

Switching, protection, communication – the new NZM1-4 circuit-breaker series up to 1200 A

xEnergy

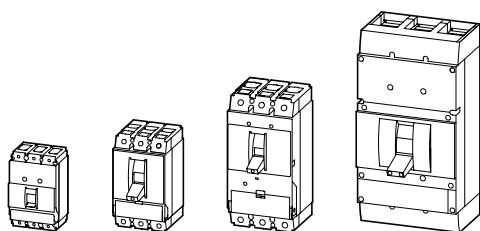
Reliable and safely controlling,
switching and managing
power. In industry, in buildings
and in machine construction.
Innovative protection concepts.
With built-in diagnostics and
communication functions.

Circuit-breaker NZM



MOELLER

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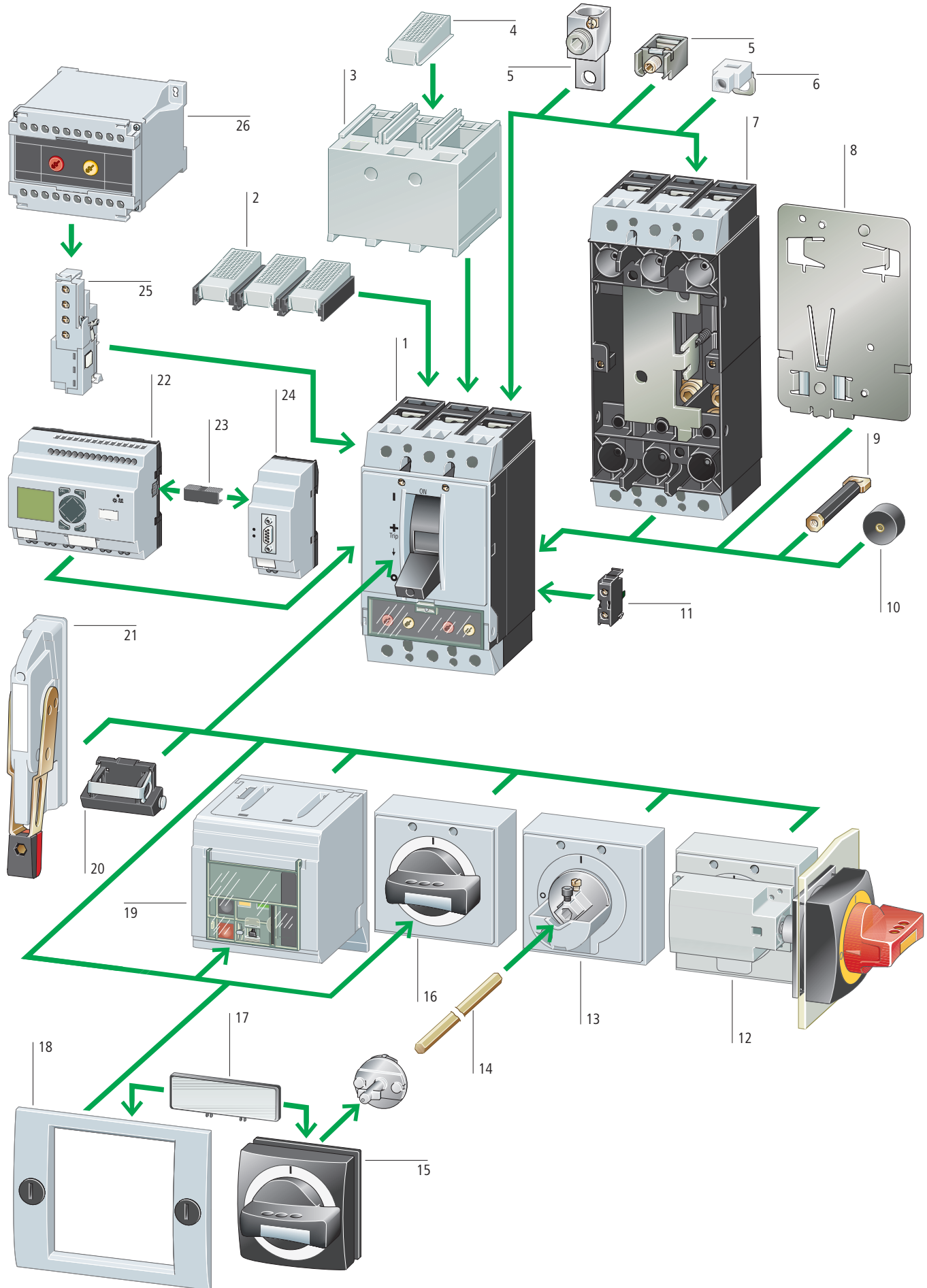


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System overview

Circuit-breakers, disconnect switches

Moeller SK1230-1157EN-NA

Circuit-breakers, disconnect switches
up to 1200 A

Moeller SK1230-1157EN-NA

→ 24	
Circuit-breakers for North America	1
Rated uninterrupted current up to 1200 A	
Switching capacity 25, 35, 42, 85,100 kA at 480 V	
Adjustable releases for overload and short-circuit	
Adjustable time selectivity	
Earth-fault protection	
Protection of systems, cables, motors, generators	
3 pole version, UL489/CSA5, IEC 60947	
→ 6	
Circuit-breakers without overcurrent protection for North America	1
Rated uninterrupted current up to 1200 A	
Remotely tripped, with undervoltage or shunt release	
3 pole version, UL489/CSA5	
→ 20	
Disconnect switches for North America	1
Rated uninterrupted current up to 1200 A	
Remotely tripped disconnect switches with undervoltage or shunt release	
3 pole version, UL489/CSA5, IEC 60947	
→ 21	

Add-on functions

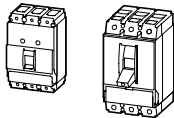
Standard auxiliary contact	11
Switching with the main contacts	
Used for indication and interlocking tasks	
Trip-indicating auxiliary contact	11
General indication of tripping with trip due to overload or short-circuit as well as voltage release	
Early-make auxiliary contacts	25
For interlocking and load shedding circuits, as well as for early make of the undervoltage release in main switch/ Emergency-stop applications	
→ 24	
Voltage releases	25
Undervoltage release	
• Non-delayed	
• OFF-delayed	
Shunt release	
→ 26	
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→ 60	
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→ 50	
Door coupling rotary handle	13, 15
• Lockable	
• With door interlock	
→ 50	
Main switch rotary handle for side panel mounting	12
→ 56	
Extension shaft	14
Can be cut to required length.	
→ 50	
Rotary handle	16
Lockable	
→ 54	
Remote operator	19
For ON and OFF switching and resetting by means of 2-wire or 3-wire control.	
→ 62	
Toggle lever interlock device	20
→ 60	
Flange Operator	21
In preparation	
Data Management Interface (DMI Module)	22
Access to diagnostics and operational data	
Recording of current values	
Parameterization and control of the circuit-breakers with electronic releases	
→ 88	
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→ see main Moeller catalogue for industrial switchgear	
PROFIBUS-DP interface	24
→ 88	

Mounting accessories

Control circuit terminal	6
For two terminals at top or bottom	
NZM1 → 68	
NZM2 → 72	
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Tunnel terminals for Al and Cu cable	5
Standard with control circuit terminal	
NZM1 → 66	
NZM2 → 70	
NZM3 → 76	
NZM4 → 82	
Box terminals	5
Standard equipment of frame size 1	
Fitted within the switch housing	
NZM1 → 66	
NZM2 → 70	
NZM3 → 74	
Terminal cover	3
Protection against direct contact where cable lugs, busbars or tunnel terminals are used.	
NZM1 → 68	
NZM2 → 72	
NZM3 → 78	
NZM4 → 86	
Clip plates	8
NZM1-XC35 for 35 mm top-hat rail	
NZM1-XC75 for 75 mm top-hat rail	
→ 60	
Rear connection	9
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NZM3 → 76	
NZM4 → 82	
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For use with toggle levers, rotary drives and remote operators protruding from the enclosure	
NZM1 → 60	
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NZM1 → 59	
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For box terminals	
NZM1 → 68	
NZM2 → 72	
NZM3 → 78	
IP2X protection against contact with a finger	4
For barrier	
NZM1 → 68	
NZM2 → 72	
NZM3 → 78	

Circuit-breakers

UL/CSA approved to UL 489, CSA 22.2 No. 5.1 and to 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_s
Delayed short-circuit releases I_{sd}

Thermomagnetic releases

Overload releases

Fixed

Adjustable

Without

I_u

A

NZM1

NZM2

I_u

A

NZM1

NZM2

I_r

A

I_u

A

NZM1

NZM2

15 – 125

15 – 250

20 – 125

20 – 250

$1 \times I_n$

1.2 – 100

1.6 – 250

Basic switching capacity¹⁾

			NZMB1-...-NA		NZMB2-...-NA			
NEMA Test Procedure	240 V 60 Hz	sym. rms kA	35		35			
	480 V 60 Hz	sym. rms kA	25 ²⁾		25			
	600 V 60 Hz	sym. rms kA	–		18			
IEC/EN 60947	400/415 V	kA/cos φ	25	0.25	25	0.25		
	440 V	kA/cos φ	25	0.25	25	0.25		
	525 V	kA/cos φ	15	0.30	15	0.30		

Normal switching capacity¹⁾

			NZMN1-...-NA		NZMN2-...-NA			
NEMA Test Procedure	240 V 60 Hz	sym. rms kA	85		85			
	480 V 60 Hz	sym. rms kA	35 ²⁾		35			
	600 V 60 Hz	sym. rms kA	–		25			
IEC/EN 60947	400/415 V	kA/cos φ	50	0.25	50	0.25		
	440 V	kA/cos φ	35	0.25	35	0.25		
	525 V	kA/cos φ	20	0.30	25	0.25		
	690 V	kA/cos φ	10	0.50	20	0.30		

High switching capacity¹⁾

					NZMH2-...-NA			
NEMA Test Procedure	240 V 60 Hz	sym. rms kA			150			
	480 V 60 Hz	sym. rms kA			100			
	600 V 60 Hz	sym. rms kA			50			
IEC/EN 60947	400/415 V	kA/cos φ			150	0.20		
	440 V	kA/cos φ			130	0.20		
	525 V	kA/cos φ			50	0.25		
	690 V	kA/cos φ			20	0.30		

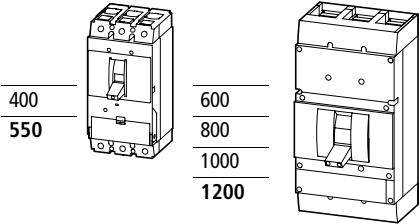
Notes

¹⁾ Breakers conform to UL/CSA as well as the IEC regulations
IEC switching performance values are contained on the rating plate. → Technical data
²⁾ for NZM...1-...-NA > 50 A 480Y/277V

Disconnect switches:

UL/CSA approved to UL 489, CSA 22.2 No. 5.1 and to IEC/EN 60947

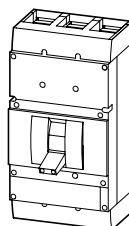
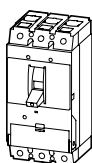
With main switch characteristics to IEC/EN 60204 and VDE 0113
isolating characteristics to IEC/EN 60947-3 and VDE 0660.
without overload and short-circuit releases
Rated uninterrupted current $I_u = I_n$



		N3-...-NA		N4-...-NA	
Rated short-circuit making capacity I_{cm}	kA	25		53	
Rated short-time withstand current I_{cw} (1s current _{rms})	kA	12		25	

Circuit-breakers, disconnect switches for North America, 3 pole

Moeller SK1230-1157EN-NA



Electronic releases

Overload releases

Fixed Adjustable

 I_u A
 I_u A
 I_r A

Without

Fixed

Adjustable

 I_u A
 I_u A
 I_u A
 I_r A

Without

Fixed

Adjustable

 I_u A
 I_u A
 I_u A
 I_r A

Short-circuit releases

System protection

Motor protection

 I_{sd} 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	

The approved switches are suitable for world-wide use. The UL and CSA certificates can be found at www.ul.com and www.csa.com

UL Certificates: file no.: E 31593 (NZM1-4), E 148671 (N(S)1-4)

CSA certificates: file no. 165628 (NZM1-4)

Molded case switch

UL/CSA approved to UL 489, CSA 22.2 No. 5.1 and to IEC/EN 60947-2, Annex L

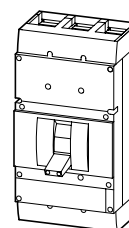
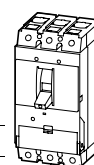
With main switch characteristics to IEC/EN 60204 and VDE 0113

Isolating characteristics to IEC/EN 60947

without overcurrent protection

Rated uninterrupted current $I_u = I_n$

Values printed in grey available on request


63
100
125

160
200
250

400
600

800
1000
1200

Switching capacity

to UL 489, CSA 22.2 No. 5.1

240 V

480 V

600 V

IEC/EN 60947

400/415 V

440 V

525 V

690

NS1-...-NA

85

35

–

50

35

20

10

NS2-...-NA

150

100

50

150

130

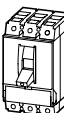
50

20

Circuit-breakers for North America

Thermomagnetic releases, 3 pole

Moeller SK1230-1157EN-NA

				Basic switching capacity 35 kA 240 V 25 kA 480 V ¹⁾ 18 kA 600 V ²⁾	Price see price list	Normal switching capacity 85 kA 240 V 35 kA 480 V ¹⁾ 25 kA 600 V ²⁾	Price see price list
Rated current = rated uninterrupted current				Part no. Article no.		Part no. Article no.	
Setting range							
Overload releases							
Short-circuit releases							
$I_n = I_u$							
A							
A							
A							
Protection of systems and cables							
3-pole							
Fixed overload releases							
Terminals standard							
terminal screw as accessories							
	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	
Line and load Box Lugs installed							
	15	15	350	NZMB2-AF15-BT-NA 107611		NZMN2-AF15-BT-NA 107631	
	20	20	350	NZMB2-AF20-BT-NA 107612		NZMN2-AF20-BT-NA 107632	
	25	25	350	NZMB2-AF25-BT-NA 107613		NZMN2-AF25-BT-NA 107633	
	30	30	350	NZMB2-AF30-BT-NA 107614		NZMN2-AF30-BT-NA 107634	
	35	35	320 – 400	NZMB2-AF35-BT-NA 107615		NZMN2-AF35-BT-NA 107635	
	40	40	320 – 400	NZMB2-AF40-BT-NA 107616		NZMN2-AF40-BT-NA 107636	
	45	45	300 – 500	NZMB2-AF45-BT-NA 107617		NZMN2-AF45-BT-NA 107637	
	50	50	300 – 500	NZMB2-AF50-BT-NA 107618		NZMN2-AF50-BT-NA 107638	
	60	60	380 – 630	NZMB2-AF60-BT-NA 107619		NZMN2-AF60-BT-NA 107639	
	70	70	480 – 800	NZMB2-AF70-BT-NA 107620		NZMN2-AF70-BT-NA 107640	
	80	80	480 – 800	NZMB2-AF80-BT-NA 107621		NZMN2-AF80-BT-NA 107641	
	90	90	600 – 1000	NZMB2-AF90-BT-NA 107622		NZMN2-AF90-BT-NA 107642	
	100	100	600 – 1000	NZMB2-AF100-BT-NA 107623		NZMN2-AF100-BT-NA 107643	

Notes

Notes for terminals → 67

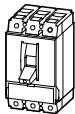
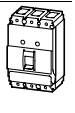
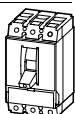
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Circuit-breakers for North America

Thermomagnetic releases, 3 pole

Moeller SK1230-1157EN-NA

				Basic switching capacity 35 kA 240 V 25 kA 480 V ¹⁾ 18 kA 600 V ²⁾	Price see price list	Normal switching capacity 85 kA 240 V 35 kA 480 V ¹⁾ 25 kA 600 V ²⁾	Price see price list
Rated current = rated uninterrupted current $I_n = I_u$ A	Setting range Overload releases I_r A	Short-circuit releases I_i A	Part no. Article no.			Part no. Article no.	
Protection of systems and cables							
3-pole							
Fixed overload release Line and load Box Lugs installed							
	110	110	750 – 1250	NZMB2-AF110-BT-NA 107624		NZMN2-AF110-BT-NA 107644	
	125	125	750 – 1250	NZMB2-AF125-BT-NA 107625		NZMN2-AF125-BT-NA 107645	
	150	150	960 – 1600	NZMB2-AF150-BT-NA 107626		NZMN2-AF150-BT-NA 107646	
	175	175	1200 – 2000	NZMB2-AF175-BT-NA 107627		NZMN2-AF175-BT-NA 107647	
	200	200	1200 – 2000	NZMB2-AF200-BT-NA 107628		NZMN2-AF200-BT-NA 107648	
	225	225	1500 – 2500	NZMB2-AF225-BT-NA 107629		NZMN2-AF225-BT-NA 107649	
	250	250	1500 – 2500	NZMB2-AF250-BT-NA 107630		NZMN2-AF250-BT-NA 107650	
Adjustable overload release Line and load Box Lugs installed							
	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	
Adjustable overload releases Line and load Box Lugs installed							
	20	15 – 20	350	NZMB2-A20-BT-NA 107773		NZMN2-A20-BT-NA 107785	
	25	20 – 25	350	NZMB2-A25-BT-NA 107774		NZMN2-A25-BT-NA 107786	
	32	25 – 32	350	NZMB2-A32-BT-NA 107775		NZMN2-A32-BT-NA 107787	
	40	32 – 40	320 – 400	NZMB2-A40-BT-NA 107776		NZMN2-A40-BT-NA 107788	
	50	40 – 50	300 – 500	NZMB2-A50-BT-NA 107777		NZMN2-A50-BT-NA 107789	
	63	50 – 63	380 – 630	NZMB2-A63-BT-NA 107778		NZMN2-A63-BT-NA 107790	
	80	63 – 80	480 – 800	NZMB2-A80-BT-NA 107779		NZMN2-A80-BT-NA 107791	
	100	80 – 100	600 – 1000	NZMB2-A100-BT-NA 107780		NZMN2-A100-BT-NA 107792	
	125	100 – 125	750 – 1250	NZMB2-A125-BT-NA 107781		NZMN2-A125-BT-NA 107793	
	160	125 – 160	960 – 1600	NZMB2-A160-BT-NA 107782		NZMN2-A160-BT-NA 107794	
	200	160 – 200	1200 – 2000	NZMB2-A200-BT-NA 107783		NZMN2-A200-BT-NA 107795	
	250	200 – 250	1500 – 2500	NZMB2-A250-BT-NA 107784		NZMN2-A250-BT-NA 107796	

Notes

Notes for terminals → 71

Moeller SK1230-1157EN-NA

High switching capacity 100 kA 240 V 65 kA 480 V 35 kA 600 V	Price see price list	Std. pack	Notes
Part no. Article no.			
NZMH2-AF110-BT-NA 107822		1 off	Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
NZMH2-AF125-BT-NA 107823			
NZMH2-AF150-BT-NA 107824			Fixed overload releases I_r Adjustable short-circuit release I_i • Approx. $6 - 10 \times I_n$ (ex-factory $6 \times I_n$) – NZM...-AF35/40-NA: approx. $8 - 10 \times I_n$
NZMH2-AF175-BT-NA 107825			Fixed short-circuit releases I_i • 350 A at $I_n = 15 - 30$ A
NZMH2-AF200-BT-NA 107826			
NZMH2-AF225-BT-NA 107827			²⁾ For basic switching capacity 18 kA 600 V and normal switching capacity 25 kA 600 V the following applies: for NZM2.
NZMH2-AF250-BT-NA 107828			
		1 off	Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
			Adjustable overload release I_r • $0.8 - 1 \times I_n$ (ex-factory $0.8 \times I_n$) Adjustable short-circuit release I_i • $6 - 10 \times I_n$ (ex-factory $6 \times I_n$) – NZM...-A40-NA: $8 - 10 \times I_n$
			Fixed short-circuit releases I_i • 350 A with $I_n = 20 - 32$ A
			¹⁾ For basic switching capacity 25 kA 480 V and normal switching capacity 35 kA 480 V the following applies: for NZM...-1-...-NA: 480Y/277 V AC from 60 A.
NZMH2-A20-BT-NA 107797		1 off	Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
NZMH2-A25-BT-NA 107798			
NZMH2-A32-BT-NA 107799			Adjustable overload release I_r • $0.8 - 1 \times I_n$ (ex-factory $0.8 \times I_n$) Adjustable short-circuit release I_i • $6 - 10 \times I_n$ (ex-factory $6 \times I_n$) – NZM...-A40-NA: $8 - 10 \times I_n$
NZMH2-A40-BT-NA 107800			Fixed short-circuit releases I_i • 350 A with $I_n = 20 - 32$ A
NZMH2-A50-BT-NA 107801			
NZMH2-A63-BT-NA 107802			²⁾ For basic switching capacity 18 kA 600 V and normal switching capacity 25 kA 600 V the following applies: for NZM2.
NZMH2-A80-BT-NA 107803			
NZMH2-A100-BT-NA 107804			
NZMH2-A125-BT-NA 107805			
NZMH2-A160-BT-NA 107806			
NZMH2-A200-BT-NA 107807			
NZMH2-A250-BT-NA 107808			

10 Circuit-breakers for North America

Magnetic 3 pole short-circuit releases

Moeller SK1230-1157EN-NA

Circuit-breakers, disconnect switches
up to 1200 A

			Basic switching capacity 480 V ¹⁾		Std. pack
Rated current = rated uninterrupted current	Setting range Short-circuit releases		Part no. Article no.	Price see price list	
$I_n = I_u$ A	I_i A 				
Short-circuit protection					
Motor protection in conjunction with contactor and overload relay					
• With short-circuit release • Without overload release					
3 pole					
Terminals standard terminal screw as accessories					
	1.2	8 – 14	NZMB1-S1,2-CNA 102906		1 off
	2	12.8 – 22.4	NZMB1-S2-CNA 102907		
	3	19.2 – 33.6	NZMB1-S3-CNA 102908		
	5	32 – 56	NZMB1-S5-CNA 102909		
	8	48 – 84	NZMB1-S8-CNA 103020		
	12	80 – 140	NZMB1-S12-CNA 103021		
	18	128 – 224	NZMB1-S18-CNA 103022		
	26	200 – 350	NZMB1-S26-CNA 103023		
	33	256 – 448	NZMB1-S33-CNA 103024		
	40	320 – 560	NZMB1-S40-CNA 281263		
	50	400 – 700	NZMB1-S50-CNA 281264		
	63	504 – 882	NZMB1-S63-CNA 281265		
	80	640 – 1120	NZMB1-S80-CNA 281266		
	100	800 – 1250	NZMB1-S100-CNA 281267		

Notes

Notes for terminals → 67

Moeller SK1230-1157EN-NA

Notes

Switches conform to UL/CSA as well as the IEC regulations.
40 IEC switching performance values from 40 A are contained on the rating plate.

UL 489, CSA-C22.2-5.1, IEC/EN 60947-4-1

Adjustable short-circuit release I_i

- $8 - 14 \times I_n$ (ex-factory $12 \times I_n$)
 - NZM...1-S1,2 – 33-CNA: approx. $8 - 14 \times I_n$
 - NZM...1-S100-CNA: $8 - 12.5 \times I_n$ (ex-factory $12 \times I_n$)

Without overload release I_r



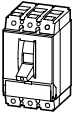
CNA: The device has components approved to UL, the conditions of approval must be observed during use.

i.e. the device must be combined with a suitable contactor and overload relay.

A switching capacity is stated for the complete motor-starter combination.

The device is approved as a CSA approved single device.

¹⁾ 480 Y/277 V AC from 60 A.

			Basic switching capacity 480 V 600 V	Price see price list
	Rated current = rated uninterrupted current $I_n = I_u$ A	Setting range Short-circuit releases I_i A 	Part no. Article no.	
Short-circuit protection				
Motor protection in conjunction with contactor and overload relay				
• With short-circuit release • Without overload release				
3 pole				
Line and load Box Lugs installed				
	1.6	12.8 – 22.4	NZMB2-S1,6-BT-CNA 107651	
	2.4	19.2 – 33.6	NZMB2-S2,4-BT-CNA 107652	
	5	32 – 56	NZMB2-S5-BT-CNA 107653	
	8	48 – 84	NZMB2-S8-BT-CNA 107654	
	12	80 – 140	NZMB2-S12-BT-CNA 107655	
	18	128 – 224	NZMB2-S18-BT-CNA 107656	
	26	200 – 350	NZMB2-S26-BT-CNA 107657	
	33	256 – 448	NZMB2-S33-BT-CNA 107658	
	40	320 – 560	NZMB2-S40-BT-CNA 107659	
	50	400 – 700	NZMB2-S50-BT-CNA 107660	
	63	504 – 882	NZMB2-S63-BT-CNA 107661	
	80	640 – 1120	NZMB2-S80-BT-CNA 107662	
	100	800 – 1400	NZMB2-S100-BT-CNA 107663	
	125	1000 – 1750	NZMB2-S125-BT-CNA 107664	
	160	1280 – 2240	NZMB2-S160-BT-CNA 107665	
	200	1600 – 2500	NZMB2-S200-BT-CNA 107666	
	250	2000 – 2500	NZMB2-S250-BT-CNA 107667	

Notes

Notes for terminals → 71

Moeller SK1230-1157EN-NA

Std. pack Notes

1 off

Switches conform to UL/CSA as well as the IEC regulations.
40 IEC switching performance values from 40 A are contained on the rating plate.

UL 489, CSA-C22.2-5.1, IEC/EN 60947-4-1
• NZM...2-S250-CNA: IEC/EN 60947-2

Adjustable short-circuit release I_i

- $8 - 14 \times I_n$ (ex-factory $12 \times I_n$)
 - NZM...2-S5 – 33-CNA: approx. $6 - 10 \times I_n$ (ex-factory $10 \times I_n$)
 - NZM...2-S250-CNA: $8 - 10 \times I_n$ (ex-factory $10 \times I_n$)

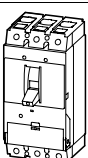
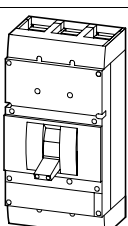
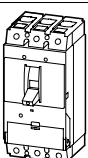
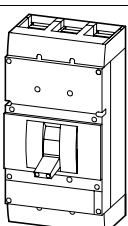
Without overload release I_r



CNA: The device has components approved to UL, the conditions of approval must be observed during use.
i.e. the device must be combined with a suitable contactor and overload relay.

A switching capacity is stated for the complete motor-starter combination.

The device is approved as a CSA approved single device.

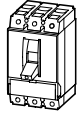
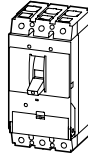
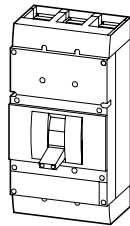
				Normal switching capacity 85 kA 240 V 42 kA 480 V 35 kA 600 V	
	Rated current = rated uninterrupted current	Setting range Overload releases	Short-circuit releases	Part no. Article no.	Price see price list
	$I_n = I_u$ A	I_r A 	Non-delayed I_i A 		
Protection of systems and cables					
3 pole					
Fixed overload releases Terminal screws standard terminals as accessories					
	250	250	500 – 2750	NZMN3-AEF250-NA 269275	
	300	300	600 – 3300	NZMN3-AEF300-NA 269276	
	350	350	700 – 3850	NZMN3-AEF350-NA 269277	
	400	400	800 – 4400	NZMN3-AEF400-NA 269278	
	450	450	900 – 3600	NZMN3-AEF450-NA 269279	
	500	500	1000 – 4000	NZMN3-AEF500-NA 269280	
	550	550	1100 – 4400	NZMN3-AEF550-NA 269281	
	600	600	1200 – 4800	NZMN3-AEF600-NA 269282	
	600	600	1200 – 7200	NZMN4-AEF600-NA 271108	
	700	700	1400 – 8400	NZMN4-AEF700-NA 271109	
	800	800	1600 – 9600	NZMN4-AEF800-NA 271110	
	900	900	1800 – 10800	NZMN4-AEF900-NA 271111	
	1000	1000	2000 – 12000	NZMN4-AEF1000-NA 271112	
	1200	1200	2400 – 14400	NZMN4-AEF1200-NA 271113	
3 pole					
Adjustable overload releases Terminal screws standard terminals as accessories					
	250	125 – 250	500 – 2750	NZMN3-AE250-NA 269299	
	400	200 – 400	800 – 4400	NZMN3-AE400-NA 269300	
	600	300 – 600	1200 – 4800	NZMN3-AE600-NA 269301	
	800	400 – 800	1600 – 9600	NZMN4-AE800-NA 271120	
	1000	500 – 1000	2000 – 12000	NZMN4-AE1000-NA 271121	
	1200	600 – 1200	2400 – 14400	NZMN4-AE1200-NA 271122	

Notes

Notes for terminals → 71

Moeller SK1230-1157EN-NA

High switching capacity 100 kA 240 V 65 kA 480 V 35 kA 600 V			
Part no. Article no.	Price see price list	Std. pack	Notes
NZMH3-AEF250-NA 269283		1 off	Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. UL 489, CSA-C22.2-5.1, IEC/EN 60947-2 Fixed overload releases I_r R.m.s. value measurement and "thermal memory" Adjustable short-circuit release I_i - With NZM...3-AEF250...400-NA: $2 - 11 \times I_n$ (ex-factory $6 \times I_n$) - With NZM...3-AEF450...600-NA: $2 - 8 \times I_n$ (ex-factory $6 \times I_n$) - With NZM...4-AEF...-NA: $2 - 12 \times I_n$ (ex-factory $6 \times I_n$) 1) For limiter high switching capacity with NZMH4, the following applies: 85 kA/480 V
NZMH3-AEF300-NA 269284			
NZMH3-AEF350-NA 269285			
NZMH3-AEF400-NA 269286			
NZMH3-AEF450-NA 269287			
NZMH3-AEF500-NA 269288			
NZMH3-AEF550-NA 269289			
NZMH3-AEF600-NA 269290			
NZMH4-AEF600-NA 271114			
NZMH4-AEF700-NA 271115			
NZMH4-AEF800-NA 271116			
NZMH4-AEF900-NA 271117			
NZMH4-AEF1000-NA 271118			
NZMH4-AEF1200-NA 271119			
NZMH3-AE250-NA 269302		1 off	Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. UL 489, CSA-C22.2-5.1, IEC/EN 60947-2 Adjustable overload release I_r $0.5 - 1 \times I_n$ (ex-factory $0.8 \times I_n$) R.m.s. value measurement and "thermal memory" Adjustable short-circuit release I_i - With NZM...3-AE250/400-NA: $2 - 11 \times I_n$ (ex-factory $6 \times I_n$) - With NZM...3-AE600-NA: $2 - 8 \times I_n$ (ex-factory $6 \times I_n$) - With NZM...4-AE...-NA: $2 - 12 \times I_n$ (ex-factory $6 \times I_n$) 1) For limiter high switching capacity with NZMH4, the following applies: 85 kA/480 V
NZMH3-AE400-NA 269303			
NZMH3-AE600-NA 269304			
NZMH4-AE800-NA 271123			
NZMH4-AE1000-NA 271124			
NZMH4-AE1200-NA 271125			

	Rated current = rated uninterrupted current	Setting range		Normal switching capacity 42 kA 480 V ¹⁾ 35 kA 600 V ²⁾	Part no. Article no.	Price see price list	
		Overload releases	Short-circuit releases				
			Non-delayed				Delayed
$I_n = I_u$ A	I_r A	I_i A	I_{sd} A				
							
Systems, cable, transformer and generator protection							
3 pole							
Line and load terminals standard Terminal screws standard terminals as accessories							
	150	150	1800	300 – 1500	NZMN2-VEF150-BT-NA 107593		
	175	175	2100	350 – 1750	NZMN2-VEF175-BT-NA 107594		
	200	200	2400	400 – 2000	NZMN2-VEF200-BT-NA 107595		
	225	225	2700	450 – 2250	NZMN2-VEF225-BT-NA 107596		
	250	250	3000	500 – 2500	NZMN2-VEF250-BT-NA 107597		
Terminal screws standard terminals as accessories							
	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

Notes for terminals → 71

Moeller SK1230-1157EN-NA

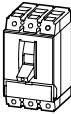
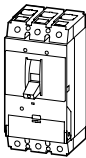
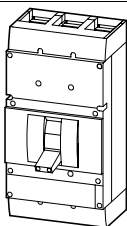
High switching capacity 65 kA 480 V 35 kA 600 V ³⁾		Price see price list	Std. pack	Notes
Part no. Article no.				
NZMH2-VEF150-BT-NA 107598			1 off	Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. UL 489, CSA-C22.2-5.1, IEC/EN 60947-2 Fixed overload releases I_r R.m.s. value measurement and 'thermal memory' Adjustable time delay setting to overcome current peaks t_r • 2 – 20 s with $6 \times I_r$ (ex-factory 10 s) Adjustable delayed short-circuit releases I_{sd} • 2 – 10 $\times I_r$ (ex-factory $6 \times I_r$) – NZM...3-VEF450...600-NA: 1.5 – 7 $\times I_r$ (ex-factory 6 $\times I_r$) Adjustable delay time t_{sd} • Steps 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms (ex-factory 0 ms) Adjustable non-delayed short-circuit releases I_i • NZM2 fixed $12 \times I_n$ • NZM...3-VEF250...400-NA: 2 – 11 $\times I_n$ (ex-factory 11 $\times I_n$) • NZM...3-VEF450...600-NA: 2 – 8 $\times I_n$ (ex-factory 8 $\times I_n$) • NZM...4-VEF...-NA: 2 – 12 $\times I_n$ (ex-factory 12 $\times I_n$) i^2t constant function • NZM2 fixed OFF • NZM3, NZM4 switched (ex-factory OFF) ¹⁾ For normal switching capacity with NZMN2-...-NA, the following applies: 35 kA/480 V ²⁾ For normal switching capacity with NZMN2-...-NA, the following applies: 25 kA/600 V ³⁾ For limiter high switching capacity with NZMH4-...-NA, the following applies: 85 kA/480 V
NZMH2-VEF175-BT-NA 107599				
NZMH2-VEF200-BT-NA 107840				
NZMH2-VEF225-BT-NA 107841				
NZMH2-VEF250-BT-NA 107842				
NZMH3-VEF250-NA 269316				
NZMH3-VEF300-NA 269317				
NZMH3-VEF350-NA 269318				
NZMH3-VEF400-NA 269319				
NZMH3-VEF450-NA 269320				
NZMH3-VEF500-NA 269321				
NZMH3-VEF550-NA 269322				
NZMH3-VEF600-NA 269323				
NZMH4-VEF600-NA 271142				
NZMH4-VEF700-NA 271143				
NZMH4-VEF800-NA 271144				
NZMH4-VEF900-NA 271145				
NZMH4-VEF1000-NA 271146				
NZMH4-VEF1200-NA 271147				

18 Circuit-breakers for North America

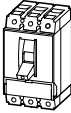
Electronic releases, 3 pole

Moeller SK1230-1157EN-NA

Circuit-breakers, disconnect switches up to 1200 A

					Normal switching capacity 42 kA 480 V ¹⁾ 35 kA 600 V ²⁾	Part no. Article no.	Price see price list
Rated current = rated uninterrupted current		Setting range Overload releases	Short-circuit releases				
$I_n = I_u$		I_r	Non-delayed	Delayed			
A		A	I_i A	I_{sd} A			
Systems, cable, transformer and generator protection							
3 pole							
Adjustable overload release							
Line and load Box Lugs installed							
	100	50 – 100	1200	100 – 1000	NZMN2-VE100-BT-NA 107843		
	160	80 – 160	1920	160 – 1600	NZMN2-VE160-BT-NA 107844		
	250	125 – 250	3000	250 – 2500	NZMN2-VE250-BT-NA 107845		
Terminal screws standard terminals as accessories							
	250	125 – 250	500 – 2750	250 – 2500	NZMN3-VE250-NA 269332		
	400	200 – 400	800 – 4400	400 – 4000	NZMN3-VE400-NA 269333		
	600	300 – 600	1200 – 4800	450 – 4200	NZMN3-VE600-NA 269334		
	800	400 – 800	1600 – 9600	800 – 8000	NZMN4-VE800-NA 271154		
	1000	500 – 1000	2000 – 12000	1000 – 10000	NZMN4-VE1000-NA 271155		
	1200	630 – 1200	2400 – 14400	1260 – 12000	NZMN4-VE1200-NA 271156		

Notes Notes for terminals → 71

Rated current = rated uninterrupted current			Setting range	Normal switching capacity	Part no. Article no.	Price see price list
$I_n = I_u$			Short-circuit releases	480 V		
A			I_i	600 V		
A						
Short-circuit protection						
Motor protection in conjunction with contactor and overload relay						
• With short-circuit release						
• Without overload release						
3 pole						
Line and load Box Lugs installed						
	90	180 – 1260	NZMN2-SE90-BT-CNA			
	140	280 – 1960	NZMN2-SE140-BT-CNA			
	220	440 – 3080	NZMN2-SE220-BT-CNA			
Terminal screws standard terminals as accessories						
	220	440 – 3080	NZMN3-SE220-CNA			
	350	700 – 4900	NZMN3-SE350-CNA			
	450	900 – 6300	NZMN3-SE450-CNA			

Notes Notes for terminals → 71

For Immediate Delivery call KMParts.com at (866) 595-9616

Moeller SK1230-1157EN-NA

High switching capacity 65 kA 480 V 35 kA 600 V ³⁾ Part no. Article no.	Price see price list	Std. pack	Notes
NZMH2-VE100-BT-NA 107846		1 off	Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. UL 489, CSA-C22.2-5.1, IEC/EN 60947-2
NZMH2-VE160-BT-NA 107847			
NZMH2-VE250-BT-NA 107848			Adjustable overload release I_r • $0.5 - 1 \times I_n$ R.m.s. value measurement and "thermal memory" Adjustable time delay setting to overcome current peaks t_r • $2 - 20$ s with $6 \times I_r$ (ex-factory 10 s) Adjustable delayed short-circuit releases I_{sd} • $2 - 10 \times I_r$ (ex-factory $6 \times I_r$) – NZM...3-VE600-NA: $1.5 - 7 \times I_r$ (ex-factory $6 \times I_r$) Adjustable delay time t_{sd} • Steps: 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms (ex-factory 0 ms) Adjustable non-delayed short-circuit releases I_i • NZM2 fixed $12 \times I_n$ • NZM...3-VE250/400-NA: $2 - 11 \times I_n$ (ex-factory $11 \times I_n$) • NZM...3-VE600-NA: $2 - 8 \times I_n$ (ex-factory $8 \times I_n$) • NZM...4-VE...-NA: $2 - 12 \times I_n$ (ex-factory $12 \times I_n$) i^2t constant function • NZM2 fixed OFF • NZM3, NZM4 switched (ex-factory OFF)
NZMH3-VE250-NA 269335			
NZMH3-VE400-NA 269336			
NZMH3-VE600-NA 269337			
NZMH4-VE800-NA 271157			
NZMH4-VE1000-NA 271158			
NZMH4-VE1200-NA 271159			1) For normal switching capacity with NZMN2-...-NA: 35 kA/480 V 2) For normal switching capacity with NZMN2-...-NA: 25 kA/600 V 3) For limiter high switching capacity with NZMH4-...-NA: 85 kA/480 V

Std. pack Notes

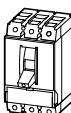
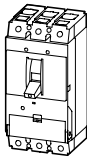
1 off

Switches conform to UL/CSA as well as the IEC regulations.
IEC switching performance values are contained on the rating plate.
UL 489, CSA-C22.2-5.1, IEC/EN 60947-2 and IEC/EN 60947-4

Adjustable short-circuit release I_i
• $2 - 14 \times I_n$ (ex-factory $12 \times I_n$)
Without overload release I_r



CNA: The device has components approved to UL, the conditions of approval must be observed during use. i.e. the device must be combined with a suitable contactor and overload relay. A switching capacity is stated for the complete motor-starter combination.
The device is approved as a CSA approved single device.

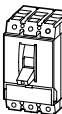
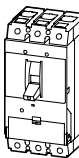
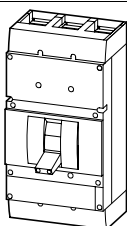
					3 switch positions I, + , 0 ; can be tripped remotely with shunt/under voltage release		Std. pack	Notes
Rated current = rated uninterrupted current	Switching capacity		Response range of the short-circuit releases	Part no. Article no.	Price see price list			
$I_n = I_u$ A	At 480 V kA	At 600 V kA	I_i A					
Molded case switches								
These switches are recommended especially as incoming circuit-breakers for the North American market.								
3 pole								
Terminals standard terminal screw as accessories								
	63	35	–	1250	NS1-63-NA 102681	1 off	Switches feature a fixed short-circuit release (self-protection) and comply to UL 489/CSA 22.2 No 5.1 regulations. Furthermore the switches are tested to IEC/EN 60947-2 as circuit-breakers without overcurrent protection (CBI-X) with main switch characteristics to IEC/EN 60204 and isolating characteristics to IEC 60947.	
	100	35	–	1250	NS1-100-NA 102682			
	125	35	–	1250	NS1-125-NA 102683			
Line and load Box Lugs installed								
	160	100	50	2500	NS2-160-BT-NA 107578	1 off	Switches feature a fixed short-circuit release (self-protection) and comply to UL 489/CSA 22.2 No 5.1 regulations. Furthermore the switches are tested to IEC/EN 60947-2 as circuit-breakers without overcurrent protection (CBI-X) with main switch characteristics to IEC/EN 60204 and isolating characteristics to IEC 60947.	
	200	100	50	2500	NS2-200-BT-NA 107579			
	250	100	50	2500	NS2-250-BT-NA 107610			
Terminal screws standard terminals as accessories								
	400	100	50	4800	NS3-400-NA 102687		NS3 and NS4 currently under development. Contact your Moeller representative.	
	600	100	50	4800	NS3-600-NA 102688			
	800	100	50	14400	NS4-800-NA 102689			
	1000	100	50	14400	NS4-1000-NA 102690			
	1200	100	50	14400	NS4-1200-NA 102691			

Notes

Notes for terminals → 67

NS2, NS3 and NS4 can be combined with remote operator NZM...-XR...
Voltage releases U/A and trip-indicating auxiliary contacts can be used.

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						3 switch positions I, +, 0 ; can be tripped remotely with shunt/under voltage release		
	Rated current = rated uninterrupted current	Short-circuit protection, max. gG/gL fuse ¹⁾	Short-circuit protection max. fuse OTS characteristic	Short-circuit rating with OTS fuse		Part no. Article no.	Price see price list	Std. pack
	$I_n = I_u$			At 480 V:	At 600 V:			
	A	A	A	kA	kA			
Switch-disconnector								
3 pole								
Terminals standard terminal screws as accessories								
	63	125	150	10	–			1 off
	100	125	150	10	–			
	125	125	150	10	–			
Line and load Box Lugs installed								
	160	250	225	10	10			1 off
Terminal screws standard terminals as accessories								
	400	630	– ²⁾	14	14	N3-400-NA 271169		1 off
	550	630	– ²⁾	14	14	N3-550-NA 293635		
	600	1600	– ²⁾	25	25	N4-600-NA 292386		
	800	1600	– ²⁾	25	25	N4-800-NA 271171		
	1000	1600	– ²⁾	25	25	N4-1000-NA 271172		
	1200	1600	– ²⁾	25	25	N4-1200-NA 271173		

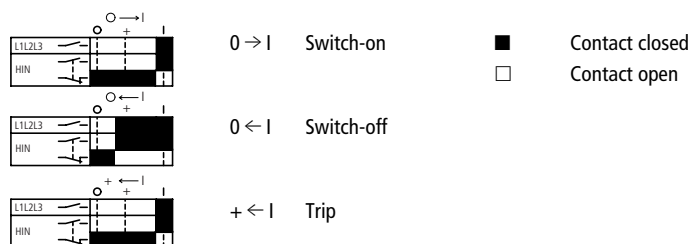
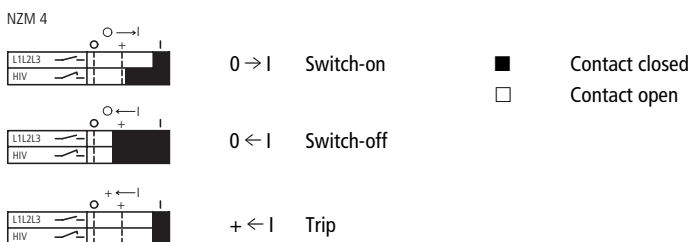
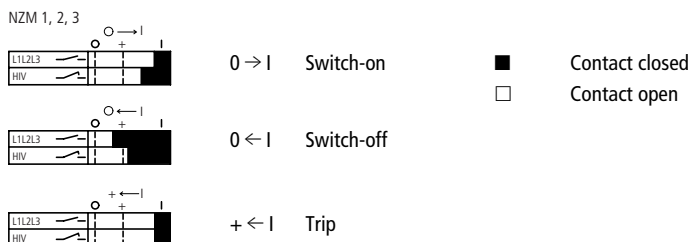
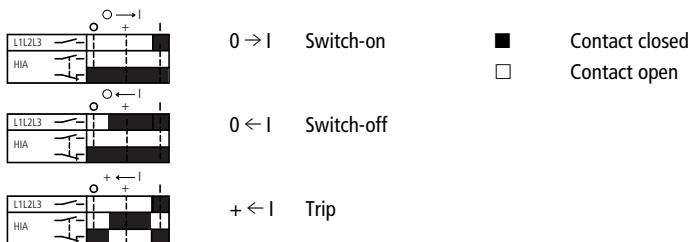
Notes

Main switch characteristics including positive drive to IEC/EN 60204 and VDE 0113.
Isolating characteristics to IEC/EN 60947-3 and VDE 0660.
Protection against accidental contact according to IEC.
Undervoltage and shunt releases and HIA trip-indicating auxiliary contacts can be used in addition to N disconnect switches.
N3... and N4... can also be combined with the NZM...-XR... remote operator.
Switches conform to UL 489/CSA 22.2 No. 5.1 as well as to the IEC regulations.

Notes for terminals → 67

¹⁾ for use when using a switch-disconnector to EN 60947-3.

