-...-NA
According to UL 489, CSA 22.2 SCCR	240 V	85	150
	480 V	35	100
	600 V	-	50
IEC/EN 60947	400/415 V	50	150
	440 V	35	130
	525 V	20	50
	690 V	10	20

1.6

NZM1-4 molded case circuit-breakers

Molded case switches for North America

Thermomagnetic releases, 3 pole

System and cable protection

Rated current = Rated uninterrupted current	Setting range Overload releases	Short-circuit releases	Switching capacity B 35 kA 240 V 60 Hz ¹⁾ 25 kA 480 V 60 Hz ²⁾ 18 kA 600 V 60Hz ²⁾ Part no. Article no.	Switching capacity N 85 kA 240 V 60 Hz ¹⁾ 35 kA 480 V 60 Hz ²⁾ 25 kA 600 V 60 Hz ²⁾ Part no. Article no.
$I_n = I_u$ A	I_r A	I_i A		
Fixed overload releases				
15	15	350	NZMB1-AF15-NA 281553	NZMN1-AF15-NA 281564
20	20	350	NZMB1-AF20-NA 281554	NZMN1-AF20-NA 281565
25	25	350	NZMB1-AF25-NA 281555	NZMN1-AF25-NA 281566
30	30	350	NZMB1-AF30-NA 281556	NZMN1-AF30-NA 281567
35	35	320-400	NZMB1-AF35-NA 272204	NZMN1-AF35-NA 274220
40	40	320-400	NZMB1-AF40-NA 272205	NZMN1-AF40-NA 274223
45	45	300-500	NZMB1-AF45-NA 272206	NZMN1-AF45-NA 274230
50	50	300-500	NZMB1-AF50-NA 272207	NZMN1-AF50-NA 274231
60	60	380-630	NZMB1-AF60-NA 272208	NZMN1-AF60-NA 274232
70	70	480-800	NZMB1-AF70-NA 272209	NZMN1-AF70-NA 274233
80	80	480-800	NZMB1-AF80-NA 272250	NZMN1-AF80-NA 274234
90	90	600-1000	NZMB1-AF90-NA 272251	NZMN1-AF90-NA 274235
100	100	600-1000	NZMB1-AF100-NA 272252	NZMN1-AF100-NA 274236
110	110	750-1250	NZMB1-AF110-NA 281557	NZMN1-AF110-NA 281568
125	125	750-1250	NZMB1-AF125-NA 281558	NZMN1-AF125-NA 281569
15	15	350	NZMB2-AF15-NA 269142	NZMN2-AF15-NA 269170
20	20	350	NZMB2-AF20-NA 269143	NZMN2-AF20-NA 269171
25	25	350	NZMB2-AF25-NA 269144	NZMN2-AF25-NA 269172
30	30	350	NZMB2-AF30-NA 269145	NZMN2-AF30-NA 269173
35	35	320-400	NZMB2-AF35-NA 269146	NZMN2-AF35-NA 269174
40	40	320-400	NZMB2-AF40-NA 269147	NZMN2-AF40-NA 269175
45	45	300-500	NZMB2-AF45-NA 269148	NZMN2-AF45-NA 269176
50	50	300-500	NZMB2-AF50-NA 269149	NZMN2-AF50-NA 269177
60	60	380-630	NZMB2-AF60-NA 269160	NZMN2-AF60-NA 269178
70	70	480-800	NZMB2-AF70-NA 269161	NZMN2-AF70-NA 269179
80	80	480-800	NZMB2-AF80-NA 269162	NZMN2-AF80-NA 269180
90	90	600-1000	NZMB2-AF90-NA 269163	NZMN2-AF90-NA 269181
100	100	600-1000	NZMB2-AF100-NA 269164	NZMN2-AF100-NA 269182
110	110	750-1250	NZMB2-AF110-NA 269165	NZMN2-AF110-NA 269183

Notes Please refer to page 93 for terminals information

Box terminals as accessories



Screw terminals as accessories



Switching capacity H

150 kA 240 V 60 Hz

100 kA 480 V 60 Hz

50 kA 600 V 60 Hz

Part no.

Part no.	Std. pack	Note
	1 off	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
	1 off	Comply with UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
	1 off	Fixed overload releases I_t
	1 off	Adjustable short-circuit releases I_i
	1 off	• $6 - 10 \times I_n$ (Factory setting $6 \times I_n$) • NZM...-AF35/40-NA: $8-10 \times I_n$
	1 off	Fixed short-circuit releases I_k
	1 off	• 350 A, when $I_n = 15-30\text{A}$
	1 off	
	1 off	
	1 off	
	1 off	
	1 off	
	1 off	
	1 off	
	1 off	
	1 off	
	1 off	
NZMH2-AF15-NA 269188	1 off	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMH2-AF20-NA 269189	1 off	Comply with UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
NZMH2-AF25-NA 269190	1 off	Fixed overload releases I_t
NZMH2-AF30-NA 269191	1 off	Adjustable short-circuit releases I_i
NZMH2-AF35-NA 269192	1 off	• $6 - 10 \times I_n$ (Factory setting $6 \times I_n$) • NZM...-AF35/40-NA: $8-10 \times I_n$
NZMH2-AF40-NA 269193	1 off	Fixed short-circuit releases I_k
NZMH2-AF45-NA 269194	1 off	• 350 A, when $I_n = 15-30\text{A}$
NZMH2-AF50-NA 269195	1 off	
NZMH2-AF60-NA 269196	1 off	
NZMH2-AF70-NA 269197	1 off	
NZMH2-AF80-NA 269198	1 off	
NZMH2-AF90-NA 269199	1 off	
NZMH2-AF100-NA 269200	1 off	
NZMH2-AF110-NA 269201	1 off	

1.6

NZM1-4 molded case circuit-breakers

Molded case switches for North America

Thermomagnetic releases, 3 pole

System and cable protection

Rated current = Rated uninterrupted current	Setting range Overload releases	Short-circuit releases	Switching capacity B 35 kA 240 V 60 Hz 25 kA 480 V 60 Hz ¹⁾ 18 kA 600 V 60Hz ²⁾ Part no. Article no.	Switching capacity N 85 kA 240 V 60 Hz 35 kA 480 V 60 Hz ¹⁾ 25 kA 600 V 60 Hz ²⁾ Part no. Article no.
$I_n = I_u$ A	I_r A	I_i A		

Screw terminals as accessories



Fixed overload releases				
125	125	750-1250	NZMB2-AF125-NA 269166	NZMN2-AF125-NA 269184
150	150	960-1600	NZMB2-AF150-NA 269167	NZMN2-AF150-NA 269185
175	175	1200-2000	NZMB2-AF175-NA 269168	NZMN2-AF175-NA 269186
200	200	1200-2000	NZMB2-AF200-NA 269169	NZMN2-AF200-NA 269187
225	225	1500-2500	NZMB2-AF225-NA 271089	NZMN2-AF225-NA 271101
250	250	1500-2500	NZMB2-AF250-NA 271100	NZMN2-AF250-NA 271102

Box terminals as accessories



Adjustable overload releases				
20	15-20	350	NZMB1-A20-NA 281559	NZMN1-A20-NA 281570
25	20-25	350	NZMB1-A25-NA 281560	NZMN1-A25-NA 281571
32	25-32	350	NZMB1-A32-NA 281561	NZMN1-A32-NA 281572
40	32-40	320-400	NZMB1-A40-NA 272253	NZMN1-A40-NA 274237
50	40-50	300-500	NZMB1-A50-NA 272254	NZMN1-A50-NA 274239
63	50-63	380-630	NZMB1-A63-NA 272255	NZMN1-A63-NA 274240
80	63-80	480-800	NZMB1-A80-NA 272256	NZMN1-A80-NA 274241
100	80-100	600-1000	NZMB1-A100-NA 272258	NZMN1-A100-NA 274242
125	100-125	750-1250	NZMB1-A125-NA 281562	NZMN1-A125-NA 281573

Screw terminals as accessories



Adjustable overload releases				
20	15-20	350	NZMB2-A20-NA 269206	NZMN2-A20-NA 269217
25	20-25	350	NZMB2-A25-NA 269207	NZMN2-A25-NA 269218
32	25-32	350	NZMB2-A32-NA 269208	NZMN2-A32-NA 269219
40	32-40	320-400	NZMB2-A40-NA 269209	NZMN2-A40-NA 269220
50	40-50	300-500	NZMB2-A50-NA 269210	NZMN2-A50-NA 269221
63	50-63	380-630	NZMB2-A63-NA 269211	NZMN2-A63-NA 269222
80	63-80	480-800	NZMB2-A80-NA 269212	NZMN2-A80-NA 269223
100	80-100	600-1000	NZMB2-A100-NA 269213	NZMN2-A100-NA 269224
125	100-125	750-1250	NZMB2-A125-NA 269214	NZMN2-A125-NA 269225
160	125-160	960-1600	NZMB2-A160-NA 269215	NZMN2-A160-NA 269226
200	160-200	1200-2000	NZMB2-A200-NA 269216	NZMN2-A200-NA 269227
250	200-250	1500-2500	NZMB2-A250-NA 271105	NZMN2-A250-NA 271106

Notes

Please refer to page 97 for terminals information

Switching capacity H

150 kA 240 V 60 Hz

100 kA 480 V 60 Hz

50 kA 600 V 60 Hz

Part no.

Article no.

Std.

pack

Note

NZMH2-AF125-NA 269202	1 off	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMH2-AF150-NA 269203	1 off	Comply with UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
NZMH2-AF175-NA 269204	1 off	Fixed overload releases I_r Adjustable short-circuit releases I_i
NZMH2-AF200-NA 269205	1 off	• 6 - 10 $\times I_n$ (Factory setting 6 $\times I_n$) • NZM...-AF35/40-NA: 8 - 10 $\times I_n$
NZMH2-AF225-NA 271103	1 off	Fixed short-circuit releases I_i
NZMH2-AF250-NA 271104	1 off	• 350 A, when $I_n = 15\text{-}30\text{A}$
	1 off	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
	1 off	Comply with UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
	1 off	Only used in motor control circuits when installed with suitable contactor.
	1 off	Adjustable overload releases I_r
	1 off	• 0.8 - 1 $\times I_n$ (Factory setting 0.8 $\times I_n$)
	1 off	Adjustable short-circuit releases I_i
	1 off	• 6 - 10 $\times I_n$ (Factory setting 6 $\times I_n$) • NZM...-A40-NA: 8 - 10 $\times I_n$
	1 off	Fixed short-circuit releases I_i
	1 off	• 350 A, when $I_n = 20\text{-}32\text{A}$
	1 off	
	1 off	
	1 off	
NZMH2-A20-NA 269228	1 off	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMH2-A25-NA 269229	1 off	Comply with UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
NZMH2-A32-NA 269230	1 off	Only used in motor control circuits when installed with suitable contactor.
NZMH2-A40-NA 269231	1 off	Adjustable overload releases I_r
NZMH2-A50-NA 269232	1 off	• 0.8 - 1 $\times I_n$ (Factory setting 0.8 $\times I_n$)
NZMH2-A63-NA 269233	1 off	Adjustable short-circuit releases I_i
NZMH2-A80-NA 269234	1 off	• 6 - 10 $\times I_n$ (Factory setting 6 $\times I_n$) • NZM...-A40-NA: 8 - 10 $\times I_n$
NZMH2-A100-NA 269235	1 off	Fixed short-circuit releases I_i
NZMH2-A125-NA 269236	1 off	• 350 A, when $I_n = 20\text{-}32\text{A}$
NZMH2-A160-NA 269237	1 off	
NZMH2-A200-NA 269238	1 off	
NZMH2-A250-NA 271107	1 off	

1.6

NZM1-4 molded case circuit-breakers

Molded case switches for North America

Thermomagnetic releases, 3 pole

Short-circuit protection

Motor protection in conjunction with contactor and overload relay

- With short-circuit releases
- Without overload releases I_r

Rated current =
Rated uninterrupted
current

Setting range
Overload releases

Switching capacity B
240 V 60 Hz
480 V 60 Hz ¹⁾

Switching capacity N
240 V 60 Hz
480 V 60 Hz ¹⁾

$I_n = I_u$ A	I_r A 	Part no. Article no.	Part no. Article no.	Std. pack
1.2	8-14	NZMB1-S1,2-CNA 102906	NZMN1-S1,2-CNA 103025	1 off
2	12.8-22.4	NZMB1-S2-CNA 102907	NZMN1-S2-CNA 103026	1 off
3	19.2-33.6	NZMB1-S3-CNA 102908	NZMN1-S3-CNA 103027	1 off
5	32-56	NZMB1-S5-CNA 102909	NZMN1-S5-CNA 103028	1 off
8	48-84	NZMB1-S8-CNA 103020	NZMN1-S8-CNA 103029	1 off
12	80-140	NZMB1-S12-CNA 103021	NZMN1-S12-CNA 103030	1 off
18	128-224	NZMB1-S18-CNA 103022	NZMN1-S18-CNA 103031	1 off
26	200-350	NZMB1-S26-CNA 103023	NZMN1-S26-CNA 103032	1 off
33	256-448	NZMB1-S33-CNA 103024	NZMN1-S33-CNA 103033	1 off
40	320-560	NZMB1-S40-CNA 281263	NZMN1-S40-CNA 281276	1 off
50	400-700	NZMB1-S50-CNA 281264	NZMN1-S50-CNA 281277	1 off
63	504-882	NZMB1-S63-CNA 281265	NZMN1-S63-CNA 281278	1 off
80	640-1120	NZMB1-S80-CNA 281266	NZMN1-S80-CNA 281279	1 off
100	800-1250	NZMB1-S100-CNA 281267	NZMN1-S100-CNA 281280	1 off

Notes

Switches correspond with both UL/CSA and IEC regulations.
IEC switching performance values shown on type label.
Comply with UL 489, CSA-C22.2-5.1, IEC/EN 60947-2

Adjustable short-circuit releases I_i

- 8 - 14 $\times I_n$ (Factory setting 12 $\times I_n$)
 - NZM...1-S 1,2-33-CAN: 8 - 14 $\times I_n$
 - NZM...1-S100-CAN: 8-12.5 $\times I_n$ (Factory setting 12 $\times I_n$)

No overload protection I_r

Please refer to page 93 for terminals information



CNA: UL Recognized, CSA certified Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker contactor and overload

Box terminals as
accessories



Thermomagnetic releases, 3 pole

Short-circuit protection

Motor protection in conjunction with contactor and overload relay

- With short-circuit releases
- Without overload releases I_r

Rated current =
Rated uninterrupted
current

Setting range
Overload releases

Switching capacity B
240 V 60 Hz
480 V 60 Hz
600 V 60 Hz
Part no.
Article no.

Switching capacity N
240 V 60 Hz
480 V 60 Hz
600 V 60 Hz
Part no.
Article no.

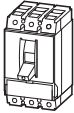
Std.
pack

$I_n = I_u$
A

I_r
A



Screw terminals as accessories



1.6	12.8- 22.4	NZMB2-S1,6-CNA 269472	NZMN2-S1,6-CNA 269478	1 off
2.4	19.2- 33.6	NZMB2-S2,4-CNA 269473	NZMN2-S2,4-CNA 269479	1 off
5	32-56	NZMB2-S5-CNA 103034	NZMN2-S5-CNA 103040	1 off
8	48-84	NZMB2-S8-CNA 103035	NZMN2-S8-CNA 103041	1 off
12	80-140	NZMB2-S12-CNA 103036	NZMN2-S12-CNA 103042	1 off
18	128-224	NZMB2-S18-CNA 103037	NZMN2-S18-CNA 103043	1 off
26	200-350	NZMB2-S26-CNA 103038	NZMN2-S26-CNA 103044	1 off
33	256-448	NZMB2-S33-CNA 103039	NZMN2-S33-CNA 103045	1 off
40	320-560	NZMB2-S40-CNA 269243	NZMN2-S40-CNA 269255	1 off
50	400-700	NZMB2-S50-CNA 269244	NZMN2-S50-CNA 269256	1 off
63	504-882	NZMB2-S63-CNA 269245	NZMN2-S63-CNA 269257	1 off
80	640-1120	NZMB2-S80-CNA 269246	NZMN2-S80-CNA 269258	1 off
100	800-1400	NZMB2-S100-CNA 269247	NZMN2-S100-CNA 269259	1 off
125	1000-1750	NZMB2-S125-CNA 269248	NZMN2-S125-CNA 269260	1 off
160	1280-2240	NZMB2-S160-CNA 269249	NZMN2-S160-CNA 269261	1 off
200	1600-2500	NZMB2-S200-CNA 269250	NZMN2-S200-CNA 269262	1 off
250	2000-2500	NZMB2-S250-CNA 102478	NZMN2-S250-CNA 102479	1 off

Notes

Switches correspond with both UL/CSA and IEC regulations.
IEC switching performance values shown on type label.
Comply with UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
• NZM...2-S250-CNA: IEC/EN 60947-2

Adjustable short-circuit releases I_i

- 8 - 14 $\times I_n$ (Factory setting 12 $\times I_n$)
 - NZM...2-S5-S3-CNA: 6 - 10 $\times I_n$ (Factory setting 10 $\times I_n$)
 - NZM...2-S250-CNA: 8 - 10 $\times I_n$ (Factory setting 10 $\times I_n$)

No overload protection I_r

Please refer to page 97 for terminals information



CNA: UL Recognized, CSA certified Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker contactor and overload

1.6

NZM1-4 molded case circuit-breakers

Molded case switches for North America

Electronic releases, 3 pole

System and cable protection

Rated current =
Rated
uninterrupted
current
 $I_n = I_u$
A

Setting range
Overload releases
 I_r
A



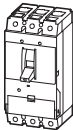
Short-circuit releases,
Non-delayed
 I_i
A



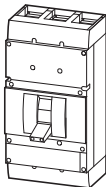
Switching capacity N
85 kA 240 V 60 Hz
42 kA 480 V 60 Hz
35 kA 600 V 60 Hz
Part no.
Article no.

Switching capacity H
125 kA 240 V 60 Hz
100 kA 480 V 60 Hz
50 kA 600 V 60 Hz
Part no.
Article no.

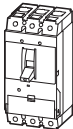
Screw terminals
as accessories



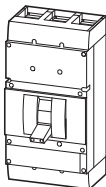
Screw terminals
as accessories



Screw terminals
as accessories



Screw terminals
as accessories



Fixed overload releases				
250	250	500-2750	NZMN3-AEF250-NA 269275	NZMH3-AEF250-NA 269283
300	300	600-3300	NZMN3-AEF300-NA 269276	NZMH3-AEF300-NA 269284
350	350	700-3850	NZMN3-AEF350-NA 269277	NZMH3-AEF350-NA 269285
400	400	800-4400	NZMN3-AEF400-NA 269278	NZMH3-AEF400-NA 269286
450	450	900-3600	NZMN3-AEF450-NA 269279	NZMH3-AEF450-NA 269287
500	500	1000-4000	NZMN3-AEF500-NA 269280	NZMH3-AEF500-NA 269288
550	550	1100-4400	NZMN3-AEF550-NA 269281	NZMH3-AEF550-NA 269289
600	600	1200-4800	NZMN3-AEF600-NA 269282	NZMH3-AEF600-NA 269290
600	600	1200-7200	NZMN4-AEF600-NA 271108	NZMH4-AEF600-NA 271114
700	700	1400-8400	NZMN4-AEF700-NA 271109	NZMH4-AEF700-NA 271115
800	800	1600-9600	NZMN4-AEF800-NA 271110	NZMH4-AEF800-NA 271116
900	900	1800-10800	NZMN4-AEF900-NA 271111	NZMH4-AEF900-NA 271117
1000	1000	2000-12000	NZMN4-AEF100-NA 271112	NZMH4-AEF1000-NA 271118
1200	1200	2400-14400	NZMN4-AEF120-NA 271113	NZMH4-AEF1200-NA 271119
Adjustable overload releases				
250	125-250	500-2750	NZMN3-AE250-NA 269299	NZMH3-AE250-NA 269302
400	200-400	800-4400	NZMN3-AE400-NA 269300	NZMH3-AE400-NA 269303
600	300-600	1200-4800	NZMN3-AE600-NA 269301	NZMH3-AE600-NA 269304
800	400-800	1600-9600	NZMN4-AE800-NA 271120	NZMH4-AE800-NA 271123
1000	500-1000	2000-12000	NZMN4-AE1000-NA 271121	NZMH4-AE1000-NA 271124
1200	600-1200	2400-14400	NZMN4-AE1200-N 271122	NZMH4-AE1200-N 271125

Notes

Please refer to page 104 for terminals information

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1.6

NZM1-4 molded case circuit-breakers

Molded case switches for North America

Electronic releases, 3 pole

Systems protection, cable protection, transformer , generator protection

Rated current =
Rated uninterrupted
current

Setting range

Overload releases

Short-circuit releases

Non-delayed

Delayed

$I_n = I_u$
A

I_t
A

I_t
A

I_{sd}
A

Switching capacity N

85 kA 240 V 60 Hz

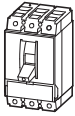
42 kA 480 V 60 Hz

35 kA 600 V 60 Hz

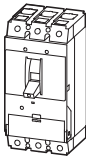
Part no.

Article no.

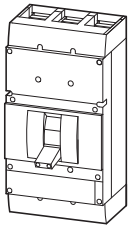
Screw terminals
as accessories



Screw terminals
as accessories



Screw terminals
as accessories



Fixed overload releases

150	150	1800	300-1500	NZMN2-VEF150-NA 271126
175	175	2100	350-1750	NZMN2-VEF175-NA 271127
200	200	2400	400-2000	ZMN2-VEF200-NA 271128
225	225	2700	450-2250	NZMN2-VEF225-NA 271129
250	250	3000	500-2500	NZMN2-VEF250-NA 271130
250	250	500-2750	500-2500	NZMN3-VEF250-NA 269308
300	300	600-3300	600-3000	NZMN3-VEF300-NA 269309
350	350	700-3850	700-3500	NZMN3-VEF350-NA 269310
400	400	800-4400	800-4000	NZMN3-VEF400-NA 269311
450	450	900-3600	675-3150	NZMN3-VEF450-NA 269312
500	500	1000-4000	750-3500	NZMN3-VEF500-NA 269313
550	550	1100-4400	825-3850	NZMN3-VEF550-NA 269314
600	600	1200-4800	900-4200	NZMN3-VEF600-NA 269315
600	600	1200-7200	1200-6000	NZMN4-VEF600-NA 271136
700	700	1400-8400	1400-7000	NZMN4-VEF700-NA 271137
800	800	1600-9600	1600-8000	NZMN4-VEF800-NA 271138
900	900	1800-10800	1800-9000	NZMN4-VEF900-NA 271139
1000	1000	2000-12000	2000-10000	NZMN4-VEF1000-NA 271140
1200	1200	2400-14400	2400-12000	NZMN4-VEF1200-NA 271141

Notes

Please refer to page 97 for terminals information

Switching capacity H

150 kA 240 V 60 Hz

100 kA 480 V 60 Hz

50 kA 600 V 60 Hz

Part no.

Article no.

Std.
pack

Note

NZMH2-VEF150-NA 271131	1 off	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMH2-VEF175-NA 271132	1 off	Comply with UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
NZMH2-VEF200-NA 271133	1 off	Adjustable overload releases I_r R.m.s. value measurement and "thermal memory"
NZMH2-VEF225-NA 271134	1 off	Adjustable delay setting t_r , to escape from the in-rush current • 2 – 20 s at $6 \times I_r$ (Factory setting 10 s)
NZMH2-VEF250-NA 271135	1 off	Delayed short-circuit releases I_{sd} • 2 – $10 \times I_r$ (Factory setting $6 \times I_r$) • NZM...3-VEF450...600-NA: $1.5 - 7 \times I_r$ (Factory setting $6 \times I_r$)
NZMH3-VEF250-NA 269316	1 off	Adjustable delay t_{sd} • 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms (Factory setting 0 ms)
NZMH3-VEF300-NA 269317	1 off	Adjustable short-circuit releases I_i • NZM2: Fixed $12 \times I_n$
NZMH3-VEF350-NA 269318	1 off	• NZM...3-AEF250...400-NA: $2 - 11 \times I_n$ (Factory setting $11 \times I_n$) • NZM...3-AEF450...600-NA: $2 - 8 \times I_n$ (Factory setting $8 \times I_n$) • NZM...4-AEF...-NA: $2 - 12 \times I_n$ (Factory setting $12 \times I_n$)
NZMH3-VEF400-NA 269319	1 off	I^2t constant function
NZMH3-VEF450-NA 269320	1 off	• NZM2 fixed OFF • NZM3, NZM4 switchable
NZMH3-VEF500-NA 269321	1 off	
NZMH3-VEF550-NA 269322	1 off	
NZMH3-VEF600-NA 269323	1 off	
NZMH4-VEF600-NA 271142	1 off	
NZMH4-VEF700-NA 271143	1 off	
NZMH4-VEF800-NA 271144	1 off	
NZMH4-VEF900-NA 271145	1 off	
NZMH4-VEF1000-NA 271146	1 off	
NZMH4-VEF1200-NA 271147	1 off	

1.6

NZM1-4 molded case circuit-breakers

Molded case switches for North America

Electronic releases, 3 pole

Systems protection, cable protection, transformer , generator protection

Rated current = Rated uninterrupted current	Setting range		Switching capacity N 85 kA 240 V 60 Hz 42 kA 480 V 60 Hz 35 kA 600 V 60 Hz Part no. Article no.
	Overload releases	Short-circuit releases	
$I_n = I_u$ A	I_r A	Non-delayed I_i A	Delayed I_{sd} A

Fixed overload releases				
100	50-100	1200	100-1000	NZMN2-VE100-NA 271148
160	80-160	1920	160-1600	NZMN2-VE160-NA 271149
250	125-250	3000	250-2500	NZM N2-V E250-NA 271150
250	125-250	500-2750	250-2500	NZM N3-V E250-NA 269332
400	200-400	800-4400	400-4000	NZM N3-V E400-NA 269333
600	300-600	1200-4800	450-4200	NZM N3-V E600-NA 269334
800	400-800	1600-9600	800-8000	NZM N4-V E800-N A 271154
1000	500-1000	2000-12000	1000-10000	NZMN4-VE1000-NA 271155
1200	630-1200	2400-14400	1260-12000	NZMN4-VE1200-NA 271156

Notes Please refer to page 97 for terminals information

Electronic releases, 3 pole

Short-circuit protection

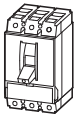
Motor protection in conjunction with contactor and overload relay

- With short-circuit releases
- Without overload releases I_t

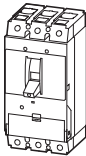
Rated current = Rated uninterrupted current	Setting range	Switching capacity N 480V 60Hz 600V 60Hz Part no. Article no.
	Short-circuit releases	
$I_n = I_u$ A	I_i A	

90	180-1260		NZMN2-SE90-CNA 271160
140	280-1960		NZMN2-SE140-CNA 271161
220	440-3080		NZMN2-SE220-CNA 271162
220	440-3080		NZMN3-SE220-CNA 269341
350	700-4900		NZMN3-SE350-CNA 269342
450	900-6300		NZMN3-SE450-CNA 284465

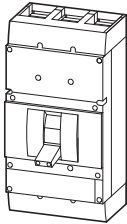
Screw terminals
as accessories



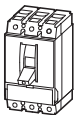
Screw terminals
as accessories



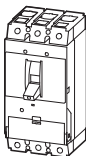
Screw terminals
as accessories



Screw terminals
as accessories



Screw terminals
as accessories



Switching capacity H

150 kA 240 V 60 Hz

100 kA 480 V 60 Hz

50 kA 600 V 60 Hz

Part no.

Article no.

Std.
pack

Note

NZMH2-VE100-NA 271151	1 off	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMH2-VE160-NA 271152	1 off	Comply with UL 489, CSA-C22.2-5.1, IEC/EN 60947-2 Only used in motor control circuits when installed with suitable contactor.
NZMH2-VE250-NA 271153	1 off	Adjustable overload releases I_r • $0.5 - 1 \times I_n$ R.m.s. value measurement and "thermal memory" Adjustable delay setting t_r , to escape from the in-rush current
NZMH3-VE250-NA 269335	1 off	• $2 - 20$ s at $6 \times I_r$ (Factory setting 10 s) Delayed short-circuit releases I_{sd}
NZMH3-VE400-NA 269336	1 off	• $2 - 10 \times I_r$ (Factory setting $6 \times I_r$) • $2 - 10 \times I_r$ (Factory setting $6 \times I_r$) • $1.5 - 7 \times I_r$ (Factory setting $6 \times I_r$) Adjustable delay t_{sd} • 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms (Factory setting 0 ms)
NZMH4-VE800-NA 271157	1 off	Adjustable short-circuit releases I_i • NZM2: Fixed $12 \times I_n$
NZMH4-VE1000-NA 271158	1 off	• NZM...3-VE250/400-NA: $2 - 11 \times I_n$ (Factory setting $11 \times I_n$) • NZM...3-VE600-NA: $2 - 8 \times I_n$ (Factory setting $8 \times I_n$) • NZM...4-VE...-NA: $2 - 12 \times I_n$ (Factory setting $12 \times I_n$)
NZMH4-VE1200-NA 271159	1 off	I^2t constant function • NZM2 fixed OFF • NZM3, NZM4 switchable

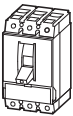
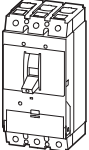
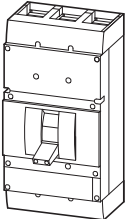
	Std. pack	Note
	1 off	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
	1 off	Comply with UL 489, CSA-C22.2-5.1, IEC/EN 60947-2 and IEC/EN 60947-4
	1 off	Adjustable short-circuit releases I_i • $2 - 14 \times I_n$ (Factory setting $12 \times I_n$) No overload protection I_r
	1 off	
	1 off	CNA: UL Recognized, CSA certified Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker contactor and overload
	1 off	

1.7

NZM1-4 molded case circuit-breakers

Molded case switches for North America

Molded case switches, 3 pole

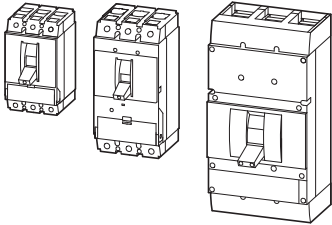
	Rated current = Rated uninterrupted current	Switching capacity		Response value of short-circuit releases	3 switch positions I, +, 0 Can be remotely operated with shunt release XU/XA, remote operator XR, Part no. Article no.	Std. pack	Note
	$I_n = I_u$ A	at 480 V A	at 600 V kA	I_k A			
Box terminals as accessories 	63	35	-	1250	NS1-63-NA 102681	1 off	With Permanently set short-circuit release (self-protection) comply with UL489/CSA 22.2 No 5.1, However, IEC/EN 60947-2: circuit-breaker without overcurrent protection (CBI-X) with main switch characteristics and isolating characteristics to IEC/EN 60204
	100	35	-	1250	NS1-100-NA 102682	1 off	
	125	35	-	1250	NS1-125-NA 102683	1 off	
Screw terminals as accessories 	160	100	50	2500	NS2-160-NA 102684	1 off	
	200	100	50	2500	NS2-200-NA 102685	1 off	
	250	100	50	2500	NS2-250-NA 102686	1 off	
Screw terminals as accessories 	400	100	50	4800	NS3-400-NA 102687	1 off	
	600	100	50	4800	NS3-600-NA 102688	1 off	
Screw terminals as accessories 	800	100	50	14400	NS4-800-NA 102689	1 off	
	1000	100	50	14400	NS4-1000-NA 102690	1 off	
	1200	100	50	14400	NS4-1200-NA 102691	1 off	

Notes

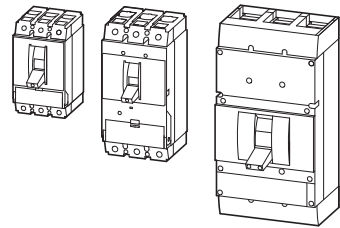
Please refer to page 93 for terminals information
 NS2, NS3 NS4 be combined with NZM...-XR
 NS1, NS2, NS3 and NS4 be combined with shunt releases NZM...-XU, NZM...-XA and auxiliary contacts

Circuit-breakers, switch-disconnectors for 1000 V AC, 3 pole

Switching capacity
With main switch characteristics to
IEC/EN 60204 and isolating
characteristics to IEC/EN 60947,
VDE 660

		Circuit-breakers 3 Pole											
		System and cable protection				Selectivity protection		Motor protection					
1000V	kA/cosφ	I _{CU}	3/0.5	10/0.5	20/0.3	10 ¹⁾ /0.5	20/0.3	10/0.5	20/0.3				
		I _{CS}	3/0.5	10/0.5	15/0.3	3/0.5	15/0.3	10/0.5	15/0.3				
Rated uninterrupted current I _u = Rated current I _n			I _u	I _u	I _u	I _u	I _u	I _u	I _u	I _u	I _u		
Ambient air temperature at 100% I _u min./max. -25/+50 °C			A	A	A	A	A	A	A	A	A		
		NZMH2- A...-S1	NZMH3- AE...-S1	NZMH4- AE...-S1	NZMH2- VE...-S1	NZMH4- VE...-S1	NZMH3- ME...-S1	NZMH4- ME...-S1	N2-...-S1	N4-...-S1			
		20	250	63	100	630	220	55	16	800			
		25	400	80	160	800	350	87	20	1000			
		32	630	1000	250	1000	450	1400	250	1250			
		40		125		1250				1600			
		50		1600		1600							
		63											
		80											
		100											
		125											
		160											
		200											
		250											
		Rated short-time withstand current I _{cm}		kA							5.5	53	
		Rated short-time withstand current I _{cw} (0.1s currentrms)		kA							3.5	25	

Notes ¹⁾ Please inquire.



1.9 NZM1-4 molded case circuit-breakers

Circuit-breakers

For 1000V, 3 pole

System and cable protection

Rated current =
Rated uninterrupted
current

Setting range
Overload releases

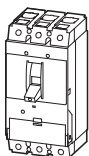
Short-circuit
releases

$I_n = I_u$ A	I_r A 	I_i A 	Part no. Article no.	Std. pack	Note
Screw terminals as accessories					
20	15-20	350	NZM H2-A20-S1 290355	1 off	Comply with IEC/EN 60947-2 Adjustable overload releases I_r • NZMH2-A...-S1: $0.8-1 \times I_n$ (Factory setting $0.8 \times I_n$) • NZMN3-AE...-S1: $0.5-1 \times I_n$ (Factory setting $0.8 \times I_n$) • NZMH4-AE...-S1: $0.5-1 \times I_n$ (Factory setting $0.5 \times I_n$)
25	20-25	350	NZM H2-A25-S1 290356	1 off	
32	25-32	350	NZM H2-A32-S1 290357	1 off	
40	32-40	320-400	NZM H2-A40-S1 290358	1 off	
50	40-50	300-500	NZM H2-A50-S1 290359	1 off	Adjustable short-circuit releases I_i • NZM H2-A40-S1: $8-10 \times I_n$ (Factory setting $8 \times I_n$) • NZM H2-A50...250-S1: $6-10 \times I_n$ (Factory setting $6 \times I_n$) • NEMN3-AE250/400-S1: $2-11 \times I_n$ (Factory setting $6 \times I_n$) • NEMN3-AE630-S1: $2-8 \times I_n$ (Factory setting $6 \times I_n$) • NZMH4-AE...-S1: $2-12 \times I_n$ (Factory setting $6 \times I_n$)
63	50-63	380-630	NZM H2-A63-S1 290360	1 off	
80	63-80	480-800	NZM H2-A80-S1 290361	1 off	
100	80-100	600-1000	NZMH2-A100-S1 290362	1 off	
125	100-125	750-1250	NZMH2-A125-S1 290363	1 off	Fixed short-circuit releases I_i • 350 A, when $I_n = 20-32A$ Terminal protection: • NZM2: Should be used with NZM2-XKSA • NZM3: Should be used with NZM2-XKSA • NZM4: Isolating busbar connection (Screw terminals NZM4-XKS)
160	125-160	960-1600	NZMH2-A160-S1 290364	1 off	
200	160-200	1200-2000	NZMH2-A200-S1 290365	1 off	
250	200-250	1500-2500	NZMH2-A250-S1 290366	1 off	
630	315-630	1260-5040	NZMH3-AE250-S1 119361	1 off	
400	200-400	800-4400	NZMH3-AE400-S1 119362	1 off	
630	315-630	1260-5040	NZMH3-AE630-S1 119363	1 off	
630	315-630	1260-7560	NZMH4-AE630-S1 290370	1 off	
800	400-800	1600-9600	NZMH4-AE800-S1 290371	1 off	
1000	500-1000	2000-12000	NZMH4-AE1000-S1 290372	1 off	
1250	630-1250	2500-15000	NZMH4-AE1250-S1 290373	1 off	
1600	800-1600	3200-19200	NZMH4-AE1600-S1 290374	1 off	

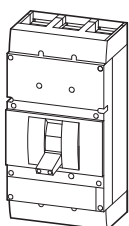
Screw terminals as accessories



Screw terminals as accessories



Screw terminals as accessories



For 1000V, 3 pole

Systems protection, cable protection, transformer , generator protection

Rated current =
Rated uninterrupted
current

Setting range

Overload releases

short-circuit releases
delayed

short-circuit releases
non-delayed

$I_n = I_u$
A

I_r
A

I_i
A

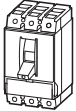
I_{sd}
A

Part no.
Article no.

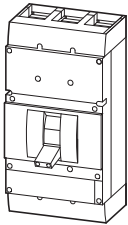
Std.
pack

Systems protection, cable protection, selectivity, generator protection¹⁾

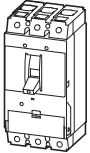
Screw terminals
as accessories



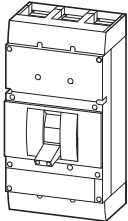
Screw terminals
as accessories



Screw terminals
as accessories



Screw terminals
as accessories



100	50-100	1200	100-1000	NZMH2-VE100-S1 100777	1 off
160	80-160	1920	160-1600	NZMH2-VE160-S1 100778	1 off
250	125-250	3000	250-2500	NZM H 2-VE250-S1 100779	1 off
630	315-630	1260-7560	630-6300	NZMH4-VE630-S1 290375	1 off
800	400-800	1600-9600	800-8000	NZMH4-VE800-S1 290376	1 off
1000	500-1000	2000-12000	1000-10000	NZMH4-VE1000-S1 290377	1 off
1250	630-1250	2500-15000	1250-12500	NZMH4-VE1250-S1 290378	1 off
1600	800-1600	3200-19200	1600-16000	NZMH4-VE1600-S1 290379	1 off
Motor protection²⁾					
220	110-220	220-3080		NZMH3-ME220-S1 119364	1 off
350	175-350	350-4900		NZMH3-ME350-S1 119365	1 off
450	225-450	450-6300		NZMH3-ME450-S1 119366	1 off
550	275-550	550-7700		NZMH4-ME550-S1 290383	1 off
875	438-875	875-12250		NZMH4-ME875-S1 290384	1 off
1400	700-1400	1400-19600		NZMH4-ME1400-S1 290385	1 off

Notes

¹⁾ Comply with IEC/EN 60947-2
Adjustable overload releases I_r
• $0.5-1 \times I_n$ (Factory setting $0.8 \times I_n$)
R.m.s. value measurement and "thermal memory"
Adjustable delay setting t_r , to escape from the in-rush current
• 2 - 20s, Factory setting 10s at $6 \times I_r$
Delayed short-circuit releases I_{sd}
• $2-10 \times I_r$ (Factory setting $6 \times I_r$)
Adjustable delay t_{sd}
• Steps: 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms
(Factory setting 0 ms)
Adjustable short-circuit releases I_i
• NZM2 fixed $12 \times I_n$
• NZM4: $2-12 \times I_n$ (Factory setting $12 \times I_n$)
• $2-8 \times I_n$ (Factory setting $6 \times I_n$)
 I^2t constant function
• NZM2 fixed OFF
• NZM4 switchable (Factory setting OFF)
Terminal protection:
• NZM2: Box terminals as accessories (+)NZM2-...-XKC...,
• NZM4: Isolating busbar connection
(Screw terminals NZM4-XKS)

²⁾ Comply with IEC/EN 60947-2
Adjustable overload releases I_r
• $0.5-1 \times I_n$ (Factory setting $0.8 \times I_n$)
R.m.s. value measurement and "thermal memory"
Adjustable delay setting t_r , to escape from the in-rush current
• 2 - 20s, Factory setting 10s at $6 \times I_r$
Phase-fault of protection
Adjustable short-circuit releases I_i
• $2-14 \times I_r$ (Factory setting $12 \times I_r$)
Terminal protection:
• NZM3: Insulated cable lugs (Screw terminals NZM3-XKS),
Should be used with NZM3-XKSA
• NZM4: Isolating busbar connection
(Screw terminals NZM4-XKS)

1.10

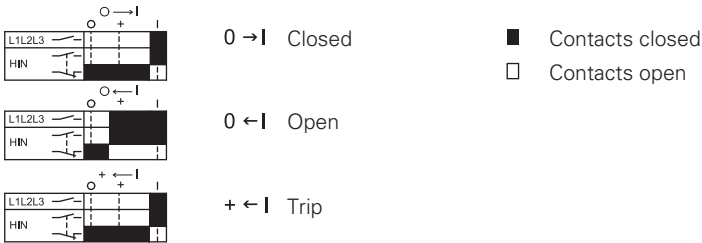
NZM1-4 molded case circuit-breakers

Wirings

Auxiliary contacts and trip indication contacts

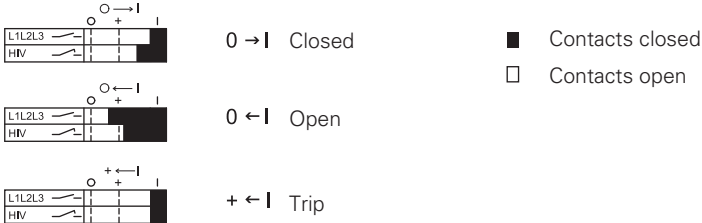
Terminal numbers

standard auxiliary (HIN)

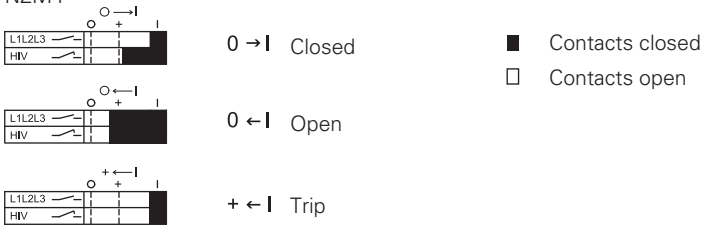


Early-make auxiliary (HIV)

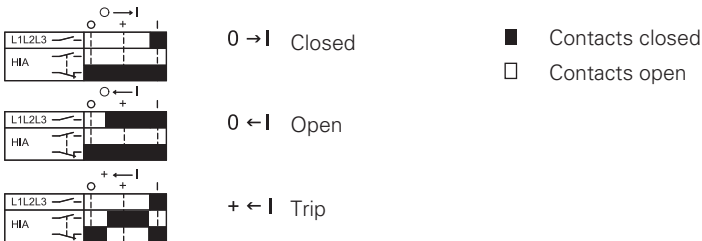
NZM 1. 2. 3



NZM4



Trip indication auxiliary (HIA)



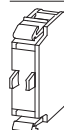
Auxiliary contacts with screw terminals

Contact configuration: 
 = safety function by positive
 opening according to
 IEC/EN 60947-5-1
 N/O = normally open contact
 N/C = normally closed contact

Part no.
 Article no.
 when ordered
 separately

Standard auxiliary contacts

Switches with the main contacts. Used for indicating and interlocking tasks.



NZM1(-4), 2(-4), 3(-4), 4(-4)
 PN1(-4), 2(-4), 3(-4)
 N1(-4), 2(-4), 3(-4), 4(-4)

1 N/O

-



M22-K10
 216376

-

1 N/C 



M22-K01
 216378

1 N/O

1 N/C 



-

2 N/O

-



-

-

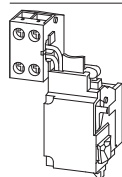
1 N/C 



-

Early-make auxiliary contact

For interlocking and load shedding circuits, as well as for early make of the under-voltage release in main switch/emergency switching off applications



With clamp terminal
 on left switch side.

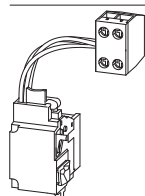
NZM1(-4)
 PN1(-4)
 N1(-4)

2 N/O

-



NZM1-XHIV
 259426



With clamp terminal
 on right switch side.

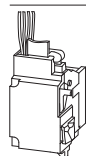
NZM1(-4)
 PN1(-4)
 N1(-4)

2 N/O

-



NZM1-XHIVR
 292195



With 3m connection
 cable instead of
 screw connection.

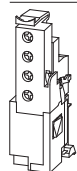
NZM1(-4)
 PN1(-4)
 N1(-4)

2 N/O

-



NZM1-XHIVL
 259432



NZM2(-4), 3(-4)
 PN2(-4), 3(-4)
 N2(-4), 3(-4)

2 N/O

-



NZM2/3-XHIV
 259430

NZM4(-4)
 N4(-4)

2 N/O

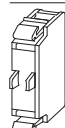
-



NZM4-XHIV
 266172

Trip indicating auxiliary contact (HIA),

General trip indication "+", when tripped by shunt release, overload release, short-circuit release or earth-fault release due to fault current.



NZM1(-4), 2(-4), 3(-4), 4(-4)
 N1(-4), 2(-4), 3(-4), 4(-4)

1 N/O

-



M22-K10
 216376

-

1 N/C 



M22-K01
 216378

1 N/O

1 N/C 



-

2 N/O

-



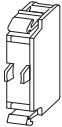
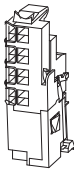
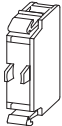
-

-

2 N/C 



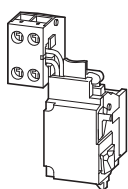
-

	Part no. Article no. when ordered separately	Std. pack	Note
	M22-CK10 216384	20 off	The following applies for the std. pack: M22-(C)K... : Std. pack = 20 off - The following can be clipped into the switch: - NZM1: one standard auxiliary contact - NZM2: up to two standard auxiliary contacts M22-(C)K... - NZM3/4: up to three standard auxiliary contacts M22-(C)K... - Any combinations of the auxiliary contact types are possible. - Marking on switch: HIN
	M22-CK01 216385	20 off	
	M22-CK11 107940	20 off	
	M22-CK20 107898	20 off	
	M22-CK02 107899	20 off	
-	-	1 off	- Not in conjunction with undervoltage release NZM...-XU... or shunt release NZM...-XA... - Early make with switch on and switch off (manual actuation): approx. 20 ms
-	-	1 off	
-	-	1 off	
	NZM2/3-XHIVC 266178	1 off	- Not in conjunction with undervoltage release NZM...-XU..., shunt release NZM...-XA... or remote operator NZM...-XR... - Early make (manual operation): approx. 20...90 ms
	NZM4-XHIVC 266180	1 off	
	M22-CK10 216384	20 off	The following applies for the std. pack: M22-(C)K... : Std. pack = 20 off - The following can be clipped into the switch: - NZM1: one standard auxiliary contact - NZM2: up to two standard auxiliary contacts M22-(C)K... - NZM3/4: up to three standard auxiliary contacts M22-(C)K... - Any combinations of the auxiliary contact types are possible. - Marking on switch: HIN
	M22-CK01 216385	20 off	
	M22-CK11 107940	20 off	
	M22-CK20 107898	20 off	
	M22-CK02 107899	20 off	

Undervoltage releases with Screw terminals

Undervoltage releases

Without auxiliary contacts

Non-delayed disconnection of circuit-breaker NZM or switch-disconnector N when control voltage drops below 35 – 70% U_s .

		For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately	Std. pack
	With clamp terminal on left switch side.	NZM1(-4), N1(-4)	24 V 50/60 Hz	NZM1-XU24AC 259434	1 off
			110V...130 V 50/60 Hz	NZM1-XU110-130AC 259440	1 off
			208 V 240 V 50/60 Hz	NZM1-XU208-240AC 259442	1 off
			380V...440 V 50/60 Hz	NZM1-XU380-440AC 259444	1 off
			480V...525 V 50/60 Hz	NZM1-XU480-525AC 259446	1 off
			600 V 50/60 Hz	NZM1-XU600AC 259448	1 off
			12 V DC	NZM1-XU12DC 259450	1 off
			24 V DC	NZM1-XU24DC 259452	1 off
			110V...130 V DC	NZM1-XU110-130DC 259458	1 off
			220V...250 V DC	NZM1-XU220-250DC 259460	1 off
	With 3 m connection cable instead of screw terminal.	NZM1(-4), N1(-4)	24 V 50/60 Hz	NZM1-XUL24AC 259462	1 off
			110V-130 V 50/60 Hz	NZM1-XUL110-130AC 259468	1 off
			208 V 240 V 50/60 Hz	NZM1-XUL208-240AC 259471	1 off
			380V- 440 V 50/60 Hz	NZM1-XUL380-440AC 259473	1 off
			480V- 525 V 50/60 Hz	NZM1-XUL480-525AC 259475	1 off
			600 V 50/60 Hz	NZM1-XUL600AC 259477	1 off
			12VDC	NZM1-XUL12DC 259479	1 off
			24 V DC	NZM1-XUL24DC 259481	1 off
			110V 130VDC	NZM1-XUL110-130DC 259487	1 off
			220V-250 V DC	NZM1-XUL220-250DC 259489	1 off

Notes

When the undervoltage release is de-energized, accidental contact with the main switches of the switch during attempts to switch on is reliably prevented.

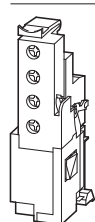
Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XA...

Undervoltage releases with Screw terminals

Undervoltage releases

Without auxiliary contacts

Non-delayed disconnection of circuit-breaker NZM or switch-disconnector N when control voltage drops below 35 – 70% U_s .



		For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately	Std. pack
	-	NZM2(-4), N2(-4) NZM3(-4), N3(-4)	24 V 50/60 Hz	NZM2/3-XU24AC 259491	1 off
			110V-130 V50/60 Hz	NZM2/3-XU110-130AC 259497	1 off
			208 V 240 V 50/60 Hz	NZM2/3-XU208-240AC 259499	1 off
			380V-440 V 50/60 Hz	NZM2/3-XU380-440AC 259501	1 off
			480V-525 V 50/60 Hz	NZM2/3-XU480-525AC 259503	1 off
			600 V 50/60 Hz	NZM2/3-XU600AC 259505	1 off
			12VDC	NZM2/3-XU12DC 259507	1 off
			24 V DC	NZM2/3-XU24DC 259509	1 off
			110V 130VDC	NZM2/3-XU110-130 DC 259515	1 off
			220V-250 V DC	NZM2/3-XU220-250 DC 259517	1 off
			24 V 50/60 Hz	NZM4-XU24AC 266189	1 off
			110V-130 V50/60 Hz	NZM4-XU110-130AC 266192	1 off
			208 V-240 V 50/60 Hz	NZM4-XU208-240AC 266193	1 off
	-	NZM4(-4), N4(-4)	380V-440 V 50/60 Hz	NZM4-XU380-440AC 266194	1 off
			480V-525 V 50/60 Hz	NZM4-XU480-525AC 266195	1 off
			600 V 50/60 Hz	NZM4-XU600AC 266196	1 off
			12VDC	NZM4-XU12DC 266203	1 off
			24 V DC	NZM4-XU24DC 266204	1 off
			110V-130VDC	NZM4-XU110-130DC 266207	1 off
			220V-250 V DC	NZM4-XU220-250DC 266208	1 off

Notes

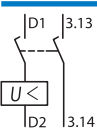
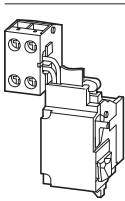
When the undervoltage release is de-energized, accidental contact with the main switches of the switch during attempts to switch on is reliably prevented.

Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XA...

Undervoltage releases with Screw terminals

Undervoltage releases

With two early-make auxiliary contacts
For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications.
For use with emergency switching off devices in conjunction with emergency switching off button.



With clamp terminal
on left switch side.

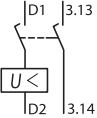
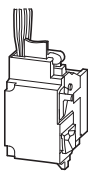
For use with
NZM1(-4), N1(-4)

Rated control voltage
 U_s
V

Part no.
Article no.
when ordered separately

Std.
pack

24 V 50/60 Hz	NZM1-XUHIV24AC 259531	1 off
110V-130 V 50/60 Hz	NZM1-XUHIV110-130AC 259537	1 off
208V-240 V 50/60 Hz	NZM1-XUHIV208-240AC 259539	1 off
380V-440 V 50/60 Hz	NZM1-XUHIV380-440AC 259541	1 off
480V-525 V 50/60 Hz	NZM 1-XUHIV480-525AC 259543	1 off
12 V DC	NZM1-XUHIV12DC 259545	1 off
24 V DC	NZM1-XUHIV24DC 259547	1 off
110 V 130VDC	NZM1-XUHIV110-130DC 259553	1 off
220V-250 V DC	NZM1-XUHIV220-250DC 259555	1 off



With 3 m connection
cable instead of
screw connection.

NZM1(-4), N1(-4)

24 V 50/60 Hz	NZM1-XUHIVL24AC 259557	1 off
110V-130 V 50/60 Hz	NZM1-XUHIVL110-130AC 259563	1 off
208V-240 V 50/60 Hz	NZM 1-XUHIVL208-240AC 259565	1 off
380V-440 V 50/60 Hz	NZM 1-XUHIVL380-440AC 259567	1 off
480V-525 V 50/60 Hz	NZM 1-XUHIVL480-525AC 259569	1 off
12 V DC	NZM1-XUHIVL12DC 259571	1 off
24 V DC	NZM1-XUHIVL24DC 259573	1 off
110 V 130VDC	NZM1-XUHIVL110-130DC 259579	1 off
220V-250 V DC	NZM1-XUHIVL220-250DC 259581	1 off

Notes

When the undervoltage release is de-energized,accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented.

Early make of auxiliary contacts on switching on and off (manual operation): approx.20 ms

Cannot be used in conjunction with remote operator NZM...-XR...

Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA...

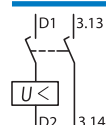
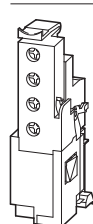
Undervoltage releases with Screw terminals

Undervoltage releases

With two early-make auxiliary contacts

For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications.

For use with emergency switching off devices in conjunction with emergency switching off button.



For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately	Std. pack
NZM2(-4), N2(-4) NZM3(-4), N3(-4)	24 V 50/60 Hz	NZM2/3-XUHIV24AC 259583	1 off
	110V-130 V 50/60 Hz	NZM2/3-XUHIV110-130AC 259589	1 off
	208V-240 V 50/60 Hz	NZM2/3-XUHIV208-240AC 259591	1 off
	380V-440 V 50/60 Hz	NZM2/3-XUHIV380-440AC 259594	1 off
	480V-525 V 50/60 Hz	NZM2/3-XUHIV480-525AC 259598	1 off
	12 V DC	NZM2/3-XUHIV12DC 259600	1 off
	24 V DC	NZM2/3-XUHIV24DC 259602	1 off
	110 V 130VDC	NZM2/3-XUHIV110-130DC 259608	1 off
	220V-250 V DC	NZM2/3-XUHIV220-250DC 259610	1 off
NZM4(-4), N4(-4)	24 V 50/60 Hz	NZM4-XUHIV24AC 266217	1 off
	110V-130 V 50/60 Hz	NZM4-XUHIV110-130AC 266220	1 off
	208V-240 V 50/60 Hz	NZM4-XUHIV208-240AC 266221	1 off
	380V-440 V 50/60 Hz	NZM4-XUHIV380-440AC 266222	1 off
	480V-525 V 50/60 Hz	NZM4-XUHIV480-525AC 266223	1 off
	12 V DC	NZM4-XUHIV12DC 266231	1 off
	24 V DC	NZM4-XUHIV24DC 266232	1 off
	110 V 130VDC	NZM4-XUHIV110-130 DC 266235	1 off
	220V-250 V DC	NZM4-XUHIV220-250 DC 266236	1 off

Notes

When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented.

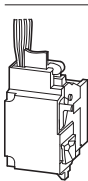
Early make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms

Cannot be used in conjunction with remote operator NZM...-XR....

Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA...

Undervoltage releases with Screw terminals

Undervoltage releases
With two early-make auxiliary contacts



	For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately	Std. pack
	NZM1(-4), N1(-4)	24 V 50/60Hz	NZM1-XUHIV20L24AC 259612	1 off
		110V-130V50/60Hz	NZM1-XUHIV20L110-130AC 259620	1 off
		208V-240 V 50/60Hz	NZM1-XUHIV20L208-240AC 259622	1 off
		380V-440 V 50/60Hz	NZM1-XUHIV20L380-440AC 259624	1 off
		24 V DC	NZM1-XUHIV20L24DC 259630	1 off



Contacts 3.23 and 3.24 with separate 3m connection cables.				
	NZM2(-4), N2(-4) NZM3(-4), N3(-4)	24 V 50/60Hz	NZM2/3-XUHIV2024AC 259640	1 off
		110V-130V50/60Hz	NZM2/3-XUHIV20110-130AC 259648	1 off
		208V-240 V 50/60Hz	NZM2/3-XUHIV20208-240AC 259651	1 off
		380V-440 V 50/60Hz	NZM2/3-XUHIV20380-440AC 259653	1 off
		24 V DC	NZM2/3-XUHIV2024DC 259659	1 off

Notes

When the undervoltage release is de-energized,accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented.

Early make of auxiliary contacts on switching on and off (manual operation): approx.20 ms

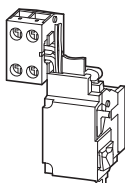
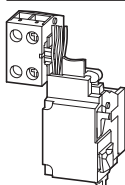
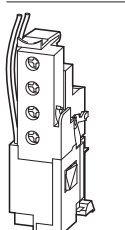
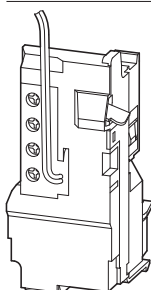
Cannot be used in conjunction with remote operator NZM...-XR....

Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA...

Undervoltage releases with Screw terminals

Undervoltage releases

With two early-make auxiliary contacts

	For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately	Std. pack
	Coil connections wired to clamp terminals, auxiliary contact connections with 3 m loose connection cables	NZM1(-4), N1(-4)	24 V 50/60Hz NZM1-XUHIV20KL24AC 284388	1 off
		110V-130V50/60Hz	NZM1-XUHIV20KL110-130AC 284389	1 off
		208V-240 V 50/60Hz	NZM1-XUHIV20KL208-240AC 284400	1 off
		24 V DC	NZM1-XUHIV20KL24DC 284387	1 off
	Coil connections with 3 m loose connection cables, auxiliary contact connections wired to clamp terminals	NZM1(-4), N1(-4)	24 V 50/60Hz NZM1-XUHIV20LK24AC 284402	1 off
		110V-130V50/60Hz	NZM1-XUHIV20LK110-130AC 284403	1 off
		208V-240 V 50/60Hz	NZM1-XUHIV20LK208-240AC 284404	1 off
		24 V DC	NZM1-XUHIV20LK24DC 284401	1 off
	Coil connections with 3 m loose connection cables, auxiliary contact connections wired to clamp terminals	NZM2(-4), N2(-4) NZM3(-4), N3(-4)	24 V 50/60Hz NZM2/3-XUHIV20LK24AC 285291	1 off
		110V-130V50/60Hz	NZM2/3-XUHIV20LK110-130AC 284407	1 off
		208V-240 V 50/60Hz	NZM2/3-XUHIV20LK208-240AC 284408	1 off
		24 V DC	NZM2/3-XUHIV20LK24DC 284405	1 off
	Contacts 3.23 and 3.24 with separate 3 m connection cables.	NZM4(-4), N4(-4)	24 V 50/60Hz NZM4-XUHIV2024AC 266244	1 off
		110V-130V50/60Hz	NZM4-XUHIV20110-130AC 266247	1 off
		208V-240 V 50/60Hz	NZM4-XUHIV20208-240AC 266248	1 off
		380V-440 V 50/60Hz	NZM4-XUHIV20380-440AC 266249	1 off
		24 V DC	NZM4-XUHIV2024DC 266258	1 off

Notes

When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented.

Early make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms

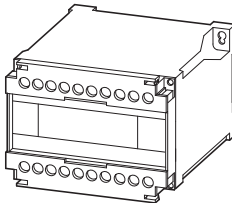
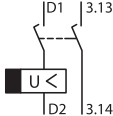
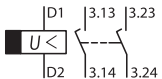
Cannot be used in conjunction with remote operator NZM...-XR...

Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA...

Undervoltage releases with Screw terminals

Undervoltage releases, off-delayed

Combination of separate delay unit and special releases

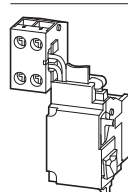
	For use with	Part no. Article no. when ordered separately	Std. pack	Note
Delay unit				
Voltage dips of less than 0.06 -16s do not cause disconnection of the NZM circuit-breakeror N switch-disconnector				
	NZM1(-4), 2(-4), 3(-4), 4(-4) N1(-4), 2(-4), 3(-4), 4(-4)	UVU-NZM 260154	1 off	• Delay time can be set from 70 ms -4 s. • With additional external capacitor: • 30,000 µF ≥ 35 V up to 8 s • 90,000 µF ≥ 35 V up to 16 s • A special release is required. • Cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... • Delay unit for separate installation (mounting: top-hat rail or screws). • For other operating voltages use a control transformer.
	Input 50/60 Hz 220 V-240V 380 V-440V 480 V-550V 24 V DC/AC	Output 18 VDC		
Without auxiliary contacts				
NZM1 with 3 m loose connection cables instead of screw terminal, NZM2, 3, and 4 with screw terminals				
	NZM1(-4) N1(-4)	NZM 1-XUVL 271607	1 off	• Delay unit UVU-NZM is additionally required. • Cannot be installed simultaneously with separate early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... • NZM1, 2, 3: Early make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms
	NZM2(-4), N2(-4) NZM 3(-4), N3(-4)	NZM 2/3-UV 259527	1 off	
	NZM4(-4) N4(-4)	NZM 4-XUV 266588	1 off	
With two early-make auxiliary contacts				
NZM1 with 3 m loose connection cables instead of screw terminal, NZM2, 3, and 4 with screw terminals				
	NZM1(-4) N1(-4)	NZM1-XUVHIVL 271608	1 off	• Cannot be used in conjunction with remote operator NZM... -XR.... • Delay unit UVU-NZM is additionally required. • Cannot be installed simultaneously with separate early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA.... • NZM1, 2, 3: Early make of auxiliary contacts on switching on and off (manual operation): appro.20 ms. • NZM4: Early make of auxiliary contacts on switching on (manual operation): approx. 90 ms.
	NZM2(-4), N2(-4) NZM 3(-4), N3(-4)	NZM2/3-XUVHIV 259684	1 off	
	NZM4(-4) N4(-4)	NZM4-XUVHIV 266596	1 off	
With two independently operating early-make auxiliary contacts				
NZM1 with 3 m separate connection cables instead of screw terminal, NZM2, 3, 4 with screw terminal, contact 3.23 and 3.24 with 3 m separate connection cables.				
	NZM1(-4) N1(-4)	NZM1-XUVHIV20L 271609	1 off	• Cannot be used in conjunction with remote operator NZM... -XR.... • Delay unit UVU-NZM is additionally required. • Cannot be installed simultaneously with separate early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA.... • NZM1, 2, 3: Early make of auxiliary contacts on switching on and off (manual operation): appro.20 ms. • NZM4: Early make of auxiliary contacts on switching on (manual operation): approx. 90 ms.
	NZM2(-4), N2(-4) NZM 3(-4), N3(-4)	NZM2/3-UVHIV20 259688	1 off	
	NZM4(-4) N4(-4)	NZM4-XUVH IV20 266604	1 off	

Shunt releases with Screw terminals

Shunt releases

Without auxiliary contacts

Switches are tripped by a voltage pulse or by the application of uninterrupted



With clamp terminal
on left switch side.