²⁾ for use when using a switch-disconnector to N3...-NA and N4...-NA without protective device to UL 1087, CSA 22.2 No 5.2.

Contact sequence of the auxiliary contacts**Standard auxiliary contact (HIN)****Early-make auxiliary contact (HIV)****Trip-indicating auxiliary contact (HIA)**

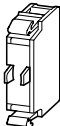
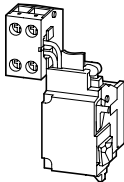
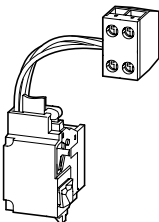
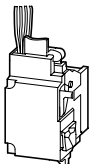
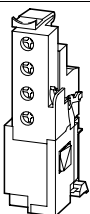
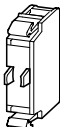
Maximum component fitting		NZM1	NZM2	NZM3	NZM4
HIN	1 N/O or 1 N/C	1	2	3	3
HIA	1 N/O or 1 N/C	1	1	1	2
HIV	2 N/O	1	1	1	1

Notes

If early-make contacts are required in combination with shunt or undervoltage releases, please select the combination type in the "Release" section.

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Circuit-breakers, disconnect switches
up to 1200 A

		For use with	Auxiliary contacts: ☹ = safety function, by positive opening to IEC/EN 60947-5-1 N/O = Normally open N/C = Normally closed		Contact sequence	Part no. Article no. when ordered separately	Price see price list
Auxiliary contacts							
Standard auxiliary contact Switching with the main contacts Used for indicating and interlocking tasks							
		NZM1, 2, 3, 4 N1, 2, 3, 4	1 N/O	—	1.X3 1.X4	M22-K10 216376	
			—	1 N/C ☹	1.X1 1.X2	M22-K01 216378	
Early-make auxiliary contact For interlock and load-shedding circuits							
	With clamp terminal on the left-hand switch side.	NZM1 N1	2 N/O	—	3.13 3.23 3.14 3.24	NZM1-XHIV 259426	
	With clamp terminal on the right-hand switch side.		2 N/O	—	3.13 3.23 3.14 3.24	NZM1-XHIVR 292195	
	With 3 m connection cable instead of screw termination.		2 N/O	—	3.13 3.23 3.14 3.24	NZM1-XHIVL 259432	
		NZM2, 3 N2, 3	2 N/O	—	3.13 3.23 3.14 3.24	NZM2/3-XHIV 259430	
		NZM4 N4	2 N/O	—	3.13 3.23 3.14 3.24	NZM4-XHIV 266172	
Trip-indicating auxiliary contact (HIA) General trip indication '+', when tripped by voltage release, overload release or short-circuit release							
		NZM1, 2, 3, 4 N1, 2, 3, 4	1 N/O	—	4.X3 4.X4	M22-K10 216376	
			—	1 N/C ☹	4.X1 4.X2	M22-K01 216378	

Moeller SK1230-1157EN-NA

Notes

The following can be clipped into the switches:

- NZM1 – a standard auxiliary contact
- NZM2 up to two M22-K... standard auxiliary contacts
- NZM3 as well as NZM4 - up to 3 standard auxiliary contacts M22-(C)K...

Any combinations of the auxiliary contact types is possible.
Marking on switch: HIN

Not in conjunction with undervoltage release NZM...-XU(C)... or shunt release NZM...-XA(C)...

Early-make with on and off switching (manual operation):
approx. 20 ms

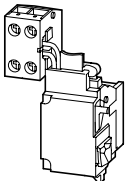
Not in conjunction with undervoltage release NZM...-XU(C)..., shunt release NZM...-XA(C)... or remote operator NZM...-XR...

Early-make with switch on (manual operation): approx.
90 ms

The following can be clipped into the switches:

- NZM1 - one trip-indicating auxiliary switch
- NZM2 - one M22-(C)K... trip-indicating auxiliary switch
- NZM3 - one M22-(C)K... trip-indicating auxiliary switch
- NZM4 - up to two M22-(C)K... trip-indicating auxiliary switches

Any combinations of the auxiliary contact types is possible.
Marking on switch: HIA

		For use with	Rated control voltage	Part no. Article no. when ordered separately
			U_s V	
Undervoltage releases				
Without auxiliary contact Non-delayed disconnection of NZM circuit-breakers or N disconnect switches when the control voltage sinks below 35 – 70% U_s . For use with Emergency-Stop devices in conjunction with Emergency-Stop button.				
 	With clamp terminal on the left-hand switch side.	NZM1, N1	24 V 50/60 Hz	NZM1-XU24AC 259434
			110 V – 130 V 50/60 Hz	NZM1-XU110-130AC 259440
			208 V 240 V 50/60 Hz	NZM1-XU208-240AC 259442
			380 V – 440 V 50/60 Hz	NZM1-XU380-440AC 259444
			480 V – 525 V 50/60 Hz	NZM1-XU480-525AC 259446
			600 V 50/60 Hz	NZM1-XU600AC 259448
			12 V DC	NZM1-XU12DC 259450
			24 V DC	NZM1-XU24DC 259452
			110 V – 130 V DC	NZM1-XU110-130DC 259458
			220 V – 250 V DC	NZM1-XU220-250DC 259460

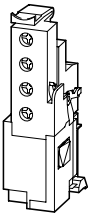
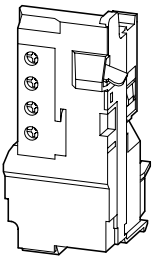
Moeller SK1230-1157EN-NA

Std. pack **Notes**

1 off

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

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

		For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately
Undervoltage releases				
Without auxiliary contact Non-delayed disconnection of NZM circuit-breakers or N disconnect switches when the control voltage sinks below 35 – 70% U_s . For use with Emergency-Stop devices in conjunction with Emergency-Stop button.				
 	—	NZM2, N2 NZM3, N3	24 V 50/60 Hz	NZM2/3-XU24AC 259491
			110 V – 130 V 50/60 Hz	NZM2/3-XU110-130AC 259497
			208 V – 240 V 50/60 Hz	NZM2/3-XU208-240AC 259499
			380 V – 440 V 50/60 Hz	NZM2/3-XU380-440AC 259501
			480 V – 525 V 50/60 Hz	NZM2/3-XU480-525AC 259503
			600 V 50/60 Hz	NZM2/3-XU600AC 259505
			12 V DC	NZM2/3-XU12DC 259507
			24 V DC	NZM2/3-XU24DC 259509
			110 V – 130 V DC	NZM2/3-XU110-130DC 259515
			220 V – 250 V DC	NZM2/3-XU220-250DC 259517
 	—	NZM4, N4	24 V 50/60 Hz	NZM4-XU24AC 266189
			110 V – 130 V 50/60 Hz	NZM4-XU110-130AC 266192
			208 V – 240 V 50/60 Hz	NZM4-XU208-240AC 266193
			380 V – 440 V 50/60 Hz	NZM4-XU380-440AC 266194
			480 V – 525 V 50/60 Hz	NZM4-XU480-525AC 266195
			600 V 50/60 Hz	NZM4-XU600AC 266196
			12 V DC	NZM4-XU12DC 266203
			24 V DC	NZM4-XU24DC 266204
			110 V – 130 V DC	NZM4-XU110-130DC 266207
			220 V – 250 V DC	NZM4-XU220-250DC 266208

Moeller SK1230-1157EN-NA

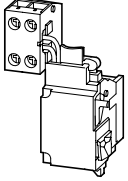
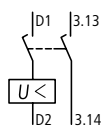
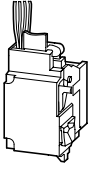
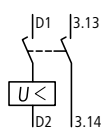
Std. pack **Notes**

1 off

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

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

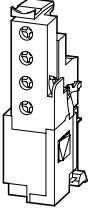
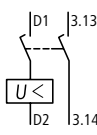
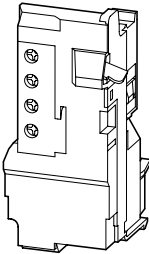
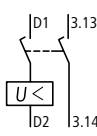
1 off

		For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately
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.				
 	With clamp terminal on the left-hand switch side.	NZM1, N1	24 V 50/60 Hz	NZM1-XUHIV24AC 259531
			110 V – 130 V 50/60 Hz	NZM1-XUHIV110-130AC 259537
			208 V – 240 V 50/60 Hz	NZM1-XUHIV208-240AC 259539
			380 V – 440 V 50/60 Hz	NZM1-XUHIV380-440AC 259541
			480 V – 525 V 50/60 Hz	NZM1-XUHIV480-525AC 259543
			12 V DC	NZM1-XUHIV12DC 259545
			24 V DC	NZM1-XUHIV24DC 259547
			110 V 130 V DC	NZM1-XUHIV110-130DC 259553
			220 V – 250 V DC	NZM1-XUHIV220-250DC 259555
 	With 3 m connection cable instead of screw termination.	NZM1, N1	24 V 50/60 Hz	NZM1-XUHIVL24AC 259557
			110 V – 130 V 50/60 Hz	NZM1-XUHIVL110-130AC 259563
			208 V 240 V 50/60 Hz	NZM1-XUHIVL208-240AC 259565
			380 V – 440 V 50/60 Hz	NZM1-XUHIVL380-440AC 259567
			480 V – 525 V 50/60 Hz	NZM1-XUHIVL480-525AC 259569
			12 V DC	NZM1-XUHIVL12DC 259571
			24 V DC	NZM1-XUHIVL24DC 259573
			110 V 130 V DC	NZM1-XUHIVL110-130DC 259579
			220 V – 250 V DC	NZM1-XUHIVL220-250DC 259581

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Std. pack **Notes**

1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented. Early-make of the auxiliary contacts with on and off switching (manual operation): approx. 20 ms. Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.
1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented. Early-make of the auxiliary contacts with on and off switching (manual operation): approx. 20 ms. Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.

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

Circuit-breakers, disconnect switches
up to 1200 A

Moeller SK1230-1157EN-NA

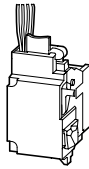
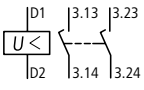
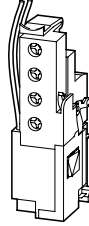
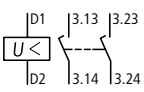
Std. pack **Notes**

1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented. Early-make of the auxiliary contacts with on and off switching (manual operation): approx. 20 ms. Cannot be used in conjunction with NZM...-XR... remote operator. Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.
1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented. Early-make of the auxiliary contacts with switch on (manual operation): approx. 90 ms. Cannot be used in conjunction with NZM...-XR... remote operator. Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.

34 Circuit-breakers, disconnect switches

Undervoltage release

Moeller SK1230-1157EN-NA

	For use with	Rated control voltage	Part no. Article no. when ordered separately	Price see price list	Std. pack
		U_s V			
Undervoltage releases					
With two separate early-make auxiliary contacts					
With 3 m connection cable instead of screw termination.					
		NZM1, N1	24 V 50/60 Hz	NZM1-XUHIV20L24AC 259612	1 off
			110 V – 130 V 50/60 Hz	NZM1-XUHIV20L110-130AC 259620	
			208 V – 240 V 50/60 Hz	NZM1-XUHIV20L208-240AC 259622	
			380 V – 440 V 50/60 Hz	NZM1-XUHIV20L380-440AC 259624	
			480 V – 525 V 50/60 Hz	NZM1-XUHIV20L480-525AC 259626	
			12 V DC	NZM1-XUHIV20L12DC 259628	
			24 V DC	NZM1-XUHIV20L24DC 259630	
		Contacts 3.23 and 3.24 with separate 3 m connection cables.			
		NZM2, N2 NZM3, N3	24 V 50/60 Hz	NZM2/3-XUHIV2024AC 259640	1 off
			110 V – 130 V 50/60 Hz	NZM2/3-XUHIV20110-130AC 259648	
			208 V – 240 V 50/60 Hz	NZM2/3-XUHIV20208-240AC 259651	
			380 V – 440 V 50/60 Hz	NZM2/3-XUHIV20380-440AC 259653	
			480 V – 525 V 50/60 Hz	NZM2/3-XUHIV20480-525AC 259655	
			12 V DC	NZM2/3-XUHIV2012DC 259657	
			24 V DC	NZM2/3-XUHIV2024DC 259659	

Notes

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

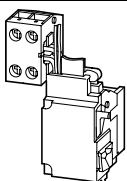
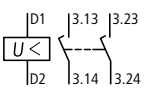
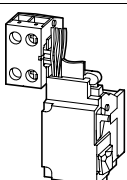
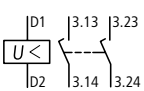
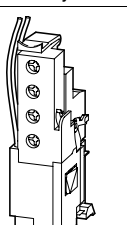
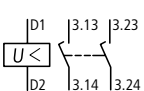
Early-make of the auxiliary contacts with on and off switching (manual operation): approx. 20 ms.

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

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

Circuit-breakers, disconnect switches
up to 1200 A

Moeller SK1230-1157EN-NA

For use with	Rated control voltage	Part no. Article no. when ordered separately	Price see price list	Std. pack	
	U_s V				
Undervoltage releases					
With two separate early-make auxiliary contacts					
Coil connection wired to clamp terminal, auxiliary switch connections wired with 3 m loose connection cables					
		NZM1, N1	24 V 50/60 Hz	NZM1-XUHIV20KL24AC 284388	1 off
			110 V – 130 V 50/60 Hz	NZM1-XUHIV20KL110-130AC 284389	
			208 V – 240 V 50/60 Hz	NZM1-XUHIV20KL208-240AC 284400	
			24 V DC	NZM1-XUHIV20KL24DC 284387	
Coil connection with 3 m loose connection cables, auxiliary switch connections wired to clamp terminal					
		NZM1, N1	24 V 50/60 Hz	NZM1-XUHIV20LK24AC 284402	1 off
			110 V – 130 V 50/60 Hz	NZM1-XUHIV20LK110-130AC 284403	
			208 V – 240 V 50/60 Hz	NZM1-XUHIV20LK208-240AC 284404	
			24 V DC	NZM1-XUHIV20LK24DC 284401	
Coil connection with 3 m loose connection cables, auxiliary switch connections wired to clamp terminal					
		NZM2, N2 NZM3, N3	24 V 50/60 Hz	NZM2/3-XUHIV20LK24AC 285291	1 off
			110 V – 130 V 50/60 Hz	NZM2/3-XUHIV20LK110-130AC 284407	
			208 V – 240 V 50/60 Hz	NZM2/3-XUHIV20LK208-240AC 284408	
			24 V DC	NZM2/3-XUHIV20LK24DC 284405	

Notes

When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to turn on the switch is safely prevented.
 Early-make of the auxiliary contacts with on and off switching (manual operation): approx. 20 ms.
 Cannot be used in conjunction with NZM...-XR... remote operator.
 Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.

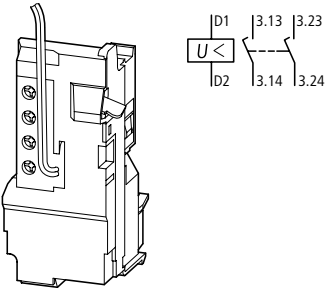
36

Circuit-breakers, disconnect switches

Undervoltage release

Moeller SK1230-1157EN-NA

Circuit-breakers, disconnect switches
up to 1200 A

For use with	Rated control voltage	Part no. Article no. when ordered separately	Price see price list	Std. pack
	U_s V			
Undervoltage releases				
With two separate early-make auxiliary contacts				
Contacts 3.23 and 3.24 with separate 3 m connection cables.				
	NZM4, N4	24 V 50/60 Hz	NZM4-XUHIV2024AC 266244	1 off
		110 V – 130 V 50/60 Hz	NZM4-XUHIV20110-130AC 266247	
		208 V 240 V 50/60 Hz	NZM4-XUHIV20208-240AC 266248	
		380 V – 440 V 50/60 Hz	NZM4-XUHIV20380-440AC 266249	
		24 V DC	NZM4-XUHIV2024DC 266258	

Notes

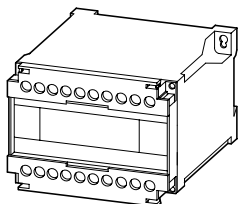
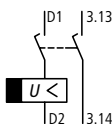
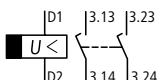
When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented.

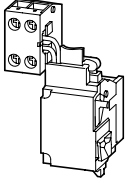
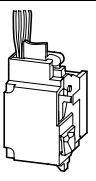
Early-make of the auxiliary contacts with switch on (manual operation): approx. 90 ms.

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

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

Moeller SK1230-1157EN-NA

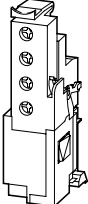
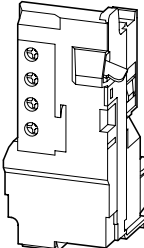
For use with	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
Undervoltage releases, off-delayed				
Combination of separate delay unit and special tripping device.				
Not UL/CSA approved				
Delay unit Voltage dips of less than the setting between 0.06 – 16 s do not cause disconnection of the NZM circuit-breaker or N switch-disconnector.				
	NZM1, 2, 3, 4 N1, 2, 3, 4 50/60 Hz 220 V – 240 V 380 V – 440 V 480 V – 550 V DC/AC 24 V	UVU-NZM 260154	1 off	Adjustable delay time 70 ms – 4 s. With additional capacitor up to 16 s. A special tripping device is required. Cannot be installed simultaneously with NZM...-XHIV... or NZM...-XA... shunt release. Delay unit for separate installation (Fixing: top-hat rail or screws). For other operating voltages use control transformer.
Special tripping device For combination with separate delay unit				
Without auxiliary contacts				
NZM1 with 3 m separate connection cables instead of screw terminal, NZM2, 3, 4 with screw terminal				
	NZM1 N1 NZM2, N2 NZM3, N3 NZM4 N4	NZM1-XUVL 271607 NZM2/3-XUV 259527 NZM4-XUV 266588	1 off	UVU-NZM delay unit is additionally required. Cannot be installed simultaneously with separate NZM...-XHIV early-make auxiliary contact or NZM...-XA... shunt release.
With 2 early-make auxiliary contacts				
NZM1 with 3 m separate connection cables instead of screw terminal, NZM2, 3, 4 with screw terminal				
	NZM1 N1 NZM2, N2 NZM3, N3 NZM4 N4	NZM1-XUVHIVL 271608 NZM2/3-XUVHIV 259684 NZM4-XUVHIV 266596	1 off	Cannot be used in conjunction with NZM...-XR... remote operator. UVU-NZM delay unit is additionally required. Cannot be installed simultaneously with separate NZM...-XHIV early-make auxiliary contact or NZM...-XA... shunt release. NZM1, 2, 3: Early-make of the auxiliary contacts with on and off switching (manual operation): approx. 20 ms. NZM4: Early-make of the auxiliary contacts with switch on (manual operation): approx. 90 ms.
With 2 separately 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 N1 NZM2, N2 NZM3, N3 NZM4 N4	NZM1-XUVHIV20L 271609 NZM2/3-XUVHIV20 259688 NZM4-XUVHIV20 266604	1 off	Cannot be used in conjunction with NZM...-XR... remote operator. UVU-NZM delay unit is additionally required. Cannot be installed simultaneously with separate NZM...-XHIV early-make auxiliary contact or NZM...-XA... shunt release. NZM1, 2, 3: Early-make of the auxiliary contacts with on and off switching (manual operation): approx. 20 ms. NZM4: Early-make of the auxiliary contacts with switch on (manual operation): approx. 90 ms.

		For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately
Shunt releases				
Without auxiliary contact Switches are tripped by a voltage pulse or by the application of uninterrupted voltage.				
		With clamp terminal on the left-hand switch side.	NZM1, N1	NZM1-XA12AC/DC 259706
				NZM1-XA24AC/DC 259708
				NZM1-XA110-130AC/DC 259724
				NZM1-XA208-250AC/DC 259726
				NZM1-XA380-440AC/DC 259728
				NZM1-XA480-525AC/DC 259730
		With 3 m connection cable instead of screw termination.	NZM1, N1	NZM1-XAL12AC/DC 259734
				NZM1-XAL24AC/DC 259736
				NZM1-XAL110-130AC/DC 259742
				NZM1-XAL208-250AC/DC 259744
				NZM1-XAL380-440AC/DC 259746
				NZM1-XAL480-525AC/DC 259748

Moeller SK1230-1157EN-NA

Std. pack **Notes**

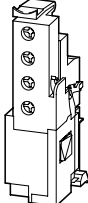
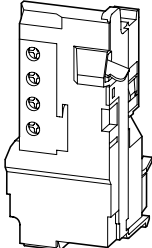
1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on, is safely prevented. Shunt release cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.
1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on, is safely prevented. Shunt release cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.

		For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately
Shunt releases				
Without auxiliary contact Switches are tripped by a voltage pulse or by the application of uninterrupted voltage.				
		—	NZM2, N2 NZM3, N3	12 V AC/DC 259752
				24 V AC/DC 259754
				110 V – 130 V AC/DC 259760
				208 V – 250 V AC/DC 259763
				380 V – 440 V AC/DC 259766
				480 V – 525 V AC/DC 259768
		—	NZM4, N4	12 V AC/DC 266446
				24 V AC/DC 266447
				110 V – 130 V AC/DC 266450
				208 V – 250 V AC/DC 266451
				380 V – 440 V AC/DC 266452
				480 V – 525 V AC/DC 266453

Moeller SK1230-1157EN-NA

Std. pack **Notes**

1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on, is safely prevented. Shunt release cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.
1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on, is safely prevented. Shunt release cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.

For use with		Rated control voltage	Part no. Article no. when ordered separately	Price see price list	Std. pack
		U_s V			
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					
		NZM3, N3	230 V AC	NZM3-XA-230AC-MNS 274097	1 off
		NZM4, N4	230 V AC	NZM4-XA-230AC-MNS 274138	1 off

Moeller SK1230-1157EN-NA

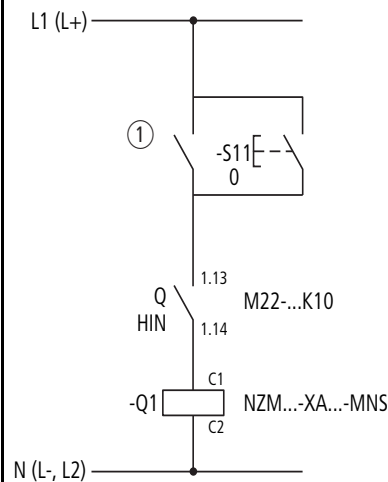
Std. pack **Notes**

1 off

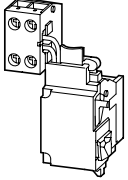
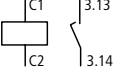
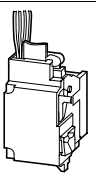
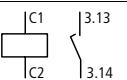
Cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.

Intermittent operation guaranteed by series connection of an M22-(C)K10 make contact.
The maximum operating time of the shunt release for mesh network circuit-breaker is 1 s.

1 off



- ① Reverse-power relay contact
- S11 Remote off
- Q Standard auxiliary contact
- Q1 Shunt release

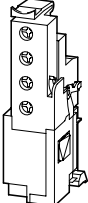
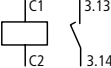
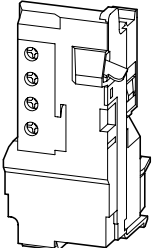
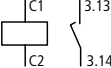
		For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately
Shunt releases				
With early-make auxiliary contact				
 	With clamp terminal on the left-hand switch side.	NZM1, N1	12 V AC/DC	NZM1-XAHIV12AC/DC 259772
			24 V AC/DC	NZM1-XAHIV24AC/DC 259774
			110 V – 130 V AC/DC	NZM1-XAHIV110-130AC/DC 259780
			208 V – 250 V AC/DC	NZM1-XAHIV208-250AC/DC 259782
			380 V – 440 V AC/DC	NZM1-XAHIV380-440AC/DC 259784
			480 V – 525 V AC/DC	NZM1-XAHIV480-525AC/DC 259786
 	With 3 m connection cable instead of screw termination.	NZM1, N1	12 V AC/DC	NZM1-XAHIVL12AC/DC 259790
			24 V AC/DC	NZM1-XAHIVL24AC/DC 259792
			110 V – 130 V AC/DC	NZM1-XAHIVL110-130AC/DC 259798
			208 V – 250 V AC/DC	NZM1-XAHIVL208-250AC/DC 259800
			380 V – 440 V AC/DC	NZM1-XAHIVL380-440AC/DC 259802
			480 V – 525 V AC/DC	NZM1-XAHIVL480-525AC/DC 259804

Moeller SK1230-1157EN-NA

Std. pack **Notes**

1 off	When the shunt release is energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented. Early-make of the auxiliary contact with on and off switching (manual operation): approx. 20 ms. Shunt release cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.
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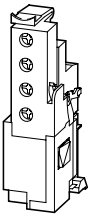
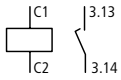
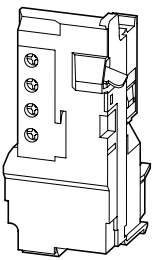
1 off

		For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately
Shunt releases				
With early-make auxiliary contact				
 	—	NZM2, N2 NZM3, N3	12 V AC/DC	NZM2/3-XAHIV12AC/DC 259808
			24 V AC/DC	NZM2/3-XAHIV24AC/DC 259810
			110 V – 130 V AC/DC	NZM2/3-XAHIV110-130AC/DC 259816
			208 V – 250 V AC/DC	NZM2/3-XAHIV208-250AC/DC 259818
			380 V – 440 V AC/DC	NZM2/3-XAHIV380-440AC/DC 259820
			480 V – 525 V AC/DC	NZM2/3-XAHIV480-525AC/DC 259822
 	—	NZM4, N4	12 V AC/DC	NZM4-XAHIV12AC/DC 266470
			24 V AC/DC	NZM4-XAHIV24AC/DC 266471
			110 V – 130 V AC/DC	NZM4-XAHIV110-130AC/DC 266474
			208 V – 250 V AC/DC	NZM4-XAHIV208-250AC/DC 266475
			380 V – 440 V AC/DC	NZM4-XAHIV380-440AC/DC 266476
			480 V – 525 V AC/DC	NZM4-XAHIV480-525AC/DC 266477

Moeller SK1230-1157EN-NA

Std. pack **Notes**

1 off	When the shunt release is energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented. Early-make of the auxiliary contact with on and off switching (manual operation): approx. 20 ms. Cannot be used in conjunction with NZM...-XR... remote operator. Shunt release cannot be installed simultaneously with NZM...-XHIV.. early-make auxiliary contact or NZM...-XU... undervoltage release.
1 off	When the shunt release is energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented. Early-make of the auxiliary contact with switch on (manual operation): approx. 90 ms. Cannot be used in conjunction with NZM...-XR... remote operator. Shunt release cannot be installed simultaneously with NZM...-XHIV.. early-make auxiliary contact or NZM...-XU... undervoltage release.

		For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately
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				
		NZM3, N3	230 V AC	NZM3-XAHIV-230AC-MNS 274141
		NZM4, N4	230 V AC	NZM4-XAHIV-230AC-MNS 274143

Moeller SK1230-1157EN-NA

Std. pack **Notes**

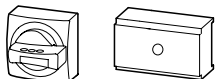
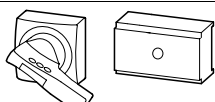
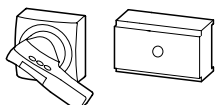
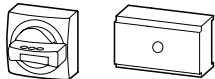
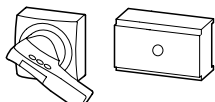
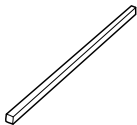
1 off

Cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release. Cannot be used in conjunction with NZM...-XR... remote operator.

Intermittent operation guaranteed by series connection of a N/O contact M22-(C)K10 (standard auxiliary contact). The maximum operating time of the shunt release for mesh network circuit-breaker is 1 s.

1 off

NZM3: Early-make of the auxiliary contact with on and off switching (manual operation): approx. 20 ms.
NZM4: Early-make of the auxiliary contact with switch on (manual operation): approx. 90 ms.

For use with			Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes	
CSA only							
Door coupling rotary handle							
Complete including rotary drive and coupling parts An additional extension shaft is necessary with the NZM...-XT(V)D(V)(R)(-60) types. Degree of protection IP66/UL/CSA Type 4X							
Standard, black/grey							
	Lockable in 0 position on handle. With door interlock	NZM1, N1	NZM1-XTVD 260166			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 NZM...-XTVD(V) • External warning plate/ designation label can be clipped on	
		NZM2, N2	NZM2-XTVD 260168				
		NZM3, N3	NZM3-XTVD 260170				
		NZM4, N4	NZM4-XTVD 266614				
	Lockable on handle and switch. Can be locked in 0 position, with adequate modification also in I position. With door interlock Lockable in 0 position on circuit-breaker.	NZM1, N1	NZM1-XTVDV 260172				
		NZM2, N2	NZM2-XTVDV 260174				
		NZM3, N3	NZM3-XTVDV 260176				
		NZM4, N4	NZM4-XTVDV 266616				
							
	Red-yellow for Emergency-Stop						
		Lockable on handle and switch. Lockable in 0 position on handle. With door interlock Lockable in 0 position on circuit-breaker.	NZM1, N1	NZM1-XTVDVR 260178		1 off	Door interlock • Not defeatable in the locked OFF position. • 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 NZM...-XTVDVR • External warning plate/ designation label can be clipped on
			NZM2, N2	NZM2-XTVDVR 260180			
NZM3, N3			NZM3-XTVDVR 260182				
NZM4, N4			NZM4-XTVDVR 266618				
							
	Extension shaft						
		Max. mounting depth: 400 mm	NZM1, N1	NZM1/2-XV4 261232		1 off	Can be cut to required length
			NZM2, N2				
NZM3, N3			NZM3/4-XV4 261234				
NZM4, N4							
	Max. mounting depth: 600 mm	NZM1, N1	NZM1/2-XV6 260191				
		NZM2, N2					
		NZM3, N3	NZM3/4-XV6 260193				
		NZM4, N4					

Notes

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

Moeller SK1230-1157EN-NA

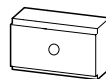
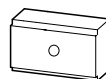
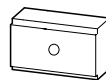
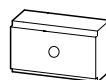
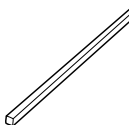
For a max. shaft length of 60 mm		Std. pack	Notes	Extremely narrow fittings		Std. pack	Notes
Part no. Article no. when ordered separately	Price see price list			Part no. Article no. when ordered separately	Price see price list		
NZM1-XTVDV-60 271508			Door interlock - For maximum shaft length 60 mm - Without shaft support - Cannot be combined with NZM...-XDZ additional handle - External warning plate/ designation label can be clipped on	NZM1-XTVDV-0 279396			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 NZM...-XTVDV-0 - For extremely narrow fittings - With special short extension shaft - Cannot be combined with NZM...-XDZ additional handle - External warning plate/ designation label can be clipped on
NZM2-XTVDV-60 271509				NZM2-XTVDV-0 279397			
NZM3-XTVDV-60 271510				NZM3-XTVDV-0 279398			
NZM4-XTVDV-60 271511				NZM4-XTVDV-0 279399			
NZM1-XTVDVR-60 271512		1 off	Door interlock - Not defeatable in the locked OFF position. - 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 NZM...-XTVDVR-60 - For maximum shaft length 60 mm - Without shaft support - Cannot be combined with NZM...-XDZ additional handle - External warning plate/ designation label can be clipped on	NZM1-XTVDVR-0 279400		1 off	Door interlock - Not defeatable in the locked OFF position. - 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 NZM...-XTVDVR-0 - For extremely narrow fittings - With special short extension shaft - Cannot be combined with NZM...-XDZ additional handle - External warning plate/ designation label can be clipped on
NZM2-XTVDVR-60 271513				NZM2-XTVDVR-0 279401			
NZM3-XTVDVR-60 271514				NZM3-XTVDVR-0 279402			
NZM4-XTVDVR-60 271515				NZM4-XTVDVR-0 279403			

52 Circuit-breakers, disconnect switches

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

Moeller SK1230-1157EN-NA

Circuit-breakers, disconnect switches
up to 1200 A

		For use with	Standard Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
Door coupling rotary handle						
Complete including rotary drive and coupling parts Extension shaft additionally required. Degree of protection IP66/UL/CSA Type 4X						
Standard, black/grey						
   	Lockable on handle and switch. Can be locked in 0 position, with adequate modification also in I position. With door interlock Lockable in 0 position on breaker.	NZM1, N1	NZM1-XTVDV-NA 100683	1 off	Door interlock • Not defeated in the locked OFF position • Door opening possible with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on	
		NZM2, N2	NZM2-XTVDV-NA 100684			
		NZM3, N3	NZM3-XTVDV-NA 100685			
		NZM4, N4	NZM4-XTVDV-NA 100686			
Red-yellow for Emergency-Stop						
   	Lockable on handle and switch. Lockable in 0 position on handle. With door interlock Lockable in 0 position on breaker.	NZM1, N1	NZM1-XTVDVR-NA 271449	1 off	Door interlock • Not defeated in the locked OFF position • Door opening possible with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on	
		NZM2, N2	NZM2-XTVDVR-NA 271450			
		NZM3, N3	NZM3-XTVDVR-NA 271451			
		NZM4, N4	NZM4-XTVDVR-NA 271452			
Extension shaft						
	Max. mounting depth: 400 mm	NZM1, N1	NZM1/2-XV4 261232	1 off	Can be cut to required length	
		NZM2, N2				
		NZM3, N3	NZM3/4-XV4 261234			
		NZM4, N4				
	Max. mounting depth: 600 mm	NZM1, N1	NZM1/2-XV6 260191			
		NZM2, PN2, N2				
		NZM3, N3	NZM3/4-XV6 260193			
		NZM4, N4				

Notes

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

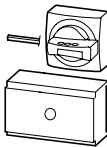
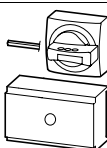
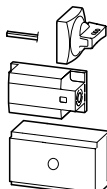
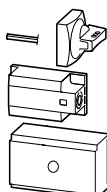
Moeller SK1230-1157EN-NA

For a max. shaft length of 60 mm		Notes	Extremely narrow fittings		Std. pack	Notes
Part no. Article no. when ordered separately	Price see price list		Part no. Article no. when ordered separately	Price see price list		
NZM1-XTVDV-60-NA 100667		Door interlock • Not defeated in the locked OFF position • Door opening possible with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on NZM...-XTVDV-60-NA • For a maximum shaft length of 60 mm • Without shaft support • Cannot be combined with NZM...-XDZ additional handle • External warning plate/ designation label can be clipped on	NZM1-XTVDV-0-NA 100675		1 off	Door interlock • Not defeated in the locked OFF position • Door opening possible with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on NZM...-XTVDV-0-NA • For extremely narrow fittings • With special short extension shaft • Cannot be combined with NZM...-XDZ additional handle • External warning plate/ designation label can be clipped on
NZM2-XTVDV-60-NA 100668			NZM2-XTVDV-0-NA 100676			
NZM3-XTVDV-60-NA 100669			NZM3-XTVDV-0-NA 100677			
NZM4-XTVDV-60-NA 100670			NZM4-XTVDV-0-NA 100678			
NZM1-XTVDVR-60-NA 100671		Door interlock • Not defeated in the locked OFF position • Door opening possible with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on NZM...-XTVDVR-60-NA • For a maximum shaft length of 60 mm • Without shaft support • Cannot be combined with NZM...-XDZ additional handle • External warning plate/ designation label can be clipped on	NZM1-XTVDVR-0-NA 100679		1 off	Door interlock • Not defeated in the locked OFF position • Door opening possible with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • 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 NZM...-XDZ additional handle • External warning plate/ designation label can be clipped on
NZM2-XTVDVR-60-NA 100672			NZM2-XTVDVR-0-NA 100680			
NZM3-XTVDVR-60-NA 100673			NZM3-XTVDVR-0-NA 100681			
NZM4-XTVDVR-60-NA 100674			NZM4-XTVDVR-0-NA 100682			

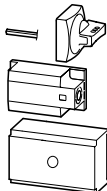
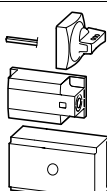
		For use with	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes	
CSA only							
Rotary handles							
Complete with rotary drive							
Standard, black/grey							
	Lockable on the 0 position on the switch using up to 3 padlocks.	NZM1, N1	NZM1-XDV 260125			NZM1, 2, 3: Can also be combined with insulating surround. MODAN handle position detection by wire release can be retrofitted.	
		NZM2, N2	NZM2-XDV 260127				
		NZM3, N3	NZM3-XDV 260129				
		NZM4, N4	NZM4-XDV 266608				
	Lockable on the 0 position on the handle using up to 3 padlocks.	NZM1, N1	NZM1-XDVG 285247			Can also be combined with insulating surround.	
		NZM2, N2	NZM2-XDVG 285248				
Red-yellow for Emergency-Stop							
	Lockable on the 0 position on the switch using up to 3 padlocks.	NZM1, N1	NZM1-XDVR 260135		1 off	NZM1, 2, 3: Can also be combined with insulating surround. MODAN handle position detection by wire release can be retrofitted.	
		NZM2, N2	NZM2-XDVR 260137				
		NZM3, N3	NZM3-XDVR 260140				
		NZM4, N4	NZM4-XDVR 266610				
	Lockable on the 0 position on the handle using up to 3 padlocks.	NZM1, N1	NZM1-XDVGR 285249			Can also be combined with insulating surround.	
		NZM2, N2	NZM2-XDVGR 285280				
Notes							
Circuit-breaker can also be installed in a lying position 90° left/right, with the handle still in the same position.							

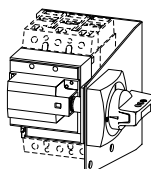
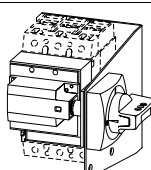
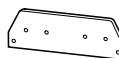
Moeller SK1230-1157EN-NA

Circuit-breakers, disconnect switches
up to 1200 A

		For use with	Part no. Article no. when ordered separately	Price see price list	Std. pack
CSA only					
Main switch assembly kit					
Equipment supplied: • Rotary door-coupling handle • NZM...-XV4 extension shaft • External warning plate/designation label in German/English • Black and yellow flash For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered → 68 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 N1	NZM1-XHB 266626	1 off
			NZM2 N2	NZM2-XHB 266627	
			NZM3 N3	NZM3-XHB 266628	
			NZM4 N4	NZM4-XHB 271779	
With red door coupling rotary handle for using switch as Emergency-Stop device according to IEC/EN 602041					
	Lockable in 0 position on handle. Lockable door, locking facility on circuit-breaker in 0 position.	—	NZM1 N1	NZM1-XHBR 266632	
			NZM2 N2	NZM2-XHBR 266633	
			NZM3 N3	NZM3-XHBR 266634	
			NZM4 N4	NZM4-XHBR 271842	
Main switch assembly kit for side panel mounting					
Actuation of the switch on the control panel side wall					
Switch mounting on mounting plate					
Equipment supplied: • Door coupling rotary handle • NZM...-XV4 extension shaft • External warning plate/designation label in German/English • Black and yellow flash For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered → 68 Other external warning plates/designation labels can be clipped on.					
Standard, black/grey					
	Can be locked in 0 position, with adequate modification also in I position.	For operation on the left	NZM1 N1	NZM1-XS-L 266641	1 off
			NZM2 N2	NZM2-XS-L 266642	
			NZM3 N3	NZM3-XS-L 266643	
			NZM4 N4	NZM4-XS-L 289806	
		For operation on the right	NZM1 N1	NZM1-XS-R 266644	
			NZM2 PN2, N2	NZM2-XS-R 266645	
			NZM3 N3	NZM3-XS-R 266646	
			NZM4 N4	NZM4-XS-R 289807	
Red-yellow for Emergency-Stop					
	Lockable in 0 position on handle.	For operation on the left	NZM1 N1	NZM1-XSR-L 266653	
			NZM2 N2	NZM2-XSR-L 266654	
			NZM3 N3	NZM3-XSR-L 266655	
			NZM4 N4	NZM4-XSR-L 289808	
		For operation on the right	NZM1 N1	NZM1-XSR-R 266656	
			NZM2 N2	NZM2-XSR-R 266657	
			NZM3 N3	NZM3-XSR-R 266658	
			NZM4 N4	NZM4-XSR-R 289809	

Moeller SK1230-1157EN-NA

	For use with	Part no. Article no. when ordered separately	Price see price list	Std. pack	
Main switch assembly kit for side wall installation Actuation of the switch on the control panel door. Mounting the breaker on the control panel side wall Equipment supplied: • Door coupling rotary handle • NZM...-XV4 extension shaft • External warning plate/designation label in German/English • Black and yellow flash For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered → 68 Other external warning plates/designation labels can be clipped on.					
<u>Standard, black/grey</u>					
	Lockable on handle and switch. Can be locked in 0 position, with adequate modification also in I position. Tamperproof with door interlock in closed OFF and ON position.	For operation on the left	NZM1, N1	NZM1-XSF-L 289810	1 off
		NZM2, N2	NZM2-XSF-L 289811		
		NZM3, N3	NZM3-XSF-L 289812		
		NZM4, N4	NZM4-XSF-L 289813		
	For operation on the right	NZM1, N1	NZM1-XSF-R 289814		
		NZM2, N2	NZM2-XSF-R 289815		
		NZM3, N3	NZM3-XSF-R 289816		
		NZM4, N4	NZM4-XSF-R 289817		
<u>Red-yellow for Emergency-Stop</u>					
	Lockable on handle and switch. Lockable in 0 position on handle. Tamperproof with door interlock in closed OFF position.	For operation on the left	NZM1, N1	NZM1-XSRF-L 289818	1 off
		NZM2, N2	NZM2-XSRF-L 289819		
		NZM3, N3	NZM3-XSRF-L 289820		
		NZM4, N4	NZM4-XSRF-L 289821		
	For operation on the right	NZM1, N1	NZM1-XSRF-R 289822		
		NZM2, N2	NZM2-XSRF-R 289823		
		NZM3, N3	NZM3-XSRF-R 289824		
		NZM4, N4	NZM4-XSRF-R 289825		

		For use with	Part no. Article no. when ordered separately	Price see price list	Std. pack
CSA only					
Main switch assembly kit for side panel mounting 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 yellow flash For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered → 68 Other external warning plates/designation labels can be clipped on.					
Standard, black/grey					
	Can be locked in 0 position, with adequate modification also in I position. Narrowest minimum clearance between enclosure side plates of control panel and circuit-breaker is defined by mounting bracket. Extensions cannot be used.	For operation on the left	NZM1 N1	NZM1-XSM-L 266663	1 off
		For operation on the left	NZM2 N2	NZM2-XSM-L 266664	
		For operation on the right	NZM1 N1	NZM1-XSM-R 266665	
		For operation on the right	NZM2 N2	NZM2-XSM-R 266666	
Red-yellow for Emergency-Stop					
	Lockable in 0 position on handle. Narrowest minimum clearance between enclosure side plates of control panel and circuit-breaker is defined by mounting bracket. Extensions cannot be used.	For operation on the left	NZM1 N1	NZM1-XSRM-L 266671	1 off
		For operation on the left	NZM2 N2	NZM2-XSRM-L 266672	
		For operation on the right	NZM1 N1	NZM1-XSRM-R 266673	
		For operation on the right	NZM2 N2	NZM2-XSRM-R 266674	
Add-on plate					
For fitting to the mounting bracket when using N conductor or PE conductor terminals K25, K50, K95 or K150.					
	—	—	NZM1, N1 NZM2, N2	NZM1/2-XZB 266676	1 off

Additional terminal arrangement for side wall operator with mounting bracket

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

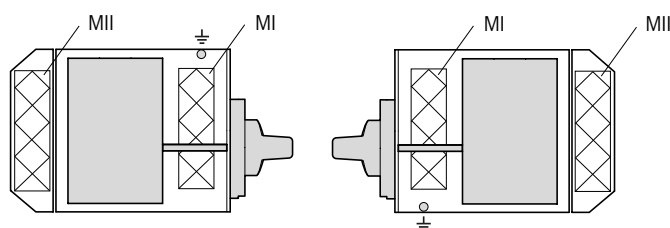
Additional terminals K25, K50, K95, K150

Actuation:

3-pole

For operation on the right

For operation on the left

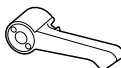
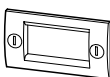
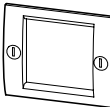
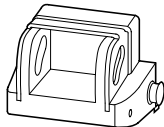
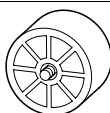
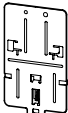
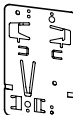


Mounting areas		MI				MII	
Variation options		V1	V2	V3	V4	V1	V2
Maximum number of additional terminals	K25	2 ×	—	—	—	—	—
	K50	—	2 ×	—	—	—	—
	K95	—	—	1 ×	—	1 ×	—
	K150	—	—	—	1 ×	—	1 ×

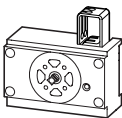
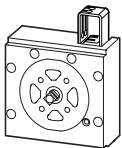
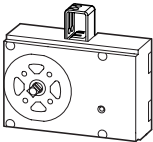
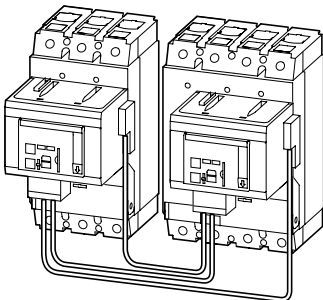
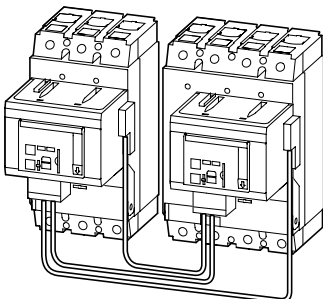
Example: In mounting area MI, variation option 1 allows the K25 additional terminal to be mounted twice.