For use with
NZM1(-4), N1(-4)

Rated control voltage
 U_s
V

Part no.
Article no.
when ordered separately

Std.
pack

12 VAC/DC

NZM1-XA12AC/DC
259706

1 off

24 V AC/DC

NZM1-XA24AC/DC
259708

1 off

110 V-130VAC/DC

NZM1-XA110-130AC/DC
259724

1 off

208 V-250 V AC/DC

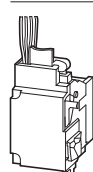
NZM1-XA208-250AC/DC
259726

1 off

380 V-440 V AC/DC

NZM1-XA380-440AC/DC
259728

1 off



With 3 m connection
cable instead of
screw connection.

NZM1(-4), N1(-4)

12 VAC/DC

NZM 1-XAL12AC/DC
259734

1 off

24 V AC/DC

NZM 1-XAL24AC/DC
259736

1 off

110 V-130VAC/DC

NZM1-XAL110-130AC/DC
259742

1 off

208 V-250 V AC/DC

NZM1-XAL208-250AC/DC
259744

1 off

380 V-440 V AC/DC

NZM1-XAL380-440AC/DC
259746

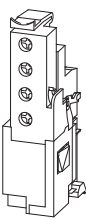
1 off

Notes

- Cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XU...
- When the shunt release is live, contact with the switch's main contacts on switching on is reliably prevented. Early make of auxiliary.

Shunt releases with Screw terminals

Shunt releases
Without auxiliary contacts
Switches are tripped by a voltage pulse or by the application of uninterrupted



For use with

NZM2(-4), N2(-4)
NZM3(-4), N3(-4)

Rated control voltage
 U_s
V

Part no.
Article no.
when ordered separately

Std.
pack

12 VAC/DC

NZM2/3-XA12AC/DC
259752

1 off

24 V AC/DC

NZM2/3-XA24AC/DC
259754

1 off

110 V-130VAC/DC

NZM2/3-XA110-130AC/DC
259760

1 off

208 V-250 V AC/DC

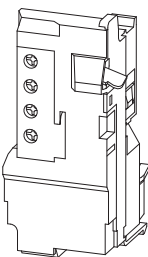
NZM2/3-XA208-250AC/DC
259763

1 off

380 V-440 V AC/DC

NZM2/3-XA380-440AC/DC
259766

1 off



NZM4(-4), N4(-4)

12 VAC/DC

NZM4-XA12AC/DC
266446

1 off

24 V AC/DC

NZM4-XA24AC/DC
266447

1 off

110 V-130VAC/DC

NZM4-XA110-130AC/DC
266450

1 off

208 V-250 V AC/DC

NZM4-XAZ08-250AC/DC
266451

1 off

380 V-440 V AC/DC

NZM4-XA380-440AC/DC
266452

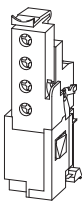
1 off

Notes

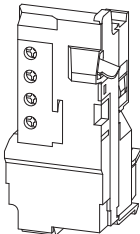
- Cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XU...
- When the shunt release is live, contact with the switch's main contacts on switching on is reliably prevented. Early make of auxiliary.

Shunt releases with Screw terminals

Shunt releases
Without auxiliary contacts
For mesh network circuit-breakers
For intermittent operation
Maximum On-time = 1 s
Operating range 10-110 % U_s
Not UL/CSA approved

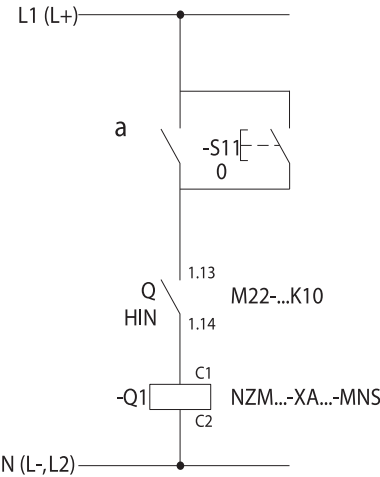


For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately	Std. pack
 NZM3(-4), N3(-4)	230V AC	NZM3-XA-230AC-MNS 274097	1 off



 NZM4(-4), N4(-4)	230V AC	NZM4-XA-230AC-MNS 274138	1 off
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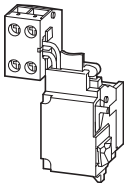
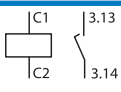
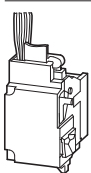
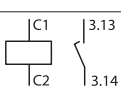
Notes Cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XU...
Intermittent operation guaranteed by series connection of a make contact M22-(C)K10. The maximum duty factor of the shunt releases for mesh network circuit-breakers is 1 s.



- ① Reverse power relay contact from mesh network relay
- S11 Remote off
- Q Standard auxiliary contacts
- Q1 Shunt releases

Shunt releases with Screw terminals

Shunt releases
With early-make auxiliary contact

			For use with	Rated control voltage U_c V	Part no. Article no. when ordered separately	Std. pack
		With clamp terminal on left switch side.	NZM1(-4), N1(-4)	12 V AC/DC	NZM1-XAHIV12AC/DC 259772	1 off
				24 V AC/DC	NZM1-XAHIV24AC/DC 259774	1 off
				110 V-130 V AC/DC	NZM1-XAHIV110-130AC/DC 259780	1 off
				208 V-250 V AC/DC	NZM1-XAHIV208-250AC/DC 259782	1 off
				380 V-440 V AC/DC	NZM 1-XAHIV380-440AC/DC 259784	1 off
		With 3 m connection cable instead of screw connection.	NZM1(-4), N1(-4)	12 V AC/DC	NZM1-XAHIVL12AC/DC 259790	1 off
				24 V AC/DC	NZM1-XAHIVL24AC/DC 259792	1 off
				110 V-130 V AC/DC	NZM1-XAHIVL110-130AC/DC 259798	1 off
				208 V-250 V AC/DC	NZM1-XAHIVL208-250AC/DC 259800	1 off
				380 V-440 V AC/DC	NZM1-XAHIVL380-440AC/DC 259802	1 off

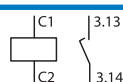
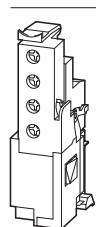
Notes

- When the shunt release is live, contact with the switch's main contacts on switching on is reliably prevented.
- Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms.
- Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XU...

Shunt releases with Screw terminals

Shunt releases

With early-make auxiliary contact



For use with

NZM2(-4), N2(-4)
NZM3(-4), N3(-4)

Rated control voltage
 U_s
V

Part no.

Article no.
when ordered separately

Std.
pack

12 V AC/DC

NZM2/3-XAHIV12AC/DC
259808

1 off

24 V AC/DC

NZM2/3-XAHIV24AC/DC
259810

1 off

110 V-130 V AC/DC

NZM2/3-XAHIV110-130AC/DC
259816

1 off

208 V-250 V AC/DC

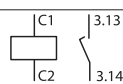
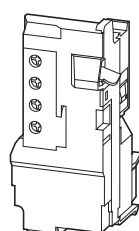
NZM2/3-XAHIV208-250AC/DC
259818

1 off

380 V-440 V AC/DC

NZM2/3-AHIV380-440AC/DC
259820

1 off



NZM4(-4), N4(-4)

12 V AC/DC

NZM4-XAHIV12AC/DC
266470

1 off

24 V AC/DC

NZM4-XAHIV24AC/DC
266471

1 off

110 V-130 V AC/DC

NZM4-XAHIV110-130AC/DC
266474

1 off

208 V-250 V AC/DC

NZM4-XAHIV208-250AC/DC
266475

1 off

380 V-440 V AC/DC

NZM4-XAHIV380-440AC/DC
266476

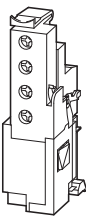
1 off

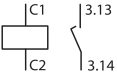
Notes

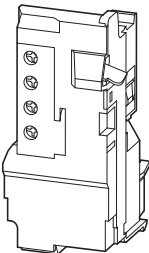
- When the shunt release is live, contact with the switch's main contacts on switching on is reliably prevented.
- Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms.
- Cannot be used in conjunction with remote operator NZM...-XR....
- Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XU...

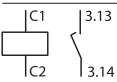
Shunt releases with Screw terminals

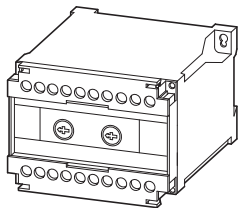
Shunt releases
With early-make auxiliary contact
For mesh network circuit-breakers
For intermittent operation
Maximum On-time = 1 s
Operating range 10-110 % U_s
Not UL/CSA approved



For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately
 NZM3(-4), N3(-4)	230V AC	NZM3-XAHIV-230AC-MNS 274141



 NZM4(-4), N4(-4)	230V AC	NZM4-XAHIV-230AC-MNS 274143
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Capacitor unit 230 V 50/60 Hz 700in conjunction with shunt release NZM...-XA208-250 AC/DC Enclosure: degree of protection IP20 Not UL/CSA approved		
NZM1(-4), N4(-4) NZM2(-4), N4(-4) NZM3(-4), N4(-4) NZM4(-4), N4(-4)	-	NZM-XCM 229413

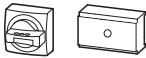
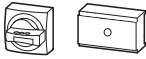
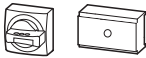
Std. pack	Note
1 off	• Cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV..or undervoltage release NZM...-XU.. • Intermittent operation guaranteed by series connection of a make contact M22-(C)K10.. • The maximum duty factor of the shunt releases for mesh network circuit-breakers is 1 s. • NZM3: Early make of auxiliary contact on switching on and off (manual operation):approx. 20 ms. • NZM4: Early make of auxiliary contact on switching on (manual operation): approx. 90 ms.
1 off	
1 off	• Enables the reliable use of circuit-breakers as mesh network circuit-breakers in the range from 0-110% Un with constant switch-off time of 40ms • If the mains voltage is absent, the installed capacitor supplies power for actuating the shunt release for at least 12 hours. • Connect NZM-XCM to the power feed side Note on engineering: Connect a standard auxiliary contact (HIN) as N/O in series with the coil of the shunt release! Standard auxiliary contact not included as standard.

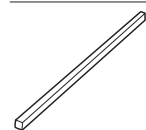
Door coupling rotary handles

Complete including rotary drive and coupling parts

An additional extension shaft is necessary with the NZM...-XT(V)D(V)(R)(-60) part numbers

Degree of protection IP66/UL/CSA type 4X

		For use with	Part no. Article no. when ordered separately	Std. pack	Note
Standard, black/grey					
	Lockable in 0 position on handle with up to 3 padlocks. With door interlock.	NZM1(-4), PN1(-4), N1(-4)	NZM1-XTVD 260166	1 off	Door interlock - Not defeated in the locked OFF and ON positions - Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. - Door can be opened in OFF
		NZM2(-4), PN2(-4), N2(-4)	NZM2-XTVD 260168	1 off	
		NZM3(-4), PN3(-4), N3(-4)	NZM3-XTVD 260170	1 off	
		NZM4(-4), N4(-4)	NZM4-XTVD 266614	1 off	
	Lockable on handle and switch with up to 3 padlocks. Can be locked in 0 position, with adequate modification also in I position. With door interlock. Lockable on switch in 0 position.	NZM1(-4), PN1(-4), N1(-4)	NZM1-XTVDV 260172	1 off	NZM...-XTVD(V) External warning plate/designation label can be clipped on
		NZM2(-4), PN2(-4), N2(-4)	NZM2-XTVDV 260174	1 off	
		NZM3(-4), PN3(-4), N3(-4)	NZM3-XTVDV 260176	1 off	
		NZM4(-4), N4(-4)	NZM4-XTVDV 266616	1 off	
Red-yellow for emergency witching off					
	Lockable on handle and switch with up to 3 padlocks. Lockable in 0 position on handle. With door interlock. Lockable on switch in 0 position.	NZM1(-4), PN1(-4), N1(-4)	NZM1-XTVDVR 260178	1 off	Door interlock - Not defeated in the locked OFF and ON positions - Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. - Door can be opened in OFF
		NZM2(-4), PN2(-4), N2(-4)	NZM2-XTVDVR 260180	1 off	
		NZM3(-4), PN3(-4), N3(-4)	NZM3-XTVDVR 260182	1 off	
		NZM4(-4), N4(-4)	NZM4-XTVDVR 266618	1 off	
NZM...-XTVD(V) External warning plate/designation label can be clipped on					



Extension shaft

	For use with	Part no. Article no. when ordered separately	Std. pack	Note
400 mm max. mounting depth	NZM1(-4), PN 1(-4), N1(-4)	NZM 1/2-X V4 261232	1 off	can be cut to required length.
	NZM2(-4), PN2(-4), N2(-4)		1 off	
	NZM3(-4), PN3(-4), N3(-4)	NZM 3/4-X V4 261234	1 off	
	NZM4(-4), N4(-4)		1 off	
600 mm max. mounting depth	NZM1(-4), PN 1(-4), N1(-4)	NZM1/2-XV6 260191	1 off	
	NZM2(-4), PN2(-4), N2(-4)		1 off	
	NZM3(-4), PN3(-4), N3(-4)	NZM3/4-XV6 260193	1 off	
	NZM4(-4), N4(-4)		1 off	

NZM1-4 molded case circuit-breakers

Circuit-breakers, switch-disconnectors

1.11

For maximum shaft length 60 mm

Part no.

Article no.
when ordered separately

Std.
pack

Note

NZM1-XTVD-60 271504	1 off	Door interlock - Can not be defeated in the locked OFF and ON positions - Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. - Door can be opened in OFF
NZM2-XTVD-60 271505	1 off	
NZM3-XTVD-60 271506	1 off	
NZM4-XTVD-60 271507	1 off	
NZM1-XTVDV-60 271508	1 off	NZM...-XTVD(V)-60 - For maximum shaft length 60 mm - Without shaft support - Cannot be combined with additional handle NZM...-XDZ - External warning plate/designation label can be clipped on.
NZM2-XTVDV-60 271509	1 off	
NZM3-XTVDV-60 271510	1 off	
NZM4-XTVDV-60 271511	1 off	

NZM1-XTVDVR-60 271512	1 off	Door interlock - Can not be defeated in the locked OFF and ON positions - Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. - Door can be opened in OFF
NZM2-XTVDVR-60 271513	1 off	
NZM3-XTVDVR-60 271514	1 off	
NZM4-XTVDVR-60 271515	1 off	
		NZM...-XTVD(V)-60 - For maximum shaft length 60 mm - Without shaft support - Cannot be combined with additional handle NZM...-XDZ - External warning plate/designation label can be clipped on.

Extremely narrow fittings

Part no.

Article no.
when ordered separately

Std.
pack

Note

NZM1-XTVD-0 279392	1 off	Door interlock - Can not be defeated in the locked OFF and ON positions - Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. - Door can be opened in OFF
NZM2-XTVD-0 279393	1 off	
NZM3-XTVD-0 279394	1 off	
NZM4-XTVD-0 279395	1 off	
NZM1-XTVDV-0 279396	1 off	NZM...-XTVD(V)-0 - For extremely narrow fittings - With special short extension shaft - Cannot be combined with additional handle NZM...-XDZ - External warning plate/designation label can be clipped on.
NZM2-XTVDV-0 279397	1 off	
NZM3-XTVDV-0 279398	1 off	
NZM4-XTVDV-0 279399	1 off	

NZM1-XTVDVR-0 279400	1 off	Door interlock - Can not be defeated in the locked OFF and ON positions - Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. - Door can be opened in OFF
NZM2-XTVDVR-0 279401	1 off	
NZM3-XTVDVR-0 279402	1 off	
NZM4-XTVDVR-0 279403	1 off	
		NZM...-XTVD(V)-0 - For extremely narrow fittings - With special short extension shaft - Cannot be combined with additional handle NZM...-XDZ - External warning plate/designation label can be clipped on.

Door coupling rotary handles for North America

Difference to normal IEC handles:

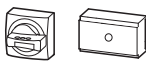
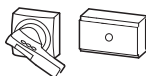
Door opening only possible with active rotation beyond the 0 position.

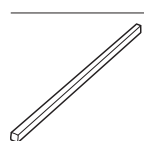
Door coupling rotary handles

Complete including rotary drive and coupling parts

Extension shaft additionally required.

Degree of protection IP66/UL/CSA type 4X,

	For use with	Part no. Article no. when ordered separately	Std. pack	Note	
	Standard, black/grey				
	Lockable on handle and switch with up to 3 padlocks. Lockable in 0 position on handle. With door interlock. Lockable on switch in 0 position.	NZM1, N(S)1	NZM1-XTVDV-NA 100683	1 off	Door interlock • Can not be defeated in the locked OFF position. • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on.
		NZM2, N(S)2	NZM2-XTVDV-NA 100684	1 off	
		NZM3, N(S)3	NZM3-XTVDV-NA 100685	1 off	
		NZM4, N(S)4	NZM4-XTVDV-NA 100686	1 off	
	Red-yellow for emergency witching off				
	Lockable on handle and switch with up to 3 padlocks. Lockable in 0 position on handle. With door interlock. Lockable on switch in 0 position.	NZM1, N(S)1	NZM1-XTVDVR-NA 271449	1 off	Door interlock • Can not be defeated in the locked OFF position. • Door opening with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on.
		NZM2, N(S)2	NZM2-XTVDVR-NA 271450	1 off	
		NZM3, N(S)3	NZM3-XTVDVR-NA 271451	1 off	
		NZM4, N(S)4	NZM4-XTVDVR-NA 271452	1 off	
					



Extension shaft

	For use with	Part no. Article no. when ordered separately	Std. pack	Note
400 mm max. mounting depth	NZM1(-4), PN1(-4), N(S)1(-4)	NZM1/2-XV4 261232	1 off	can be cut to required length.
	NZM2(-4), PN2(-4), N(S)2(-4)			
600 mm max. mounting depth	NZM3(-4), PN3(-4), N(S)3(-4)	NZM3/4-XV4 261234	1 off	
	NZM4(-4), N(S)4(-4)			
600 mm max. mounting depth	NZM1(-4), PN1(-4), N(S)1(-4)	NZM1/2-XV6 260191	1 off	
	NZM2(-4), PN2(-4), N(S)2(-4)			
	NZM3(-4), PN3(-4), N(S)3(-4)	NZM3/4-XV6 260193	1 off	
	NZM4(-4), N(S)4(-4)			

NZM1-4 molded case circuit-breakers

Circuit-breakers, switch-disconnectors

1.11

For maximum shaft length 60 mm

Part no.

Article no.
when ordered separately

Std.
pack

Note

Extremely narrow fittings

Part no.

Article no.
when ordered separately

Std.
pack

Note

NZM1-XTVDV-60-NA 100667	1 off	Door interlock • Can not be defeated in the locked OFF position. • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver.	NZM1-XTVDV-0-NA 100675	1 off	Door interlock • Can not be defeated in the locked OFF position. • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver.
NZM2-XTVDV-60-NA 100668	1 off	• Cannot be combined with mechanical interlock • External warning plate/designation label can be clipped on.	NZM2-XTVDV-0-NA 100676	1 off	• Cannot be combined with mechanical interlock • External warning plate/designation label can be clipped on.
NZM3-XTVDV-60-NA 100669	1 off		NZM3-XTVDV-0-NA 100677	1 off	
NZM4-XTVDV-60-NA 100670	1 off		NZM4-XTVDV-0-NA 100678	1 off	
		NZM...-XTVDV-60-NA • For maximum shaft length 60 mm • Without shaft support • Cannot be combined with additional handle NZM...-XDZ • External warning plate/designation label can be clipped on.			
NZM1-XTVDVR-60-NA 100671	1 off	Door interlock • Can not be defeated in the locked OFF position. • Door opening possible with active rotation beyond the 0 position.	NZM1-XTVDVR-0-NA 100679	1 off	Door interlock • Can not be defeated in the locked OFF position. • Door opening possible with active rotation beyond the 0 position.
NZM2-XTVDVR-60-NA 100672	1 off	• Cannot be combined with mechanical interlock • External warning plate/designation label can be clipped on.	NZM2-XTVDVR-0-NA 100680	1 off	• Cannot be combined with mechanical interlock • External warning plate/designation label can be clipped on.
NZM3-XTVDVR-60-NA 100673	1 off		NZM3-XTVDVR-0-NA 100681	1 off	
NZM4-XTVDVR-60-NA 100674	1 off		NZM4-XTVDVR-0-NA 100682	1 off	
		NZM...-XTVDV-60-NA • For maximum shaft length 60 mm • Without shaft support • Cannot be combined with additional handle NZM...-XDZ • External warning plate/designation label can be clipped on.			NZM...-XTVDVR-0-NA • For extremely narrow fittings • With special short extension shaft • Cannot be combined with additional handle NZM...-XDZ • External warning plate/designation label can be clipped on.

Rotary handle on circuit-breaker

Complete with rotary drive

		For use with	Part no. Article no. when ordered separately	Std. pack	Note
Standard, black/grey					
	Lockable in 0 position on switch with upto 3 padlocks.	NZM1(-4), PN1(-4), N1(-4)	NZM1 -XDV 260125	1 off	NZM1,2,3: Can also be combined with insulating surround
		NZM2(-4), PN2(-4), N2(-4)	NZM2 -XDV 260127	1 off	
		NZM3(-4), PN3(-4), N3(-4)	NZM3-XDV 260129	1 off	
		NZM4(-4), N4(-4)	NZM4-XDV 266608	1 off	
	Lockable in 0 position on switch with upto 3 padlocks.	NZM1(-4), PN1(-4), N1(-4)	NZM1-XDVG 285247	1 off	NZM1,2,3: Can also be combined with insulating surround
		NZM2(-4), PN2(-4), N2(-4)	NZM2-XDVG 285248	1 off	
Red-yellow for emergency witching off					
	Lockable in 0 position on switch with upto 3 padlocks.	NZM1(-4), PN1(-4), N1(-4)	NZM1-XDVR 260135	1 off	NZM1,2,3: Can also be combined with insulating surround
		NZM2(-4), PN2(-4), N2(-4)	NZM2-XDVR 260137	1 off	
		NZM3(-4), PN3(-4), N3(-4)	NZM3-XDVR 260140	1 off	
		NZM4(-4), N4(-4)	NZM4-XDVR 266610	1 off	
	Lockable in 0 position on switch with upto 3 padlocks.	NZM1(-4), PN1(-4), N1(-4)	NZM1-XDVGR 285249	1 off	NZM1,2,3: Can also be combined with insulating surround
		NZM2(-4), PN2(-4), N2(-4)	NZM2-XDVGR 285280	1 off	

Notes

Circuit-breaker can also be installed in a lying position 90° left/right, with the handle still in the same position.

Rotary handles on switch with door interlock

Complete with rotary drive and insulating surround

		For use with	Part no. Article no. when ordered separately	Std. pack	Note
		Standard, black/grey			
	Lockable in 0 position on handle with up to 3 padlocks, can also be modified for the I position. Also available with door interlock e.g. for MCC service distribution	NZM1(-4), PN1(-4), N1(-4)	NZM1-XDTV 260131	1 off	Door interlock - In the ON position, can be defeated from the outside using a 1 mm pin - Can not be defeated in the locked OFF and ON positions - Door can be opened in OFF - Can only be switched ON when the door is closed
		NZM2(-4), PN2(-4), N2(-4)	NZM2-XDTV 260133	1 off	
	Red-yellow for emergency witching off				
	Lockable in 0 position on handle with up to 3 padlocks. Also available with door interlock e.g. for MCC service distribution	NZM1(-4), PN1(-4), N1(-4)	NZM1-XDTVR 260142	1 off	
		NZM2(-4), PN2(-4), N2(-4)	NZM2-XDTVR 260144	1 off	

Notes Circuit-breaker can also be installed in a lying position 90° left/right, with the handle still in the same position.

Rotary handles on switch with door interlock for UL/CSA approved NA switches

Differenceto normal IEC handles: Door opening only possible with active rotation beyond the 0 position.

Complete with rotary drive and insulating surround

		For use with	Part no. Article no. when ordered separately	Std. pack	Note
		Standard, black/grey			
	Lockable in 0 position on handle with up to 3 padlocks, can also be modified for the I position. Also available with door interlock e.g. for MCC service distribution	NZM 1 .N1	NZM1-X DTV-NA 271453	1 off	Door interlock - In the ON position, can be defeated from the outside using a 1 mm pin - Can not be defeated in the locked OFF and ON positions - Door opening only possible with active rotation beyond the 0 position. - Can only be switched ON when the door is closed - Cannot be combined with
		NZM 2. N2	NZM2-X DTV-NA 271454	1 off	
	Red-yellow for emergency witching off				
	Lockable in 0 position on handle with up to 3 padlocks. Also available with door interlock e.g. for MCC service distribution	NZM 1 .N1	NZM1-XDTVR-NA 271455	1 off	
		NZM 2. N2	NZM2-XDTVR-NA 271456	1 off	

Notes Circuit-breaker can also be installed in a lying position 90° left/right, with the handle still in the same position.

Main switch assembly kit

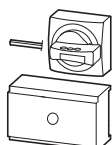
	Part no.	
For use with	Article no. when ordered separately	Std. pack

Main switch assembly kit

Equipment supplied:

- Door coupling rotary handle
- Extension shaft NZM...-XV4
- External warning plate/designation label in German/English
- Black and yellowflash

For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered, see Page 95.
Other external warning plates/designation labels can be clipped on.

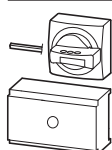


With black door coupling rotary handle

Lockable in 0 position on handle

With door interlock.

NZM1(-4) PN1(-4), N1(-4)	NZM1-XHB 266626	1 off
NZM2(-4) PN2(-4), N2(-4)	NZM2-XHB 266627	1 off
NZM3(-4) PN3(-4), N3(-4)	NZM3-XHB 266628	1 off
NZM4(-4) N4(-4)	NZM4-XHB 271779	1 off



With red door coupling rotary handle for use of switch as emergency switching off device to IEC/EN 60204-1

Lockable in 0 position on handle

With door interlock.

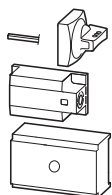
NZM1(-4) PN1(-4), N1(-4)	NZM1-XHBR 266632	1 off
NZM2(-4) PN2(-4), N2(-4)	NZM2-XHBR 266633	1 off
NZM3(-4) PN3(-4), N3(-4)	NZM3-XHBR 266634	1 off
NZM4(-4) N4(-4)	NZM4-XHBR 271842	1 off

Main switch assembly kit for side wall installation with mounting bracket.**For direct mounting of circuit-breaker and handle in the side wall of the control cabinet**

Equipment supplied:

- Door coupling rotary handle
- Extension shaft NZM...-XV4
- External warning plate/designation label in German/English
- Black and yellowflash

For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered, see Page 95.
Other external warning plates/designation labels can be clipped on.



Standard, black/grey

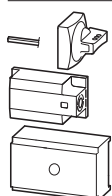
Lockable in 0 position with adequate modification also in I position.

For operation on the left

NZM1(-4) PN1(-4), N1(-4)	NZM1-XS-L 266641	1 off
NZM2(-4) PN2(-4), N2(-4)	NZM2-XS-L 266642	1 off
NZM3(-4) PN3(-4), N3(-4)	NZM3-XS-L 266643	1 off
NZM4(-4) N4(-4)	NZM4-XS-L 289806	1 off

For operation on the right

NZM1(-4) PN1(-4), N1(-4)	NZM1-XS-R 266644	1 off
NZM2(-4) PN2(-4), N2(-4)	NZM2-XS-R 266645	1 off
NZM3(-4) PN3(-4), N3(-4)	NZM3-XS-R 266646	1 off
NZM4(-4) N4(-4)	NZM4-XS-R 289807	1 off



Red-yellow for emergency switching off

For operation on the left

NZM1(-4) PN1(-4), N1(-4)	NZM1-XSR-L 266653	1 off
NZM2(-4) PN2(-4), N2(-4)	NZM2-XSR-L 266654	1 off
NZM3(-4) PN3(-4), N3(-4)	NZM3-XSR-L 266655	1 off
NZM4(-4) N4(-4)	NZM4-XSR-L 289808	1 off

For operation on the right

NZM1(-4) PN1(-4), N1(-4)	NZM1-XSR-R 266656	1 off
NZM2(-4) PN2(-4), N2(-4)	NZM2-XSR-R 266657	1 off
NZM3(-4) PN3(-4), N3(-4)	NZM3-XSR-R 266658	1 off
NZM4(-4) N4(-4)	NZM4-XSR-R 289809	1 off

Main switch assembly kit

Part no.

For use with

Article no.
when ordered separately

Std.
pack

Main switch assembly kit for side wall installation with mounting bracket.

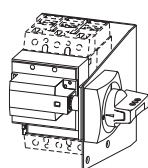
For direct mounting of circuit-breaker and handle in the side wall of the control cabinet

Equipment supplied:

- Door coupling rotary handle
- Mounting bracket
- Special short extension shaft
- External warning plate/designation label in German/English
- Black and yellowflash

For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered, see Page 95

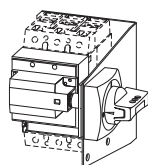
Other external warning plates/designation labels can be clipped on.



Standard, black/grey

Lockable in 0 position with adequate modification also in I position. Minimum clearance between control panel side walls and circuit-breaker is defined by mounting bracket. Extension cannot be used

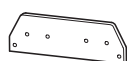
For operation on the left	NZM1(-4) PN1(-4), N1(-4)	NZM1-XSM-L 266663	1 off
For operation on the left	NZM2(-4) PN2(-4), N2(-4)	NZM2-XSM-L 266664	1 off
For operation on the right	NZM1(-4) PN1(-4), N1(-4)	NZM1-XSM-R 266665	1 off
For operation on the right	NZM2(-4) PN2(-4), N2(-4)	NZM2-XSM-R 266666	1 off



Red-yellow for emergency switching off

Lockable in 0 position on handle. Minimum clearance between control panel side walls and circuit-breaker is defined by mounting bracket. Extension cannot be used

For operation on the left	NZM 1(-4) PN1(-4), N1(-4)	NZM1-XSRM-L 266671	1 off
For operation on the left	NZM2(-4) PN2(-4), N2(-4)	NZM2-XSRM-L 266672	1 off
For operation on the right	NZM1(-4) PN1(-4), N1(-4)	NZM1-XSRM-R 266673	1 off
For operation on the right	NZM2(-4) PN2(-4), N2(-4)	NZM2-XSRM-R 266674	1 off



Additional plate

For fitting to the mounting bracket when using neutral conductor or PE conductor terminals K25 K50 k95 or K150.

-	NZM 1(-4) PN1(-4), N1(-4) NZM2(-4) PN2(-4), N2(-4)	NZM1/2-XZB 266676	1 off
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Additional terminal arrangement for side wall operator with mounting bracket

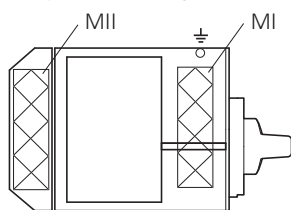
NZM1-XS(R)M-..., NZM2-XS(R)M-...

Additional terminals K25, K50, K95, K150

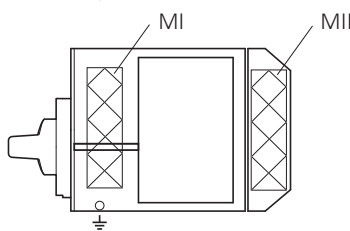
Actuation:

3 pole

For operation on the right

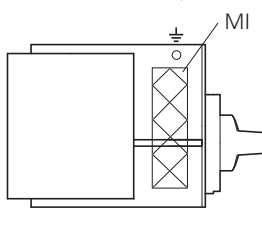


For operation on the left

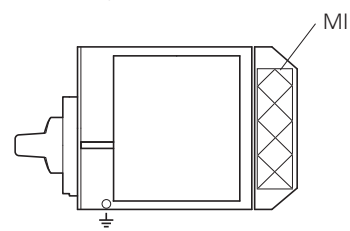


4 pole

For operation on the right



For operation on the left



Mounting areas

Variation options

Maximum number of additional terminal

MI

V1

V2

V3

V4

MII

V1

V2

K25

2 x

—

—

—

—

—

K50

—

2 x

—

—

—

—

K95

—

—

1 x

—

1 x

—

K150

—

—

—

1 x

—

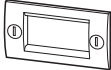
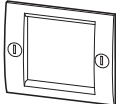
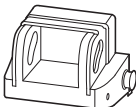
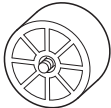
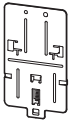
1 x

Example: In mounting area MI, variation option 1 allows the K25 additional terminal to be mounted twice

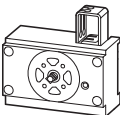
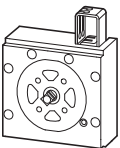
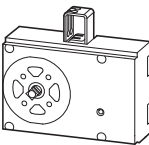
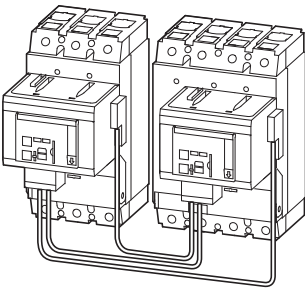
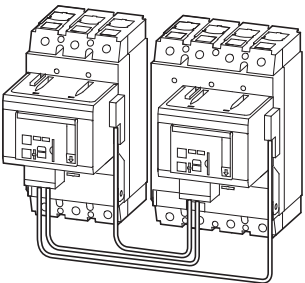
Accessories

For use with		Part no. Article no. when ordered separately	Std. pack	Note																			
External warning plate/designation label																							
Main switch-open in 0 position																							
German/English	NZM1(-4), PN1(-4), N1(-4) NZM2(-4), PN2(-4), N2(-4)	ZFS61/62-NZM7 272525	10 off	A bilingual external warning plate/designation label in German/English is already included in the main switch assembly kit																			
German	NZM3(-4), PN3(-4), N3(-4) NZM4(-4), N4(-4)	ZFS61-NZM7 051089	10 off																				
English		ZFS62-NZM7 065957	10 off																				
French		ZFS63-NZM7 065958	10 off																				
Blank (for engraving or printing)		ZFS60-NZM7 065896	10 off	External warning plates are available in the following languages:																			
Further languages		ZFS*-NZM7 999978	10 off	64 Bulgarian 74 Russian 65 Danish 75 Swedish 66 Finnish 76 Serbo-Croatian 67 Dutch 77 Spanish 68 Italian 78 Czech 69 Greek 79 Turkish 70 Norwegian 80 Hungarian 71 Polish 81 Afrikaans 72 Portuguese 82 Chinese/English 73 Romanian 83 Chinese To obtain the order number, insert the language code number into the part number required. Ordering example External warning plate in Finnish: ZFS66-NZM7																			
Lightning symbol																							
Including terminal marking for main switch																							
small 	<table border="1"><tr><td>U</td><td>X</td><td>L1</td><td>T1</td><td>N</td><td>PE</td></tr><tr><td>V</td><td>Y</td><td>L2</td><td>T2</td><td>Ø</td><td></td></tr><tr><td>W</td><td>Z</td><td>L3</td><td>T3</td><td>PE</td><td></td></tr></table>	U	X	L1	T1	N	PE	V	Y	L2	T2	Ø		W	Z	L3	T3	PE		NZM1(-4), PN1(-4), N1(-4) NZM2(-4), PN2(-4), N2(-4)	BPF-NZM7 217294	10 off	Included as standard in main switch assembly kit
U	X	L1	T1	N	PE																		
V	Y	L2	T2	Ø																			
W	Z	L3	T3	PE																			
large 	<table border="1"><tr><td>U</td><td>X</td><td>L1</td><td>T1</td><td>N</td><td>PE</td></tr><tr><td>V</td><td>Y</td><td>L2</td><td>T2</td><td>Ø</td><td></td></tr><tr><td>W</td><td>Z</td><td>L3</td><td>T3</td><td>PE</td><td></td></tr></table>	U	X	L1	T1	N	PE	V	Y	L2	T2	Ø		W	Z	L3	T3	PE		NZM3(-4), PN3(-4), N3(-4) NZM4(-4), N4(-4)	BPF-NZM10 231363	10 off	Included as standard in main switch assembly kit
U	X	L1	T1	N	PE																		
V	Y	L2	T2	Ø																			
W	Z	L3	T3	PE																			

Accessories

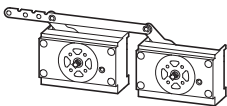
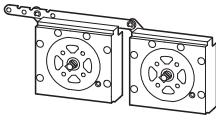
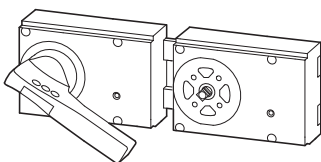
	Part no. Article no. when ordered separately	Std. pack	Note	
For use with				
Additional handle				
Enables switching when control panel door is open				
	NZM1(-4), PN1(-4), N1(-4) NZM2(-4), PN2(-4), N2(-4)	NZM1/2-XDZ 266621	1 off	• Push-fits on to the extension shaft. • 100 mm free extension shaft required
	NZM3(-4), PN3(-4), N3(-4) NZM4(-4), N4(-4)	NZM3/4-XDZ 266622	1 off	
Insulating surround				
For toggle levers, rotary handles with rotary drive and remote operators				
	NZM1(-4) PN12(-4), N1(-4)	NZM1 -XBR 260195	1 off	• For rectangular cut-out on doors and enclosures with material thicknesses of 1.5-5mm • External warning plate/designation label can be clipped on. • NZM4-XBR can not be combined with rotary handle with rotary mechanism.
	NZM2(-4) PN2(-4), N2(-4)	NZM2-XBR 260197	1 off	
	NZM3(- 4) PN3(-4), N3(-4)	NZM3-XBR 284645	1 off	
	NZM4(-4) N4(-4)	NZM4-XBR 284646	1 off	
Toggle lever locking device				
Lockable in Off position with up to three padlocks (haspthickness 4 – 8 mm)				
	NZM1(-4) PN12(-4), N1(-4)	NZM1-XKAV 260199	1 off	Cannot be combined with insulating surround
	NZM2(-4), PN2(-4), N2(-4) NZM3(-4), PN3(-4), N3(-4)	NZM2/3-XKAV 260201	1 off	
Spacers				
Enables fast and attractively priced offsetting of varying construction sizeswith/without rotary handle or remote operator to the same front depth				
	NZM1(-4), PN1(-4), N1(-4) NZM2(-4), PN2(-4), N2(-4)	NZM1/2-XAB 260203	1 set	• Grid depth 17.5 mm, M4 thread • One set contains 4 spacers • Maximum component fitting: NZM1: 4 off perfixing screw, NZM2: 2 off perfixing screw, 2(NZM1) or 4(NZM2) fixing screws contained per switch
	NZM3(-4) PN3(-4), N3(-4) NZM4(-4) N4(-4)	NZM3-XAB 260211	1 set	
Clips				
Allows switches to be clipped on to DIN rails				
	NZM1(-4) PN1(-4) N1(-4)	NZM1-XC35 260213	1 off	For 35 mm top-hat rails
	NZM2 PN2 N2	NZM2 -XC75 260215	1 off	• For 75 mm top-hat rails • Not in combination with remote operator

Mechanical interlock

	For use with	Part no. Article no. when ordered separately	Std. pack	Note
Mechanical interlock for (door coupling) rotary handles				
	NZM1(-4) PN1(-4), N1(-4)	NZM1-XMV 281581	1 off	• Rotary handles on switches or door coupling rotary handles are additionally required. • Cannot be combined with paralleling mechanisms, side wall operators and remote operator as well as NZM4-XBR insulating surrounds. • In order to establish a mechanical interlock at least 2 interlock modules are required. • Possible combinations and interlock variants, see "Installation design". • Order Bowden cable separately
	NZM2(-4) PN2(-4), N2(-4)	NZM2-XMV 281582	1 off	
	NZM3(-4) PN3(-4), N3(-4)	NZM3-XMV 281583	1 off	
	NZM4(-4) PN4(-4), N4(-4)	NZM4-XMV 281584	1 off	
Bowden cables				
	For mechanical interlock for (door coupling) rotary handles			
	NZM1(-4), PN1(-4), N1(-4) NZM2(-4), PN2(-4), N2(-4) NZM3(-4), PN3(-4), N3(-4) NZM4(-4), N4(-4)	NZM-XBZ225 281585	1 off	-
		NZM-XBZ600 281586	1 off	-
		NZM-XBZ1000 281587	1 off	-
Mechanical interlock for remote operator				
	For 2 switches of the same or different construction size with opposed operation. Adjacent mounting			
	NZM2(-4), N2(-4) +NZM2(-4), N2(-4)	NZM2-XMVR 104543	1 off	• Type contains parts for both switches. • Remote operator also required. • Maximum switching distance, see "Installation design". • Cannot be combined with rotary handles, door coupling rotary handles and early-make auxiliary contacts.
	NZM2(-4), N2(-4) +NZM3(-4), N3(-4)	NZM2/3-XMVR 104544	1 off	
	NZM3(-4), N3(-4) +NZM3(-4), N3(-4)	NZM3-XMVR 104545	1 off	
	NZM3(-4), N3(-4) +NZM4(-4), N4(-4)	NZM3 /4-XMVR 104546	1 off	
	NZM4(-4), N4(-4) +NZM4(-4), N4(-4)	NZM4-XMVR 104547	1 off	
	For 2 switches of the same or different construction size with opposed operation. Extra long Bowden cable for mounting one above the other or in adjacent enclosures.			
	NZM2(-4), N2(-4) +NZM2(-4), N2(-4)	NZM2-XMVRL 104548	1 off	• Type contains parts for both switches. • Remote operator also required. • Maximum switching distance, see "Installation design". • Cannot be combined with rotary handles, door coupling rotary handles and early-make auxiliary contacts.
	NZM2(-4), N2(-4) +NZM3(-4), N3(-4)	NZM2/3-XMVRL 104549	1 off	
	NZM3(-4), N3(-4) +NZM3(-4), N3(-4)	NZM3-XMVRL 104550	1 off	
	NZM3(-4), N3(-4) +NZM4(-4), N4(-4)	NZM3/4-XMVRL 104551	1 off	
	NZM4(-4), N4(-4) +NZM4(-4), N4(-4)	NZM4-XMVRL 104552	1 off	

Paralleling mechanism

Simultaneous actuation of 2 PN switch-disconnectors of the same type mounted side-by-side.

	For use with	Part no. Article no. when ordered separately	Std. pack	Note
	PN1(-4)+PN1(-4)	PN1-XPA 283471	1 off	PN1, PN2 • 1 × rotary handle on switch (-XD) supplied. • 1 × door coupling rotary handle (-XTVD) supplied.
	PN2(-4)+PN2(-4)	PN2-XPA 283472	1 off	
	PN3(-4)+PN3(-4)	PN3-XPA 283473	1 off	PN3 • 1 × rotary handle on switch (not lockable) supplied. • 1 × door coupling rotary handle (not lockable) supplied. • Not suitable for use as a main switch

Remote operators

For remote switching of circuit-breakers and switch-disconnect

ON and OFF switching and resetting by means of two-wire or three-wire control

Local switching by hand possible.

Lockable in the 0 position of the remote operator with up to 3 padlocks (hasp thickness: 4-8 mm)



For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately	Std. pack
NZM2(-4) N2(-4)	110-130 V 50/60 Hz	NZM2-XRD110-130AC 115390	1 off
	208-240 V 50/60 Hz	NZM2-XRD208-240AC 115391	1 off
	380-440 V 50/60 Hz	NZM2-XRD380-440AC 115392	1 off
	24-30 V DC	NZM2-XRD24-30DC 115393	1 off
	110-130VDC	NZM2-XRD110-130DC 115394	1 off
	220-250 V DC	NZM2-XRD220-250DC 115395	1 off
NZM3(-4) N3(-4)	110-130 V 50/60 Hz	NZM3-XR110-130AC 259848	1 off
	208-240 V 50/60 Hz	NZM3 -XR208-240AC 259850	1 off
	380-440 V 50/60 Hz	NZM3 -XR380-440AC 259852	1 off
	24-30 V DC	NZM3-XR24-30DC 259854	1 off
	110-130VDC	NZM3-XR110-130 DC 259858	1 off
	220-250 V DC	NZM3-XR220-250 DC 259860	1 off
NZM4(-4) N4(-4)	110-130 V 50/60 Hz	NZM4-XR110-130AC 266684	1 off
	208-240 V 50/60 Hz	NZM4-XR208-240AC 266685	1 off
	380-440 V 50/60 Hz	NZM4 -XR380-440AC¹⁾ 266686	1 off
	24-30 V DC	NZM4-XR24-30DC 266691	1 off
	110-130VDC	NZM4-XR110-130 DC 266693	1 off
	220-250 V DC	NZM4-XR220-250 DC 266694	1 off
Cover for 4th pole Additional shroud for mounting the NZM2-XR... and NZM3-XR... on a 4 pole switch			
NZM3-4 N3-4		NZM2-XAVPR 266677	1 off
NZM3-4 N3-4		NZM3-XAVPR 266678	1 off

Notes

1) NOT UL/CSA approved

Note

Sliding switch for "Auto" or "Manual"

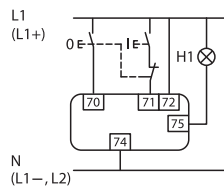
Max. number auxiliary contacts:

- Standard auxiliary contacts: 2
- Trip-indicating auxiliary contact: 1

Cannot be combined with switch-disconnector PN...

Cannot be combined with mechanical interlock

Three-wire control

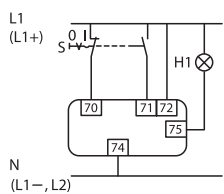


Terminal 70/71:

NZM-XR: Contact loading according to technical data

NZM-XRD: Full current flows through the contact during make and break! RMQ series contact elements can be used for the remote operators .NZM2(3.4)-XR(D)...

Three-wire control



Terminal 75:

NZM-XR: Operational readiness signal when over closed and not locked

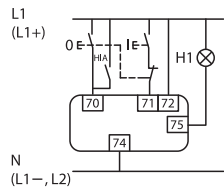
NZM2-XRD: Operational readiness signal when sliding switch set to Auto.

Sliding switch with three positions: Manual/Auto/Locked for reliable differentiation of operating positions.

AC-15: 400 V; 2 A

DC-13: 220V; 0.2 A

Three-wire control with automatic reset to the 0 position after the switch has tripped



Switching cycle:

NZM2-XR



NZM2-XRD



NZM3-XR



NZM2-XRD

NZM4-XR

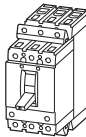
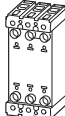


The time interval between OFF and ON is 3 seconds.

ON commands received during the time interval are ignored within the first 3 seconds after switch off.

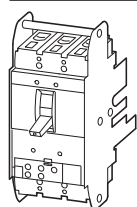
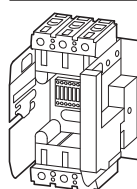
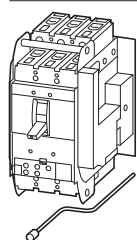
Plug-in units

For circuit-breakers NZM and switch-disconnectors N

	For use with 3P, 4P	Number of poles	Part no. Article no. when ordered with basic unit	Part no. Article no. when ordered separately	Note
	Complete plug-in set Only order with breaker				
	NZM1	3 pole	+NZM1-XSV		NZM1: <i>I</i> _{max} :125A Mounting position: Mounting position: vertical, 90° right, 90° left Only apply for -A,-S trip unit
	NZM2 N2	3 pole	+NZM2-XSV		
	NZM2-4 N2-4	4 pole	+NZM2-4-XSV		
			+NZM3-XSV		NZM2: <i>I</i> _{max} at: • 20°C: 250 A • 40°C: 230 A (NZM...2-...) 250 A (NZM...2-E...)
		+NZM3-4-XSV			
	Plug-in socket				
	NZM1	3 pole		NZM1-XSVS 109777	Mounting position: Vertical, 90° right, 90° left
	NZM2 N2	3 pole		NZM2-XSVS 266699	
	NZM2-4 N2-4	4 pole		NZM2-4-XSVS 266700	Order control circuit plug unit separately!
				NZM3-XSVS 168472	
			NZM3-4-XSVS 168473		
	Plug-in accessory Only order with breaker				
	NZM1	3 pole	+NZM1-XSVE		
	NZM2 N2	3 pole	+NZM 2-XSVE		
	NZM2-4 N2-4	4 pole	+NZM2-4-XSVE		
			+NZM3-XSVE		
		+NZM3-4-XSVE			
	Control circuit plug unit				
	NZM2-4 N2-4	For auxiliary contact, shunt/overvoltage release		NZM2-XSVHI 266705	-
	NZM2-4 N2-4	For remote operator		NZM2-X SVR 266706	-

withdrawable unit with control circuit plug unit

For circuit-breakers NZM and switch-disconnectors N
Not UL/CSA approved



For use with 3P, 4P	Number of poles	Part no. Article no. when ordered with basic unit	Part no. Article no. when ordered separately	Std. pack	Note
Complete withdrawable set					
Only order with breaker					
NZM3 N3	3 pole	+NZM3-XAV		1 off	I_{nmax} at: 20 °C: 605 A (NZM3), 1600 A (NZM4) 40 °C: 550 A (NZM3), 1500 A (NZM4)
NZM3-4 N3-4	4 pole	+NZM3-4-XAV		1 off	
NZM4 N4	3 pole	+NZM4-XAV		1 off	
NZM4-4 N4-4	4 pole	+NZM4-4-XAV		1 off	
Socket base					
NZM3 N3	3 pole		NZM3-XAVS 266711	1 off	Additional electrical indication with auxiliary contacts possible. One N/O or NC contact M22-(C)K01 or M22-(C)K10 each per position. Alternatively also double contacts M22-CK Please refer to RMQ-Titan
NZM3-4 N3-4	4 pole		NZM3-4-XAVS 266712	1 off	
NZM4 N4	3 pole		NZM4-XAVS 266713	1 off	
NZM4-4 N4-4	4 pole		NZM4-4-XAVS 266714	1 off	
Withdrawable carrier					
NZM3 N3	3 pole	+NZM3-XAVE		1 off	Cannot be combined with adapter set NZM4/NZM14 (NZM4-XSAS14-...) or N(ZM)4/N(ZM)12.
NZM3-4 N3-4	4 pole	+NZM3-4-XAVE		1 off	
NZM4 N4	3 pole	+NZM4-XAVE		1 off	
NZM4-4 N4-4	4 pole	+NZM4-4-XAVE		1 off	

Plug-in units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM1					
3 pole	20	25	NZMB1-A20+NZM1-XSVE	NZMB1-A20-E 148154	1 off
	25	25	NZMB1-A25+NZM1-XSVE	NZMB1-A25-E 148155	1 off
	32	25	NZMB1-A32+NZM1-XSVE	NZMB1-A32-E 148156	1 off
	40	25	NZMB1-A40+NZM1-XSVE	NZMB1-A40-E 148157	1 off
	50	25	NZMB1-A50+NZM1-XSVE	NZMB1-A50-E 148158	1 off
	63	25	NZMB1-A63+NZM1-XSVE	NZMB1-A63-E 148159	1 off
	80	25	NZMB1-A80+NZM1-XSVE	NZMB1-A80-E 148160	1 off
	100	25	NZMB1-A100+NZM1-XSVE	NZMB1-A100-E 148161	1 off
	125	25	NZMB1-A125+NZM1-XSVE	NZMB1-A125-E 148162	1 off
	20	36	NZMC1-A20+NZM1-XSVE	NZMC1-A20-E 148173	1 off
	25	36	NZMC1-A25+NZM1-XSVE	NZMC1-A25-E 148174	1 off
	32	36	NZMC1-A32+NZM1-XSVE	NZMC1-A32-E 148175	1 off
	40	36	NZMC1-A40+NZM1-XSVE	NZMC1-A40-E 148176	1 off
	50	36	NZMC1-A50+NZM1-XSVE	NZMC1-A50-E 148177	1 off
	63	36	NZMC1-A63+NZM1-XSVE	NZMC1-A63-E 148178	1 off
	80	36	NZMC1-A80+NZM1-XSVE	NZMC1-A80-E 148179	1 off
	100	36	NZMC1-A100+NZM1-XSVE	NZMC1-A100-E 148180	1 off
	125	36	NZMC1-A125+NZM1-XSVE	NZMC1-A125-E 148181	1 off
	20	50	NZMN1-A20+NZM1-XSVE	NZMN1-A20-E 148192	1 off
	25	50	NZMN1-A25+NZM1-XSVE	NZMN1-A25-E 148193	1 off
	32	50	NZMN1-A32+NZM1-XSVE	NZMN1-A32-E 148194	1 off
	40	50	NZMN1-A40+NZM1-XSVE	NZMN1-A40-E 148195	1 off
	50	50	NZMN1-A50+NZM1-XSVE	NZMN1-A50-E 148196	1 off
	63	50	NZMN1-A63+NZM1-XSVE	NZMN1-A63-E 148197	1 off
	80	50	NZMN1-A80+NZM1-XSVE	NZMN1-A80-E 148198	1 off
	100	50	NZMN1-A100+NZM1-XSVE	NZMN1-A100-E 148199	1 off
	125	50	NZMN1-A125+NZM1-XSVE	NZMN1-A125-E 148200	1 off

Plug-in units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM1					
3 pole	20	70	NZMS1-A20+NZM1-XSVE	NZMS1-A20-E 148211	1 off
	25	70	NZMS1-A25+NZM1-XSVE	NZMS1-A25-E 148212	1 off
	32	70	NZMS1-A32+NZM1-XSVE	NZMS1-A32-E 148213	1 off
	40	70	NZMS1-A40+NZM1-XSVE	NZMS1-A40-E 148214	1 off
	50	70	NZMS1-A50+NZM1-XSVE	NZMS1-A50-E 148215	1 off
	63	70	NZMS1-A63+NZM1-XSVE	NZMS1-A63-E 148216	1 off
	80	70	NZMS1-A80+NZM1-XSVE	NZMS1-A80-E 148217	1 off
	100	70	NZMS1-A100+NZM1-XSVE	NZMS1-A100-E 148218	1 off
	125	70	NZMS1-A125+NZM1-XSVE	NZMS1-A125-E 148219	1 off
	20	100	NZMH1-A20+NZM1-XSVE	NZMH1-A20-E 148225	1 off
	25	100	NZMH1-A25+NZM1-XSVE	NZMH1-A25-E 148226	1 off
	32	100	NZMH1-A32+NZM1-XSVE	NZMH1-A32-E 148227	1 off
	40	100	NZMH1-A40+NZM1-XSVE	NZMH1-A40-E 148228	1 off
	50	100	NZMH1-A50+NZM1-XSVE	NZMH1-A50-E 148229	1 off
	63	100	NZMH1-A63+NZM1-XSVE	NZMH1-A63-E 148230	1 off
	80	100	NZMH1-A80+NZM1-XSVE	NZMH1-A80-E 148231	1 off
	100	100	NZMH1-A100+NZM1-XSVE	NZMH1-A100-E 148232	1 off
	125	100	NZMH1-A125+NZM1-XSVE	NZMH1-A125-E 148233	1 off
NZM2					
3 pole	125	25	NZMB2-A125+NZM2-XSVE	NZMB2-A125-E 148247	1 off
	160	25	NZMB2-A160+NZM2-XSVE	NZMB2-A160-E 148248	1 off
	200	25	NZMB2-A200+NZM2-XSVE	NZMB2-A200-E 148249	1 off
	250	25	NZMB2-A250+NZM2-XSVE	NZMB2-A250-E 148250	1 off
	125	36	NZMC2-A125+NZM2-XSVE	NZMC2-A125-E 148264	1 off
	160	36	NZMC2-A160+NZM2-XSVE	NZMC2-A160-E 148265	1 off
	200	36	NZMC2-A200+NZM2-XSVE	NZMC2-A200-E 148266	1 off
	250	36	NZMC2-A250+NZM2-XSVE	NZMC2-A250-E 148267	1 off

Plug-in units

	Rated current I _n (A)	Switching capacity I _{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM2					
3 pole	125	50	NZMN2-A125+NZM2-XSVE	NZMN2-A125-E 148281	1 off
	160	50	NZMN2-A160+NZM2-XSVE	NZMN2-A160-E 148282	1 off
	200	50	NZMN2-A200+NZM2-XSVE	NZMN2-A200-E 148283	1 off
	250	50	NZMN2-A250+NZM2-XSVE	NZMN2-A250-E 148284	1 off
	40	70	NZMS2-A40+NZM2-XSVE	NZMS2-A40-E 148309	1 off
	50	70	NZMS2-A50+NZM2-XSVE	NZMS2-A50-E 148310	1 off
	63	70	NZMS2-A63+NZM2-XSVE	NZMS2-A63-E 148311	1 off
	80	70	NZMS2-A80+NZM2-XSVE	NZMS2-A80-E 148312	1 off
	100	70	NZMS2-A100+NZM2-XSVE	NZMS2-A100-E 148313	1 off
	125	70	NZMS2-A125+NZM2-XSVE	NZMS2-A125-E 148314	1 off
	160	70	NZMS2-A160+NZM2-XSVE	NZMS2-A160-E 148315	1 off
	200	70	NZMS2-A200+NZM2-XSVE	NZMS2-A200-E 148316	1 off
	250	70	NZMS2-A250+NZM2-XSVE	NZMS2-A250-E 148317	1 off
	20	150	NZMH2-A20+NZM2-XSVE	NZMH2-A20-E 148350	1 off
	25	150	NZMH2-A25+NZM2-XSVE	NZMH2-A25-E 148351	1 off
	32	150	NZMH2-A32+NZM2-XSVE	NZMH2-A32-E 148352	1 off
	40	150	NZMH2-A40+NZM2-XSVE	NZMH2-A40-E 148353	1 off
	50	150	NZMH2-A50+NZM2-XSVE	NZMH2-A50-E 148354	1 off
	63	150	NZMH2-A63+NZM2-XSVE	NZMH2-A63-E 148355	1 off
	80	150	NZMH2-A80+NZM2-XSVE	NZMH2-A80-E 148356	1 off
	100	150	NZMH2-A100+NZM2-XSVE	NZMH2-100-E 148357	1 off
	125	150	NZMH2-A125+NZM2-XSVE	NZMH2-A125-E 148358	1 off
	160	150	NZMH2-A160+NZM2-XSVE	NZMH2-A160-E 148359	1 off
	200	150	NZMH2-A200+NZM2-XSVE	NZMH2-A200-E 148360	1 off
	250	150	NZMH2-A250+NZM2-XSVE	NZMH2-A250-E 148361	1 off

Plug-in units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM2					
4 pole	125	25	NZMB2-4-A125+NZM2-4-XSVE	NZMB2-4-A125-E 148257	1 off
	160	25	NZMB2-4-A160+NZM2-4-XSVE	NZMB2-4-A160-E 148258	1 off
	200	25	NZMB2-4-A200+NZM2-4-XSVE	NZMB2-4-A200-E 148260	1 off
	250	25	NZMB2-4-A250+NZM2-4-XSVE	NZMB2-4-A250-E 148262	1 off
	125	36	NZMC2-4-A125+NZM2-4-XSVE	NZMC2-4-A125-E 148274	1 off
	160	36	NZMC2-4-A160+NZM2-4-XSVE	NZMC2-4-A160-E 148275	1 off
	200	36	NZMC2-4-A200+NZM2-4-XSVE	NZMC2-4-A200-E 148277	1 off
	250	36	NZMC2-4-A250+NZM2-4-XSVE	NZMC2-4-A250-E 148279	1 off
	125	50	NZMN2-4-A125+NZM2-4-XSVE	NZMN2-4-A125-E 148297	1 off
	160	50	NZMN2-4-A160+NZM2-4-XSVE	NZMN2-4-A160-E 148298	1 off
	200	50	NZMN2-4-A200+NZM2-4-XSVE	NZMN2-4-A200-E 148300	1 off
	250	50	NZMN2-4-A250+NZM2-4-XSVE	NZMN2-4-A250-E 148302	1 off
	125	50	NZMS2-4-A125+NZM2-4-XSVE	NZMS2-4-A125-E 148338	1 off
	160	50	NZMS2-4-A160+NZM2-4-XSVE	NZMS2-4-A160-E 148339	1 off
	200	50	NZMS2-4-A200+NZM2-4-XSVE	NZMS2-4-A200-E 148341	1 off
	250	50	NZMS2-4-A250+NZM2-4-XSVE	NZMS2-4-A250-E 148343	1 off
	20	150	NZMH2-4-A20+NZM2-4-XSVE	NZMH2-4-A20-E 148387	1 off
	25	150	NZMH2-4-A25+NZM2-4-XSVE	NZMH2-4-A25-E 148388	1 off
	32	150	NZMH2-4-A32+NZM2-4-XSVE	NZMH2-4-A32-E 148389	1 off
	40	150	NZMH2-4-A40+NZM2-4-XSVE	NZMH2-4-A40-E 148390	1 off
	50	150	NZMH2-4-A50+NZM2-4-XSVE	NZMH2-4-A50-E 148391	1 off
	63	150	NZMH2-4-A63+NZM2-4-XSVE	NZMH2-4-A63-E 148392	1 off
	80	150	NZMH2-4-A80+NZM2-4-XSVE	NZMH2-4-A80-E 148393	1 off
	100	150	NZMH2-4-A100+NZM2-4-XSVE	NZMH2-4-A100-E 148394	1 off
	125	150	NZMH2-4-A125+NZM2-4-XSVE	NZMH2-4-A125-E 148395	1 off
	160	150	NZMH2-4-A160+NZM2-4-XSVE	NZMH2-4-A160-E 148396	1 off
	200	150	NZMH2-4-A200+NZM2-4-XSVE	NZMH2-4-A200-E 148398	1 off
	250	150	NZMH2-4-A250+NZM2-4-XSVE	NZMH2-4-A250-E 148400	1 off

Withdrawable units

	Rated current I _n (A)	Switching capacity I _{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM3					
3 pole	320	36	NZMC3-A320+NZM3-XAVE	NZMC3-A320-E 148413	1 off
	400	36	NZMC3-A400+NZM3-XAVE	NZMC3-A400-E 148414	1 off
	500	36	NZMC3-A500+NZM3-XAVE	NZMC3-A500-E 148415	1 off
	320	50	NZMN3-A320+NZM3-XAVE	NZMN3-A320-E 148427	1 off
	400	50	NZMN3-A400+NZM3-XAVE	NZMN3-A400-E 148428	1 off
	500	50	NZMN3-A500+NZM3-XAVE	NZMN3-A500-E 148429	1 off
	320	85	NZMH3-A320+NZM3-XAVE	NZMH3-A320-E 148464	1 off
	400	85	NZMH3-A400+NZM3-XAVE	NZMH3-A400-E 148465	1 off
	500	85	NZMH3-A500+NZM3-XAVE	NZMH3-A500-E 148466	1 off
4 pole	320	36	NZMC3-4-A320+NZM3-XAVE	NZMC3-4-A320-E 148420	1 off
	400	36	NZMC3-4-A400+NZM3-XAVE	NZMC3-4-A400-E 148422	1 off
	500	36	NZMC3-4-A500+NZM3-XAVE	NZMC3-4-A500-E 148424	1 off
	320	50	NZMN3-4-A320+NZM3-XAVE	NZMN3-4-A320-E 148440	1 off
	400	50	NZMN3-4-A400+NZM3-XAVE	NZMN3-4-A400-E 148442	1 off
	500	50	NZMN3-4-A500+NZM3-XAVE	NZMN3-4-A500-E 148444	1 off
	320	85	NZMH3-4-A320+NZM3-XAVE	NZMH3-4-A320-E 148478	1 off
	400	85	NZMH3-4-A400+NZM3-XAVE	NZMH3-4-A400-E 148480	1 off
	500	85	NZMH3-4-A500+NZM3-XAVE	NZMH3-4-A500-E 148482	1 off

Plug-in units

	Rated current I _n (A)	Switching capacity I _{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM3					
3 pole	320	36	NZMC3-A320+NZM3-XSVE	NZMC3-A320-S 168457	1 off
	400	36	NZMC3-A400+NZM3-XSVE	NZMC3-A400-S 168458	1 off
	500	36	NZMC3-A500+NZM3-XSVE	NZMC3-A500-S 168459	1 off
	320	50	NZMN3-A320+NZM3-XSVE	NZMN3-A320-S 168493	1 off
	400	50	NZMN3-A400+NZM3-XSVE	NZMN3-A400-S 168494	1 off
	500	50	NZMN3-A500+NZM3-XSVE	NZMN3-A500-S 168495	1 off
4 pole	320	36	NZMC3-4-A320+NZM3-XSVE	NZMC3-4-A320-S 168474	1 off
	400	36	NZMC3-4-A400+NZM3-XSVE	NZMC3-4-A400-S 168476	1 off
	500	36	NZMC3-4-A500+NZM3-XSVE	NZMC3-4-A500-S 168478	1 off
	320	50	NZMN3-4-A320+NZM3-XSVE	NZMN3-4-A320-S 168516	1 off
	400	50	NZMN3-4-A400+NZM3-XSVE	NZMN3-4-A400-S 168518	1 off
	500	50	NZMN3-4-A500+NZM3-XSVE	NZMN3-4-A500-S 168520	1 off
	500	50	NZMN3-4-A500R+NZM3-XSVE	NZMN3-4-A500R-S 168521	1 off

Plug-in units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM1					
3 pole	40	25	NZMB1-S40+NZM1-XSVE	NZMB1-S40-E 148163	1 off
	50	25	NZMB1-S50+NZM1-XSVE	NZMB1-S50-E 148164	1 off
	63	25	NZMB1-S63+NZM1-XSVE	NZMB1-S63-E 148165	1 off
	80	25	NZMB1-S80+NZM1-XSVE	NZMB1-S80-E 148166	1 off
	100	25	NZMB1-S100+NZM1-XSVE	NZMB1-S100-E 148167	1 off
	40	36	NZMC1-S40+NZM1-XSVE	NZMC1-S40-E 148182	1 off
	50	36	NZMC1-S50+NZM1-XSVE	NZMC1-S50-E 148183	1 off
	63	36	NZMC1-S63+NZM1-XSVE	NZMC1-S63-E 148184	1 off
	80	36	NZMC1-S80+NZM1-XSVE	NZMC1-S80-E 148185	1 off
	100	36	NZMC1-S100+NZM1-XSVE	NZMC1-S100-E 148186	1 off
	40	50	NZMN1-S40+NZM1-XSVE	NZMN1-S40-E 148201	1 off
	50	50	NZMN1-S50+NZM1-XSVE	NZMN1-S50-E 148202	1 off
	63	50	NZMN1-S63+NZM1-XSVE	NZMN1-S63-E 148203	1 off
	80	50	NZMN1-S80+NZM1-XSVE	NZMN1-S80-E 148204	1 off
	100	50	NZMN1-S100+NZM1-XSVE	NZMN1-S100-E 148205	1 off
	40	70	NZMS1-S40+NZM1-XSVE	NZMS1-S40-E 148220	1 off
	50	70	NZMS1-S50+NZM1-XSVE	NZMS1-S50-E 148221	1 off
	63	70	NZMS1-S63+NZM1-XSVE	NZMS1-S63-E 148222	1 off
	80	70	NZMS1-S80+NZM1-XSVE	NZMS1-S80-E 148223	1 off
	100	70	NZMS1-S100+NZM1-XSVE	NZMS1-S100-E 148224	1 off
	40	100	NZMH1-S40+NZM1-XSVE	NZMH1-S40-E 148234	1 off
	50	100	NZMH1-S50+NZM1-XSVE	NZMH1-S50-E 148235	1 off
	63	100	NZMH1-S63+NZM1-XSVE	NZMH1-S63-E 148236	1 off
	80	100	NZMH1-S80+NZM1-XSVE	NZMH1-S80-E 148237	1 off
	100	100	NZMH1-S100+NZM1-XSVE	NZMH1-S100-E 148238	1 off
NZM2					
3 pole	125	25	NZMB2-S125+NZM2-XSVE	NZMB2-S125-E 148251	1 off
	160	25	NZMB2-S160+NZM2-XSVE	NZMB2-S160-E 148252	1 off
	200	25	NZMB2-S200+NZM2-XSVE	NZMB2-S200-E 148253	1 off

Withdrawable units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM2					
3 pole	125	36	NZMC2-S125+NZM2-XSVE	NZMC2-S125-E 148268	1 off
	160	36	NZMC2-S160+NZM2-XSVE	NZMC2-S160-E 148269	1 off
	200	36	NZMC2-S200+NZM2-XSVE	NZMC2-S200-E 148270	1 off
	125	50	NZMN2-S125+NZM2-XSVE	NZMN2-S125-E 148285	1 off
	160	50	NZMN2-S160+NZM2-XSVE	NZMN2-S160-E 148286	1 off
	200	50	NZMN2-S200+NZM2-XSVE	NZMN2-S200-E 148287	1 off
	125	70	NZMS2-S125+NZM2-XSVE	NZMS2-S125-E 148318	1 off
	160	70	NZMS2-S160+NZM2-XSVE	NZMS2-S160-E 148319	1 off
	200	70	NZMS2-S200+NZM2-XSVE	NZMS2-S200-E 148320	1 off
	40	150	NZMH2-S40+NZM2-XSVE	NZMH2-S40-E 148362	1 off
	50	150	NZMH2-S50+NZM2-XSVE	NZMH2-S50-E 148363	1 off
	63	150	NZMH2-S63+NZM2-XSVE	NZMH2-S63-E 148364	1 off
	80	150	NZMH2-S80+NZM2-XSVE	NZMH2-S80-E 148365	1 off
	100	150	NZMH2-S100+NZM2-XSVE	NZMH2-S100-E 148366	1 off
	125	150	NZMH2-S125+NZM2-XSVE	NZMH2-S125-E 148367	1 off
	160	150	NZMH2-S160+NZM2-XSVE	NZMH2-S160-E 148368	1 off
	200	150	NZMH2-S200+NZM2-XSVE	NZMH2-S200-E 148369	1 off
NZM3					
3 pole	250	36	NZMC3-S250+NZM3-XAVE	NZMC3-S250-E 148416	1 off
	320	36	NZMC3-S320+NZM3-XAVE	NZMC3-S320-E 148417	1 off
	400	36	NZMC3-S400+NZM3-XAVE	NZMC3-S400-E 148418	1 off
	500	36	NZMC3-S500+NZM3-XAVE	NZMC3-S500-E 148419	1 off
	250	50	NZMN3-S250+NZM3-XAVE	NZMN3-S250-E 148430	1 off
	320	50	NZMN3-S320+NZM3-XAVE	NZMN3-S320-E 148431	1 off
	400	50	NZMN3-S400+NZM3-XAVE	NZMN3-S400-E 148432	1 off
	500	50	NZMN3-S500+NZM3-XAVE	NZMN3-S500-E 148433	1 off
	250	150	NZMH3-S250+NZM3-XAVE	NZMH3-S250-E 148468	1 off
	320	150	NZMH3-S320+NZM3-XAVE	NZMH3-S320-E 148469	1 off
	400	150	NZMH3-S400+NZM3-XAVE	NZMH3-S400-E 148470	1 off
	500	150	NZMH3-S500+NZM3-XAVE	NZMH3-S500-E 148471	1 off

Plug-in units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM3					
3 pole	250	36	NZMC3-S250+NZM3-XSVE	NZMC3-S250-S 168460	1 off
	320	36	NZMC3-S320+NZM3-XSVE	NZMC3-S320-S 168461	1 off
	400	36	NZMC3-S400+NZM3-XSVE	NZMC3-S400-S 168462	1 off
	500	36	NZMC3-S500+NZM3-XSVE	NZMC3-S500-S 168463	1 off
	250	50	NZMN3-S250+NZM3-XSVE	NZMN3-S250-S 168496	1 off
	320	50	NZMN3-S320+NZM3-XSVE	NZMN3-S320-S 168497	1 off
	400	50	NZMN3-S400+NZM3-XSVE	NZMN3-S400-S 168498	1 off
	500	50	NZMN3-S500+NZM3-XSVE	NZMN3-S500-S 168499	1 off

Plug-in units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM1					
3 pole	40	25	NZMB1-M40+NZM1-XSVE	NZMB1-M40-E 148168	1 off
	50	25	NZMB1-M50+NZM1-XSVE	NZMB1-M50-E 148169	1 off
	63	25	NZMB1-M63+NZM1-XSVE	NZMB1-M63-E 148170	1 off
	80	25	NZMB1-M80+NZM1-XSVE	NZMB1-M80-E 148171	1 off
	100	25	NZMB1-M100+NZM1-XSVE	NZMB1-M100-E 148172	1 off
	40	36	NZMC1-M40+NZM1-XSVE	NZMC1-M40-E 148187	1 off
	50	36	NZMC1-M50+NZM1-XSVE	NZMC1-M50-E 148188	1 off
	63	36	NZMC1-M63+NZM1-XSVE	NZMC1-M63-E 148189	1 off
	80	36	NZMC1-M80+NZM1-XSVE	NZMC1-M80-E 148190	1 off
	100	36	NZMC1-M100+NZM1-XSVE	NZMC1-M100-E 148191	1 off
	40	50	NZMN1-M40+NZM1-XSVE	NZMN1-M40-E 148206	1 off
	50	50	NZMN1-M50+NZM1-XSVE	NZMN1-M50-E 148207	1 off
	63	50	NZMN1-M63+NZM1-XSVE	NZMN1-M63-E 148208	1 off
	80	50	NZMN1-M80+NZM1-XSVE	NZMN1-M80-E 148209	1 off
	100	50	NZMN1-M100+NZM1-XSVE	NZMN1-M100-E 148210	1 off
	40	100	NZMH1-M40+NZM1-XSVE	NZMH1-M40-E 148239	1 off
	50	100	NZMH1-M50+NZM1-XSVE	NZMH1-M50-E 148240	1 off
	63	100	NZMH1-M63+NZM1-XSVE	NZMH1-M63-E 148241	1 off
	80	100	NZMH1-M80+NZM1-XSVE	NZMH1-M80-E 148242	1 off
	100	100	NZMH1-M100+NZM1-XSVE	NZMH1-M100-E 148243	1 off

Plug-in units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM2					
3 pole	125	25	NZMB2-M125+NZM2-XSVE	NZMB2-M125-E 148254	1 off
	160	25	NZMB2-M160+NZM2-XSVE	NZMB2-M160-E 148255	1 off
	200	25	NZMB2-M200+NZM2-XSVE	NZMB2-M200-E 148256	1 off
	125	36	NZMC2-M125+NZM2-XSVE	NZMC2-M125-E 148271	1 off
	160	36	NZMC2-M160+NZM2-XSVE	NZMC2-M160-E 148272	1 off
	200	36	NZMC2-M200+NZM2-XSVE	NZMC2-M200-E 148273	1 off
	125	50	NZMN2-M125+NZM2-XSVE	NZMN2-M125-E 148288	1 off
	160	50	NZMN2-M160+NZM2-XSVE	NZMN2-M160-E 148289	1 off
	200	50	NZMN2-M200+NZM2-XSVE	NZMN2-M200-E 148290	1 off
	20	70	NZMS2-M20+NZM2-XSVE	NZMS2-M20-E 148321	1 off
	25	70	NZMS2-M25+NZM2-XSVE	NZMS2-M25-E 148322	1 off
	32	70	NZMS2-M32+NZM2-XSVE	NZMS2-M32-E 148323	1 off
	40	70	NZMS2-M40+NZM2-XSVE	NZMS2-M40-E 148324	1 off
	50	70	NZMS2-M50+NZM2-XSVE	NZMS2-M50-E 148325	1 off
	63	70	NZMS2-M63+NZM2-XSVE	NZMS2-M63-E 148326	1 off
	80	70	NZMS2-M80+NZM2-XSVE	NZMS2-M80-E 148327	1 off
	100	70	NZMS2-M100+NZM2-XSVE	NZMS2-M100-E 148328	1 off
	125	70	NZMS2-M 125+NZM2-XSVE	NZMS2-M125-E 148329	1 off
	160	70	NZMS2-M 160+NZM2-XSVE	NZMS2-M160-E 148330	1 off
	200	70	NZMS2-M200+NZM2-XSVE	NZMS2-M200-E 148331	1 off
	20	150	NZMH2-M20+NZM2-XSVE	NZMH2-M20-E 148370	1 off
	25	150	NZMH2-M25+NZM2-XSVE	NZMH2-M25-E 148371	1 off
	32	150	NZMH2-M32+NZM2-XSVE	NZMH2-M32-E 148372	1 off
	40	150	NZMH2-M40+NZM2-XSVE	NZMH2-M40-E 148373	1 off
	50	150	NZMH2-M50+NZM2-XSVE	NZMH2-M50-E 148374	1 off
	63	150	NZMH2-M63+NZM2-XSVE	NZMH2-M63-E 148375	1 off
	80	150	NZMH2-M80+NZM2-XSVE	NZMH2-M80-E 148376	1 off
	100	150	NZMH2-M100+NZM2-XSVE	NZMH2-M100-E 148377	1 off
	125	150	NZMH2-M125+NZM2-XSVE	NZMH2-M125-E 148378	1 off
	160	150	NZMH2-M160+NZM2-XSVE	NZMH2-M160-E 148379	1 off
	200	150	NZMH2-M200+NZM2-XSVE	NZMH2-M200-E 148380	1 off

Withdrawable units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM3					
3 pole	630	50	NZMN3-AE630+NZM3-XAVE	NZMN3-AE630-E 148426	1 off
	630	70	NZMS3-AE630+NZM3-XAVE	NZMS3-AE630-E 148452	1 off
	630	100	NZMH3-AE630+NZM3-XAVE	NZMH3-AE630-E 148467	1 off
4 pole	630	50	NZMN3-4-AE630+NZM3-4-XAVE	NZMN3-4-AE630-E 148446	1 off
	630	70	NZMS3-4-AE630+NZM3-4-XAVE	NZMS3-4-AE630-E 148458	1 off
	630	150	NZMH3-4-AE630+NZM3-4-XAVE	NZMH3-4-AE630-E 148484	1 off
NZM4					
3 pole	630	50	NZMN4-AE630+NZM4-XAVE	NZMN4-AE630-E 148494	1 off
	800	50	NZMN4-AE800+NZM4-XAVE	NZMN4-AE800-E 148495	1 off
	1000	50	NZM N4-AE1000+NZM4-XAVE	NZMN4-AE1000-E 148496	1 off
	1250	50	NZMN4-AE1250+NZM4-XAVE	NZMN4-AE1250-E 148497	1 off
	1600	50	NZM N4-AE1600+NZM4-XAVE	NZMN4-AE1600-E 148498	1 off
	630	85	NZMH4-AE630+NZM4-XAVE	NZMH4-AE630-E 148523	1 off
	800	85	NZMH4-AE800+NZM4-XAVE	NZMH4-AE800-E 148524	1 off
	1000	85	NZM H4-AE1000+NZM4-XAVE	NZMH4-AE1000-E 148525	1 off
	1250	85	NZM H4-AE1250+NZM4-XAVE	NZMH4-AE1250-E 148526	1 off
	1600	85	NZM H4-AE1600+NZM4-XAVE	NZMH4-AE1600-E 148527	1 off
	800	50	NZM N4-4-AE800+NZM4-4-XAVE	NZMN4-4-AE800-E 148507	1 off
4 pole	1000	50	NZM N4-4-AE1000+NZM4-4-XAVE	NZMN4-4-AE1000-E 148509	1 off
	1250	50	NZM N4-4-AE1250+NZM4-4-XAVE	NZMN4-4-AE1250-E 148511	1 off
	1600	50	NZM N4-4-AE1600+NZM4-4-XAVE	NZMN4-4-AE1600-E 148513	1 off
	800	85	NZM H4-4-AE800+NZM4-4-XAVE	NZMH4-4-AE800-E 148536	1 off
	1000	85	NZM H4-4-AE1000+NZM4-4-XAVE	NZMH4-4-AE1000-E 148538	1 off
	1250	85	NZM H4-4-AE1250+NZM4-4-XAVE	NZMH4-4-AE1250-E 148540	1 off
	1600	85	NZM H4-4-AE1600+NZM4-4-XAVE	NZMH4-4-AE1600-E 148542	1 off

Withdrawable units

	Rated current I _n (A)	Switching capacity I _{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM2					
3 pole	90	50	NZMN2-ME90+NZM2-XSVE	NZMN2-ME90-E 148291	1 off
	140	50	NZMN2-ME140+NZM2-XSVE	NZMN2-ME140-E 148292	1 off
	220	50	NZMN2-ME220+NZM2-XSVE	NZMN2-ME220-E 148293	1 off
	90	70	NZMS2-ME90+NZM2-XSVE	NZMS2-ME90-E 148332	1 off
	140	70	NZMS2-ME140+NZM2-XSVE	NZMS2-ME140-E 148333	1 off
	220	70	NZMS2-ME220+NZM2-XSVE	NZMS2-ME220-E 148334	1 off
	90	150	NZMH2-ME90+NZM2-XSVE	NZMH2-ME90-E 148381	1 off
	140	150	NZMH2-ME140+NZM2-XSVE	NZMH2-ME140-E 148382	1 off
	220	150	NZMH2-ME220+NZM2-XSVE	NZMH2-ME220-E 148383	1 off
NZM3					
3 pole	220	70	NZMS3-ME220+NZM3-XAVE	NZMS3-ME220-E 148453	1 off
	350	70	NZMS3-ME350+NZM3-XAVE	NZMS3-ME350-E 148454	1 off
	450	70	NZMS3-ME450+NZM3-XAVE	NZMS3-ME450-E 148455	1 off
	220	150	NZMH3-ME220+NZM3-XAVE	NZMH3-ME220-E 148472	1 off
	350	150	NZMH3-ME350+NZM3-XAVE	NZMH3-ME350-E 148473	1 off
	450	150	NZMH3-ME450+NZM3-XAVE	NZMH3-ME450-E 148474	1 off
NZM4					
3 pole	550	50	NZMN4-ME550+NZM4-XAVE	NZMN4-ME550-E 148499	1 off
	875	50	NZMN4-ME875+NZM4-XAVE	NZMN4-ME875-E 148500	1 off
	1400	50	NZM N4-M E 1400+NZM4-XAVE	NZMN4-ME1400-E 148501	1 off
	550	85	NZMH4-ME550+NZM4-XAVE	NZMH4-ME550-E 148528	1 off
	875	85	NZMH4-ME875+NZM4-XAVE	NZMH4-ME875-E 148529	1 off
	1400	85	NZM H4-M E 1400+NZM4-XAVE	NZMH4-ME1400-E 148530	1 off
NZM2					
3 pole	100	50	NZMN2-VE100+NZM2-XSVE	NZMN2-VE100-E 148294	1 off
	160	50	NZMN2-VE160+NZM2-XSVE	NZMN2-VE160-E 148295	1 off
	250	50	NZMN2-VE250+NZM2-XSVE	NZMN2-VE250-E 148296	1 off
	100	70	NZMS2-VE100+NZM2-XSVE	NZMS2-VE100-E 148335	1 off
	160	70	NZMS2-VE160+NZM2-XSVE	NZMS2-VE160-E 148336	1 off
	250	70	NZMS2-VE250+NZM2-XSVE	NZMS2-VE250-E 148337	1 off
	100	150	NZMH2-VE100+NZM2-XSVE	NZMH2-VE100-E 148384	1 off
	160	150	NZMH2-VE160+NZM2-XSVE	NZMH2-VE160-E 148385	1 off
	250	150	NZMH2-VE250+NZM2-XSVE	NZMH2-VE250-E 148386	1 off

Withdrawable units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM2					
4 pole	100	50	NZM N2-4-VE 100+NZM2-4-XSVE	NZMN2-4-VE100-E 148304	1 off
	160	50	NZM N2-4-VE 160+NZM2-4-XSVE	NZMN2-4-VE160-E 148305	1 off
	250	50	NZM N2-4-VE250+NZM2-4-XSVE	NZMN2-4-VE250-E 148307	1 off
	100	70	NZMS2-4-VE100+NZM2-4-XSVE	NZMS2-4-VE100-E 148345	1 off
	160	70	NZMS2-4-VE160+NZM2-4-XSVE	NZMS2-4-VE160-E 148346	1 off
	250	70	NZMS2-4-VE250+NZM2-4-XSVE	NZMS2-4-VE250-E 148348	1 off
	100	150	NZM H2-4-VE 100+NZM2-4-XSVE	NZMH2-4-VE100-E 148402	1 off
	160	150	NZM H2-4-VE 160+NZM2-4-XSVE	NZMH2-4-VE160-E 148403	1 off
	250	150	NZM H2-4-VE250+NZM2-4-XSVE	NZMH2-4-VE250-E 148405	1 off
NZM3					
3 pole	250	50	NZMN3-VE250+NZM3-XAVE	NZMN3-VE250-E 148437	1 off
	400	50	NZMN3-VE400+NZM3-XAVE	NZMN3-VE400-E 148438	1 off
	630	50	NZMN3-VE630+NZM3-XAVE	NZMN3-VE630-E 148439	1 off
	400	70	NZMS3-VE400+NZM3-XAVE	NZMS3-VE400-E 148456	1 off
NZM3					
3 pole	630	70	NZMS3-VE630+NZM3-XAVE	NZMS3-VE630-E 148457	1 off
	250	70	NZMH3-VE250+NZM3-XAVE	NZMH3-VE250-E 148475	1 off
	400	150	NZMH3-VE400+NZM3-XAVE	NZMH3-VE400-E 148476	1 off
	630	150	NZMH3-VE630+NZM3-XAVE	NZMH3-VE630-E 148477	1 off

Plug-in units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM3					
3 pole	220	50	NZMN3-ME220+NZM3-XSVE	NZMN3-ME220-S 168500	1 off
	350	50	NZMN3-ME350+NZM3-XSVE	NZMN3-ME350-S 168501	1 off
	450	50	NZMN3-ME450+NZM3-XSVE	NZMN3-ME450-S 168502	1 off
	220	70	NZMS3-ME220+NZM3-XSVE	NZMS3-ME220-S 168531	1 off
	350	70	NZMS3-ME350+NZM3-XSVE	NZMS3-ME350-S 168532	1 off
	450	70	NZMS3-ME450+NZM3-XSVE	NZMS3-ME450-S 168533	1 off
	220	50	NZMN3-ME220+NZM3-XAVE	NZMN3-ME220-E 148434	1 off
	350	50	NZMN3-ME350+NZM3-XAVE	NZMN3-ME350-E 148435	1 off
	450	50	NZMN3-ME450+NZM3-XAVE	NZMN3-ME450-E 148436	1 off

Plug-in units

	Rated current I _n (A)	Switching capacity I _{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM3					
3 pole	250	50	NZMN3-VE250+NZM3-XSVE	NZMN3-VE250-S 168503	1 off
	400	50	NZMN3-VE400+NZM3-XSVE	NZMN3-VE400-S 168504	1 off
	630	50	NZMN3-VE630+NZM3-XSVE	NZMN3-VE630-S 168505	1 off
	400	70	NZMS3-VE400+NZM3-XSVE	NZMS3-VE400-S 168534	1 off
	630	70	NZMS3-VE630+NZM3-XSVE	NZMS3-VE630-S 168535	1 off
	400	50	NZMN3-4-VE400+NZM3-XSVE	NZMN3-4-VE400-S 168522	1 off
	630	50	NZMN3-4-VE630+NZM3-XSVE	NZMN3-4-VE630-S 168524	1 off
	400	70	NZMS3-4-VE400+NZM3-XSVE	NZMS3-4-VE400-S 168540	1 off
	630	70	NZMS3-4-VE630+NZM3-XSVE	NZMS3-4-VE630-S 168542	1 off

Withdrawable units

	Rated current I _n (A)	Switching capacity I _{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM3					
4 pole	400	50	NZM N3-4-VE400+NZM3-4-XAVE	NZMN3-4-VE400-E 148448	1 off
	630	50	NZM N3-4-VE630+NZM3-4-XAV E	NZMN3-4-VE630-E 148450	1 off
	400	70	NZMS3-4-VE400+NZM3-4-XAVE	NZMS3-4-VE400-E 148460	1 off
	630	70	NZMS3-4-VE630+NZM3-4-XAVE	NZMS3-4-VE630-E 148462	1 off
	400	150	NZM H 3-4-VE400+NZM 3-4-XAVE	NZMH3-4-VE400-E 148486	1 off
	630	150	NZM H3-4-VE630+NZM3-4-XAVE	NZMH3-4-VE630-E 148488	1 off
NZM4					
3 pole	630	50	NZMN4-VE630+NZM4-XAVE	NZMN4-VE630-E 148502	1 off
	800	50	NZMN4-VE800+NZM4-XAVE	NZMN4-VE800-E 148503	1 off
	1000	50	NZM N4-VE1000+NZM4-XAVE	NZMN4-VE1000-E 148504	1 off
	1250	50	NZM N4-VE1250+NZM4-XAVE	NZMN4-VE1250-E 148505	1 off
	1600	50	NZM N4-VE1600+NZM4-XAVE	NZMN4-VE1600-E 148506	1 off
	630	85	NZMH4-VE630+NZM4-XAVE	NZMH4-VE630-E 148531	1 off
	800	85	NZMH4-VE800+NZM4-XAVE	NZMH4-VE800-E 148532	1 off
	1000	85	NZM H4-VE1000+NZM4-XAVE	NZMH4-VE1000-E 148533	1 off
	1250	85	NZM H4-VE1250+NZM4-XAVE	NZMH4-VE1250-E 148534	1 off
	1600	85	NZM H4-VE1600+NZM4-XAVE	NZMH4-VE1600-E 148535	1 off
	4 pole	800	NZM N4-4-VE800+NZM4-4-XAVE	NZMN4-4-VE800-E 148515	1 off
		1000	NZM N4-4-VE1000+NZM4-4-XAVE	NZMN4-4-VE1000-E 148517	1 off
		1250	NZM N4-4-VE1250+NZM4-4-XAVE	NZMN4-4-VE1250-E 148519	1 off

Withdrawable units

	Rated current I_n (A)	Switching capacity I_{cu} (kA)	Description	Part no. Article no.	Std. pack
NZM4					
4 pole	1600	50	NZM N4-4-VE1600+NZM4-4-XAVE	NZMN4-4-VE1600-E 148521	1 off
	800	85	NZM H4-4-VE800+NZM4-4-XAVE	NZMH4-4-VE800-E 148544	1 off
	1000	85	NZM H4-4-VE1000+NZM4-4-XAVE	NZMH4-4-VE1000-E 148546	1 off
	1250	85	NZM H4-4-VE1250+NZM4-4-XAVE	NZMH4-4-VE1250-E 148548	1 off
	1600	85	NZM H4-4-VE1600+NZM4-4-XAVE	NZM H4-4-VE1600-E 148550	1 off

Plug-in units

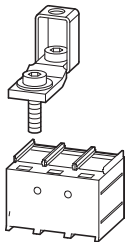
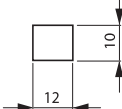
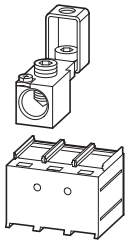
	Rated current I_n (A)	Description	Part no. Article no.	Std. pack
N1				
3 pole	63	N1-63+NZM1-XSVE	N1-63-E 148244	1 off
	100	N1-100+NZM1-XSVE	N1-100-E 148245	1 off
	125	N1-125+NZM1-XSVE	N1-125-E 148246	1 off
N2				
3 pole	160	N2-160+NZM2-XSVE	N2-160-E 148407	1 off
	200	N2-200+NZM2-XSVE	N2-200-E 148408	1 off
	250	N2-250+NZM2-XSVE	N2-250-E 148409	1 off
4 pole	160	N2-4-160+NZM2-4-XSVE	N2-4-160-E 148410	1 off
	200	N2-4-200+NZM2-4-XSVE	N2-4-200-E 148411	1 off
	250	N2-4-250+NZM2-4-XSVE	N2-4-250-E 148412	1 off

Withdrawable units

	Rated current I_n (A)	Description	Part no. Article no.	Std. pack
N3				
3 pole	400	N3-400+NZM3-XAVE	N3-400-E 148490	1 off
	630	N3-630+NZM3-XAVE	N3-630-E 148491	1 off
4 pole	400	N3-4-400+NZM3-4-XAVE	N3-4-400-E 148492	1 off
	630	N3-4-630+NZM3-4-XAVE	N3-4-630-E 148493	1 off
N4				
3 pole	800	N4-800+NZM4-XAVE	N4-800-E 148552	1 off
	1000	N4-1000+NZM4-XAVE	N4-1000-E 148553	1 off
	1250	N4-1250+NZM4-XAVE	N4-1250-E 148554	1 off
	1600	N4-1600+NZM4-XAVE	N4-1600-E 148555	1 off
4 pole	800	N4-4-800+NZM4-4-XAVE	N4-4-800-E 148556	1 off
	1000	N4-4-1000+NZM4-4-XAVE	N4-4-1000-E 148557	1 off
	1250	N4-4-1250+NZM4-4-XAVE	N4-4-1250-E 148558	1 off
	1600	N4-4-1600+NZM4-4-XAVE	N4-4-1600-E 148559	1 off

NZM1 Terminals

Terminal capacity

	Max. cable connection area	For use with	Number of poles	Terminal capacity Connection	mm ²	AWG/kcmil
	Box terminal					
	Standard equipment					
		NZM1(-4), PN1(-4), N(S)1(-4)	3 pole and 4 pole	Cooper cable	1 × 10-70 ¹⁾ 2 × 6-25	1 × 8-2/0
				Aluminium cable	1 × 10-35 2 × 10-35	
	Tunnel terminal					
	-	NZM1(-4), PN1(-4), N(S)1(-4)	3 pole and 4 pole	Cooper cable ☉ ▽ Aluminium cable ☉ ▽	1 × 16-95	1 × 6-3/0
	Rear terminal bolts					
	Not UL/CSA approved					
-	-	NZM1(-4), PN1(-4), N(S)1(-4)	3 pole and 4 pole	Cooper cable	1 × 2.5-25 2 × 2.5-25 1 × 10-35 2 × 10-35	

Notes ¹⁾ Up to 240mm² can be connected depending on make of cable

NZM1-4 molded case circuit-breakers

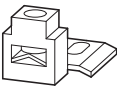
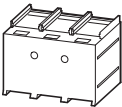
Circuit-breakers, switch-disconnectors

1.11

Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm			
2 × 9 × 0.8		NZM1-XKC 260015	1 set	- Standard connection with all NZM1 PN1 AND N(S)1 Switches - Conversion kit for circuit-breaker with screw terminal - Fitted within the switch housing
		NZM1-4-XKC 267075	1 set	
	min. 12 × 5	NZM1-XKS 260019	1 set	- Contains parts for a terminal located at top or bottom - Flush mounting outside the switch housing - Cover NZM1(-4)-XKSA must be fitted (included as standard)
		NZM1-4-XKS 266725	1 set	
		NZM1-XKA 266730	1 set	- Contains parts for a terminal located at top or bottom - With control circuit terminal for 1 × 0.75-2.5mm² (18-14AWG) or 2 × 0.75-2.5mm² (18-14AWG) copper conductor - Flush mounting outside the switch housing - Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules - Cover NZM1(-4)-XKSA must be fitted (included as standard)
		NZM1-4-XKA 266731	1 set	
	min. 12 × 5 max. 16 × 5	NZM1-XKA 266734	1 set	Contains parts for a terminal located at top or bottom
		NZM1-4-XKA 266737	1 set	

NZM1 Terminals

Terminal capacity

	Max. cable connection area	For use with	Number of poles	Terminal capacity Connection	mm ²	AWG/kcmil
	Control cable terminals					
	-	NZM1(-4), PN1(-4), N(S)1(-4)	3 pole and 4 pole	Screw terminals	1 × 0.75-2.5 2 × 0.75-1.5	1 × 18-14 2 × 18-16
	-	NZM1(-4), PN1(-4), N(S)1(-4)	3 pole and 4 pole	Box terminals	1 × 0.75-2.5 2 × 0.75-1.5	1 × 18-14 2 × 18-16
	Cover					
	-	NZM1(-4), PN1(-4), N(S)1(-4)	3 pole			
	-	NZM1(-4), PN1(-4), N(S)1(-4)	4 pole			
	Terminal covers knockout					
	For box terminal					
	-	NZM1, PN1, N1	3 pole			
	-	NZM1 PN1(-4), N1(-4)	4 pole			
	IP2X protection against contact with finger					
	For box terminal					
	-	NZM1 PN1(-4), N1(-4)	3 pole			
	-	NZM1 PN1(-4), N1(-4)	4 pole			
	For covers NZM1(-4)-XKSA or NZM1... (C)NA, N(S)1... NA					
	-	NZM1, PN1, NS1	3 pole			
	-	NZM1 PN1(-4), N1(-4)	4 pole			

NZM1-4 molded case circuit-breakers

Circuit-breakers, switch-disconnectors

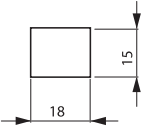
1.11

Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm			
		NZM1-XSTS 260150	1 set	- Contains parts for a terminal located at top or bottom - Included as standard with tunnel terminal - Degree of protection IP1X - Cannot be combined with NZM1(-4)-XIPK - Height or thickness of connections:2mm
		NZM-XSTK 266739	1 set	
		NZM1-XKSA 260021	1 set	- Contains parts for a terminal located at top or bottom - Contact protection against direct contact where cable lugs, bars or tunnel terminals are used - Contained in the set with tunnel terminals and screw terminals - When using insulated conductor material to degree of protection IP1X
		NZM1-4-XKSA 266741	1 set	
		NZM1-XKSFA 100780	1 set	- Contains parts for a terminal located at top or bottom - Enhanced contact protection (simplified finger protection) - Cannot be combined with NZM-XSTK control circuit terminal
		NZM1-4-XKSFA 100781	1 set	
		NZM1-XIPK 266744	1 set	
		NZM1-4-XIPK 266745	1 set	
		NZM1-XIPA 266748	1 set	- Contains parts for a terminal located at top or bottom - Enhanced contact protection to IP2X
		NZM1-4-XIPA 266749	1 set	

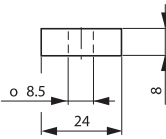
NZM2 Terminals

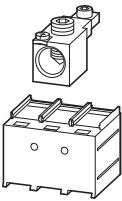
Terminal capacity



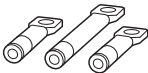
Max. cable connection area	For use with	Number of poles	Terminal capacity Connection	mm ²	AWG/kcmil
Box terminal					
	NZM2(-4), PN2(-4), N(S)2(-4)	3 pole and 4 pole	Copper cable	1 × 4-185	1 × 11-350
			Copper cable	2 × 4-70	



Screw terminals (Standard equipment)					
	NZM2(-4), PN2(-4), N(S)2(-4)	3 pole and 4 pole	Copper cable	1 × 4-185	1 × 11-3/0
			lugs	2 × 4-70	
			Aluminum cable	1 × 10-50	
			lugs	2 × 10-50	



Tunnel terminal					
-	NZM2(-4), PN2(-4), N(S)2(-4)	3 pole and 4 pole	Copper cable	1 × 16-185 ¹⁾	1 × 6-350
-			Copper cable	1 × 16-185 ¹⁾	
-					



Rear terminal bolts					
Not UL/CSA approved					
When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated.					
-	NZM2(-4), PN2(-4), N(S)2(-4)	3 pole and 4 pole	Copper cable	1 × 4-185	
-			lugs	2 × 4-70	
-			Aluminum cable	1 × 10-50	
-			lugs	2 × 10-50	
-					
-					
-					

NZM1-4 molded case circuit-breakers

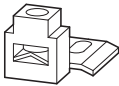
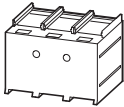
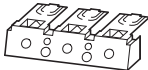
Circuit-breakers, switch-disconnectors

1.11

Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered with basic unit	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm				
≥2 × 9 × 0.8			NZM2-160-XKC 262240	1 set	- Contains parts for a terminal located at top or bottom - Conversion kit for circuit-breaker with screw terminal - Fitted within the switch housing - O = for fitting at the top - U = for fitting at the bottom - U_e ≥ 525 V AC: - Use NZM2(-4)-XKSA cover
			NZM2-250-XKC 262244	1 set	
			NZM2-4-160-XKC 266755	1 set	
			NZM2-4-250-XKC 266756	1 set	
≥2 × 16 × 0.8	≥16 × 5		NZM2-XKS 260030	1 set	- Contains parts for a terminal located at top or bottom - Standard connection with all NZM2, PN2 and N2 circuit-breakers. - Conversion kit for circuit-breaker with box terminal - Use special cable lugs narrow version, see Page 99 - Fitted within the switch housing - If a bar is used, insulation (400 mm) heat-shrink tubing and a cover NZM2(-4)-XKSA are required. - U_e ≥ 525 V AC: - For all other connection types use cover NZM3(-4)-XKSA.
			NZM2-4-XKS 266750	1 set	
≥2 × 16 × 0.8	≥16 × 5		NZM2-XKA 271457	1 set	- Contains parts for a terminal located at top or bottom - With control circuit terminal for 1 × 0.75-2.5mm² (18-14AWG) or 2 × 0.75-1.5mm² (18-16AWG) copper conductor - Flush mounting outside the switch housing - Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules - Cover NZM2(-4)-XKSA must be fitted (included as standard)
			NZM2-4-XKA 271458	1 set	
min.2 × 16 × 0.8 max.6 × 24 × 0.5	min.16 × 5 max.20 × 5	NZM2-160-XKC 266763	NZM2-XKR 266765	1 set	- Contains parts for a terminal located at top or bottom - O = for fitting at the top - U = for fitting at the bottom
		+NZM2-XKRU 266764		1 set	
		+NZM2-4-XKRO 266766	NZM2-4-XKR 266768	1 set	
		+NZM2-4-XKRU 266767		1 set	

NZM2 Terminals

Terminal capacity

	Max. cable connection area	For use with	Number of poles	Terminal capacity Connection	mm ²	AWG/kcmil
	Control cable terminals					
	-	NZM2(-4), PN2(-4), N(S)2(-4)	3 pole and 4 pole	Screw terminals	1 × 0.75-2.5 2 × 0.75-1.5	1 × 18-14 2 × 18-16
	-	NZM2(-4), PN2(-4), N(S)2(-4)	3 pole and 4 pole	Box terminals	1 × 0.75-2.5 2 × 0.75-1.5	1 × 18-14 2 × 18-16
	Cover					
	-	NZM2, PN2, N(S)2	3 pole			
	-	NZM2(-4), PN2(-4), N(S)2(-4)	4 pole			
	Terminal covers, knockout					
	-	NZM2, PN2, N(S)2	3 pole			
	-	NZM2(-4), PN2(-4), N(S)2(-4)	4 pole			
	IP2X protection against contact with finger					
	For box terminal					
	-	NZM2, PN2, N(S)2	3 pole			
	-	NZM2(-4), PN2(-4), N(S)2(-4)	4 pole			
	For covers NZM2(-4)-XKSA or NZM2(-4) or NZM2...(C)NA and N(S)2...NA					
	-	NZM2, PN2, N(S)2	3 pole			
	-	NZM2(-4), PN2(-4), N(S)2(-4)	4 pole			
	Copper cable lug Not UL/CSA approved When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated.					
	- 95 mm ²	NZM2(-4), PN2(-4), N2(-4)	3 pole and 4 pole			
	- 120 mm ²					
	- 150 mm ²					
	- 185 mm ²					

NZM1-4 molded case circuit-breakers

Circuit-breakers, switch-disconnectors

1.11

Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered with basic unit	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm				
			NZM2-XSTS 260156	1 set	- Contains parts for a terminal located at top or bottom - Included as standard with tunnel terminal - Degree of protection IP1X - NZM-XSTK cannot be combined with NZM1(-4)-XIPK IP2X protection against contact with a finger - Height or thickness of connection: 2mm
			NZM-XSTK 266739	1 set	
			NZM2-XKSA 260038	1 set	- Contains parts for a terminal located at top or bottom - Contact protection against direct contact where cable lugs, bars or tunnel terminals are used
			NZM2-4-XKSA 266770	1 set	- Contained in the set with tunnel terminals and screw terminals - When using insulated conductor material to degree of protection IP1X
			NZM2-XKSFA 104640	1 set	- Contains parts for a terminal located at top or bottom - Enhanced contact protection (simplified finger protection)
			NZM2-4-XKSFA 104641	1 set	
			NZM2-XIPK 266773	1 set	- Contains parts for a terminal located at top or bottom - Enhanced contact protection to IP2X
			NZM2-4-XIPK 266774	1 set	- Protection on grasping terminal chamber when connecting cables in box terminals. With two conductors maximum cross-section 25 mm² or AWG4 - Can not be combined with control cable terminal NZM-XSTK.
			NZM2-XIPA 266777	1 set	- Contains parts for a terminal located at top or bottom - Enhanced contact protection to IP2X
			NZM2-4-XIPA 266778	1 set	When fitting to NZM2-...(C)NA or NZM...-NA: with two conductors maximum cross-section 25mm² or AWG4
			KS95-NZM 7 059775	3 set	Special cable lug, narrow style
			KS120-NZM7 059776	3 set	
			KS150-NZM7 059777	3 set	
			NZM2-XKS185 260032	3 set	

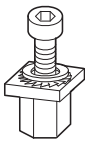
NZM3 Terminals

Rated current¹⁾

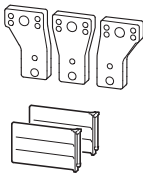
Terminal capacity



Max. cable connection area	I_n A	For use with	Number of poles	Terminal capacity Connection	mm ²	AWG/kcmil
Box terminal						
	Max. 500 400 UL/CSA	NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Copper cable Copper cable	1 × 35-240 2 × 16-120	1 × 2-500
	630	NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Copper cable Copper cable	1 × 35-240 2 × 16-120	1 × 2-500



Screw terminals (Standard equipment)						
	Max. 500 400 UL/CSA	NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Copper cable lugs	1 × 16-240 2 × 16-240	1 × 4-350 2 × 50
	630	NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Aluminum cable lugs	1 × 10-120 2 × 10-120	1 × 4-350 2 × 50



Connection width extension						
-	630	NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Copper cable lugs	2 × 300	2 × 500
-				Aluminum cable lugs		

Notes ¹⁾ The rated operational current values have been determined according to IEC/EN 60947 (switchgear standard). They generally relate to the max. defined cross-sections and are intended as a general guide.
The engineering standards which apply in each case must be observed.

NZM1-4 molded case circuit-breakers

Circuit-breakers, switch-disconnectors

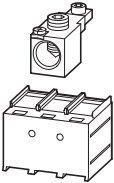
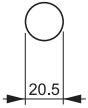
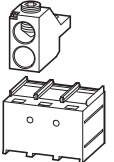
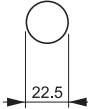
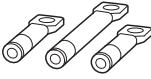
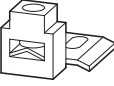
1.11

Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered with basic unit	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm				
min. 6 × 16 × 0.8 max. 20 × 24 × 0.5 or max. 11 × 21 × 1		+NZM3-XKCO 262246	NZM3-XKC 260042	1 set	- Contains parts for a terminal located at top or bottom - Conversion kit for circuit-breaker with screw terminal - Fitted within the switch housing - O = for fitting at the top - U = for fitting at the bottom - U_e ≥ 525 V AC: Use NZM3(-4)-XKSA cover. - Use ferrules with flexible and highly flexible conductors. - Observe limited cable cross-section through sleeve.
		+NZM3-XKCU 262245		1 set	
min. 6 × 16 × 0.8 max. 20 × 24 × 0.5 or max. 11 × 21 × 1		+NZM3-4-XKCO 266781	NZM3-4-XKC 266783	1 set	
		+NZM3-4-XKCU 266782		1 set	
10 × 32 × 1.0 +5 × 32 × 1.0	30 × 10 +30 × 5		NZM3-XKS 260039	1 set	- Contains parts for a terminal located at top or bottom - Standard connection with all NZM3, PN3 and N3 circuit-breakers. - Conversion kit for circuit-breaker with box terminal - Use special cable lugs narrow version, see Page 99 - Fitted within the switch housing - If a bar is used, insulation (400 mm) heat-shrink tubing and a cover NZM3(-4)-XKSA are required. - U_e ≥ 525 V AC: For all other connection types use cover NZM3(-4)-XKSA.
			NZM3-4-XKS 266780	1 set	
(2 ×) 10 × 50 × 1.0	(2 ×) 10 × 50		NZM3-XKV70 100514	1 set	
			NZM3-4-XKV70 100515	1 set	

NZM3 Terminals

Rated current¹⁾

Terminal capacity

Max. cable connection area	I_n A	For use with	Number of poles	Terminal capacity Connection	mm ²	AWG/kcmil
Terminals for connection width extension						
Not UL/CSA approved						
	Max. 500	NZM3, PN3, N3	3 pole	Copper cable	1 × 120-300	
	Max. 500	NZM3(-4), PN3(-4), N3(-4)	4 pole	Copper cable	1 × 120-300	
	630	NZM3, PN3, N3	3 pole			
	630	NZM3(-4), PN3(-4), N3(-4)	4 pole			
Tunnel terminal						
	Max. 350	NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Copper cable Copper cable	1 × 16-185 ²⁾	1 × 6-350
	Max. 350	NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Aluminium cable Aluminium cable	1 × 16-185 ²⁾	1 × 6-350
						
	Max. 630	NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Copper cable Copper cable	1 × 50-240 2 × 50-240	1 × 0-500 2 × 0-500
	Max. 630	NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Aluminium cable Aluminium cable	1 × 50-240 2 × 50-240	1 × 0-500 2 × 0-500
						
Rear terminal bolts						
Not UL/CSA approved						
	Max. 630	NZM3(-4), PN3(-4), N3(-4)	3 pole and 4 pole	Copper cable Copper cable	1 × 16-240 2 × 16-240	
	Max. 630	NZM3(-4), PN3(-4), N3(-4)	3 pole and 4 pole	Copper cable Copper cable	1 × 16-240 2 × 16-240	
	Max. 630	NZM3(-4), PN3(-4), N3(-4)	3 pole and 4 pole	Copper cable Copper cable	1 × 16-240 2 × 16-240	
	Max. 500	NZM3(-4), PN3(-4), N3(-4)	3 pole and 4 pole	Aluminium cable Aluminium cable	1 × 10-120 2 × 10-120	
	Max. 500	NZM3(-4), PN3(-4), N3(-4)	3 pole and 4 pole	Aluminium cable Aluminium cable	1 × 10-120 2 × 10-120	
	Max. 500	NZM3(-4), PN3(-4), N3(-4)	3 pole and 4 pole	Aluminium cable Aluminium cable	1 × 10-120 2 × 10-120	
Control cable terminals						
		NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Box terminal	1 × 0.75-2.5 2 × 0.75-1.5	1 × 18-14 2 × 18-16
		NZM3(-4), PN3(-4), N(S)3(-4)	3 pole and 4 pole	Screw terminal	1 × 0.75-2.5 2 × 0.75-1.5	1 × 18-14 2 × 18-16

Notes

¹⁾ The rated operational current values have been determined according to IEC/EN 60947 (switchgear standard). They generally relate to the max. defined cross-sections and are intended as a general guide.

The engineering standards which apply in each case must be observed.

²⁾ Up to 240 mm² can be connected depending on the cable manufacturer.

NZM1-4 molded case circuit-breakers

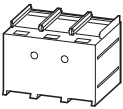
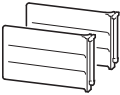
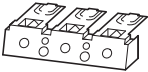
Circuit-breakers, switch-disconnectors

1.11

Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered with basic unit	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm				
22 × 21 × 1.0			NZM3-XK300 100782	1 set	- Contains parts for a terminal located at top or bottom - Only in combination with connection width extension NZM3(-4)-XKV70. - Use ferrules with flexible and highly flexible conductors. - With control cable terminal for 1 × 0.75 – 2.5 mm² or 2 × 0.75 – 1.5 mm² copper conductor as standard.
			NZM3-4-XK300 100783	1 set	
			NZM3-XK22X21 100784	1 set	
22 × 21 × 1.0			NZM3-4-XK22X21 100785	1 set	
			NZM3-XKA1 271459	1 set	- Contains parts for a terminal located at top or bottom - With control cable terminal for 1 × 0.75 – 2.5 mm² (18 – 14 AWG) or 2 × 0.75 – 1.5 mm² (18 – 16 AWG) copper cable as standard. - Fitting outside switch housing. - Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules. - Cover NZM3(-4)-XKSA must be fitted (included as standard).
			NZM3-4-XKA1 271460	1 set	
			NZM3-XKA2 271461	1 set	
			NZM3-4-XKA2 271462	1 set	
min. 6 × 16 × 0.8 max. 10 × 32 × 1.0	Min. 20 × 5 Max. 30-10	+NZM3-XKRO 266790		1 set	- Contains parts for a terminal located at top or bottom - O = for fitting at the top - U = for fitting at the bottom
			NZM3-4-XKR 266792	1 set	
		+NZM3-XKRU 266791		1 set	
		+NZM3-4-XKRO 266793		1 set	
			NZM3-4-XKR 266795	1 set	
		+NZM3-4-XKRU 266794		1 set	
			+NZM3-XSTK 266739	1 set	- Contains parts for a terminal located at top or bottom - Included as standard with tunnel terminal. - Degree of protection IP1X - NZM-XSTK cannot be combined with NZM1(-4)-XIPK IP2X protection against contact with a finger. - Height or thickness of connections: 2 mm
			+NZM3-XSTS 266797	1 set	

NZM3 Terminals

Terminal capacity

	Max. cable connection area	For use with	Number of poles	Terminal capacity Connection	mm ²	AWG/kcmil
	Cover					
	-	NZM3(-4), PN3(-4),N(S)3(-4)	3 pole			
	-	NZM3(-4), PN3(-4),N(S)3(-4)	4 pole			
	Phase isolators					
	-	NZM3(-4), PN3(-4),N(S)3(-4)	3 pole			
	-	NZM3(-4), PN3(-4),N(S)3(-4)	4 pole			
	Terminal covers, knockout					
	-	NZM3(-4), PN3(-4),N(S)3(-4)	3 pole			
	-	NZM3(-4), PN3(-4),N(S)3(-4)	4 pole			
	IP2X protection against contact with finger					
	For box terminal					
	-	NZM3(-4), PN3(-4),N3(-4)	3 pole			
	For covers NZM1(-4)-XKSA or NZM1... (C)NA, N(S)1...NA					
	-	NZM3(-4), PN3(-4),N(S)3(-4)	3 pole			
	-	NZM3(-4), PN3(-4),N(S)3(-4)	4 pole			
	Copper cable lug					
	Not UL/CSA approved					
	When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated.					
	240mm ²	NZM3(-4), PN3,N3(-4)	3 pole and 4 pole			
	185mm ²	NZM4(-4), N4(-4)	3 pole and 4 pole			

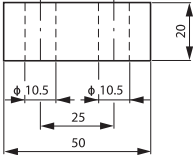
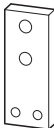
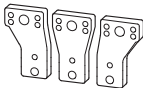
NZM1-4 molded case circuit-breakers

Circuit-breakers, switch-disconnectors

1.11

Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered with basic unit	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm				
			NZM3-XKSA 260045	1 set	- Contains parts for a terminal located at top or bottom - Insulation/protection against direct contact where cable lugs, bars or tunnel terminals are used.
			NZM3-4-XKSA 266801	1 set	- Included in set with tunnel terminals. - When using insulated conductor material to degree of protection IP1X.
			NZM3-XKP 100512	1 set	- Contains parts for a terminal located at top or bottom - Included with the connection width extension.
			NZM3-4-XKP 100513	1 set	- Cannot be combined with the NZM3(-4)-XKA tunnel terminal, NZM3(-4)-XKR connection on rear. - Insulation protection where cable lugs, bars, or flat conductor are used
			NZM3-XKSFA 104642	1 set	- Contains parts for a terminal located at top or bottom - Enhanced contact protection (simplified finger protection).
			NZM3-4-XKSFA 104643	1 set	
			NZM3-XIPK 266804	1 set	- Contains parts for a terminal located at top or bottom - Enhanced contact protection to IP2X
			NZM3-4-XIPK 266805	1 set	- Protection on grasping terminal chamber when connecting cables in box terminals. With two conductors maximum cross-section 70 mm² or AWG0 - Can not be combined with control cable terminal NZM-XSTK.
			NZM3-XIPA 266808	1 set	- Contains parts for a terminal located at top or bottom - Enhanced contact protection to IP2X
			NZM3-4-XIPA 266809	1 set	When fitting to NZM3-...(C)NA or N3...-NA: with two conductors maximum cross-section 70mm² or AWG0
			NZM3-XKS240 260041	3 set	Special cable lug, narrow style
			NZM3-4-XKS185 260040	3 set	

NZM4 Terminals

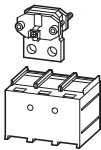
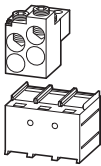
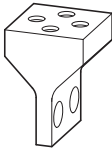
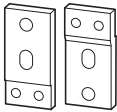
		Rated current ¹⁾			Terminal capacity		
	Max. cable connection area	I_n A	For use with	Number of poles	Terminal capacity Connection	mm ²	AWG/kcmil
2-hole	Screw terminals (Standard equipment)						
		Max. 1250	NZM4(-4) N4(-4), N(S)4	3 pole and 4 pole	Copper cable lugs	1 × 120-185 4 × 50-185	1 × 250-350 4 × 0-350
		1600	NZM4(-4) N4(-4), N(S)4	3 pole and 4 pole	Copper cable lugs	1 × 120-185 4 × 50-185	1 × 250-350 4 × 0-350
	Module plate						
1-hole	-	Max. 1250	NZM4 N(S)4	3 pole	Copper cable lugs	1 × 120-300 2 × 95-300	1 × 250-600 2 × 000-600
	-	Max. 1250	NZM4-4 N4-4	4 pole	Copper cable lugs	1 × 120-300 2 × 95-300	1 × 250-600 2 × 000-600
2-hole	-	Max. 1400	NZM4 N(S)4	3 pole	Copper cable lugs	2 × 95-185 4 × 35-185	2 × 000-350 4 × 2-350
	-	Max. 1400	NZM4-4 N4-4	4 pole	Copper cable lugs	4 × 50	4 × 0
2-hole	-	Max. 1250	NZM4 N(S)4	3 pole	Copper cable lugs	2 × 95-300	2 × 000-600
	-	Max. 1250	NZM4-4 N4-4	4 pole	Copper cable lugs	2 × 95-300	2 × 000-600
	-	Max. 1600	NZM4 N(S)4	3 pole	Copper cable lugs	2 × 95-300	2 × 000-500
	-	Max. 1600	NZM4-4 N4-4	4 pole	Copper cable lugs	2 × 95-300	2 × 000-500
Connection width extension							
	-	Max. 1600	NZM4 N(S)4	3 pole	Copper cable lugs	4 × 300 6 × 95-240	4 × 600 6 × 000-500
	-	Max. 1600	NZM4 N(S)4	3 pole	Copper cable lugs	4 × 300 6 × 95-240	4 × 600 6 × 000-500
	-	Max. 1600	NZM4-4 N4-4	4 pole	Copper cable lugs	4 × 300 6 × 95-240	4 × 600 6 × 000-500
	-	Max. 1600	NZM4-4 N4-4	4 pole	Copper cable lugs	4 × 300 6 × 95-240	4 × 600 6 × 000-500

Notes

¹⁾ The rated operational current values have been determined according to IEC/EN 60947 (switchgear standard). They generally relate to the max. defined cross-sections and are intended as a general guide. The engineering standards which apply in each case must be observed.

Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm			
2 × (10 × 40 × 1.0)	(2 ×) 50 × 10		1 set	• Double hole fitting with M10 screw at 25 mm spacing.
2 × (10 × 40 × 1.0)	(2 ×) 50 × 10		1 set	• Use special cable lug narrow version.
				• $U_e \geq 525$ V AC, cross section > 185 mm ² : Use of shroud NZM4(-4)-XKSA required.
2 × (10 × 40 × 1.0)	(2 ×) 40 × 10	NZM4-XKM1	1 set	• Contains parts for a terminal located at top or bottom
2 × (10 × 50 × 1.0)	(2 ×) 50 × 10	266814		• For M10 screws. Can be enlarged for M12 screws
2 × (10 × 40 × 1.0)	(2 ×) 40 × 10	NZM4-4-XKM1	1 set	• Use special cable lug narrow version.
2 × (10 × 50 × 1.0)	(2 ×) 50 × 10	266818		• Can be fitted to circuit-breaker with screw terminal.
				• Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary
2 × (10 × 40 × 1.0)	(2 ×) 40 × 10	NZM4-XKM2	1 set	
2 × (10 × 50 × 1.0)	(2 ×) 50 × 10	266820		
2 × (10 × 40 × 1.0)	(2 ×) 40 × 10	NZM4-4-XKM2	1 set	
2 × (10 × 50 × 1.0)	(2 ×) 50 × 10	266821		
2 × (10 × 40 × 1.0)	(2 ×) 40 × 10	NZM4-XKM2S-1250	1 set	• Contains parts for a terminal located at top or bottom
2 × (10 × 50 × 1.0)	(2 ×) 50 × 10	284471		• Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary
2 × (10 × 40 × 1.0)	(2 ×) 40 × 10	NZM4-4-XKM2S-1250	1 set	
2 × (10 × 50 × 1.0)	(2 ×) 50 × 10	284472		
2 × (10 × 40 × 1.0)	(2 ×) 40 × 10	NZM4-XKM2S-1600	1 set	
2 × (10 × 50 × 1.0)	(2 ×) 50 × 10	284473		
2 × (10 × 40 × 1.0)	(2 ×) 40 × 10	NZM4-4-XKM2S-1600	1 set	
2 × (10 × 50 × 1.0)	(2 ×) 50 × 10	284474		
min. 10 × 50 × 1.0	min. (2 ×) 80 × 10	NZM4-XKV95	1 set	• Contains parts for a terminal located at top or bottom
		281591		• Five-hole fitting, for example, for up to nine cable lugs per phase.
min. 10 × 50 × 1.0	min. (2 ×) 80 × 10	NZM4-XKV110	1 set	• Can be fitted to circuit-breaker with screw terminal.
		281593		• Phase isolator supplied.
min. 10 × 50 × 1.0	min. (2 ×) 80 × 10	NZM4-4-XKV95	1 set	• Distance between pole centres with NZM4(-4)-XKV95: 95 mm
		281592		Installation conditions for current transformer up to 130 mm width with 80 mm bar width.
min. 10 × 50 × 1.0	min. (2 ×) 80 × 10	NZM4-4-XKV120	1 set	• Distance between pole centers with NZM4-4-XKV110: 107.5 mm
		281594		Installation conditions for current transformer up to 135 mm width with 80 mm bar width.
				• Distance between pole centers with NZM4-4-XKV120: 122 mm
				Installation conditions for current transformer up to 164 mm width with 80 mm bar width.
				• 4 mm holes predrilled for control cable terminal.

NZM4 Terminals

		Rated current ¹⁾			Terminal capacity	
	Max. cable connection area	<i>I_n</i> A	For use with	Number of poles	Terminal capacity Connection	mm ² AWG/kcmil
	Flat cable terminal					
	-	Max.1100	NZM4, N(S)4	3 pole		
	-	Max.1100	NZM4-4, N(S)4-4	4 pole		
	Tunnel terminal					
	-	Max.1400	NZM4, N(S)4	3 pole	Copper cable lugs	1 × 50-240 4 × 50-240 1 × 0-500 4 × 0-500
	-	Max.1400	NZM4-4, N(S)4-4	4 pole	Aluminum cable lugs	1 × 50-240 4 × 50-240 1 × 0-500 4 × 0-500
	Rear terminal bolts Not UL/CSA approved					
	-	Max.1250	NZM4-4, N4-4	3 pole and 4 pole	Copper cable lugs	1 × 120-185 2 × 95-185
	-	Max.1600			Aluminum cable lugs	4 × 35-185 1 × 185 2 × 70-185 4 × 50-185
	Adapter set NZM14 and NZM4 Not UL/CSA approved					
	-	Max.1250	NZM4, N4	3 pole		
	-	Max.1600	NZM4, N4	4 pole		

Notes ¹⁾ The rated operational current values have been determined according to IEC/EN 60947 (switchgear standard). They generally relate to the max. defined cross-sections and are intended as a general guide. The engineering standards which apply in each case must be observed.

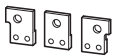
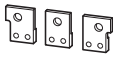
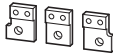
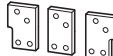
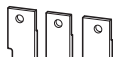
NZM1-4 molded case circuit-breakers

Circuit-breakers, switch-disconnectors

1.11

Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm			
Min. 6 × 16 × 0.8 Max. 20 × 32 × 0.5		NZM4-XKB 266829	1 set	- Contains parts for a terminal located at top or bottom - Conversion kit for circuit-breaker with screw terminal.
Min. 6 × 16 × 0.8 Max. 20 × 32 × 0.5		NZM4-4-XKB 266831	1 set	- Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary. - When the circuit-breaker is installed on a conductive mounting plate, cover NZM4(-4)-XKSA must be used
		NZM4-XKA 266836	1 set	- Contains parts for a terminal located at top or bottom - With control circuit terminal for 1 × 0.75-2.5 mm² (18-14 AWG) or 2 × 0.75-1.5 mm² (18-16 AWG) copper cable as standard.
		NZM4-4-XKA 266837	1 set	- Can be fitted to circuit-breaker with screw terminal. - Use ferrules with flexible and highly flexible conductors. - Cover NZM4(-4)-XKSA must be fitted (included as standard).
(2 ×) 10 × 50 × 1.0	(2 ×) 50 × 10	NZM4-XKR 266842	1 set	- Contains parts for a terminal located at top or bottom - Can also be retrofitted: Module plate NZM4...-XKM... or connection width extension NZM4...-XKV...
(2 ×) 10 × 50 × 1.0	(2 ×) 50 × 10	NZM4-4-XKR 266843	1 set	
		NZM4-XAS14-1250 283291	1 set	- Conversion kit for NZM14 to NZM4. Same connections as NZM14. Contains for both sides of switch. 3 connection extensions on outlet side 3 connection extensions on trip block side. 1 long shroud for the outlet side - Paper drilling template in the instructional leaflet (AWA)
		NZM4-XAS14-1600 283292	1 set	Cannot be combined with the module plate (NZM4-XKM...), flat cable terminal (NZM4-XKB), connection width extension (NZM4-XKV...), tunnel terminal (NZM4-XKA), connection on rear (NZM4-XKR) and withdrawable unit (NZM4-XAV...).

NZM4 Terminals

		Rated current ¹⁾	Terminal capacity				
Max. cable connection area		<i>I_n</i> A	For use with	Number of poles	Terminal capacity Connection	mm ²	AWG/kcmil
Adapter set N(ZM)4/N(ZM)12							
	-	Max.1000	N4	3 pole			
							
	-	Max.1250	N4	3 pole			
							
	-	Max.1600	N4	3 pole			
							
	-	Max.1000	NZM4	3 pole			
							
	-	Max.1250	NZM4	3 pole			
							
	-	Max.1600	NZM4	3 pole			
							

Notes

¹⁾ The rated operational current values have been determined according to IEC/EN 60947 (switchgear standard). They generally relate to the max. defined cross-sections and are intended as a general guide.
The engineering standards which apply in each case must be observed.