Moeller SK1230-1157EN-NA

For use with		Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes																															
External warning/marking plate																																				
"Main switch – open in 0 position"																																				
German/English	NZM1, N1 NZM2, N2 NZM3, N3 NZM4, N4	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		ZFS61-NZM7 051089																																		
English		ZFS62-NZM7 065957																																		
French		ZFS63-NZM7 065958																																		
Blank (for engraving or printing)		ZFS60-NZM7 065896																																		
Further languages		ZFS*-NZM7 999978																																		
					External warning plates are available in the following languages: 64 Bulgarian 73 Romanian 65 Danish 74 Russian 66 Finnish 75 Swedish 67 Dutch 76 Serbo-Croatian 68 Italian 77 Spanish 69 Greek 78 Czech 70 Norwegian 79 Turkish 71 Polish 80 Hungarian 72 Portugese 81 Afrikaans To obtain the reference for ordering, insert the language code number into the type reference required Ordering example External warning plate in Finnish: ZFS66-NZM7																															
Lightning symbol																																				
For main switches																																				
small	<table><tr><td>01</td><td>02</td><td>03</td><td>04</td><td>05</td><td>06</td><td>07</td><td>08</td><td>09</td><td>10</td></tr><tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr><tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr></table>	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	NZM1, N1 NZM2, N2	BPF-NZM7 217294		10 off	Included as standard in main switch assembly kit
01		02	03	04	05	06	07	08	09	10																										
11	12	13	14	15	16	17	18	19	20																											
21	22	23	24	25	26	27	28	29	30																											
	NZM3, N3 NZM4, N4	BPF-NZM10 231363																																		
large	<table><tr><td>01</td><td>02</td><td>03</td><td>04</td><td>05</td><td>06</td><td>07</td><td>08</td><td>09</td><td>10</td></tr><tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr><tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr></table>	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				10 off	
01	02	03	04	05	06	07	08	09	10																											
11	12	13	14	15	16	17	18	19	20																											
21	22	23	24	25	26	27	28	29	30																											
																																				

For use with	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
Add-on handle				
Enables switching when the control panel door is open				
	NZM1, N1 NZM2, N2	NZM1/2-XDZ 266621	1 off	Push-fits on to the extension shaft 100 mm free extension shaft required.
	NZM3, N3 NZM4, N4	NZM3/4-XDZ 266622	1 off	
Insulating surrounds				
For toggle lever, rotary handle with rotary drive and remote operator.				
	NZM1 N1	NZM1-XBR 260195	1 off	For oblong cut-out on doors and enclosures with material thicknesses of 1.5 – 5 mm. External warning plate/designation label can be clipped on NZM4-XBR cannot be combined with rotary handle with rotary drive.
	NZM2 N2	NZM2-XBR 260197		
	NZM3 N3	NZM3-XBR 284645		
	NZM4 N4	NZM4-XBR 284646		
Toggle lever locking device				
Off position lockable using up to 3 padlocks (hasp thickness 4 – 8 mm)				
	NZM1 N1	NZM1-XKAV 260199	1 off	Cannot be combined with insulating surround.
	NZM2, N2 NZM3, N3	NZM2/3-XKAV 260201	1 off	
Spacers				
Enables fast and low-priced adjustment of differing frame sizes with/without rotary handle to the same front depth				
	NZM1, N1 NZM2, N2	NZM1/2-XAB 260203	1 set	Grid depth 17.5 mm, M4 thread Type contains 4 off spacer Maximum component capacity: NZM1: 4 units per fixing screw, NZM2: 2 units per fixing screw 2 (NZM1) or 4 (NZM2) fixing screws contained per circuit-breaker
	NZM3 N3 NZM4 N4	NZM3-XAB 260211	1 set	
Clip plate				
Enables snap-fit of the circuit-breaker to a DIN rail				
	NZM1 N1	NZM1-XC35 260213	1 off	For top-hat rail 35 mm
	NZM2 N2	NZM2-XC75 260215	1 off	For top-hat rail 75 mm Not suitable for circuit-breakers with remote operator.

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	For use with	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
Mechanical interlocking of (door coupling) rotary handles					
	NZM1 N1	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. Cannot be combined with rotary handles and door coupling rotary handles for -UL/CSA approved NA switches. In order to establish a mechanical interlock at least 2 interlock modules are required. Possible combinations and interlock variants → engineering Order Bowden cables separately
	NZM2 N2	NZM2-XMV 281582			
	NZM3 N3	NZM3-XMV 281583			
	NZM4 N4	NZM4-XMV 281584			
Bowden cables					
For mechanical interlocking of (door coupling) rotary handles					
	NZM1, N1 NZM2, N2 NZM3, N3 NZM4, N4	NZM-XBZ225 281585 NZM-XBZ600 281586 NZM-XBZ1000 281587		1 off	–
Mechanical interlock for remote operator					
For 2 switches of the same or next frame size with each other. Mounting beside one another.					
	NZM2(-4), N2(-4) +NZM2(-4), N2(-4)	NZM2-XMVR ¹⁾ 104543		1 off	Type contains parts for both switches. Remote operator also required. Maximum switching distance → engineering 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 ¹⁾ 104544			
	NZM3(-4), N3(-4) +NZM3(-4), N3(-4)	NZM3-XMVR ¹⁾ 104545			
	NZM3(-4), N3(-4) +NZM4(-4), N4(-4)	NZM3/4-XMVR ¹⁾ 104546			
	NZM4(-4), N4(-4) +NZM4(-4), N4(-4)	NZM4-XMVR ¹⁾ 104547			
For 2 switches of the same or next frame size with each other. Extra long Bowden cables for mounting in neighbouring control panel fields.					
	NZM2(-4), N2(-4) +NZM2(-4), N2(-4)	NZM2-XMVRL ¹⁾ 104548		1 off	Type contains parts for both switches. Remote operator also required. Maximum switching distance → engineering 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 ¹⁾ 104549			
	NZM3(-4), N3(-4) +NZM3(-4), N3(-4)	NZM3-XMVRL ¹⁾ 104550			
	NZM3(-4), N3(-4) +NZM4(-4), N4(-4)	NZM3/4-XMVRL ¹⁾ 104551			
	NZM4(-4), N4(-4) +NZM4(-4), N4(-4)	NZM4-XMVRL ¹⁾ 104552			

Notes

¹⁾ on request

For use with	Rated control voltage	Part no. Article no. when ordered separately	Price see price list	Std. pack		
	U_s V					
Remote operator For remote switching of circuit-breakers and disconnect switches. ON and OFF switching and resetting by means of 2-wire or 3-wire control. Can be synchronized. Local switching by hand possible Lockable in the 0 position of the remote operator with up to 3 padlocks (hasp thickness: 4 – 8 mm)						
	NZM2 N2	110 – 130 V 50/60 Hz	NZM2-XR110-130AC 259830	1 off		
		208 – 240 V 50/60 Hz	NZM2-XR208-240AC 259832			
		380 – 440 V 50/60 Hz	NZM2-XR380-440AC ¹⁾ 259834			
		24 – 30 V DC	NZM2-XR24-30DC 259836			
		110 – 130 V DC	NZM2-XR110-130DC 259840			
		220 – 250 V DC	NZM2-XR220-250DC 259842			
	NZM3 N3	110 – 130 V 50/60 Hz	NZM3-XR110-130AC 259848			
		208 – 240 V 50/60 Hz	NZM3-XR208-240AC 259850			
		380 – 440 V 50/60 Hz	NZM3-XR380-440AC ¹⁾ 259852			
		24 – 30 V DC	NZM3-XR24-30DC 259854			
		110 – 130 V DC	NZM3-XR110-130DC 259858			
		220 – 250 V DC	NZM3-XR220-250DC 259860			
	NZM4 N4	48 – 60 V 50/60 Hz	NZM4-XR48-60AC 266683			
		110 – 130 V 50/60 Hz	NZM4-XR110-130AC 266684			
		208 – 240 V 50/60 Hz	NZM4-XR208-240AC 266685			
		380 – 440 V 50/60 Hz	NZM4-XR380-440AC ¹⁾ 266686			
		24 – 30 V DC	NZM4-XR24-30DC 266691			
		48 – 60 V DC	NZM4-XR48-60DC 266692			
		110 – 130 V DC	NZM4-XR110-130DC 266693			
		220 – 250 V DC	NZM4-XR220-250DC 266694			
	Clamp terminal springloaded clamp Control circuit terminal springloaded terminals					
	NZM...-XR...	–	NZM-XRC 266696			1 off

Notes

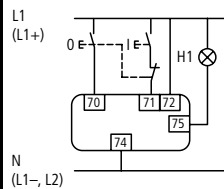
¹⁾ Not UL/CSA approved.

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Notes

A standard auxiliary contact (HIN) for the switch position detection is supplied.

3-wire control



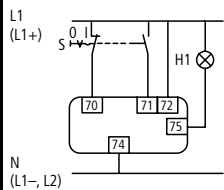
Terminal 70/71:

Please note during engineering:

Full current flows through the contact during make and break!

RMQ series contact elements can be used for the
NZM2(3,4)-XR... remote operators.

2-wire control



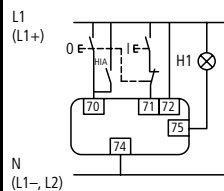
Terminal 75:

Ready for activation signal after the cover is closed and
not locked.

AC-15: 400 V; 2 A

DC-13: 220 V; 0.2 A

3-wire control with automatic reset to the OFF position after the switch has tripped

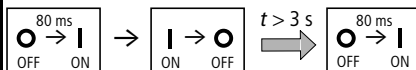


Switching cycle:

NZM2-XR



NZM3-XR

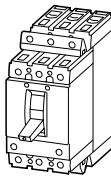
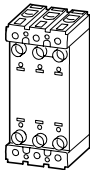
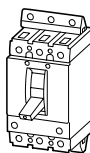


NZM4-XR

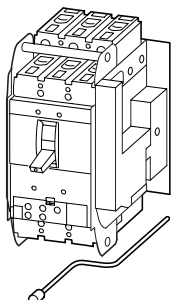
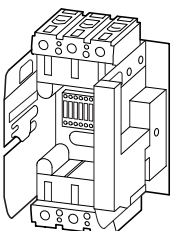
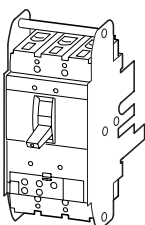


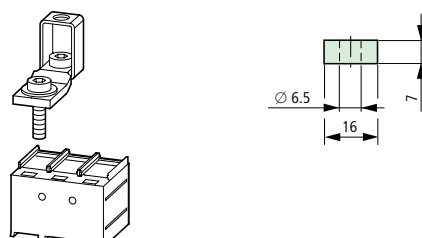
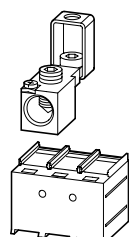
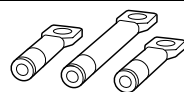
The time interval between OFF and ON is 3 seconds.

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

For use with	Number of poles	Part no. Article no. when ordered with basic unit	Price see price list	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes	
Plug-in units								
For circuit-breakers NZM and disconnect switches N not UL/CSA approved								
Plug-in adapter elements								
Complete								
Only in combination with circuit-breaker								
	NZM2 N2	3 pole	+NZM2-XSV 266697			1 off	<i>I</i> _{nmax.} at: 20 °C: 250 A 40 °C: 230 A (NZM...2-...) 250 A (NZM...2-E...) Mounting position: vertical, 90° right, 90° left Order control circuit plug unit separately!	
Sockets								
e.g. for reserved slots								
Retrofit of circuit-breaker with plug-in module.								
	NZM2 N2	3 pole		NZM2-XSVS 266699		1 off		
Removable module								
Fits socket base								
Only in combination with circuit-breaker								
	NZM2 N2	3 pole	+NZM2-XSVE 266701			1 off		
Control circuit plug unit								
	NZM2 N2	for auxiliary contact, shunt/undervoltage		NZM2-XSVHI 266705		1 off	–	
	NZM2 N2	for remote operator		NZM2-XSVR 266706		1 off	–	

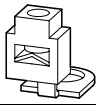
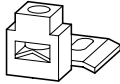
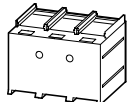
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For use with	Number of poles	Part no. Article no. when ordered with basic unit	Price see price list	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
Withdrawable unit with control circuit plug unit							
For circuit-breakers NZM and disconnect switches N not UL/CSA approved							
Withdrawable unit with auxiliary plug-in adapter							
Complete Only in combination with circuit-breaker							
	NZM3 N3	3 pole	+NZM3-XAV 266707			1 off	<i>I</i> _{nmax.} at: 20 °C: 605 A (NZM3), 1600 A (NZM4) 40 °C: 550 A (NZM3), 1500 A (NZM4) Mounting position: NZM3: vertical, 90 ° left NZM4: vertical, 3 positions Connected, test, disconnected The 3 positions are indicated mechanically. Additionally, auxiliary contacts are use for remote signalling. An optional M22-(C)K01 N/C contact or M22-(C)K10 N/O contact per position. Also see the RMQ-Titan control circuit device range.
	NZM4 N4	3 pole	+NZM4-XAV 266709				
Socket base e.g. for reserved slots Retrofit of circuit-breaker with withdrawable carrier.							
	NZM3 N3	3 pole		NZM3-XAVS 266711		1 off	All connections of auxiliary switches (HIA, HIN, HIV) and undervoltage and shunt releases to the control circuit plug units are already present. Cannot be combined with NZM4/NZM14 (NZM4-XSAS14-...) or N(ZM)4/N(ZM)12 adapter kits.
	NZM4 N4	3 pole		NZM4-XAVS 266713			
Withdrawable carrier Not UL/CSA approved.							
	NZM3 N3	3 pole	+NZM3-XAVE 266715			1 off	
	NZM4 N4	3 pole	+NZM4-XAVE 266717				

	Max. cable connection	For use with		Terminal capacities Type of conductor	Terminal capacities mm ²	AWG/kcmil
Box terminal						
Standard equipment		NZM1, N(S)1	Three pole	Cu cable	1 × 10 – 70 ¹⁾ 2 × 6 – 25	1 × 8 – 2/0
Screw connection						
		NZM1, N(S)1	Three pole	Copper cable lugs Aluminium cable lugs	1 × 10 – 70 2 × 6 – 25 1 × 10 – 35 2 × 10 – 35	1 × 8 – 2/0
Tunnel terminal						
	– –	NZM1, N(S)1	Three pole	Copper cable ☉ ☉ Al cable ☉ ☉	1 × 16 – 95	1 × 6 – 3/0
Connection on rear not UL/CSA approved						
	– –	NZM1, N(S)1	Three pole	Copper cable lugs	1 × 2.5 – 25 2 × 2.5 – 25 1 × 10 – 35 2 × 10 – 35	
Notes						
¹⁾ Up to 240 mm ² can be connected depending on the cable manufacturer.						

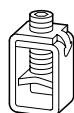
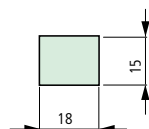
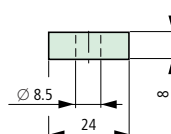
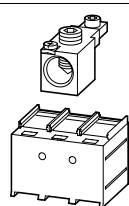
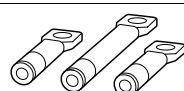
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Terminal capacities Cu strip (number of segments × width × segment thickness) mm	Copper busbar width × thickness mm	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
2 × 9 × 0.8		NZM1-XKC 260015		1 off	Standard connection with all switches NZM1, and N(S)1. Conversion kit for circuit-breaker with screw connection. Type contains parts for a 3 pole switch side. Fitted within the switch housing
	min. 12 × 5	NZM1-XKS 260019		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Fitted outside the switch housing Mounting of the cover NZM1-XKSA obligatory (supplied).
		NZM1-XKA 266730		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. A standard with control circuit terminal for 1 × 0.75 – 2.5 mm ² (18 – 14 AWG) or 2 × 0.75 – 1.5 mm ² (18 – 14 AWG) copper conductors. Fitted outside the switch housing Use with flexible and highly flexible conductors ferrules. Maximum specified cross-section can only be connected when stranded and without ferrules. Mounting of the cover NZM1-XKSA obligatory (supplied).
	min. 12 × 5 max. 16 × 5	NZM1-XKR 266734		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers.

	Max. cable connection	For use with		Terminal capacities	Terminal capacities	AWG/kcmil
				Type of conductor	mm ²	
Control circuit terminal						
	—	NZM1, N(S)1	Three- and four-pole	Screw connection	1 × 0.75 – 2.5 2 × 0.75 – 1.5	1 × 18 – 14 2 × 18 – 16
	—			Box terminal		
Cover						
	—	NZM1, N(S)1	3 pole			
	—					
Connection cover, knockout						
For box terminals						
	—	NZM1, N1	3 pole			
		NZM1, N1				
IP2X protection against contact with a finger						
For box terminals						
	—	NZM1, N1	3 pole			
		NZM1, N1				
For cover NZM1-XKSA or NZM1...(C)NA, N(S)1...NA						
	—	NZM1, NS1	3 pole			

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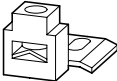
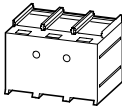
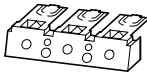
Terminal capacities Cu strip (number of segments × width × segment thickness) mm	Copper busbar width × thickness mm	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
		NZM1-XSTS 260150		1 off	Type contains parts for two terminal locations located at top or bottom for 3 pole circuit-breakers. Included as standard with tunnel terminal Degree of protection IP1X NZM-XSTK cannot be combined with NZM1-XIPK IP2X protection against contact with a finger. Height or thickness of the control terminals: NZM-XSTK = 2 mm NZM-XSTS = 2 mm
		NZM-XSTK 266739		1 off	
		NZM1-XKSA 260021		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Protection against direct contact where cable lugs, busbars or tunnel terminals are used Contained in kit with tunnel terminals or screw connection terminals. Degree of protection IP1X on the connection side when using insulated conductor material.
		NZM1-XKSFA 100780		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Enhancement of the protection against direct contact (simplified protection against contact with a finger). Cannot be combined with NZM-XSTK control circuit terminal.
		NZM1-XIPK 266744		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Enhancement of the protection against direct contact to IP2X. Protection when reaching into the cable connection area with the connection of cables in the box terminal. Cannot be combined with NZM-XSTK control circuit terminal.
		NZM1-XIPA 266748		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Enhancement of the protection against direct contact to IP2X.

Max. cable connection area		For use with	Terminal capacities		AWG/kcmil	Terminal capacities Cu strip (number of segments × width × segment thickness) mm
			Type of conductor	Terminal capacities mm ²		
Box terminal						
		NZM2, N(S)2	Three pole	Copper conductors Cu cable	1 × 4 – 185 2 × 4 – 70	1 × 11 – 350 ≥ 2 × 9 × 0.8
Screw connection						
		NZM2, N(S)2	Three pole	Copper cable lugs Aluminium cable lugs.	1 × 4 – 185 2 × 4 – 70 1 × 10 – 50 2 × 10 – 50	1 × 11 – 3/0 ≥ 2 × 16 × 0.8
Tunnel terminal						
	–	NZM2, N(S)2	Three pole	Copper cable ☉ Copper cable ☉	1 × 16 – 185 ¹⁾ 1 × 6 – 350 –	–
Connection on rear						
not UL/CSA approved When using cable lugs without NZM3-XKSA cover, they must be insulated.						
	– – – –	NZM2, N2	Three pole	Copper cable lugs Aluminium cable lugs.	1 × 4 – 185 2 × 4 – 70 1 × 10 – 50 2 × 10 – 50	min. 2 × 16 × 0.8 max. 6 × 24 × 0.5

Notes¹⁾ Up to 240 mm² can be connected depending on the cable manufacturer.

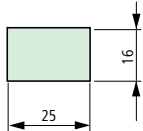
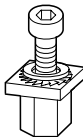
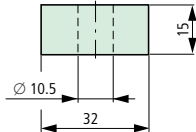
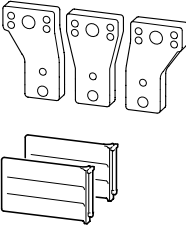
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Copper busbar width × thickness mm	Part no. Article no. when ordered with basic unit	Price see price list	Part no. Article no. when ordered separately	Price see price list	Std.	Notes
	+NZM2-160-XKCO 262218		NZM2-160-XKC 262240		1 off	Type suffix and type contain parts for a circuit-breaker side at top or bottom for 3 pole circuit-breakers. Conversion kit for circuit-breaker with screw connection. Fitted within the switch housing O = for fitting at the top U = for fitting at the bottom $U_e \geq 525 \text{ V AC}$: • Use cover NZM2-XKSA.
	+NZM2-160-XKCU 262223					
	+NZM2-250-XKCO 262242		NZM2-250-XKC 262244			
	+NZM2-250-XKCU 262243					
$\geq 16 \times 5$			NZM2-XKS 260030		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Standard connection with all NZM2 and N2 circuit-breakers. Conversion kit for circuit-breaker with box terminal. Use special cable lug narrow version, → 101 Fitted within the switch housing If a busbar is used its insulation (400 mm) e.g. by heat-shrink and a shroud NZM2-XKSA are necessary. $U_e \geq 525 \text{ V AC}$: • On all other connection types a shroud NZM2-XKSA should be used.
			NZM2-XKA 271457		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. A standard with control circuit terminal for $1 \times 0.75 - 2.5 \text{ mm}^2$ (18 – 14 AWG) or $2 \times 0.75 - 1.5 \text{ mm}^2$ (18 – 16 AWG) copper conductors. Fitted outside the switch housing Use with flexible and highly flexible conductors ferrules. Maximum specified cross-section can only be connected when stranded and without ferrules. Mounting of the cover NZM2-XKSA obligatory (supplied).
Min. 16×5 Max. 20×5	+NZM2-XKRO 266763		NZM2-XKR 266765		1 off	Type suffix and type contain parts for a circuit-breaker side at top or bottom for 3 pole circuit-breakers. O = for fitting at the top U = for fitting at the bottom
	+NZM2-XKRU 266764					

	Max. cable connection area		For use with		Terminal capacities Type of conductor	Terminal capacities mm ²	AWG/kcmil
Control circuit terminal							
	—	—	NZM2, N(S)2	Three pole	Screw connection	1 × 0.75 – 2.5 2 × 0.75 – 1.5	1 × 18 – 14 2 × 18 – 16
	—	—	NZM2, N(S)2	Three pole	Box terminal	1 × 0.75 – 2.5 2 × 0.75 – 1.5	1 × 18 – 14 2 × 18 – 16
Cover							
	—	—	NZM2, NS2	3 pole			
Connection cover, knockout							
	—	—	NZM2, N(S)2	3 pole			
IP2X protection against							
For box terminals							
	—		NZM2, N(S)2	3 pole			
For covers NZM2-XKSA or NZM2 or NZM2...(C)NA and N(S)2...NA							
	—		NZM2, N(S)2	3-pole			
Copper cable lug							
not UL/CSA approved When using cable lugs without NZM2-XKSA cover, they must be insulated.							
	—	95 mm ²	NZM2, N2	Three pole			
	—	120 mm ²					
	—	150 mm ²					
	—	185 mm ²					

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Terminal capacities Cu strip (number of segments × width × segment thickness) mm	Copper busbar width × thickness mm	Part no. Article no. when ordered with basic unit	Price see price list	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
				NZM2-XSTS 260156		1 off	Type contains parts for two terminal locations located at top or bottom for 3 pole circuit-breakers. Included as standard with tunnel terminal Degree of protection IP1X
				NZM-XSTK 266739		1 off	NZM-XSTK cannot be combined with NZM2-XIPK IP2X protection against contact with a finger. Height or thickness of the control circuit terminals: NZM-XSTK = 2 mm NZM-XSTS = 2 mm
				NZM2-XKSA 260038		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Protection against direct contact where cable lugs, busbars or tunnel terminals are used Degree of protection IP1X on the connection side when using insulated conductor material.
				NZM2-XKSFA 104640		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Enhancement of the protection against direct contact (simplified protection against contact with a finger).
				NZM2-XIPK 266773		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Enhancement of the protection against direct contact to IP2X. Protection when reaching into the cable connection area with the connection of cables in the box terminal. With 2 conductors minimum cross-section 25 mm ² or AWG4. Cannot be combined with NZM-XSTK control circuit terminal.
				NZM2-XIPA 266777		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Enhancement of the protection against direct contact to IP2X. When mounting NZM2-...(C)NA or NZM...-NA the following applies: With 2 conductors minimum cross-section 25 mm ² or AWG4.
				KS95-NZM7 059775		3 off	Type contains a cable lug for 3 pole switches. Special cable lug, narrow style
				KS120-NZM7 059776			
				KS150-NZM7 059777			
				NZM2-XKS185 260032			

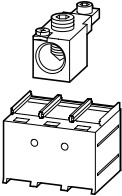
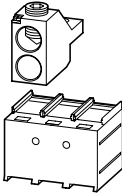
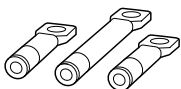
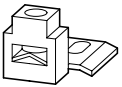
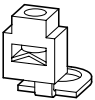
	Max. cable connection	Rated current ¹⁾ I_n A	For use with		Terminal capacities Type of conductor	Terminal capacities mm ²	AWG/kcmil
Box terminal							
		Max. 500 400 UL/CSA Max. 630	NZM3, N(S)3	Three pole	Copper conductors Cu cable	1 × 35 – 240 2 × 16 – 120	1 × 2 – 500
Screw connection							
		Max. 630 Max. 400	NZM3, N(S)3	Three pole	Copper cable lugs Aluminium cable lugs	1 × 16 – 240 2 × 16 – 240 1 × 10 – 120 2 × 10 – 120	1 × 4 – 350
Connection width extension							
		Max. 630	NZM3, N(S)3	Three pole	Copper cable lugs Aluminium cable lugs	2 × 300	2 × 500

Notes

¹⁾ The following applies for the rated current: The values have been determined conform to IEC 60947 (switchgear standard) and generally relate to the max. defined cross-sections and are intended for the purpose of orientation. The engineering standards which apply in each case must be observed.

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Terminal capacities Cu strip (number of segments × width × segment thickness) mm	Copper busbar width × thickness mm	Part no. Article no. when ordered with basic unit	Price see price list	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
min. 6 × 16 × 0.8 max. 20 × 24 × 0.5 max. 11 × 21 × 1		+NZM3-XKCO 262246		NZM3-XKC 260042		1 off	Type suffix and type contain parts for a circuit-breaker side at top or bottom for 3 pole circuit-breakers. Conversion kit for circuit-breaker with screw connection. Fitted within the switch housing O = for fitting at the top U = for fitting at the bottom $U_e \geq 525$ V AC: • Use NZM3-XKSA cover. Use with flexible and highly flexible conductors ferrules, note the max. terminal capacity when using ferrules.
10 × 24 × 1.0 + 5 × 24 × 1.0 or (2 ×) 8 × 24 × 1.0		+NZM3-XKCU 262245					
10 × 32 × 1.0 + 5 × 32 × 1.0	30 × 10 + 30 × 5			NZM3-XKS 260039		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Standard connection with all NZM3, and N3 circuit-breakers. Conversion kit for circuit-breaker with box terminal. Use special cable lugs narrow version, → 73 Fitted within the switch housing When a busbar is used insulation is required (400 mm) e.g. using heat shrink and a shroud NZM3-XKSA. $U_e \geq 525$ V AC: A shroud NZM3-XKSA must be used with all other connection types.
(2 ×) 10 × 50 × 1.0	(2 ×) 10 × 50			NZM3-XKV70 100514		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Central holes, e.g. for up to 2 cable lugs per phase. Can be fitted to circuit-breaker with screw termination Phase isolator supplied. Distance between pole centres with NZM3-XKV70: 70 mm Drilled hole available for control cable. Terminals NZM3-XK300 and NZM3-XK22X21 can be mounted.

Max. cable connection			Rated current ¹⁾	For use with	Terminal capacities			
			I_n A		Type of conductor	Terminal capacities	AWG/kcmil	
						mm ²		
Terminals for connection width extension								
not UL/CSA approved			Max. 500	NZM3, N3	3-pole	Cu cable	1 × 120 – 300	
				NZM3, N3				
			Max. 630	NZM3, N3	3-pole			
Tunnel terminal								
	–		Max. 350	NZM3, N(S)3	Three pole	Copper cable ☉ ☿ Al cable ☉ ☿	1 × 16 – 185 ²⁾	1 × 6 – 350
	–						–	–
	–		Max. 630				1 × 50 – 240	1 × 0 – 500
	–						2 × 50 – 240	2 × 0 – 500
Connection on rear								
not UL/CSA approved			Max. 630	NZM3, N3	Three pole	Copper conductors Cu cable	1 × 16 – 240	
							2 × 16 – 240	
			Max. 500			Al conductors Al cable	1 × 10 – 120	
							2 × 10 – 120	
Control circuit terminal								
	–		–	NZM3, N(S)3	Three pole	Box terminal	1 × 0.75 – 2.5	1 × 18 – 14
						2 × 0.75 – 1.5	2 × 18 – 16	
	–		–	NZM3, N(S)3		Screw connection		

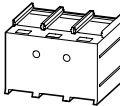
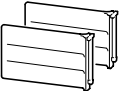
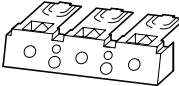
Notes

¹⁾ The following applies for the rated current: The values have been determined conform to IEC 60947 (switchgear standard) and generally relate to the max. defined cross-sections and are intended for the purpose of orientation.
The engineering standards which apply in each case must be observed.

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

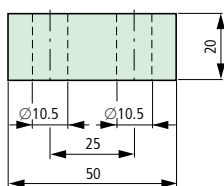
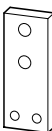
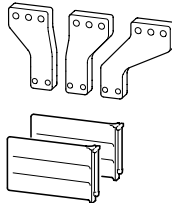
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Terminal capacities Cu strip (number of segments × width × segment thickness) mm	Copper busbar width × mm	Part no. Article no. when ordered with basic unit	Price see price list	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
				NZM3-XK300 100782		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Only in conjunction with connection width extension NZM3-XKV70. Use with flexible and highly flexible conductors ferrules. Standard with control circuit terminal for 1 × 0.75 – 2.5 mm ² or 2 × 0.75 – 1.5 mm ² copper conductors.
22 × 21 × 1.0				NZM3-XK22X21 100784			
				NZM3-XKA1 271459		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. A standard with control circuit terminal for 1 × 0.75 – 2.5 mm ² (18 – 14 AWG) or 2 × 0.75 – 1.5 mm ² (18 – 16 AWG) copper conductors. Fitted outside the switch housing. Use with flexible and highly flexible conductors ferrules. Maximum specified cross-section can only be connected when stranded and without ferrules. Mounting of the cover NZM3-XKSA obligatory (supplied).
				NZM3-XKA2 271461			
		+NZM3-XKRO 266790		NZM3-XKR 266792		1 off	Type suffix and type contain parts for a circuit-breaker side at top or bottom for 3 pole circuit-breakers. O = for fitting at the top U = for fitting at the bottom
		+NZM3-XKRU 266791					
min. 6 × 16 × 0.8 max. 10 × 32 × 1.0	Min. 20 × 5 Max. 30 – 10						
				NZM-XSTK 266739		1 off	Type contains parts for two terminal locations located at top or bottom for 3 pole circuit-breakers. Included as standard with tunnel terminal Degree of protection IP1X. NZM-XSTK cannot be combined with NZM1-XIPK IP2X protection against contact with a finger. Height or thickness of the control terminals: NZM-XSTK = 2 mm NZM-XSTS = 2 mm
				NZM3/4-XSTS 266797		1 off	

		Max. cable connection area	For use with	Terminal capacities		AWG/kcmil	Terminal capacities		Copper busbar width × thickness mm
				Type of conductor	Terminal capacities mm ²		Cu strip (number of segments × width × segment thickness) mm		
Cover									
	—		NZM3, N(S)3	3 pole					
	—								
Phase isolator									
	—		NZM3, N(S)3	3 pole					
	—								
Connection cover, knockout									
	—		NZM3, N(S)3	3 pole					
	—								
IP2X protection against contact with a finger									
For box terminals									
			NZM3, N3	3 pole					
For cover NZM3-XKSA or NZM3...(C)NA and N(S)3...NA									
			NZM3, N(S)3	3 pole					
Copper cable lug									
not UL/CSA approved									
When using cable lugs without NZM3-XKSA cover, they must be insulated.									
	185 mm ²		NZM3, N3 NZM4, N4	Three pole					
	240 mm ²								

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Part no. Article no. when ordered with basic unit	Price see price list	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
		NZM3-XKSA 260045		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Insulation/protection against direct contact where cable lugs, busbars or tunnel terminals are used. Included in set with tunnel terminals Degree of protection IP1X on the connection side when using insulated conductor material.
		NZM3-XKP 100512		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Included with the connection width extension. Cannot be combined with the NZM3-XKA tunnel terminal, NZM3-XKR connection on rear. Insulation protection where cable lugs, busbars or flat conductor.
		NZM3-XKSFA 104642		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Enhancement of the protection against direct contact to (simplified protection against contact with a finger).
		NZM3-XIPK 266804		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Enhancement of the protection against direct contact to IP2X. Protection when reaching into the cable connection area with the connection of cables in the box terminal. With 2 conductors minimum cross-section 70 mm² 00 or AW00. Cannot be combined with NZM-XSTK control circuit terminal.
		NZM3-XIPA 266808		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Enhancement of the protection against direct contact to IP2X. When mounting NZM3-...(C)NA or N3...-NA the following applies: With 2 conductors minimum cross-section 70 mm² 00 or AW00.
		NZM3-XKS240 260041		3 off	Type contains a cable lug for 3 pole switches. Special cable lug, narrow style
		NZM3-XKS185 260040		3 off	

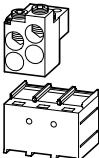
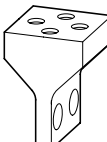
Max. cable connection area		Rated current ¹⁾	For use with	Terminal capacities			
		I_n		Type of conductor	Terminal capacities	AWG/kcmil	
Not UL/CSA approved		A			mm ²		
Screw connection							
Standard equipment							
	Double hole	Max. 1250	NZM4 N4 N(S)4	Three pole	Cu cable lugs	1 × 120 – 185 4 × 50 – 185	1 × 250 – 350 4 × 0 – 350
		Max.					
Module plate							
	Single hole	Max. 1250	NZM4, N(S)4	3 pole	Copper cable lugs	1 × 120 – 300 2 × 95 – 300	1 × 250 – 600 2 × 000 – 600
	Double hole	Max. 1400	NZM4, N(S)4	3 pole	Copper cable lugs	2 × 95 – 185 4 × 35 – 185 4 × 50	2 × 000 – 350 4 × 2 – 350 4 × 0
	Double hole	Max. 1250	NZM4, N(S)4	3 pole	Copper cable lugs	2 × 95 – 300	2 × 000 – 600
		Max. 1600					
			NZM4, N(S)4	3 pole	Copper cable lugs Copper cable lugs		
Connection width extension							
		Max. 1600	NZM4, N(S)4	3 pole	Cu cable lugs	4 × 300 6 × 95 – 240	4 × 600 6 × 000 – 500

Notes

¹⁾ The following applies for the rated current: The values have been determined conform to IEC/EN 60947 (switchgear standard) and generally relate to the max. defined cross-sections and are intended for the purpose of orientation. The engineering standards which apply in each case must be observed.

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Terminal capacities		Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
Cu strip (number of segments × width × segment thickness)	Copper busbar width × thickness				
mm	mm				
2 × (10 × 40 × 1.0)	(2 ×) 50 × 10			off	Double hole fitting for M10 screws with 25 mm clearance. Use special cable lug narrow version. $U_e \geq 525$ V or cross-section > 185 mm ² : Use of shroud NZM4-XKSA required.
2 × (10 × 40 × 1.0) 2 × (10 × 50 × 1.0)	(2 ×) 40 × 10 (2 ×) 50 × 10	NZM4-XKM1 266814		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. For M10 screws. Can be enlarged for M12 screws. Use special cable lug narrow version. Can be fitted to circuit-breaker with screw termination Insulation through NZM4-XKSA cover or NZM4-XKP phase separator necessary
		NZM4-XKM2 266820			
		NZM4-XKM2S-1250 284471			Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Insulation through cover NZM4-XKSA or phase isolator NZM4-XKP necessary.
		NZM4-XKM2S-1600 284473			
		NZM4-XKV95 281591		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Five way holes, e.g. for up to 9 cable lugs per phase. Can be fitted to circuit-breaker with screw termination Phase isolator supplied. Distance between pole centres with NZM4-XKV95: 95 mm Installation conditions for current transformer up to 130 mm width with 80 mm busbar width.
		NZM4-XKV110 281593			Distance between pole centres with NZM4-XKV110: 107.5 mm Installation conditions for current transformer up to 135 mm width with 80 mm busbar width. Distance between pole centres with NZM4-XKV120: 122 mm Installation conditions for current transformer up to 164 mm width with 80 mm busbar width. 4 mm drilled holes for control circuit terminal available.

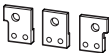
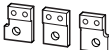
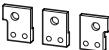
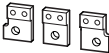
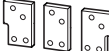
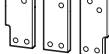
	Max. cable connection area	Rated current ¹⁾ I_n A	For use with	Terminal capacities			
				Type of conductor	Terminal capacities	AWG/kcmil	
					mm ²		
Tunnel terminal							
	–	Max. 1400	NZM4, N(S)4	3 pole	Copper cable ☺ ☹ Al cable ☺ ☹	1 × 50 – 240 4 × 50 – 240 1 × 50 – 240 4 × 50 – 240	1 × 0 – 500 4 × 0 – 500
Connection on rear							
not UL/CSA approved							
	–	Max. 1250	NZM4, N4	Three pole	Copper cable lugs Aluminium cable lugs	1 × 120 – 185 2 × 95 – 185 4 × 35 – 185 1 × 185 2 × 70 – 185 4 × 50 – 185	

Notes

¹⁾ See page 80

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Terminal capacities		Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
Cu strip (number of segments × width × segment thickness) mm	Copper busbar width × thickness mm				
		NZM4-XKA		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. A standard with control circuit terminal for 1 × 0.75 – 2.5 mm ² (18 – 14 AWG) or 2 × 0.75 – 1.5 mm ² (18 – 16 AWG) copper conductors. Can be fitted to circuit-breaker with screw termination Use with flexible and highly flexible conductors ferrules. Mounting of the cover NZM4 -XKSA obligatory (supplied).
		NZM4-XKR 266842		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Can also be retrofitted: NZM4...-XKM... module plate or NZM4-...-XKV... connection width extension

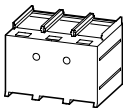
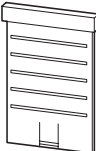
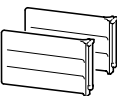
Not UL/CSA approved	Max. cable connection area	Rated current ¹⁾ I_n A	For use with	Terminal capacities				
				Type of conductor	Terminal capacities	AWG/kcmil		
					mm ²			
Adapter set N(ZM)4/N(ZM)12								
	—	Max. 1000	N4	3 pole				
								
	—	Max. 1250	N4	3 pole				
								
	—	Max. 1600	N4	3 pole				
								
	—	Max. 1000	NZM4	3 pole				
								
	—	Max. 1250	NZM4	3 pole				
								
	—	Max. 1600	NZM4	3 pole				
								
								

Notes

¹⁾ The following applies for the rated current: The values have been determined conform to IEC/EN 60947 (switchgear standard) and generally relate to the max. defined cross-sections and are intended for the purpose of orientation. The engineering standards which apply in each case must be observed.

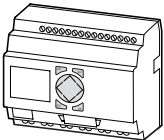
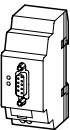
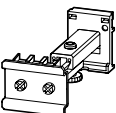
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Terminal capacities		Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
Cu strip (number of segments × width × segment thickness) mm	Copper busbar width × thickness mm				
		N4-XAS12-1000 285609		1 off	Kit for conversion of N(ZM)12 to N(ZM)4. Using the connection lugs of the exchange kit all 3-pole NZM12 or N12 can be adapted to the connection dimensions of the NZM4 or N4, which have been manufactured since 1983. Non-exchangeable are 4-pole base units as well as devices with withdrawable units and remote operators.
		N4-XAS12-1250 285610		1 off	Scope of the exchange 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 Paper drilling template in the assembly instructions (AWA) The exchange kits have identical dimensions to the types N(ZM)12..., which correspond to the types manufactured from 02/97 onwards.
		N4-XAS12-1600 285611		1 off	Special feature: The N(ZM)12-800 manufactured before 02/97 features 10 mm connection lugs instead of the 8 mm connections lugs currently used. With these types the customer must determine the year of manufacture of the device by measuring the thickness of the connection lugs and order the exchange kit N(ZM)4-XAS12-1250.
		NZM4-XAS12-1000 285612		1 off	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-XAS12-1250 285613		1 off	Expansion for devices manufactured before 1983! The exchange kit for switch-disconnector can be used completely here. The adapters will only fit on top on the circuit-breaker with the longer "ZM" version! The devices are about 65 mm longer at the bottom and the lower connection is about 26 mm lower. Accordingly, the adapters are too short for the bottom and the height does not correspond either.
		NZM4-XAS12-1600 285614		1 off	

		Max. cable	For use with		Terminal capacities Type of conductor	Terminal capacities mm ²	AWG/kcmil
Control circuit terminal							
	—		NZM3, N(S)3 NZM4, N(S)4	Three- and four-pole	Screw connection	1 × 0.75 – 2.5 2 × 0.75 – 1.5	1 × 18 – 14 2 × 18 – 16
Cover							
	—		NZM4, N(S)4	3 pole			
	—						
Terminal cover							
	—		NZM4, N4	3 pole			
	—						
Phase isolators							
	—		NZM4 N(S)4	3 pole			
Cable lug							
	not UL/CSA approved						
	185 mm ²		NZM3, N3	3 pole			
240 mm ²		NZM4, N4					

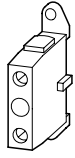
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Terminal capacities Cu strip (number of segments × width × segment thickness) mm	Copper busbar width × thickness mm	Part no. Article no. when ordered separately	Price see price list	Std. pack	Notes
		NZM3/4-XSTS 266797		1 off	Type contains parts for two terminal locations located at top or bottom for 3 pole circuit-breakers. Included as standard with tunnel terminal Degree of protection IP1X NZM-XSTK cannot be combined with NZM3-XIPK or NZM4-XIPK IP2X protection against contact with a finger. Height or thickness of the control circuit terminals: NZM-XSTK = 2 mm NZM-XSTS = 2 mm
		NZM4-XKSA 266846		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Protection against direct contact where cable lugs, busbars, flat conductor terminals or tunnel terminals are used. Contained in kit with module plates, flat conductor terminals and tunnel terminals. Degree of protection IP4X at front, side and rear, on the connection side when using insulated conductor material to IP1X.
		NZM4-XKSFA 292193		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Enhancement of the protection against direct contact to (simplified protection against contact with a finger).
		NZM4-XKP 281595		1 off	Type contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Included with the connection width extension. Cannot be combined with the tunnel terminal NZM4-XKA, connection NZM4-XKR on rear. Insulation protection where cable lugs, busbars, module plates or flat cable terminals are used.
		NZM3-XKS185 260040		3 off	Type contains a cable lug for 3 pole switches. Special cable lug, narrow style
		NZM3-XKS240 260041		3 off	

Description		Part no. Article no.	Price	Std. pack	Notes
Diagnostic and configurator software for NZM and DMI (at the machine)					
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 connection cable. Protection parameters: Online display and characteristic representation, export option to "Moeller CurveSelect" characteristics program. Warning and trip messages: Read of the diagnostics memory even in a no-voltage state. Load currents: Display and trend representation. Recording and export feature to MS-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 suitable for use in conjunction with circuit-breakers having electronic releases. Free-of-charge download of the manual AWB1230-1459 and a demo software at www.moeller.net .
Data Management Interface (DMI Module)					
 Query of diagnostics and operational data, display of currents, motor starter function, parameterization and control of the circuit-breaker with electronic release. Comprehensive remote diagnostic options and remote operation via fieldbus in combination with fieldbus connection. Inclusive NZM-XDMI-CAB connection cable between NZM and DMI (length: 2 m).		NZM-XDMI612			electronic
Expansion unit, networking					
 Fieldbus interface: to PROFIBUS-DPV1 slave. Can be operated with class 1 and class 2 masters. Addresses available: 1 to 126 Fieldbus connection to CANopen Addresses available: 1 to 127 Fieldbus connection to DeviceNet Addresses available: 0 to 63		NZM-XDMI-DPV1		1 off	EASY204-DP.
		EASY221-CO			
		233540			
Switched-mode power supply unit					
- 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			—
Telescopic adapter					
for DMI module For equalization of the mounting depth when rear mounted in CI-K.. enclosures and cabinets.				1 off	—
 With 35 mm top-hat rail IEC/EN 60715, adjustable from 75 – 115 mm. Screw-on and snap fitting.		226161			

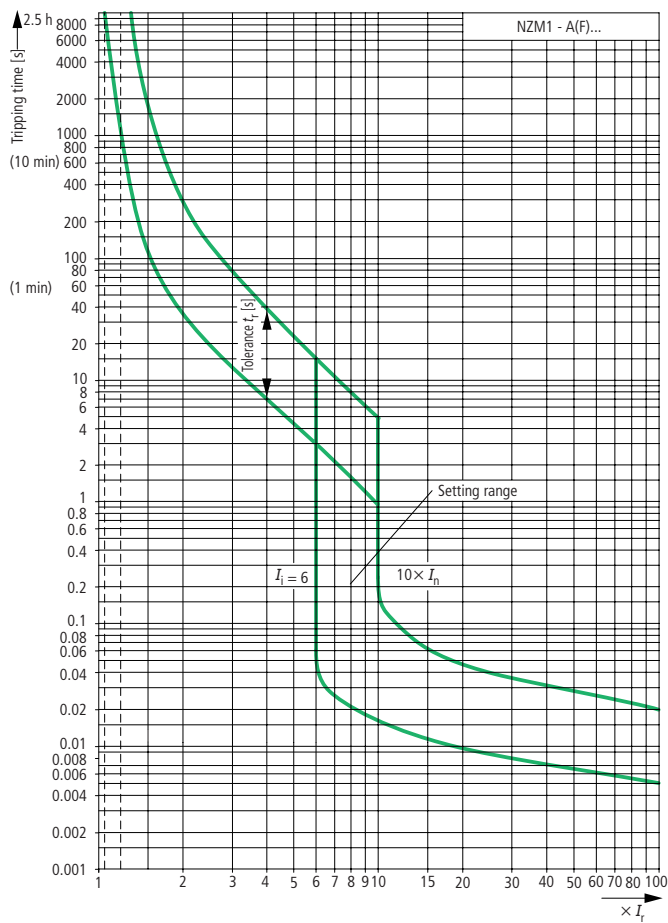
Moeller SK1230-1157EN-NA

Description	Part no. Article no.	Price see price list	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. Please inquire.
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. • Display 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 of 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 circuit-breaker to the PROFIBUS-DP fieldbus, the accessory device NZM-XDMI-612 and the fieldbus interface NZM-XDMI-DPV1 are required.