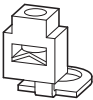
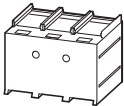
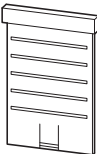
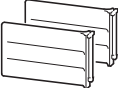
NZM1-4 molded case circuit-breakers

Circuit-breakers, switch-disconnectors

1.11

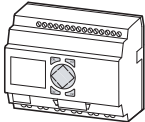
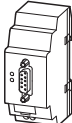
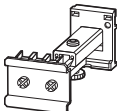
Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm			
		N4-XAS12-1000 285609	1 set	Conversion kit from N(ZM)12 to N(ZM)4. With the terminal lugs of the replacement kit all three-pole NZM12 and N12 can be adapted to the connection dimensions of the NZM4 or N4 supplied from model year 1983. 4 pole basic devices, withdrawable units and basic devices with remote operator can not be replaced.
		N4-XAS12-1250 285610	1 set	- Contents of replacement kits N(ZM)4-XAS12...: 3 connection extensions on outlet side 3 connection extensions on trip block side 2 mounting brackets 4 fixing screws 4 phase isolators 6 fixing screws, nuts and washers
		N4-XAS12-1600 285611	1 set	- Paper drilling template in the instructional leaflet (AWA) - The replacement kits have the same dimensions as models N(ZM)12..., which correspond to production status 02/97 to the present.
		NZM4-XAS12-1000 285612	1 set	Special feature: Prior to 02/97 the N(ZM)12-800 was supplied with 10 mm instead of 8 mm terminal lugs. With these models the customer must determine the device's year of manufacture by measuring the thickness of the terminal lug and order replacement kit N(ZM)4-XAS12-1250.
		NZM4-XAS12-1250 285613	1 set	- Example: - N(ZM)12-800...(1000) > N(ZM)4-XAS12-1000 - N(ZM)12-800 before 02/97 > N(ZM)4-XAS12-1250 - N(ZM)12-1250 > N(ZM)4-XAS12-1250 - N(ZM)12-1600 > N(ZM)4-XAS12-1600
		NZM4-XAS12-1600 285614	1 set	

NZM4 Terminals

	Rated current ¹⁾				Terminal capacity	
	Max. cable connection area	I _n A	For use with	Number of poles	Terminal capacity Connection	mm ² AWG/kcmil
	Control cable terminals					
	-		NZM3(-4), PN3, N(S)3(-4) NZM4(-4), N(S)4(-4)	3 pole and 4 pole	Screw terminals	1 × 0.75-2.5 1 × 18-14 2 × 0.75-1.5 2 × 18-16
	Cover					
	-		NZM4, N(S)4	3 pole		
	-		NZM4-4, N4-4	4 pole		
	Terminal covers, knockout					
	-		NZM4, N4	3 pole		
	-		NZM4-4, N4-4	4 pole		
	Phase isolators					
	-		NZM4, N(S)4	3 pole		
	-		NZM4-4, N4-4	4 pole		
	Cable lug Not UL/CSA approved					
	185 mm ²		NZM3(-4), PN3, N3(-4)	3 pole and 4 pole		
	240 mm ²		NZM4(-4), N4(-4)			

Terminal capacity Copper strip No. of discs × width × disc thickness	Copper bar width × thickness	Part no. Article no. when ordered separately	Std. pack	Note
mm	mm			
		NZM3/4-XSTS 266797	1 set	- Contains parts for a terminal located at top or bottom - Included as standard with tunnel terminal - Degree of protection IP1X - NZM-XSTK cannot be combined with NZM3(-4)-XIPK or NZM4(-4)-XIPK protection against contact with a finger - Height or thickness of connection: 2mm
		NZM4-XKSA 266846	1 set	- Contains parts for a terminal located at top or bottom - Contact protection against direct contact where cable lugs, bars or tunnel terminals are used
		NZM4-4-XKSA 266847	1 set	- Contained in the set with tunnel terminals and screw terminals - When using insulated conductor material to degree of protection IP4X
		NZM4-X KSFA 292193	1 set	- Contains parts for a terminal located at top or bottom - Enhanced contact protection (simplified finger protection)
		NZM4-4-XKSFA 292194	1 set	
		NZM4-XKP 281595	1 set	- Contains parts for a terminal located at top or bottom - Included with the connection width extension. - Cannot be combined with the NZM4(-4)-XKA tunnel terminal, NZM4(-4)-XKR connection on rear.
		NZM4-4-XKP 281596	1 set	Insulation protection where cable lugs, bars, or flat conductor are used
		NZM3-XKS185 260040	1 set	Special cable lug, narrow style
		NZM3-XKS240 260041	1 set	

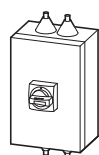
Accessory

Description	Part no. Article no. when ordered separately	Std. pack	Notes
Diagnostics and configuration software for NZM and DMI (local)			
PC software for direct connection to all new NZM circuit breakers with electronic releases (IEC and UL/CSA devices) or for direct connection to the DMI module, including the required connection cable to NZM. - Protection parameter: online display and curve display, export option to curve characteristics program "Moeller CurveSelect". - Warning and release messages: reading of diagnostic memory also in voltage-free state. - Load currents: display and trend indication. - Recording and export options to Excel for load currents and diagnostic messages. - Configuration of the DMI: motor starter, remote operator, assignment of the DMI inputs and outputs and displays.	NZM-XPC-KIT 265631	1 off	Only for use in combination with circuit-breakers with electronic releases. Download the manual AWB1230-1459 and demo-software at www.eaton.com.cn/electrical .
Data management interface (DMI module)			
 - Access to diagnostics and operational data. - Recording current values, motor starter function, and setting parameters. - Control of the circuit-breakers with electronic trip block. - Comprehensive remote diagnostic options and remote operation via fieldbus in combination with a field Bus connection	NZM-XDM1612 260217	1 off	Only for use in combination with circuit-breakers with electronic releases. Download the manual AWB1230-1441 and demosoftware at www.eaton.com.cn/electrical .
Fieldbus interface for DMI			
Connection to the DMI module - Transfer of phase currents, parameter data, status data and diagnostics data. - Transfer of circuit-breaker position (wiring of auxiliary contacts to DMI inputs). - Actuation of the DMI motor starter functions and the NZM remote operator. - Detection of digital inputs and actuation via field Bus.			
 PRDFIBUS-DPV1-Slave fieldbus interface. Can be operated with class 1 and class 2 masters. Addresses available: 1 to 126	NZM-XDMI-DPV1 270333	1 off	Connected to the DMI module and has the same contour appearance.
Switched-mode power supply unit			
For DMI module			
- Rated input voltage: 50/60 HZ: 115/230 V AC - Rated output voltage (residual ripple): 24 V DC ($\pm 3\%$) - Rated output current: 1.25 A	EASY400-POW 212319	1 off	-
Telescopic adapter			
For DMI module			
For equalization of the mounting depth when rear mounted in CI-K... enclosures and cabinets.			
 With 35 mm top-hat rail IEC/EN 60715, adjustable from 75 – 115 mm. Screw and snap fitting.	M22-TA 226161	1 off	-

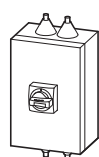
Accessory

	Part no. Article no. when ordered separately	Std. pack	Notes
FDT frame software for operating field devices			
PC software for integration of software modules (DTM's) according to the FDT standard V1.2 (e.g. NZM-XPC-DTM). • Operation of a temporary or stationary service station for engineering, remote diagnostics, remote operation and remote parameter definition of networked switchgear and field devices. • Engineering of the network topology of networked field devices. • Overview representation of the topology with online status information. • Access to the device-specific DTM's for configuration, operation, parameterization and diagnostics of the devices. • Storage of all engineering information in a central database. Download and upload from/to the devices.	FDT-NAVIGATOR 281623	1 off	The connection of the field devices can be implemented via the PROFIBUS DPV1 master or via gateways (e.g.: USB/PROFIBUS, Ethernet/PROFIBUS). Communication interfacing for the PC and a communication DTM (driver) is necessary for this purpose.
DTM software module to FTD standard			
PC software module (Device Type Manager) to FDT/DTM standard V1.2 for integration in the FDT navigator or other FDT-capable framework software packages (primary control system, PLC engineering systems). • Remote diagnostics, remote monitoring, remote parameter definition and remote operation of the new NZM2,3,4 circuit-breakers with electronic trip release via PROFIBUS-DPV1. • Indication of the circuit-breaker state (on/off/tripped), the phase currents, parameter data, status data and diagnostics data. • Definition of the trip parameters. • Display and setting the DMI motor starter functions and assignment of the DMI inputs and outputs. • Control of the motor starter functions.	NZM-XPC-DTM 281624	1 off	For connection of the circuitbreaker to the PROFIBUS-DP fieldbus, the accessory device NZM-XDMI612 and the fieldbus interface NZM-XDMI-DPV1 are required.

Insulated enclosures



	Max. rated uninterrupted current I_n A	For use with	Part no. Article no. when ordered separately	Std. pack
Insulated enclosures				
With door coupling rotary handle Complete includes all necessary functional parts Degree of protection IP65 Not UL/CSA approved				
Standard, black/grey				
Lockable in 0 position on handle with up to 3 padlocks. Additionally with cover interlock.	≤ 63 A	PN1.N1	NZM1-XCIKS-TVD 271521	1 off
	≤ 63 A	NZM1. PN1.N1	NZM1-XC123-TVD 271522	1 off
	≤ 125 A	NZM1(-4), PN1(-4), N1(-4)	NZM1-XC143-TVD 271523	1 off
	≤ 160 A	NZM1(-4), PN1(-4), N1(-4)	NZM1-XC143/2-TVD 104645	1 off
	≤ 200 A	NZM2(-4), PN2(-4), N2(-4)	NZM2-XC143-TVD 271524	1 off
	≤ 250 A	NZM2(-4), PN2(-4), N2(-4)	NZM2-XC145-TVD 280418	1 off
	≤ 400 A	NZM3(-4), PN3(-4), N3(-4)	NZM3-XC148-TVD 271525	1 off
Red-yellow for emergency switching off				
Lockable on handle and switch with up to 3 padlocks. Lockable in 0 position on handle. Additionally with cover interlock and locking facility on circuit-breaker in 0 position.	≤ 63 A	PN1.N1	NZM1-XCIKS-TVDVR 271526	1 off
	≤ 63 A	NZM1. PN1.N1	NZM1-XC123-TVDVR 271527	1 off
	≤ 125 A	NZM1(-4), PN1(-4), N1(-4)	NZM1-XC143-TVDVR 271528	1 off
	≤ 160 A	NZM1(-4), PN1(-4), N1(-4)	NZM1-XC143/2-TVDVR 104646	1 off
	≤ 200 A	NZM2(-4), PN2(-4), N2(-4)	NZM2-XC143-TVDVR 271529	1 off
	≤ 250 A	NZM2(-4), PN2(-4), N2(-4)	NZM2-XC145-TVDVR 279356	1 off
	≤ 400 A	NZM3(-4), PN3(-4), N3(-4)	NZM3-XC148-TVDVR 271530	1 off



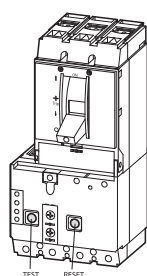
Insulated enclosure description	Terminals for 3-pole switches fitted by user for fourth and fifth conductor (N and PE), on 4 pole switches: for fifth conductor (PE)	Notes
CIK5-160-M	K10/1, K25/1	Enclosures for separate mounting with top and bottom cable entry, suitable for installation of circuit-breakers and switch-disconnectors. Include fixing straps for wall mounting. Short-circuit resistance at 415 V 50/60 Hz up to 10 kA. Cannot be used in combination with remote operator NZM...-XR..., plug-in unit NZM...-XSV or withdrawable unit NZM...-XAV. Order insulated additional terminal for 4th or 5th pole separately. Enclosure CI-K5 with hard metric knock-outs Enclosure CI23 with flanges CI43, CI45 and CI48 feature gland plates. Only for switches with box terminals for direct connection of cables.
CI23-150	K10/1, K25/1	
CI43-150	K10/1, K25/1, K50/1, K95/1 N/BR	
CI43-200	K10/1, K25/1, K50/1, K95/1 N/BR	
CI43-200	K10/1, K25/1, K50/1, K95/1N/BR, K150/1/BR, K240/1/BR	
CI45-200	K10/1, K25/1, K50/1, K95/1N/BR, K150/1/BR, K240/1/BR	
CI48-250	K95/1N/BR, K150/1/BR, K240/1/BR, K2X240/1/BR	
CIK5-160-M	K10/1, K25/1	
CI23-150	K10/1, K25/1	
CI43-150	K10/1, K25/1, K50/1, K95/1 N/BR	
CI43-200	K10/1, K25/1, K50/1, K95/1 N/BR	
CI43-200	K10/1, K25/1, K50/1, K95/1N/BR, K150/1/BR, K240/1/BR	
CI45-200	K10/1, K25/1, K50/1, K95/1N/BR, K150/1/BR, K240/1/BR	
CI48-250	K95/1N/BR, K150/1/BR, K240/1/BR, K2X240/1/BR	

Earth-fault release

	For use with		Part no. Article no. when ordered separately	Std. pack	Notes
Earth-fault release					
Not UL/CSA approved					
Suitable for use in three- and single-phase systems					
Pulse-current sensitive according to core-balance principle					
					
For 3 and 4 pole NZM1(-4) circuit-breakers and N1(-4) switch-disconnectors, dependant on mains power $U_b = 200 \dots 415 \text{ V } 50/60 \text{ Hz}$					
Rated fault current $I_{\Delta n} = 0.03 \text{ A}$	NZM1 N1	3 pole	NZM1-XFI30R 104603	1 off	At $I_{\Delta n} = 0.03 \text{ A}$: delay time t_v always fixed at 10 ms. Alarm indication > 30 % $I_{\Delta n}$ by yellow LED. Trip indication by up to 2 auxiliary contacts (HIAFI) can be retrofitted: N/O = M22-K01, NC = M22-K10 are reset with the reset toggle lever. If the trip-indicating auxiliary contact in the fault current block is used, the NC contacts operates as a N/O contact and the NC contact operates as N/O contacts. Double contact not permissible. Not in combination with insulated enclosure or main switch assembly kit for side wall installation with mounting bracket. NZM1-XFI...R can not be used in combination with lower cover NZM1-XKSA. NZM1-XFI...U not in combination with shunt or undervoltage release
	NZM1-4 N1-4	4 pole	NZM1-4-XFI30R 104606	1 off	
Rated fault current $I_{\Delta n} = 0.3 \text{ A}$	NZM1 N1	3 pole	NZM1-XFI300R 104604	1 off	
	NZM1-4 N1-4	4 pole	NZM1-4-XFI300R 104607	1 off	
Rated fault current $I_{\Delta n} = 0.03-0.1-0.3-0.5-1-3 \text{ A}$ Delay time $t_v = 10-60-150-300-450 \text{ ms}$	NZM1 N1	3 pole	NZM1-XFIR 104605	1 off	
	NZM1-4 N1-4	4 pole	NZM1-4-XFIR 104608	1 off	
Rated fault current $I_{\Delta n} = 0.03 \text{ A}$	NZM1 N1	3 pole	NZM 1-XFI30U 104609	1 off	
	NZM1-4 N1-4	4 pole	NZM1-4-XFI30U 104612	1 off	
Rated fault current $I_{\Delta n} = 0.3 \text{ A}$	NZM1 N1	3 pole	NZM 1-XFI300U 104610	1 off	
	NZM1-4 N1-4	4 pole	NZM1-4-XFI300U 104613	1 off	
Rated fault current $I_{\Delta n} = 0.03-0.1-0.3-0.5-1-3 \text{ A}$ Delay time $t_v = 10-60-150-300-450 \text{ ms}$	NZM1 N1	3 pole	NZM1-XFIU 104611	1 off	
	NZM1-4 N1-4	4 pole	NZM1-4-XFIU 104614	1 off	
Pulse-current sensitive according to core-balance principle					
					
For 4 pole circuit-breaker NZM2-4 and switch-disconnector N2-4 independent of mains voltage $U_b = 280 \dots 690 \text{ V } 50/60 \text{ Hz}$					
Rated fault current $I_{\Delta n} = 0.3 \text{ A}$	NZM2-4 N2-4	4 pole	NZM2-4-XFI30 292343	1 off	Auxiliary contacts (1 N/O, 1 NC built-in) are reset with the reset button. Not in combination with plug-in units, insulated enclosure or main switch assembly kit for side wall installation with mounting bracket.
	NZM2-4 N2-4	4 pole	NZM2-4-XFI 292344	1 off	
Rated fault current $I_{\Delta n} = 0.03-0.1-0.3-0.5-1-3 \text{ A}$ Delay time $t_v = 10-60-150-300-450 \text{ ms}$	NZM2-4 N2-4	4 pole			
	NZM2-4 N2-4	4 pole			
Core-balance principle with AC/DC current sensitivity (in range 0 ... 100 kHz)					
 					
For 4 pole circuit-breaker NZM2-4 and switch-disconnector N2-4 Internal voltage supply $U_b = 50 \dots 400 \text{ V}$					
Rated fault current $I_{\Delta n} = 0.3 \text{ A}$	NZM2-4 N2-4	4 pole	NZM2-4-XFIA30 292345	1 off	Observe response threshold dependence on frequency! See "Frequency response" characteristic curve. Adjusting buttons can be sealed.
	NZM2-4 N2-4	4 pole	NZM2-4-XFIA 292346	1 off	
Rated fault current $I_{\Delta n} = 0.03-0.1-0.3-0.5-1-3 \text{ A}$ Delay time $t_v = 10-60-150-300-450 \text{ ms}$	NZM2-4 N2-4	4 pole			
	NZM2-4 N2-4	4 pole			

Earth-fault release

	For use with	Part no. Article no. when ordered separately	Std. pack	Notes
Earth-fault release, 3 pole, 4 pole Not UL/CSA approved Not dependent on mains and control voltages $I_g = 0.35-0.4-0.5-0.6-0.7-0.8-0.9-1.0 \times I_n$ $t_g = 0-20-60-100-200-300-500-750-1000$ ms				
	NZM4	+NZM4-XT 266721	1 off	Only suitable for use in conjunction with circuit breakers with electronic releases.
	NZM4-4	+NZM4-4-XT 266722	1 off	Not in combination with motor-protective circuitbreakers NZM...-ME... Indication of the earth-fault in optional DMI communication module.

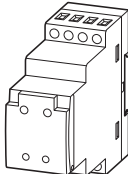


Circuit-breakers with earth-fault release, 3 pole

For apparatus with power electronics, such as power inverters and frequency inverters

	Rated current = Rated uninterrupted current	Overload releases Phase conductors	Short-circuit releases	Number of poles	Part no. Article no. High switching capacity 150 kA; 415 V 50/60 Hz
	$I_n = I_u$ A	I_r A	I_i A		
AC/DC sensitive according to core-balance principle in range of 0 – 100 kHz residual-current frequency. Not UL/CSA approved.	160	125...160	960...1600	3 pole	NZMH2-A160-FIA30 112627
Suitable for use in three-phase systems.	200	160...200	1200...2000	4 pole	NZMH2-A200-FIA30 112628
Rated operating voltage: 400 V (50/60 Hz) Rated fault current $I_{\Delta n} = 0.03$ A Internal power supply $U_e = 50 - 400$ V	250	200...250	1500...2500	3 pole	NZMH2-A250-FIA30 112629

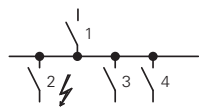
Residual-current relay

Description	Rated current		Part no. Article no.	Std. pack	Notes
	Energy I_n A	Motor I_n A			
 Residual-current relays Pulsed current sensitive Rated control voltage: $U_s = 230\text{ V AC (50/60 Hz)}$ Integrated auxiliary contact (1 C/O) Ring-type transformer must also be ordered.					
Rated fault current $I_{\Delta n} = 0.03\text{ A}$			PFR-003 285555	1 off	-
Rated fault current $I_{\Delta n} = 0.3\text{ A}$			PFR-03 285556	1 off	-
Rated fault current $I_{\Delta n} = 0.03\text{-}5\text{ A}$ Adjustable fault current and delay time Fault current early warning by flashing, red LED			PFR-5 285557	1 off	Adjustable fault current: 0.03, 0.1, 0.3, 0.5, 1, 3, 5 A Adjustable delay time: 0.02, 0.1, 0.3, 0.5, 1, 3, 5 A
Ring-type transformer Rated operating voltage: 690 V (50/60 Hz)					
Internal diameter: 20 mm	50A	50A	PFR-W-20 285558	1 off	Includes fixing clip for DIN rail mounting
Internal diameter: 30 mm	150A	100A	PFR-W-30 285559	1 off	
Internal diameter: 35 mm	150A	100A	PFR-W-35 285600	1 off	Includes screw fixing alternative: fixing clip for DIN mounting rail note on engineering: the current transformer diameter must be selected 1.5 times larger than the envelope diameter of the passed through conductor.
Internal diameter: 70 mm	400A	200A	PFR-W-70 285601	1 off	
Internal diameter: 105 mm	600A	250A	PFR-W-105 285602	1 off	
Internal diameter: 140mm	1200A	630A	PFR-W-140 285603	1 off	
Internal diameter: 210mm	1800A	800A	PFR-W-210 285604	1 off	
Magnetic shielding					
PFR-W-35			PFR-WMA-35 286001	1 off	Required for load circuits with high inrush currents $> 4 \times I_n$, e.g. motors and capacitors.
PFR-W-70			PFR-WMA-70 286002	1 off	
PFR-W-105			PFR-WMA-105 286003	1 off	
PFR-W-140			PFR-WMA-140 286004	1 off	
PFR-W-210			PFR-WMA-210 286005	1 off	
Mounting clip For the DIN rail mounting current transformers PFR-W-35 and larger					
			PFR-WC 286006	1 off	1 set = 2 off

Multi-function component adapters

	Rated current = Rated uninterrupted current				
For use with	$I_n = I_u$ A	Part no. Article no. when ordered with basic unit	Part no. Article no. when ordered separately	Std. pack	Notes
Component adapters for circuit-breakers and switch-disconnectors					
For mounting on flat copper bars 12–30 × 5–10 mm, double T and triple T profile					
Rated operating voltage U_b : 690 V					
• Temperature resistant to 120 °C • Self-extinguishing to UL 94 • Track resistance CTI 200					
NZM1, PN1, N1, NS1	160		NZM1-XAD160 104554	1 off	For switch and standard connection with box terminal. Connection to the system at top using supplied connection cable. In conjunction with IP2X protection against contact with a finger. Enhanced contact protection on the switch secondary side.
NZM2, PN2, N2, NS2	250		NZM2-XAD250 104555	1 off	Connection to the system possible at top or bottom via connection on rear (+)NZM2-XKR4...
NZM3, PN3, N3	550		NZM3-XAD550 104556	1 off	Connection to the system possible at top or bottom via connection on rear (+)NZM3-XKR13...
Connection block for component adapters					
For NZM2, NZM3 circuit-breakers					
NZM2, PN2, N2, NS2	250	+NZM2-XKR40 281664	NZM2-XKR4 281666	1 off	Part no. and part no. suffix include parts for one switch side at top or bottom (for NZM3 top only). Required with component adapter and switch with connection on rear. See Component adapters NZM1-XAD-160, NZM1-XAD-250 and NZM1-XAD-550, for example. • O = for fitting at the top • U = for fitting at the bottom
NZM2, PN2, N2, NS2	250	+NZM2-XKR4U 281665		1 off	
NZM3, PN3, N3	550	+NZM3-XKR130 281667	NZM3-XKR13 281668	1 off	

Selectivity protection between incoming circuit-breaker NZM and outgoing circuit-breaker FAZ-B(C), PKZ...



Incoming circuit-breaker
Outgoing circuit-breaker

Selectivity 415 V AC

between circuit-breakers enables separate shut-down of faulty system sections.
Selectivity (discrimination) exists between incoming circuit-breaker 1 and outgoing circuit-breaker 2 if, only outgoing breaker 2 trips at position 2 during a short-circuit.
System sections 3 and 4 continue to operate.

Incoming circuit-breaker (S1)**NZM...1-A...****NZM...2-A...**

	I_{cu} [kA]	25(36)(50)(70)(100)								25(36)(50)(70)(150)								
	I_n [A]	20-40	50	63	80	100	125	160	20-40	50	63	80	100	125	160	200	250	
Outgoing circuit-breaker (S2)	I_n [A]	$I_{cu}(415V)$ [kA]	Selectivity threshold I_s [kA] for selectivity between S2 and S1, overload and short-circuit release set to max. value															
FAZ-B(C)	0.5	15	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	1	15	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	2	15	2	T	T	T	T	T	3	T	T	T	T	T	T	T	T	
	3	15	1.2	2	3	3	10	T	1.5	1.5	3	5	T	T	T	T	T	
	4	15	1.2	2	3	3	8	T	1.2	1.5	3	4	T	T	T	T	T	
	6	15	1.2	2	2.5	3	5	10	10	1.2	1.5	2.5	3	T	T	T	T	
	10	15	1.2	1.5	2	2	4	10	10	1	1.5	2.5	3	10	10	10	10	
	13	15	1	1.5	2	2	4	10	10	1	1.2	2	3	10	10	10	10	
	16	15	1	1.2	1.5	2	3	8	8	1	1.2	1.5	2.5	10	10	10	10	
	20	15	0.8	1.2	1.5	1.5	3	8	8	1	1.2	1.5	2.5	10	10	10	10	
	25	15	0.7	1.2	1.5	1.5	3	7	7	0.8	1	1.5	2	10	10	10	10	
	32	15	–	1.2	1	1.5	2	6	6	–	1	1.5	2	8	8	8	10	
	40	15	–	–	1	1.5	2	5	5	–	–	1.2	1.5	7	7	7	10	
	50	15	–	–	–	1.2	1.5	4	4	–	–	–	1.5	6	6	6	10	
	63	15	–	–	–	–	1.5	3	3	–	–	–	–	6	6	6	10	
PKZM0-...	0.16	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	0.25	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	0.4	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	0.63	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	1	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	1.6	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	2.5	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	4	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	6.3	100	4	5	5	T	T	T	2	3	4	5	T	T	T	T	T	
	10	100	3	4	5	6	25	T	1.5	2.5	4	4	T	T	T	T	T	
	12	50	3	4	5	6	25	T	1.5	2.5	4	4	T	T	T	T	T	
	16	50	1.5	1.5	2	3	5	7	T	1	1.6	2	2.5	T	T	T	T	
	20	50	0.8	1.5	1.5	2	3	5	T	0.8	1.2	1.5	2	T	T	T	T	
	25	50	–	1	1.5	1.5	2.5	4	T	–	1	1.5	2	10	T	T	T	
	32	50	–	–	1	1	2	3.5	T	–	–	1	1.5	8	40	T	T	
PKZ2/ZM-...	0.6	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	1.0	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	1.6	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	2.4	100	1.2	2	2.5	10	T	T	1.2	2	2.5	10	T	T	T	T	T	
	4	100	1	1.5	2	2.5	2.5	4	10	1	1.5	2	2.5	2.5	10	10	10	
	6	100	0.6	0.8	1	1.2	2	3	8	0.6	0.8	1	1.2	2	8	8	10	
	10	100	0.5	0.7	0.8	1	1.2	2	4	0.5	0.7	0.8	1	1.2	4	4	5	
	16	100	0.5	0.6	0.7	0.8	1.2	1.5	3	0.5	0.6	0.7	0.8	1.2	3	3	4	
	25	30	–	0.6	0.7	0.7	1.2	1.5	2	–	0.6	0.7	0.7	1.2	2	2	3	
	32	30	–	–	0.6	0.7	1.2	1.5	2	–	–	0.6	0.7	1.2	2	2	3	
PKZM4	40	30	–	–	0.6	0.7	1	1.5	2	–	–	0.6	0.7	1	2	2	2	
	16	100	0.5	0.8	0.8	0.8	2	5	5	0.5	0.8	0.8	0.8	2	5	5	5	
	25	100	–	0.7	0.8	0.8	1.5	5	5	–	0.7	0.8	0.8	1.5	5	5	5	
	32	50	–	–	0.8	0.8	1.5	4	4	–	–	0.8	0.8	1.5	4	4	4	
	40	50	–	–	–	0.8	1.5	3	3	–	–	–	0.8	1.5	3	3	3	
	50	50	–	–	–	–	1	2.5	2.5	–	–	–	–	1	2.5	2.5	2.5	
	58	50	–	–	–	–	–	2.5	2.5	–	–	–	–	–	2.5	2.5	2.5	
63	50	–	–	–	–	–	2	2	–	–	–	–	–	2	2	2		

Notes T: total selectivity

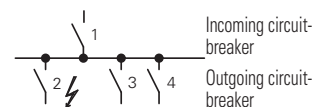
Incoming circuit-breaker (S1)																		
NZM...2-VE...			NZM...3-AE...			NZM...3-VE...			NZM...4-AE...					NZM...4-VE...				
50(70)(150)			50(70)(150)			50(70)(150)			50(100)					50(100)				
100	160	250	250	400	630	250	400	630	630	800	1000	1250	1600	630	800	1000	1250	1600
Selectivity threshold I _s [kA] for selectivity between S2 and S1, overload and short-circuit release set to max. value																		
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
8	8	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
7	7	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
6	6	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
6	6	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
8	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
8	8	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
4	4	5	5	13	T	5	13	T	T	T	T	T	T	T	T	T	T	T
3	3	4	4	7	T	4	7	T	T	T	T	T	T	T	T	T	T	T
2	2	3	3	5	20	3	5	20	T	T	T	T	T	T	T	T	T	T
2	2	3	3	3.5	15	3	3.5	15	T	T	T	T	T	T	T	T	T	T
2	2	2.5	2.5	3.5	15	2.5	3.5	15	T	T	T	T	T	T	T	T	T	T
5	5	6	6	16	45	6	16	45	45	T	T	T	T	45	T	T	T	T
5	5	3.3	3.3	10	25	3.3	10	25	25	42	T	T	T	25	42	T	T	T
4	4	3	3	8	18	3	8	18	18	30	45	T	T	18	30	45	T	T
3	3	3	3	8	18	3	8	18	18	30	45	T	T	18	30	45	T	T
2.5	2.5	3	3	8	18	3	8	18	18	30	45	T	T	18	30	45	T	T
2.5	2.5	2.5	2.5	6.5	15	2.5	6.5	15	15	25	40	T	T	15	25	40	T	T
2	2	2.5	2.5	6.5	15	2.5	6.5	15	15	25	40	T	T	15	25	40	T	T

1.12

NZM1-4 molded case circuit-breakers

Selectivity: incoming circuit-breaker, outgoing circuit-breaker

Selectivity protection between incoming circuit-breaker NZM... and outgoing circuit-breaker NZM...



Selectivity 415 V AC

between circuit-breakers enables separate shut-down of faulty system sections. Selectivity (discrimination) exists between incoming breaker 1 and outgoing breaker 2 if, only outgoing breaker 2 trips at position 2 during a short-circuit. System sections 3 and 4 continue to be operational.

Incoming circuit-breaker (S1)

NZM...1-A...

NZM...2-A...

	I_{cu} [kA]	25(36)(50)(70)(100)								25(36)(50)(70)(150)								
	I_n [A]	20-40	50	63	80	100	125	160	20-40	50	63	80	100	125	160	200	250	
Outgoing circuit-breaker (S2)	I_n [A]	I_{cu} (415V) [kA]	Prospective short-circuit current (kA). Set the overload and short-circuit release of the incoming circuit-breaker to the max. value.															
NZM...1-A...	20-40	25-100	—	—	0.5	0.7	0.8	1.5	1.5	—	—	0.6	0.8	1.5	1.5	1.5	2	3
	50	25-100	—	—	—	0.6	0.8	1.5	1.5	—	—	—	0.8	1.5	1.5	1.5	2	3
	63	25-100	—	—	—	—	0.8	1.5	1.5	—	—	—	—	1.5	1.5	1.5	2	3
	80	25-100	—	—	—	—	—	1.5	1.5	—	—	—	—	—	1.5	1.5	2	3
	100	25-100	—	—	—	—	—	—	1.5	—	—	—	—	—	—	1.5	2	3
	125	25-100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3
	160	25-100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3
NZM...2-A...	20-40	25-150	—	—	0.5	0.6	0.8	1	1	—	—	0.5	0.6	0.8	1	1.2	1.6	2
	50	25-150	—	—	—	0.6	0.8	1	1	—	—	—	0.6	0.8	1	1.2	1.6	2
	63	25-150	—	—	—	—	0.8	1	1	—	—	—	—	0.8	1	1.2	1.6	2
	80	25-150	—	—	—	—	—	1	1	—	—	—	—	—	1	1.2	1.6	2
	100	25-150	—	—	—	—	—	—	1	—	—	—	—	—	—	1.2	1.6	2
	125	25-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.6	2
	160	25-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
	200	25-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250	25-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
NZM...1-M...	20-40	25-150	—	—	—	—	0.8	1	1	—	—	—	—	0.8	1	1.2	1.6	2
	50	25-150	—	—	—	—	—	—	1	—	—	—	—	—	—	1.2	1.6	2
	63	25-150	—	—	—	—	—	—	1	—	—	—	—	—	—	1.2	1.6	2
	80	25-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.6	2
	100	25-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
NZM...2-M...	20-12	25-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	160	25-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	200	25-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NZM...2-VE...	100	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	1.2	1.6	2
	160	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	250	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NZM...2-ME...	90	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	1.2	1.6	2
	140	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	220	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NZM...3-AE...	250	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	630	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NZM...3-VE...	250	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	630	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NZM...3-ME...	220	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	350	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	450	50-150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NZM...4-AE...	630	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	800	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1000	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1250	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1600	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NZM...4-VE...	630	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	800	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1000	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1250	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1600	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NZM...4-ME...	550	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	875	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1400	50-85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Notes T: total selectivity

Incoming circuit-breaker (S1)

NZM...2-VE...			NZM...3-AE...			NZM...3-VE...			NZM...4-AE...					NZM...4-VE...				
50(70)(150)			50(70)(150)			50(70)(150)			50(100)					50(100)				
100	160	250	250	400	630	250	400	630	630	800	1000	1250	1600	630	800	1000	1250	1600

Prospective short-circuit current (kA). Set the overload and short-circuit release of the incoming circuit-breaker to the max. value.

2	5	7.5	7.5	20	20	12.5	25	25	T	T	T	T	T	T	T	T	T	T
2	5	7.5	7.5	20	20	12.5	25	25	T	T	T	T	T	T	T	T	T	T
2	5	6	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	5	6	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	5	6	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	5	6	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	5	6	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
1	2	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
1	2	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
1	2	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	2	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	2	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	–	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	–	4	5	10	10	10	15	15	T	T	T	T	T	T	T	T	T	T
–	–	–	–	10	10	–	15	15	T	T	T	T	T	T	T	T	T	T
–	–	–	–	10	10	–	15	15	T	T	T	T	T	T	T	T	T	T
1	2	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	2	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	2	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	2	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	–	4	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	–	2	6	7	10	7	10	12	T	T	T	T	T	T	T	T	T	T
–	–	–	6	7	10	7	10	12	T	T	T	T	T	T	T	T	T	T
–	–	–	–	7	10	–	10	12	T	T	T	T	T	T	T	T	T	T
–	1.2	2	6	7	10	7	8	11	T	T	T	T	T	T	T	T	T	T
–	–	2	6	7	10	7	8	11	T	T	T	T	T	T	T	T	T	T
–	–	–	–	7	10	–	8	11	T	T	T	T	T	T	T	T	T	T
–	–	2	6	7	10	5	10	12	T	T	T	T	T	T	T	T	T	T
–	–	–	6	7	10	5	10	12	T	T	T	T	T	T	T	T	T	T
–	–	–	–	7	10	5	10	12	T	T	T	T	T	T	T	T	T	T
–	–	–	–	5	7.5	–	10	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	7.5	–	–	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	–	T/80	T/80	T/80	T/80	–	T/80	T/80	T/80	T/80
–	–	–	–	3.5	4	–	10	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	4	–	–	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	–	T/80	T/80	T/80	T/80	–	T/80	T/80	T/80	T/80
–	–	–	–	3.5	4	–	10	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	4	–	–	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	–	T/80	T/80	T/80	T/80	–	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	–	10	15	20	20	–	10	15	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20

1.12

NZM1-4 molded case circuit-breakers

Selectivity: incoming circuit-breaker, outgoing circuit-breaker

Protection of PVC insulated cables against thermal overload due to short-circuits

According to VDE 0100 Part 430 Wiring Regulations, cables and conductors must be protected from overload and short-circuits. In circuit-breakers NZM, overload protection is implemented through the adjustable, current-dependently delayed overload release.

Short-circuit protection is provided by adjustable instantaneous releases, which open the main contacts in less than 25 ms. The short-circuit total opening time restricts the temperature rise of the cable to a minimum.

The tables indicate the minimum conductor crosssection reliably protected by circuit-breakers during a short-circuit. (Operating voltage $U_n = 415 \text{ V}$)

Minimum protected cross-section mm² copper

NZM...1(-4)-...20	6
NZM...1(4)-...25...160	10
NZM...2(-4)-...20...250	4
NZM...3(-4)-...250...630	16
NZM...4(-4)-...630...1600	95

Backup protection

between incoming circuit-breaker NZM(N)(H) and outgoing circuit-breaker NZMB(N)(H)...

	Incoming circuit-breaker ①														
	NZM1					NZM2					NZM3				
	I_n	Up to 160 A				Up to 250 A					Up to 630 A				
	$I_{cu} (415V)$	25 kA	36 kA	50 kA	70 kA	100 kA	25 kA	36 kA	50 kA	70 kA	150 kA	50 kA	70 kA	150 kA	
Outgoing circuit-breaker ②															
	$I_{cu} (415V)$	I_n													
NZMB1	25 kA	Up to 160 A	25	36	50	70	100	25	36	50	70	150	50	70	150
NZMC1	36 kA	Up to 160 A	—	36	50	70	100	—	36	50	70	150	50	70	150
NZMN1	50 kA	Up to 160 A	—	—	50	70	100	—	—	50	70	150	50	70	150
NZMS1	70 kA	Up to 160 A	—	—	—	70	100	—	—	—	70	150	—	70	150
NZMH1	100 kA	Up to 160 A	—	—	—	—	100	—	—	—	—	150	—	—	150
NZMB2	25 kA	Up to 250 A	—	—	—	—	—	25	36	50	70	150	50	70	150
NZMC2	36 kA	Up to 250 A	—	—	—	—	—	—	36	50	70	150	50	70	150
NZMN2	50 kA	Up to 250 A	—	—	—	—	—	—	—	50	70	150	50	70	150
NZMS2	70 kA	Up to 250 A	—	—	—	—	—	—	—	—	70	150	—	70	150
NZMH2	150 kA	Up to 250 A	—	—	—	—	—	—	—	—	—	150	—	—	150
NZMN3	50 kA	Up to 630 A	—	—	—	—	—	—	—	—	—	—	50	70	150
NZMS3	70 kA	Up to 630 A	—	—	—	—	—	—	—	—	—	—	—	70	150
NZMH3	150 kA	Up to 630 A	—	—	—	—	—	—	—	—	—	—	—	—	150

Where the prospective fault current at the mounting location of circuit-breakers is very high current-limiting circuit-breakers NZMN(H) are normally used. A cost-effective alternative if the fault level is too high for circuit-breakers NZMB(C)(N) is to fit a current-limiting circuit-breaker NZMN(H) upstream of an arrangement of standard circuit-breakers NZMB(C)(N).

The table shows which current-limiting circuit-breakers NZMN(H) provide reliable protection at network locations with high short-circuit ratings in combination with NZMB(C)(N).

The selectivity limit is determined by the response current of the non-delayed short-circuit release in the upstream incoming circuit-breaker. In many applications this is sufficient.

between incoming circuit-breaker NZM...1-A... and outgoing circuit-breaker FAZ-B(C)/PLSM-B(C)...

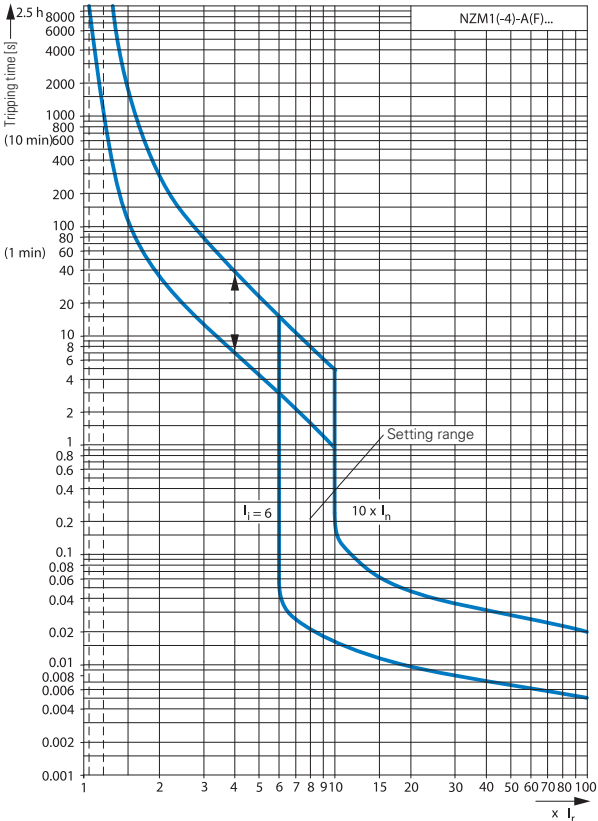
Outgoing circuit-breaker	Incoming circuit-breaker	
	NZM(B)(C)2...A	NZMC(N)(S)(H)1...A
FAZ-(2)(3)(4)(N)-B(C)...		
0,5...16	25 kA	30 kA
20...40	20 kA	20 kA
50,63	15 kA	15 kA
PLSM-B(C) ... (/...)		
0,5...16	25 kA	30 kA
20...40	20 kA	20 kA
50,63	15 kA	15 kA

between incoming circuit-breaker NZM...2-A... and outgoing circuit-breaker FAZ-B(C)/PLSM-B(C)...

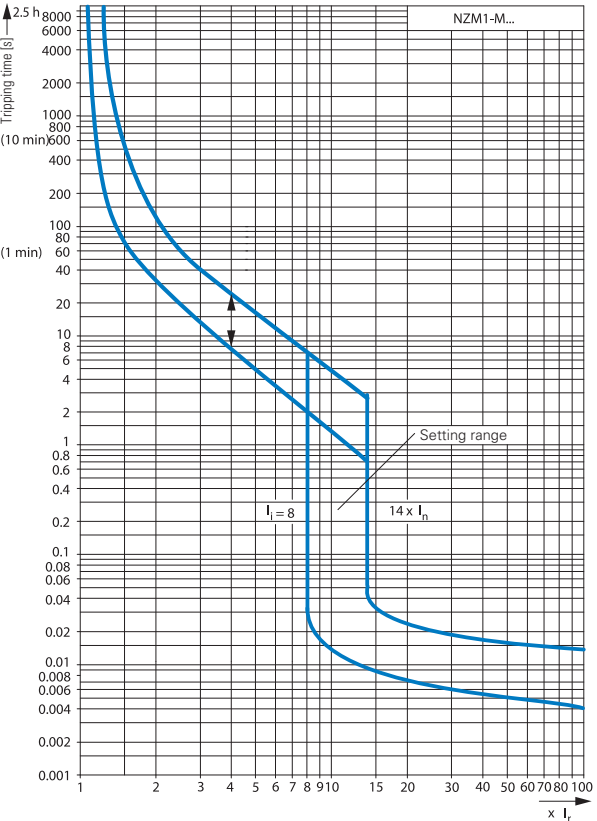
Outgoing circuit-breaker	Incoming circuit-breaker	
	NZMB(C)2...A	NZMN(S)(H)2...A
FAZ-(2)(3)(4)(N)-B(C)...		
0,5...10	25 kA	50 kA
13...32	25 kA	30 kA
40...63	20 kA	20 kA
PLSM-B(C) ... (/...)		
0,5...10	25 kA	50 kA
13...32	25 kA	30 kA
40...63	20kA	20 kA

Tripping characteristics NZM1, NZM2

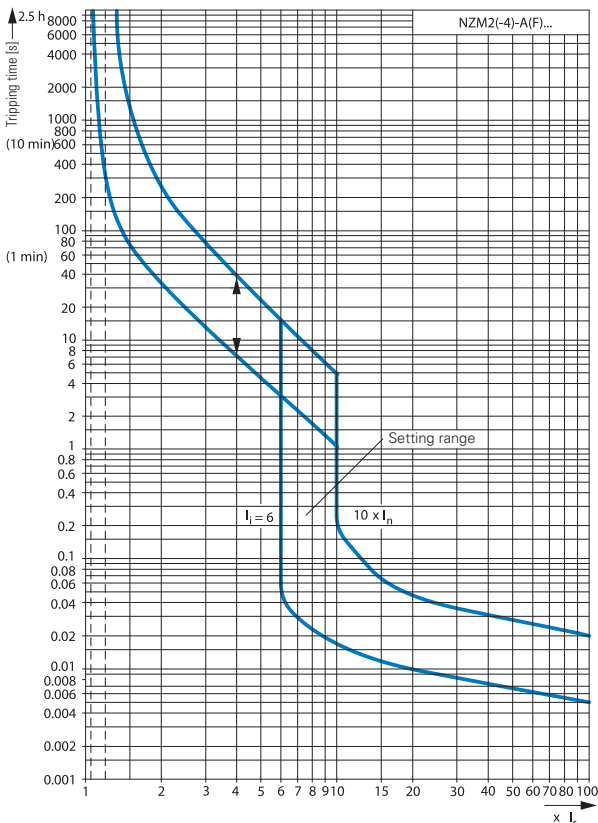
System and line protection with NZM1



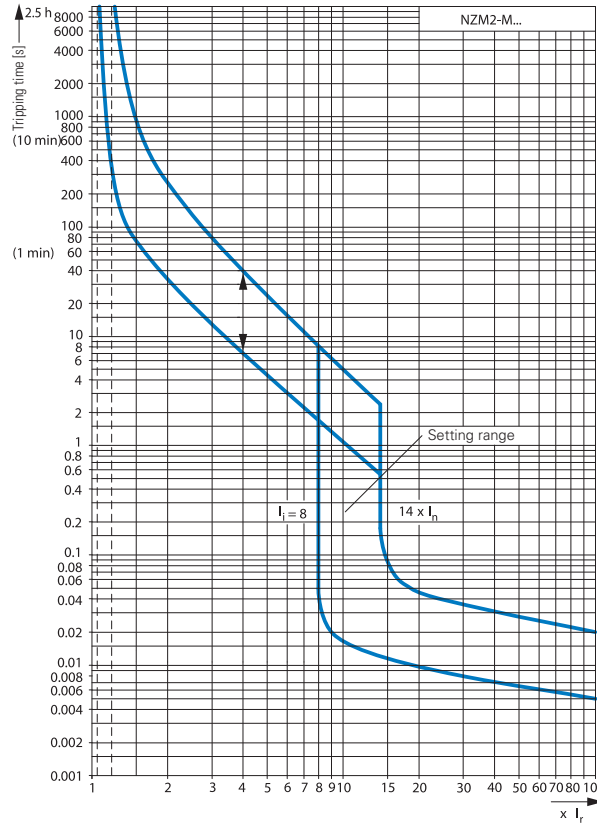
Motor protection with NZM1



System and line protection with NZM2



Motor protection with NZM2

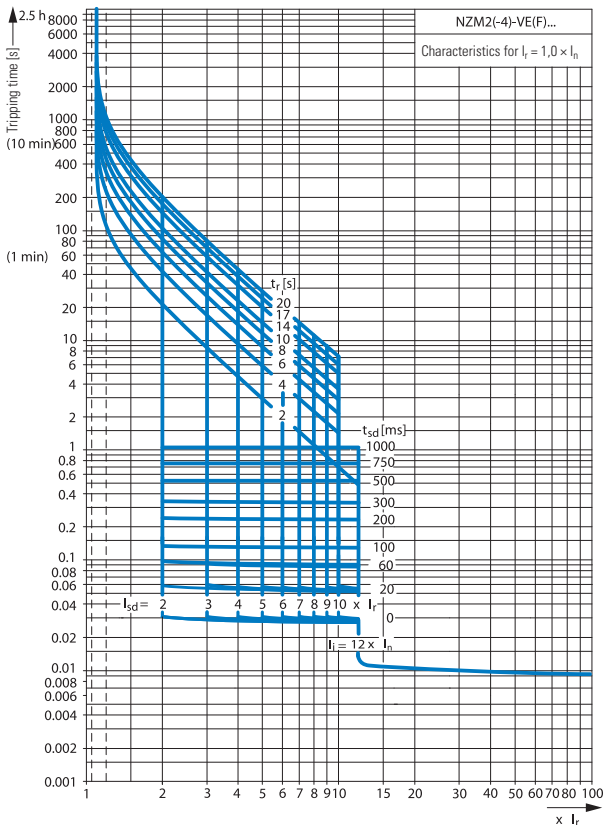


1.13 NZM1-4 molded case circuit-breakers

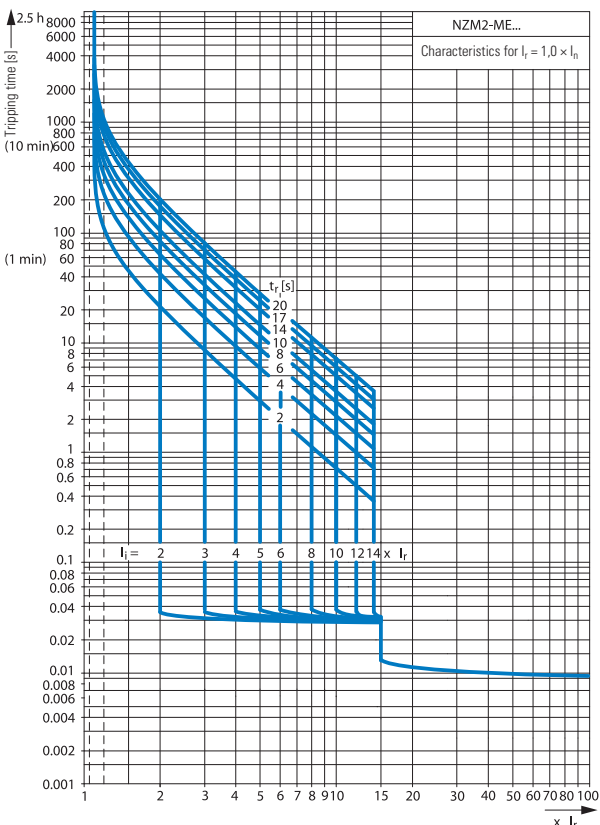
Tripping characteristics

Tripping characteristics NZM2, NZM3

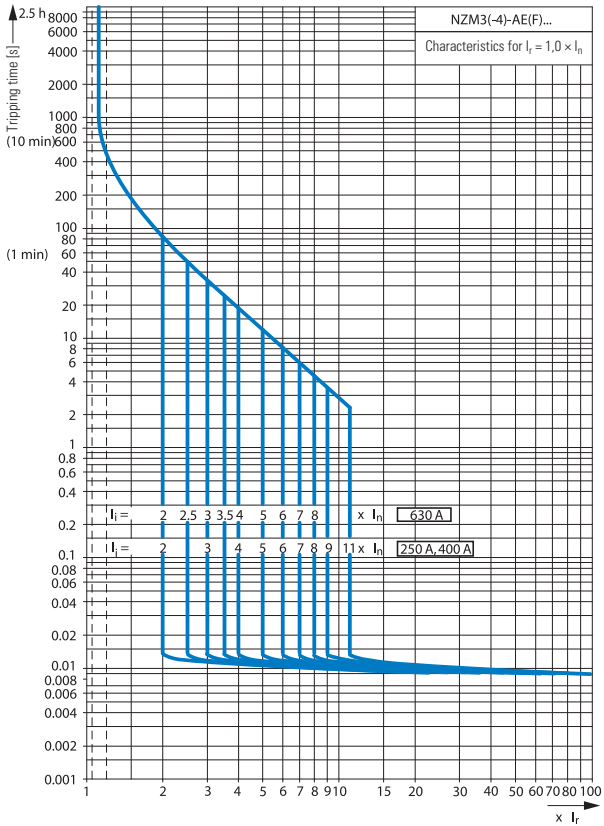
Systems, cable, selectivity and generator protection with NZM2



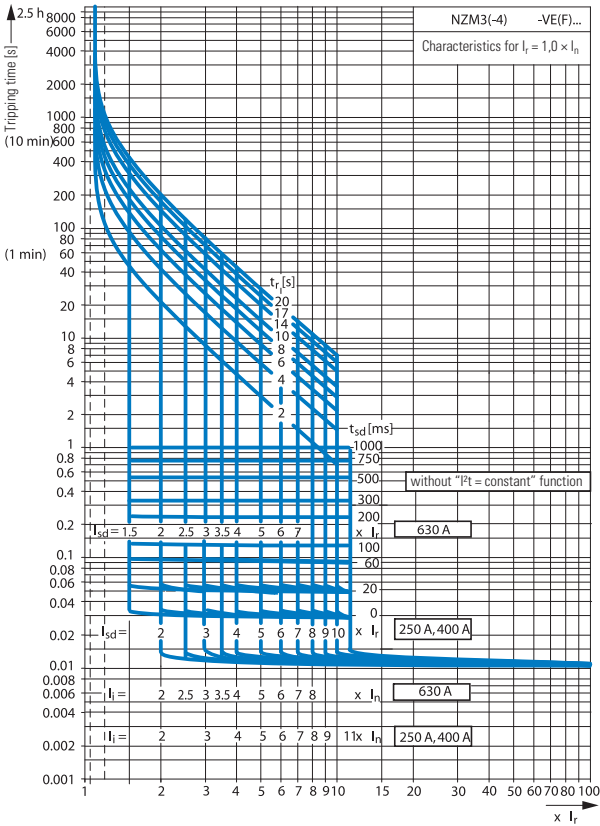
Motor protection with NZM2



System and line protection with NZM3

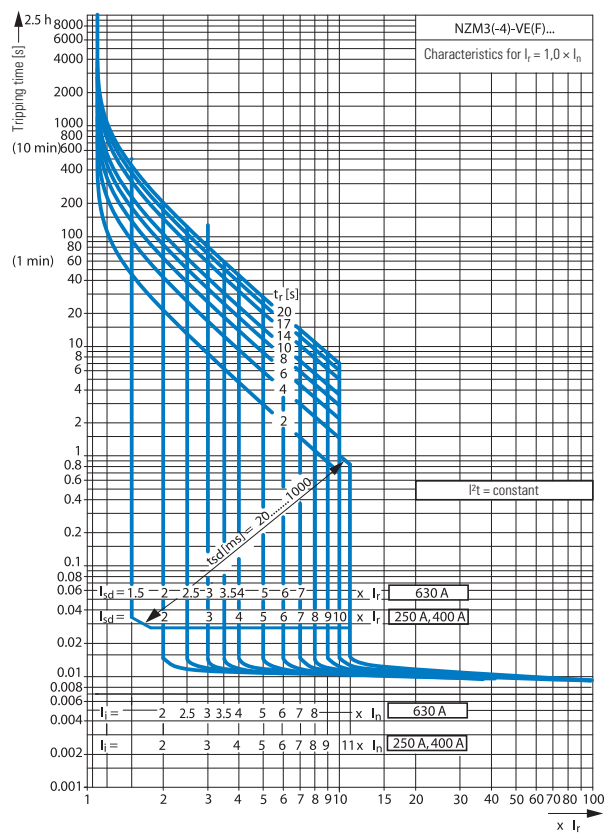


Systems, cable, selectivity and generator protection with NZM3

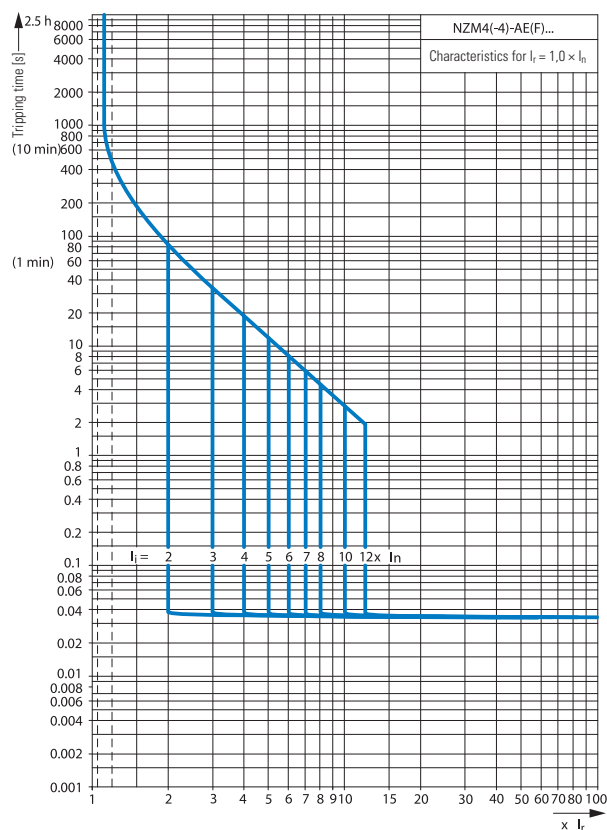


Tripping characteristics NZM3, NZM4

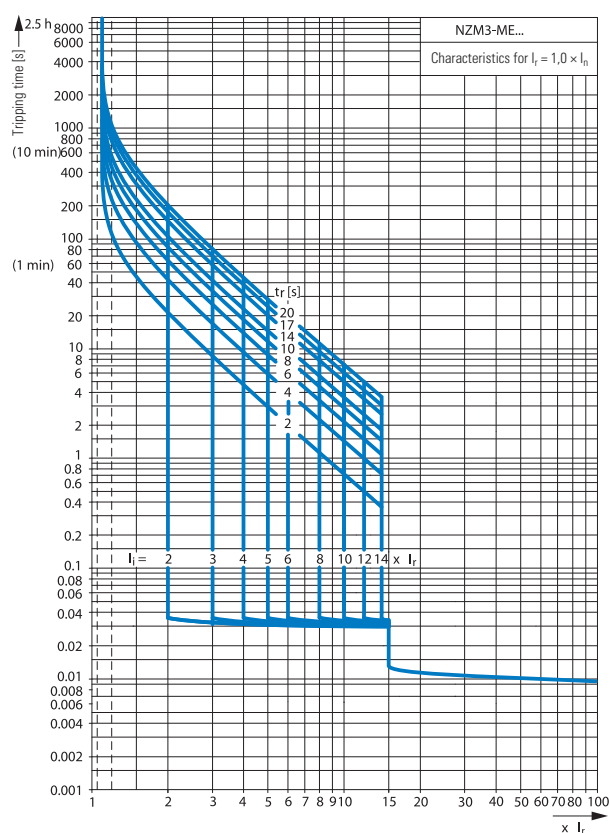
Systems, cable, selectivity and generator protection with NZM3



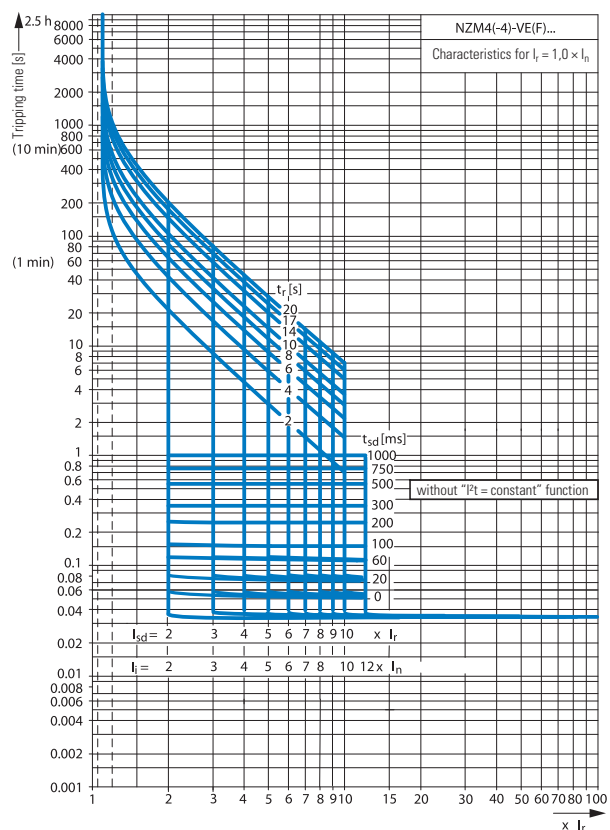
System and line protection with NZM4



Motor protection with NZM3



Systems, cable, selectivity and generator protection with NZM4



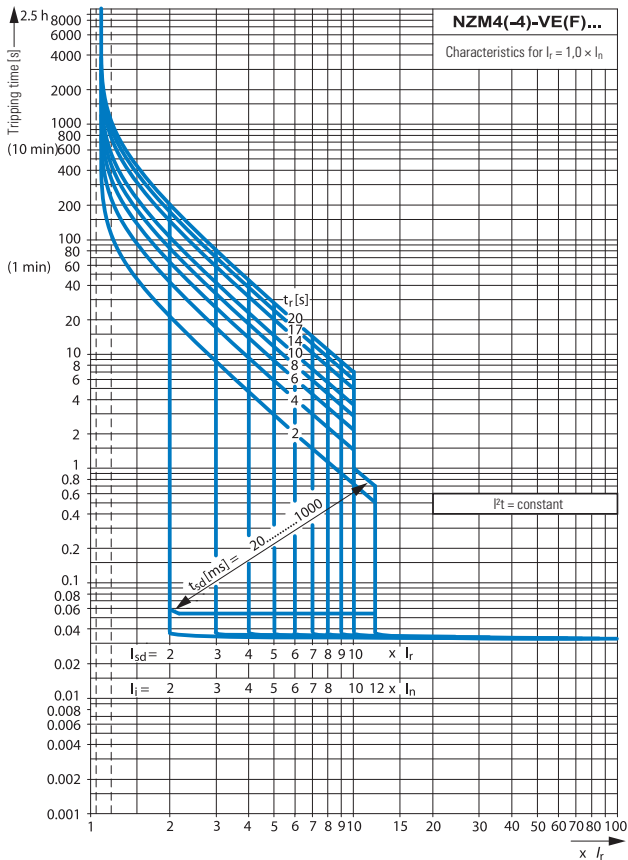
1.13

NZM1-4 molded case circuit-breakers

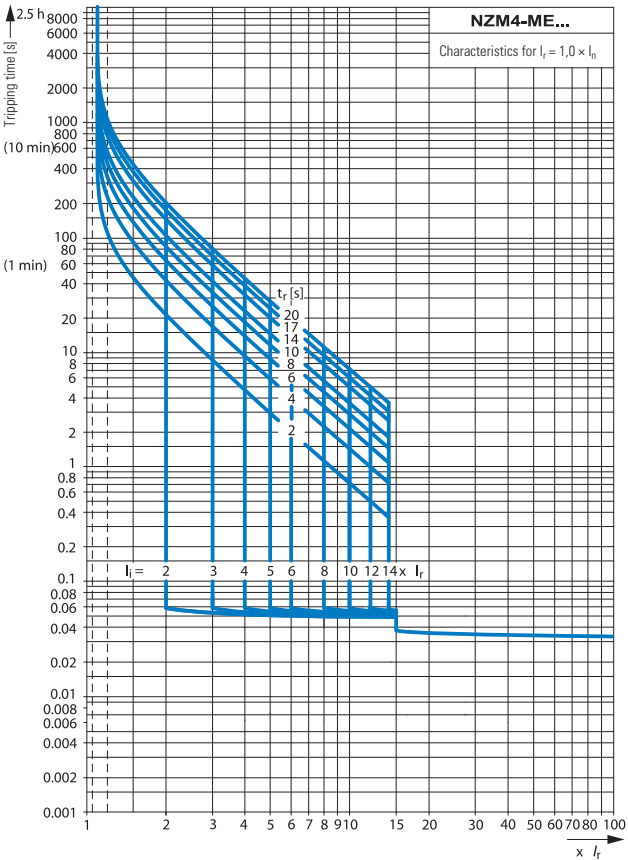
Tripping characteristics

Tripping characteristics NZM4

Systems, cable, selectivity and generator protection with NZM4

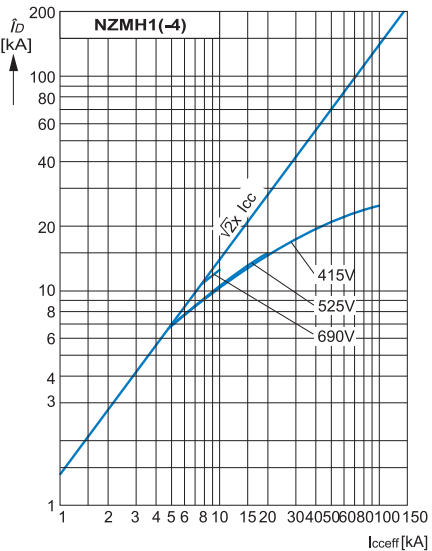
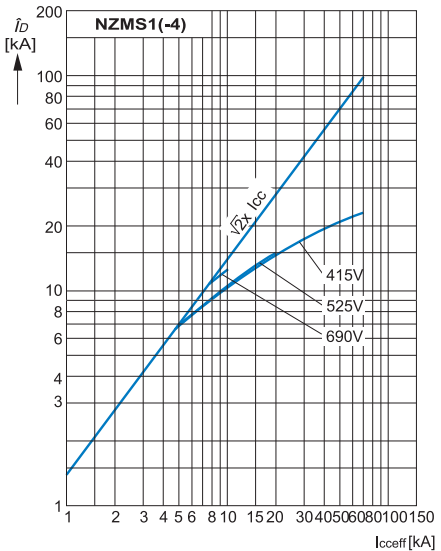
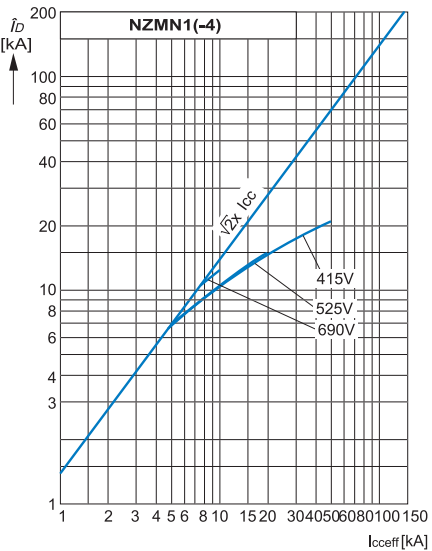
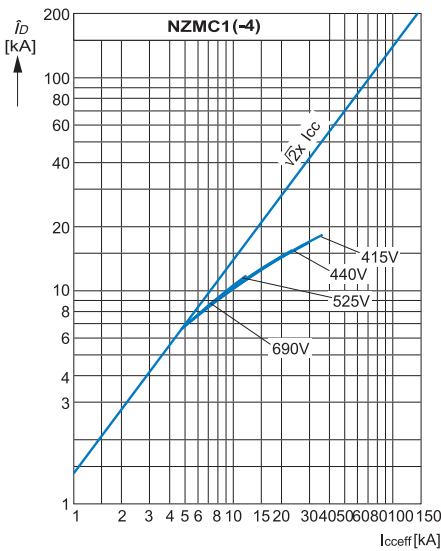
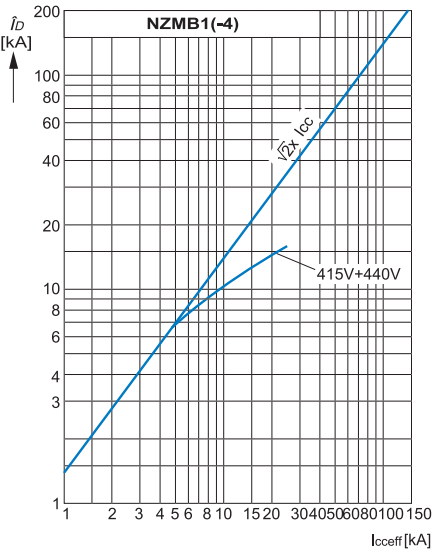