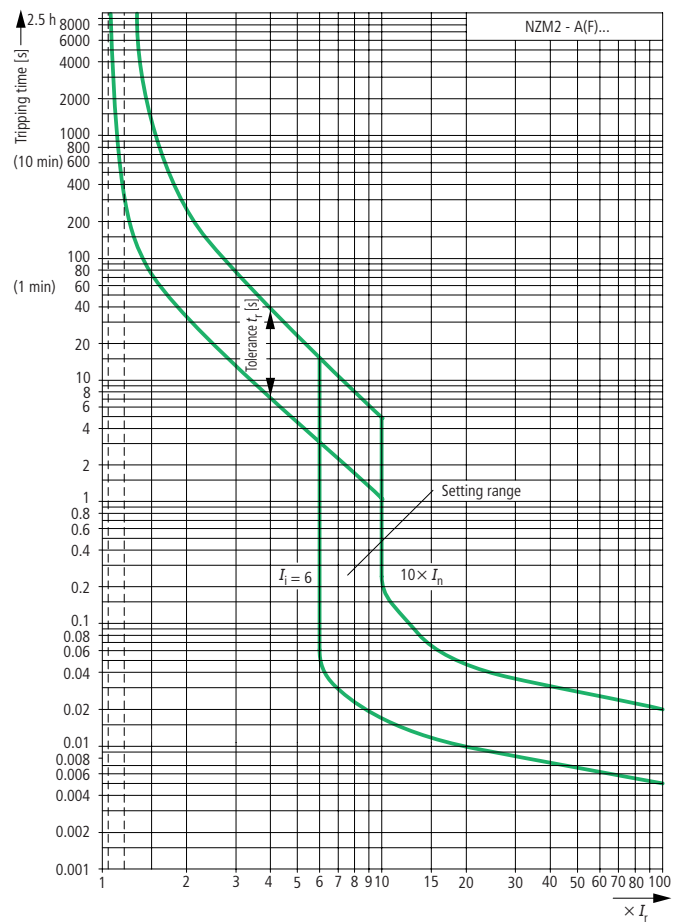
	Rated uninterrupted current I_u A	Terminal capacities mm ²	Part no. Article no. when ordered separately	Price see price list	Std. pack
Additional insulated terminals					
For looping through the neutral and protective conductor 1 pole					
	32	Flexible, 1 × (1.5 – 6)	K10/1 093827		10 off
	63	Flexible, 1 × (6 – 16), stranded, 1 × (16 – 25)	K25/1 096200		
	100	Flexible, 1 × (10 – 35), stranded, 1 × (16 – 50)	K50/1 098573		
	160	Stranded, 1 × (16 – 95)	K95/1N/BR 012336		1 off
	250	Stranded, 1 × (35 – 150), 2 × (16 – 70)	K150/1/BR 014709		
	400	Stranded, 1 × (50 – 240), 2 × (25 – 120)	K240/1/BR 017082		
	630	Stranded, 1 × (240 – 300), 2 × (50 – 240)	K2X240/1/BR 019455		

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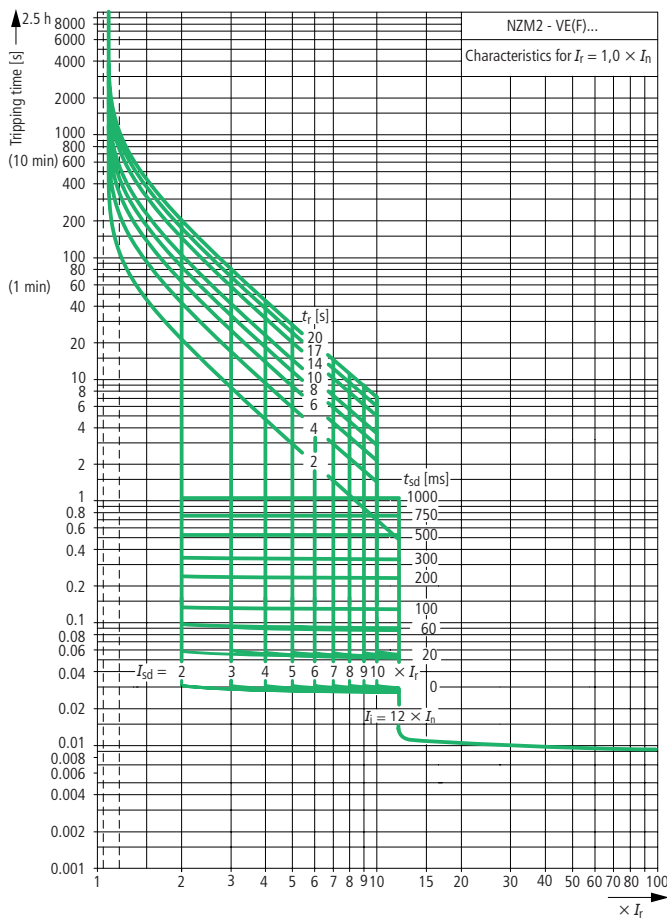
System and line protection with NZM1



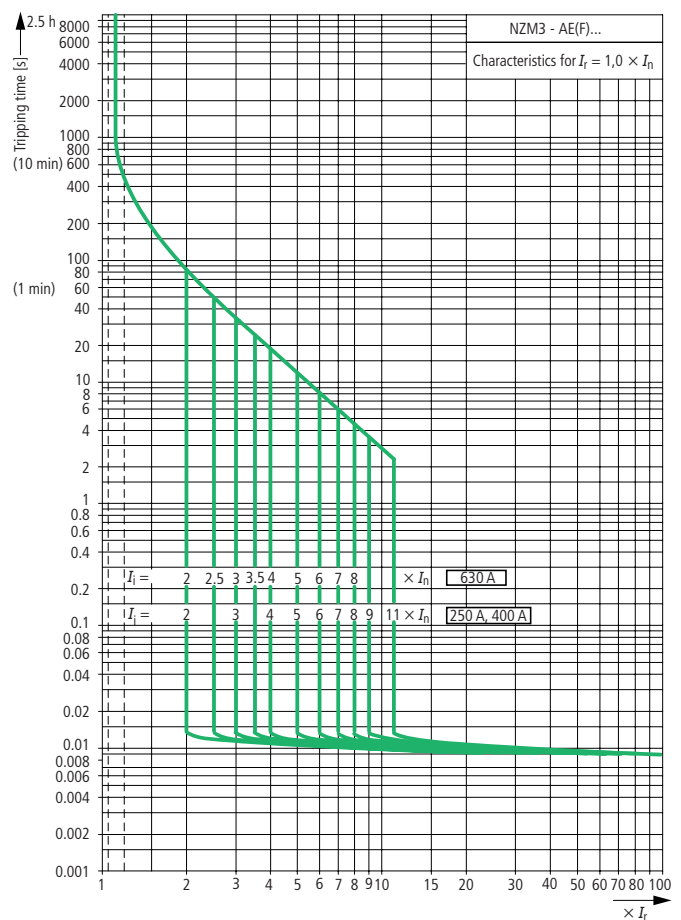
System and line protection with NZM2



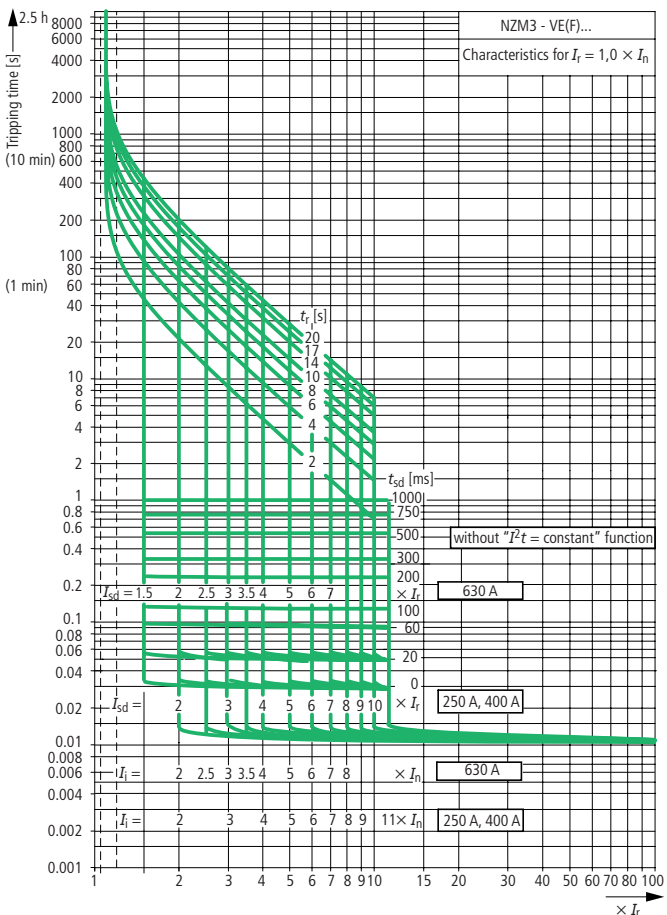
Systems, cable, selectivity and generator protection with NZM2



System and line protection with NZM3

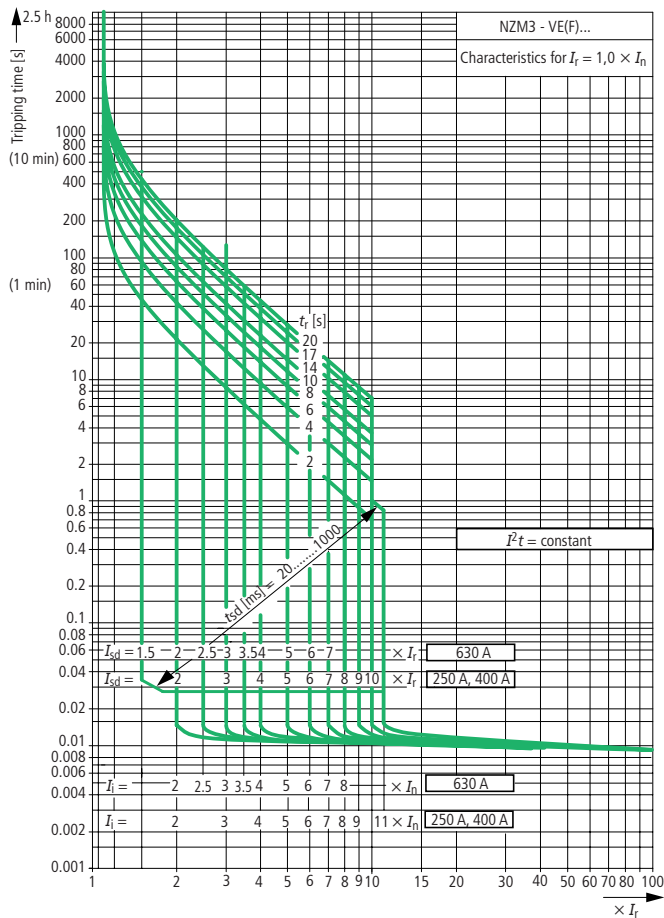


Systems, cable, selectivity and generator protection with NZM3

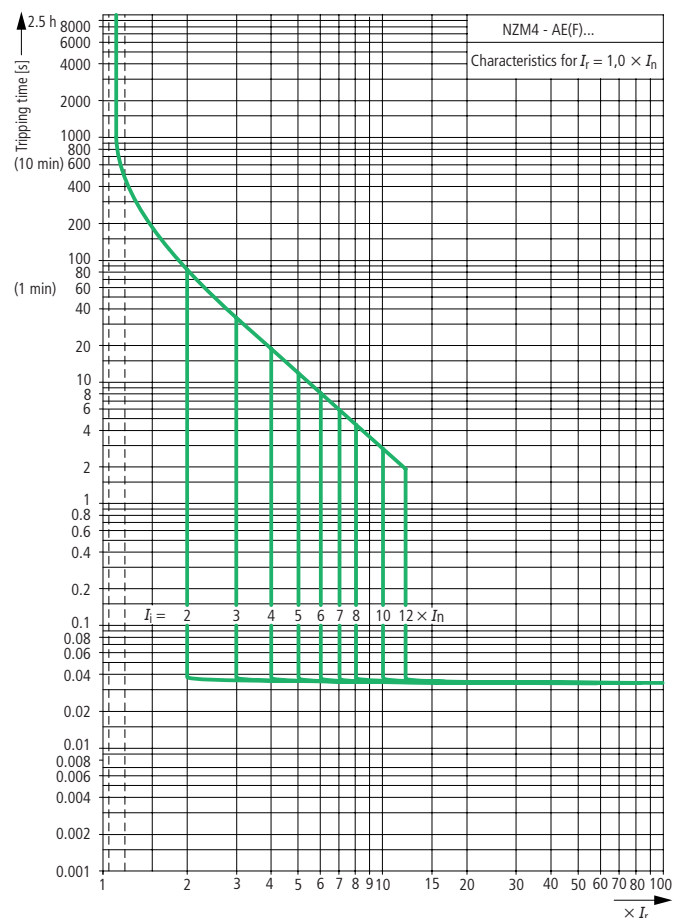


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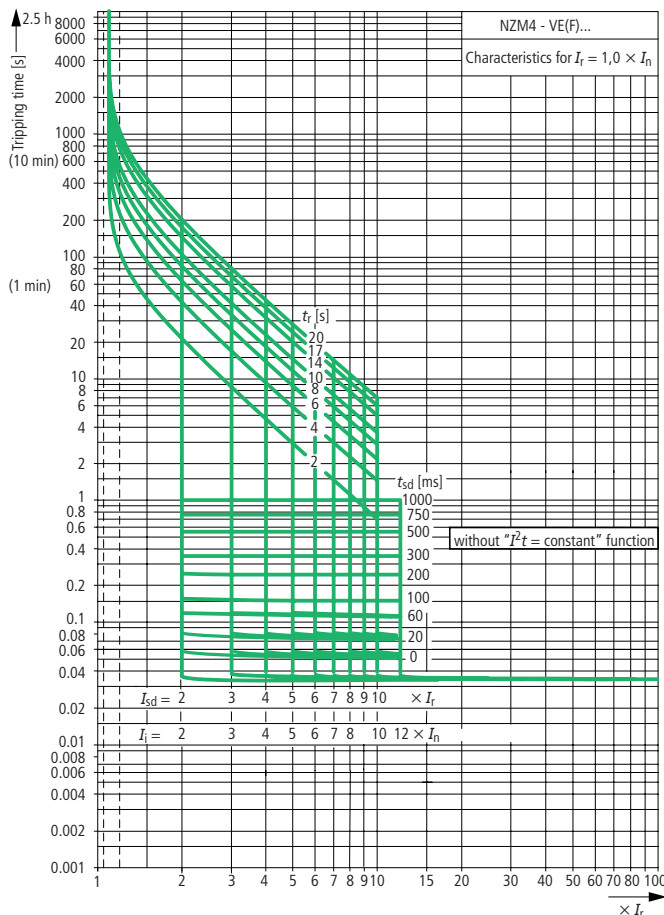
Systems, cable, selectivity and generator protection with NZM3



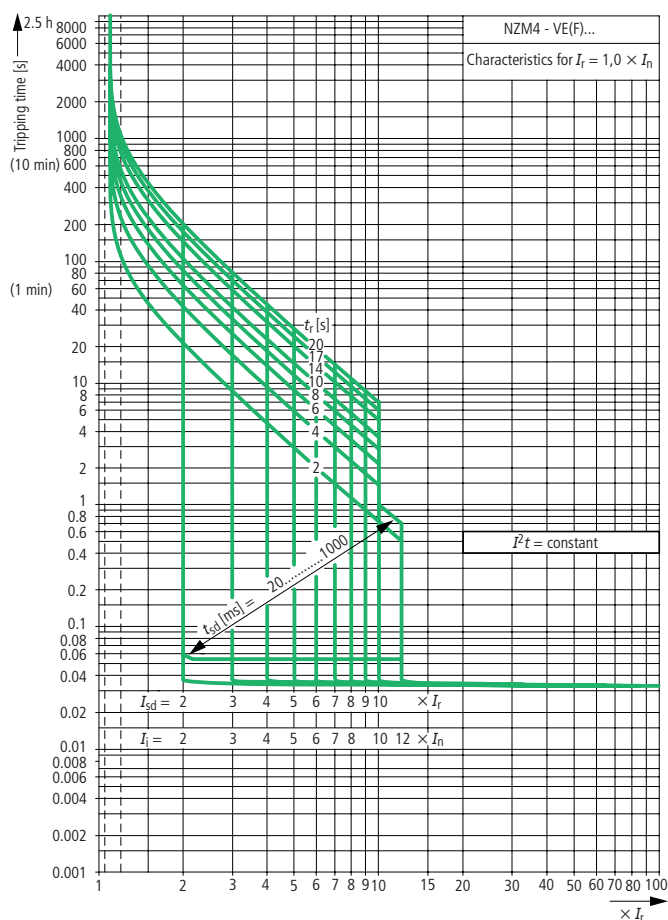
System and line protection with NZM4



Systems, cable, selectivity and generator protection with NZM4

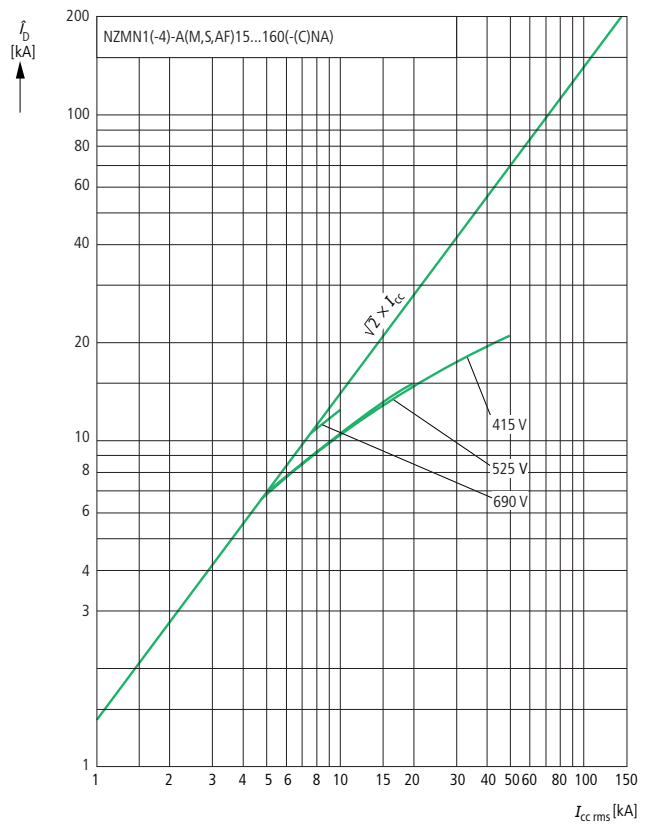
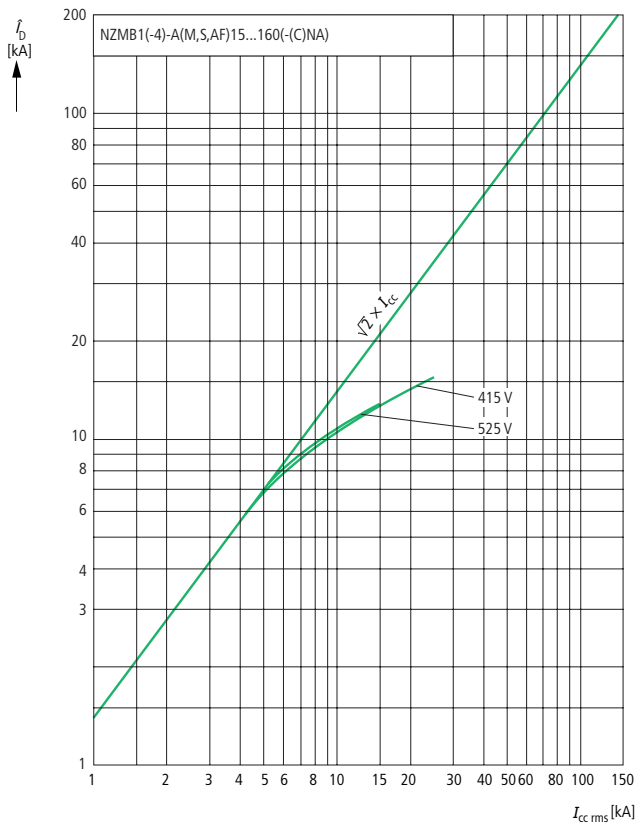


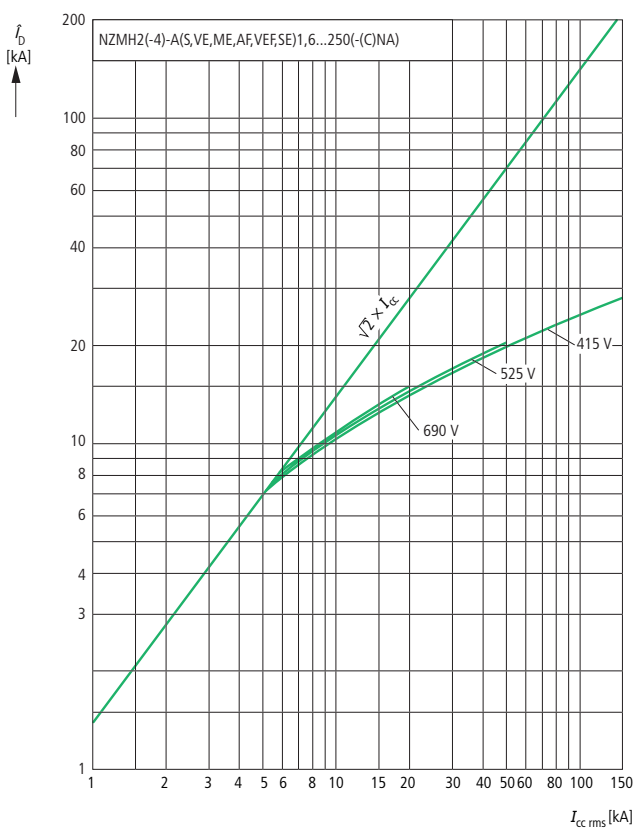
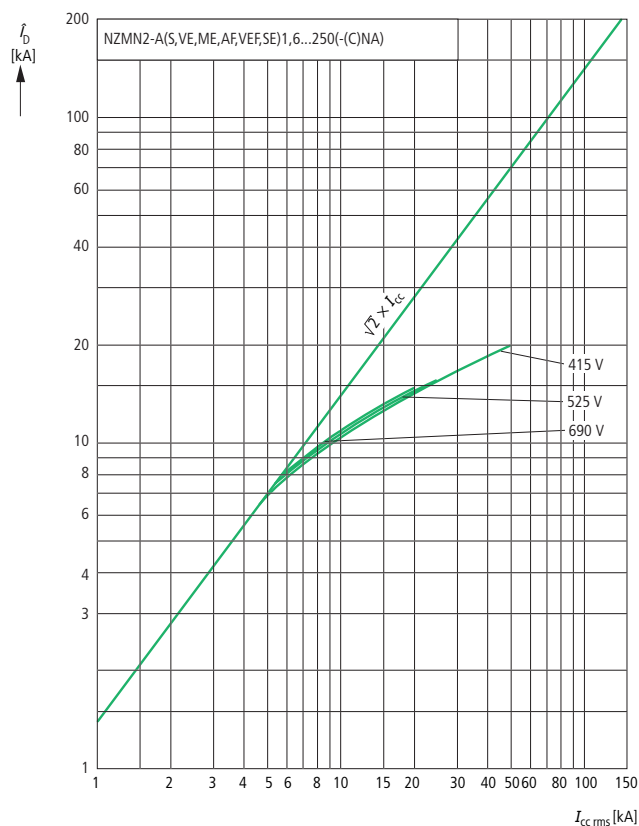
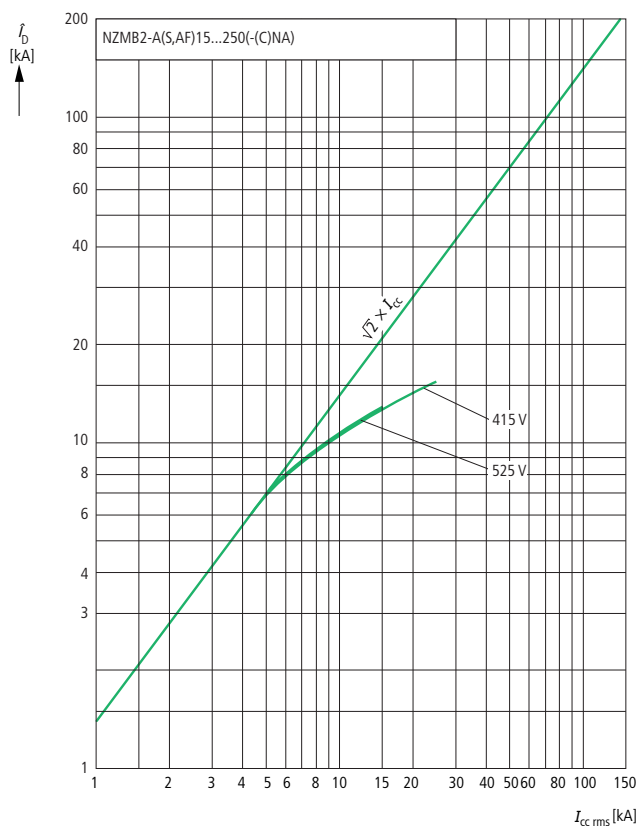
Systems, cable, selectivity and generator protection with NZM4



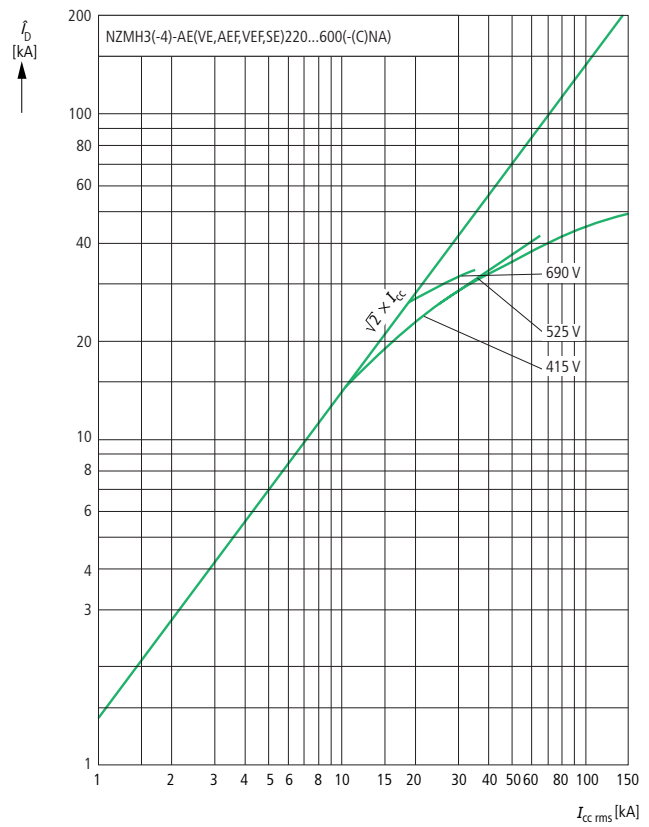
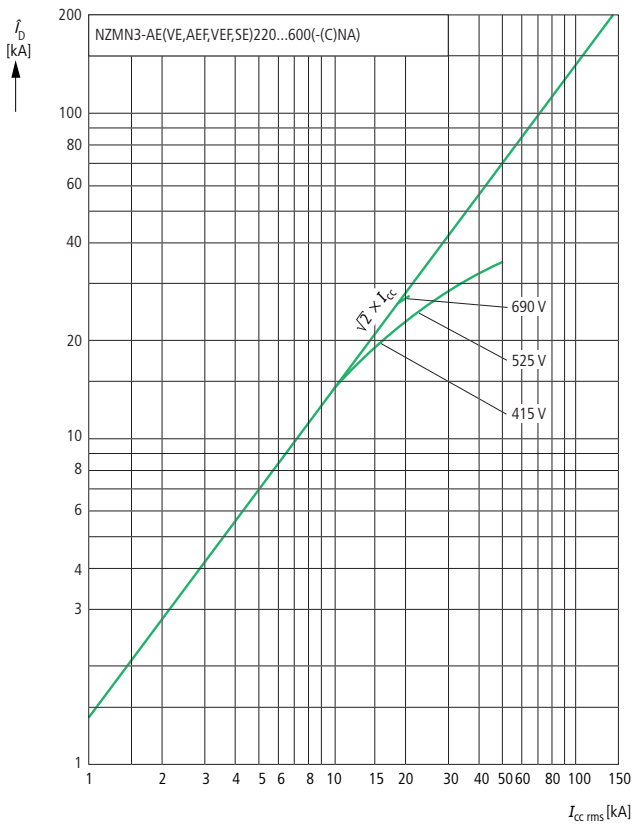
Moeller SK1230-1157EN-NA

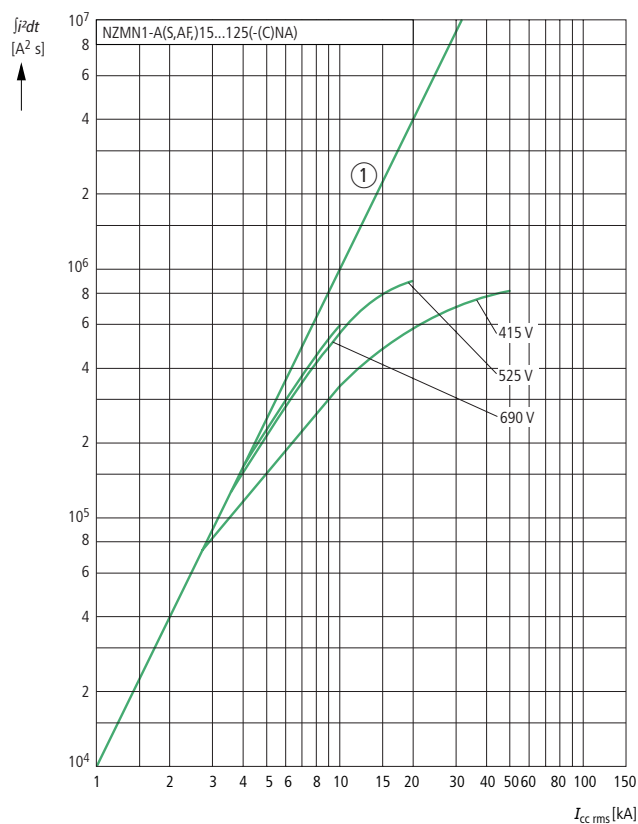
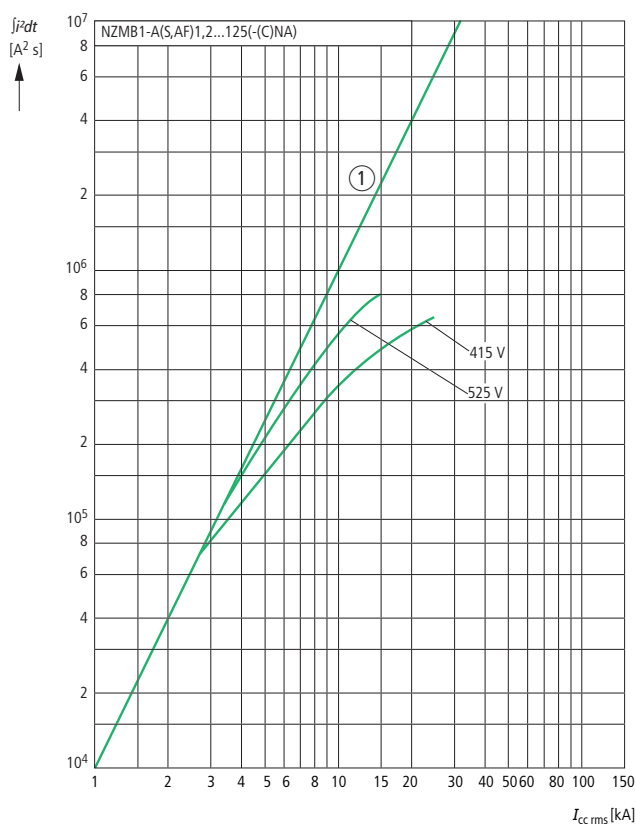
Let-through current $\hat{i}_D$



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

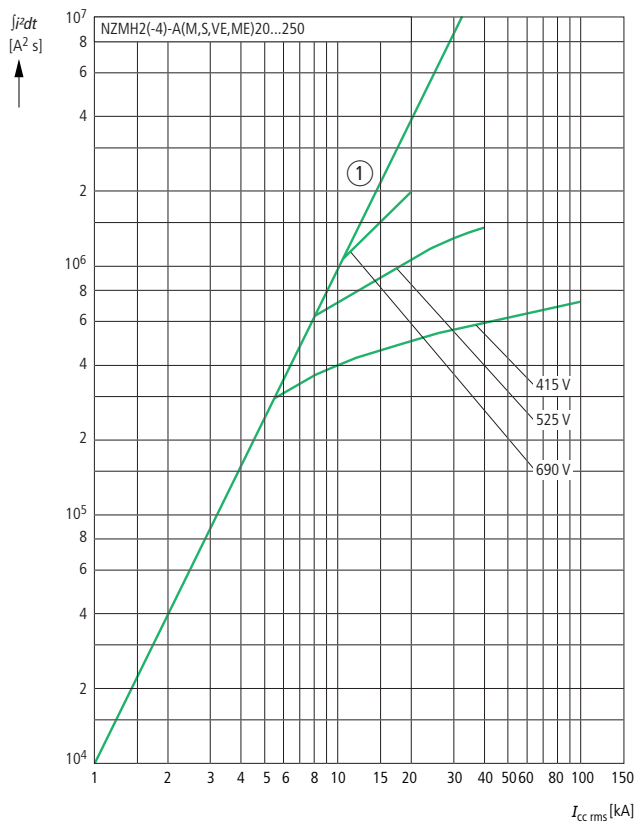
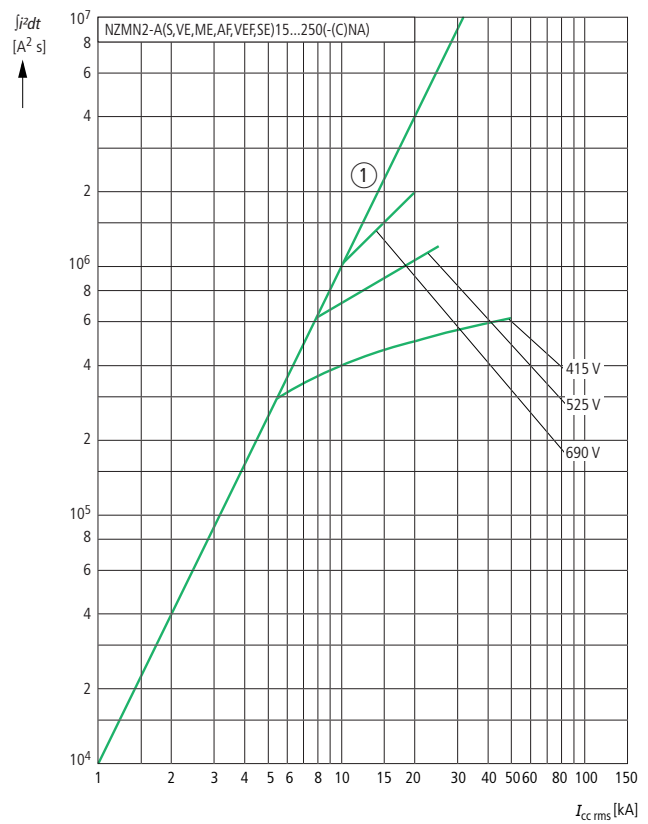
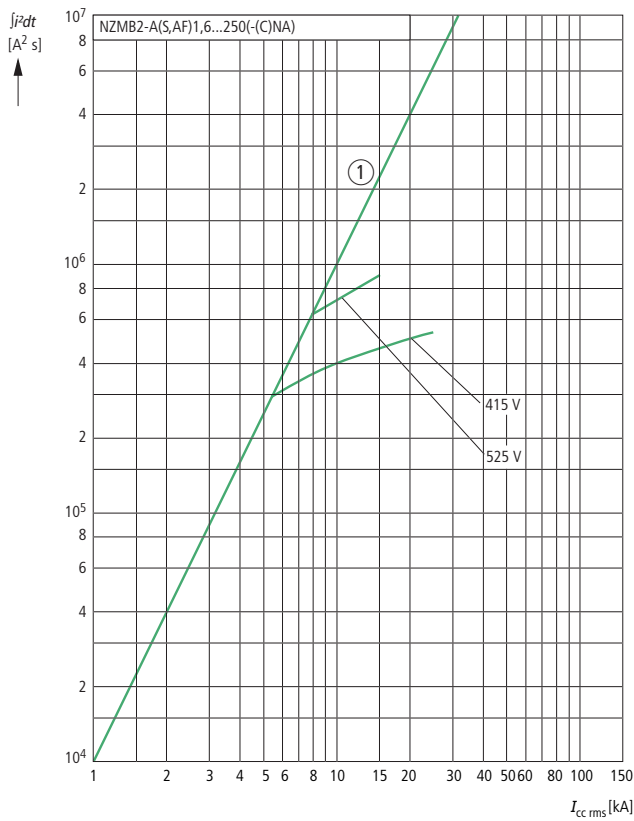
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Let-through current i_D


Let-through energy I^2t 

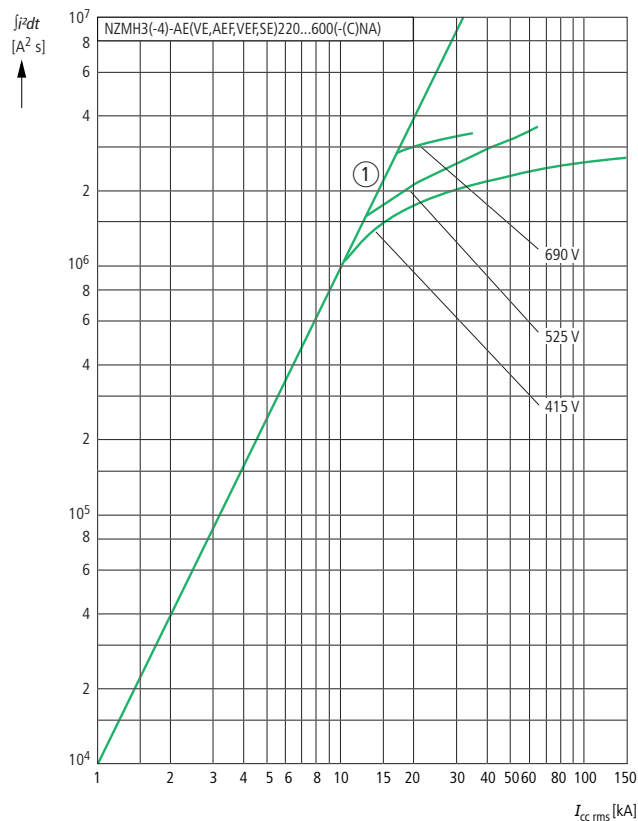
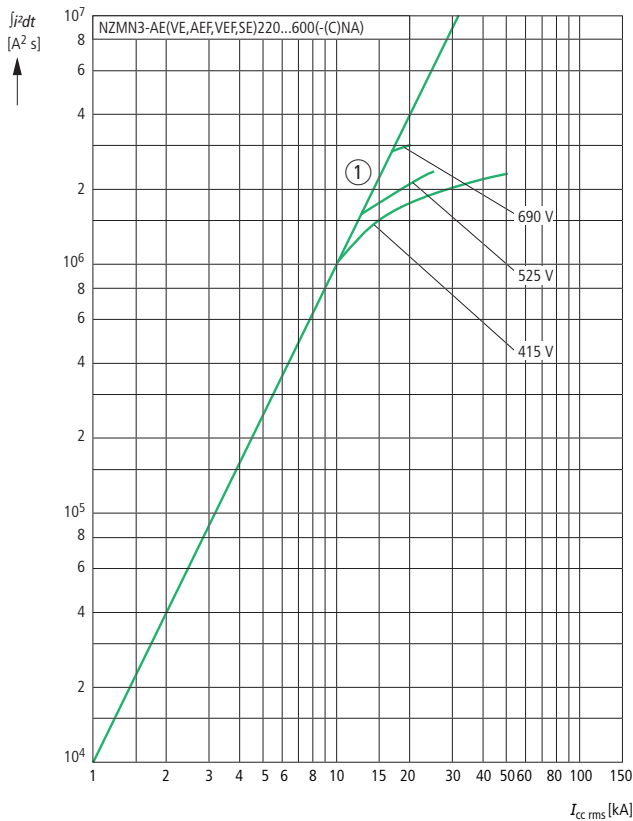
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Let-through energy I^2t



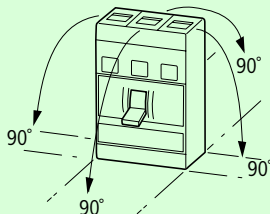
① 1st half-wave

Let-through energy I^2t

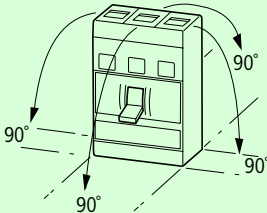


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Circuit-breakers, disconnect switches
up to 1200 A

			Rated uninterrupted current: 125 A NZMB1 NZMN1
General			
Standards			IEC/EN 60947: UL 489, CSA 22.2 No. 5.1
Protection against direct contact			Finger and back of hand proof to VDE 0106 Part 100
Climatic proofing			Damp heat, constant, according to IEC 60068-2-78 Damp heat, cyclical 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 to VDE 0106 Part 101 and Part 101/A1			
between auxiliary contacts and main contacts		V AC	500
between the auxiliary contacts		V AC	300
Mounting position			Vertical and 90° in all directions 
Direction of incoming supply			As required
Degree of protection			
Device			In the operating controls area: IP20 (basic degree of protection)
Enclosures			With insulating surround: IP40, with door coupling rotary handle: IP66
Terminals			Tunnel terminal: IP10 Phase isolator and strip terminal: IP00

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Rated uninterrupted current: 250 A			Rated uninterrupted current: 600 A		Rated uninterrupted current: 1200 A	
NZMB2	NZMN2	NZMH2	NZMN3	NZMH3	NZMN4	NZMH4
IEC/EN 60947: UL 489, CSA 22.2 No. 5.1						
Finger and back of hand proof to VDE 0106 Part 100						
Damp heat, constant, according to IEC 60068-2-78						
Damp heat, cyclical to IEC 60068-2-30						
-25/+70						
-25/+70						
20 (half-sinusoidal shock 20 ms)						
500						
300						
			With plug-in adapter NZM2: vertical, 90° right/left			
			With withdrawable unit NZM3: vertical, 90° left NZM4: vertical			
			with remote operator: NZM2, NZM3, NZM4: vertical and 90° in all directions			
As required						
In the operating controls area: IP20 (basic degree of protection)						
With insulating surround: IP40, with door coupling rotary handle: IP66						
Tunnel terminal: IP10						
Phase isolator and strip terminal: IP00						

				Rated uninterrupted current: 160 A		
				NZMB1		NZMN1
Circuit-breakers						
Rated impulse withstand voltage U_{imp}						
Main contacts		V		6000		6000
Auxiliary contacts		V		6000		6000
Rated operational voltage	U_e	V AC		690		690
Overvoltage category/pollution degree				III/3		III/3
Rated insulation voltage	U_i	V		690		690
For use in IT electrical power networks		V		525		690
Switching capacity						
Rated short-circuit making capacity						
240 V 50/60 Hz	I_{cm}	kA		63		187
400/415 V 50/60 Hz	I_{cm}	kA		53		105
440 V 50/60 Hz	I_{cm}	kA		53		74
525 V 50/60 Hz	I_{cm}	kA		30		40
690 V 50/60 Hz	I_{cm}	kA		–		17
Rated short-circuit breaking capacity I_{cn}						
I_{cu} to IEC/EN 60947 operating sequence O-t-CO	240 V 50/60 Hz	I_{cu}	kA	30		85
	400/415 V 50/60 Hz	I_{cu}	kA	25		50
	440 V 50/60 Hz	I_{cu}	kA	25		35
	525 V 50/60 Hz	I_{cu}	kA	15		20
	690 V 50/60 Hz	I_{cu}	kA	–		10
I_{cs} to IEC/EN 60947 operating sequence O-t-CO-t-CO	240 V 50/60 Hz	I_{cs}	kA	30		85
	400/415 V 50/60 Hz	I_{cs}	kA	25		50
	440 V 50/60 Hz	I_{cs}	kA	25		35
	525 V 50/60 Hz	I_{cs}	kA	7.5		10
	690 V 50/60 Hz	I_{cs}	kA	–		7.5
Utilization category to IEC/EN 60947-2				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
	690 V 50/60 Hz	I_e	A	160		160
AC-3	400/415 V 50/60 Hz	I_e	A	160		160
	690 V 50/60 Hz	I_e	A	160		160
Lifespan, mechanical (of which max. 50 % trip by shunt/undervoltage release)				Operations		20000
Maximum operating frequency				Ops/h		120
Lifespan, electrical to IEC/EN 60947-4-1 section B						
AC-1	400/415 V 50/60 Hz	Operations		10000		10000
	690 V 50/60 Hz	Operations		7500		7500
AC-3	400/415 V 50/60 Hz	Operations		7500		7500
	690 V 50/60 Hz	Operations		5000		5000
Current heat loss per pole at I_u				W		13
Overload releases						
Temperature compensation for NZM2 to IEC/EN 60947, residual error in the range -25 °C/+70 °C (reference temperature 40 °C)						
Thermomagnetic			%/K	0.7		0.7
Electronic				–		–
Total opening delay at short-circuit				ms		< 10
Technical data, divergent from the products for the IEC market						
Switching capacity NA switches (UL489, CSA 22.2 No. 5.1)						
240 V 60 Hz			kA	35		85
480V 60Hz			kA	25 ²⁾		35 ²⁾
600 V 60 Hz			kA	–		–

Notes

¹⁾ For switching capacity of NA switches with NZM...1-...NA the following applies: 480Y/277 V from 60 A

²⁾ For rated operational current AC-3 at NZM4 the following applies: 400 V: max. 650 kW; 600 V: max. 600 kW

³⁾ For switching capacity of NA switches with NZMH2 and NZMH3 the following applies: current limiting switch to UL489

⁴⁾ For switching capacity of NA switches with NZMH4 at 240 V 60 Hz the following applies: please enquire

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Circuit-breakers, disconnect switches
up to 1200 A

Rated uninterrupted current: 250 A				Rated uninterrupted current: 600 A		Rated uninterrupted current: 1200 A	
NZMB2		NZMN2	NZMH2	NZMN3		NZMN4	NZMH4
8000		8000	8000	8000	8000	8000	8000
6000		6000	6000	6000	6000	6000	6000
690		690	690	690	690	690	690
III/3		III/3	III/3	III/3	III/3	III/3	III/3
1000		1000	1000	1000	1000	1000	1000
525		690	690	690	690	525	525
63		187	330	187	330	105	275
53		105	330	105	330	105	220
53		74	286	74	286	74	187
30		53	105	53	143	53	143
–		40	40	40	74	40	105
30		85	150	85	150	50	125
25		50	150	50	150	50	100
25		35	130	35	130	35	85
15		25	50	25	65	25	65
–		20	20	20	35	20	50
30		85	150	85	150	37	63
25		50	150	50	150	37	50
25		35	130	35	130	26	43
15		25	38	13	33	19	49
–		5	5	5	9	15	37
A		A	A	A	A	B	B
–		1.9	1.9	3.3	3.3	19.2	–
–		1.9	1.9	3.3	3.3	19.2	–
250		250	250	600	600	1200	1200
250		250	250	600	600	1200	1200
250		250	250	600	600	1200 ³⁾	1200 ³⁾
250		250	250	600	600	1200 ³⁾	1200 ³⁾
20000		20000	20000	15000	15000	10000	10000
120		120	120	60	60	60	60
10000		10000	10000	5000	5000	3000	3000
7500		7500	7500	3000	3000	2000	2000
6500		6500	6500	2000	2000	2000	2000
5000		5000	5000	2000	2000	1000	1000
19		19	19	40	40	97	97
0		0	0	–	–	–	–
0		0	0	0	0	0	0
< 10		< 10	< 10	< 10	< 10	< 25 ≤ 415 V; < 35 > 415 V	< 25 ≤ 415 V; < 35 > 415 V
35		85	150 ⁴⁾	85	150 ⁴⁾	85	125 ⁶⁾
25		35	100 ⁴⁾	42	100 ⁴⁾	42	85
18		25	50 ⁴⁾	35	50 ⁴⁾	35	50

Current limiting specifications: NZMH2... and NZMH3...