Motor protection with NZM4



Let-through characteristics NZM1

Let-through current $\hat{I}_D$

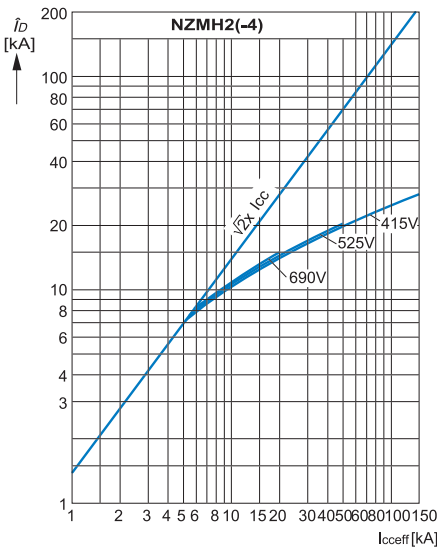
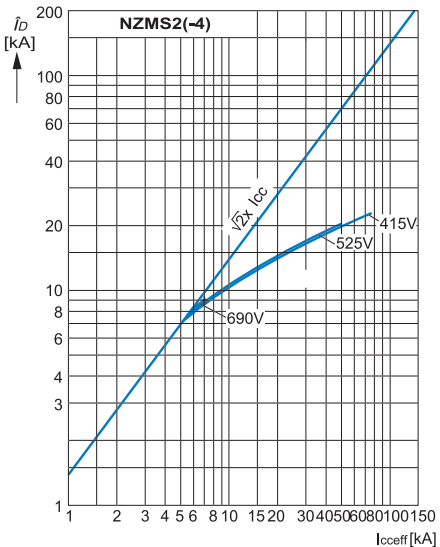
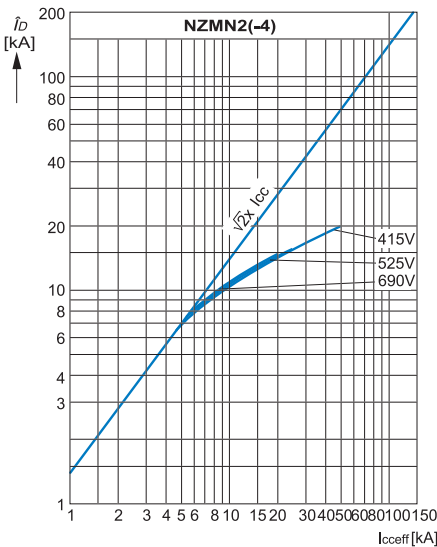
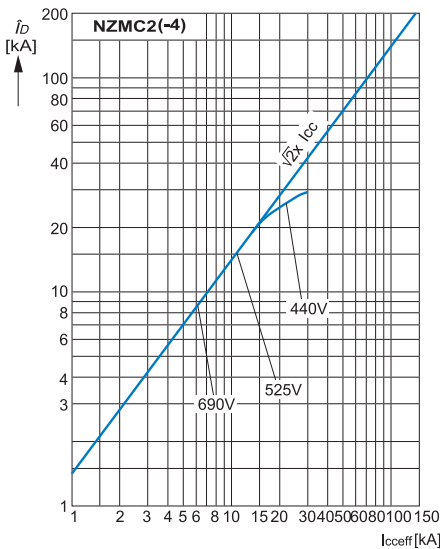
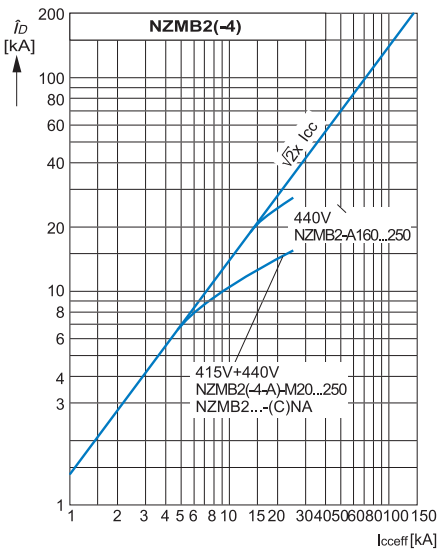


1.13 NZM1-4 molded case circuit-breakers

Let-through characteristics

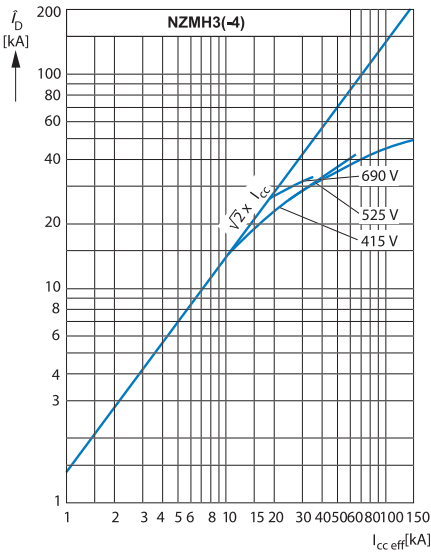
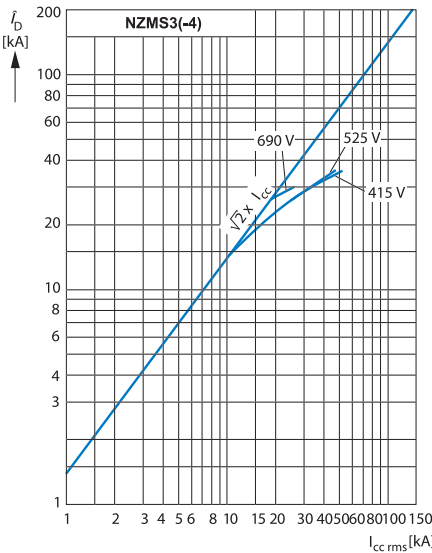
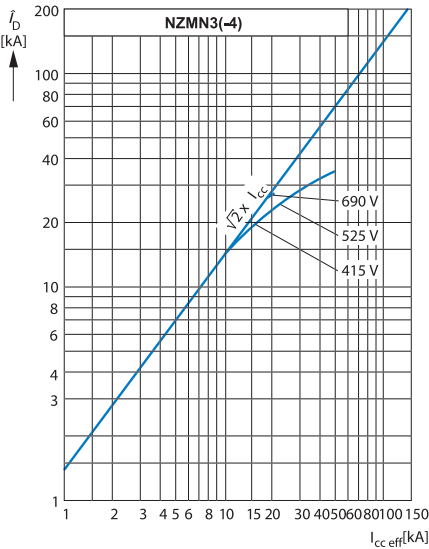
Let-through characteristics NZM2

Let-through current $\hat{I}_D$

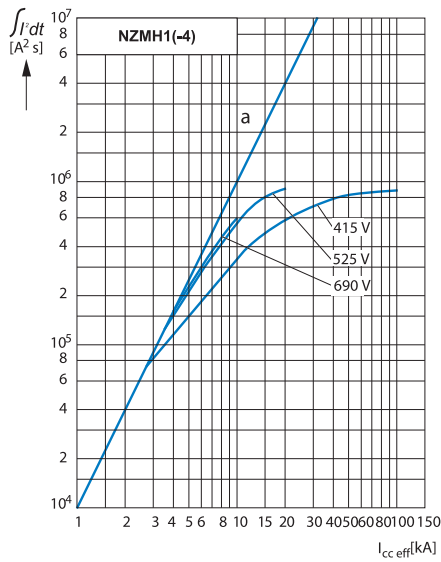
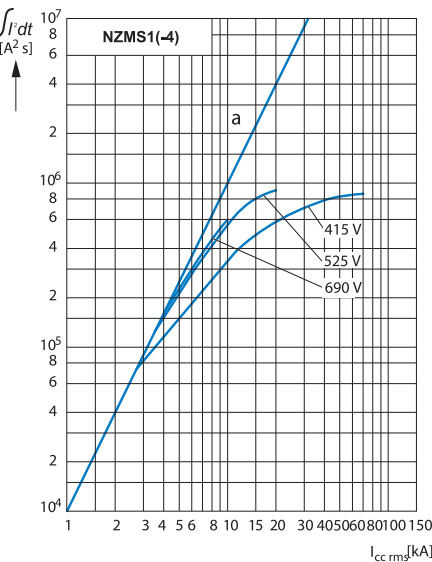
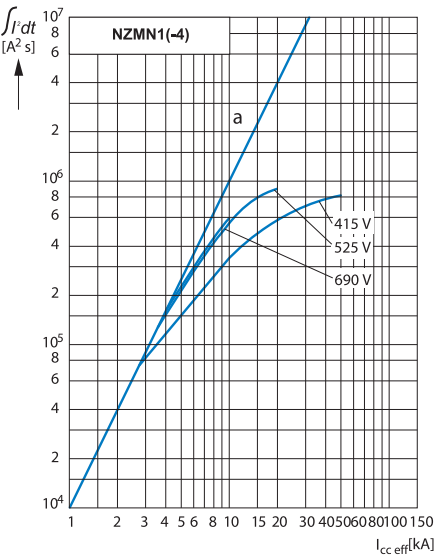
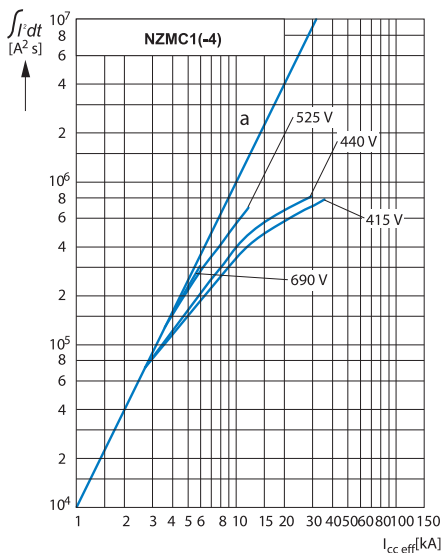
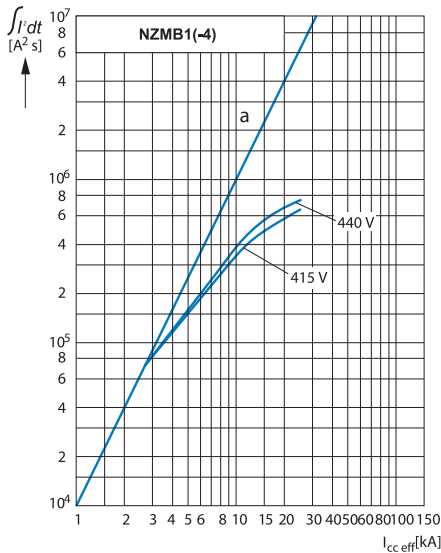


Let-through characteristics NZM2

Let-through current $\hat{I}_D$



Let-through energy $\int I^2 dt$

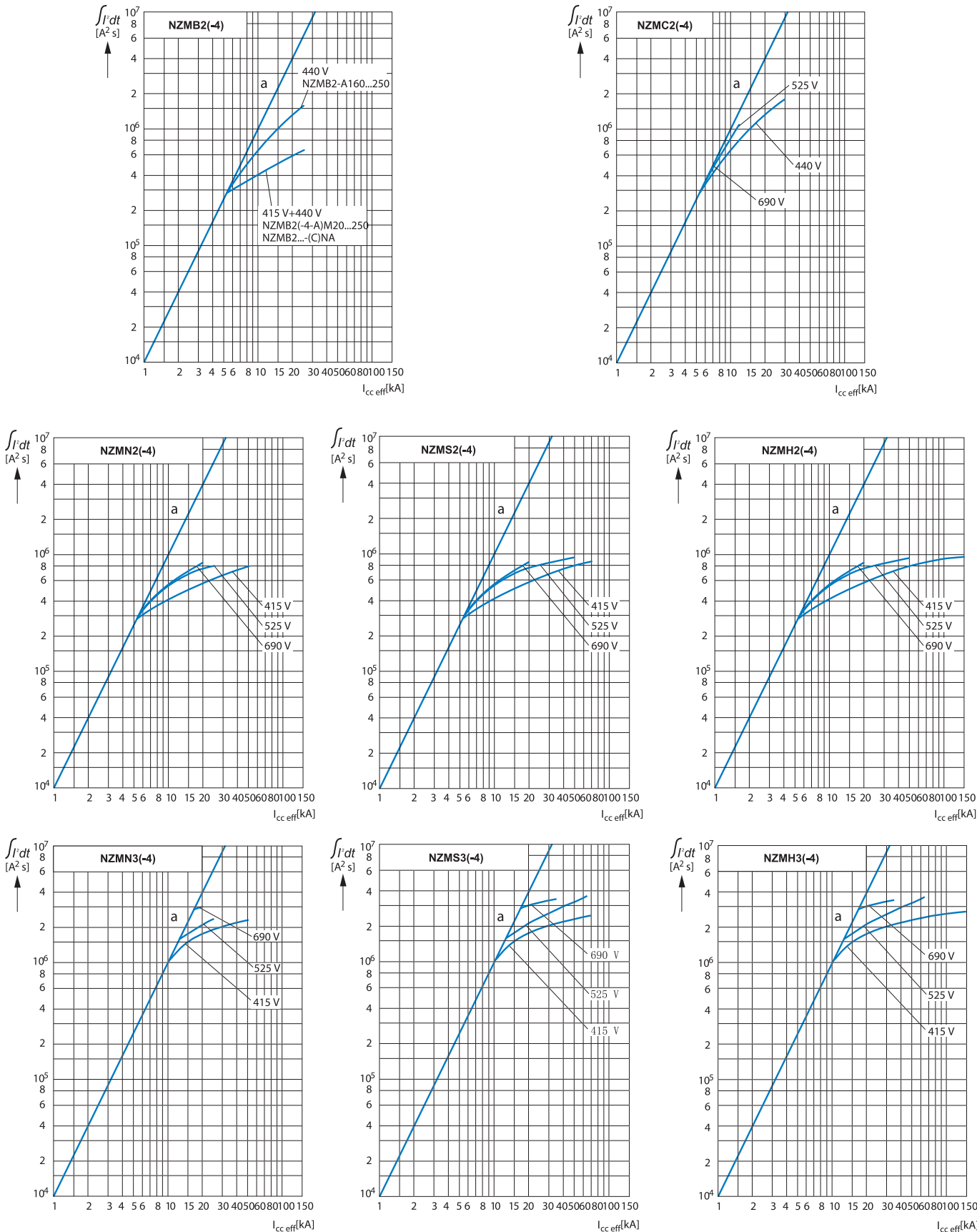


1.13 NZM1-4 molded case circuit-breakers

Let-through characteristics

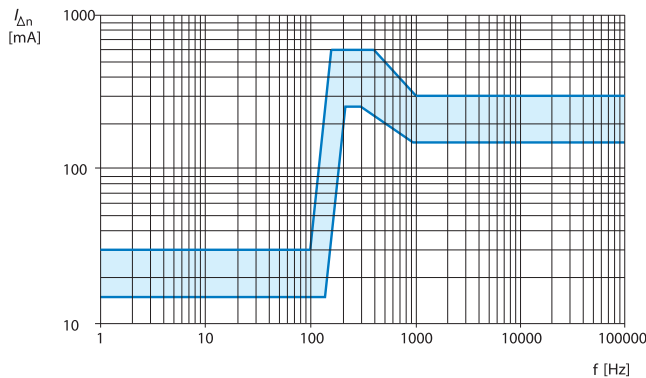
Let-through characteristics NZM2, 3

Let-through energy I^2t

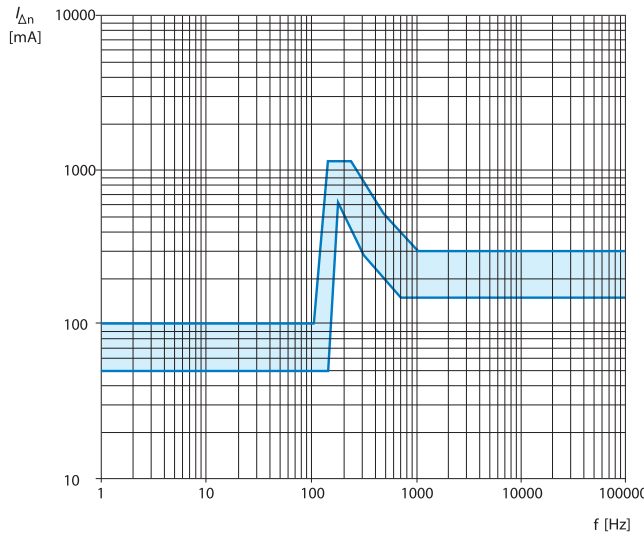


Residual-current release frequency response

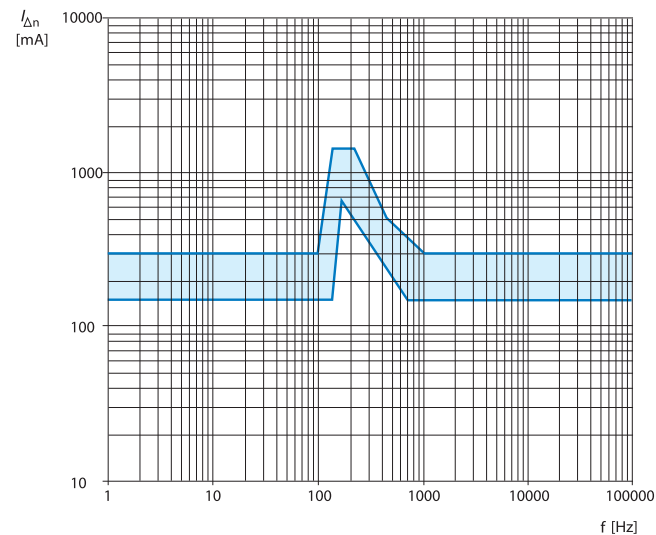
Frequency response NZM2-4-XFIA30
30 mA



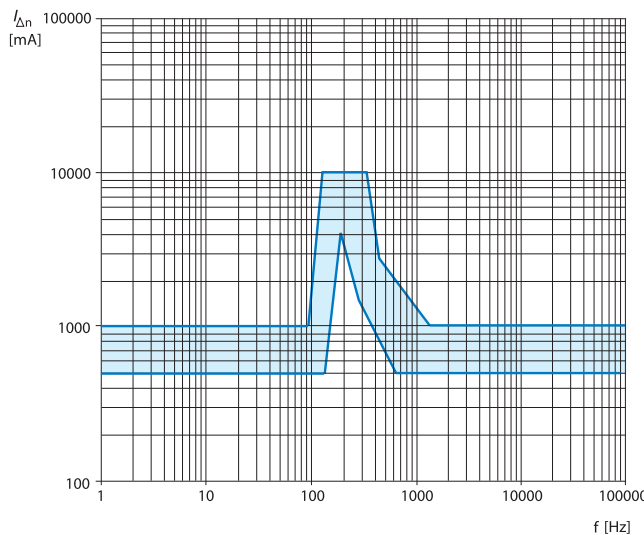
Frequency response NZM2-4-XFIA
100 mA



Frequency response NZM2-4-XFIA
300 mA



Frequency response NZM2-4-XFIA
1000 mA

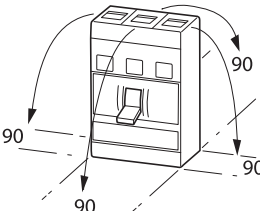


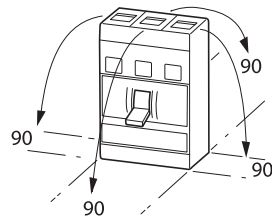
1.14

NZM1-4 molded case circuit-breakers

Technical data

Circuit-breakers

		Rated uninterrupted current max. 160 A				
		NZMB1	NZMC1	NZMN1	NZMS1	NZMH1
General						
Standards		IEC/EN 60947				
Contact protection		Finger and back-of-hand proof to DIN EN 50274/VDE 0660 Part 514				
Climatic proofing		Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30				
Ambient temperature						
Storage		°C	-25/+70			
Operation		°C	-25/+70			
Mechanical shock resistance (IEC/EN 60068-2-27)		20 (half-sinusoidal shock 20 ms)				
Safe isolation according to EN 61140						
Between auxiliary contacts and main contacts		V AC	500			
Between the auxiliary contacts		V AC	300			
Built-in position		Vertical and 90° in all directions				
						
Direction of incoming supply		Any				
Degree of protection						
Device		In the area of the HMI devices: IP20 (basic degree of protection)				
Enclosure		With insulating surround: IP40 With door coupling rotary handle: IP66				
Terminal type		Tunnel terminal: IP10 Phase isolator and cable terminal: IP00				

Rated uninterrupted current max. 250 A					Rated uninterrupted current max. 630 A			Rated uninterrupted current max. 1600 A	
NZMB2	NZMC2	NZMN2	NZMS2	NZMH2	NZMN3	NZMS3	NZMH3	NZMN4	NZMH4
IEC/EN 60947									
Finger and back-of-hand proof to DIN EN 50274/VDE 0660 Part 514									
Damp heat, constant, to IEC 60068-2-78									
Damp heat, cyclic, to IEC 60068-2-30									
-25/+70									
-25/+70									
20 (half-sinusoidal shock 20 ms)									
500									
300									
Vertical and 90° in all directions									
					With plug-in adapter elements - NZM2: vertical, 90° right/left With withdrawable unit: - NZM3: vertical, 90° left - NZM4: vertical With remote operator: - NZM2, N(S)2, NZM3, N(S)3, NZM4, N(S)4: vertical and 90° in all directions				
Any									
In the area of the HMI devices: IP20 (basic degree of protection)									
With insulating surround: IP40									
With door coupling rotary handle: IP66									
Tunnel terminal: IP10									
Phase isolator and cable terminal: IP00									

Circuit-breakers

				Rated uninterrupted current max. 160 A				
				NZMB1	NZMC1	NZMN1	NZMS1	NZMH1
Circuit-breaker								
Rated impulse withstand voltage U_{imp}								
Main contacts		V		6000	6000	6000	6000	6000
Auxiliary contacts		V		6000	6000	6000	6000	6000
Rated operating voltage	U_e	V AC		690	690	690	690	690
Overvoltage category/degree of pollution				III/3	III/3	III/3	III/3	III/3
Rated insulation voltage	U_i	V		690	690	690	690	690
For use in IT electrical power networks		V		525	525	690	690	690
Switching capacity								
Rated short-circuit making capacity								
	240 V 50/60 Hz	I_{cm}	kA	63	121	187	220	220
	400/415 V 50/60 Hz	I_{cm}	kA	53	76	105	220	220
	440 V 50/60 Hz	I_{cm}	kA	53	63	74	74	74
	525 V 50/60 Hz	I_{cm}	kA	30	24	40	40	40
	690 V 50/60 Hz	I_{cm}	kA	-	14	17	17	17
Rated short-circuit breaking capacity I_{cn}								
I_{cu} according to IEC/EN 60947 Operating sequence O-t-CO	240 V 50/60 Hz	I_{cu}	kA	30	55	85	90	100
	400/415 V 50/60 Hz	I_{cu}	kA	25	36	50	70	100
	440 V 50/60 Hz	I_{cu}	kA	25	30	35	35	35
	525 V 50/60 Hz	I_{cu}	kA	15	12	20	20	20
	690 V 50/60 Hz	I_{cu}	kA	-	8	10	10	10
I_{cs} according to IEC/EN 60947 Operating sequence O-t-CO-t-CO	240 V 50/60 Hz	I_{cs}	kA	30	55	85	90	100
	400/415 V 50/60 Hz	I_{cs}	kA	25	36	50	50	50
	440 V 50/60 Hz	I_{cs}	kA	18.5	22.5	35	35	35
	525 V 50/60 Hz	I_{cs}	kA	7.5	6	10	10	10
	690 V 50/60 Hz	I_{cs}	kA	-	4	7.5	7.5	7.5
Utilization category to IEC/EN 60947-2				A	A	A	A	A
Rated short-time withstand current								
t = 0.3 s		I_{cw}	kA	-	-	-	-	-
t = 1 s		I_{cw}	kA	-	-	-	-	-
Rated making and breaking capacity								
Rated operational current								
AC-1	400/415 V 50/60 Hz	I_e	A	160	160	160	160	160
	690 V 50/60 Hz	I_e	A	160	160	160	160	160
AC-3	400/415 V 50/60 Hz	I_e	A	160	160	160	160	160
	690 V 50/60 Hz	I_e	A	160	160	160	160	160
Lifespan, mechanical of which max. 50 % trip by shunt/undervoltage release	Operations			20000	20000	20000	20000	20000
Max. operating frequency	Ops/h			120	120	120	120	120
Lifespan, electrical, according to IEC/EN 60947-4-1 part B								
AC-1	400/415 V 50/60 Hz	Operations		10000	7500	10000	10000	10000
	690 V 50/60 Hz	Operations		7500	5000	7500	7500	7500
AC-3	400/415 V 50/60 Hz	Operations		7500	-	7500	7500	7500
	690 V 50/60 Hz	Operations		5000	-	5000	5000	5000
Heat dissipation per pole at I_u		W		13	13	13	13	13
Overload releases								
Temperature compensation residual error for T > 40 °C								
Thermomagnetic releases		%/k		0.7 ⁵⁾	0.7 ⁵⁾	0.7 ⁵⁾	0.7 ⁵⁾	0.7 ⁵⁾
Electronic releases				-	-	-	-	-
Total opening delay on short-circuit		ms		<10	<10	<10	<10	<10
Technical data that diverge from products for the IEC market								
Switching capacity of NA switch (UL489, CSA 22.2 No. 5-1)								
	240 V 60 Hz	kA		35	-	85	-	-
	480 V 60 Hz	kA		25	-	35 ²⁾	-	-
	600 V 60 Hz	kA		-	-	-	-	-

Notes

¹⁾ Switching capacity of NA switches with NZM...1-...(C)NA: 480 V/277 V

²⁾ For rated operational current AC-3 with NZM4: 400 V: max. 650 kW; 690 V: max. 600 kW

³⁾ DC data apply only for NZM...A... with thermomagnetic release

⁴⁾ For switching capacity NZM2...NA: 600 V/347 V

⁵⁾ For thermal losses per pole the specification refers to the maximum rated operational current of the construction size

⁶⁾ Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit-breaker

⁷⁾ For higher switching capacity please inquire

Rated uninterrupted current max. 250 A					Rated uninterrupted current max. 630 A			Rated uninterrupted current max. 1600 A	
NZMB2	NZMC2	NZMN2	NZMS2	NZMH2	NZMN3	NZMS3	NZMH3	NZMN4	NZMH4
8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
690	690	690	690	690	690	690	690	690	690
III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
525	525	690	690	690	690	690	690	525	525
63	121	187	220	330	187	220	330	105	275
53	76	105	220	330	105	220	330	105	220
53	63	74	143	286	74	143	286	74	187
30	24	53	84	105	53	95	143	53	143
-	9	40	40	40	40	53	74	40	105
30	55	85	100	150	85	100	150	50	125
25	36	50	70	150	50	70	150	50	85
25	30	35	65	130	35	65	130	35	85
15	15	25	36	50	25	36	65	25	65
...	8	20	20	20	20	25	35	20	50
30	55	85	100	150	85	100	150	37	63
25	36	50	70	150	50	70	150	37	50
18.5	22.5	35	65	130	35	65	130	26	43
-	9	25	36	38	13	18	33	19	49
-	4	5	5	5	5	6	9	15	37
A	A	A	A	A	A	A	A	B	B
-	-	1.9	1.9	1.9	3.3	3.3	3.3	19.2	-
-	-	1.9	1.9	1.9	3.3	3.3	3.3	19.2	-
250	250	250	250	250	630	630	630	1600	1600
250	250	250	250	250	630	630	630	1600	1600
250	250	250	250	250	630	630	630	1600 ³⁾	1600 ³⁾
250	250	250	250	250	630	630	630	1600 ³⁾	1600 ³⁾
20000	20000	20000	20000	20000	15000	15000	15000	10000	10000
120	120	120	120	120	60	60	60	60	60
10000	10000	10000	10000	10000	5000	5000	5000	3000	3000
7500	7500	7500	7500	7500	3000	3000	3000	2000	2000
6500	6500	6500	6500	6500	2000	2000	2000	2000	2000
5000	5000	5000	5000	5000	2000	2000	2000	1000	1000
19	19	19	19	19	40	40	40	97	97
0	0	0	0	0	-	-	-	-	-
0	0	0	0	0	0	0	0	0	0
<10	<10	<10	<10	<10	<10	<10	<10	<25≤415V <35>415V	<25≤415V <35>415V
35	-	85	100	150 ⁴⁾	85	100	150 ⁴⁾	85	125 ⁶⁾
25	-	35	65	100 ⁴⁾	42	65	100 ⁴⁾	42	85
18	-	25	35	50 ⁴⁾	35	42	50 ⁴⁾	35	50

Circuit-breakers NZMH2-XFIA30, circuit-breakers with earth-fault release

NZMH2...-XFIA30			
Circuit-breakers with earth-fault release			
Electrical			
Standards			IEC/EN 60947-2
Rated uninterrupted current	$I_n = I_u$	A	max. 250
Rated short-circuit breaking capacity I_{cn}			
I_{cu} according to IEC/EN 60947	400/415V50/60Hz	I_{cu}	kA
I_{cu} according to IEC/EN 60947	400/415V50/60Hz	I_{cs}	kA
Sensitivity			Pulse-current sensitive, type B
Min. operating voltage			
For detecting type A/AC fault currents			0 V (dependent on mains power)
For detecting type B fault currents			50 V (dependent on mains power)
Suitable for use in			For three- and singlephase systems
Rated operating voltage	U_e	V AC	50...400 (3~)
Rated frequency	f	Hz	50/60
Number of poles	I_n	A	3 pole
Rated operational current range			160...250
Rated fault currents	$I_{\Delta n}$	A	0.03
Detection range of fault current			With AC voltage: 0 – 100 kHz With pulsed DC voltage: 50 Hz
Rated ultimate short-circuit making and rated breaking capacity	$I_{\Delta m}$	A	= I_{cu}
Fault current early warning			-
Shock resistance (IEC 60068-2-27)			20 (half-sinusoidal shock 20 ms)
Lifespan, mechanical (50 % with fault current)	Operations		20000
Mechanical			
Standard front dimension		mm	96
Mounting			Bottom
Mounting position			Vertical and 90° in all directions
Direction of incoming supply			Any
Degree of protection			IP20 in the operating component area
Ambient temperature		°C	-25...+70
Sealability			Yes, setting buttons
Terminal capacities			
Flexible without ferrule		mm ²	Same as NZM2 standard terminal
Flexible with ferrule		mm ²	Same as NZM2 standard terminal

Switch-disconnectors

			PN1/N1 160A max.	PN2/N2 250 A max.	PN3/N3 630 A max.	N4 1600 A max.
Switch-disconnectors						
Rated impulse withstand voltage U_{imp}						
Main contacts	V		6000	8000	8000	8000
Auxiliary contacts	V		6000	6000	6000	6000
Rated operating voltage	U_e	V AC	690	690	690	690
Max. rated uninterrupted current						
IEC/EN 61131-3	I_u	A	160	250	630	1600
Technical data that diverge from products for the IEC market (UL489, CSA 22.2 No. 5-1)	I_u	A	125	160	550	1200
Overvoltage category/degree of pollution						
			III/3	III/3	III/3	III/3
Rated insulation voltage	U_e	VAC	690	1000	1000	1000
Switching capacity						
Rated short-circuit making capacity	I_{cm}	kA	2.8	5.5	25	53
Rated short-time withstand current						
t = 0.3s	I_{cw}	kA	2	3.5 ¹⁾	12	25
t = 1s	I_{cw}	kA	2	3.5 ¹⁾	12	25
Rated conditional short-circuit current I_q						
With back-up fuse		A gG/gL	125 PN1(N1)-160:160	250	630	2 x 800
400/415V		kA	100	100	100	100
690V		kA	100	100	80	80
With downstream fuse		A gG/gL	125 PN1(N1)-160:160	250	630	2 x 800
400/415V		kA	100	100	100	100
690V		kA	10	100	100	80
Rated making and breaking capacity						
Rated operational current, AC-22/23 A						
400/415V	I_e	A	160	250	630	1600
690V	I_e	A	160	250	630	1600
Lifespan, mechanical	Operations		20000	20000	15000	10000
Maximum operating frequency		Ops/h	120	120	60	60
Lifespan, electrical according to IEC/EN 60947-4-1 Annex B						
AC-1	400/415V	Operations	10000	10000	5000	3000
	690V	Operations	7500	7500	3000	3000
AC-3	400/415V	Operations	7500	7500	3000	2000
	690V	Operations	5000	5000 ³⁾	2000	1000
Heat dissipation per pole at I_u ²⁾		W	8	16	40	97

Notes

¹⁾ The rated short-time withstand current for PN2/N2 in conjunction with residual-current release NZM2-4-XFI..., $I_{cw} = 1.5$ kA

²⁾ For thermal losses per pole the specification refers to the maximum rated operational current of the construction size.

³⁾ For the electrical life at AC-3 for PN2/N2 the following applies: 690 V: max. 160 kW

Derating

			NZM1, PN1, N1, NS1 125 A160A		NZM2, PN2, N2, NS2 250 A			NZM3, PN3, N3, NS3 630 A		NZM4, N4, NS4 1600 A	
					Without	With XSV TM	E	Without	With XAV	Without	With XAV
In determining the maximum permissible current loads at different ambient temperatures,the derating coefficients											
Open	20 °C	%	100	100	100	100	100	100	96	100	100
	30 °C	%	100	100	100	97	100	100	92	100	98
	40 °C	%	100	100	100	92	100	100	87	100	93
	50 °C	%	100	95	100	87	94	100	83	100	89
	60 °C	%	86	90	90	81	88	88	78	87	85
	65 °C	%	83	85	85	78	84	85	75	85	83
	70 °C	%	79	80	80	75	81	80	73	82	80

Notes

XSV = Plug-in units

XAV = Withdrawable units

TM = Thermomagnetic

E = Electronic

Molded Case Switch

				NS1-...-NA max. 125A	NS2-... -NA max. 250A			
Molded Case Switch								
Rated peak withstand current U_{imp}								
Main contacts				6000	8000			
Auxiliary contacts				6000	6000			
Rated operating voltage				U_e	690			
Max. rated uninterrupted current								
IEC/EN 60947-2 Annex L				I_u	125	250		
UL489/CSA 22.2 No. 5.1				I_u	125	250		
Overvoltage category/pollution degree				III/3	III/3			
Rated insulation voltage				U_i	690	1000		
Switching capacity according to UL 489, CSA 22.2 No. 5.1								
240V				85	150			
480V				35	100			
600V				-	50			
Switching capacity divergent from products for North America.								
Rated short-circuit making capacity				240V	I_{cm}	187	330	
				400/415 V	I_{cm}	105	330	
				440V	I_{cm}	74	286	
				525V	I_{cm}	53	105	
				690V	I_{cm}	17	53	
Rated short-circuit breaking capacity				240V	I_{cu}	85	150	
$I_{cc} = I_{cu}$				400/415V	I_{cu}	50	150	
To IEC/EN 60947-2 Annex L				440V	I_{cu}	35	130	
				525V	I_{cu}	20	50	
				690V	I_{cu}	10	20	
				240V	I_{cs}	85	150	
				400/415V	I_{cs}	50	150	
				440V	I_{cs}	35	130	
				525V	I_{cs}	10	37.5	
				690V	I_{cs}	7.5	5	
Lifespan, mechanical				Operations	20000	20000		
Maximum operating frequency					120	120		
Lifespan, electrical				AC-1	400/415 V	Operations	10000	10000
					690V	Operations	7500	7500
				AC-3	400/415 V	Operations	7500	6500
					690 V	Operations	5000	5000
Heat dissipation per pole at I_u ¹⁾					13	19		
Total downtime on short-circuit					>10	<10		

Notes ¹⁾ Figures apply to the maximum rated operational current of the construction size

Active power loss

NZM up to 250 A with thermomagnetic release (3 and 4 pole)

I _n [A]	Fixed mounted											
	NZM1-						NS1-			N1-, PN1-		
	A...(-NA)		M...		AF...-NA		S... (-CNA)		...-NA		...(-NA)	
	P [W]	R [μohms]	P [W]	R [μohms]	P [W]	R [μohms]	P [W]	R [μohms]	P [W]	R [μohms]	P [W]	R [μohms]
1.2	-	-	-	-	-	-	1.2	413000	-	-	-	-
1.6	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	0.5	66000	-	-	-	-
2.4	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	1.1	66000	-	-	-	-
5	-	-	-	-	-	-	0.4	9180	-	-	-	-
8	-	-	-	-	-	-	1	9180	-	-	-	-
12	-	-	-	-	-	-	0.5	1670	-	-	-	-
15	-	-	-	-	5.5	8180	-	-	-	-	-	-
18	-	-	-	-	-	-	1.3	1670	-	-	-	-
20	9.8	8180	k.A.	k.A.	9.8	8180	-	-	-	-	-	-
25	8.8	4680	k.A.	k.A.	8.8	4680	-	-	-	-	-	-
26	-	-	-	-	-	-	2	1050	-	-	-	-
30	-	-	-	-	8.2	3030	-	-	-	-	-	-
32	9.1	3030	k.A.	k.A.	-	-	-	-	-	-	-	-
33	-	-	-	-	-	-	3.2	1050	-	-	-	-
35	-	-	-	-	8.2	2220	-	-	-	-	-	-
40	11	2220	13.5	2810	11	2220	2.7	562	-	-	-	-
45	-	-	-	-	10.7	1760	-	-	-	-	-	-
50	13.5	1760	15	1880	13.5	1760	4.2	562	-	-	-	-
60	-	-	-	-	12.9	1190	-	-	-	-	-	-
63	14	1190	16.7	1250	-	-	6.7	562	6.7	562	6	380
70	-	-	-	-	12.5	850	-	-	-	-	-	-
80	15.5	850	21.1	1085	15.5	850	10.8	562	-	-	-	-
90	-	-	-	-	17.5	730	-	-	-	-	-	-
100	24	730	25	795	24	730	16.9	562	16.9	562	15	380
110	-	-	-	-	20.7	570	-	-	-	-	-	-
125	38	570	-	-	38	570	-	-	26.3	562	24	380
150	-	-	-	-	-	-	-	-	-	-	-	-
160	50	460	-	-	-	-	-	-	-	-	38	380
175	-	-	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-	-	-
225	-	-	-	-	-	-	-	-	-	-	-	-
250	-	-	-	-	-	-	-	-	-	-	-	-

Notes The values stated in the table apply for 3 and 4 pole fixed mounted devices with an equal load distribution.
On 4 pole devices the current in the N-conductor is equal to zero.
The total resistive load is the measured value for a 3 pole or a 4 pole switch.
The total heat dissipation is the value measured at I_n, 50/60Hz for a 3 pole or 4 pole switch.
The heat dissipation can be calculated with the formula: P = 3 × R × I²

Active power loss

NZM up to 1600 A with electronic release (3 and 4 pole)

Fixed mounted		Supplementary Plug-in units	Fixed mounted		Supplementary Withdrawable units	Fixed mounted		Supplementary Withdrawable units
NZM2-	N2, PN2		NZM3-	N3, PN3-		NZM4-	N4-	
R [μohms]	R [μohms]	R [μohms]	R [μohms]	R [μohms]	R [μohms]	R [μohms]	R [μohms]	R [μohms]
275	256	100	100	90	70	37	37	10

Fixed mounted

NZM2-				NS2-				N2-, PN2-			
A...(-NA)		M...		AF...-NA		S... (-CNA)		...-NA		...(-NA)	
P [W]	R [μohms]	P [W]	R [μohms]	P [W]	R [μohms]	P [W]	R [μohms]	P [W]	R [μohms]	P [W]	R [μohms]
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	6.2	750000	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	8.4	450000	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	0.2	4600	-	-	-	-
-	-	-	-	-	-	0.5	4600	-	-	-	-
-	-	-	-	-	-	0.4	1200	-	-	-	-
-	-	-	-	3	4250	-	-	-	-	-	-
-	-	-	-	-	-	1	1200	-	-	-	-
5.1	4250	5.1	4250	5.1	4250	-	-	-	-	-	-
8	4250	8	4250	6	3140	-	-	-	-	-	-
-	-	-	-	-	-	0.5	780	-	-	-	-
-	-	-	-	9	3140	-	-	-	-	-	-
10	3140	10	3140	-	-	-	-	-	-	-	-
-	-	-	-	-	-	0.9	780	-	-	-	-
-	-	-	-	11	2800	-	-	-	-	-	-
13	2800	13	2800	13	2800	1.5	317	-	-	-	-
-	-	-	-	15	2270	-	-	-	-	-	-
18	2270	18	2270	18	2270	2.5	317	-	-	-	-
-	-	-	-	19	1700	-	-	-	-	-	-
20	1700	20	1700	-	-	4	317	-	-	-	-
-	-	-	-	17	1070	-	-	-	-	-	-
22	1070	22	1070	22	1070	6	317	-	-	-	-
-	-	-	-	23	855	-	-	-	-	-	-
28	855	28	855	28	855	10	317	-	-	-	-
-	-	-	-	22	589	-	-	-	-	-	-
29	589	29	589	29	589	15	317	-	-	-	-
-	-	-	-	35	427	-	-	-	-	-	-
40	427	40	427	-	-	25	317	25	317	19.7	256
-	-	-	-	37	332	-	-	-	-	-	-
48	332	48	332	48	332	40	317	40	317	30.7	256
-	-	-	-	46	310	-	-	-	-	-	-
57	310	-	-	57	310	59.4	317	59.4	317	48	256

Terminal capacities

				NZM1, PN1, N1 NS1 160 A	<i>I_n</i> ¹⁾ A	NZM2, PN2,N2, NS2 250A	<i>I_n</i> ¹⁾ A	NZM3, PN3,N3, NS3 630A	<i>I_n</i> ¹⁾ A
Standard equipment				Box terminal	-	Screw terminal	-	Screw terminal	-
Accessories				Screw terminals Tunnel terminals Rear terminal bolts		Box terminal Tunnel terminals Rear terminal bolts		Box terminal Tunnel terminals Rear terminal bolts	
Copper conductors and cables									
Box terminal	Solid		mm ²	1 x (10-16) 2 x (6-16)	160	1 x (4-16) 2 x (4-16)	250	2 x 16 -	500
		Stranded	mm ²	1 x (25-70)3 2 x 25	160	1 x (25-185) 2 x (25-70)	250	1 x (35-240) 2 x (25-120)	500
Tunnel terminal	Solid Stranded		mm ²	1 x 16	160	1 x (16-185)	250	-	-
		1-hole	mm ²	1 x (25-95)	160	1 x (25-185)	250	1 x (25-185)	350
		Double-hole	mm ²	-	-	-	-	1 x (50-240) 2 x (50-240)	630
		4-hole	mm ²	-	-	-	-	-	-
Screw terminals and connection on rear									
Directly on switch	Solid		mm ²	1 x (10-16) 2 x (6-16)	160	1 x (4-16) 2 x (4-16)	250	1 x 16 2 x 16	630 2 x 185
		Stranded	mm ²	1 x (25-70)3 2 x 25	160	1 x (25-185) 2 x (25-70)	250	1 x (25-240) 2 x (25-240)	630 2 x 185
Module plate	1-hole	min.	mm ²	-	-	-	-	-	-
		max.	mm ²	-	-	-	-	-	-
Module plate	2-hole	min.	mm ²	-	-	-	-	-	-
		max.	mm ²	-	-	-	-	-	-
Connection width extension								2 x 300	630 2 x 185
Aluminium conductors and cables									
Tunnel terminal	Solid Stranded		mm ²	1 x 16	160	1 x 16	250	1 x 16	350
		1-hole	mm ²	1 x (25-95)	160	1 x (25-185)	250	1 x (25-185)	
		Double-hole	mm ²	-	-	-	-	1 x (50-240) 2 x (50-240)	630
		4-hole	mm ²	-	-	-	-	-	-
Screw terminals and connection on rear									
Directly on switch	Solid		mm ²	1 x (10-16) 2 x (10-16)	160	1 x (10-16) 2 x (10-16)	250	1 x 16 2 x (10-16)	400
		Stranded	mm ²	1 x (25-35) 2 x (25-35)	160	1 x (25-50) 2 x (25-50)	250	1 x (25-120) 2 x (25-120)	400
Module plate	1-hole	min.	mm ²	-	-	-	-	-	-
		max.	mm ²	-	-	-	-	-	-
Module plate	Double-hole		mm ²	-	-	-	-	-	-
Connection width extension			mm ²						
Copper strip (number of segments x width x segment thickness)									
Box terminal		min.	mm ²	2 x 9 x 0.8	160	2 x 9 x 0.8	250	6 x 16 x 0.8	630
		max.	mm ²	9 x 9 x 0.8	160	10 x 16 x 0.8	250	10 x 24 x 1.0+5 x 24 x 1.0 (2x)8 x 24 x 1.0	630
Single flat cable terminal		min.	mm	-	-	-	-	-	-
		max.	mm	-	-	-	-	-	-
Module plate	1-hole		mm ²	-	-	-	-	-	-
Screw terminals and connection on rear									
Copper strip, perforated		min.	mm	-	-	2 x 9 x 0.8	250	6 x 16 x 0.8	630
Copper strip, perforated		max.	mm	-	-	10 x 16 x 0.8	-	10 x 32 x 1.0+5 x 32 x 1.0	630
Connection width extension			mm ²	-	-	-	-	(2x)10 x 50 x 1.0	630
Copper bar (width x thickness)									
Screw terminals and connection on rear									
Screw terminals				M6	-	M8	-	M10	-
Directly on switch		min.	mm ²	12 x 5	160	16 x 5	250	20 x 5	630
		max.	mm ²	16 x 5	-	20 x 5	-	30 x 10 +30 x 5	630
Module plate 1-hole		min.	mm ²	-	-	-	-	-	-
		max.	mm ²	-	-	-	-	-	-
Module plate 2-hole			mm ²	-	-	-	-	-	-
Connection width extension		min.	mm ²	-	-	-	-	-	630
		max.	mm ²	-	-	-	-	2 x (10 x 50)	10 x 40

NZM4, N4 NS4 1600 A	$I_n^{(1)}$ A	NZM...1...NA, N1...NA,NS1...NA	NZM...2...NA, N2...NA,NS2...NA	NZM...3...NA, N3...NA,NS3...NA	NZM...4...NA, N4...NA,NS4...NA
Screw terminal	-	-	Screw terminal	Screw terminal	Screw terminal
Tunnel terminals	-	-	Box terminal	Box terminal	Tunnel terminals
Rear terminal bolts	-	Tunnel terminals	Tunnel terminals	Tunnel terminals	Rear terminal bolts
Strip terminal	-	Rear terminal bolts	Rear terminal bolts	Rear terminal bolts	Strip terminal
-	-	AWG	1 x (12-6)	1 x (12-6)	-
-	-	AWG/kcmil	1 x (4-20)	1 x (4-350)	1 x (2-500)
-	-	AWG	1 x 6	1 x 6	1 x 6
-	-	AWG/kcmil	1 x (4-3/0)	1 x (4-350)	1 x (4-350)
-	-	AWG/kcmil	-	-	1 x (0-500)
4 x (50-240)	1400	AWG/kcmil	-	-	1 x (0-500)
-	-	AWG	1 x (12-6)	1 x (12-6)	-
1 x (120-185)	1250	AWG/kcmil	1 x (4-2/0)	1 x (4-3/0)	1 x (4-350)
4 x (50-185)	1000	kcmil	-	-	1 x (250-350)
1 x (120-300)	1000	AWG/kcmil	-	-	4 x (0-350)
2x (95-300)	1400	AWG/kcmil	-	-	1 x (250-600)
2x (95-185)	1400	AWG/kcmil	-	-	2 x (3/0-600)
4 x (35-185)	1400	AWG/kcmil	-	-	2 x (3/0-350)
4 x 300	1600	AWG/kcmil	-	-	4 x (2-350)
6 x (95-240)	4x240	AWG/kcmil	-	2 x500	4 x600
-	-	AWG	-	-	6 x (3/0-500)
-	-	AWG/kcmil	-	-	-
-	-	AWG/kcmil	-	-	-
4 x (50-240)	1400	AWG/kcmil	-	-	-
-	-	AWG	-	-	-
-	-	AWG/kcmil	-	-	-
1 x (185-240)	Please inquire	AWG/kcmil	-	-	-
2 x (70-185)	Please inquire	kcmil	-	-	-
4 x 50	-	AWG/kcmil	-	-	-
2 x 240	Please inquire	AWG	-	-	-
6 x (70-240)	-	AWG/kcmil	-	-	-
-	-	mm	2 x 9 x 0.8	2 x 9 x 0.8	6 x 16 x 0.8
-	-	mm	9 x 9 x 0.8	10 x 16 x 0.8	10 x 24 x 1.0
6 x 16 x 0.8	1100				+5 x 24 x 1.0
(2x)10 x 32 x 1.0	1100	mm	-	-	(2x)8 x 24 x 1.0
(2x)10 x 50 x 1.0	1250	mm	-	-	6 x 16 x 0.8
(2x)10 x 40 x 1.0		mm	-	-	(2x)10 x 32 x 1.0
(2x)10 x 50 x 1.0	1600	mm	-	2 x 16 x 0.8	(2x)10- x 50 x 1.0
(2x)10 x 50 x 1.0	1600	mm	-	10 x 16 x 0.8	(2x)10 x 50 x 1.0
(2x)10 x 80 x 1.0	1600	mm	-	-	+5 x 32 x 1.0
(2x)10 x 50 x 1.0		mm	-	-	(2x)10 x 50 x 1.0
M10	-		M6	M8	M10
25 x 5	1600	mm	12 x 5	16 x 5	25 x 5
2x(50x10)	1600	mm	16x 5	20x 5	2 x(50 x 10)
25 x 5	1250	mm	-	-	25 x 5
2x(50x10)	(2x)40 x 1.0	mm	-	-	2 x(50 x 10)
2x(50x10)	1500	mm	-	-	2 x(50 x 10)
60x10	1600	mm	-	-	60 x 10
2x(80x10)	(2x)50 x 1.0	mm	-	-	2 x(80 x 10)

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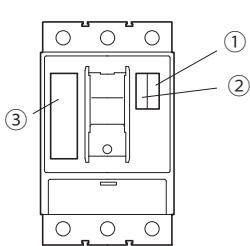
NZM1-4 molded case circuit-breakers

Technical data

Auxiliary contacts

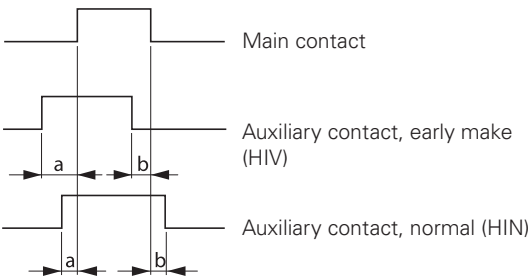
At AC = 50/60 Hz			M22-K...	XHIV	XHI
Auxiliary contacts					
Rated operating voltage					
AC voltage	U _e	V AC	500	500	500
DC voltage	U _e	V DC	220	220	220
Conventional thermal current	I _{th} =I _e	A	4	4	4
Rated operational current					
AC-15	I _e	A	4	4	4
	I _e	A	4	4	4
	I _e	A	2	2	2
	I _e	A	1	1	1
DC-13	I _e	A	3	3	3
	I _e	A	1.7	1.5	-
	I _e	A	1.2	0.8	1.2
	I _e	A	0.8	0.5	0.5
	I _e	A	0.3	0.2	0.2
Short-circuit protection					
Max. fuse		A gG/gL	10	10	10
Max. miniature circuit-breaker		A	PKZMO-10/FAZ-B6	FAZ-B6	FAZ-B6
Early make times compared to main contacts on make and break (switching times on manual operation).		ms	-	NZM1, PN1, N(S)1: approx. 20 NZM2, PN2, N(S)2: approx. 20 NZM3, PN3, N(S)3: approx. 20 NZM4, N(S)4: approx. 90 With NZM4/N(S)4 the HIV does not feature early break.	-
Terminal capacities					
Solid or flexible conductor with ferrule	mm ²		1x(0.75-2.5)	1x(0.75-2.5)	1x(0.75-2.5)
			2x(0.75-2.5)	2x(0.75-2.5)	2x(0.75-2.5)
	AWG		1x(18-14)	1x(18-14)	1x(18-14)
			2x(18-14)	2x(18-14)	2x(18-14)
UL/CSA					
Rated operational current	I _e	A	10A-600 V AC	2.5A-240 V AC	2.5A-240 V AC
			1A-250 V DC	1A-250 V DC	1A-250 V DC
Heavy Pilot Duty			A600/P300 via 300 V AC same polarity	C300/R300	C300/R300

Maximum equipment and position of the built-in accessories



	① -XHIV or-XA or-XU	② HIA	③ HIN
NZM1	1	1	1
NZM2	1	1	2
NZM3	1	1	3
NZM4	1	2	4

Time differences ON-OFF



	Time difference a (ms) Manual operation			Motor drive			Time difference a (ms) Manual operation			Motor drive		
	HIV	HIN K10	K01	HIV	HIN K10	K01	HIV	HIN K10	K01	HIV	HIN K10	K01
NZM1	20 ²⁾	0	2.5	-	-	-	20 ²⁾	0	2.5	-	-	-
NZM2	20 ²⁾	3.5	6.5		2.5	4.5	20 ²⁾	3	4.5		3	4
NZM3	20 ²⁾	4	8		2	4	20 ²⁾	3.5	8		3	6.5
NZM4	90 ²⁾	7	11				0 ¹⁾²⁾	12	15			

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NZM1-4 molded case circuit-breakers

Technical data

Undervoltage release

		NZM1(2/3)-XU...		NZM4-XU...
Undervoltage releases				
Rated control voltage				
AC voltage at 50/60 Hz	U_s	V AC	24-690	24-690
DC voltage	U_s	V DC	12-250	12-250
Operating range				
Drop-out voltage		$\times U_s$	0.35-0.7	0.35-0.7
Pick-up voltage		$\times U_s$	0.85-1.1	0.85-1.1
Power consumption				
AC voltage				
Sealing AC		VA	1.5	3.6
DC voltage				
Sealing DC		W	0.8	2.5
Max. opening delay (response time until the main circuits open)		ms	19	23
Minimum command time		ms	10-15	10-15
Terminal capacities				
Solid or flexible conductor with ferrule	mm ²		1 × (0.75-2.5)	1 × (0.75-2.5)
			2 × (0.75-2.5)	2 × (0.75-2.5)
	AWG		1 × (18-14)	1 × (18-14)
			2 × (18-14)	2 × (18-14)

Undervoltage releases, off-delayed

			UVU-NZM
Undervoltage releases, off-delayed			
Rated control voltage			
AC voltage at 50/60 Hz	U_e	V AC	24, 220-550
AC voltage	U_e	V DC	24
Inrush current (peak value)	I_e	mA	<500
Power consumption		VA	50
Deceleration time	t_{sd}	ms	70-4000
With additional external capacitor 90,000 µF ≥ 35 V		s	To 16
With additional external capacitor 30,000 µF ≥ 35 V		s	To 8
Terminal capacities			
Solid or flexible conductor with ferrule		mm²	1 × (0.5-2.5)
			2 × (0.5-1.5)

Shunt release

			NZM1(2/3)-XA...	NZM4-XA...	NZM2/3-XA...-MNS	NZM4-XA...-MNS
Shunt release						
Rated control voltage						
AC voltage	U_s	V AC	12-600	12-600	230	230
DC voltage	U_s	V DC	12-600	12-600	-	-
Frequency range		Hz	0-400	0-400	50/60	50/60
Operating range						
AC voltage		$\times U_s$	0.7-1.1	0.7-1.1	0.1-1.1	0.1-1.1
DC voltage		$\times U_s$	0.7-1.1	0.7-1.1	-	-
Power consumption						
Sealing AC/DC		VA/W	2.5	2.5	-	-
Maximum power consumption at 110 % U_s (230 V 50 Hz)		A	-	-	0.5	1
Max. opening delay (response time until the main circuits open)		ms	20	22	20	22
Max. duty factor		ms	L	L	1000	1000
Minimum signal duration		ms	10-15	10-15	10-15	10-15
Terminal capacity						
Solid or flexible conductor with ferrule	mm ²		1 × (0.75-2.5)	1 × (0.75-2.5)	1 × (0.75-2.5)	1 × (0.75-2.5)
			2 × (0.75-2.5)	2 × (0.75-2.5)	2 × (0.75-2.5)	2 × (0.75-2.5)
	AWG		1 × (18-14)	1 × (18-14)	1 × (18-14)	1 × (18-14)
			2 × (18-14)	2 × (18-14)	2 × (18-14)	2 × (18-14)

Capacitor unit for shunt release

NZM-XCM

Capacitor unit for shunt release			
Rated operating voltage	U_e	V AC	230
Rated operational current	I_e	mA	<10
Inrush current (peak value)	I_e	A	3
Terminal capacity			
Solid or flexible conductor with ferrule	mm ²		1 × (0.5-2.5)
			2 × (0.5-1.5)
	AWG		1 × (20-14)
			2 × (20-16)

Remote operator

NZM2-XR...

NZM2-XRD...

NZM3-XR...

NZM4-XR...

Remote operator						
Rated control voltage						
AC voltage	U_s	V AC	48- 440	110- 440	48-440	48- 440
DC voltage	U_s	V DC	24-250	24-250	24-250	24-250
Operating range						
AC voltage	U_s		0.85-1.1	0.85-1.1	0.85-1.1	0.85-1.1
DC voltage	U_s		0.85-1.1	0.85-1.1	0.85-1.1	0.85-1.1
Motor rating						
AC voltage	48 V-60 V AC	VA	350	-	350	350
	110 V-130VAC	VA	350	550	350	350
	208V-240 V AC	VA	350	550	350	350
	380V-440 V AC	VA	350	650	350	350
DC voltage	24V-30 V DC	W	250	450	250	250
	48 V-60 V DC	W	250	-	250	250
	110V-130VDC	W	250	450	250	250
	220V-250 V DC	W	250	450	250	250
Total make time		ms	60	110-130 ⁽¹⁾	80	100
Total opening delay		ms	300	110-130 ⁽¹⁾	1000	3000
Minimum signal duration						
With switch on		ms	30	100	30	30
With switch off		ms	150	100	150	500
Lifespan, mechanical	Operations		20000	20000	20000	10000
Maximum operating frequency	Ops./h		120	120	60	20
Terminal capacities						
Solid or flexible conductor with ferrule	mm ²		0.75-2.5	0.75-2.5	0.75-2.5	0.75-2.5
			18-14	18-14	18-14	18-14

Notes When 24 V-30 V DC, as to 150-170 ms.