Circuit-breakers		Voltage	Threshold current			Intermediate current			High interrupting capacity		
Type	max. frame size	At 60 Hz	sym. rms	Maximum		sym. rms	Maximum		sym. rms	Maximum	
	[A]	[V]	[kA]	[kA]	I^2dt [kA²s]	[kA]	[kA]	I^2dt [kA²s]	[kA]	[kA]	I^2dt [kA²s]
NZMH2-A...	250 A	240	16.25	12.80	0.36	100	20.23	0.40	150	20.00	0.38
		480	16.25	13.20	0.50	65	23.63	0.85	100	26.55	0.78
		600	16.25	12.98	0.60	30	19.40	0.67	50	24.40	0.84
NZMH2-VE...	250 A	240	16.25	11.40	0.31	100	18.23	0.27	150	20.40	0.32
		480	16.25	14.23	0.48	65	23.63	0.58	100	26.43	0.62
		600	16.25	14.33	0.48	30	19.60	0.60	50	24.63	0.79
NZMH3	600 A	240	39	41.20	3.30	100	31.00	1.01	150	36.80	1.34
		480	39	29.50	1.60	65	36.40	2.34	100	43.10	1.92
		600	30	29.50	2.24	42	33.80	2.04	50	39.15	2.42

Circuit-breakers, disconnect switches up to 1200 A

Moeller SK1230-1157EN-NA

				N3 550 A max.	N4 1200 A max.
Disconnect switches					
Rated impulse withstand voltage U_{imp}					
Main contacts		V		8000	8000
Auxiliary contacts		V		6000	6000
Rated operational voltage	U_e	V AC		690	690
Rated uninterrupted current max.					
IEC/EN 61131-3	I_u	A		630	1600
Technical data, divergent from the products for the IEC market UL489, CSA 22.2 No. 5.1	I_u	A		550	1200
Overvoltage category/pollution degree				III/3	III/3
Rated insulation voltage	U_e	V AC		1000	1000
Switching capacity					
Rated short-circuit making capacity	I_{cm}	kA		25	53
Rated short-time withstand current					
	$t = 0.3\text{ s}$	I_{cw}	kA	12	25
	$t = 1\text{ s}$	I_{cw}	kA	12	25
Rated conditional short-circuit current					
with back-up fuse			A gG/gL	550	2 x 600
	400/415 V		kA	100	100
	690 V		kA	80	80
With downstream fuse			A gG/gL	630	2 x 600
	400/415 V		kA	100	100
	690 V		kA	100	80
Rated making and breaking capacity					
Rated operational current, AC-22/23A	415 V	I_e	A	550	1200
	690 V	I_e	A	550	1200
Lifespan, mechanical		Operations		15000	10000
Maximum operating frequency		Ops/h		60	60
Lifespan, electrical to IEC/EN 60947-4-1 section B					
AC-1	400/415 V	Operations		5000	3000
	690 V	Operations		3000	2000
AC-3	400/415 V	Operations		3000	2000
	690 V	Operations		2000	1000
Current heat loss per pole at $I_u^{1)}$			W	40	97

Notes

¹⁾ The current heat loss per pole ratings refer to the maximum current rating of the frame size.

³⁾ 690 V: max. 160 kW

			NZM1, NS1 125 A	NZM2, NS2 250 A without	with XSV TM	E	NZM3, N3, NS3 600 A without	with XAV	NZM4, N4, NS4 1200 A without	with XAV
Permissible loading at different ambient temperatures (derating)										
open	20°C	%	100	100	100	100	100	96	100	100
	30°C	%	100	100	97	100	100	92	100	98
	40°C	%	100	100	92	100	100	87	100	93
	50°C	%	100	100	87	94	100	83	100	89
	60°C	%	86	90	81	88	90	78	87	85
	65°C	%	83	85	78	84	85	75	85	83
	70°C	%	79	80	75	81	80	73	82	80

Notes

XSV = plug-in unit
XAV = withdrawable unit
TM = thermomagnetic
E = electronic

				NS1-...-NA max. 125A	NS2-...-NA max. 250A
Molded Case Switch					
Rated impulse withstand voltage		U_{imp}			
Main contacts				6000	8000
Auxiliary contacts				6000	6000
Rated operational voltage		U_e		690	690
Rated uninterrupted current max.					
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 to UL 489, CSA 22.2 No. 5.1					
	240 V			85	150
	480 V			35	100
	600 V			–	50
Switching capacity, divergent from the products for the NA market					
Rated short-circuit making capacity	240 V	I_{cm}		187	330
	400/415 V	I_{cm}		105	330
	440 V	I_{cm}		74	286
	525 V	I_{cm}		53	105
	690 V	I_{cm}		17	53
Rated short-circuit breaking capacity $I_{cc} = I_{cu}$ to IEC/EN 60947-2 Annex L	240 V	I_{cu} to IEC/EN 60947 test cycle O-t-CO	I_{cu}	85	150
	400/415 V		I_{cu}	50	150
	440 V		I_{cu}	35	130
	525 V		I_{cu}	20	50
	690 V		I_{cu}	10	20
	240 V	I_{cs} to IEC/EN 60947 test cycle O-t-CO-t-CO	I_{cs}	85	150
	400/415 V		I_{cs}	50	150
	440 V		I_{cs}	35	130
	525 V		I_{cs}	10	37.5
	690 V		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
		690 V	Operations	7500	7500
	AC-3	400/415 V	Operations	7500	6500
		690 V	Operations	5000	5000
Current heat loss per pole at I_u ¹⁾				13	19
Total opening delay on short-circuit				< 10	< 10

Notes
¹⁾ Details relate to the maximum nominal current of the frame size

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Circuit-breakers, disconnect switches
up to 1200 A

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

I_n [A]	Fixed mounted				NS1-			
	NZM1-		AF...-NA		S...-CNA		...-NA	
	P [W]	R [μOhm]	P [W]	R [μOhm]	P [W]	R [μOhm]	P [W]	R [μOhm]
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	9.8	8180	—	—	—	—
25	8.8	4680	8.8	4680	—	—	—	—
26	—	—	—	—	2	1050	—	—
30	—	—	8.2	3030	—	—	—	—
32	9.1	3030	—	—	—	—	—	—
33	—	—	—	—	3.2	1050	—	—
35	—	—	8.2	2220	—	—	—	—
40	11	2220	11	2220	2.7	562	—	—
45	—	—	10.7	1760	—	—	—	—
50	13.5	1760	13.5	1760	4.2	562	—	—
60	—	—	12.9	1190	—	—	—	—
63	14	1190	—	—	6.7	562	6.7	562
70	—	—	12.5	850	—	—	—	—
80	15.5	850	15.5	850	10.8	562	—	—
90	—	—	17.7	730	—	—	—	—
100	24	730	24	730	16.9	562	16.9	562
110	—	—	20.7	570	—	—	—	—
125	38	570	38	570	—	—	26.3	562
150	—	—	—	—	—	—	—	—
160	50	460	—	—	—	—	—	—
175	—	—	—	—	—	—	—	—
200	—	—	—	—	—	—	—	—
225	—	—	—	—	—	—	—	—
250	—	—	—	—	—	—	—	—

Note: The values stated in the table apply for fixed mounted 3 pole devices which are loaded uniformly.
The entire resistive load is for the measured three-pole or four-pole value.
The total heat dissipation is the measured value for I_n at 50/60 Hz for a 3-pole switch.
The heat dissipation can be calculated using the formula: $P = 3 \times R \times I^2$

NZM up to 1200 A with electronic release (3 pole)

Fixed mounted NZM2-	Additional Plug-in units	Fixed mounted NZM3-	N3-	Additional Withdrawable units	Fixed mounted NZM4-	N4-	Additional Withdrawable units
R [μOhm]	R [μOhm]	R [μOhm]	R [μOhm]	R [μOhm]	R [μOhm]	R [μOhm]	R [μOhm]
275	100	100	90	70	37	37	10

Note: The values stated in the table apply for 3 pole devices which are loaded uniformly.
The total resistive load is the measured value for a 3 pole switch
(independent of I_n and the type of release).
The total resistive load for a switch in fixed or withdrawable design results from:
the resistive value for fixed mounting + resistive value for plug-in or withdrawable design.
The heat dissipation can be calculated using the formula: $P = 3 \times R \times I^2$

Moeller SK1230-1157EN-NA

Circuit-breakers, disconnect switches
up to 1200 A

Fixed mounted

NZM2-						NS2-	
A...-NA		AF...-NA		S...-CNA		...-NA	
P	R	P	R	P	R	P	R
[W]	[μOhm]	[W]	[μOhm]	[W]	[μOhm]	[W]	[μOhm]
—	—	—	—	—	—	—	—
—	—	—	—	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	—	—	—	—
8	4250	6	3140	—	—	—	—
—	—	—	—	0.5	780	—	—
—	—	9	3140	—	—	—	—
10	3140	—	—	—	—	—	—
—	—	—	—	0.9	780	—	—
—	—	11	2800	—	—	—	—
13	2800	13	2800	1.5	317	—	—
—	—	15	2270	—	—	—	—
18	2270	18	2270	2.5	317	—	—
—	—	19	1700	—	—	—	—
20	1700	—	—	4	317	—	—
—	—	17	1070	—	—	—	—
22	1070	22	1070	6	317	—	—
—	—	23	855	—	—	—	—
28	855	28	855	10	317	—	—
—	—	22	589	—	—	—	—
29	589	29	589	15	317	—	—
—	—	35	427	—	—	—	—
40	427	—	—	25	317	25	317
—	—	37	332	—	—	—	—
48	332	48	332	40	317	40	317
—	—	46	310	—	—	—	—
57	310	57	310	59.4	317	59.4	317

				NZM1, NS1 125 A	$I_n^{1)}$ A	NZM2, NS2 250 A	$I_n^{1)}$ A	NZM3, N3, NS3 600 A	$I_n^{1)}$ A	
Terminal capacities										
Standard equipment					Box terminal	–	Screw terminal	–	Screw terminal	
Accessories					Screw connection Tunnel terminal Connection on rear		Box terminal Tunnel terminal Connection on rear		Box terminal Tunnel terminal Connection on rear	
Cu conductors, Cu cable										
Box terminal	Solid		mm ²	1 × (10 – 16) 2 × (6 – 16)	125	1 × (4 – 16) 2 × (4 – 16)	250	2 × 16	500	
	Stranded		mm ²	1 × (25 – 70) ³⁾ 2 × 25		1 × (25 – 185) 2 × (25 – 70)		1 × (35 – 240) 2 × (25 – 120)		
Tunnel terminal	Solid		mm ²	1 × 16	125	1 × (16 – 185)	250	–	–	
	Stranded		mm ²	1 × (25 – 95)		1 × (25 – 185)		1 × (25 – 185)		
		Single hole	mm ²	–	–	–	–	1 × (50 – 240)	600	
		Double hole fitting	mm ²	–		2 × (50 – 240)				
		4-hole	mm ²	–	–	–	–	–	–	
Bolt terminal and rear-side connection										
	Direct on the switch	Solid		mm ²	1 × (10 – 16) 2 × (6 – 16)	125	1 × (4 – 16) 2 × (4 – 16)	250	1 × 16 2 × 16	600
		Stranded		mm ²	1 × (25 – 70) ³⁾ 2 × 25		1 × (25 – 185) 2 × (25 – 70)		1 × (25 – 240) 2 × (25 – 240)	
	Module plate	Single hole	min.	mm ²	–	–	–	–	–	–
			max.	mm ²	–	–	–	–	–	–
	Module plate	Double hole	min.	mm ²	–	–	–	–	–	–
			max.	mm ²	–	–	–	–	–	–
Connection width extension			mm ²					2 × 300	600	
Al conductors, Al cable										
Tunnel terminal	Solid		mm ²	1 × 16	125	1 × 16	250	1 × 16	350	
	Stranded		mm ²	1 × (25 – 95)		1 × (25 – 185)		1 × (25 – 185) ²⁾		
		Single hole	mm ²	–		–		–		1 × (50 – 240)
		Double hole fitting	mm ²	–		–		–		2 × (50 – 240)
		4-hole	mm ²	–	–	–	–	–	–	
Bolt terminal and rear-side connection										
	Direct on the switch	Solid		mm ²	1 × (10 – 16) 2 × (10 – 16)	125	1 × (10 – 16) 2 × (10 – 16)	250	1 × 16 2 × (10 – 16)	400
		Stranded		mm ²	1 × (25 – 35) 2 × (25 – 35)		1 × (25 – 50) 2 × (25 – 50)		1 × (25 – 120) 2 × (25 – 120)	
	Module plate	Single hole	min.	mm ²	–	–	–	–	–	–
		Single hole	max.	mm ²	–	–	–	–	–	–
	Module plate	Double hole	min.	mm ²	–	–	–	–	–	–
			max.	mm ²	–	–	–	–	–	–
Connection width extension			mm ²							
Cu strip (number of segments × width × segment thickness)										
Box terminal			min.	mm ²	125	2 × 9 × 0.8	250	6 × 16 × 0.8	600	
			max.	mm ²		9 × 9 × 0.8		10 × 16 × 0.8		10 × 24 × 1.0 + 5 × 24 × 1.0 (2 ×) 8 × 24 × 1.0
Flat conductor terminal			min.	mm	–	–	–	–	–	–
			max.	mm	–	–	–	–	–	–
Module plate	Single hole		mm ²	–	–	–	–	–	–	–
Bolt terminal and rear-side connection										
	Flat copper strip, with holes	min.	mm	–	–	2 × 16 × 0.8	250	6 × 16 × 0.8	600	
		max.	mm	–	–	10 × 16 × 0.8		10 × 32 × 1.0 + 5 × 32 × 1.0		
Connection width extension			mm ²	–	–	–	–	(2 ×) 10 × 50 × 1.0		
Copper busbar (width × thickness)										
Bolt terminal and rear-side connection										
	Screw connection				M6	–	M8	–	M10	–
		Direct on the switch	min.	mm ²	12 × 5	125	16 × 5	250	20 × 5	600
	max.		mm ²	16 × 5	–	20 × 5	–	30 × 10 + 30 × 5		
	Module plate	Single hole	min.	mm ²	–	–	–	–	–	–
			max.	mm ²	–	–	–	–	–	–
	Module plate	Double hole	min.	mm ²	–	–	–	–	–	–
			max.	mm ²	–	–	–	–	–	600
Connection width extension			mm ²	–	–	–	–	2 × (10 × 50)		

Notes

¹⁾ The rated currents I_n have been determined conform to IEC/EN 60947 (switchgear standard) and generally relate to the max. defined cross-sections and are intended for the purpose of orientation. The engineering standards which apply in each case must be observed.

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

³⁾ depending on the cable manufacturer up to 95 mm² can be connected.

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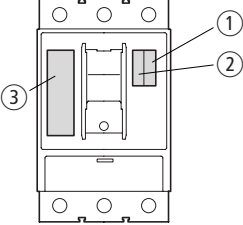
NZM4, N4, NS4 1200 A	$I_n^{1)}$ A		NZM...1...NA, NS1...NA	NZM...2...NA, NS2...NA	NZM...3...NA, N3...NA, NS3...NA	NZM...4...NA, N4...NA, NS4...NA
Screw terminal	–	–	Box terminal	Screw terminal	Screw terminal	Screw terminal
Tunnel terminal	–	–	Screw connection	Box terminal	Box terminal	Tunnel terminal
Connection on rear	–	–	Tunnel terminal	Tunnel terminal	Tunnel terminal	Connection on rear
Strip terminal	–	–	Connection on rear	Connection on rear	Connection on rear	Strip terminal
–	–	AWG	1 × (12 – 6)	1 × (12 – 6)	–	–
–	–	AWG/kcmil	1 × (4 – 2/0)	1 × (4 – 350)	1 × (2 – 500)	–
–	–	AWG	1 × 6	1 × 6	1 × 6	–
–	–	AWG/kcmil	1 × (4 – 3/0)	1 × (4 – 350)	1 × (4 – 350)	–
–	–	AWG/kcmil	–	–	1 × (0 – 500) 2 × (0 – 500)	–
4 × (50 – 240)	1200	AWG/kcmil	–	–	–	4 × (0 – 500)
–	–	AWG	1 × (12 – 6) 2 × (9 – 6)	1 × (12 – 6)	–	–
1 × (120 – 185) 4 × (50 – 185)	1200	AWG/kcmil	1 × (4 – 2/0)	1 × (4 – 3/0)	1 × (4 – 350)	1 × (250 – 350) 4 × (0 – 350)
1 × (120 – 300)	1000	kcmil	–	–	–	1 × (250 – 600)
2 × (95 – 300)	–	AWG/kcmil	–	–	–	2 × (3/0 – 600)
2 × (95 – 185)	1200	AWG/kcmil	–	–	–	2 × (3/0 – 350)
4 × (35 – 185)	–	AWG/kcmil	–	–	–	4 × (2 – 350)
4 × 300	1200	AWG/kcmil	–	–	2 × 500	4 × 600
6 × (95 – 240)	–	AWG/kcmil	–	–	–	6 × (3/0 – 500)
–	–	AWG	–	–	–	–
–	–	AWG/kcmil	–	–	–	–
–	–	AWG/kcmil	–	–	–	–
4 × (50 – 240)	1200	AWG/kcmil	–	–	–	–
–	–	AWG	–	–	–	–
–	–	AWG/kcmil	–	–	–	–
1 × (185 – 240)	on request	kcmil	–	–	–	–
2 × (70 – 185)	on request	AWG/kcmil	–	–	–	–
4 × 50	–	AWG	–	–	–	–
2 × 240	on request	AWG/kcmil	–	–	–	–
6 × (70 – 240)	–	–	–	–	–	–
–	–	mm	2 × 9 × 0.8	2 × 9 × 0.8	6 × 16 × 0.8	–
–	–	mm	9 × 9 × 0.8	10 × 16 × 0.8	10 × 24 × 1.0 + 5 × 24 × 1.0 (2 ×) 8 × 24 × 1.0	–
6 × 16 × 0.8	1100	mm	–	–	–	6 × 16 × 0.8
(2 ×) 10 × 32 × 1.0	–	mm	–	–	–	(2 ×) 10 × 32 × 1.0
(2 ×) 10 × 50 × 1.0	1200	mm	–	–	–	(2 ×) 10 × 50 × 1.0
(2 ×) 10 × 50 × 1.0	1200	mm	–	2 × 16 × 0.8	6 × 16 × 0.8	(2 ×) 10 × 50 × 1.0
(2 ×) 10 × 50 × 1.0	–	mm	–	10 × 16 × 0.8	10 × 32 × 1.0 + 5 × 32 × 1.0	(2 ×) 10 × 50 × 1.0
(2 ×) 10 × 80 × 1.0	1200	mm	–	–	(2 ×) 10 × 50 × 1.0	(2 ×) 10 × 80 × 1.0
M10	–	–	M6	M8	M10	M10
25 × 5	1200	mm	12 × 5	16 × 5	20 × 5	25 × 5
2 × (50 × 10)	–	mm	16 × 5	20 × 5	30 × 10 + 30 × 5	2 × (50 × 10)
25 × 5	1200	mm	–	–	–	25 × 5
2 × (50 × 10)	–	mm	–	–	–	2 × (50 × 10)
2 × (50 × 10)	1200	mm	–	–	–	2 × (50 × 10)
60 × 10	1200	mm	–	–	–	60 × 10
2 × (80 × 10)	–	mm	–	–	2 × (10 × 50)	2 × (80 × 10)

Circuit-breakers, disconnect switches
up to 1200 A

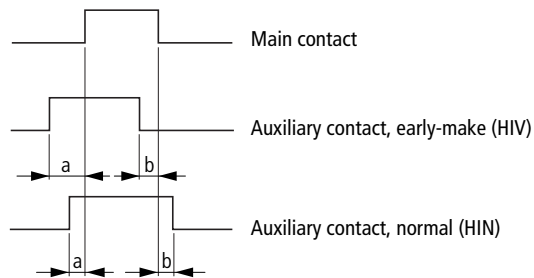
at AC = 50/60 Hz			M22-K...	XHIV	XHI
Auxiliary contacts					
Rated operational voltage					
AC	U_e	V AC	500	500	500
DC	U_e	V DC	220	220	220
Conventional thermal current					
	$I_{th} = I_e$	A	4	4	4
Rated operational current					
AC-15	115 V	I_e	A	4	4
	230 V	I_e	A	4	4
	400 V	I_e	A	2	2
	500 V	I_e	A	1	1
DC-13	24 V	I_e	A	3	3
	42 V	I_e	A	1.7	1.5
	60 V	I_e	A	1.2	0.8
	110 V	I_e	A	0.8	0.5
	220 V	I_e	A	0.3	0.2
Short-circuit protection					
max. fuse		A gG/gL	10	10	10
Max. miniature circuit-breaker		A	PKZM0-10/FAZ-B6	FAZ-B6	FAZ-B6
Early-make time compared to the main contacts during switch on and off (switching times with manual operation)			–	NZM1, PN1, N1: approx. 20 NZM2, PN2, N2: approx. 20 NZM3, PN3, N3: approx. 20 NZM4, N4: ca. 90 With NZM4/N4 the HIV does not feature early break.	–
Terminal capacities					
Solid or flexible conductor with ferrule		mm ²	1 × (0.75 – 2.5) 2 × (0.75 – 2.5)	1 × (0.75 – 2.5) 2 × (0.75 – 2.5)	1 × (0.75 – 2.5) 2 × (0.75 – 2.5)
		AWG	1 × (18 – 14) 2 × (18 – 14)	1 × (18 – 14) 2 × (18 – 14)	1 × (18 – 14) 2 × (18 – 14)
UL/CSA					
Rated operational current	I_e	A	10 A – 600 V AC 1 A – 250 V DC	2.5 A – 240 V AC 1 A – 250 V DC	2.5 A – 240 V AC 1 A – 250 V DC
Heavy Pilot Duty			A600/P300 above 300 V AC same polarity	C300/R300	C300/R300

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Maximum component installation and position of the internal accessories

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

Time differences ON-OFF



	Time difference a (ms)						Time difference b (ms)					
	Manual operation			Motor operators			Manual operation			Motor operators		
	HIV	HIN	K01	HIV	HIN	K01	HIV	HIN	K01	HIV	HIN	K01
NZM1	20 ²⁾	0	2.5	—	—	—	20 ²⁾	0	2.5	—	—	—
NZM2	20 ²⁾	3.5	6.5	Not per- missible	2.5	4.5	20 ²⁾	3	4.5	Not per- missible	3	4
NZM3	20 ²⁾	4	8	Not per- missible	2	4	20 ²⁾	3.5	8	Not per- missible	3	6.5
NZM4	90 ²⁾	7	11	Not per- missible	on request	on request	0 ¹⁾²⁾	12	15	Not per- missible	on request	on request

Notes

¹⁾ With NZM4/N4 the HIV does **not** feature early break.

²⁾ Minimum value, as it is dependent on the switching speed

				NZM1(2/3)-XU...	NZM4-XU...
Undervoltage release					
Rated control voltage					
Alternating voltage at 50/60 Hz	U_s	V AC		24 – 600	24 – 600
DC	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					
Sealing AC		VA		1.5	3.6
DC					
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) 2 × (0.75 – 2.5)	1 × (0.75 – 2.5) 2 × (0.75 – 2.5)
		AWG		1 × (18 – 14) 2 × (18 – 14)	1 × (18 – 14) 2 × (18 – 14)

				UVU-NZM
Undervoltage releases, off-delayed				
Rated operational voltage				
Alternating voltage at 50/60 Hz	U_e	V AC		24, 220 – 550
DC	U_e	V DC		24
Inrush current (peak value)	I_e	mA		< 500
Power consumption		VA		50
Delay 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		mm ²		1 × (0.5 – 2.5) 2 × (0.5 – 1.5)

				NZM1(2/3)-XA...	NZM4-XA...	NZM2/3-XA...-MNS	NZM4-XA...-MNS
Shunt release							
Rated control voltage							
AC	U_s	V AC		12 – 525	12 – 600	230	230
DC	U_s	V DC		12 – 525	12 – 600	–	–
Frequency range		Hz		0 – 400	0 – 400	50/60	50/60
Operating range							
AC		$\times U_s$		0.7 – 1.1	0.7 – 1.1	0.1 – 1.1	0.1 – 1.1
DC		$\times U_s$		0.7 – 1.1	0.7 – 1.1	–	–
Power consumption							
Sealing AC/DC		VA/W		2.5	2.5	–	–
Maximum current consumption at 110% U_s (230 V 50 Hz)		A		–	–	0.5	1
Maximum opening delay (response time until opening of the main contacts)		ms		20	22	20	22
Maximum duty factor		ms		∞	∞	1000	1000
Minimum command time		ms		10 – 15	10 – 15	10 – 15	10 – 15
Terminal capacities							
Solid or flexible conductor with ferrule		mm ²		1 × (0.75 – 2.5) 2 × (0.75 – 2.5)	1 × (0.75 – 2.5) 2 × (0.75 – 2.5)	1 × (0.75 – 2.5) 2 × (0.75 – 2.5)	1 × (0.75 – 2.5) 2 × (0.75 – 2.5)
		AWG		1 × (18 – 14) 2 × (18 – 14)	1 × (18 – 14) 2 × (18 – 14)	1 × (18 – 14) 2 × (18 – 14)	1 × (18 – 14) 2 × (18 – 14)

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				NZM-XCM
Capacitor unit for shunt release				
Rated operational voltage	U_e	V AC		230
Rated operational current	I_e	mA		< 10
Inrush current (peak value)	I_e	A		3
Terminal capacities				
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)

				NZM2-XR...	NZM3-XR...	NZM4-XR...
Remote operator						
Rated control voltage						
AC	U_s	V AC		110 – 440	110 – 440	110 – 440
DC	U_s	V DC		24 – 250	24 – 250	24 – 250
Operating range						
AC	U_s			0.85 – 1.1	0.85 – 1.1	0.85 – 1.1
DC	U_s			0.85 – 1.1	0.85 – 1.1	0.85 – 1.1
Motor rating						
AC	110 V – 130 V AC		VA	350	350	350
	208 V – 240 V AC		VA	350	350	350
	380 V – 440 V AC		VA	350	350	350
DC	24 V – 30 V DC		W	250	250	250
	110 V – 130 V DC		W	250	250	250
	220 V – 250 V DC		W	250	250	250
Total make time				60	80	100
Total opening delay				300	1000	3000
Minimum signal duration						
with switch on				30	30	30
with switch off				150	250	500
Lifespan, mechanical				20000	15000	10000
Maximum operating frequency				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
			AWG	18 – 14	18 – 14	18 – 14

			DMI
General			
Dimensions (W × H × D)		mm	107.5 × 90 × 53
Modular spacing (space units)			6 space units wide
Weight		kg	0.3
Mounting			Top-hat rail IEC/EN 60715, 35 mm
Climatic environmental conditions			
Operating ambient temperature		°C	0 to +55
Mounting position			horizontal, vertical
Condensation			Prevent condensation by means of suitable measures
LCD display (clearly legible)		°C	0 to +55
Storage/Transport		°C	-40 to +70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 – 95
Air pressure (operation)		hPa	795 – 1080
Corrosion resistance			
IEC/EN 60068-2-42	4 days SO ₂	cm ³ /m ³	10
IEC/EN 60068-2-43	4 days H ₂ S	cm ³ /m ³	1
Ambient conditions, mechanical			
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 ms		Impacts	18
Drop to IEC/EN 60068-2-31	Drop height	mm	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1
Power supply			
Rated operational voltage	U _e	V	24
Admissible range		V DC	20.4 – 28.8
Residual ripple		%	≤ 5
Input current at 24 V DC		mA	210
Voltage dips (IEC/EN 61131-2)		ms	10
Heat dissipation at 24 V DC		W	5

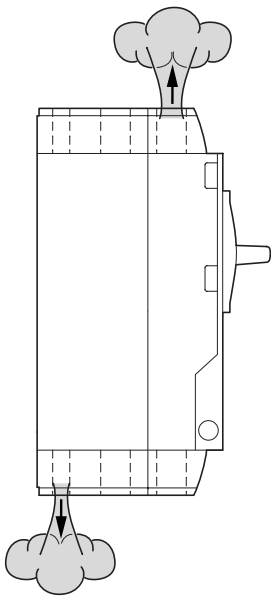
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			EASY221-CO	EASY222-DN	NZM-XDMI-DPV1
General					
Standards			EN 55011, EN 55022, EN 61000-4, IEC 60068-2-6, IEC 60068-2-27		
Dimensions (W × H × D)		mm	35.5 × 90 × 58 (2 SU)	35.5 × 90 × 58 (2 SU)	35.5 × 90 × 58 (2 SU)
Weight		kg	0.15	0.15	0.15
Mounting			Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)		
Terminal capacity					
Solid		mm ²	0.2 / 4 (AWG 22 – 12)	0.2 / 4 (AWG 22 – 12)	0.2 / 4 (AWG 22 – 12)
Flexible with ferrule		mm ²	0.2 / 2.5 (AWG 22 – 12)	0.2 / 2.5 (AWG 22 – 12)	0.2 / 2.5 (AWG 22 – 12)
Flat-bladed screwdriver		mm	3.5 × 0.8	3.5 × 0.8	3.5 × 0.8
Max. tightening torque		Nm	0.6	0.6	0.6
Climatic environmental conditions					
Operating ambient temperature		°C	-25 to 55, cold as per IEC 60068-2-1, heat as per 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
Atmospheric pressure (operation)		hPa	795 – 1080	795 – 1080	795 – 1080
Corrosion resistance					
IEC/EN 60947-2-42	4 days SO ₂	cm ³ /m ³	10	10	10
IEC/EN 60068-2-43	4 days H ₂ S	cm ³ /m ³	1	1	1
Mechanical environmental 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		Impacts	18	18	18
Drop to IEC/EN 60068-2-31	Drop height	mm	50	50	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1	1	1
Mounting position			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 impulses (IEC/EN 61000-4-4, level 3)					
Power lines		kV	2	2	2
Signal cables		kV	2	2	2
		kV	0.5 (power line symmetry)		
Immunity to line-conducted interference (IEC/EN 61000-4-6)		V	10	10	10

			EASY221-CO	EASY222-DN	NZM-XDMI-DPV1
Dielectric strength					
Rating of the air and creepage distance			EN 50178, UL 508, CSA C22.2, No. 142		
Dielectric strength			EN 50178		
Power supply					
Rated operational voltage	U_e	V	24 (-15/+20 %)	24 (-15/+20 %)	24 (-15/+20 %)
Admissible range		V DC	20.4 – 28.8	20.4 – 28.8	20.4 – 28.8
Residual ripple		%	< 5	< 5	< 5
At 24 V DC		mA	Averaged 200	Averaged 200	Averaged 200
Voltage dips (IEC/EN 61131-2)		ms	10	10	10
Heat dissipation at 24 V DC		W	4.8	4.8	4.8
Protection against polarity reversal					
Power supply			Yes	Yes	Yes
LED displays					
Power supply			LED RUN (RUN): green	LED module status (MS): green	LED power (POW): green
LED display			LED ERROR (ERR): red	LED network status (NS): red/green	LED-PROFIBUS-DP (BUS): red
Network					
Connection types			RJ45	5-pole, twin-level terminal block	–
Potential isolation			Bus to power supply (simple, bus and power supply to EASY base unit (safe isolation))	Bus to power supply (simple, bus and power supply to EASY base unit (safe isolation))	–
Function			CANopen slave	DeviceNet slave	–
Interface			CAN	CAN	–
Bus protocol			CANopen	DeviceNet	–
Baud rates			Automatic detection up to 1 MBit / s	Automatic detection up to 500 kBit / s	–
Bus termination resistors			Separate, external bus connection necessary (120 Ω)	Separate, external bus connection necessary (120 Ω)	–
Bus addresses			1 – 127 via EASY base unit with display or EASY-SOFT addressable	0 – 63 via EASY base unit with display or EASY-SOFT addressable	–
Services					
Cyclic			All data R1 – R16, S1 – S8	All data R1 – R16, S1 – S8	–
Acyclic			Read / write, time, day, summer- / winter time, all parameters of the EASY function	Read / write, time, day, summer- / winter time, all parameters of the EASY function	–
PROFIBUS-DP					
Connection types			–	–	Sub-D 9 pole, socket
Potential isolation			–	–	Bus to power supply (simple), bus and power supply to DMI base unit (safe isolation)
Function			–	–	PROFIBUS-DP slave
Interface			–	–	RS 485
Bus protocol			–	–	PROFIBUS-DP
Baud rates			–	–	Automatic detection up to 12 MBit / s
Bus termination resistors			–	–	Switch-in via connector
Bus addresses			–	–	1 – 126 via DMI

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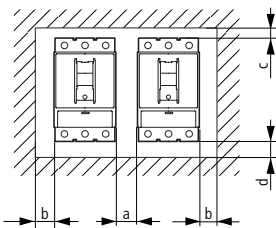
Direction of blow-out



	Top Front	Bottom Rear
NZM1	X	—
NZM2	X	X
NZM3	X	X
NZM4	X	—

Circuit-breakers, disconnect switches up to 1200 A

Minimum clearance



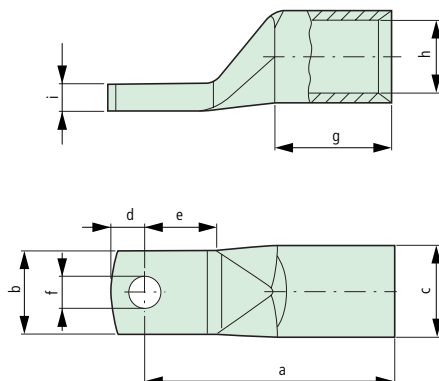
Between two switches mounted side-by-side
Minimum clearance a in mm

	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 switch and other components
Minimum clearance in mm

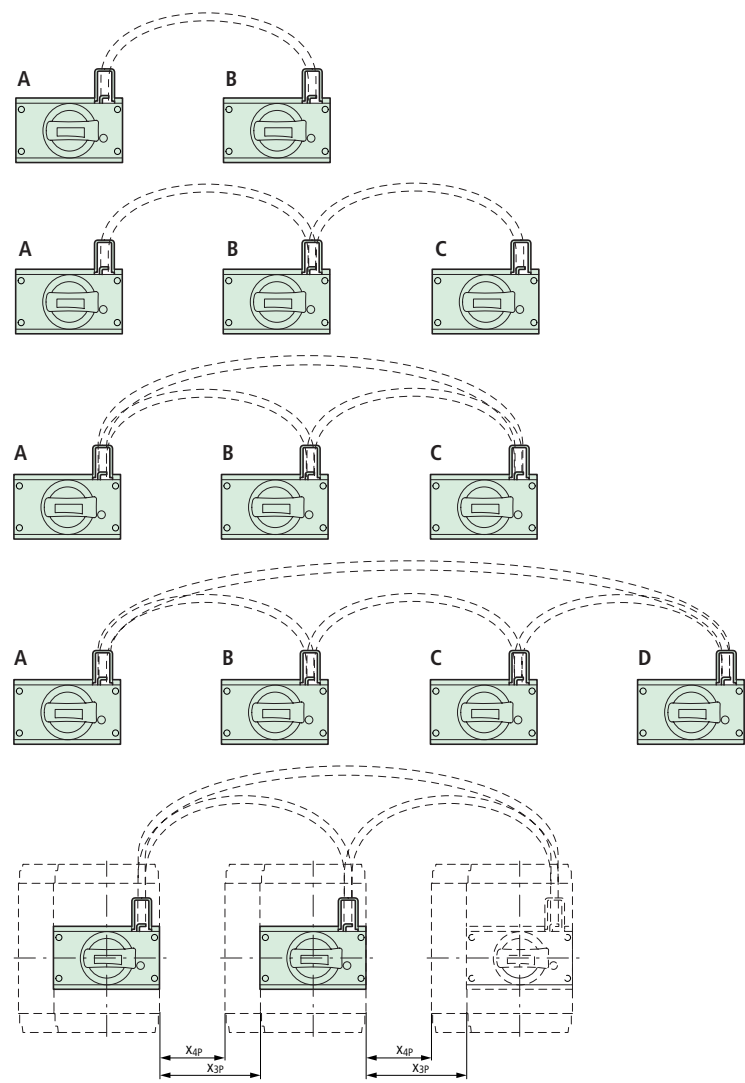
	b ≤ 690 V	c ≤ 690 V	1000 V	d ≤ 690 V
NZM1	0	60	—	0
NZM2	5	35	35	35
NZM3	5	60	60	60
NZM4	15	100	200	0

Dimensions



Cable lug	For use with	Nominal cross-section mm ²	Terminal bolts 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±0.4	7
NZM3-XKS185	NZM3, NZM4	185	M10	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

Interlocking variants combination options



A	B
OFF	OFF
ON	ON
ON/TRIP	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

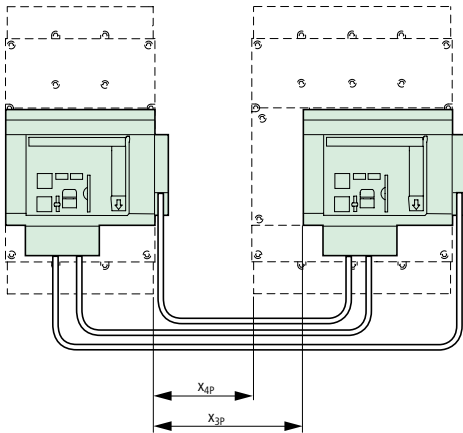
X_{3p} = 3 pole switch clearance

NZM-XBZ225					
Max. switch clearance		NZM1	NZM2	NZM3	NZM4
		X _{3P}	X _{3P}	X _{3P}	X _{3P}
		mm	mm	mm	mm
NZM1	3 pole	135	120	135	125
NZM2	3 pole	135	120	135	125
NZM3	3 pole	90	75	85	80
NZM4	3 pole	50	40	25	15

NZM-XBZ600					
Max. switch clearance		NZM1	NZM2	NZM3	NZM4
		X _{3P}	X _{3P}	X _{3P}	X _{3P}
		mm	mm	mm	mm
NZM1	3 pole	510	495	510	475
NZM2	3 pole	510	495	510	475
NZM3	3 pole	460	450	460	460
NZM4	3 pole	400	380	400	390

NZM-XBZ1000					
Max. switch clearance		NZM1	NZM2	NZM3	NZM4
		X _{3P}	X _{3P}	X _{3P}	X _{3P}
		mm	mm	mm	mm
NZM1	3 pole	910	895	910	865
NZM2	3 pole	910	895	910	865
NZM3	3 pole	820	850	860	860
NZM4	3 pole	750	730	800	790

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Circuit-breakers, disconnect switches
up to 1200 A

Mechanical interlock, XMVR (mounting side-by-side)

NZM...-XMVR						
Max. switch clearance		NZM2 3 pole	NZM3 3 pole	NZM3 3 pole	NZM4 3 pole	NZM4 3 pole
NZM2	3 pole	130	—	—	—	—
NZM3	3 pole	95	135	135	200	200
NZM4	3 pole	—	—	—	160	160

Mechanical interlock, XMVRL (mounting in adjacent control panel sections)

NZM...-XMVRL						
Max. switch clearance		NZM2 3 pole	NZM3 3 pole	NZM3 3 pole	NZM4 3 pole	NZM4 3 pole
NZM2	3 pole	on request	—	—	—	—
NZM3	3 pole	on request	on request	on request	on request	on request
NZM4	3 pole	—	—	—	on request	on request

Circuit-breakers, disconnect switches
up to 1200 A

Cover for screw terminals

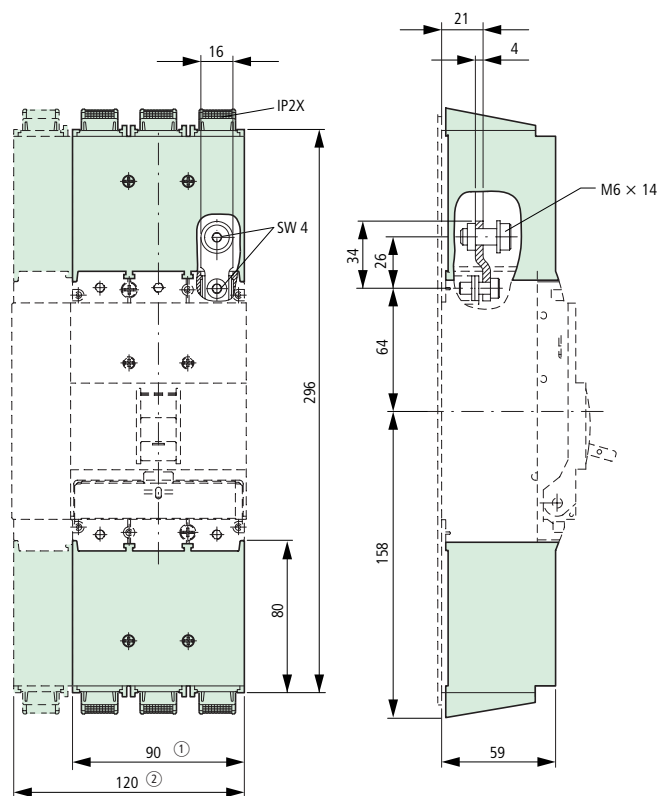
NZM1-XKSA

Screw connection

NZM1-XKS

IP2X protection against contact with a finger

NZM1-XIPA

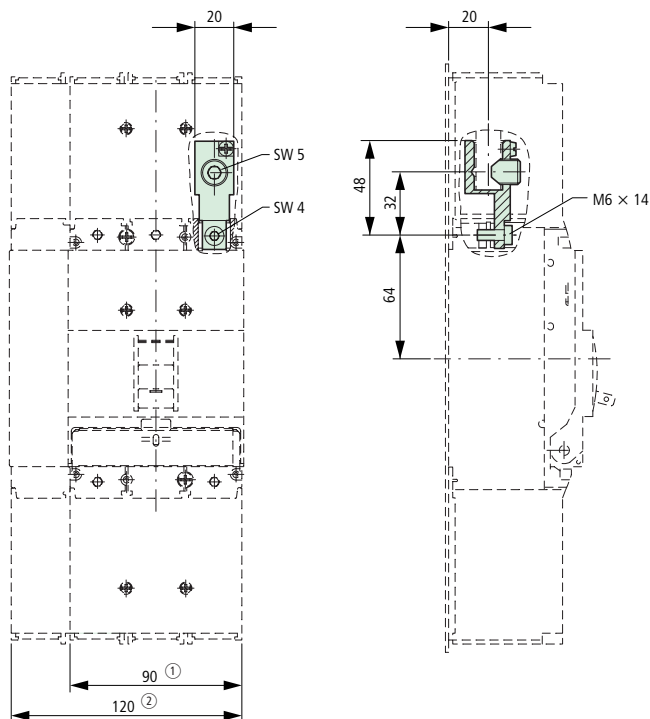


① 3-pole

② 4-pole

NZM1 tunnel terminal

NZM1-XKA

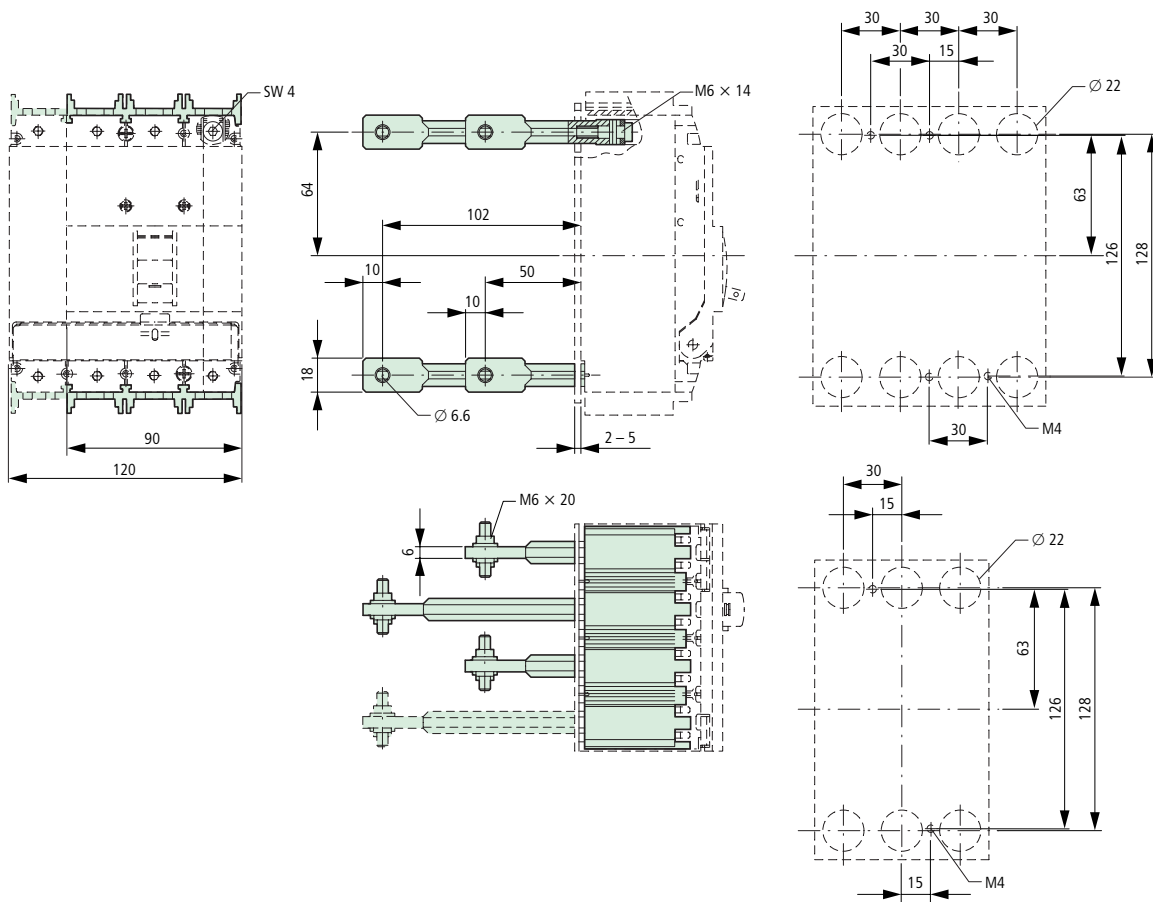


① 3-pole

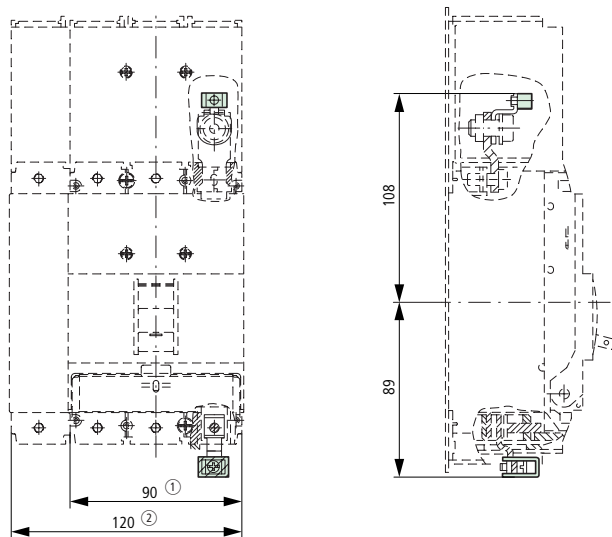
② 4-pole

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Connection on rear
NZM1-XKR

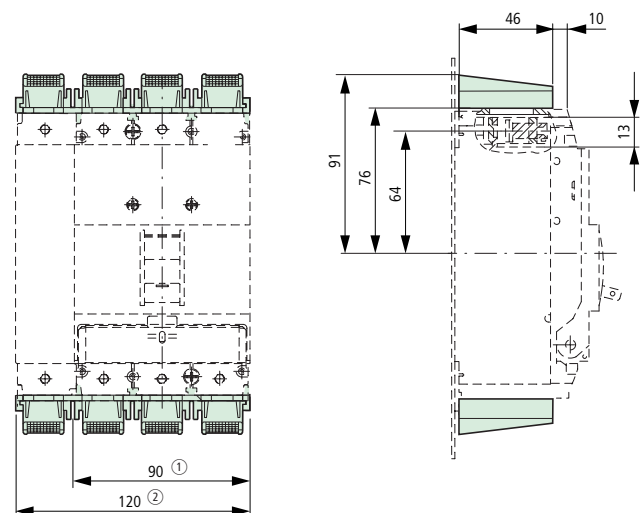


Control circuit terminal
NZM1-XSTK, NZM1-XSTS



- ① 3-pole
- ② 4-pole

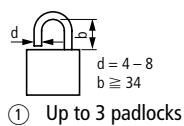
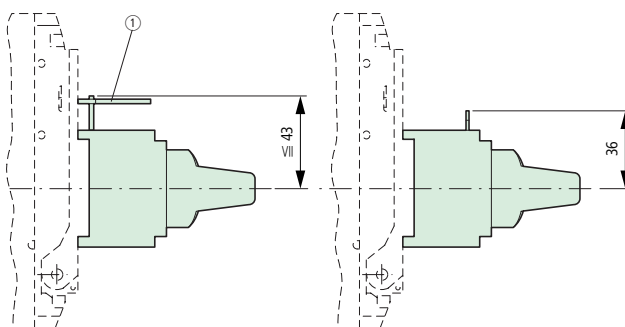
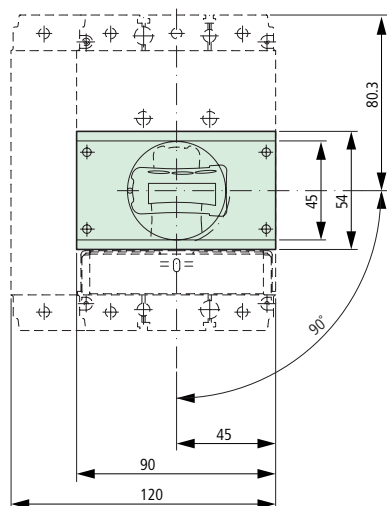
IP2X protection against contact with a finger
NZM1-XIPK



Rotary handle for circuit-breaker

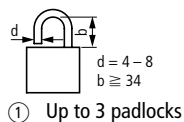
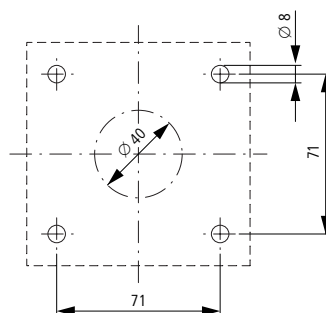
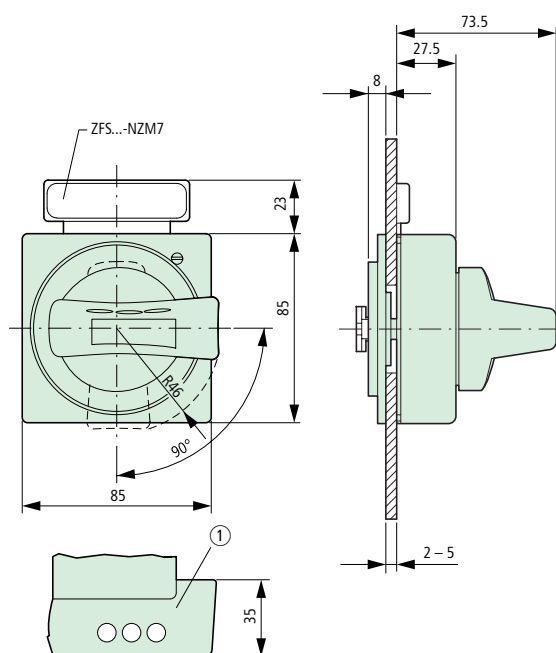
NZM1-XDV(R)

NZM1-XDTV



Door coupling rotary handle

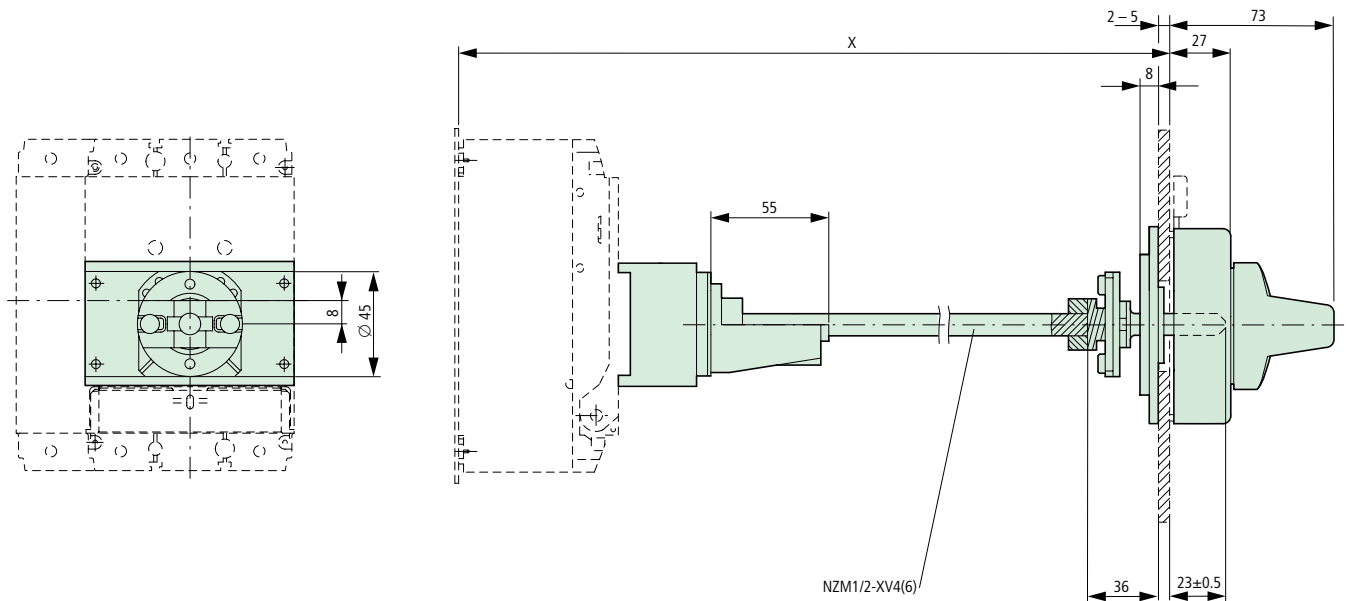
NZM1-XT(V)D(V)(R)



Moeller SK1230-1157EN-NA

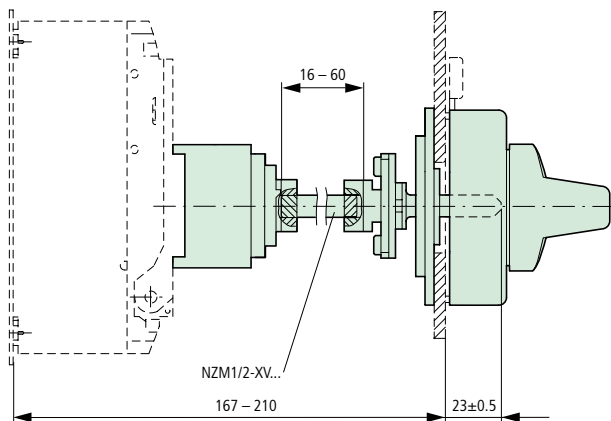
Door coupling rotary handle with extension shaft

NZM1-XT(V)D(V)(R)(-NA)
NZM1/2-XV4(6)

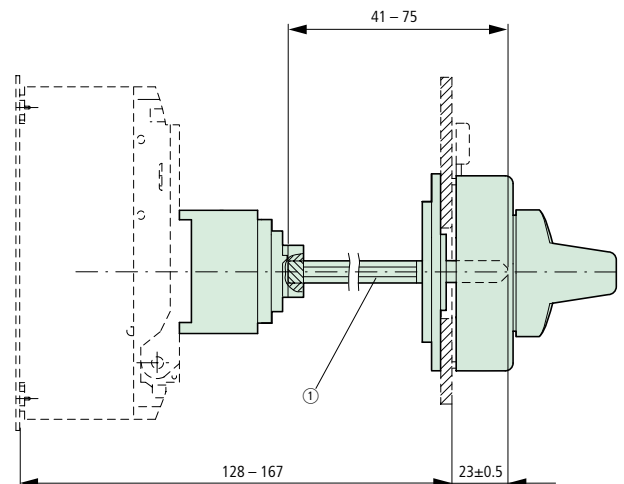


	x
NZM1/2-XV4	210 – 400
NZM1/2-XV6	400 – 600

NZM1-XT(V)D(V)(R)-60(-NA)

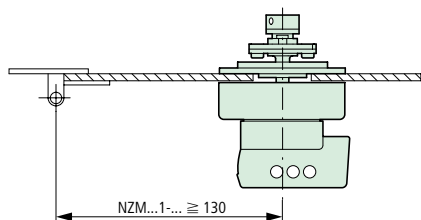


NZM1-XT(V)D(V)(R)-0(-NA)



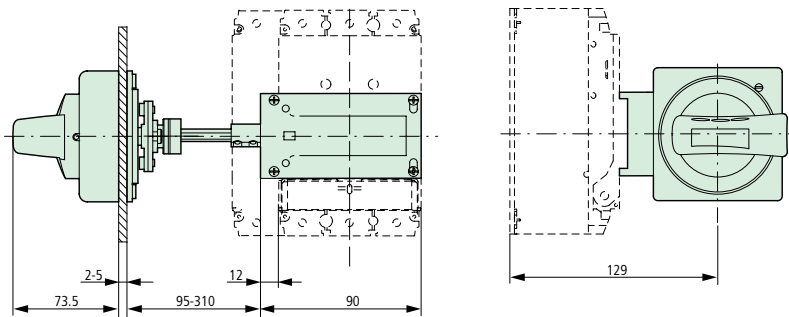
① Special tip

Minimum door coupling rotary handle clearance from door pivot point

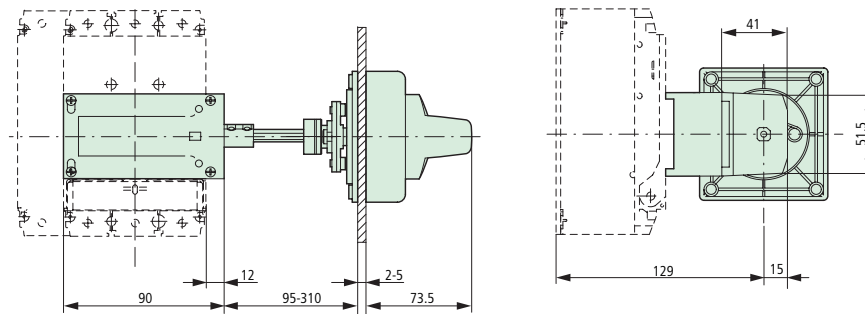


Main switch assembly kit for side wall installation

NZM1-XS(R)-L

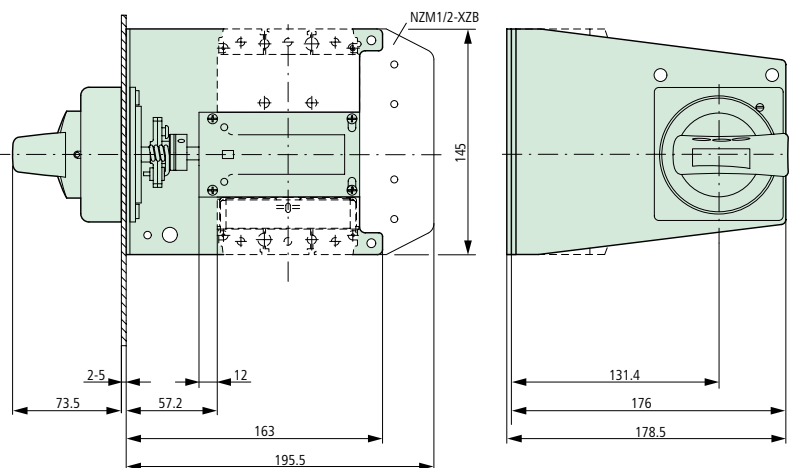


NZM1-XS(R)-R

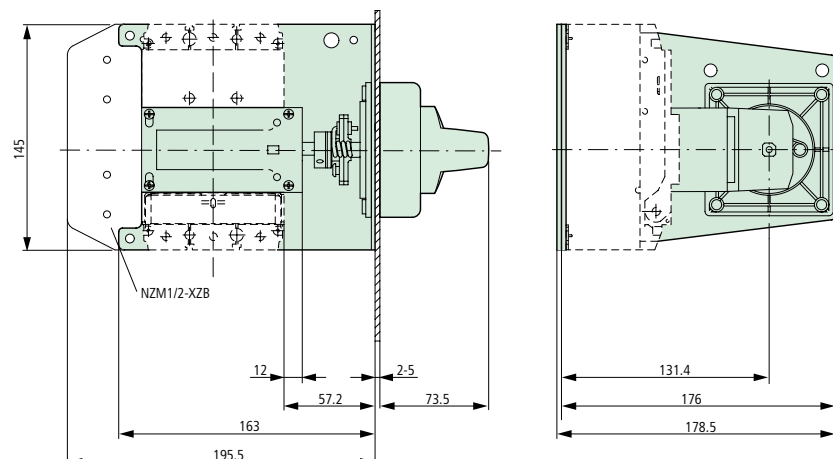


Main switch assembly kit for side panel mounting with mounting bracket

NZM1-XS(R)M-L

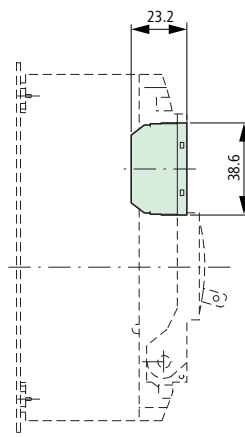
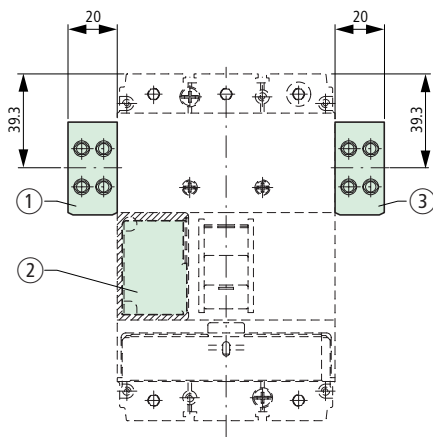


NZM1-XS(R)M-R



Moeller SK1230-1157EN-NA

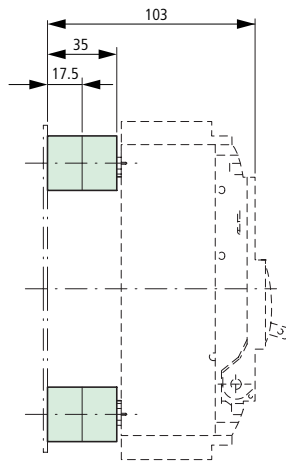
Undervoltage release, shunt release, early-make auxiliary contact



- 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

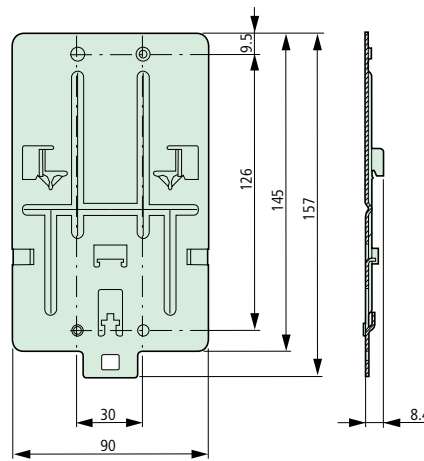
Spacers

NZM1/2-XAB



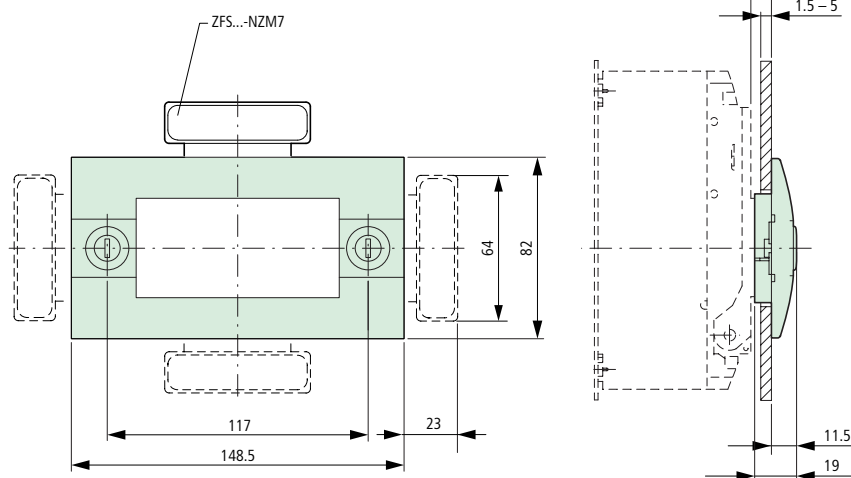
Clip plates

NZM1-XC35



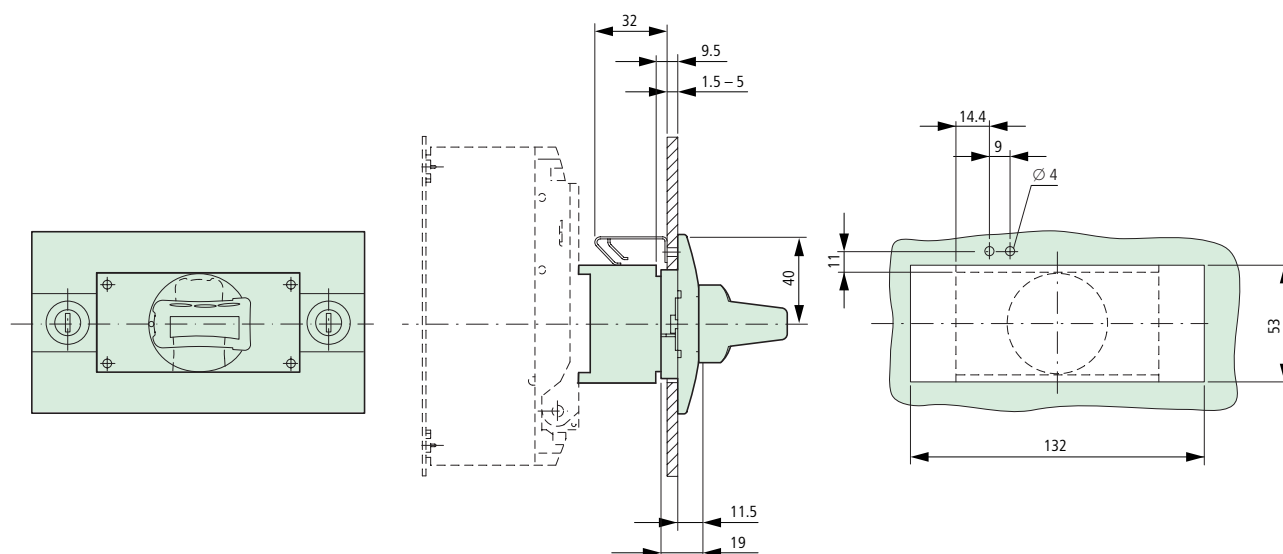
Insulating surround NZM1-XBR

Mounting aperture

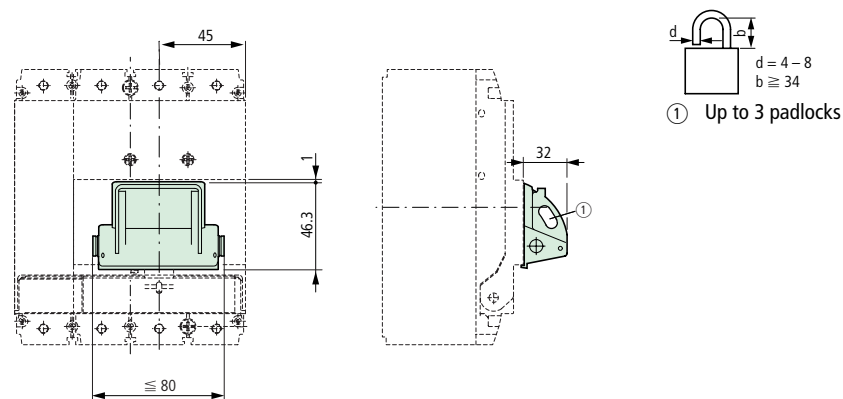


Rotary handle on switch with door interlock NZM1-XDTV(R)

Mounting aperture

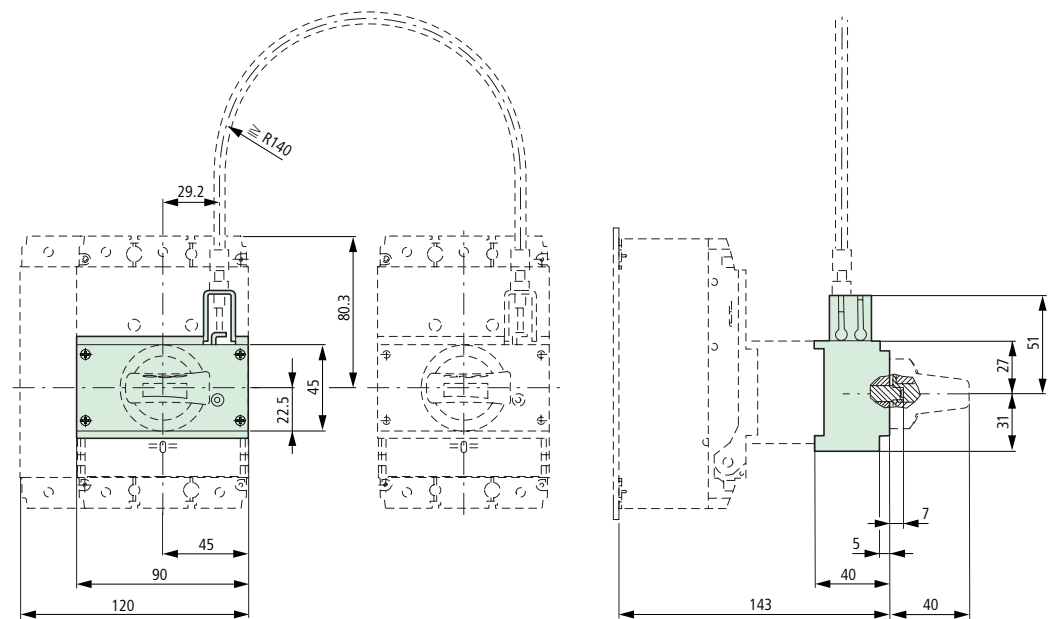


Toggle lever interlock device NZM1-XKAV

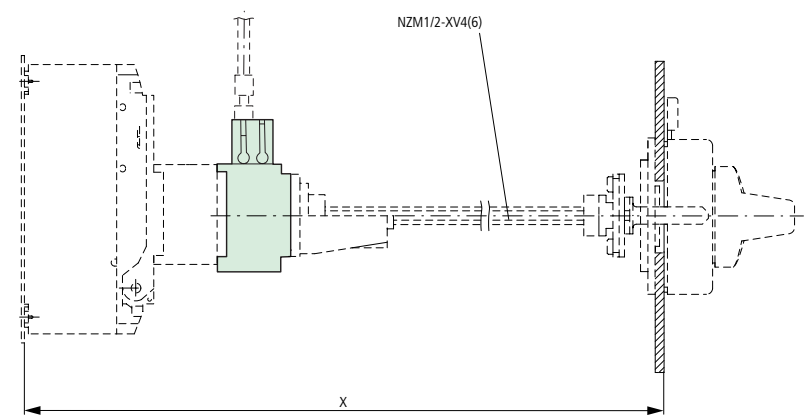


Moeller SK1230-1157EN-NA

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

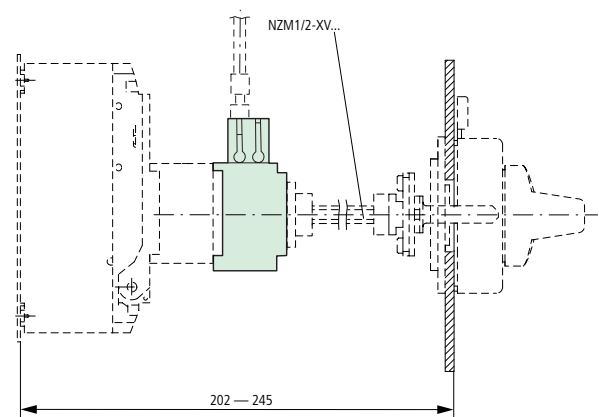


NZM1-XMV with NZM1-XT(V)D(V)(R)

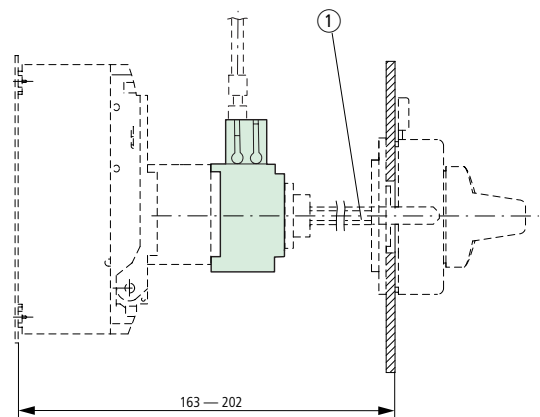


	x
NZM1/2-XV4	245 – 400
NZM1/2-XV6	400 – 600

NZM1-XMV with NZM1-XT(V)D(V)(R)-60

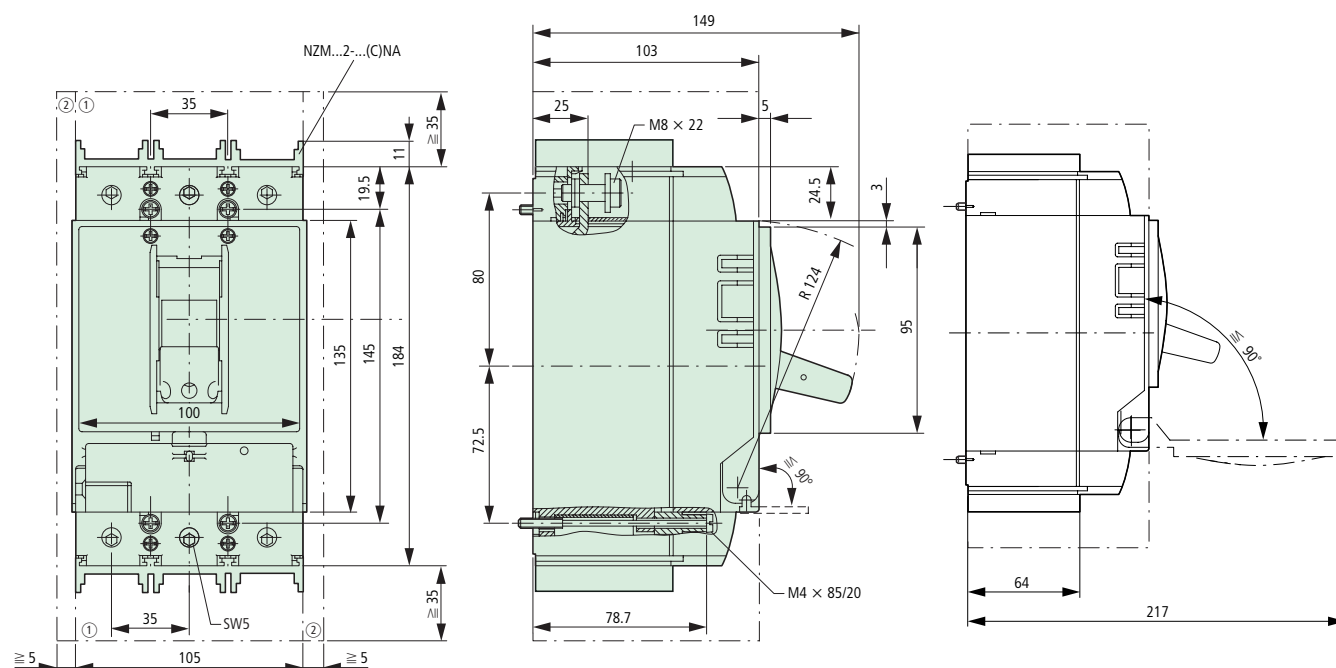


NZM1-XMV with NZM1-XT(V)D(V)(R)-0



① Special tip

NZMB2, NZMN2, NZMH2, NS2



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

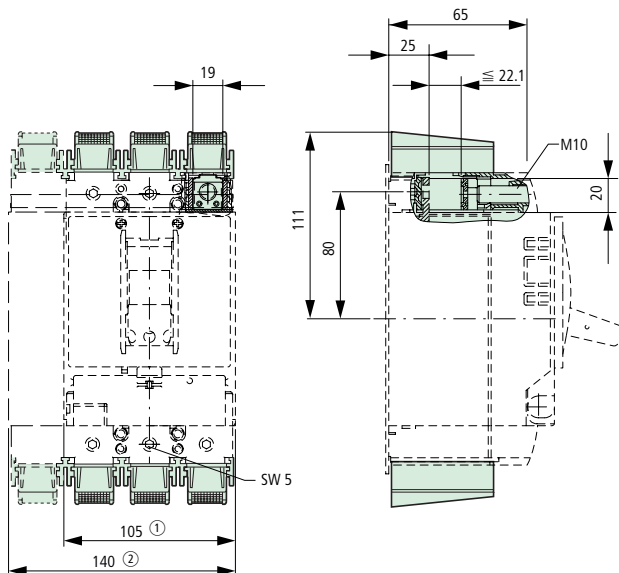
Moeller SK1230-1157EN-NA

Box terminal

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

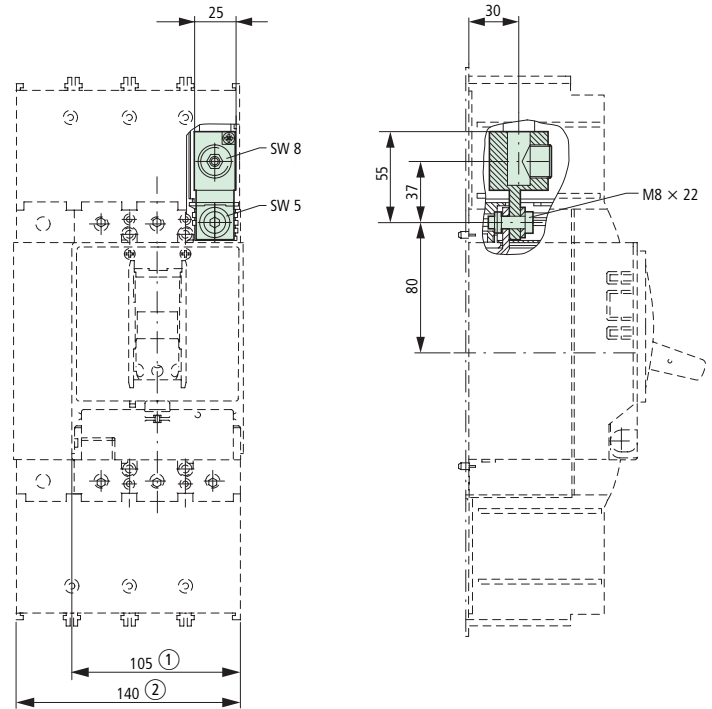
IP2X protection against contact with a finger

NZM2-XIPK



Tunnel terminal

NZM2-XKA



① 3-pole

② 4-pole

Cover for screw terminals

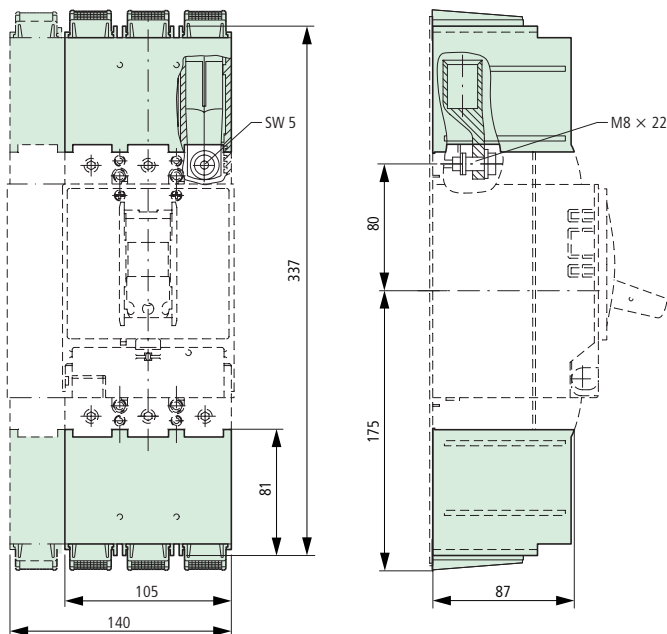
NZM2-XKSA

Cable lug

NZM2-XKS185

IP2X protection against contact with a finger for shroud

NZM2-XIPA

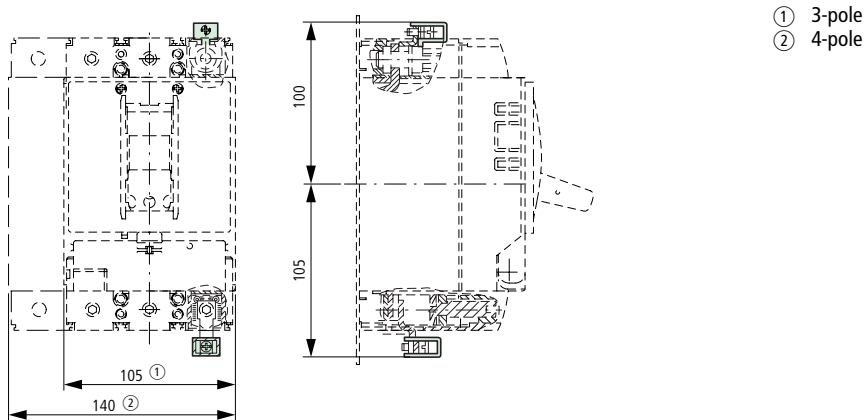


(+)NZM2-XKR(O)(U)



Moeller SK1230-1157EN-NA

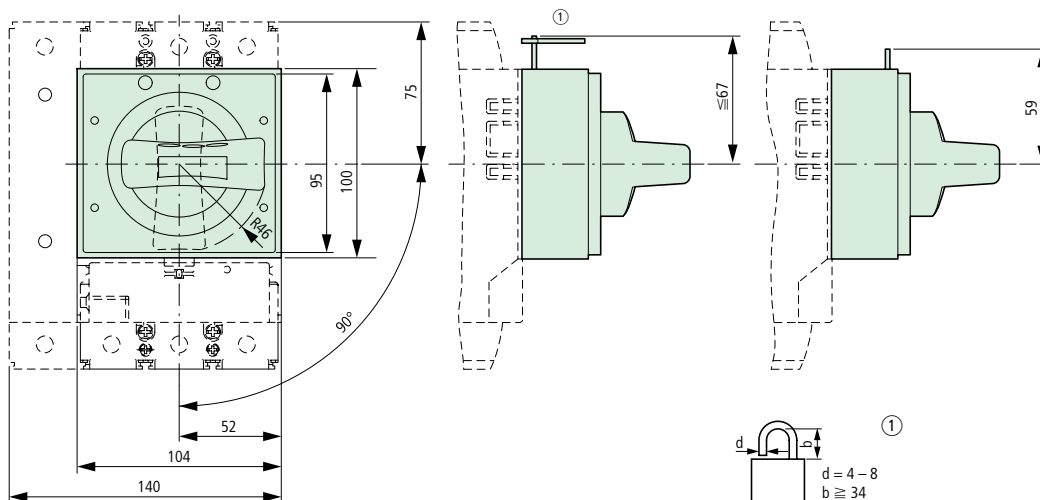
Control circuit terminal
NZM2-XSTS, NZM2-XSTK



Rotary handle for circuit-breaker

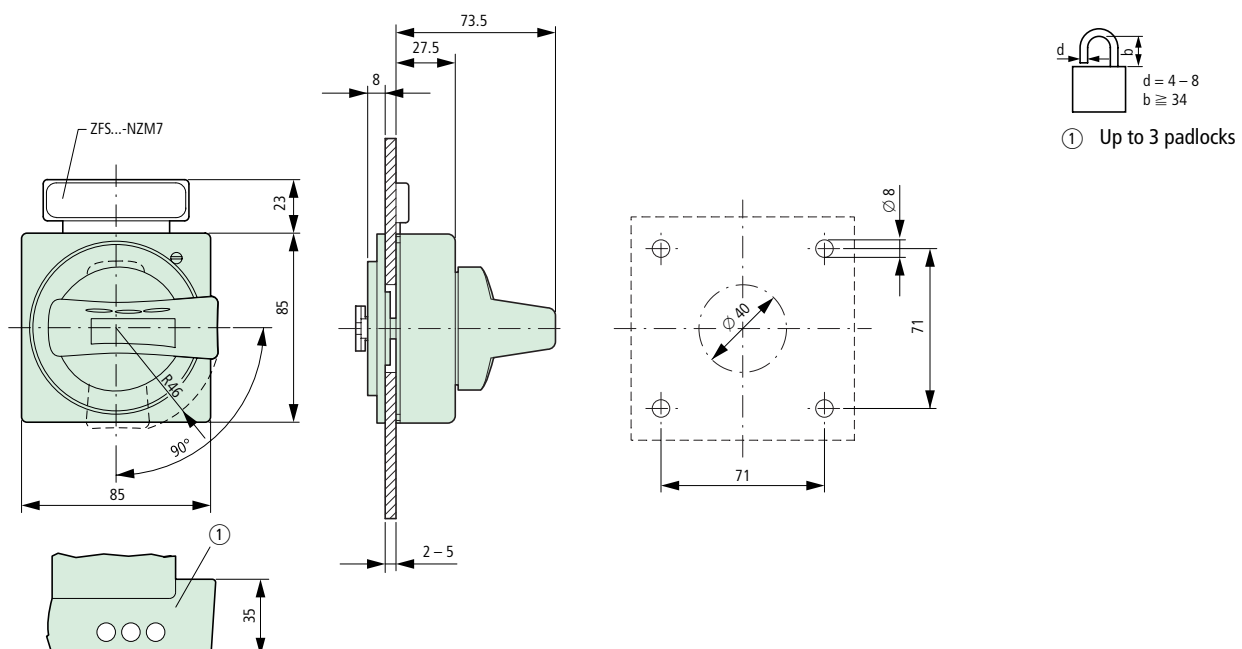
NZM2-XDV(R)

NZM2-XDTV(R)



Door coupling rotary handle

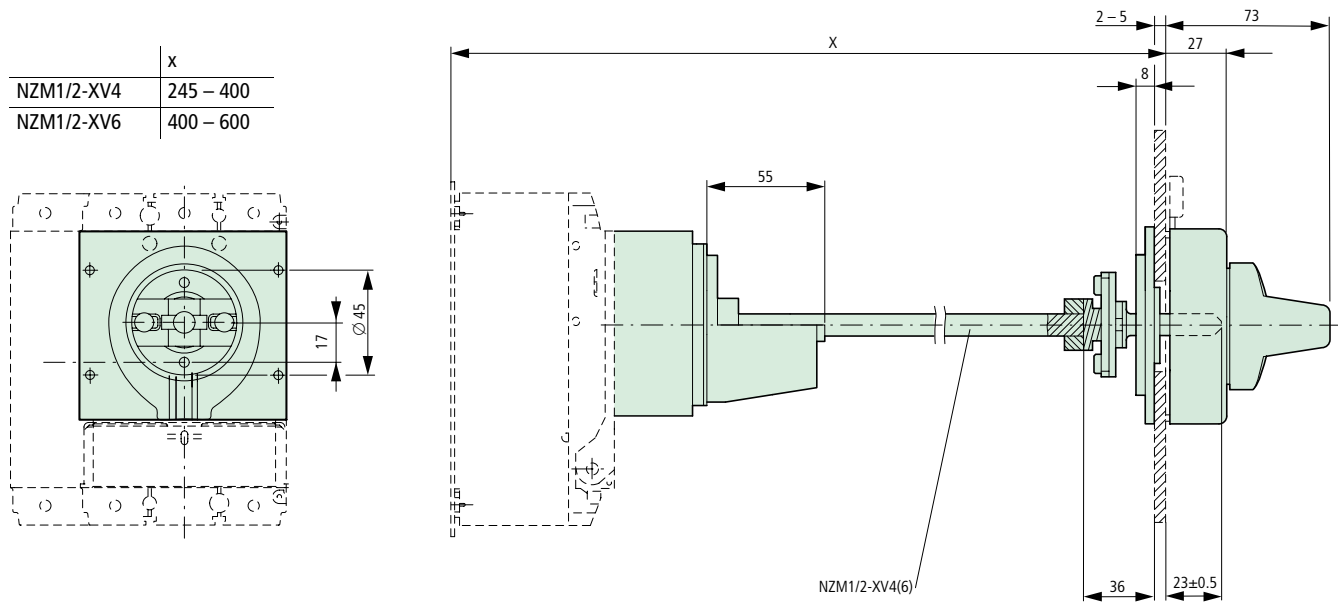
NZM2-XT(V)D(V)(R)