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NZM1-4 molded case circuit-breakers

Technical data

Data Management Interface (DMI module)

DMI			
General			
Dimensions (W x H x D)	mm	107.5 x 90 x 53	
Modular spacing (space units)		6 SU (space units) wide	
Weight	kg	0.3	
Mounting		Top-hat rail IEC/EN 60715, 35 mm	
Ambient climatic conditions			
Operating ambient temperature	°C	0 to +55	
Built-in position		Horizontal/vertical	
Condensation		Prevent condensation by means of suitable measures	
LCD display (clearly legible)	°C	0-55	
Storage/transport	°C	-40 to +70	
Relative humidity, non-condensing (IEC/EN 60068-2-30)	%	5-95	
Air pressure (in operation)	hPa	795-1080	
Corrosion resistance			
IEC/E N 60068-2-42	4 days SO ₂	cm ³ /m ³	10
IEC/E N 60068-2-43	4 days H ₂ S	cm ³ /m ³	1
Ambient mechanical conditions			
Pollution degree		2	
Degree of protection IEC/EN 60529		IP20	
Vibrations (IEC/EN 60068-2-6)			
Constant amplitude 0.15 mm	Hz	10-57	
Constant acceleration, 2 g	Hz	57-150	
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11	Shocks	18	
Drop IEC/EN 60068-2-31	Drop height	mm	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1
Power supply			
Rated operating voltage	U _e	V	24
Permissible range		V DC	20.4-28.8
Residual ripple		%	F5
Input current at 24 V DC		mA	210
Voltage dips (IEC/EN 61131-2)		ms	10
Power loss at 24 V DC		W	5

Fieldbus interface

				EASY221-C0	EASY222-DN	NZM-XDMI-DPV1
General						
Standards				EN 55011. EN 55022. EN 61000-4. IEC 60068-2-6. IEC 60068-2-27		
Dimensions (W x H x D)		mm		35.5x90x58(2SU)	35.5x90x58(2SU)	35.5x90x58(2SU)
Weight		kg		0.15	0.15	0.15
Mounting				Top-hat rail EN 50022, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)		
Terminal capacity						
Solid		mm²		0.2/4(AWG 22-12)	0.2/4(AWG 22-12)	0.2/4(AWG 22-12)
Flexible with ferrule		mm²		0.2/2.5(AWG 22-12)	0.2/2.5(AWG 22-12)	0.2/2.5(AWG 22-12)
Standard screwdriver		mm		3.5 x 0.8	3.5 x 0.8	3.5 x 0.8
Max. tightening torque		Nm		0.6	0.6	0.6
Ambient climatic conditions						
Operating ambient temperature		°C		-25 to 55, low temperatures to IEC 60068-2-1, high temperatures to IEC 60068-2-2		
Condensation				Prevent condensation by means of suitable measures		
Storage		°C		40-70	40-70	40-70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%		5-95	5-95	5-95
Air pressure (in operation)		hPa		795-1080	795-1080	795-1080
Corrosion resistance						
IEC/E N 60068-2-42		4 days SO ₂	cmC/mC	10	10	10
IEC/E N 60068-2-43		4 days H ₂ S	cmC/mC	1	1	1
Ambient mechanical conditions						
Pollution degree				2	2	2
Degree of protection (IEC/EN 60529)				IP20	IP20	IP20
Vibrations (IEC/EN 60068-2-6)						
Constant amplitude 0.15 mm		Hz		10-57	10-57	10-57
Constant acceleration, 2 g		Hz		57-150	57-150	57-150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms			Shocks	18	18	18
Drop (IEC/EN 60 068-2-31)		Drop height	mm	50	50	50
Free fall, packaged (IEC/EN 60068-2-32)				1	1	1
Mounting position		m		Horizontal/vertical	Horizontal/vertical	Horizontal/vertical
Electromagnetic compatibility (EMC)						
Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)						
Air discharge		kV		8	8	8
Contact discharge		kV		6	6	6
Electromagnetic fields (IEC/EN 61000-4-3, RFI)		V/m		10	10	10
Radio interference suppression (EN 55011)				EN 55011 Class B EN 55022 Class B		EN 55011 Class A EN 55022 Class A
Burst impulse (IEC/EN 61000-4-4, Level 3)						
Supply cables		kV		2	2	2
Signal cables		kV		2	2	2
High-energy pulses (surge) (IEC/EN 61000-4-5, Level 2)				0.5 (supply cables, symmetrical)		
Immunity to line-conducted interference (IEC/EN 61000-4-6)		V		10	10	10

Fieldbus interface

EASY221-C0			EASY222-DN		NZM-XDMI-DPV1	
Insulation resistance						
Clearances and creepage distances			EN 50178, UL 508, CSA C22.2, No. 142			
Insulation resistance			EN 50178			
Power supply						
Rated operating voltage		U_e V	24 (-15/+20%)	24 (-15/+20%)	24 (-15/+20%)	
Permissible range		VDC	20.4-28.8	20.4-28.8	20.4-28.8	
Ripple		%	<5	<5	<5	
At 24 V DC		mA	typ. 200	typ. 200	typ. 200	
Voltage dips (IEC/EN 61131-2)		ms	10	10	10	
Heat dissipation at 24 V DC		W	4.8	4.8	4.8	
Polarity reversal protection						
Power supply			Yes	Yes	Yes	
LED indicators						
Power supply			RUN LED (RUN): green	Module status LED (MS): green	Power LED (POW): green	
LED display			LED ERROR (ERR): red	Network status LED (NS): red/green	PROFIBUS-DP LED (BUS): red	
Network						
Terminal type			RJ45	5 pole, pluggable screw terminal	-	
Potential isolation			Between bus and power supply (simple), between bus and power supply and NZM-XDMI612 (safe isolation)	Between bus and power supply (simple), between bus and power supply and NZM-XDMI612 (safe isolation)	-	
Function			CANopen slave	DeviceNet slave	-	
Interface			CAN	CAN	-	
Bus protocol			CANopen	DeviceNet	-	
Baud rates			Automatic search up to 1 MBit/s	Automatic search up to 500 kBit/s	-	
Bus terminating resistors			Separate external bus termination required (120Ω) NZM-XDMI612	Separate external bus termination required (120Ω) NZM-XDMI612	-	
Bus addresses			1 – 127 addressed via display	0 – 63 addressed via display	-	
Services						
Cyclical			All data R1 – R16, S1 – S8	All data R1 – R16, S1 – S8	-	
Acyclical			Read/write, real-time, day, summer/winter time, all parameters of the easy function relay	Read/write, real-time, day, summer/winter time, all parameters of the easy function relay	-	
PROFIBUS-DP						
Terminal type			-	-	SUB-D 9 pole, socket	
Potential isolation			-	-	Between bus and power supply (simple, between bus and power supply and NZM-XD M1612	
Function			-	-	PROFIBUS-DP slave	
Interface			-	-	RS 485	
Bus protocol			-	-	PROFIBUS-DP	
Baud rates			-	-	Automatic search up to 12 MBit/s	
Bus terminating resistors			-	-	Separate external bus termination required	
Bus addresses			-	-	1-126 via DMI	

Residual-current relay

		PFR-003	PFR-03	PFR-5
Electrical				
Standards		IEC/EN 60947-2, IEC755, IEC 1008, IEC 1009		
Sensitivity		Pulse-current sensitive, type A		
Rated control voltage	U_s V AC	230+20%(50/60Hz)		
Motor rating	P_e W	3	3	3
Rated fault currents	$I_{\Delta n}$ mA	0.03	0.3	0.03,0.1,0.3,0.5,1,3,5
Deceleration time	t_v s	0.02 (non-delayed)	0.02 (non-delayed)	0.02,0.1,0.3,0.5,1,3,5
Relay contacts		1 built-in changeover contact	1 built-in changeover contact	1 built-in changeover contact
Rated operating voltage of the relay contacts	V AC/DC	250/100	250/100	250/100
Rated operational current of the relay contacts	A	6	6	6
Fault current early warning	Hz	-	-	0.5 = 25%-50% $I_{\Delta n}$ 1 = 50%-75% $I_{\Delta n}$ 2 = 75%-100% $I_{\Delta n}$
Mechanical				
Standard front dimension	mm	45	45	45
Device height	mm	85	85	85
Built-in width	mm	45	45	45
Mounting		Quick attachment for top-hat rail DIN 46277, EN 50022		
Terminals top and bottom		Box terminals		
Terminal protection		Finger and back-of-hand proof BGV A2, VDE 106 Part 100		
Terminal capacities	mm ²	2 x 0.75 – 2.5 solid, 2 x 0.75 – 1.5 flexible/with sleeve		
Sealing facility for setting buttons		-	-	Yes

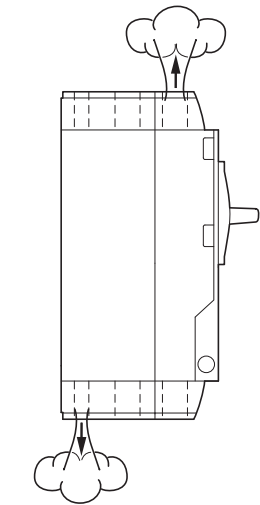
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NZM1-4 molded case circuit-breakers

Technical data

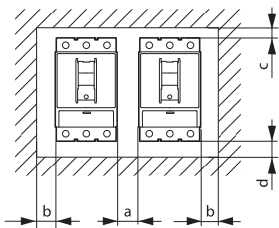
Direction of blow-out, minimum clearances, tube cable lugs

Direction of blow-out



	Top, front	Bottom, rear
NZM1	X	-
NZM2	X	X
NZM3	X	X
NZM4	X	-

Minimum clearances



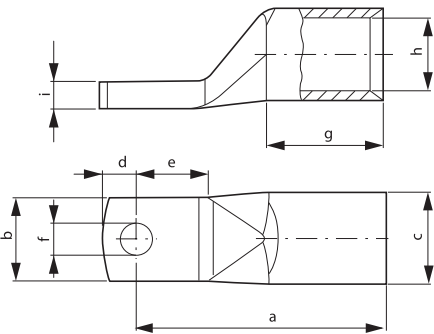
between two adjacently mounted switches
Minimum clearance a in mm

	NZM1	NZM2	NZM3	NZM4
NZM1	0	5	5	15
NZM2	5	5	5	15
NZM3	5	5	5	15
NZM4	15	15	15	15

between switches and other parts
Minimum clearances in mm

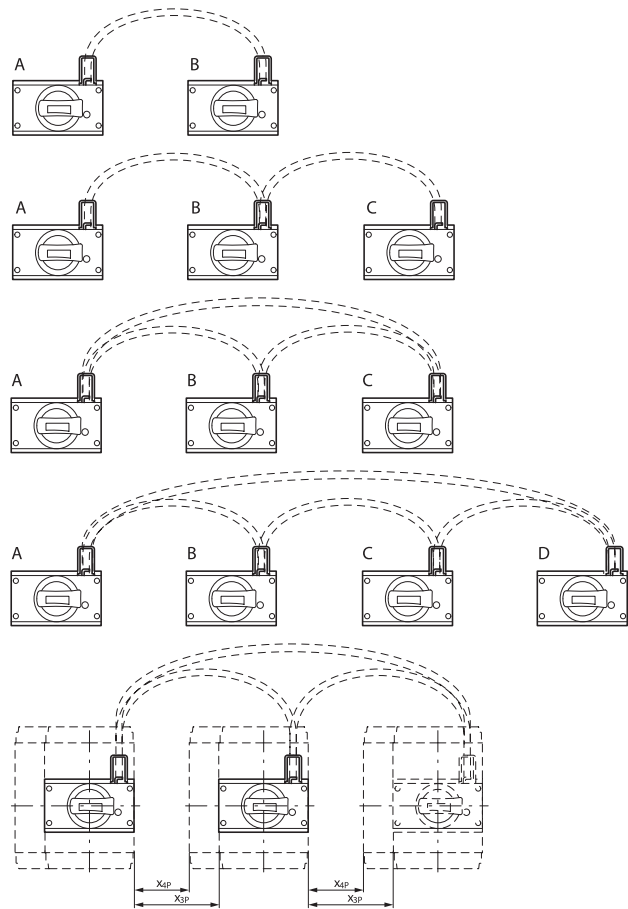
	b		c		d	
	≥ 690V	1000V	≥ 690V	1000V	≥ 690V	1000V
NZM1	0	-	60	-	0	-
NZM2	5	5	35	35	35	35
NZM3	5	5	60	60	60	60
NZM4	15	15	100	200	0	0

Tube cable lugs, dimensions



Cable lug	For use with	Nominal cross section mm ²	Terminal bolt Ø	Dimensions in mm								
				a	b	C	d	e	f	g	h	i
KS95-NZM7	NZM2	95	M8	53+2	23±0.5	18±0.2	10±1	19	8,5	25	13,5	4,4
KS120-NZM7	NZM2	120	M8	56+2	23±0.5	19.5±0.2	10±1	19	8,5	26	15	4,4
KS150-NZM7	NZM2	150	M8	61+2	23±0.5	21±0.2	10±1	19	8,5	30	16,5	4,4
NZM2-XKS185	NZM2	185	M8	65±1.5	22±1	24±0.3	9 ⁺¹ _{-0.5}	19 ^{+2.5} _{-0.5}	8,5 ^{+0.05} _{-0.1}	30±2	19±0.8	7
NZM3-XKS185	NZM3, NZM4	185	M 10	65	24,5	24	11,5	18	10,5	30	19	7.0±0.8
NZM3-XKS240	NZM3, NZM4	240	M10	72	31	26	11.5	19	10,5	35	21	5.0±0.8

Interlock variations and combination possibilities



A	B
OFF	OFF
ON/TRIP	ON
ON	ON/TRIP

A	B	C
OFF	OFF	OFF
ON	ON/TRIP	ON
ON/TRIP	ON	ON/TRIP

A	B	C
OFF	OFF	OFF
ON/TRIP	ON	ON
ON	ON/TRIP	ON
ON	ON	ON/TRIP

A	B	C	D
OFF	OFF	OFF	OFF
ON/TRIP	ON	ON/TRIP	ON
ON	ON/TRIP	ON	ON/TRIP

X_{3p} = switch spacing, 3 pole
X_{4p} = switch spacing, 4 pole

NZM-XBZ225

Max. switch spacing		NZM1		NZM2		NZM3		NZM4	
		X _{3p}	X _{4p}	X _{3p}	X _{4p}	X _{3p}	X _{4p}	X _{3p}	X _{4p}
		mm	mm	mm	mm	mm	mm	mm	mm
NZM1	3/4 pole	135	105	120	85	135	90	125	80
NZM2	3/4 pole	135	105	120	85	135	90	125	80
NZM3	3/4 pole	90	75	75	35	85	40	80	45
NZM4	3/4 pole	50	35	40	15	25	-	15	-

NZM-XBZ600

Max. switch spacing		NZM1		NZM2		NZM3		NZM4	
		X _{3p}	X _{4p}	X _{3p}	X _{4p}	X _{3p}	X _{4p}	X _{3p}	X _{4p}
		mm	mm	mm	mm	mm	mm	mm	mm
NZM1	3/4 pole	510	480	495	460	510	465	475	405
NZM2	3/4 pole	510	480	495	460	510	465	475	405
NZM3	3/4 pole	460	430	450	410	460	415	460	390
NZM4	3/4 pole	400	370	380	340	400	375	390	320

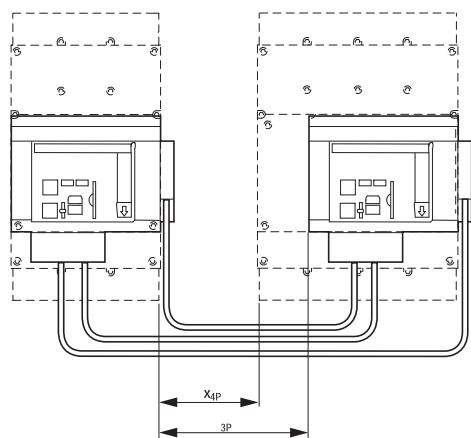
NZM-XBZ1000

Max. switch spacing		NZM1		NZM2		NZM3		NZM4	
		X _{3p}	X _{4p}	X _{3p}	X _{4p}	X _{3p}	X _{4p}	X _{3p}	X _{4p}
		mm	mm	mm	mm	mm	mm	mm	mm
NZM1	3/4 pole	910	880	895	860	910	865	865	795
NZM2	3/4 pole	910	880	895	860	910	865	865	795
NZM3	3/4 pole	820	790	850	810	860	815	860	790
NZM4	3/4 pole	750	720	730	700	800	775	790	720

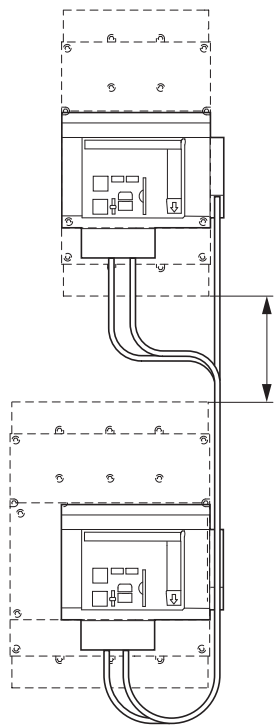
1.14

NZM1-4 molded case circuit-breakers

Technical data



X_{3p} = max. switch spacing 3 pole
X_{3p} = max. switch spacing 4 pole



Mechanical interlock XMVR

NZM...-XMVR (mounted side-by-side)

Max. switch spacing		NZM2		Right switch		NZM4	
		X _{3P}	X _{4P}	X _{3P}	X _{4P}	X _{3P}	X _{4P}
Left switch		mm	mm	mm	mm	mm	mm
NZM2	3/4 pole	130	95	95	50	...	...
NZM3	3/4 pole	...	...	135	90	155	85
NZM4	3/4 pole	...	...	...	...	120	50

Mechanical interlock XMVRL

NZM...-XMVRL (mounted side-by-side, in adjacent enclosures)

Max. switch spacing		NZM2		Right switch		NZM4	
		X _{3P}	X _{4P}	X _{3P}	X _{4P}	X _{3P}	X _{4P}
Left switch		mm	mm	mm	mm	mm	mm
NZM2	3/4 pole	350	315	420	385	...	...
NZM3	3/4 pole	...	...	400	365	460	390
NZM4	3/4 pole	...	...	...	...	420	350

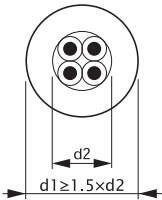
Mechanical interlock XMVRL

NZM...-XMVRL (mounted one above the other)

Max. switch spacing		Switch at top	Switch at top	Switch at top
		NZM2	NZM3	NZM4
		3/4 pole	3/4 pole	3/4 pole
		Y	Y	Y
Switch at bottom		mm	mm	mm
NZM2	3/4 pole	220	225	...
NZM3	3/4 pole	...	220	230
NZM4	3/4 pole	...	...	230

Ring-type transformer PFR-W...

Maximum rated operational current [A]		Diameter Transformer part no. PFR-W- ...	Maximum conductor circumference (mm)
Power distribution	Motor/capacitor	d1	d2
50	50	20	13
150	100	30	20
150	100	35	23
400	200	70	47
600	250	105	70
1200	630	140	93
1800	800	210	140



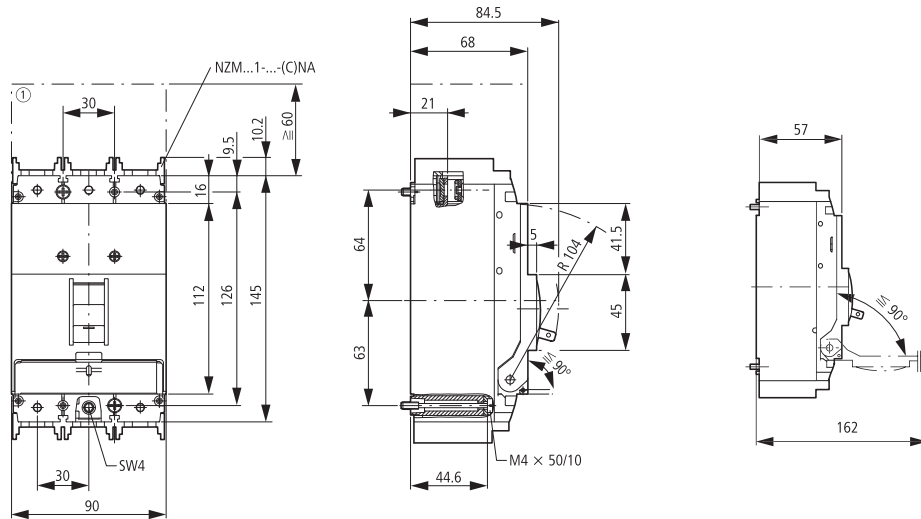
Size 1: basic devices (NZM1. PN1. N1. NS1)

Circuit-breakers

Switch-disconnectors

3 pole

NZMB1
NZMC1
NZMN1
NZMH1
PN1
N1
NS1



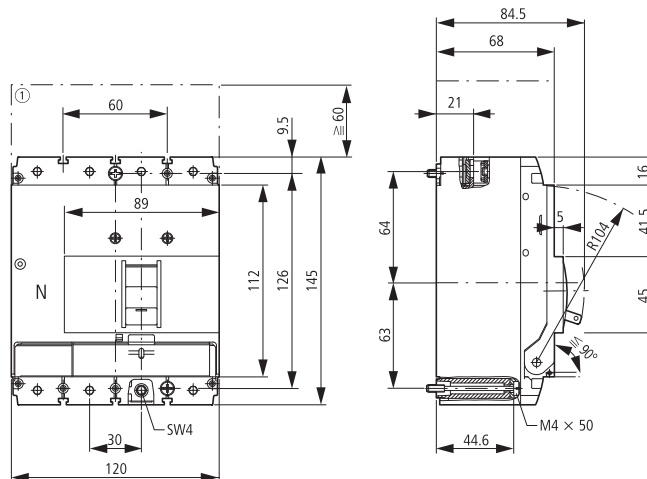
① Blow-out area, minimum distance to other parts ≥ 60 mm

Circuit-breakers

Switch-disconnectors

4 pole

NZMB1-4
NZMN1-4
NZMH1-4
PN1-4
N1-4



① Blow-out area, minimum distance to other parts ≥ 60 mm

Covers

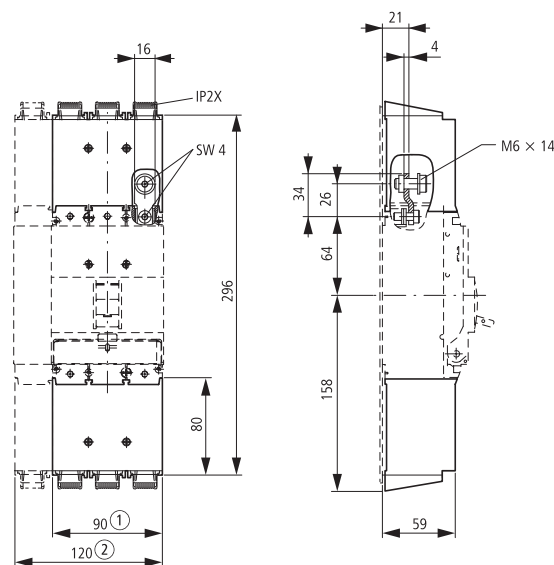
NZM1(-4)-XKSA

Screw terminals

NZM 1(-4)-XKS

IP2X protection against contact with a finger for cover

NZM1(-4)-XIPA



① 3 pole
② 4 pole

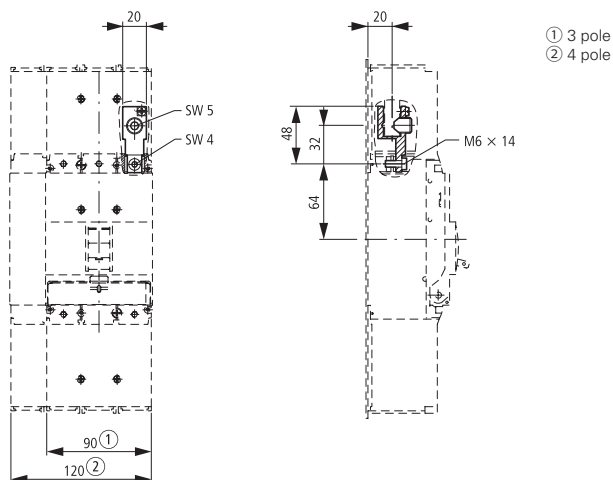
NZM1-4 molded case circuit-breakers

Dimensions

Size 1: accessories (NZM1...-XK..., NZM1...XIPK, NZM-XSTK)

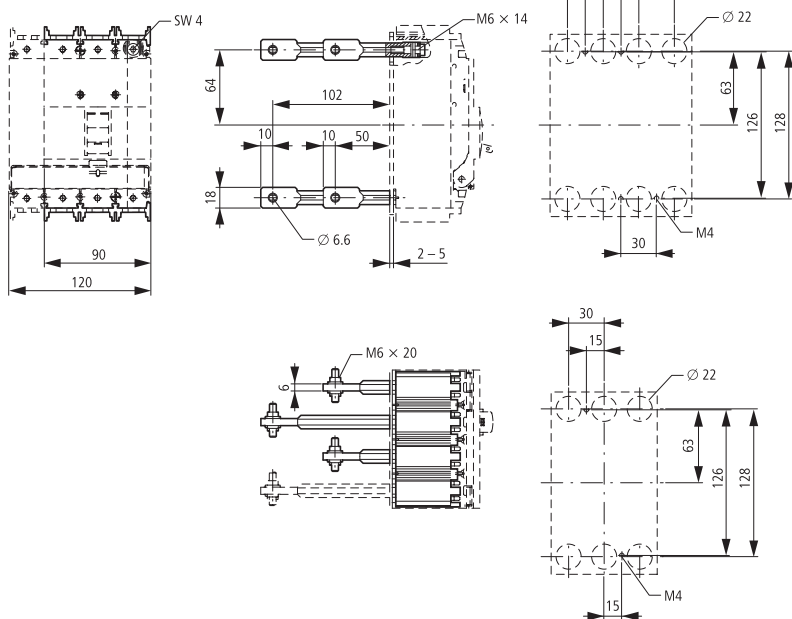
Tunnel terminal

NZM1(-4)-XKA



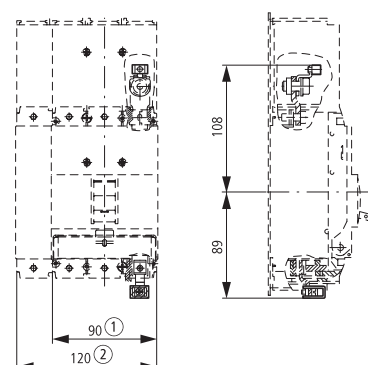
Rear terminal bolts

NZM1(-4)-XKR



Control cable terminals

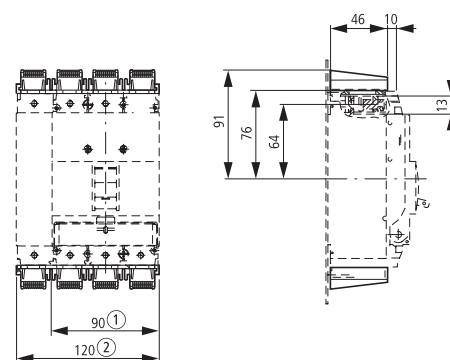
NZM1-XIPK.NZM-XSTK



① 3 pole
② 4 pole

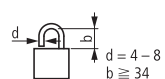
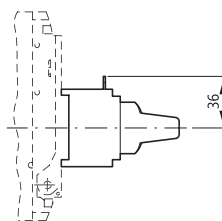
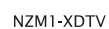
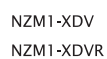
IP2X protection against contact with finger

NZM1(-4)-XIPK

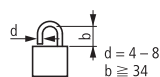
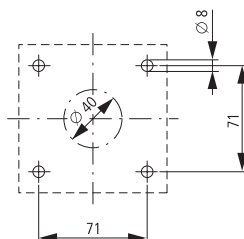


Size 1: accessories (NZM1-XDV.... NZM1-XTVD...)

Rotary handle on circuit-breaker



NZM1-XTVD(V)(R)(-NA)



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1.16

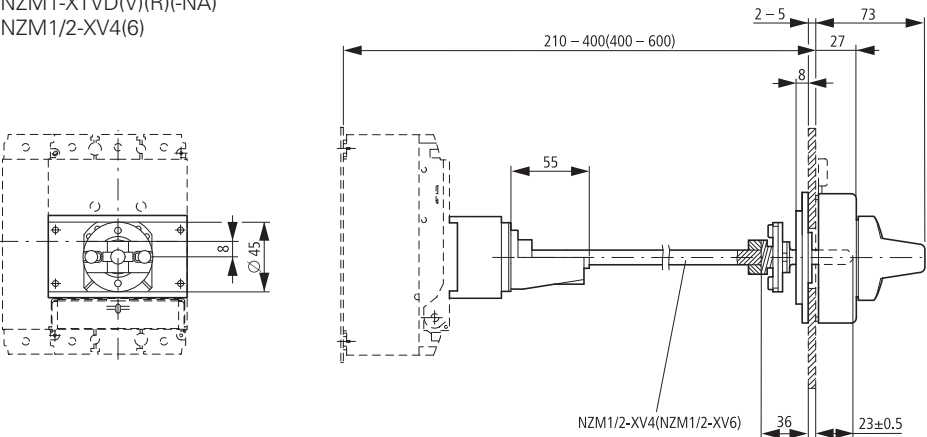
NZM1-4 molded case circuit-breakers

Dimensions

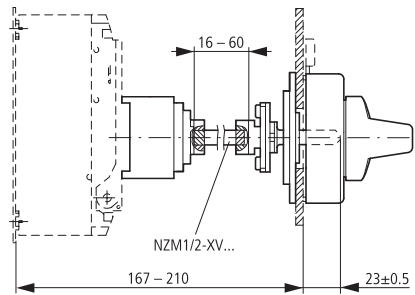
Size 1: accessories (NZM1-XTVD...)

Door coupling rotary handle with extension shaft

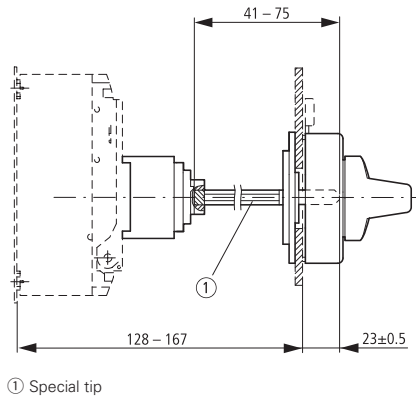
NZM1-XTVD(V)(R)(-NA)
NZM1/2-XV4(6)



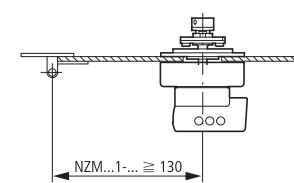
NZM1-XTVD(V)(R)-60(-NA)



NZM1-XTVD(V)(R)-0(-NA)



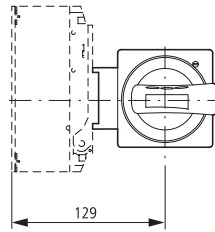
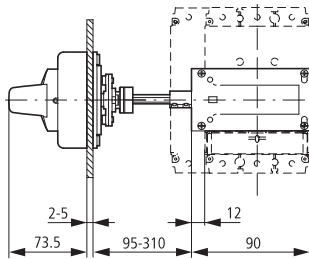
Minimum distance of door coupling rotary handle from door pivot point



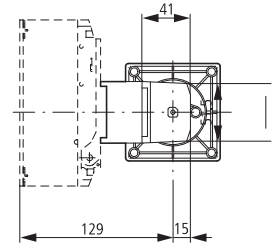
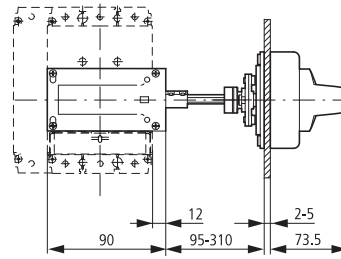
Size 1: accessories (NZM1-XS, NZM1...HIV)

Main switch assembly kit for side wall installation

NZM1-XS(R)-L

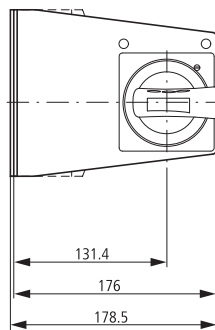
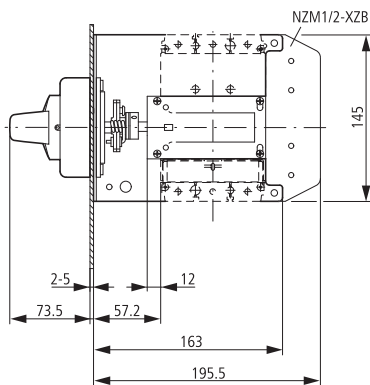


NZM1-XS(R)-R

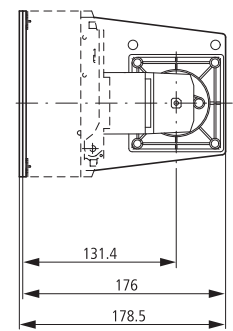
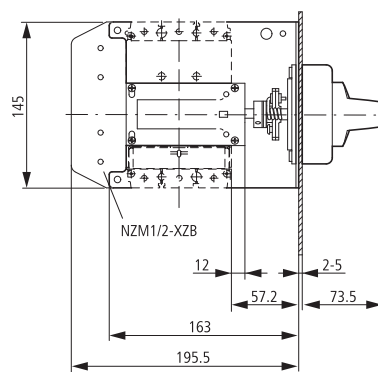


Main switch assembly kit for side wall installation with mounting bracket

NZM1-XS(R)M-L



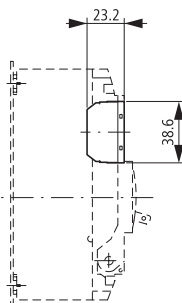
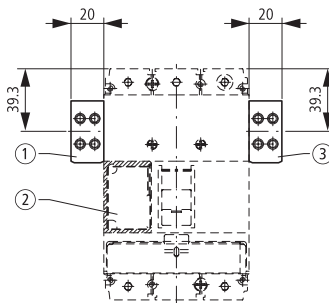
NZM1-XS(R)M-R



Undervoltage releases

Shunt releases (for power circuit breaker)

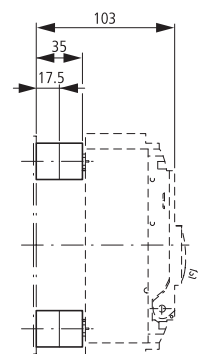
Early-make auxiliary contacts



- ①
NZM1-XA(HIV)
NZM1-XU(HIV)(20)
NZM1-XHIV
- ②
NZM1-XA(HIV)(L)
NZM1-XU(V)(HIV)(L)(20)
NZM1-XHIV(L)
- ③
NZM1-XHIVR

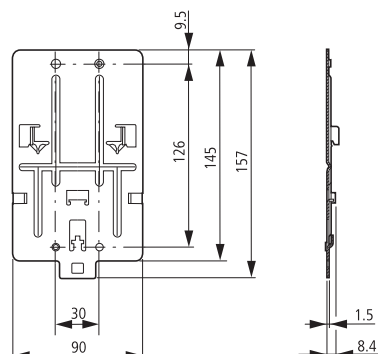
Spacers

NZM1/2-XAB



Clip plate

NZM1-XC35

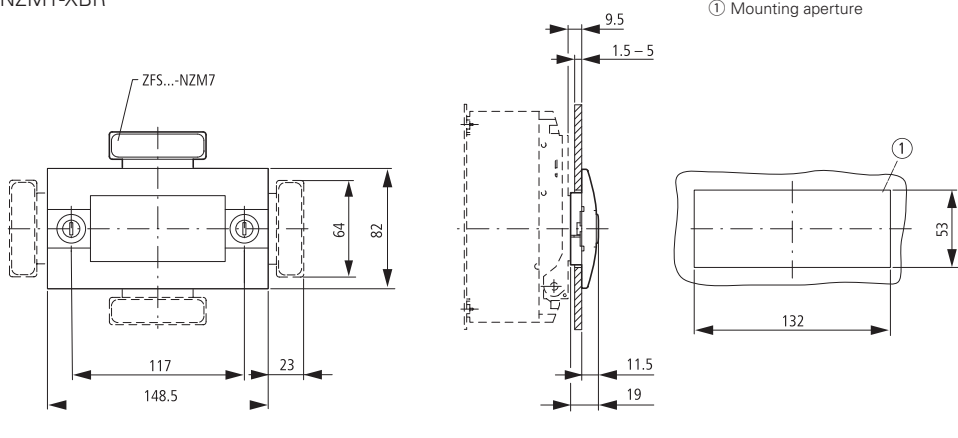


1.16 NZM1-4 molded case circuit-breakers

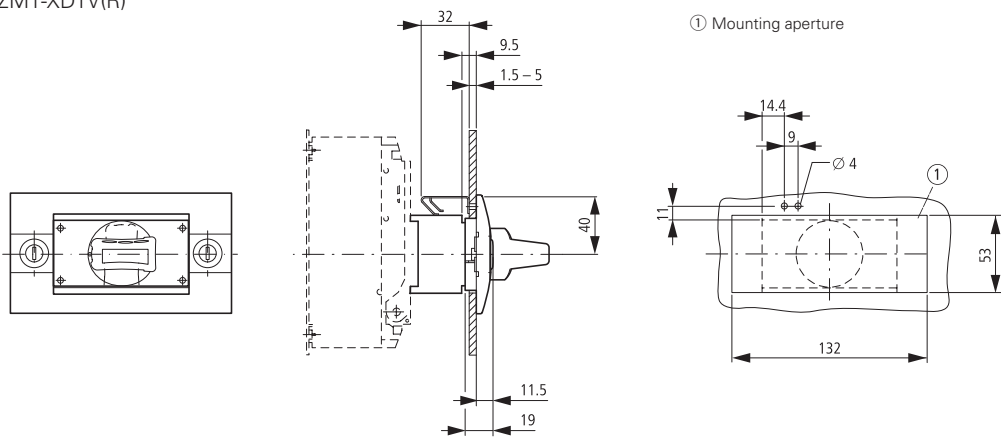
Dimensions

Size 1: accessories (NZM...-X...)

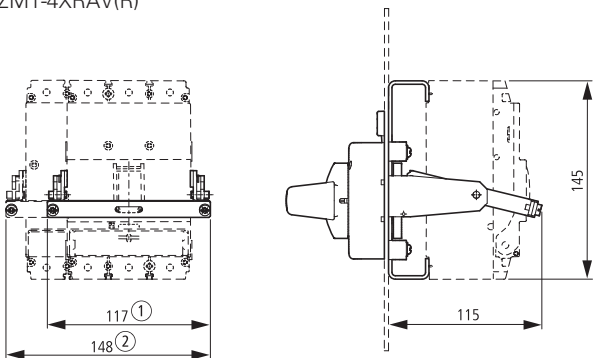
Insulating surround NZM1-XBR



Rotary handle on switch with door interlock NZM1-XDTV(R)

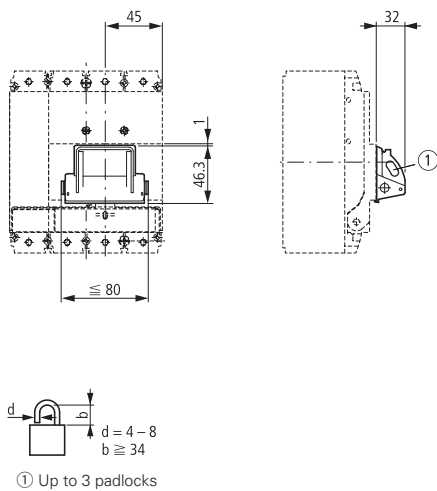


Rear-mounted drives NZM1-XRAV(R) NZM1-4XRAV(R)



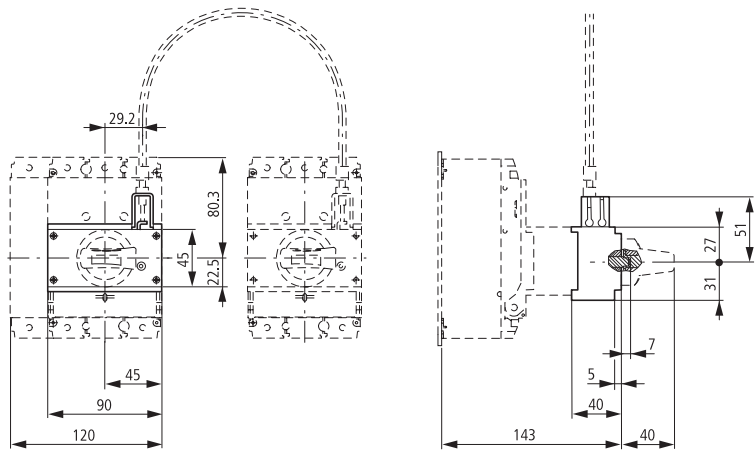
- ① NZM1-XRAV(R)
② NZM1-4XRAV(R)

Toggle lever locking device NZM-XKAV

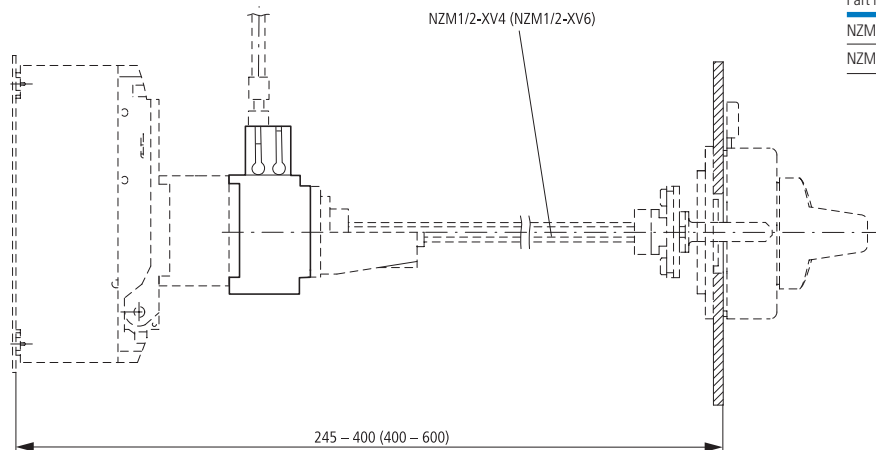


Size 1: accessories (NZM1-XMV, NZM1-XTV...)

Mechanical interlock
NZM1-XMV+NZM1-XDV(R)

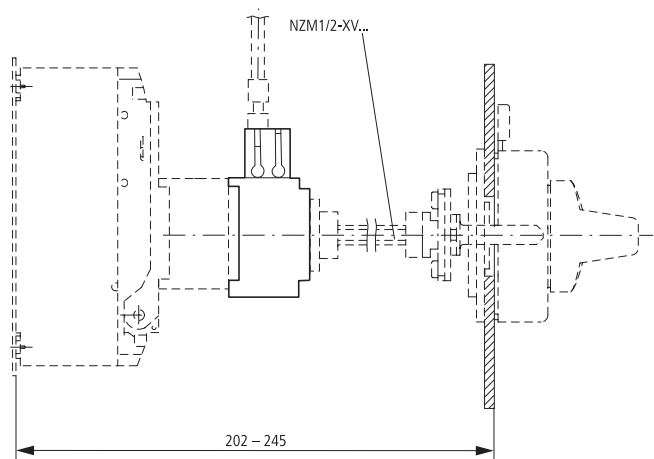


NZM1-XMV+NZM1-XTVD(V)(R)

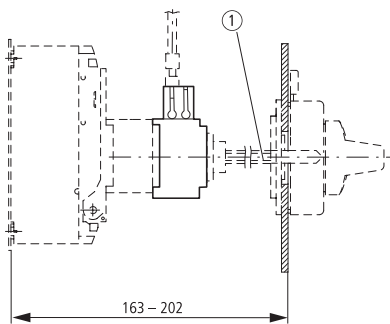


Part no.	X
NZM1/2-XV4	245–400
NZM1/2-XV6	400–600

NZM1-XMV+NZM1-XTVD(V)(R)-60



NZM1-XMV+NZM1-XTVD(V)(R)-0



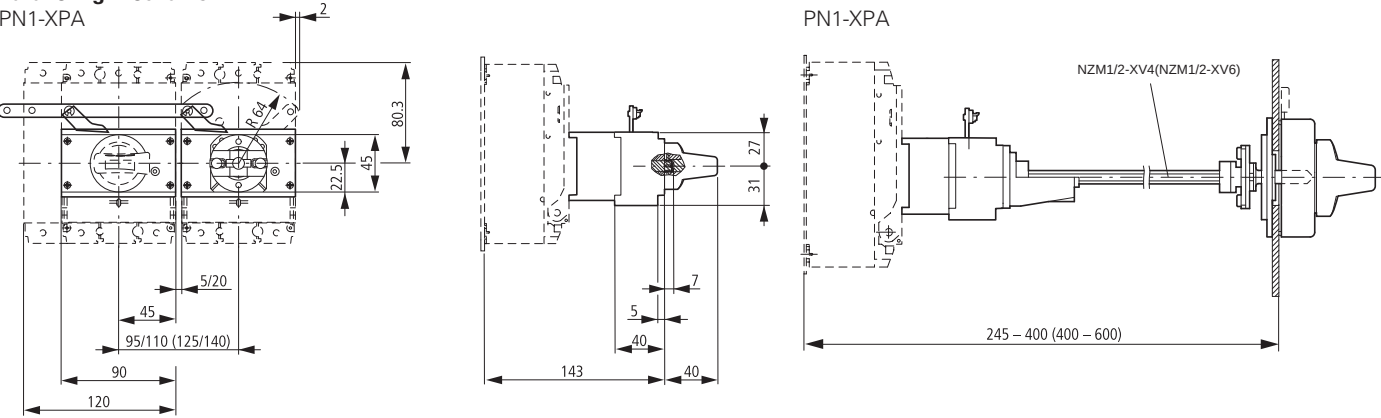
① Special tip

1.16 NZM1-4 molded case circuit-breakers

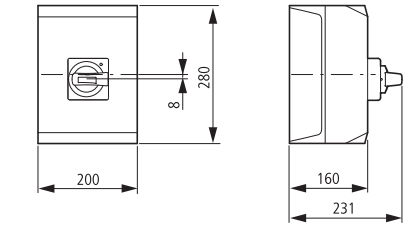
Dimensions

Size 1: accessories (PN1-XPA, NZM1-XCI...,NZM1-XAD)

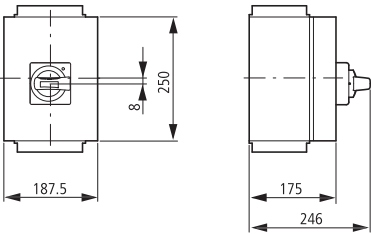
Paralleling mechanism PN1-XPA



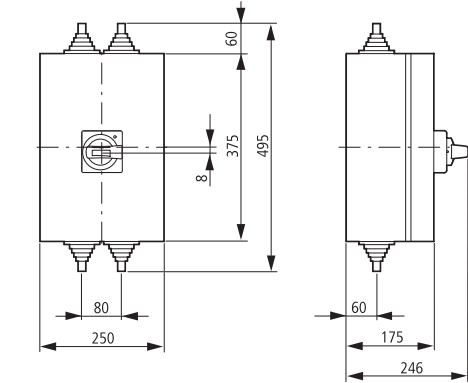
Insulated enclosures NZM1-XCIKS-T...



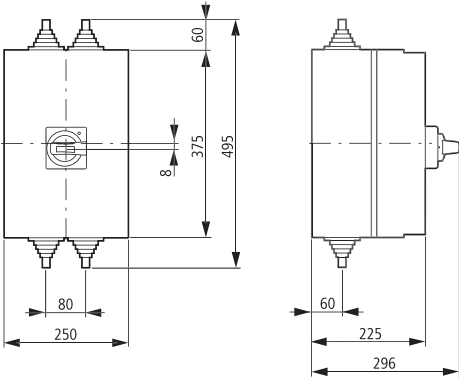
NZM1-XC123-T...



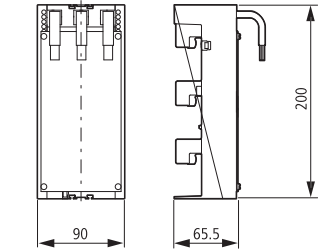
NZM1-XC143-T...



NZM1-XC143/2-T...



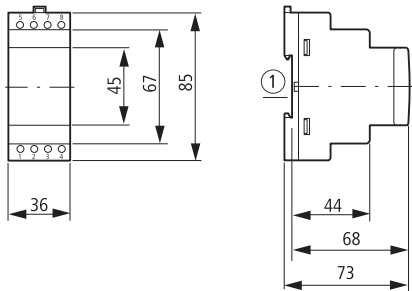
Component adapter NZM1-XAD160



Size 1: accessories (NZM1...-XFL..., PFR-...)

Residual-current relays

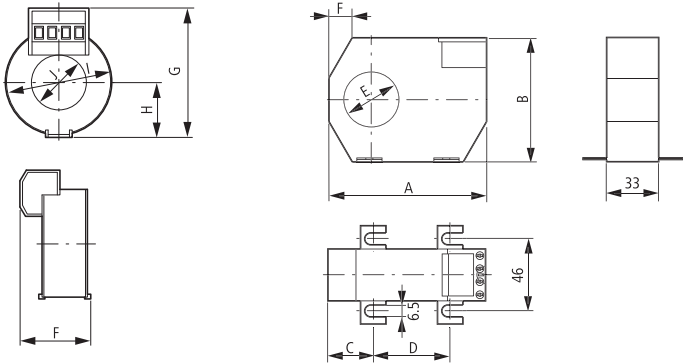
PFR-003
PFR-03
PFR-5



Ring-type transformer

PFR-W

PFR-W-35...210

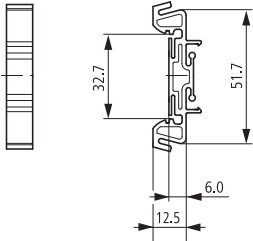


Part no.	A	B	C	D	E	F
PFR-W-35	100	79	26	48.5	35	35
PFR-W-70	130	110	32	66	70	52
PFR-W-105	170	146	38	94	105	72
PFR-W-140	220	196	48.5	123	140	97
PFR-W-210	299	284	69	161	210	141

Part no.	F	G	H	I	J
PFR-W-20	32	60	24	46	21
PFR-W-30	32	70	30	59	30

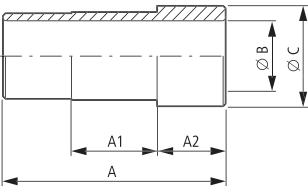
Mounting clip

PFR-WC



Magnetic shielding

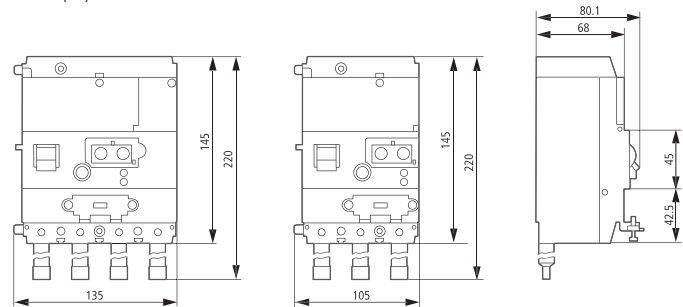
PFR-WMA



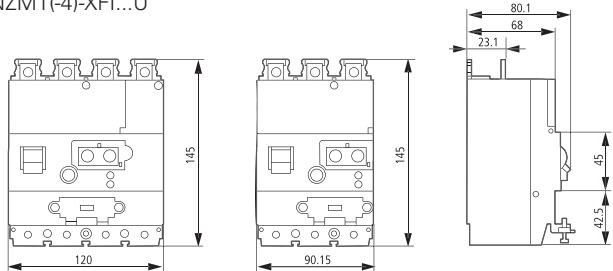
Part no.	A	ØB	ØC	A1	A2
PFR-WMA-35	91	28	40	35	28
PFR-WMA-70	105	62	75	35	35
PFR-WMA-105	153	98	110	35	60
PFR-WMA-140	153	133	145	35	60
PFR-WMA-210	153	203	215	35	60

Earth-fault release

NZM1(4)-XFI...R



NZM1(4)-XFI...U



1.16

NZM1-4 molded case circuit-breakers

Dimensions

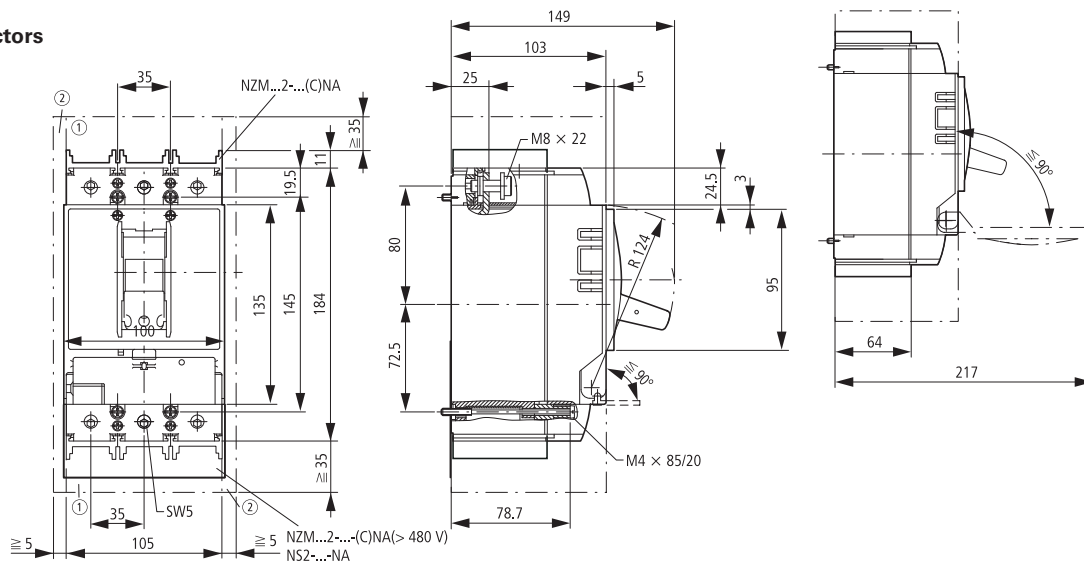
Size 2: basic devices (NZM2, PN2, N2, NS2)

Circuit-breakers

Switch-disconnectors

3 pole

NZMB2
NZMC2
NZMN2
NZMH2
PN2
N2
NS2



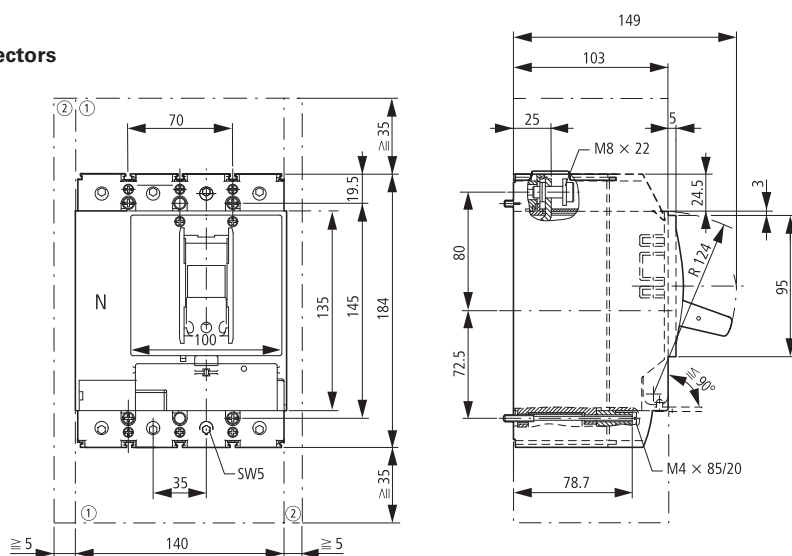
- ① Blow-out area, minimum distance to other parts ≥ 35 mm
② Minimum distance to adjacent parts ≥ 5 mm

Circuit-breakers

Switch-disconnectors

4 pole

NZMB2-4
NZMN2-4
NZMH2-4
PN2-4
N2-4

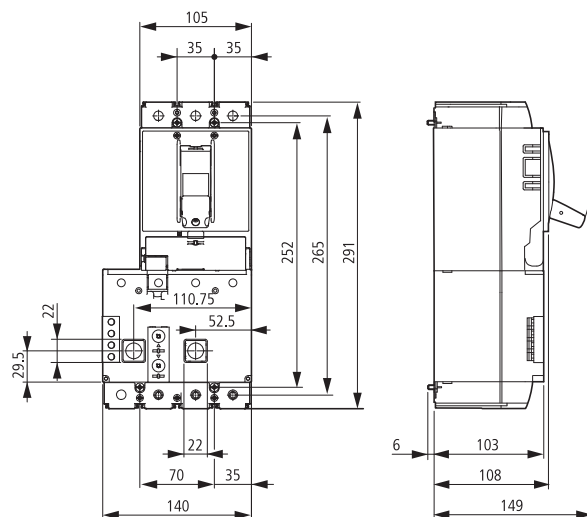


- ① Blow-out area, minimum distance to other parts ≥ 35 mm
② Minimum distance to adjacent parts ≥ 5 mm

Circuit-breakers

3 pole

NZMH2...-XFIA30



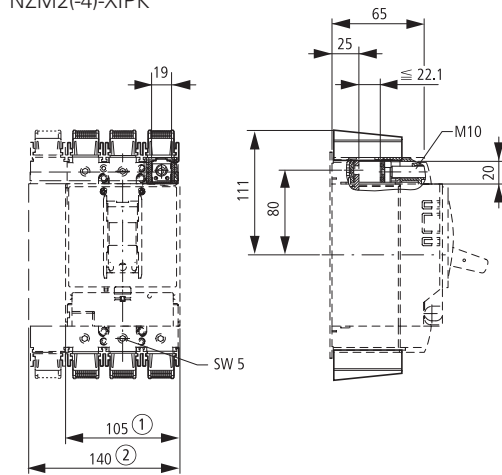
Size 2: basic devices (NZM2...-XK..., NZM2...-XIP..., NZM2-XST...)

Box terminal

NZM2(-4)-...-XKC(O)(U)

IP2X protection against contact with finger

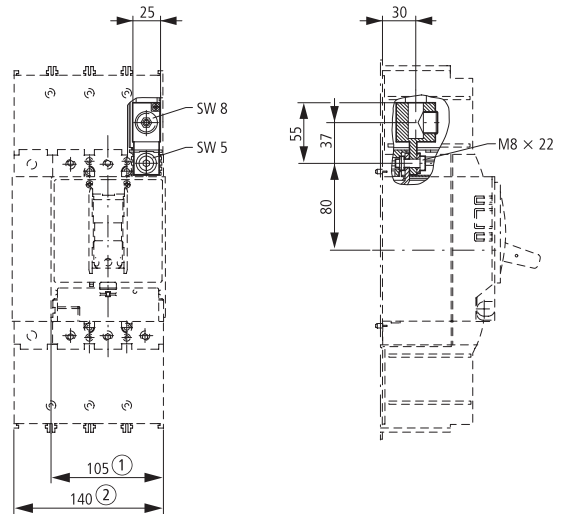
NZM2(-4)-XIPK



- ① 3 pole
- ② 4 pole

Tunnel terminal

NZM2(-4)-XKA



Covers

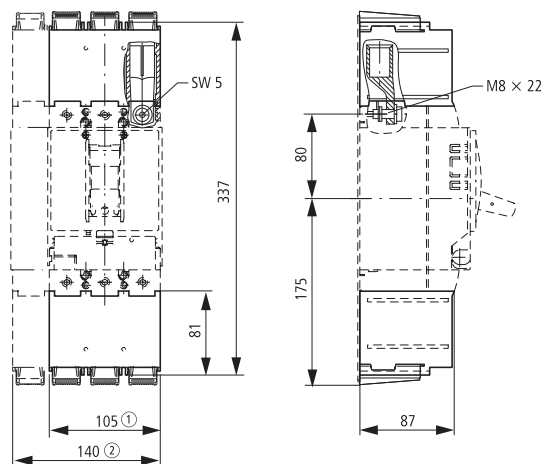
NZM2(-4)-XKSA

Cable lug

NZM2-XKS185

IP2X protection against contact with a finger for cover

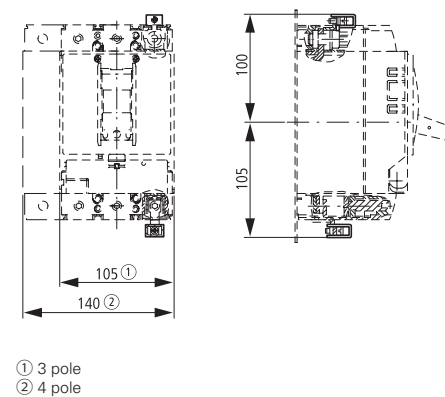
NZM2(-4)-XIPA



Cable lug cover

NZM2-XSTS

NZM-XSTK



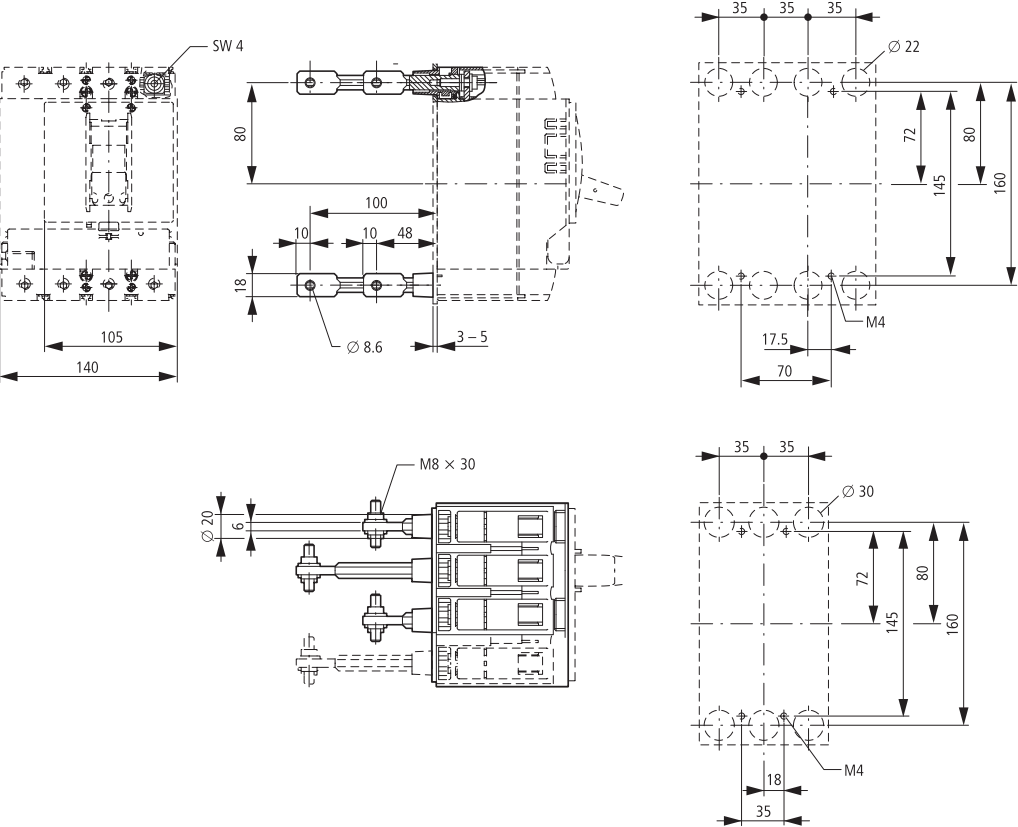
- ① 3 pole
- ② 4 pole

1.16 NZM1-4 molded case circuit-breakers

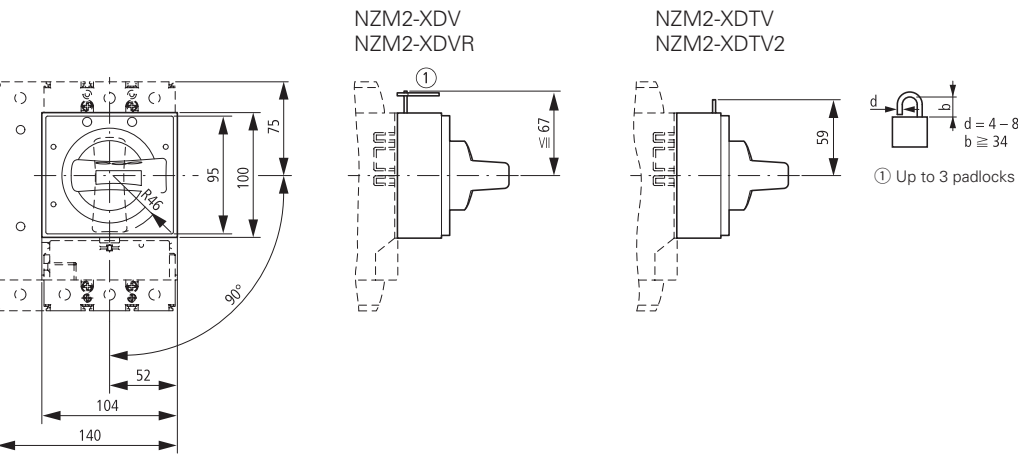
Dimensions

Size 2: accessories (NZM2...-XKR... NZM2-XDV..., NZM2-XDTV...)

Rear terminal bolts (+)NZM2(-4)-XKR(0)(U)

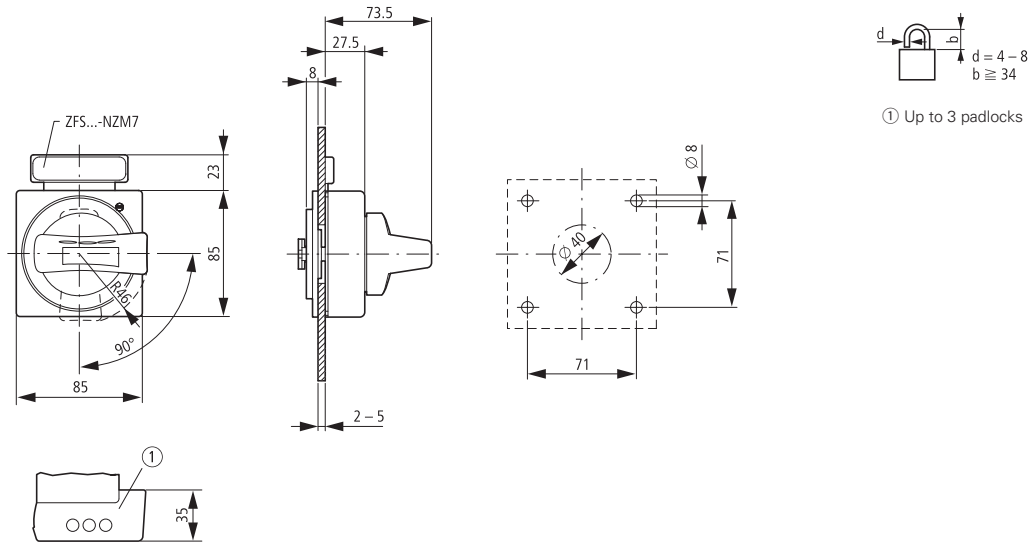


Rotary handle on circuit-breaker



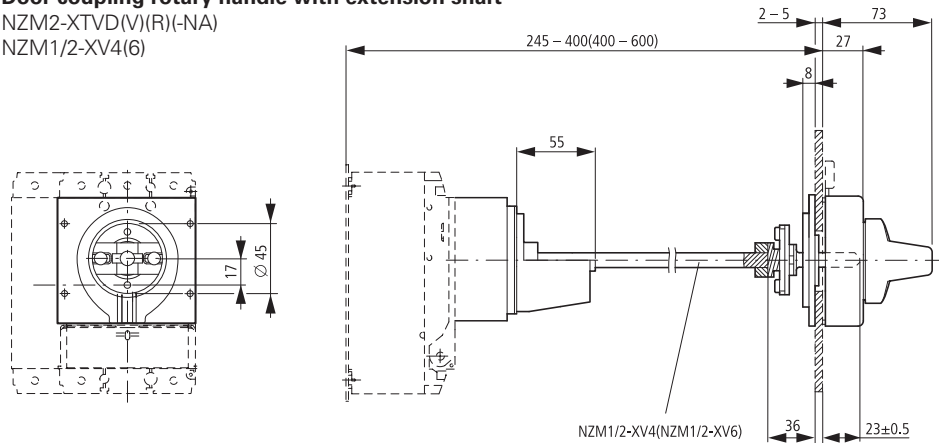
Size 2: accessories (NZM2-XTV..., NZM1/2-XV4(6))

Door coupling rotary handles
NZM2-XTVD(V)(R)...