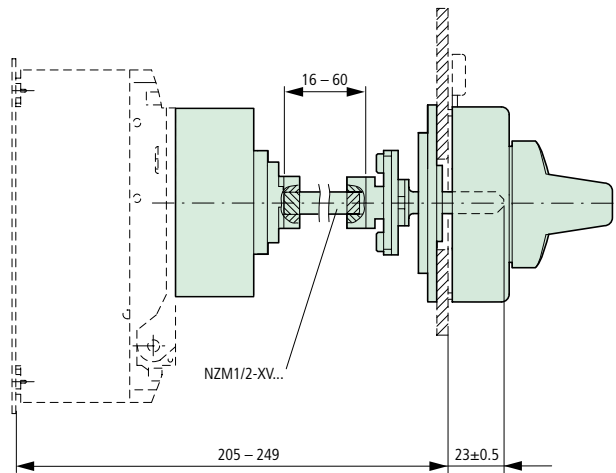
Door coupling rotary handle with extension shaft

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

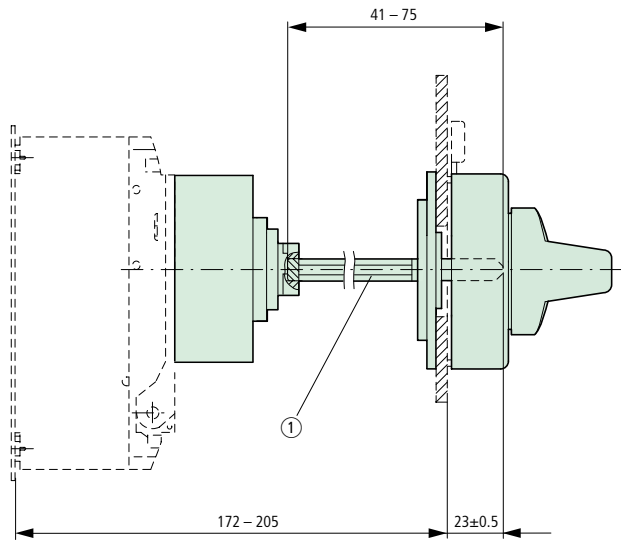
	x
NZM1/2-XV4	245 – 400
NZM1/2-XV6	400 – 600



NZM2-XT(V)D(V)(R)-60(-NA)

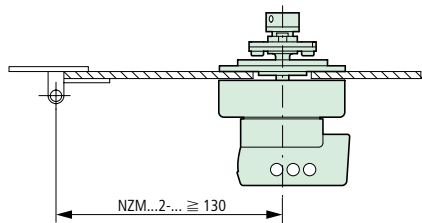


NZM2-XT(V)D(V)(R)-0(-NA)



① Special tip

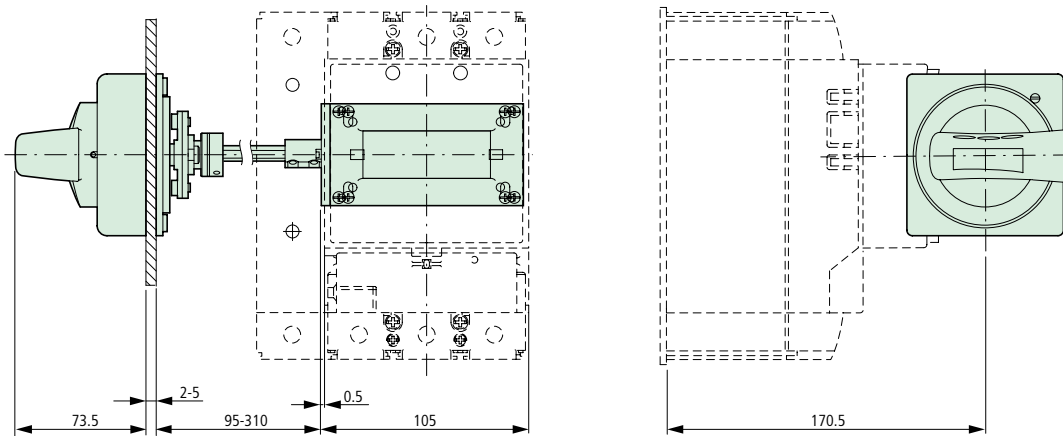
Minimum door coupling rotary handle clearance from door pivot point



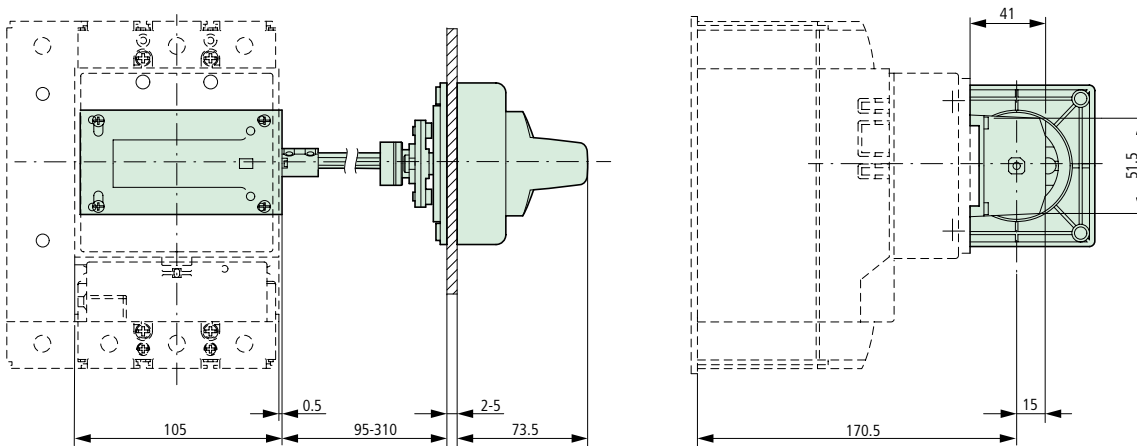
Moeller SK1230-1157EN-NA

Main switch assembly kit for side wall installation

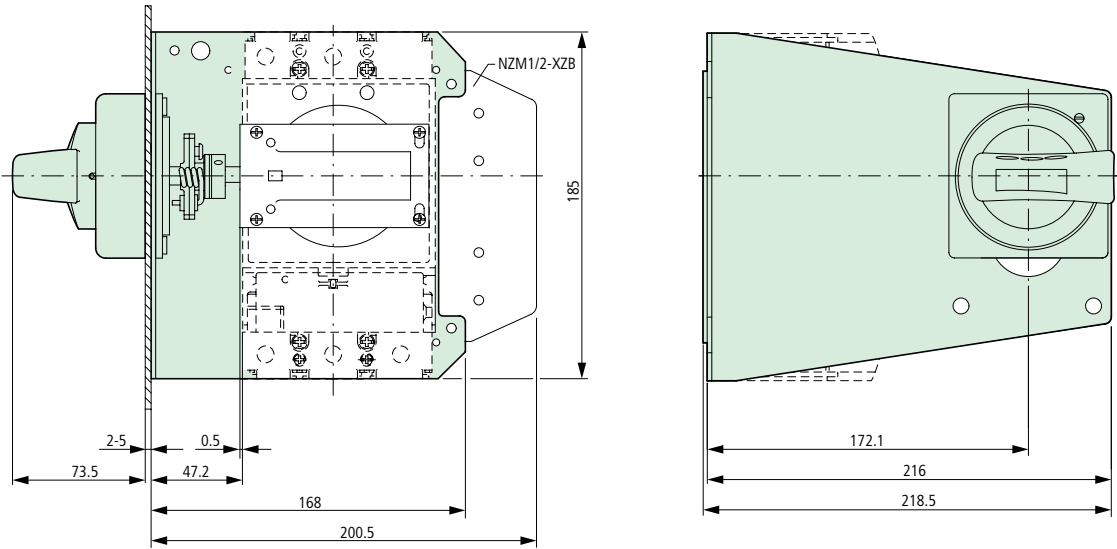
NZM2-XS(R)-L



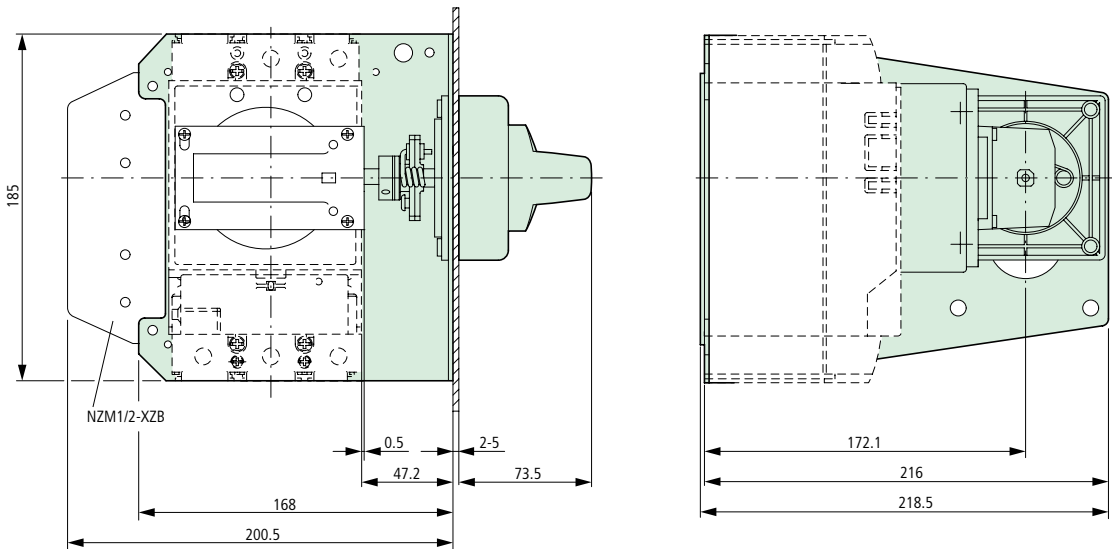
NZM2-XS(R)-R



Main switch assembly kit for side panel mounting with mounting bracket
NZM2-XS(R)M-L



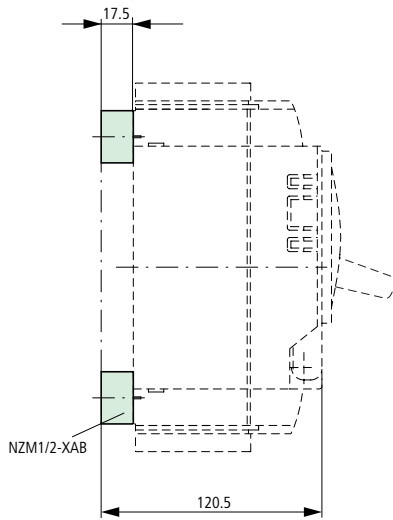
NZM2-XS(R)M-R



Moeller SK1230-1157EN-NA

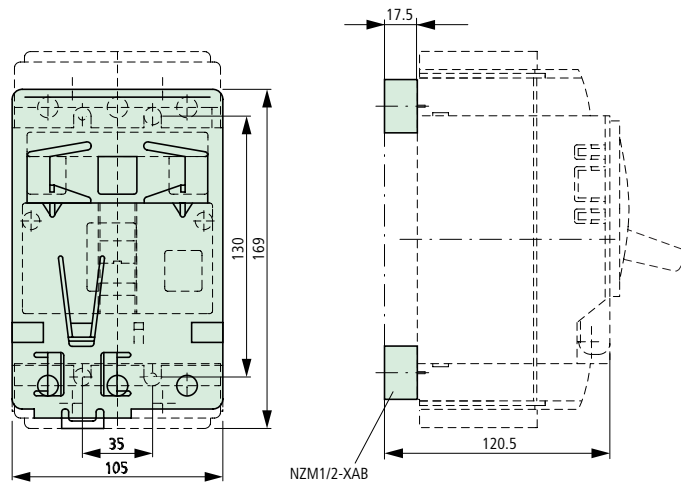
Spacers

NZM1/2-XAB



Clip plates

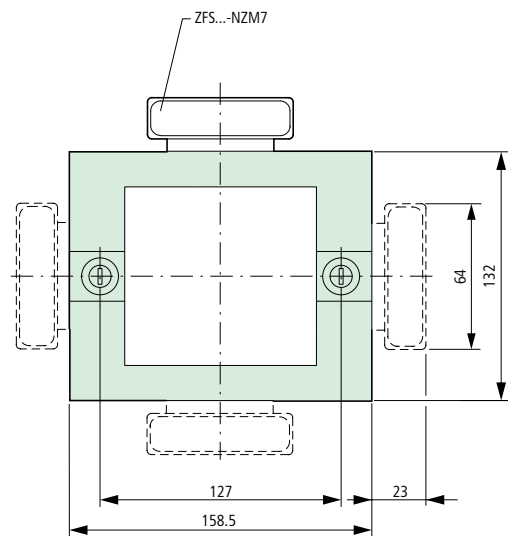
NZM2-XC75



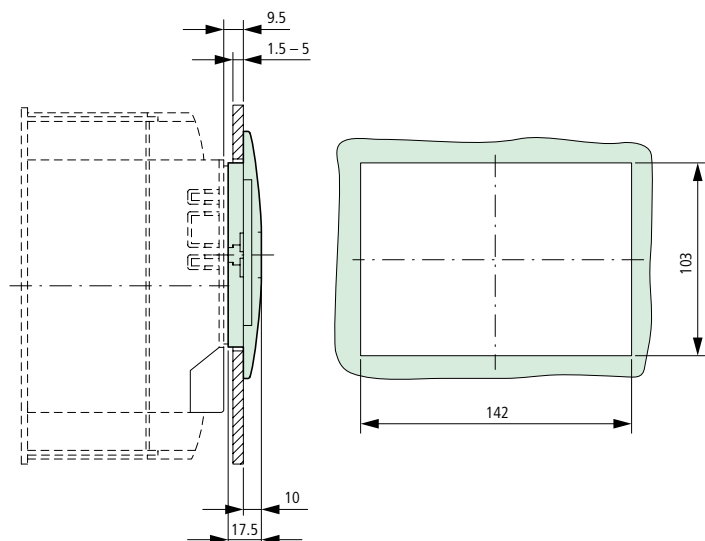
Circuit-breakers, disconnect switches up to 1200 A

Insulating surround

NZM2-XBR

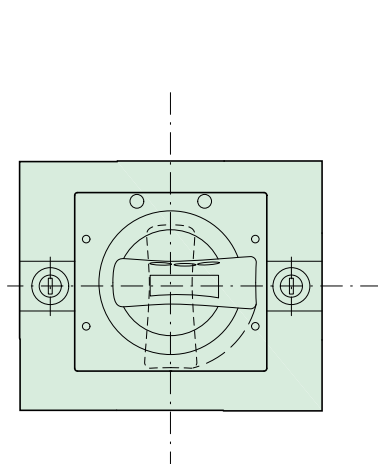


Mounting aperture

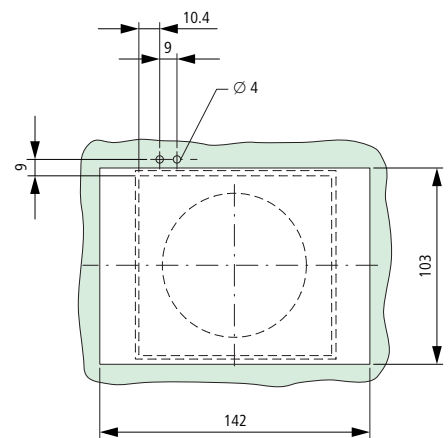


Rotary handle on switch with door interlock

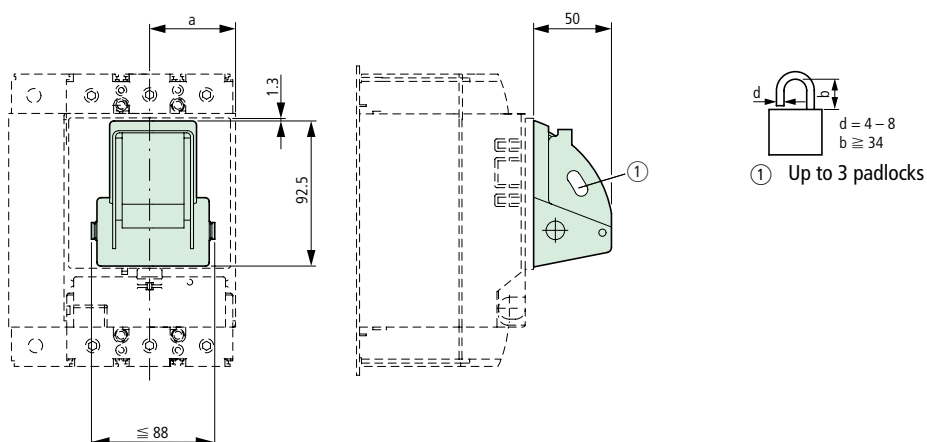
NZM2-XDTV(R)



Mounting aperture

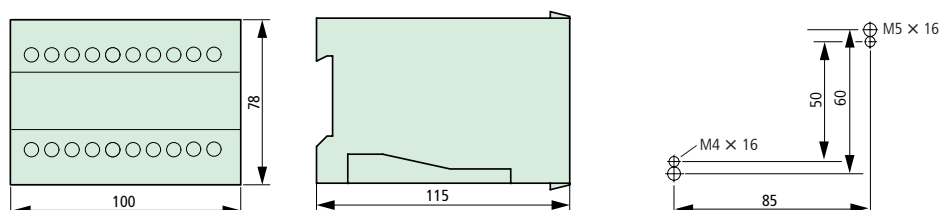


Toggle lever interlock device NZM2/3-XKAV

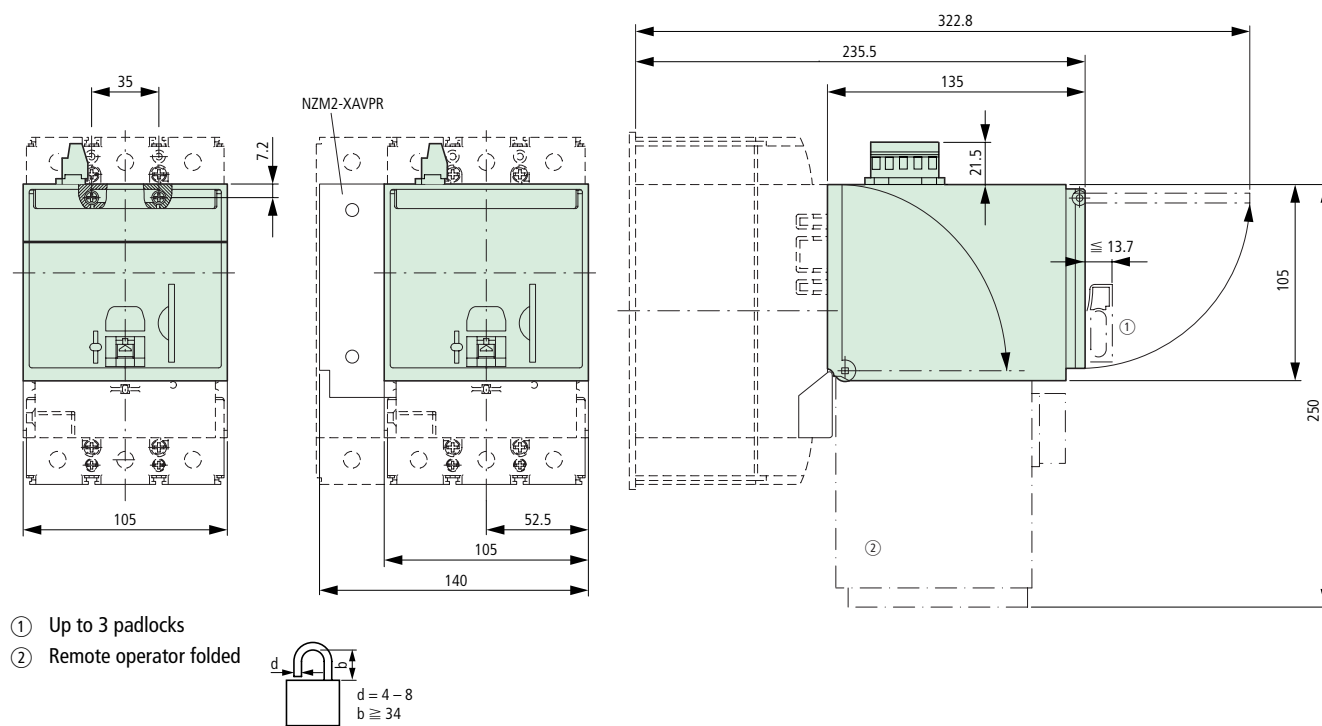


	a
NZM2, PN2, N2	52,5
NZM3, PN3, N3	70

Capacitor unit NZM-XCM

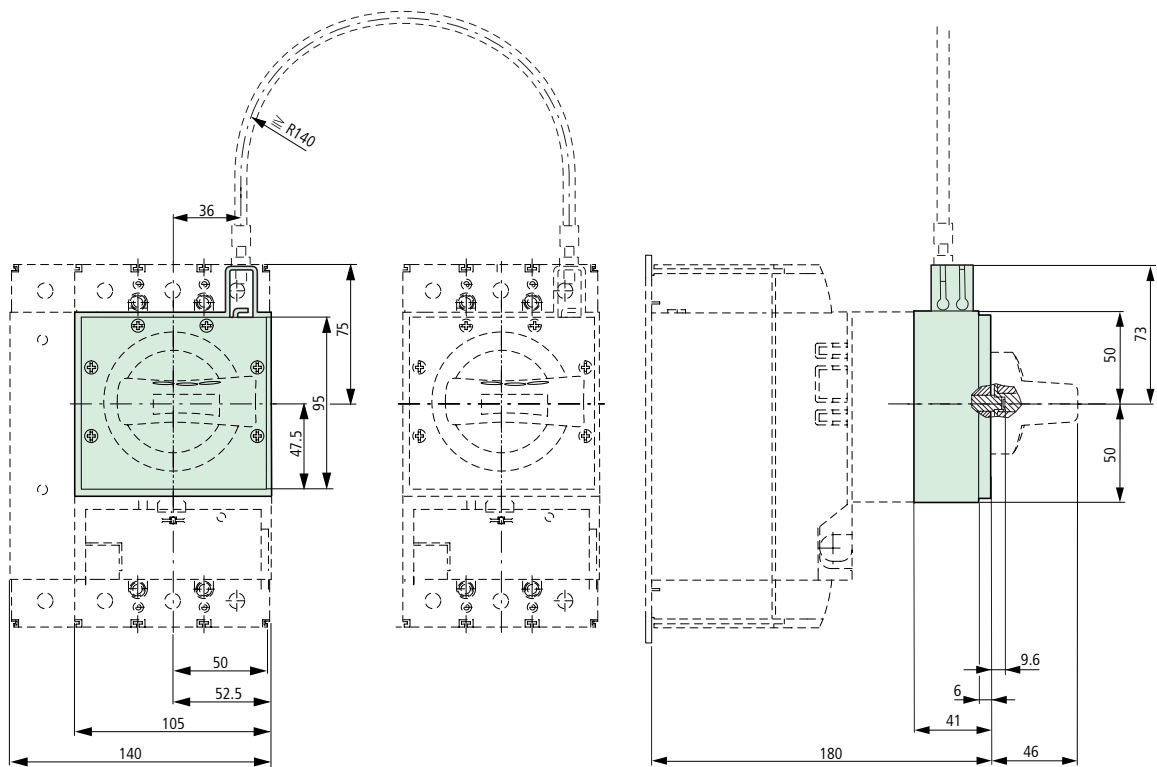


Remote operator NZM2-XR...

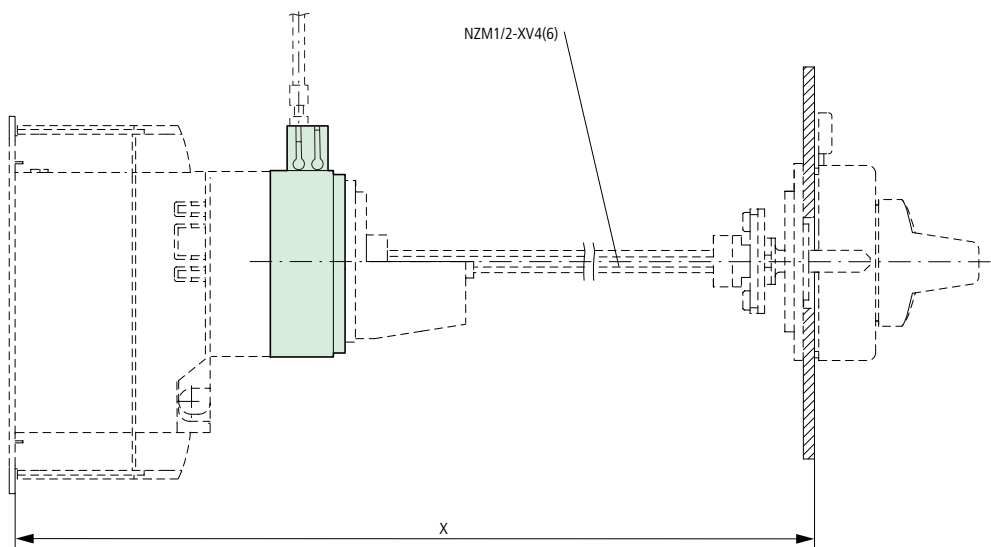


Moeller SK1230-1157EN-NA

Mechanical interlock
NZM2-XMV with NZM2-XDV(R)

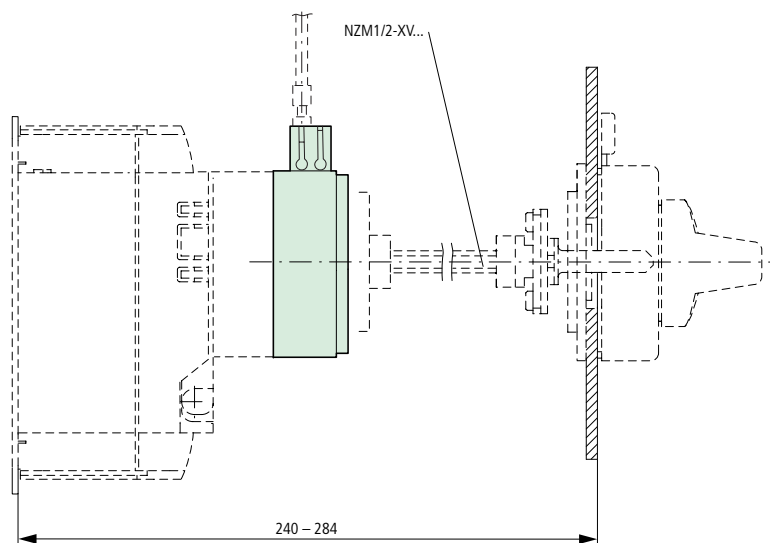


NZM2-XMV with NZM2-XT(V)D(V)(R)



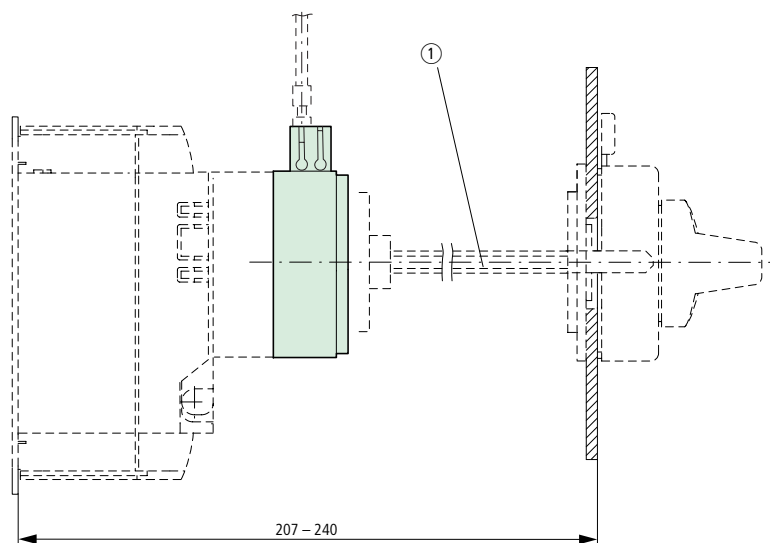
	x
NZM1/2-XV4	280 – 400
NZM1/2-XV6	400 – 600

NZM2-XMV with NZM2-XT(V)D(V)(R)-60



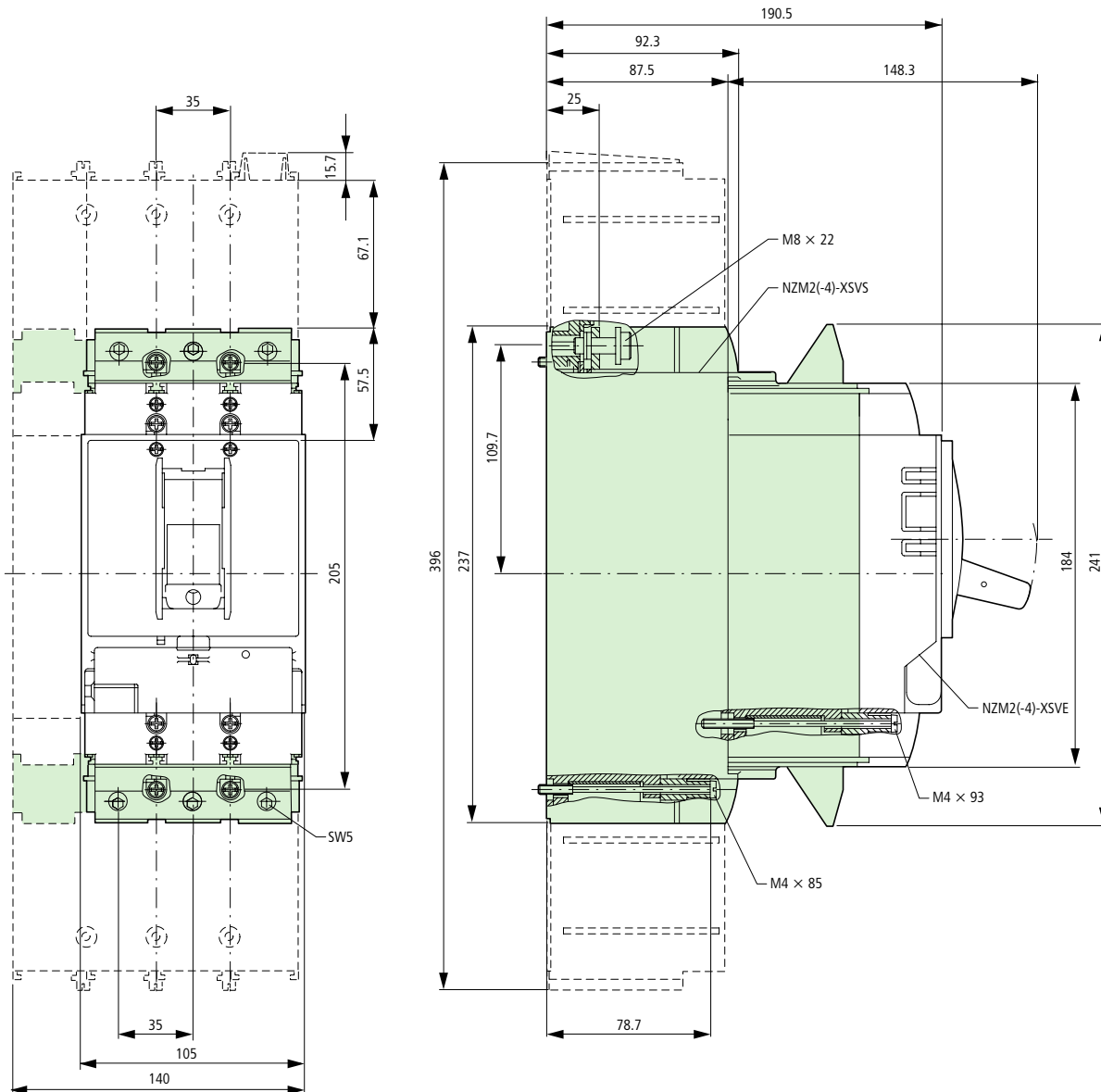
NZM2-XMV with NZM2-XT(V)D(V)(R)-0

① Special tip

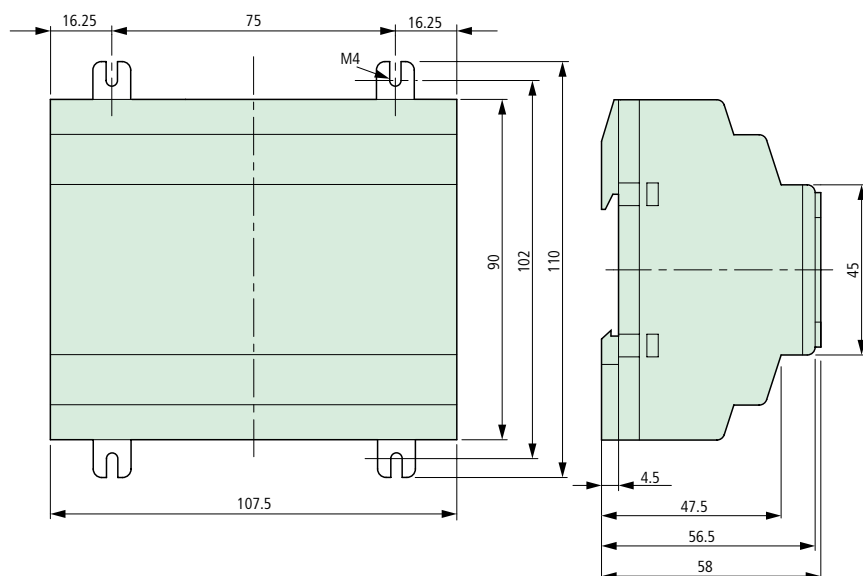


Moeller SK1230-1157EN-NA

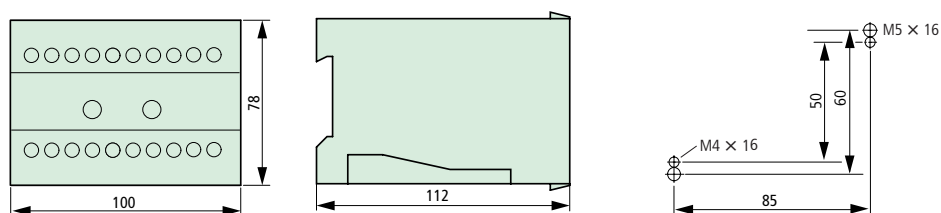
Plug-in adapter elements
+NZM2-XSV



NZM-XDMI612



UVU-NZM

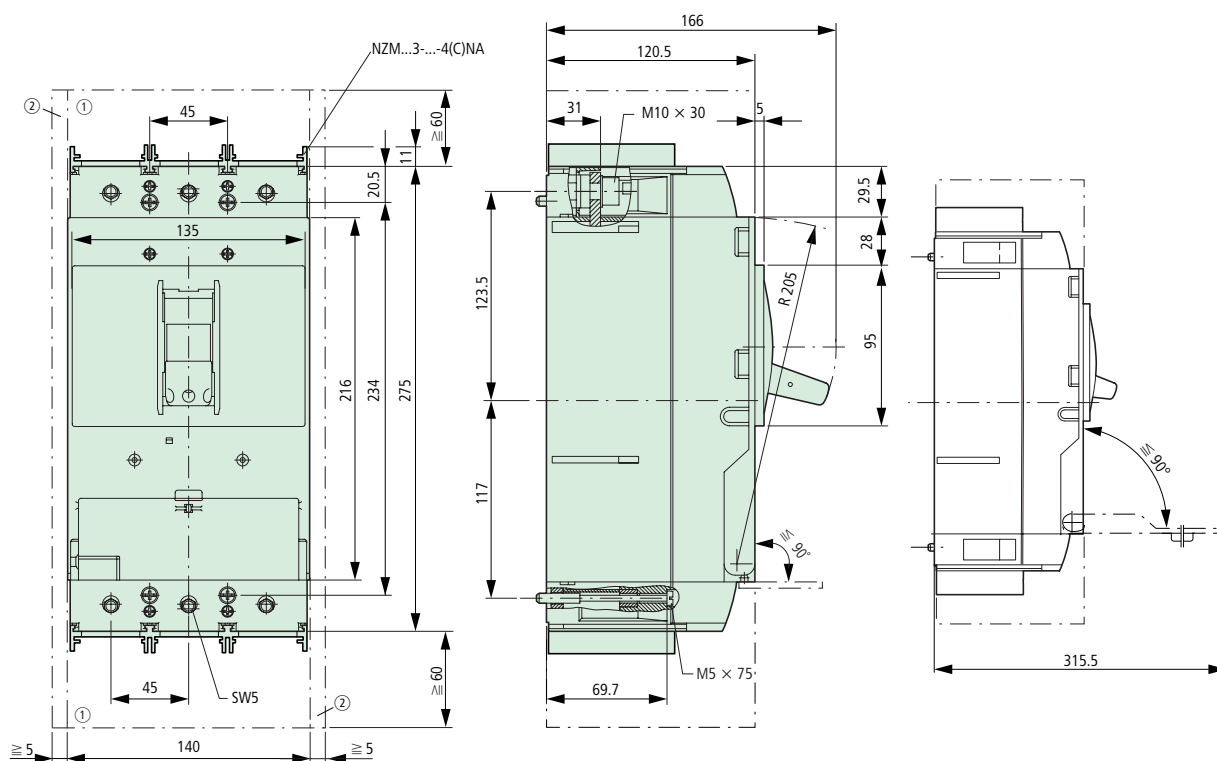


Moeller SK1230-1157EN-NA

Circuit-breakers, disconnect switches
up to 1200 A

Circuit-breaker, disconnect switches, 3-pole

NZMN3, NZMH3, N3, NS3

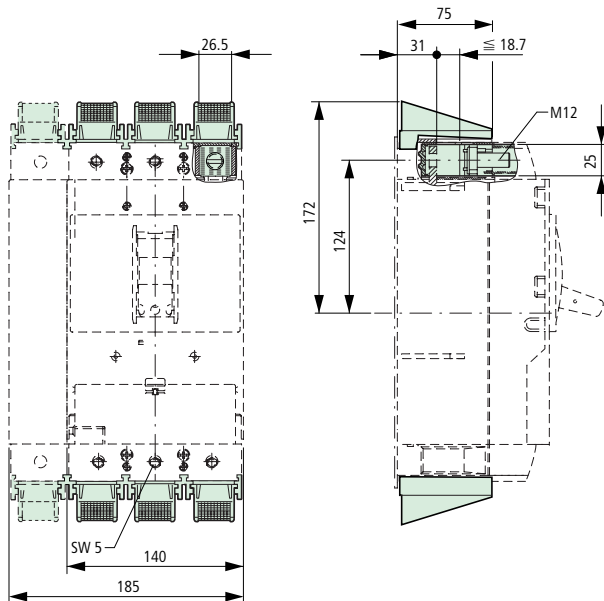
① Blow out area, minimum clearance to other parts ≥ 60 mm② Minimum clearance from adjacent parts ≥ 5 mm

Moeller SK1230-1157EN-NA

Box terminal

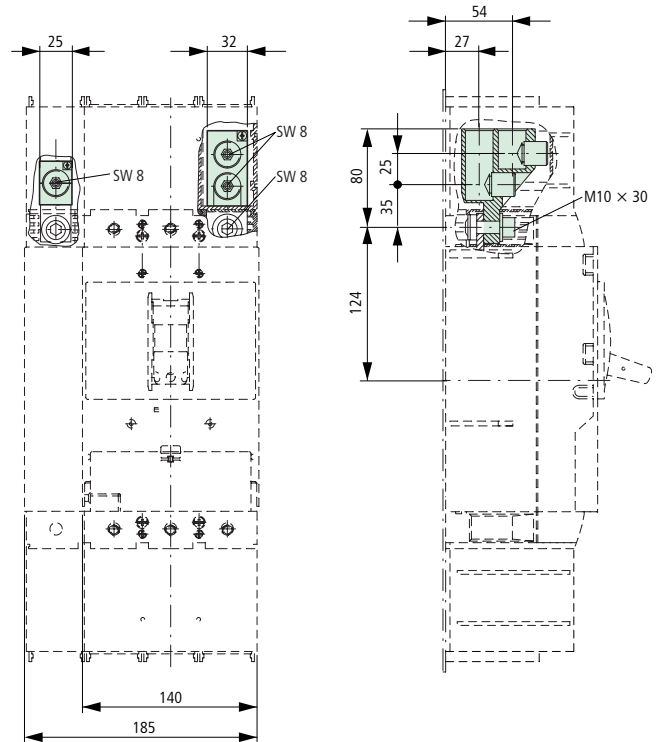
(+)NZM3-XKC(O)(U)

IP2X protection against contact with
NZM3-XIPK



Tunnel terminal

NZM3-XKA1(2)