Door coupling rotary handle with extension shaft

NZM2-XTVD(V)(R)(-NA)
NZM1/2-XV4(6)



1.16 NZM1-4 molded case circuit-breakers

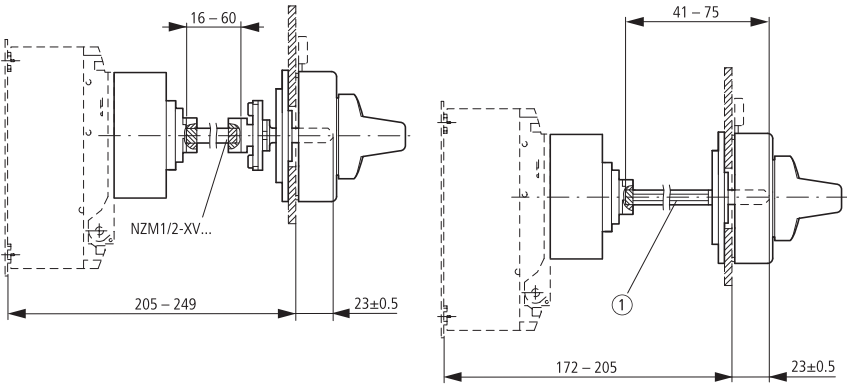
Dimensions

Size 2: accessories (NZM2-XTVD..., NZM2-XS...)

Door coupling rotary handle with extension shaft

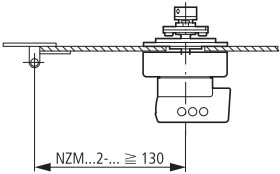
NZM2-XTVD(V)(R)-60(-NA)

NZM2-XTVD(V)(R)-0(-NA)



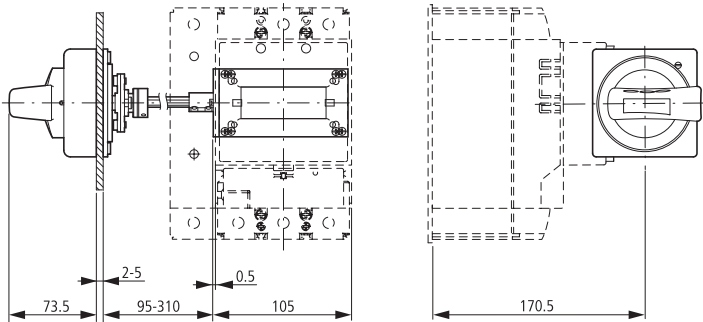
① Special tip

Minimum distance of door coupling rotary handle from door pivot point

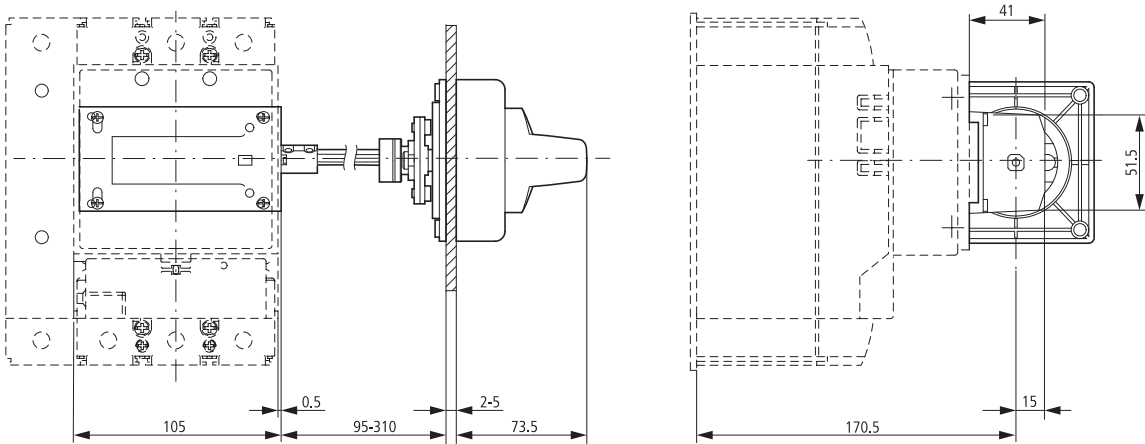


Main switch assembly kit for side wall installation

NZM2-XS(R)-L



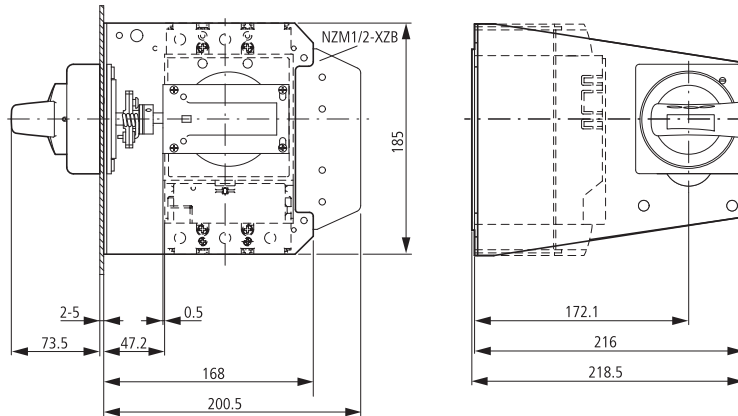
NZM2-XS(R)-R



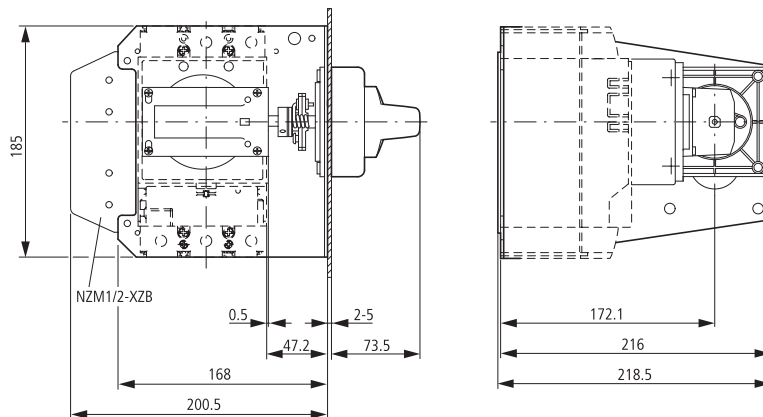
Size 2: accessories (NZM2-XS..., NZM2...-XRAV...)

Main switch assembly kit for side wall installation with mounting bracket.

NZM2-XS(R)M-L

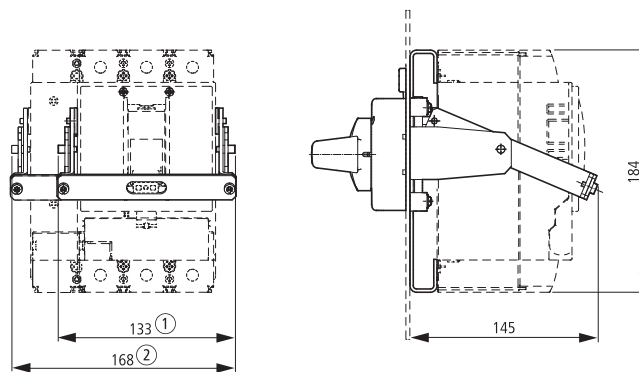


NZM2-XS(R)M-R



Rear-mounted drives

NZM2



- ① NZM2-XRAV(R)
- ② NZM2-4-XRAV(R)

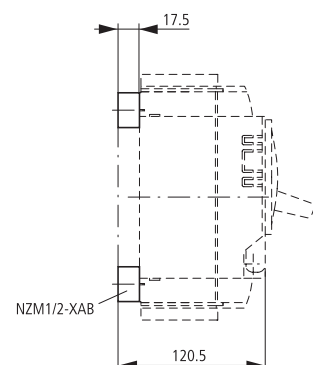
NZM1-4 molded case circuit-breakers

Dimensions

Size 2: accessories (NZM...-XAB, NZM2-XBR, NZM2-XDTV...)

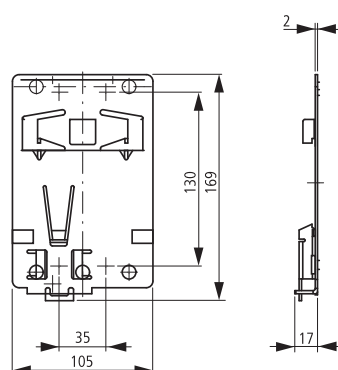
Spacers

NZM1/2-XAB



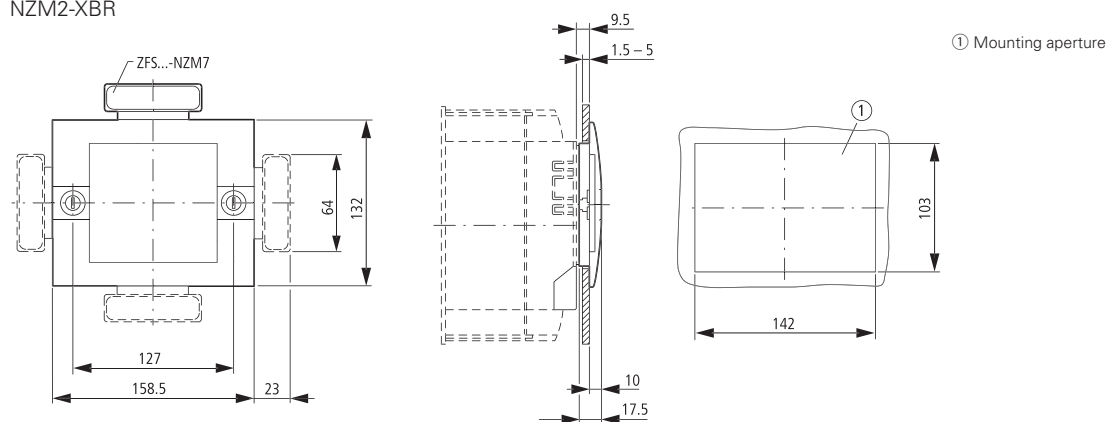
Clip plate

NZM2-XC75



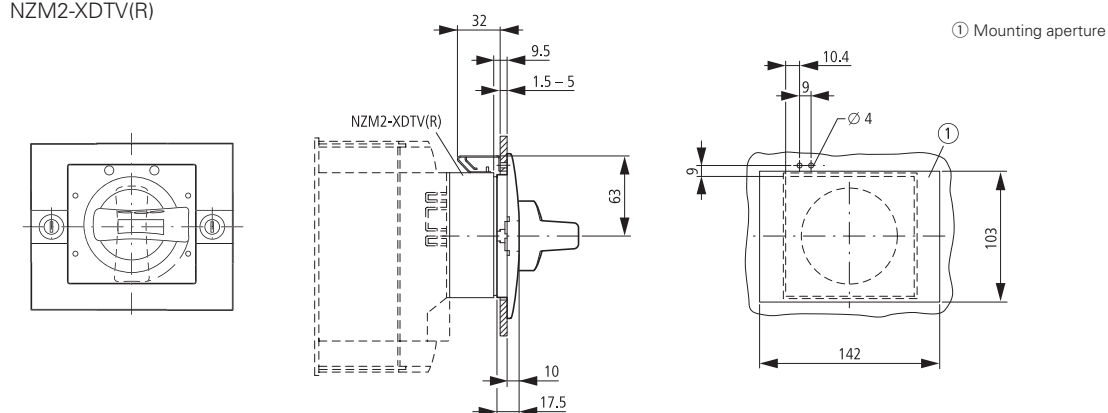
Insulating surround

NZM2-XBR



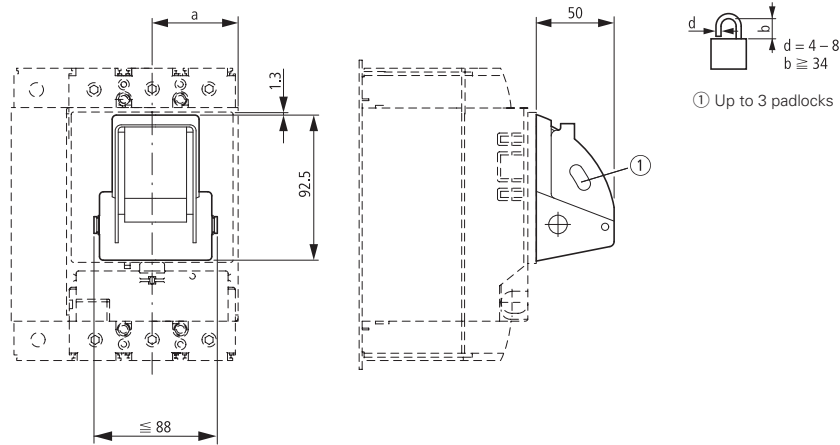
Rotary handle on switch with door interlock

NZM2-XDTV(R)



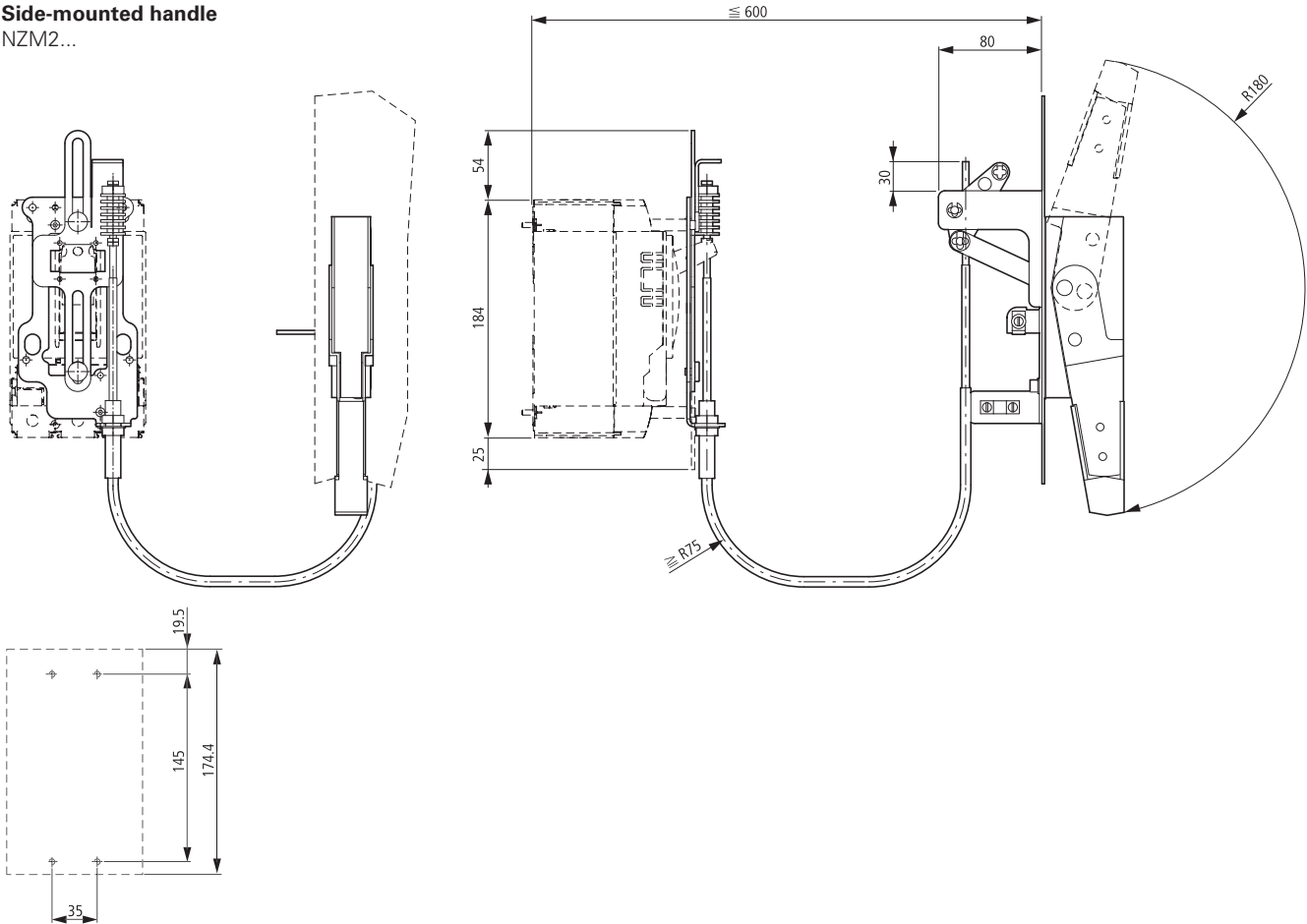
Size 2: accessories (NZM2...-XKAV, NZM2...)

Toggle lever locking device
NZM2/3-XKAV



Part no.	a
NZM2, PN2, N2	52.5
NZM3, PN3, N3	70

Side-mounted handle
NZM2...



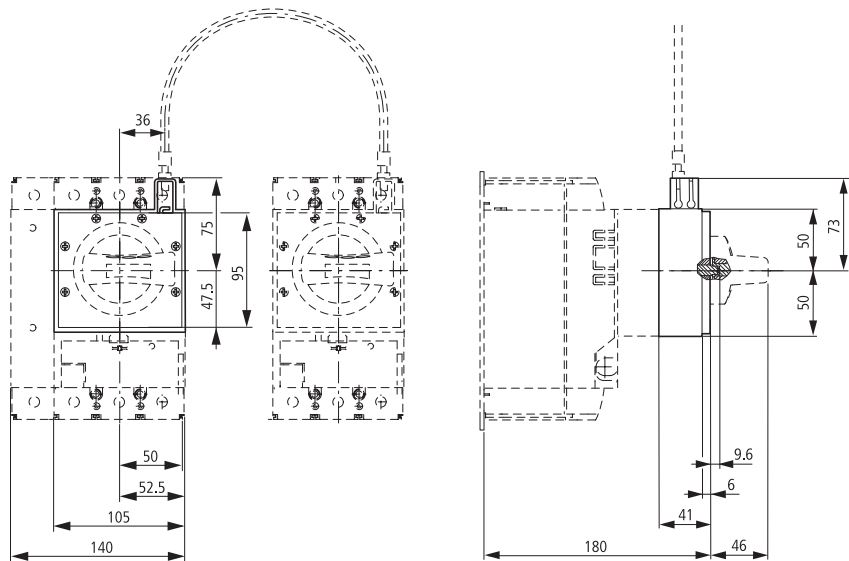
Drilling template

1.16 NZM1-4 molded case circuit-breakers

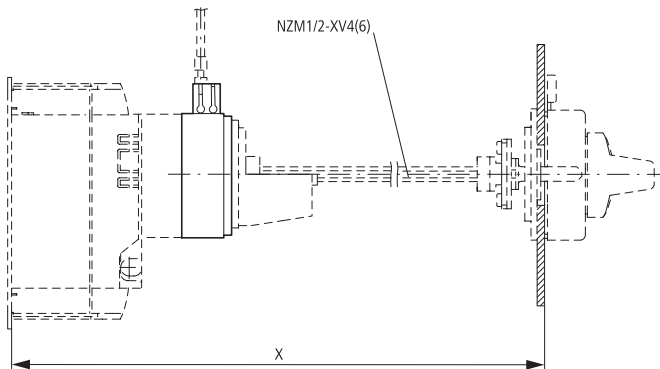
Dimensions

Size 2: accessories (NZM2-XMV, NZM2-XTVD..., NZM2-XD)

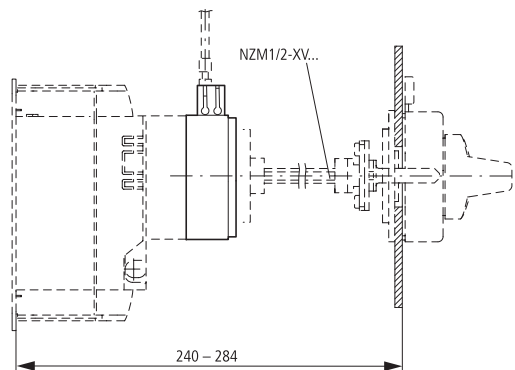
Mechanical interlock NZM2-XMV+NZM2-XD



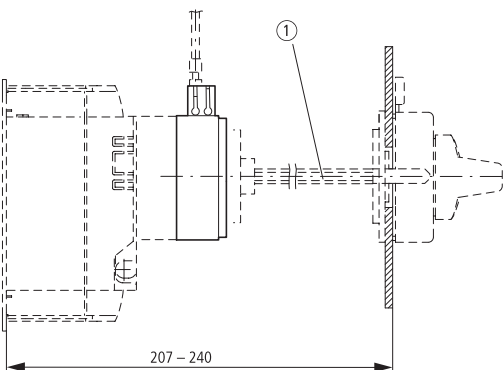
NZM2-XMV+NZM2-XTVD(V)(R)



NZM2-XMV+NZM 2-XTVD(V)(R)-60



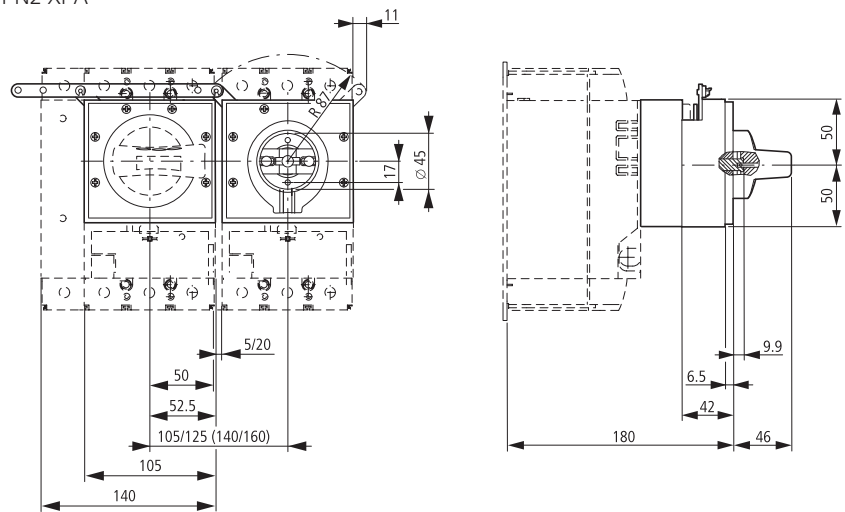
NZM2-XMV + NZM2-XT(V)D(V)(R)-0



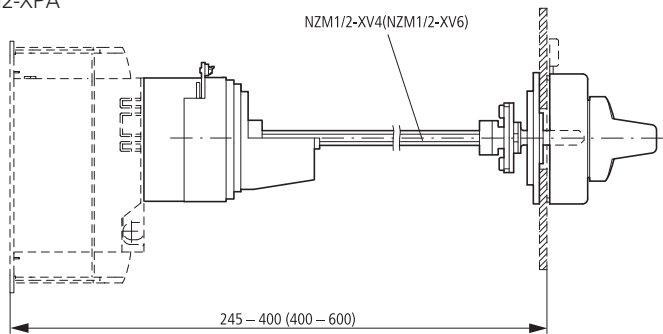
① Special tip

Size 2: accessories (PN2-XPA, NZM2-XR...)

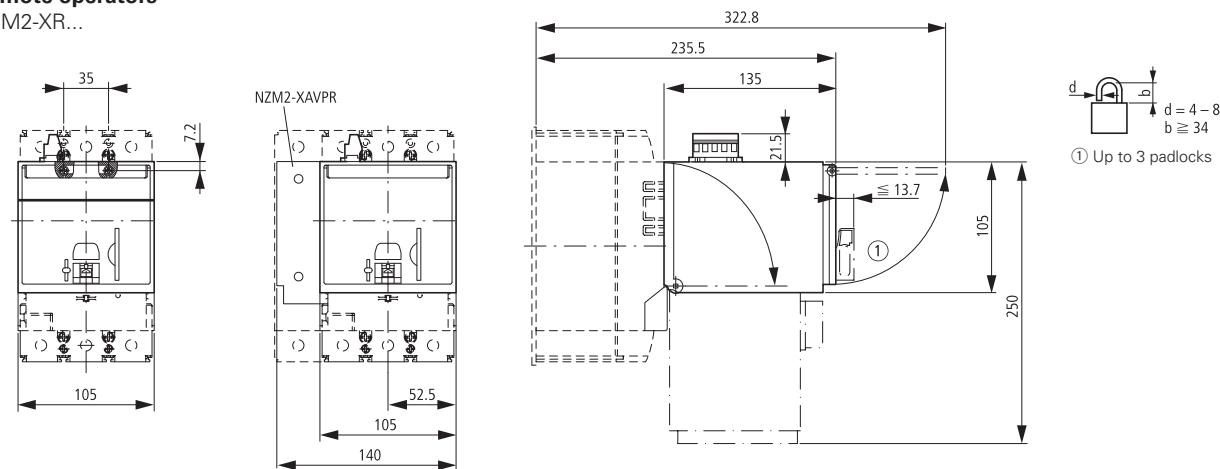
Paralleling mechanism
PN2-XPA



PN2-XPA



Remote operators
NZM2-XR...



1.16

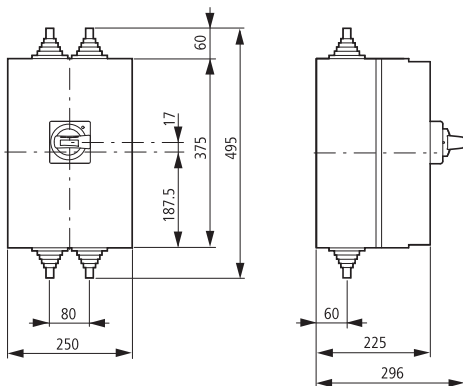
NZM1-4 molded case circuit-breakers

Dimensions

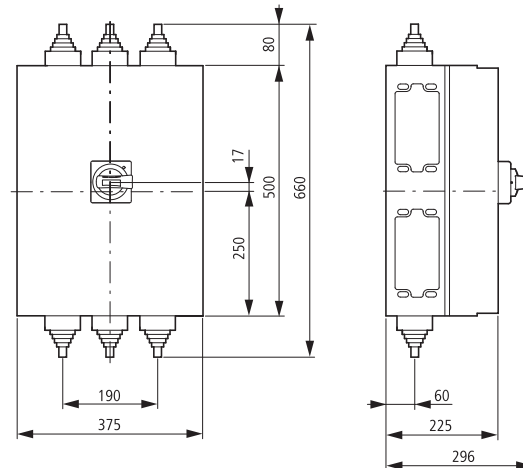
Size 2: accessories (NZM2-XCI..., NZM2-XAD, NZM2...-XSV)

Insulated enclosures

NZM2-XC143-T

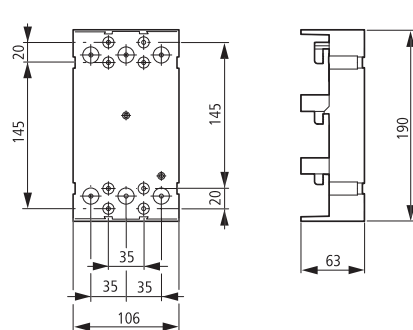


NZM2-XC145-T...



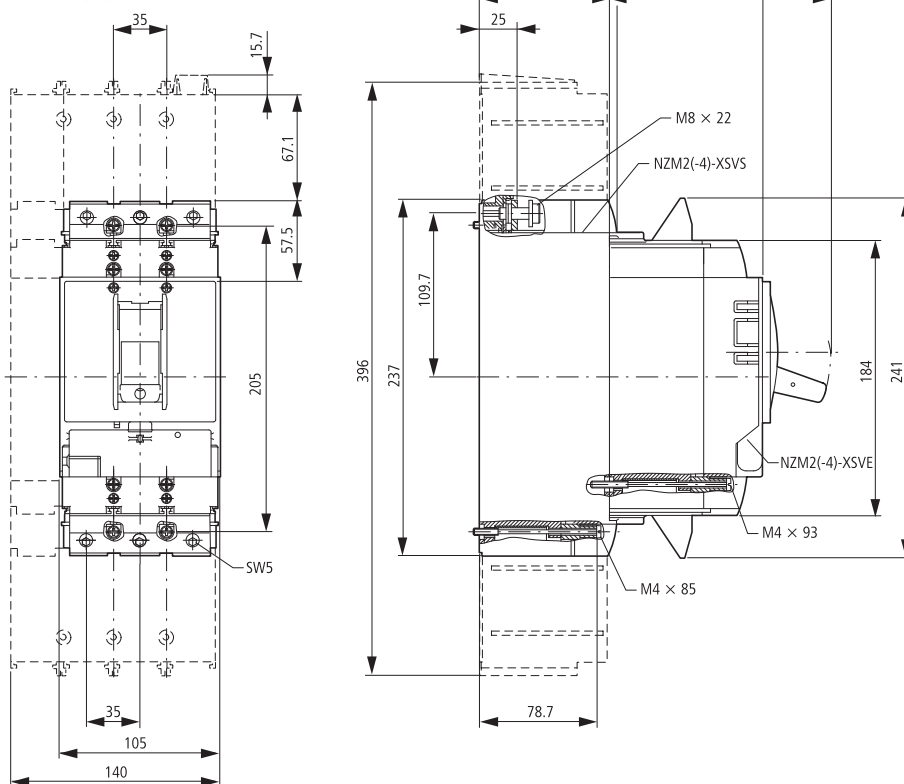
Component adapter

NZM2-XAD250



Plug-in units

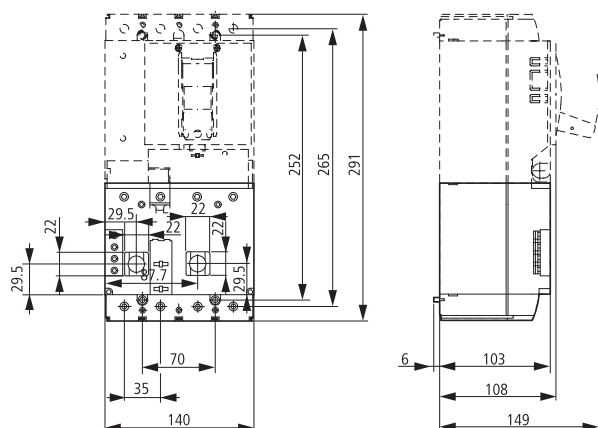
+NZM2(-4)-XSV



Size 2: accessories (NZM2(-4)-XFI, NZM-XDMI..., UVU-NZM)

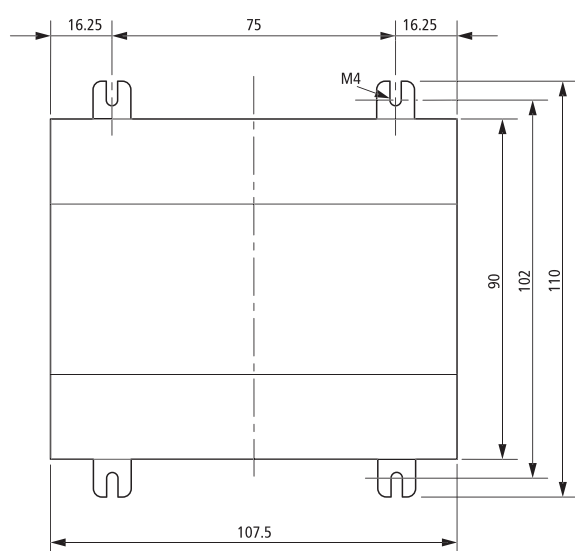
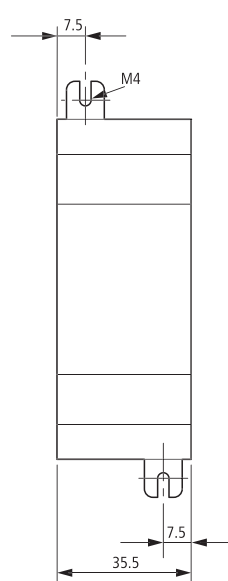
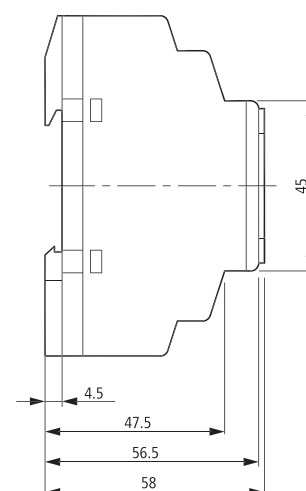
Earth-fault release

NZM2(-4)-XFL..



Data management interface (DMI module)

NZM-XDMI612

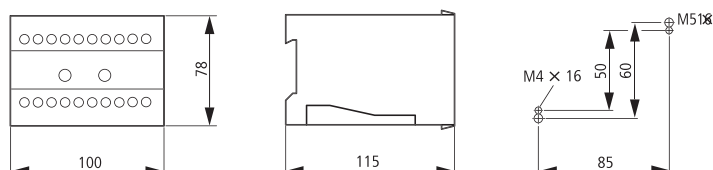
NZM-XDMI-DPV1
EASY2...NZM-XDMI...
EASY2...

Undervoltage releases, off-delayed

UVU-NZM

Capacitor unit

NZM-XCM



1.16 NZM1-4 molded case circuit-breakers

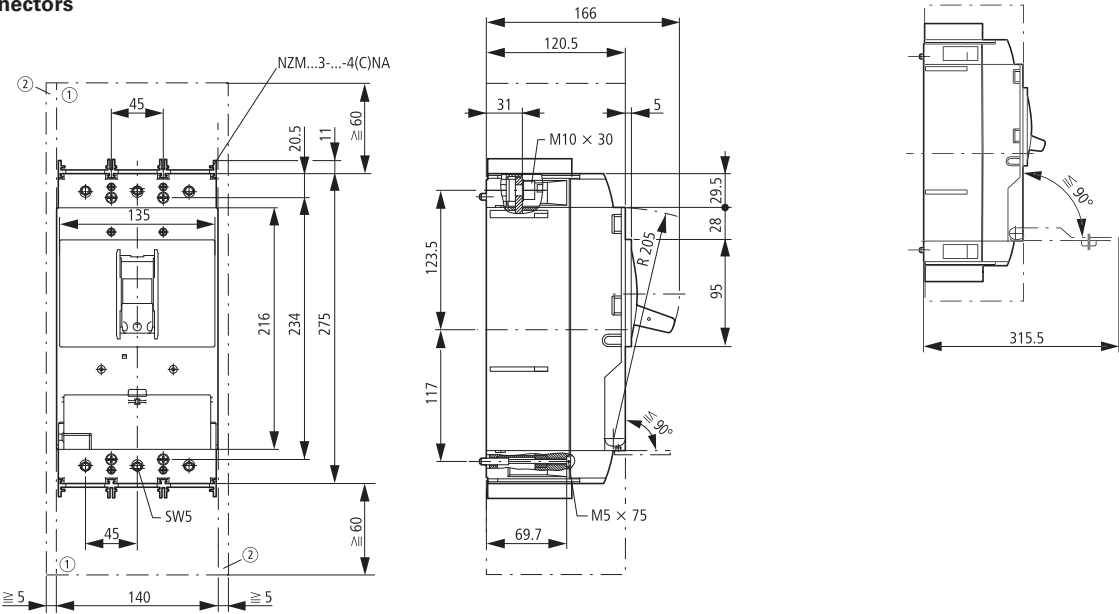
Dimensions

Size 3: basic devices (NZM3, PN3, N3, NS3)

Circuit-breakers
Switch-disconnectors

3 pole

NZMN3
NZMH3
PN3
N3
NS3

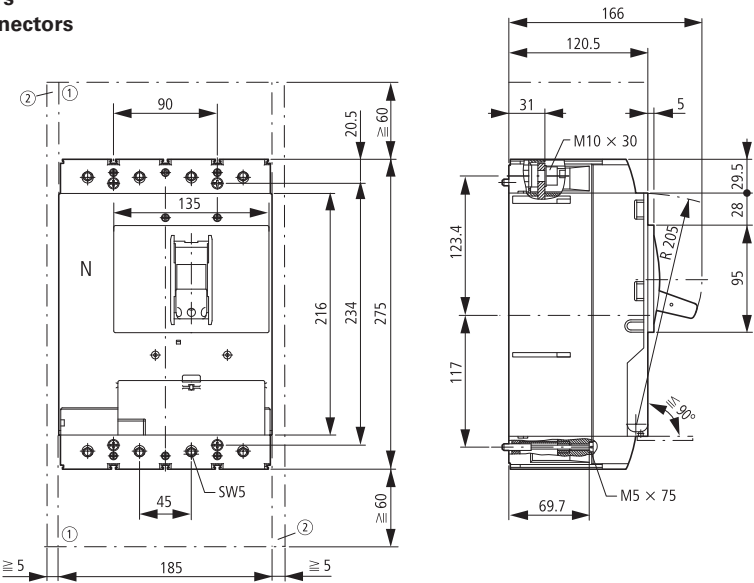


- ① Blow-out area, minimum distance to other parts ≥ 35 mm
- ② Minimum distance to adjacent parts ≥ 5 mm

Circuit-breakers
Switch-disconnectors

4 pole

NZMN3-4
NZMH3-4
PN3-4
N3-4



- ① Blow-out area, minimum distance to other parts ≥ 35 mm
- ② Minimum distance to adjacent parts ≥ 5 mm

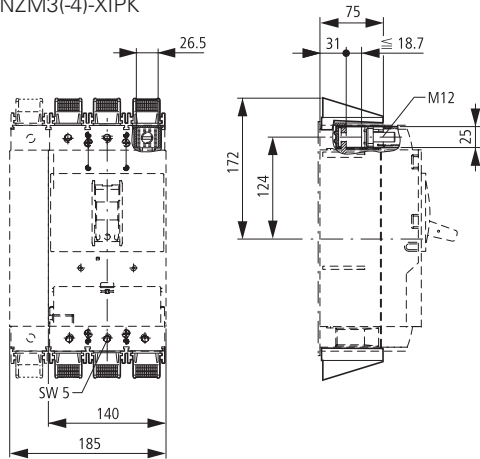
Size 3: accessories (NZM3...-XK, NZM3...-XIP...,NZM3-XST...)

Box terminal

(+)NZM3(-4)-XKC(O)(U)

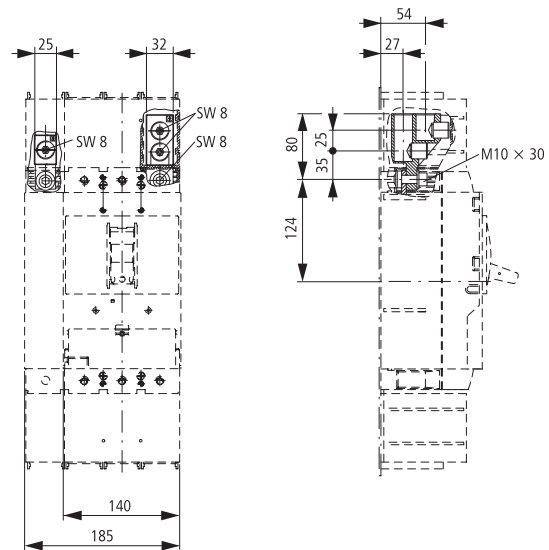
IP2X protection against contact with finger

NZM3(-4)-XIPK



Tunnel terminal

NZM3(-4)-XKA1(2)



Cover

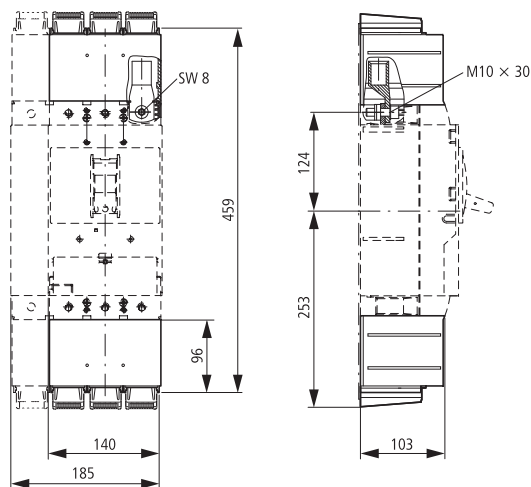
NZM3(-4)-XKSA

Cable lug

NZM3-XKS185

IP2X protection against contact with a finger

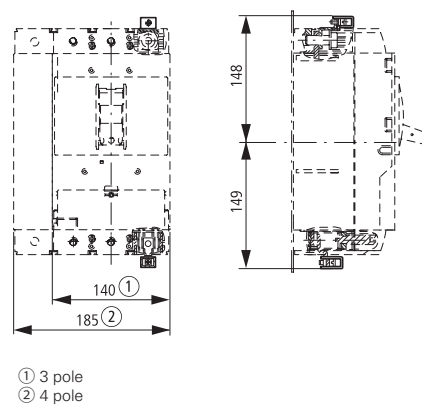
NZM3(-4)-XIPA



Cable lug cover

NZM3/4-XSTS

NZM-XSTK



① 3 pole
② 4 pole

1.16

NZM1-4 molded case circuit-breakers

Dimensions

Size 3: accessories (NZM3...XK...)

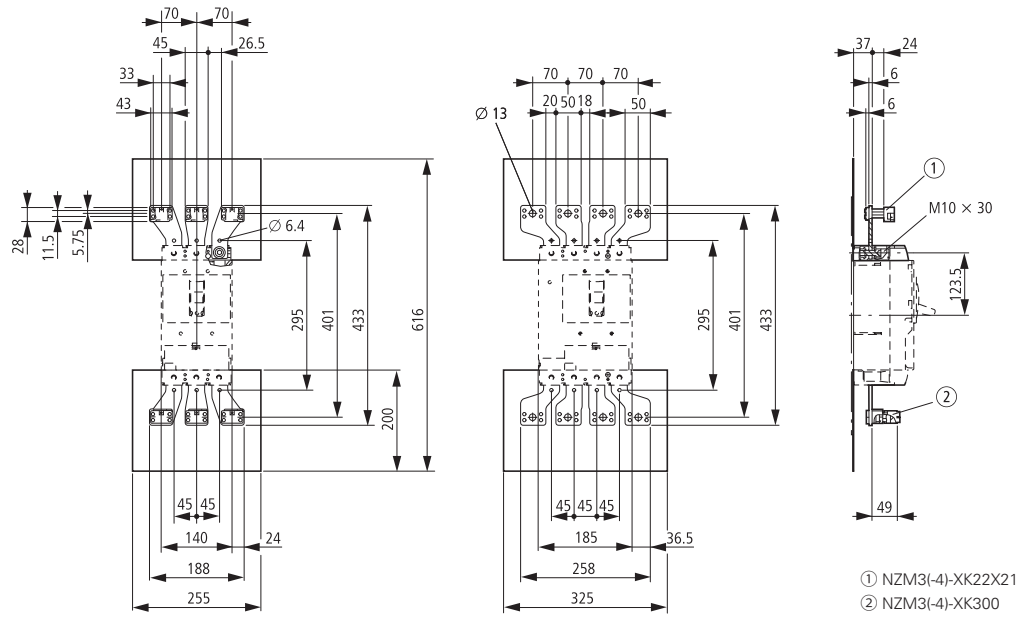
Connection width extension

NZM3(-4)-XKV70

Terminals

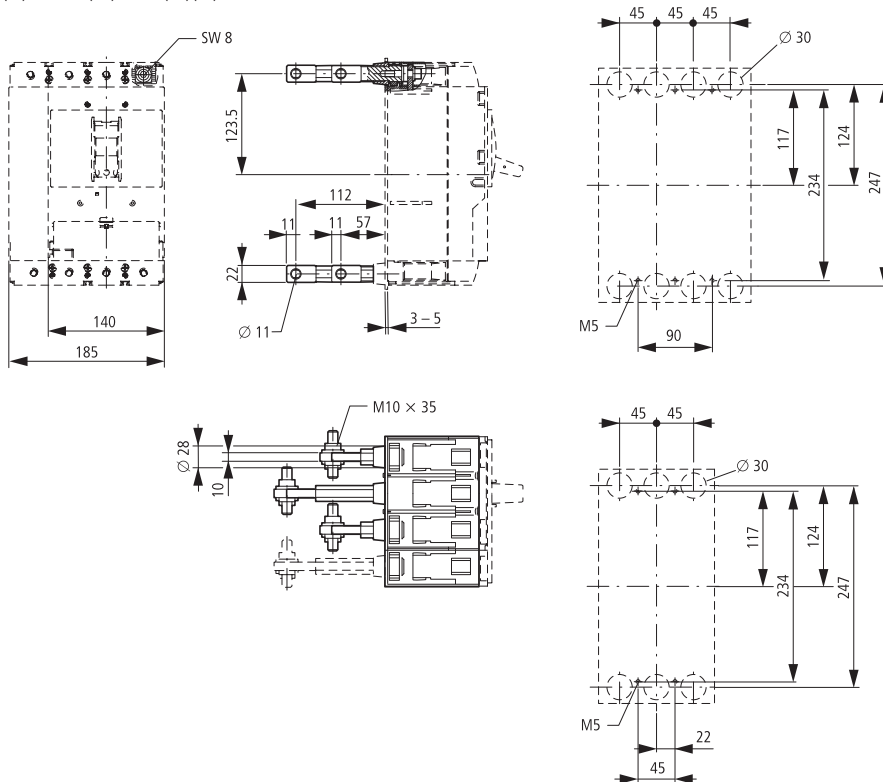
NZM3(-4)-XK22X21

NZM3(-4)-XK300



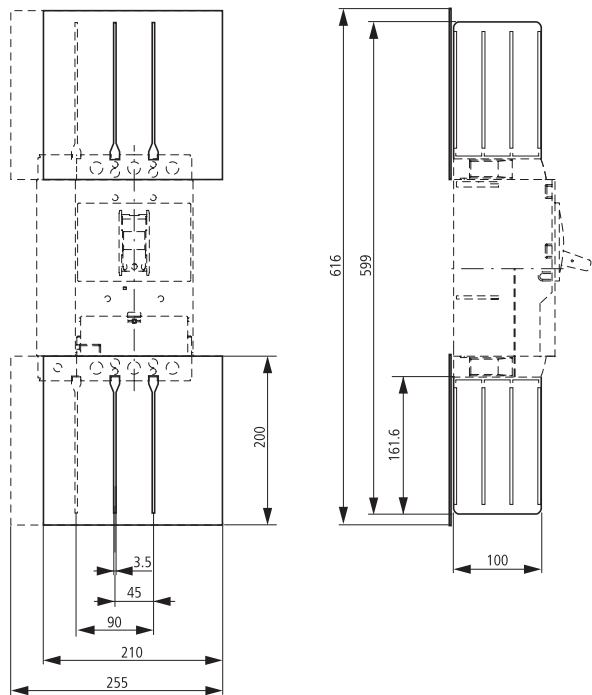
Rear terminal bolts

(+)NZM3(-4)-XKR(O)(U)

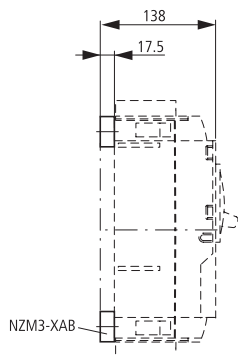


Size 3: accessories (NZM3...-XKP, NZM3-XAB, NZM3-XBR)

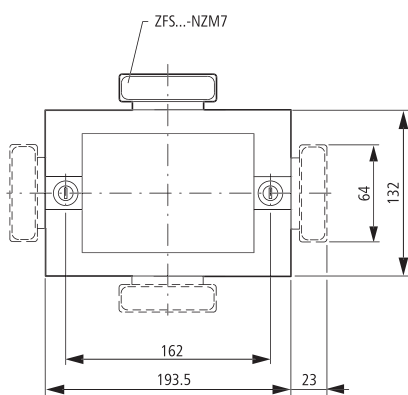
Phase isolators
NZM3-4-XKP



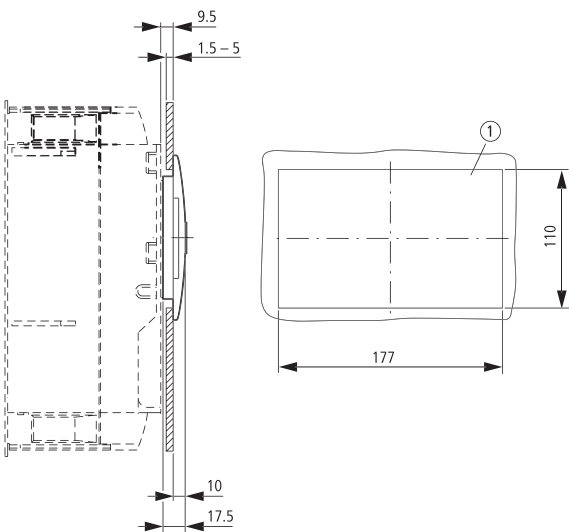
Spacers
NZM3-XAB



Insulating surround
NZM3-XBR



① Mounting aperture



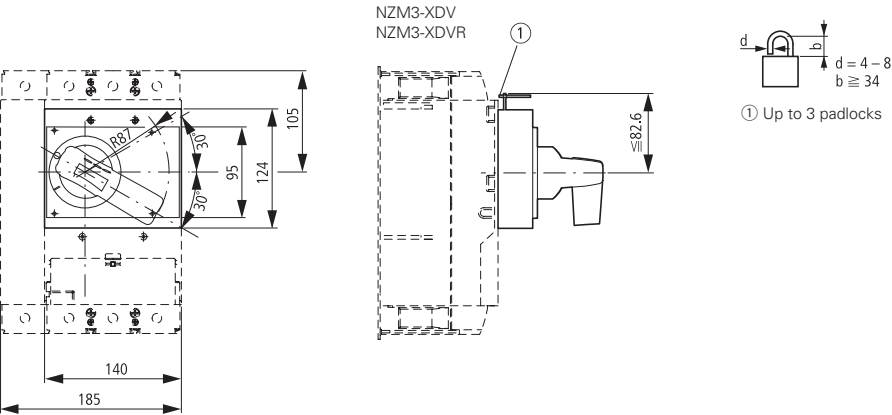
1.16

NZM1-4 molded case circuit-breakers

Dimensions

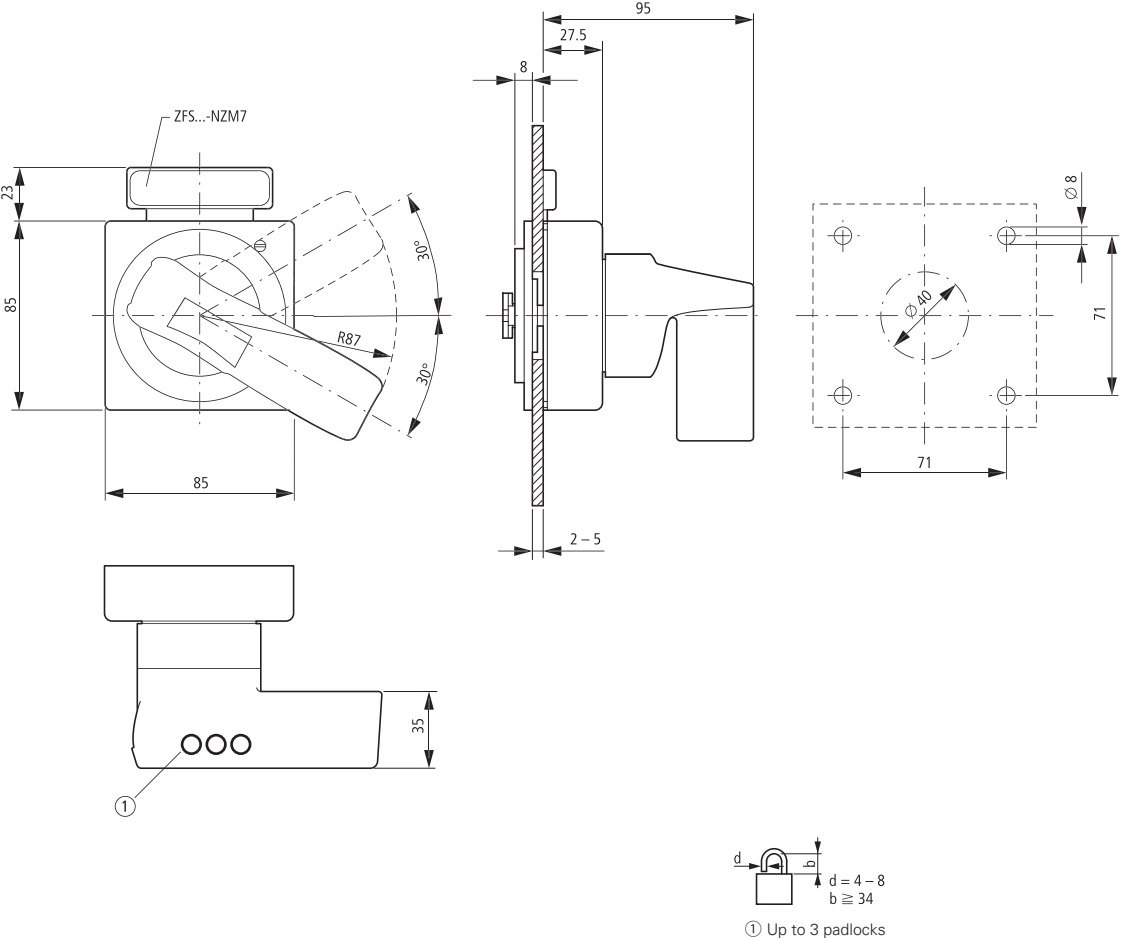
Size 3: accessories (NZM3-XDV..., NZM3-XTVD...)

Rotary handle on circuit-breaker



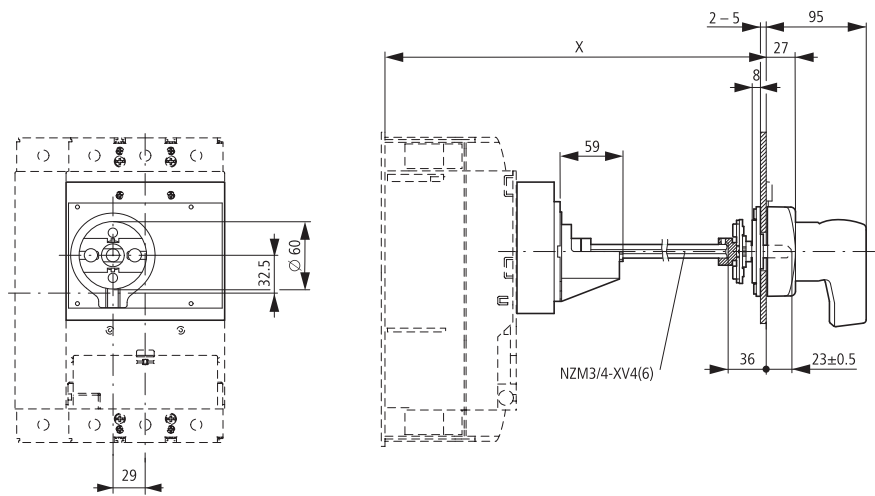
Door coupling rotary handles

NZM3-XTVD(V)(R)...



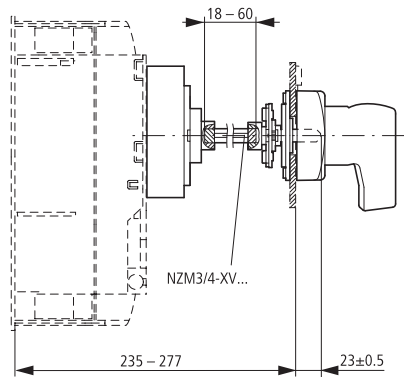
Size 3: accessories (NZM3-XTVD...)

Door coupling rotary handle with extension shaft
NZM3-XTVD(V)(R)(-NA)
NZM3/4-XV4(6)

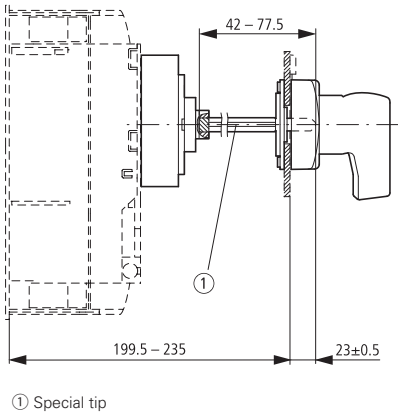


Part no.	X
NZM3/4-XV4	270 – 400
NZM3/4-XV6	400 – 600

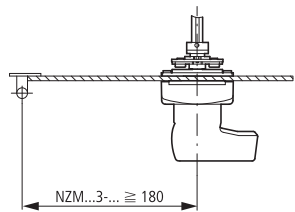
NZM3-XTVD(V)(R)-60(-NA)



NZM3-XTVD(V)(R)-0(-NA)



Minimum distance of door coupling rotary handle from door pivot point

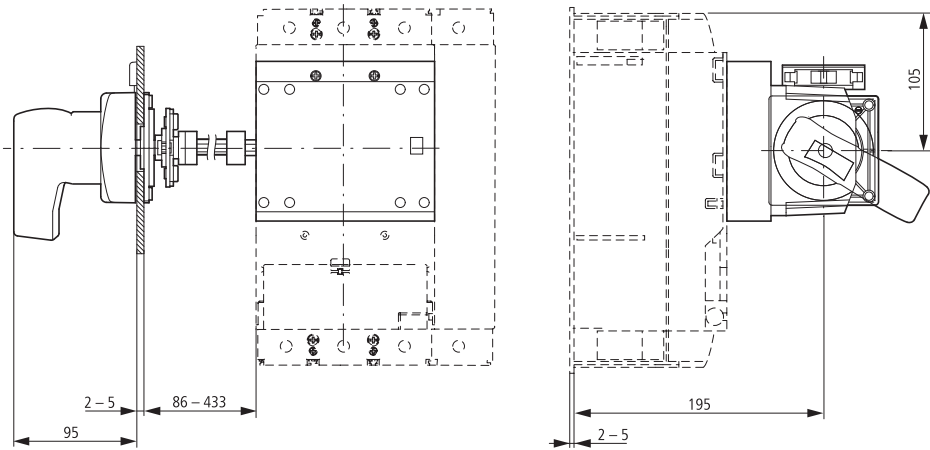


1.16 NZM1-4 molded case circuit-breakers

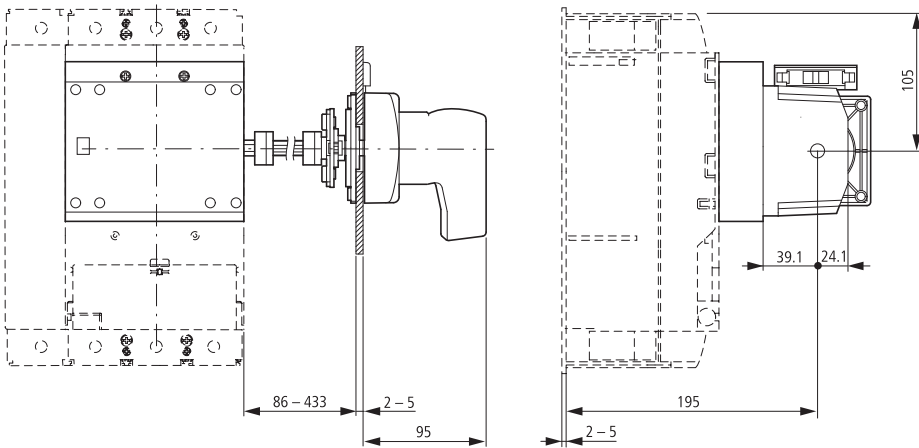
Dimensions

Size 3: accessories (NZM3-XS.... NZM3)

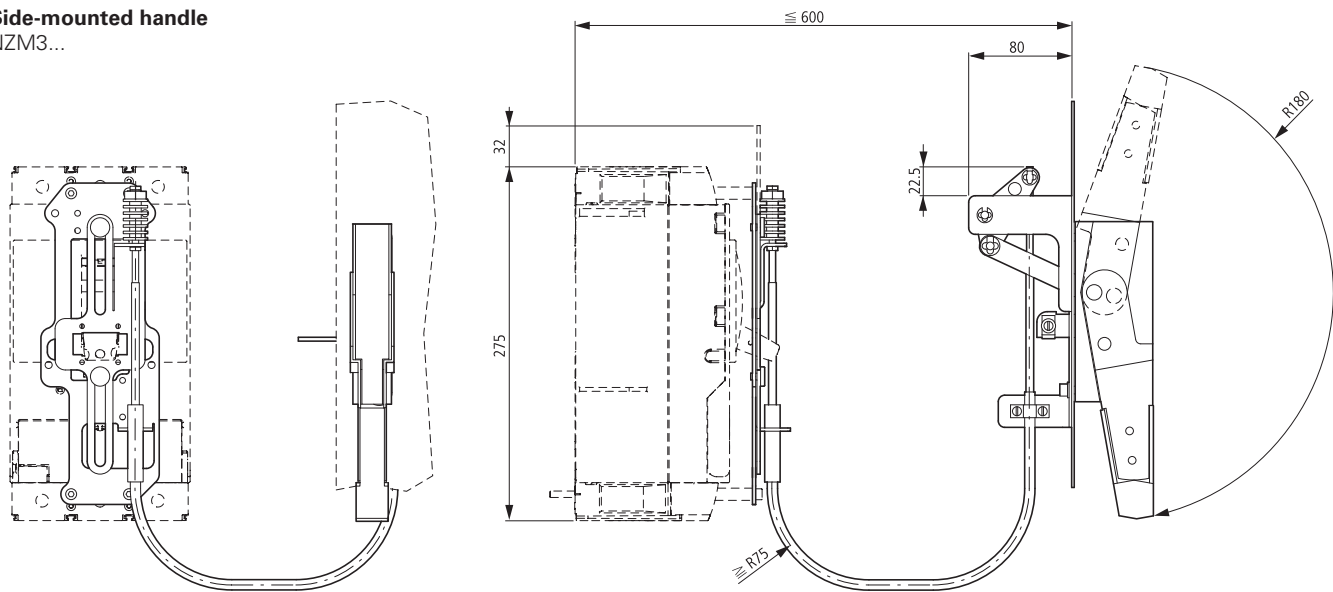
Main switch assembly kit for side wall installation
NZM3-XS(R)-L



NZM3-XS(R)-R

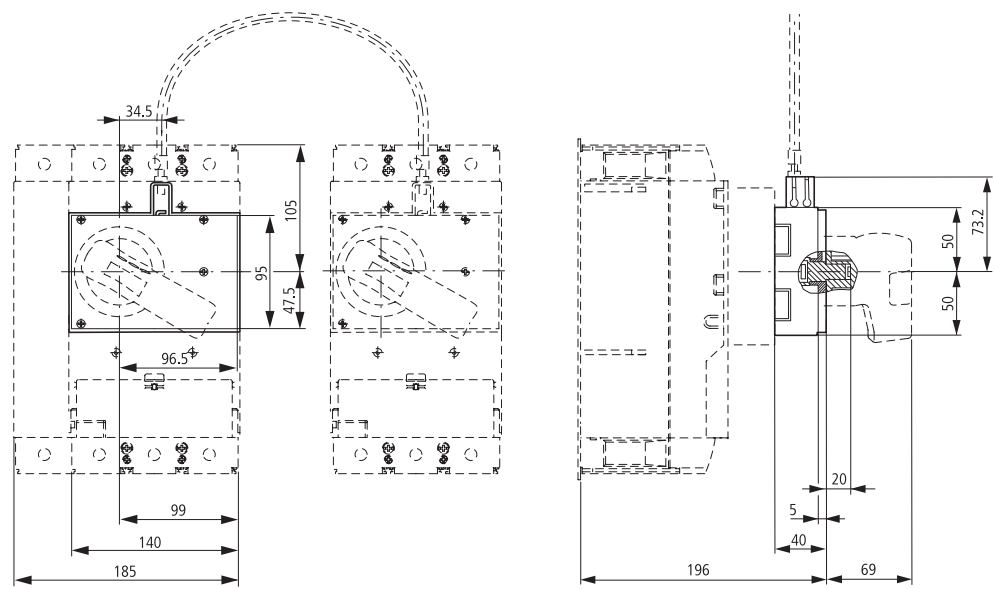


Side-mounted handle
NZM3...

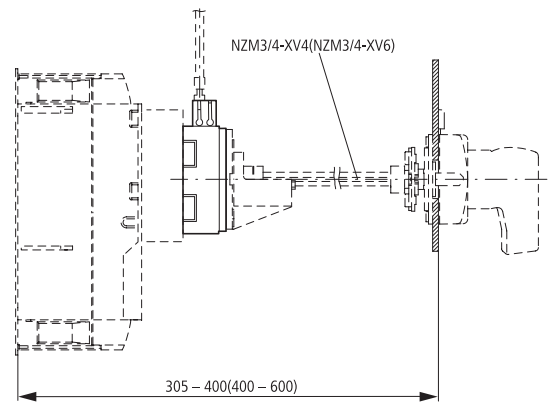


Size 3: accessories (NZM3-XMV. NZM3-XTVD.... NZM3-XDV)

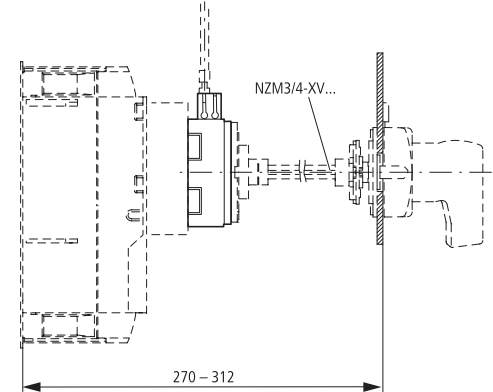
Mechanical interlock
NZM3-XMV+NZM3-XDV(R)



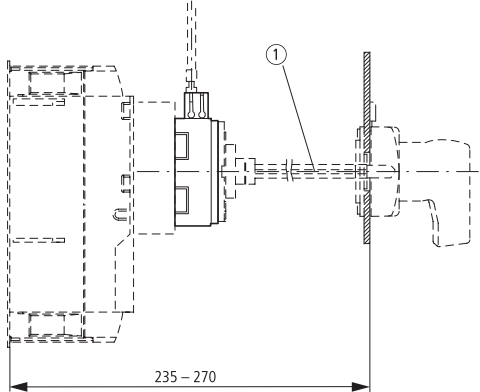
NZM3-XMV+NZM3-XTVD(V)(R)



NZM3-XMV+NZM 3-XTVD(V)(R)-60



NZM3-XMV+NZM 3-XTVD(V)(R)-0



① Special tip

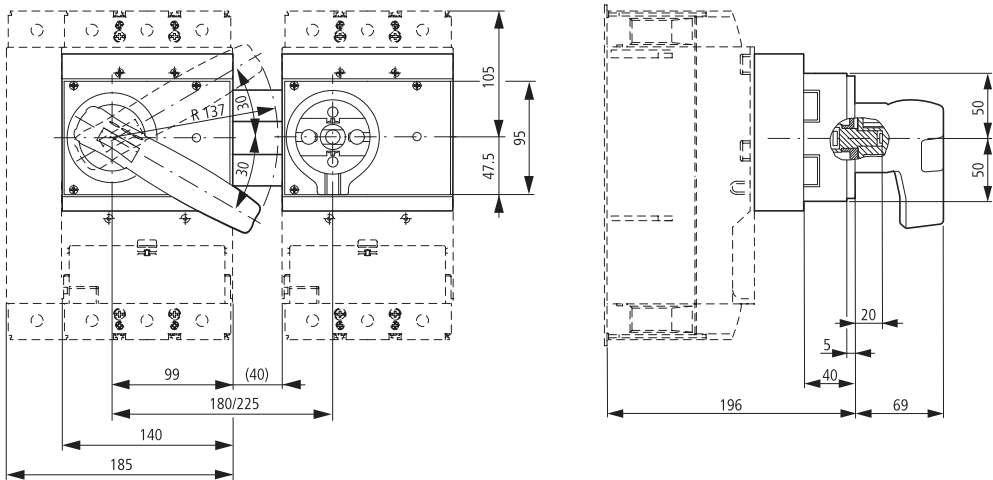
1.16

NZM1-4 molded case circuit-breakers

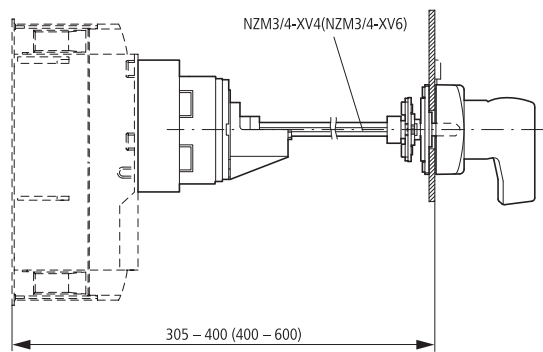
Dimensions

Size 3: accessories (PN3-XPA. NZM3-XCL... NZM3-XAD...)

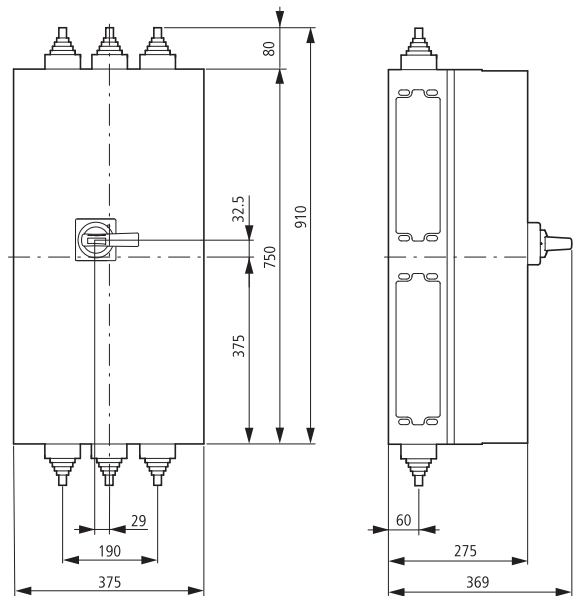
Paralleling mechanism PN3-XPA



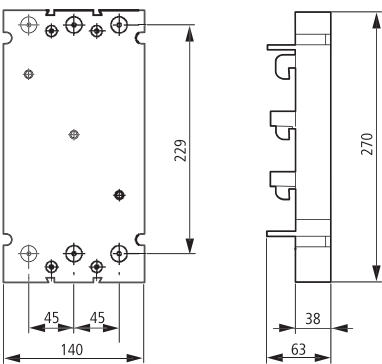
PN3-XPA



Insulated enclosures NZM3-XCI48-TD



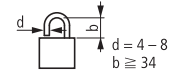
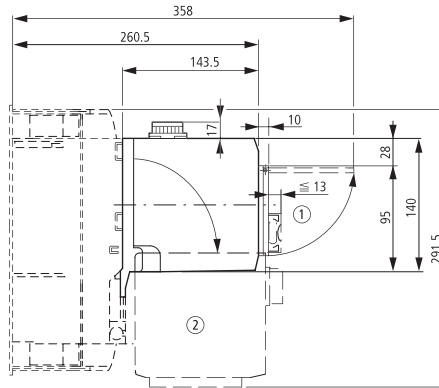
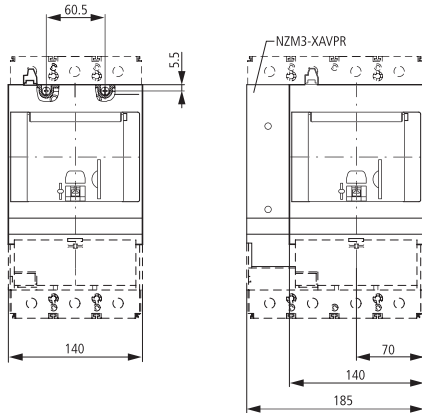
Component adapter NZM3-XAD550



Size 3: accessories (NZM3-X...)

Remote operators

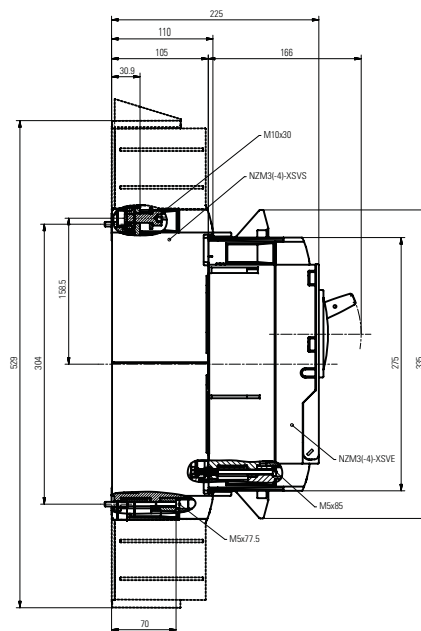
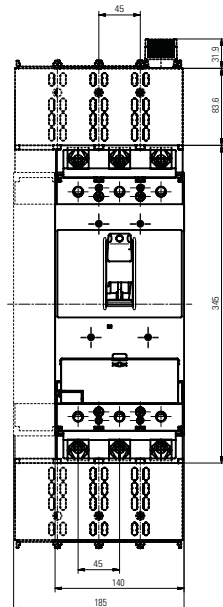
NZM3-XR...



- ① Up to 3 padlocks
- ② Remote operator folded

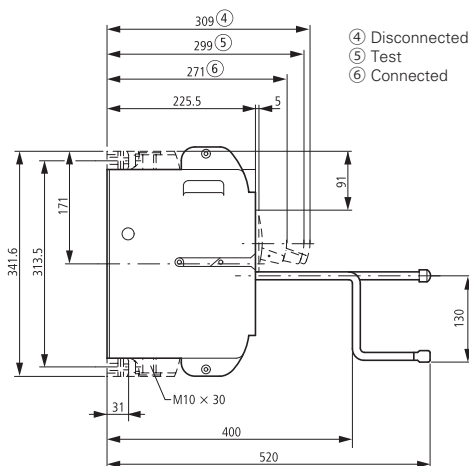
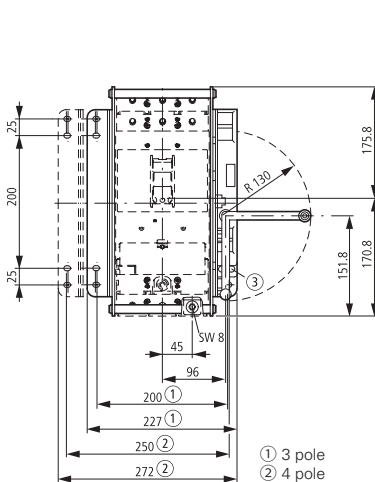
Plug-in units

+NZM3(-4)-XSV

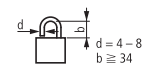


Withdrawable units

+NZM3(-4)-XAV



- ④ Disconnected
- ⑤ Test
- ⑥ Connected



- ③ Up to 3 padlocks

NZM1-4 molded case circuit-breakers

Dimensions

Size 4: basic devices (NZM4. N4. NS4)

Circuit-breakers

Switch-disconnectors

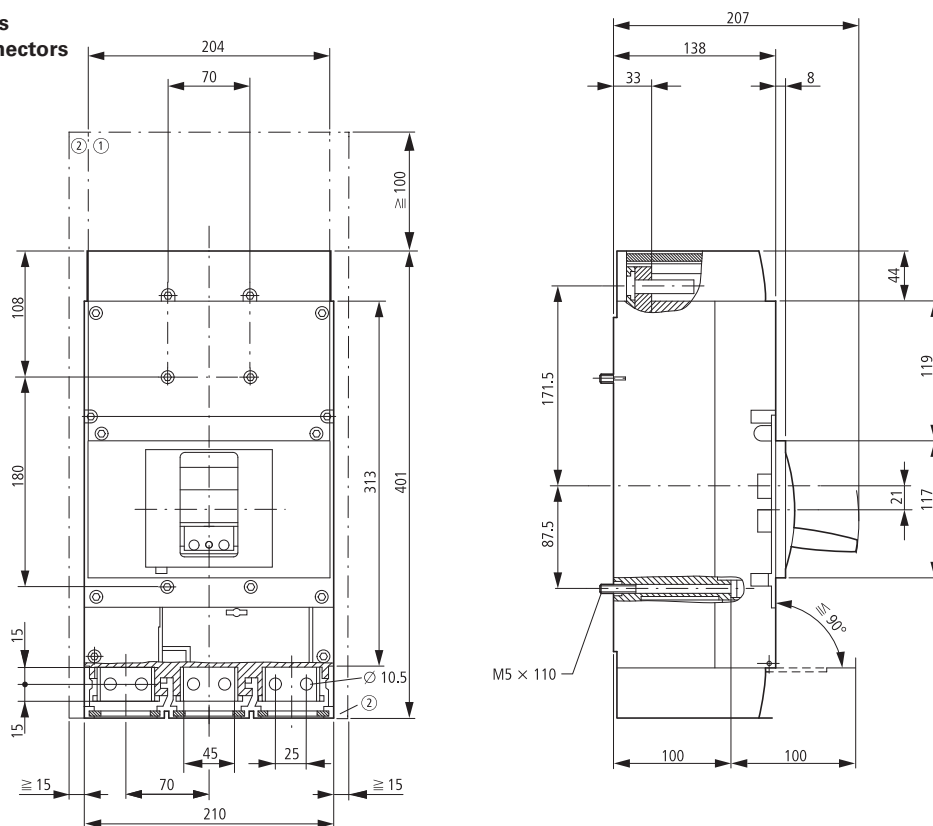
3 pole

NZMN4

NZMH4

N4

NS4



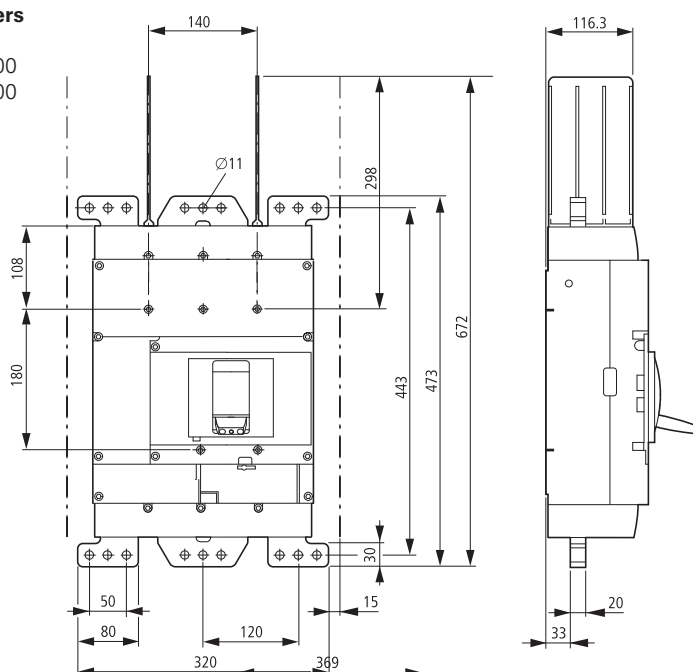
- ① Blow-out area, minimum distance to other parts ≥ 35 mm
② Minimum distance to adjacent parts ≥ 5 mm

Circuit-breakers

3 pole

NZMN4-VE2000

NZMH4-VE2000



Size 4: accessories (NZM4, N4, NZM4..XK)

Circuit-breakers

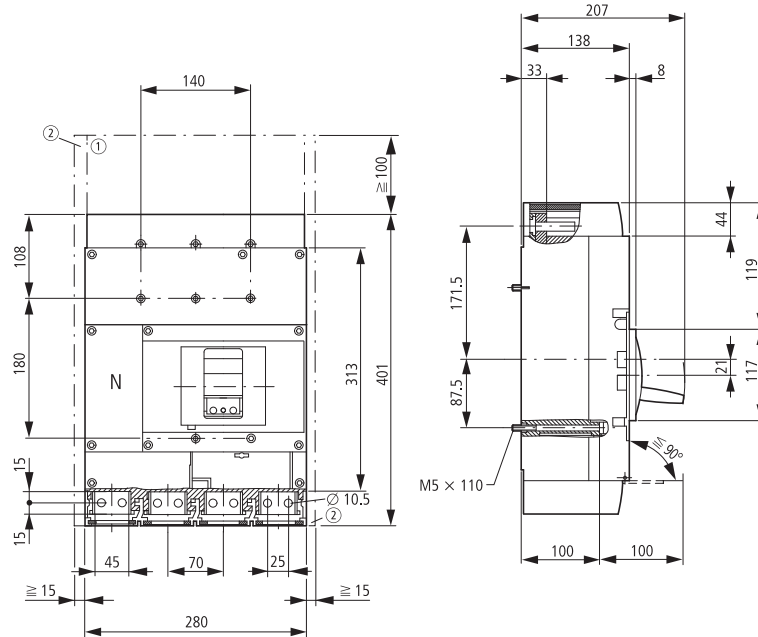
Switch-disconnectors

4 pole

NZMN4-4

NZMH4-4

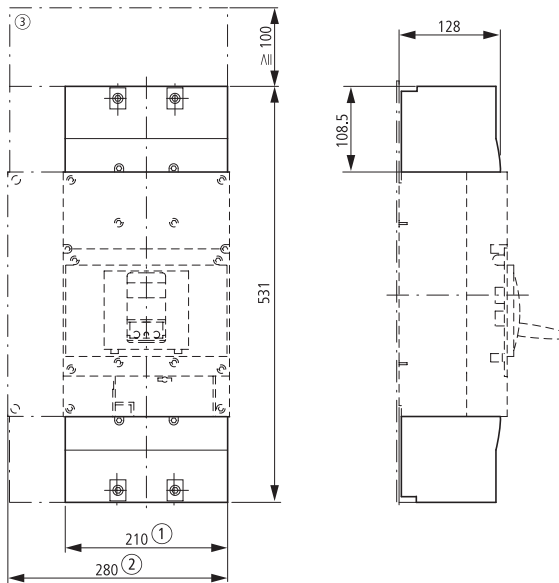
N4-4



- ① Blow-out area, minimum distance to other parts ≥ 100 mm
- ② Minimum distance to adjacent parts ≥ 15 mm

Covers

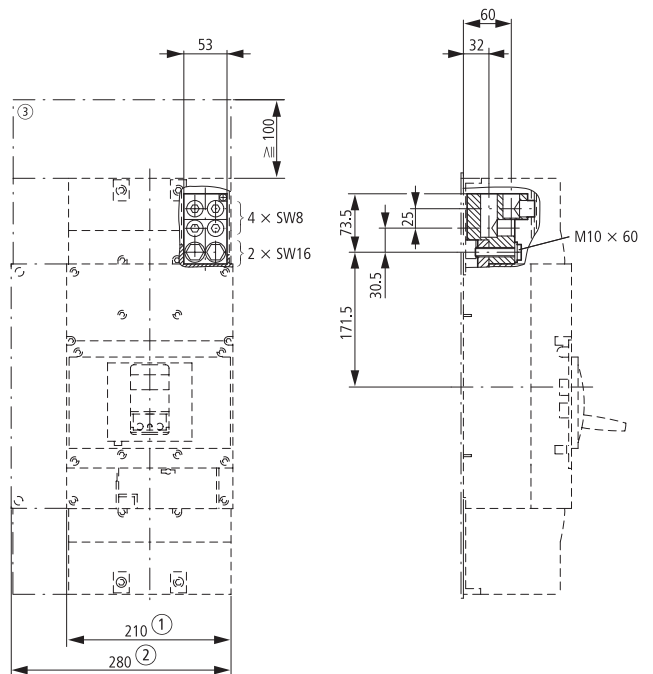
NZMN4(-4)-XKSA



- ① 3 pole
- ② 4 pole
- ③ Clearance from conductive parts ≥ 100 mm up to 690 V; ≥ 200 mm up to 1000 V

Tunnel terminal

NZMN 4-4-XKA



NZM1-4 molded case circuit-breakers

Dimensions

Size 4: accessories (NZM4...-XKM)

Screw terminals

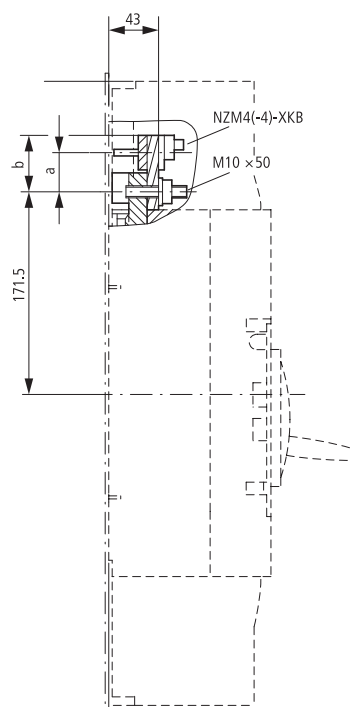
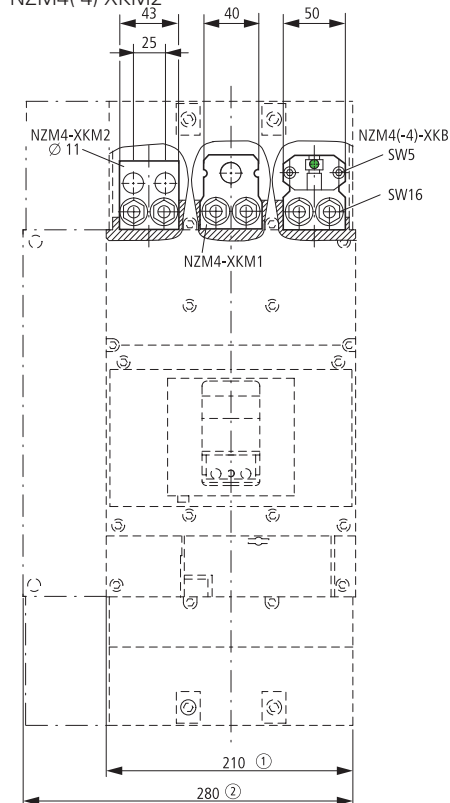
Module plate

1-hole

NZM4(-4)-XKM1

2-hole

NZM4(-4)-XKM2



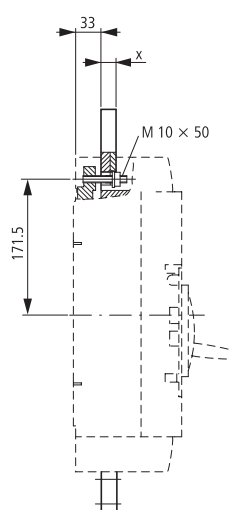
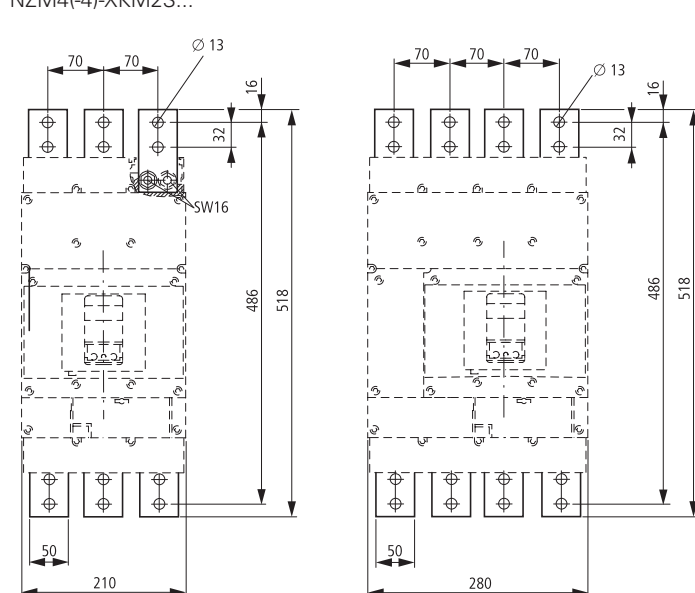
Part no.	a	b
NZM4(-4)-XKM1	36	47
NZM4(-4)-XKM2	32	40
NZM4(-4)-XKB	-	47

- ① 3 pole
- ② 4 pole
- ③ Clearance from conductive parts
 ≥ 100 mm up to 690 V;
 ≥ 200 mm up to 1000 V

Module plate

2 hole, vertical

NZM4(-4)-XKM2S...

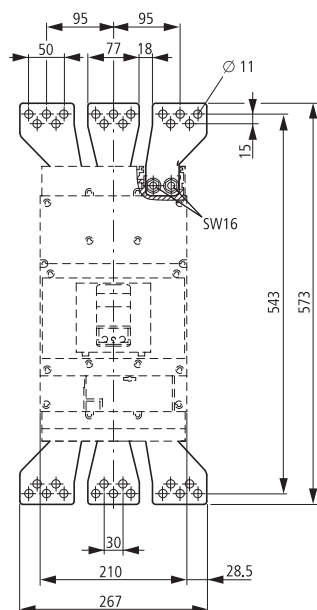


Part no.	x
NZM4(-4)-XKM2S-1250	12
NZM4(-4)-XKM2S-1600	20

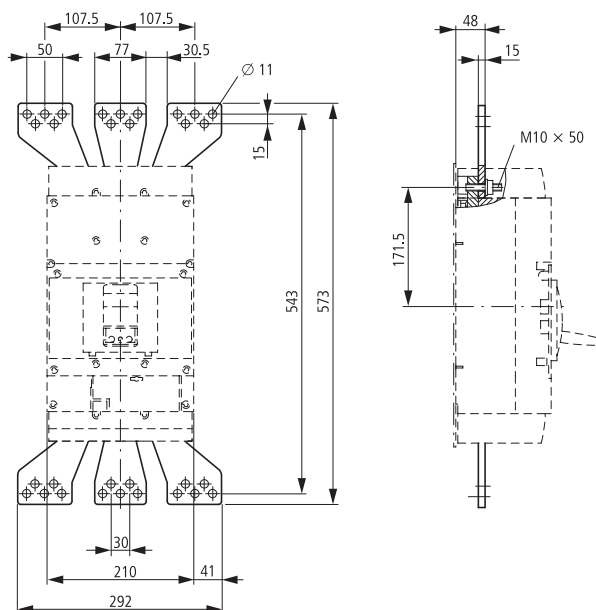
Size 4: accessories (NZM4-XKV...)

Connection width extension

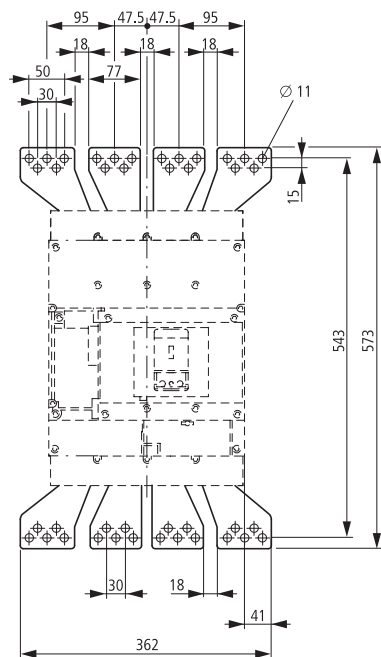
NZM4-XKV95



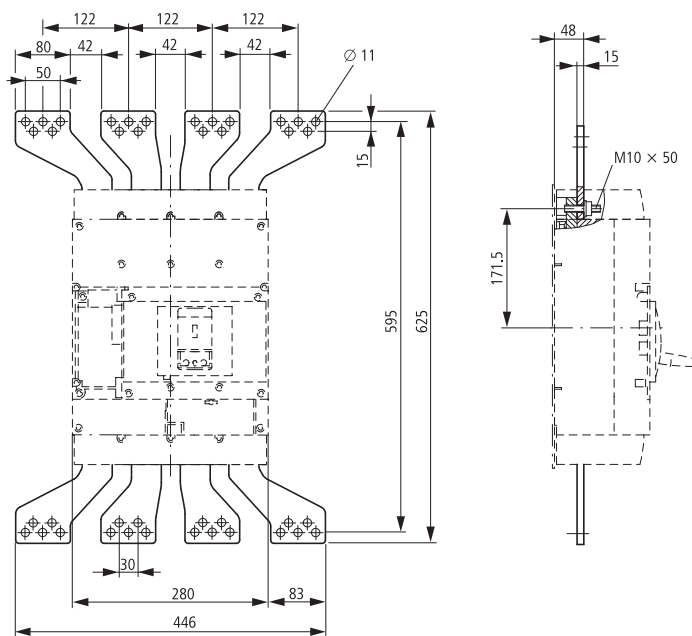
NZM4-XKV110



NZM4-4-XKV95



NZM4-4-XKV120

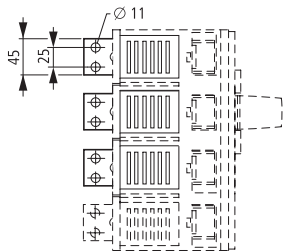
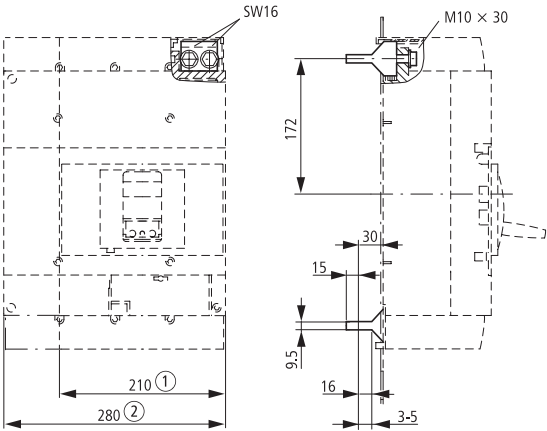


1.16 NZM1-4 molded case circuit-breakers

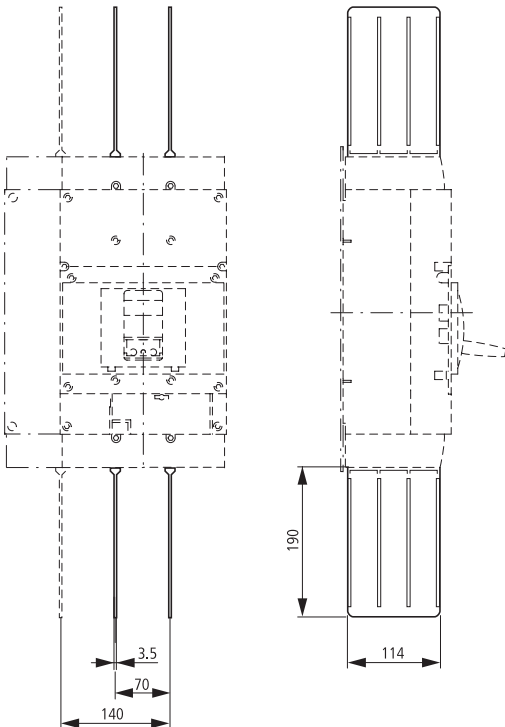
Dimensions

Size 4: accessories (NZM4(-4)-XKP, NZM4(-4)-XKR)

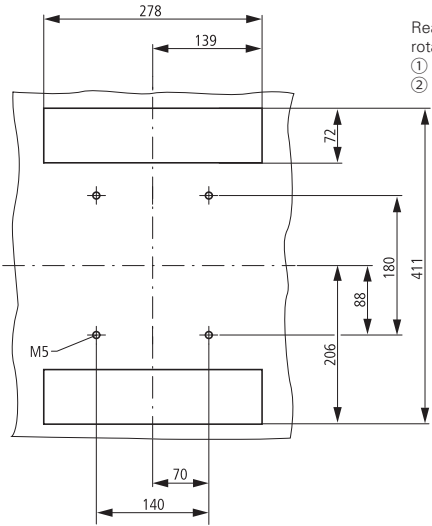
Rear terminal bolts NZM4(-4)-XKR



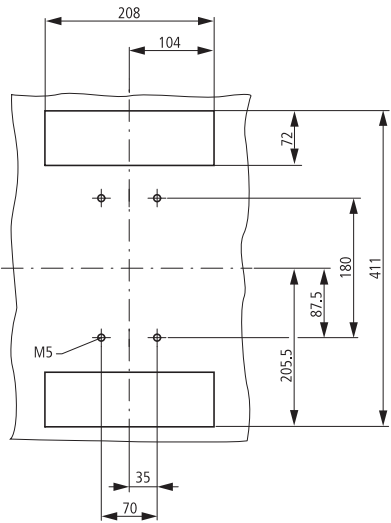
Phase isolators NZM4-4-XKP



Fitting on mounting plate



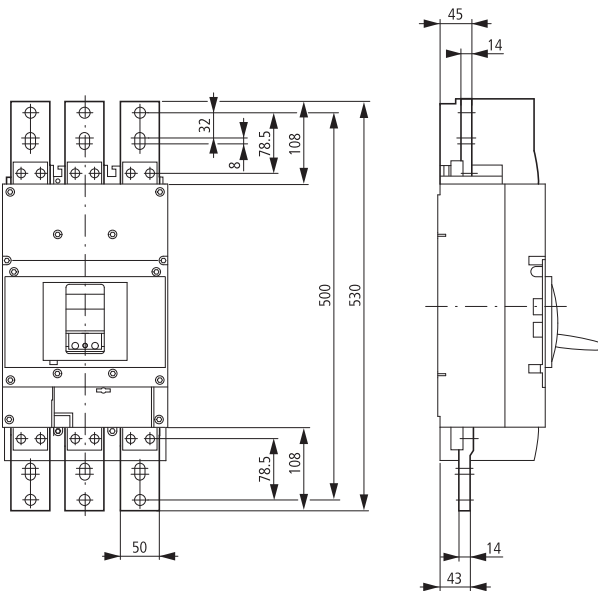
Rear connection possible also rotated by 90°.
① 3 pole
② 4 pole



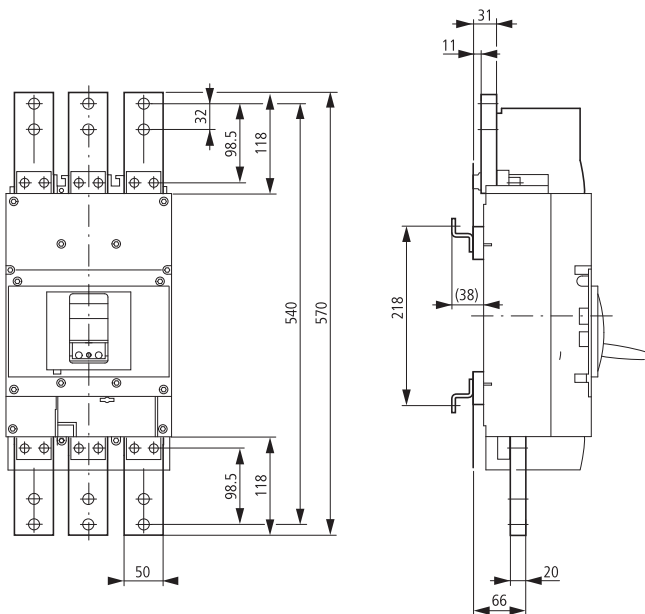
Size 4: accessories (NZM4-XAS..., NZM12)

Adapter kit

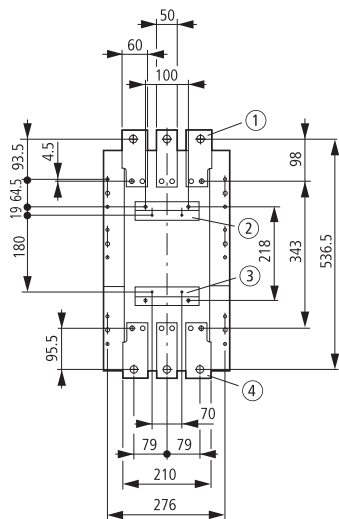
NZM4-XAS14-1250



NZM4-XAS14-1600



Drilling template NZM12-1000 (1250) conversion to NZM4



- ① Module plate NZM4-XAS12-1000(1250)
- ② Holes for mounting bracket NZM4-XAS12(M5)
- ③ Mounting bracket NZM4-XAS12
- ④ Mounting rail NZM12

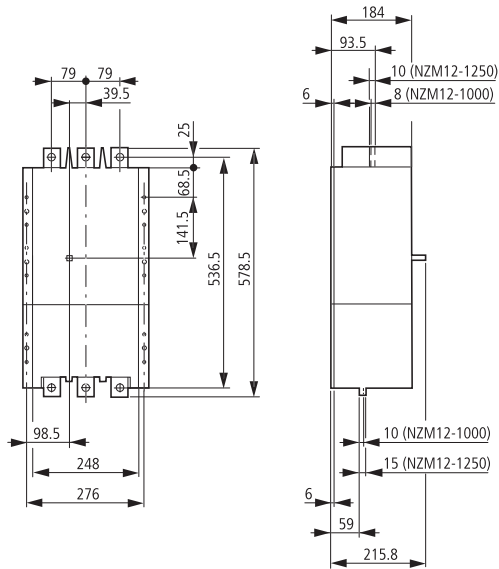
1.16

NZM1-4 molded case circuit-breakers

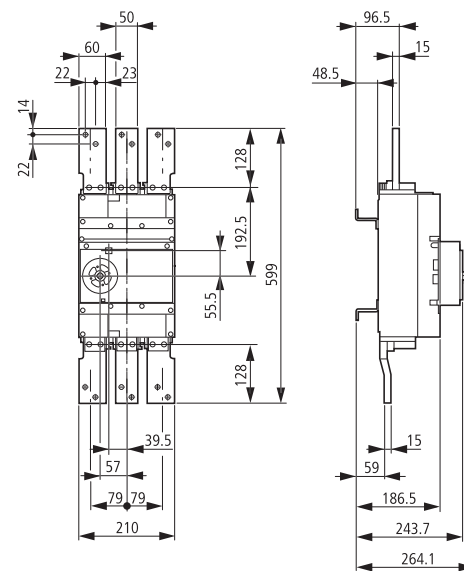
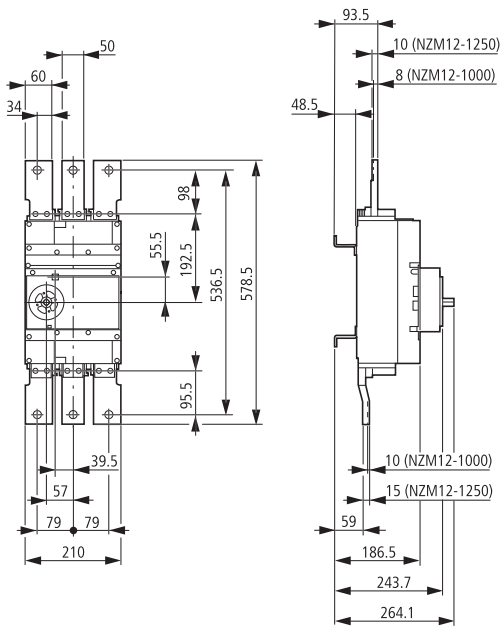
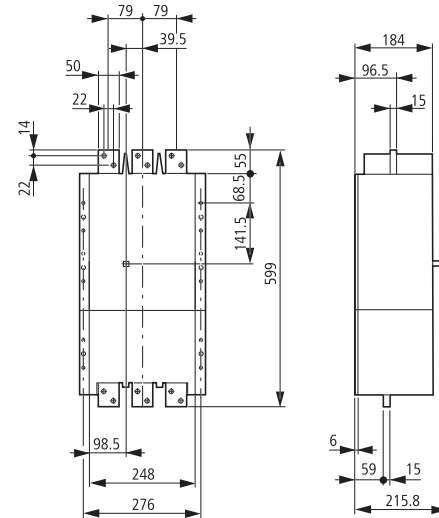
Dimensions

Size 4: NZM12 replacement (NZM12, NZM4-XAS...)

Replacement of NZM12-1000(1250) with NZM4 with module plate,
fixed mounting on mounting plate
NZM4-XAS1 2-1000(1250)

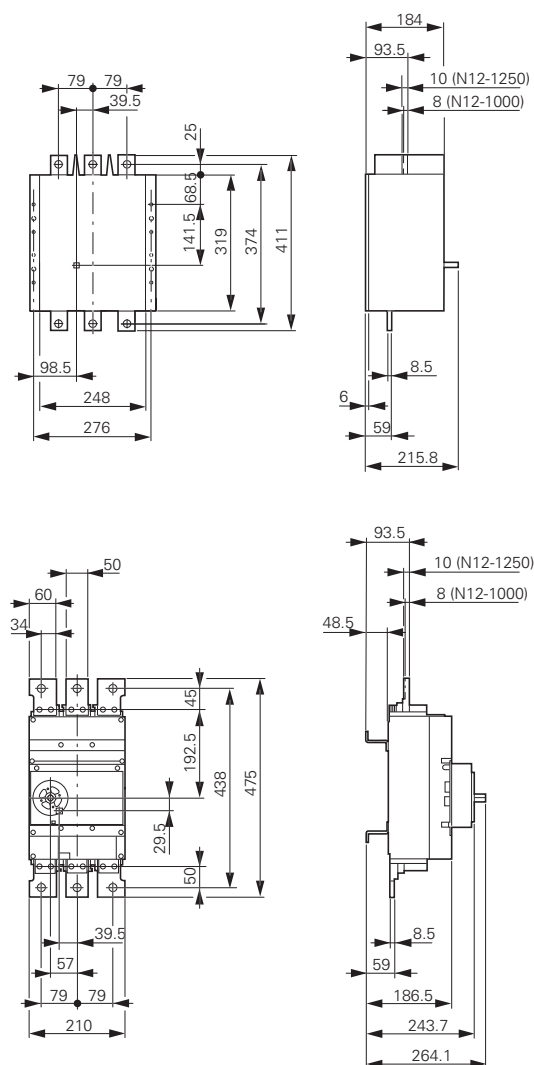


Replacement of NZM12-1600 with NZM4 with module plate,
fixed mounting on mounting plate
NZM4-XAS12-1600

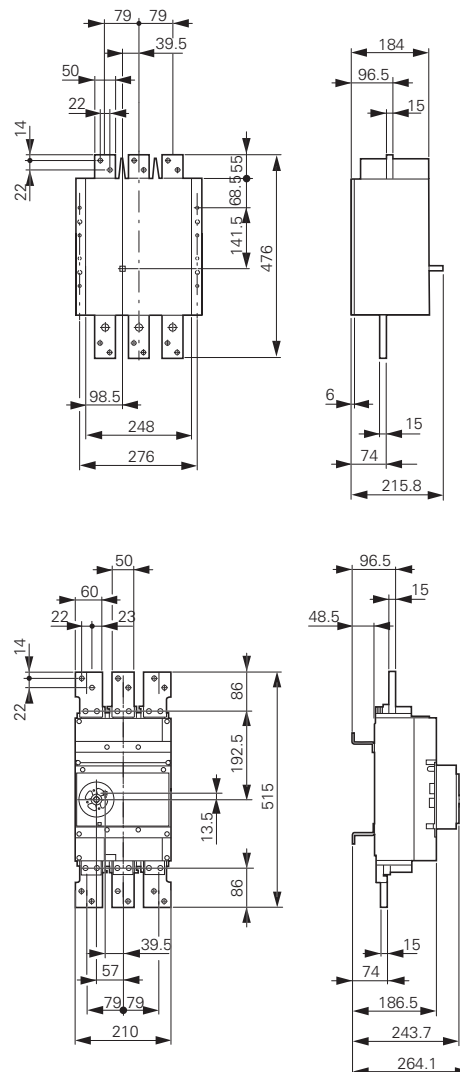


Size 4: NZM12 replacement (N12. N4-XAS)

Replacement of N12-1000(1250) with N4 with module plate,
fixed mounting on mounting plate
N4-XAS12-1000(1250)



Replacement of N12-1600 with N4 with module plate,
fixed mounting on mounting plate
N4-XAS12-1600



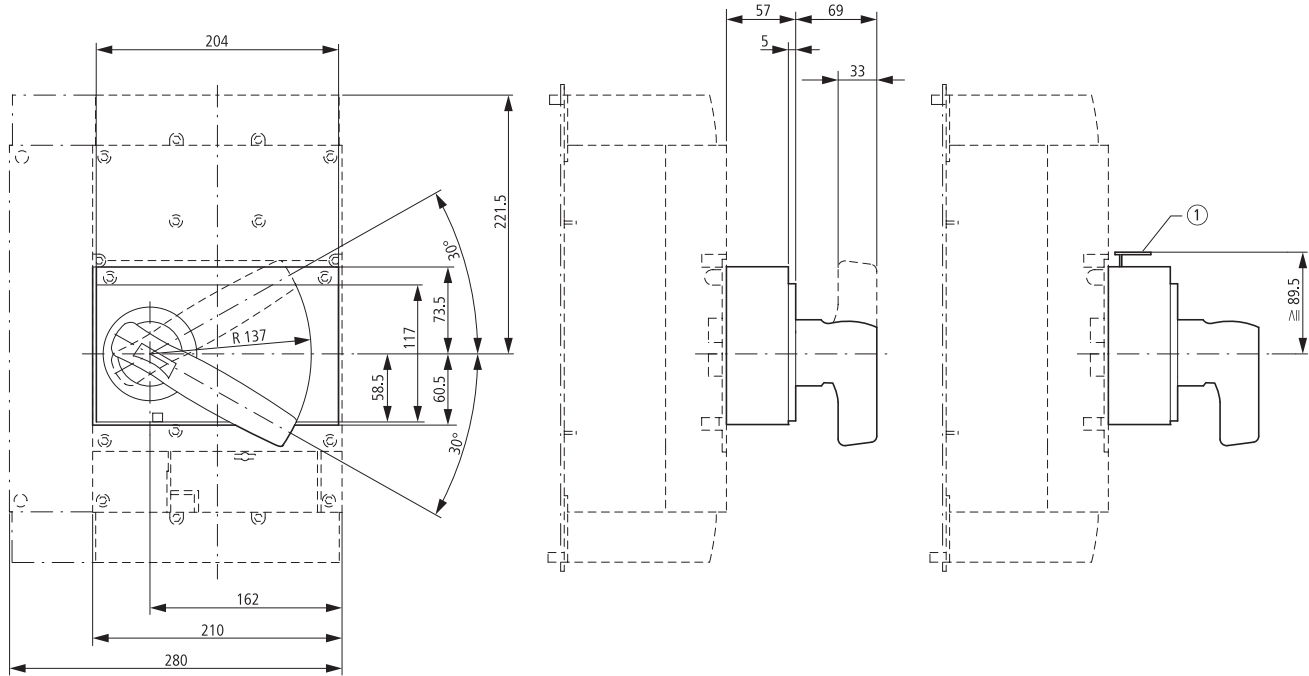
1.16

NZM1-4 molded case circuit-breakers

Dimensions

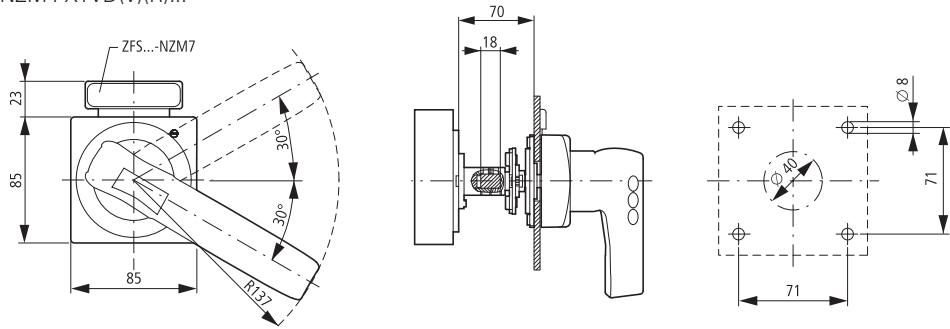
Size 4: accessories (NZM4-XDV..., NZM4-XTVD...)

Rotary handle on circuit-breaker
NZM4-XDV(R)



 d = 4 – 8
b ≥ 34
① Up to 3 padlocks

Door coupling rotary handles
NZM4-XTVD(V)(R)...

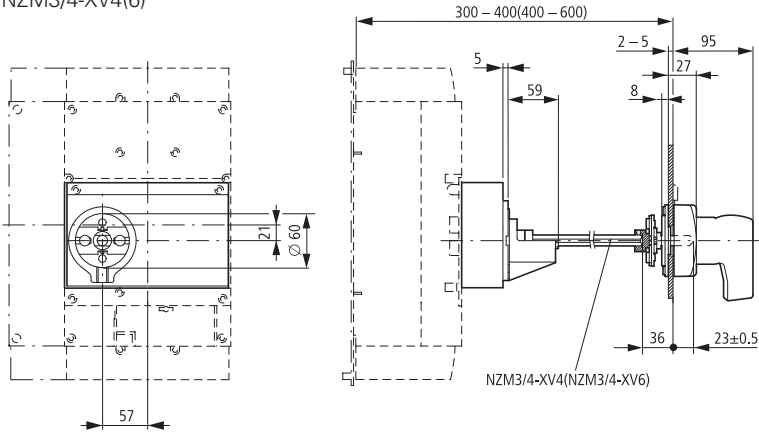


 d = 4 – 8
b ≥ 34
① Up to 3 padlocks

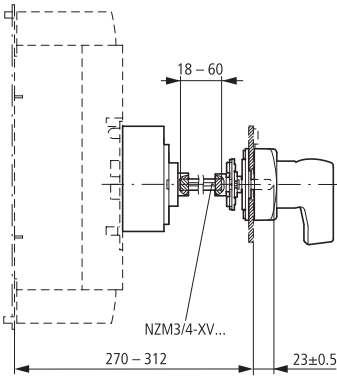
Size 4: accessories (NZM4-XTVD.... NZM4...-XV. NZM4-XS...)

Door coupling rotary handle with extension shaft

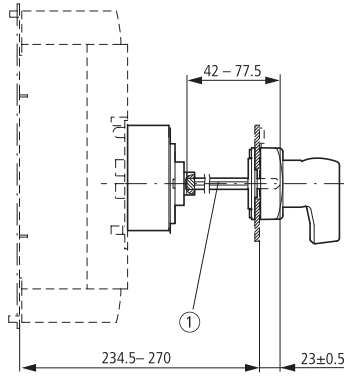
NZM4-XTVD(V)(R)(-NA)
NZM3/4-XV4(6)



NZM4-XTVD(V)(R)-60(-NA)

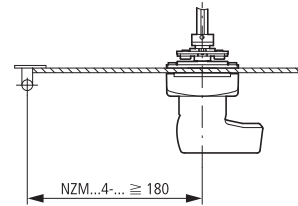


NZM4-XTVD(V)(R)-0(-NA)



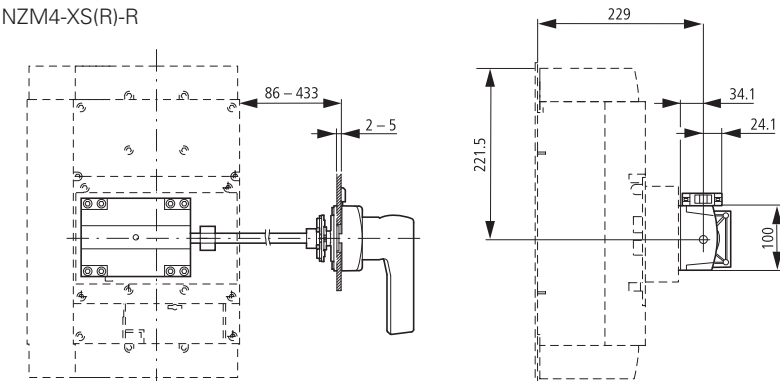
① Special tip

Minimum distance of door coupling rotary handle from door pivot point



Main switch assembly kit for side wall installation

NZM4-XS(R)-L
NZM4-XS(R)-R



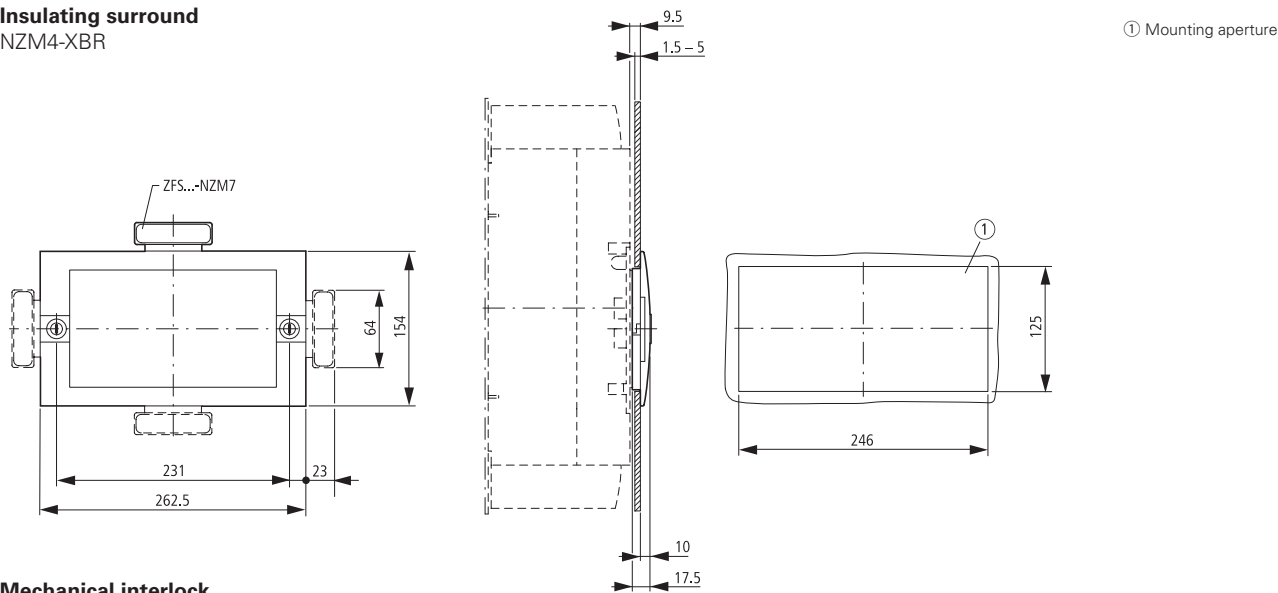
1.16

NZM1-4 molded case circuit-breakers

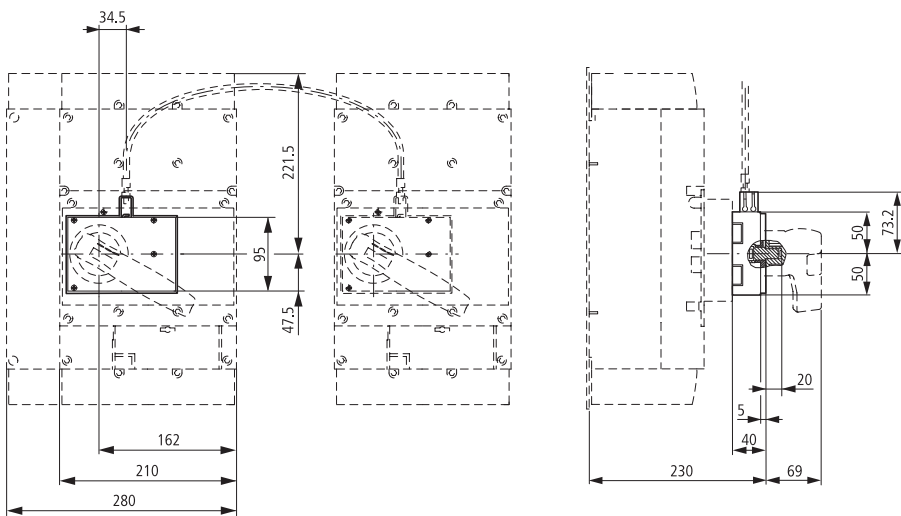
Dimensions

Size 4: accessories (NZM4-XBR. NZM4-XMV. NZM4-X...)

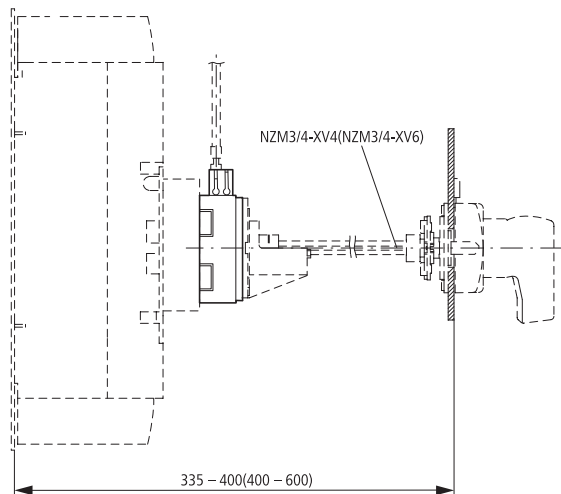
Insulating surround
NZM4-XBR



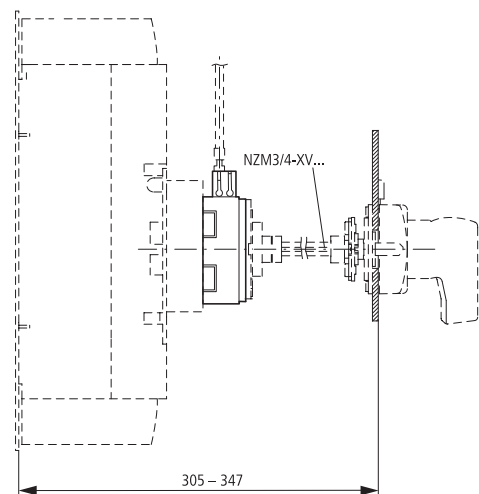
Mechanical interlock
NZM4-XMV+NZM4-XDV(R)



NZM4-XMV+NZM4-XTVD(V)(R)



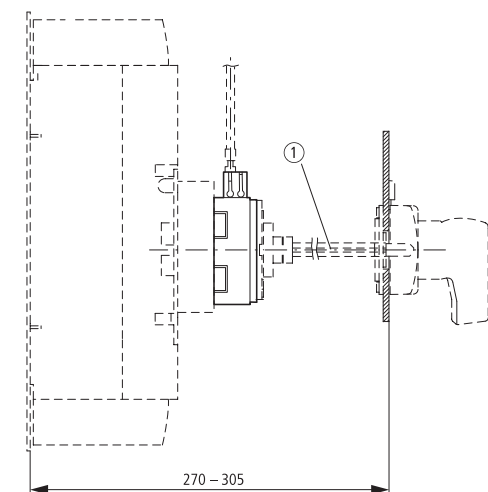
NZM4-XMV+NZM4-XTVD(V)(R)-60



Size 4: accessories (NZM4-XMV, NZM4-X...)

Mechanical interlock

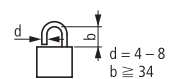
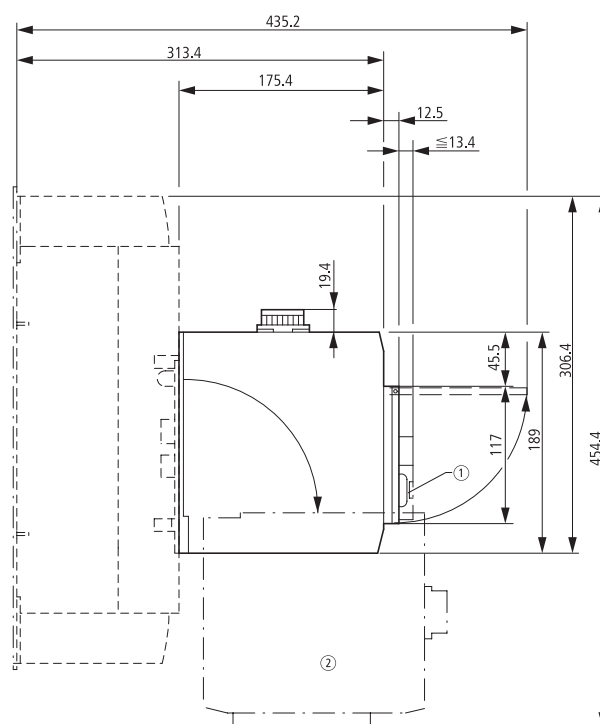
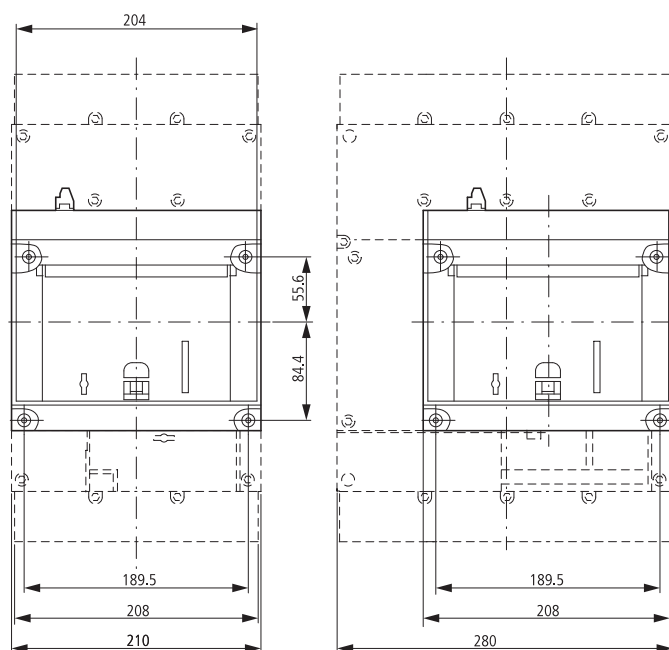
NZM4-XMV+NZM4-XTVD(V)(R)-0



① Special tip

Remote operators

NZM4-XR...



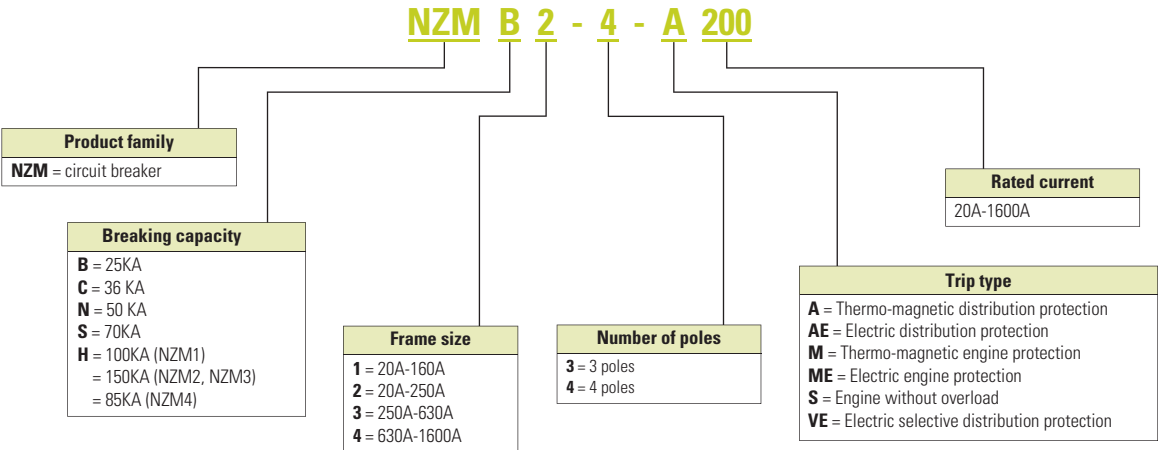
- ① Up to 3 padlocks
- ② Remote operator folded

1.17

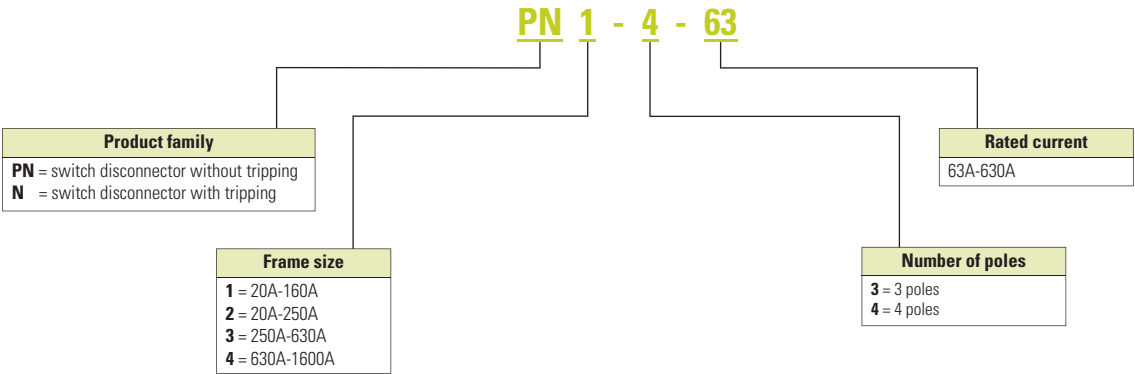
NZM1-4 molded case circuit-breakers

Selection guide

NZM selection guide



Switch-disconnection selection guide



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