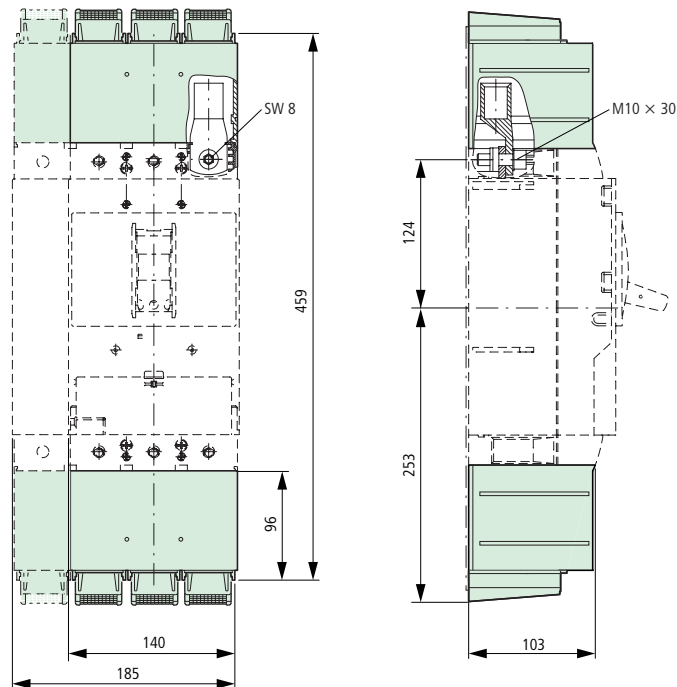
Cover for screw terminals

NZM3-XKSA

Cable lug

NZM3-XKS185

IP2X protection against contact with
NZM3-XIPA



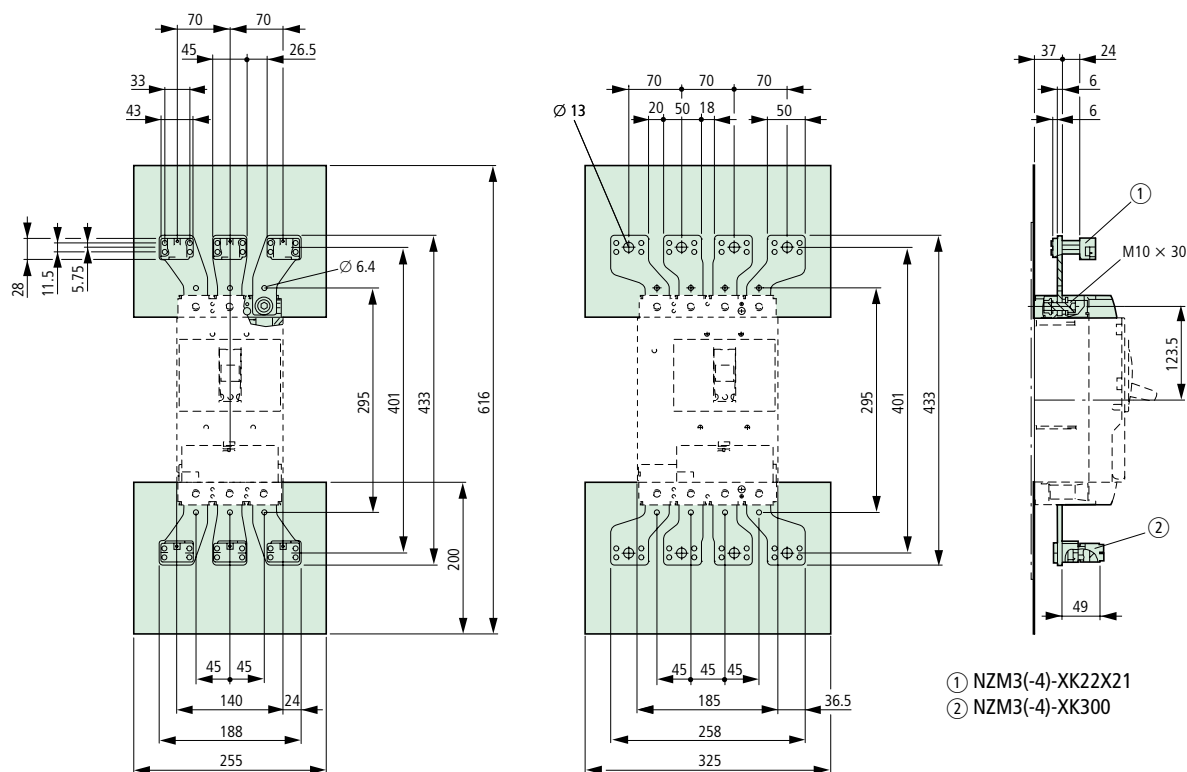
Connection width extension

NZM3-XKV70

Terminals

NZM3-XK22X21

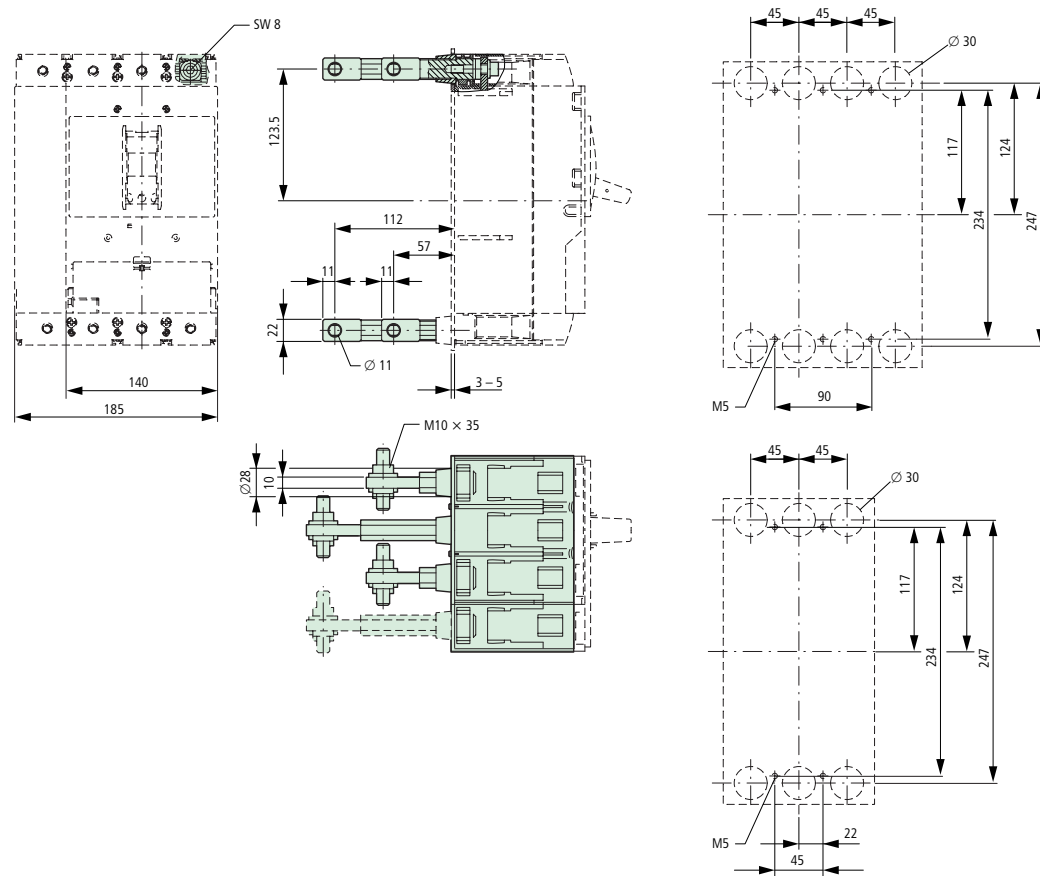
NZM3-XK300



Note: Length with phase isolators approx. 599 mm

Connection on rear

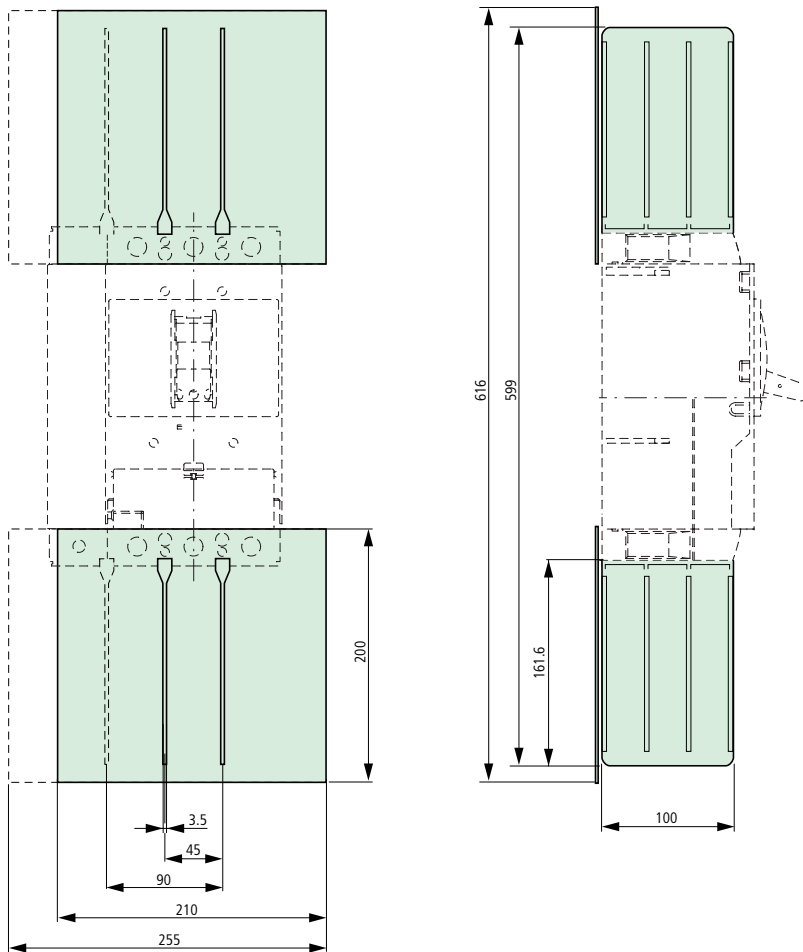
(+)NZM3-XKR(O)(U)



Moeller SK1230-1157EN-NA

Phase isolator

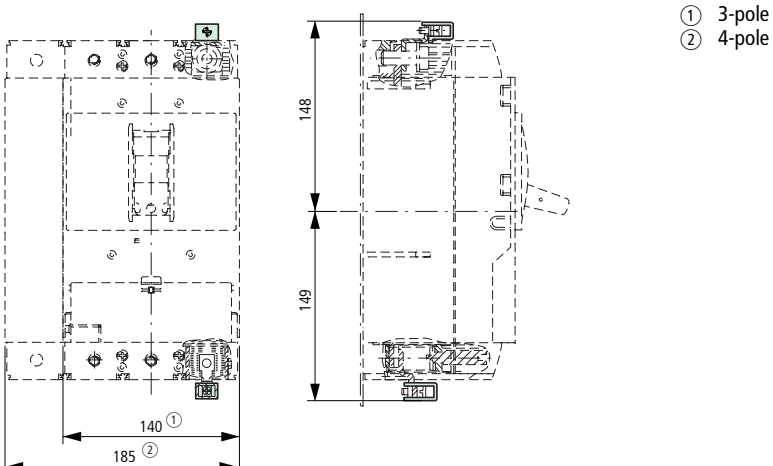
NZM3-XKP



Control circuit terminal

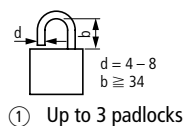
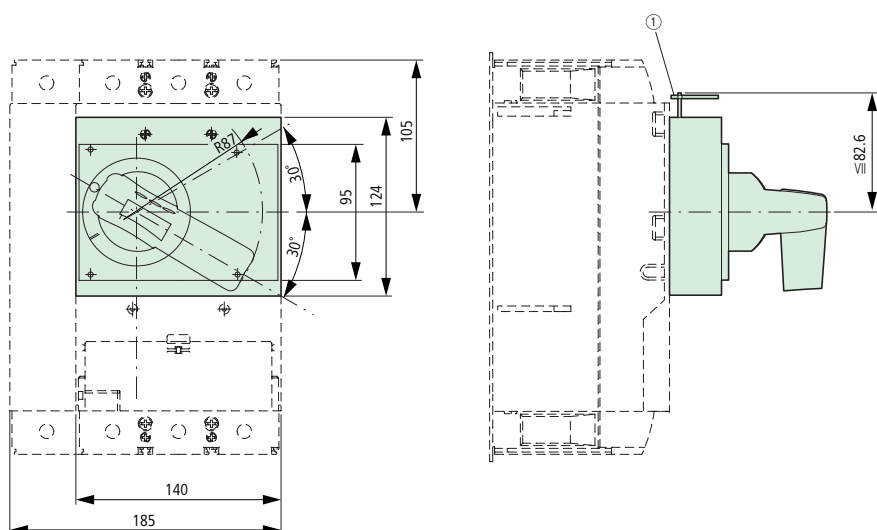
NZM3/4-XSTS

NZM-XSTK



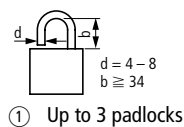
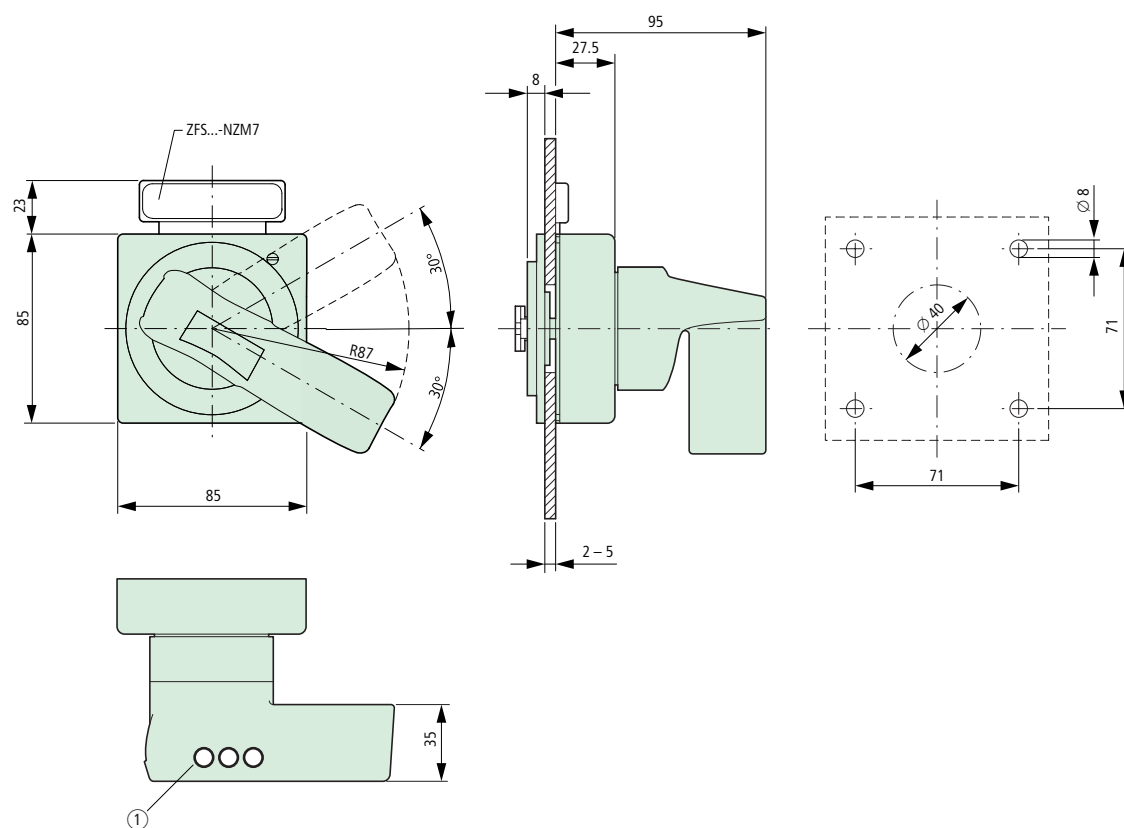
Rotary handle on circuit-breaker

NZM3-XDV(R)



Door coupling rotary handle

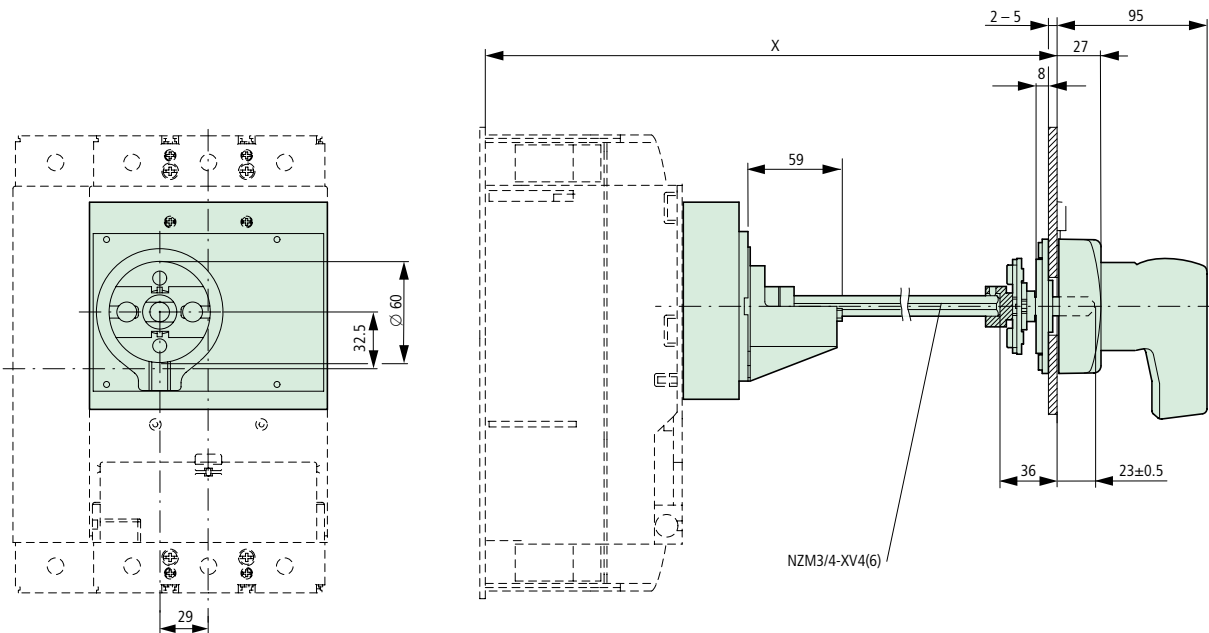
NZM3-XT(V)D(V)(R)



Moeller SK1230-1157EN-NA

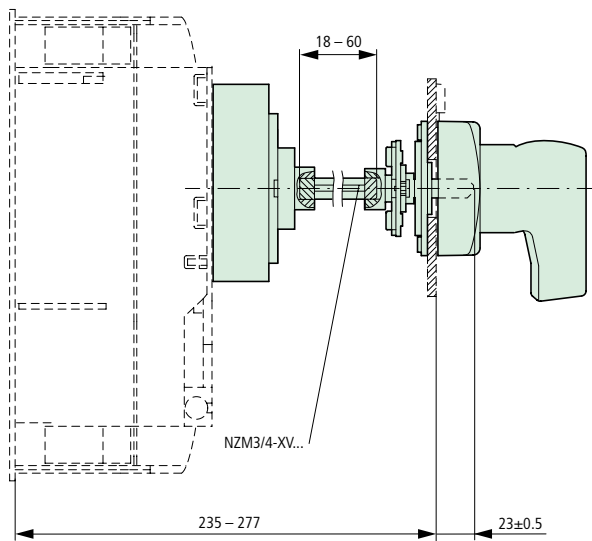
Door coupling rotary handle with extension shaft

NZM3-XT(V)D(V)(R)(-NA)
 NZM3/4-XV4(6)

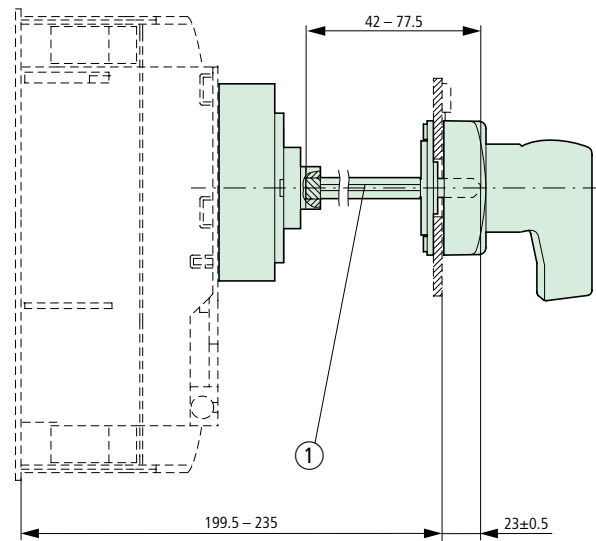


	X
NZM3/4-XV4	270 – 400
NZM3/4-XV6	400 – 600

NZM3-XT(V)D(V)(R)-60(-NA)

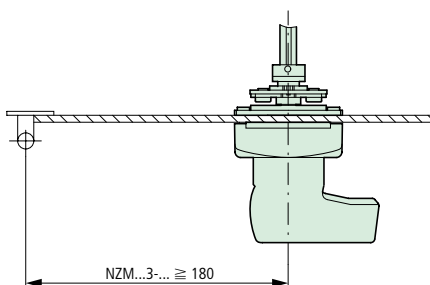


NZM3-XT(V)D(V)(R)-0(-NA)



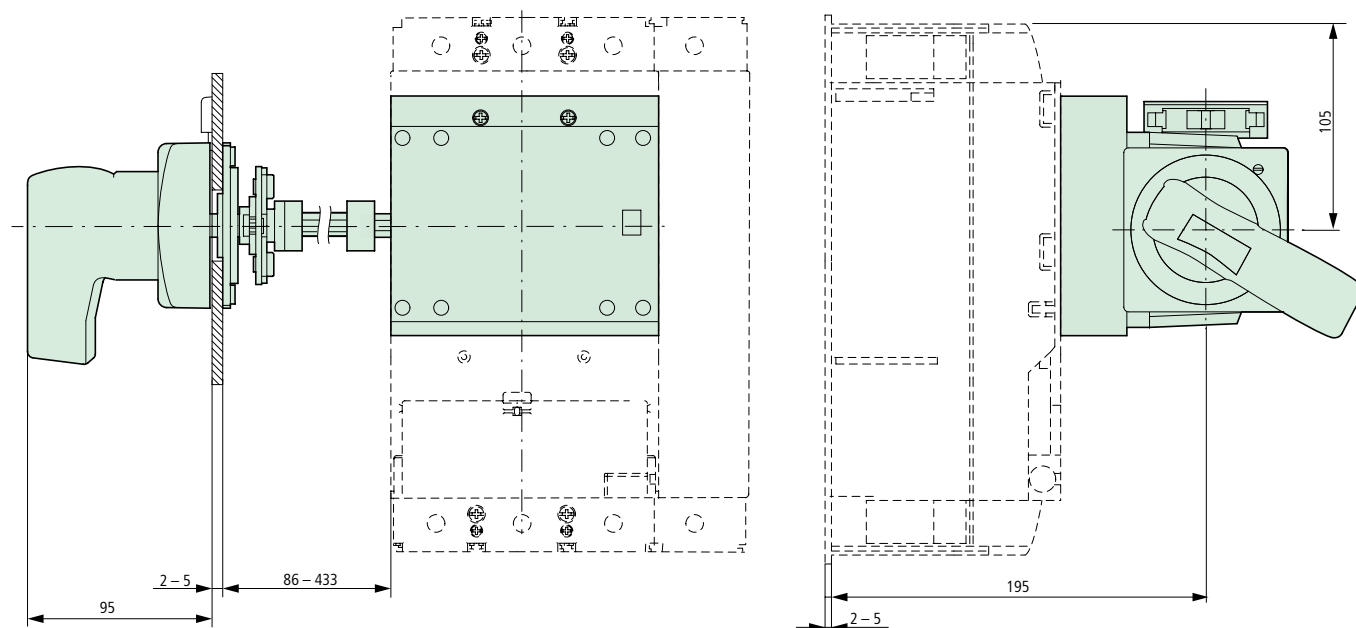
① Special tip

Minimum door coupling rotary handle clearance from door pivot point

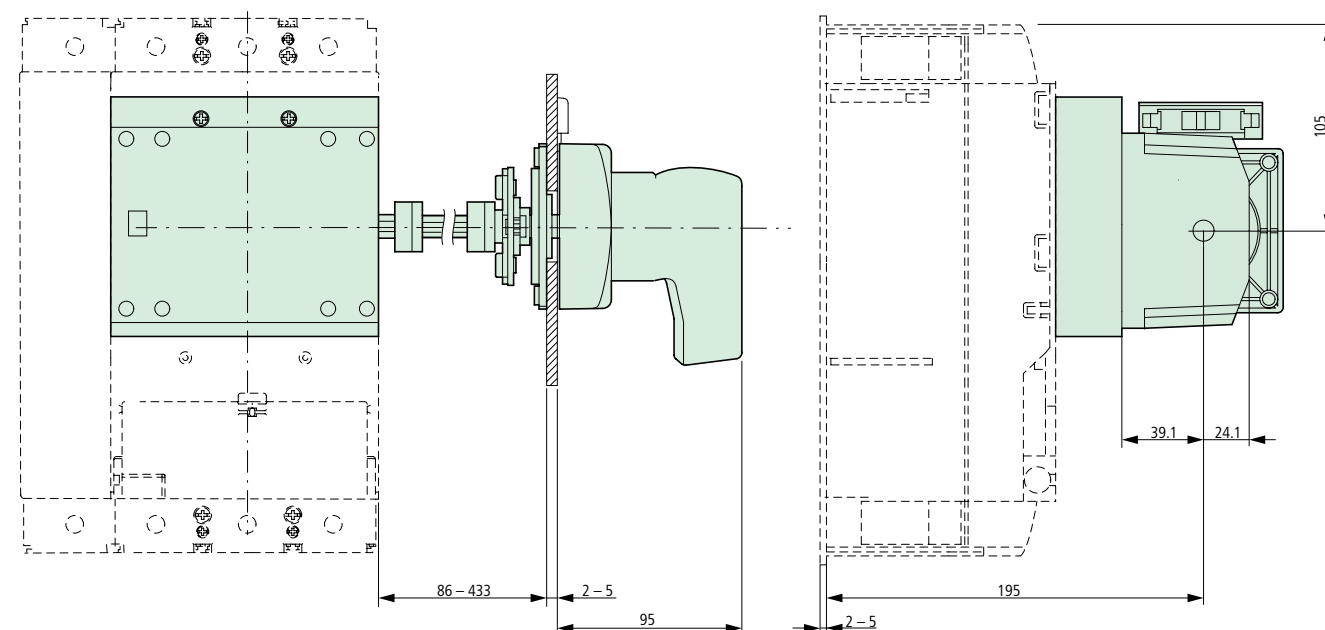


Main switch assembly kit for side wall installation

NZM3-XS(R)-L

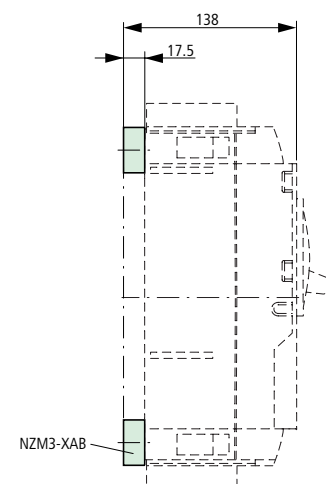


NZM3-XS(R)-R



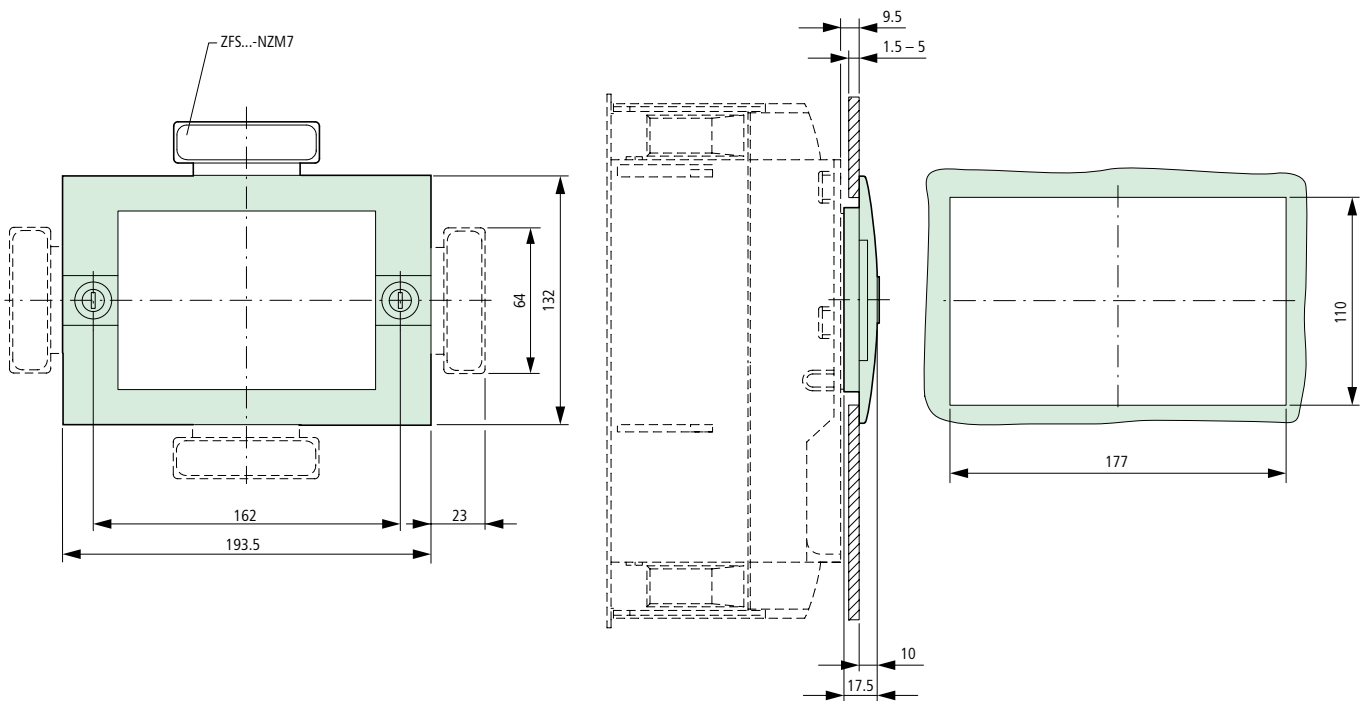
Spacers

NZM3-XAB

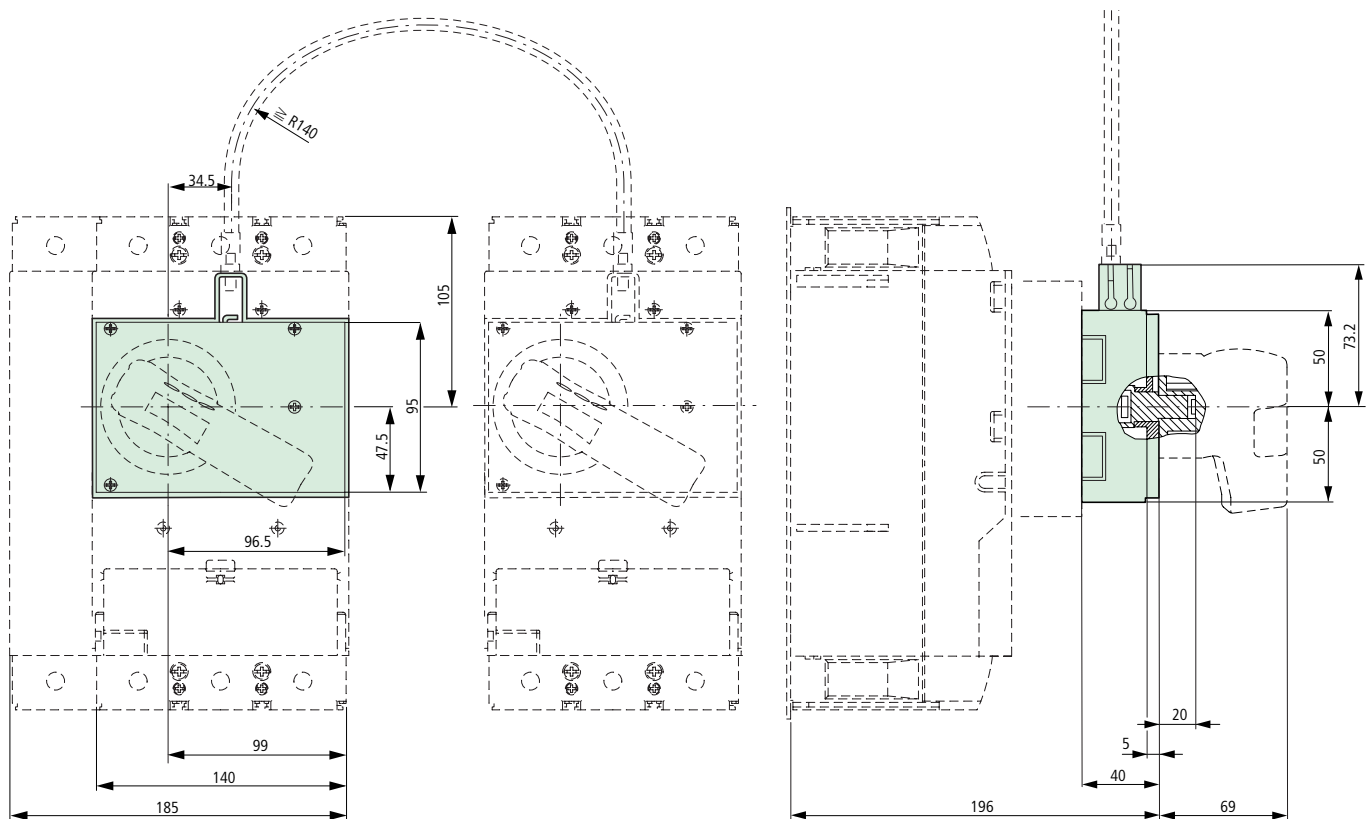


Moeller SK1230-1157EN-NA

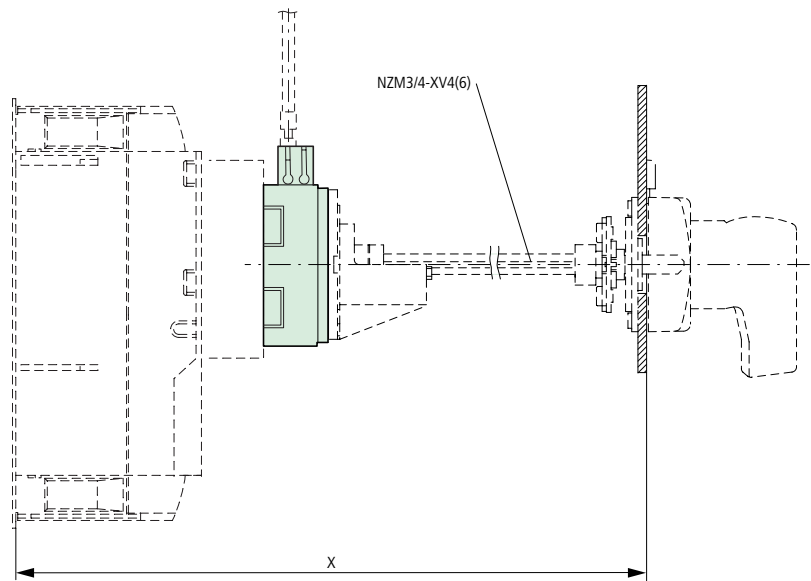
Insulating surround
NZM3-XBR



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

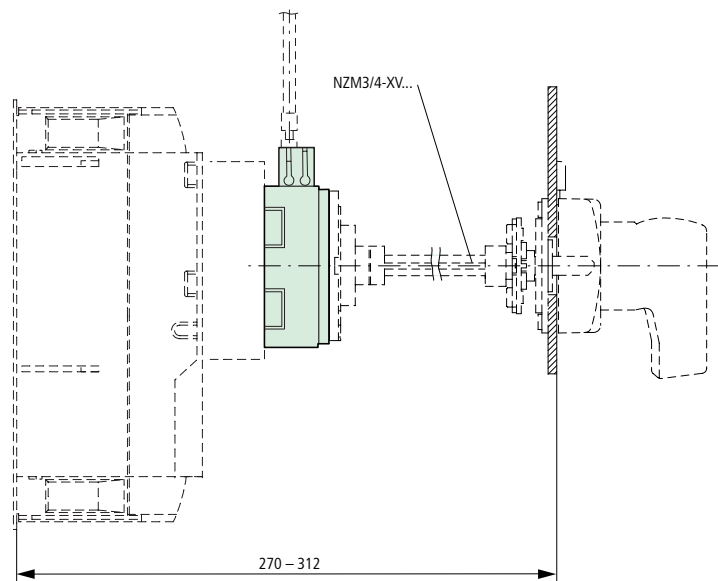


NZM3-XMV with NZM3-XT(V)D(V)(R)

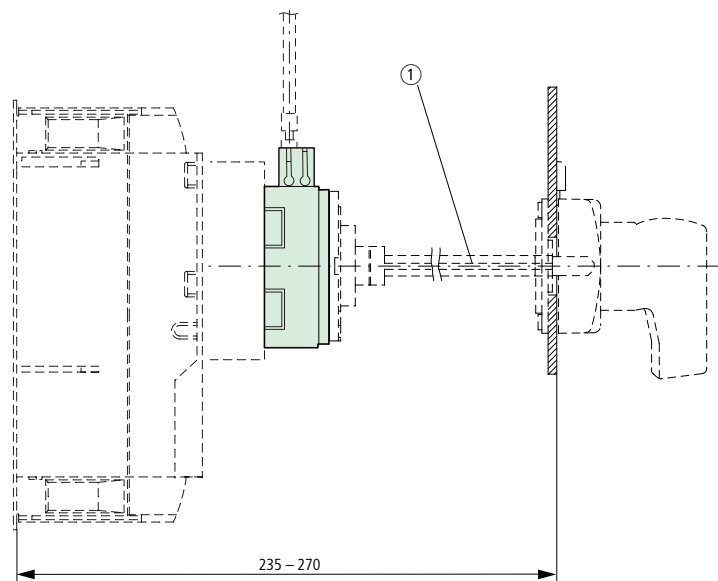


	x
NZM3/4-XV4	305 – 400
NZM3/4-XV6	400 – 600

NZM3-XMV with NZM3-XT(V)D(V)(R)-60



NZM3-XMV with NZM3-XT(V)D(V)(R)-0

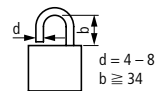
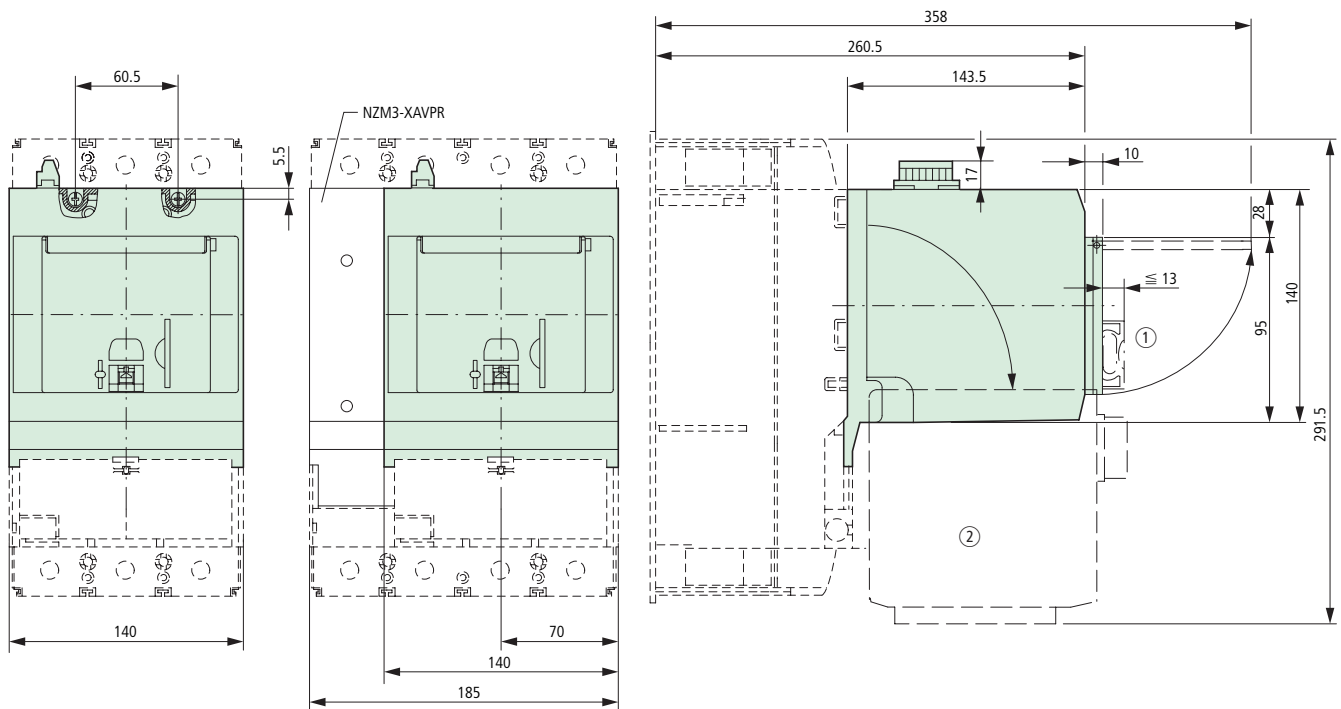


① Special tip

Moeller SK1230-1157EN-NA

Remote operator

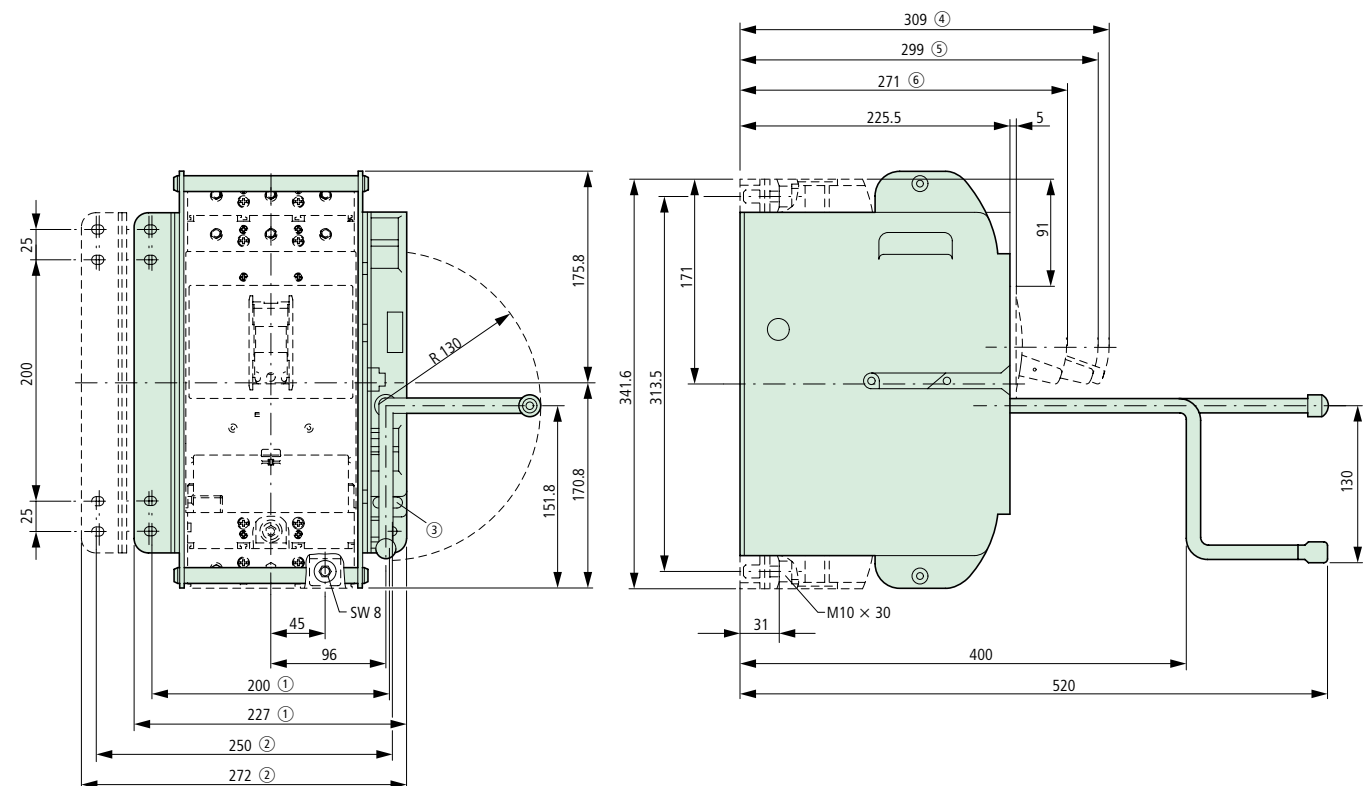
NZM3-XR...



- ① Up to 3 padlocks
- ② Remote operator folded

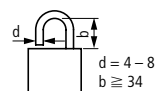
Withdrawable unit

+NZM3-XAV



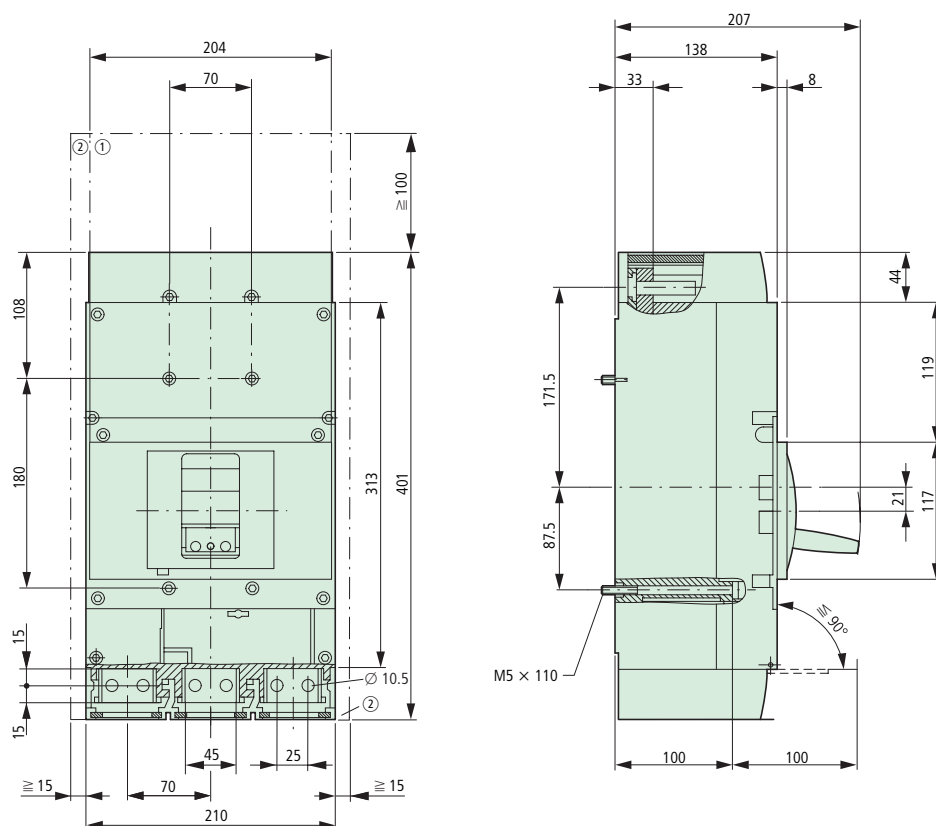
- ① 3-pole
- ② 4-pole

- ③ Up to 3 padlocks



- ④ disconnected
- ⑤ test
- ⑥ connected

Circuit-breaker, switch-disconnector, 3-pole
NZMN4, NZMH4, N4, NS4



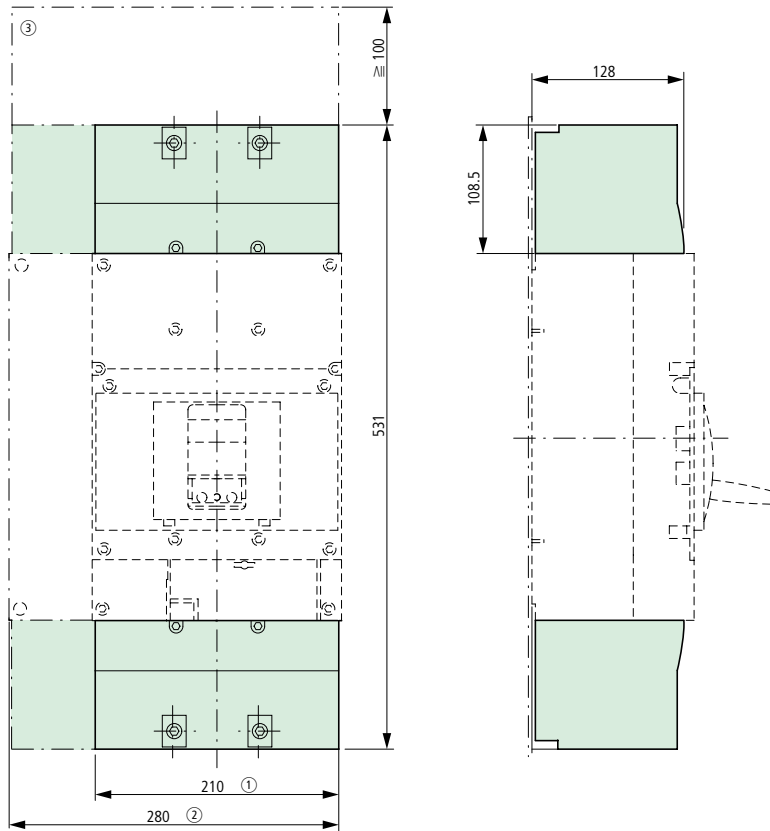
① Blow out area, minimum clearance to other parts ≥ 100 mm up to 690 V; ≥ 200 mm up to 1000 V

② Minimum clearance from adjacent parts ≥ 15 mm

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Cover

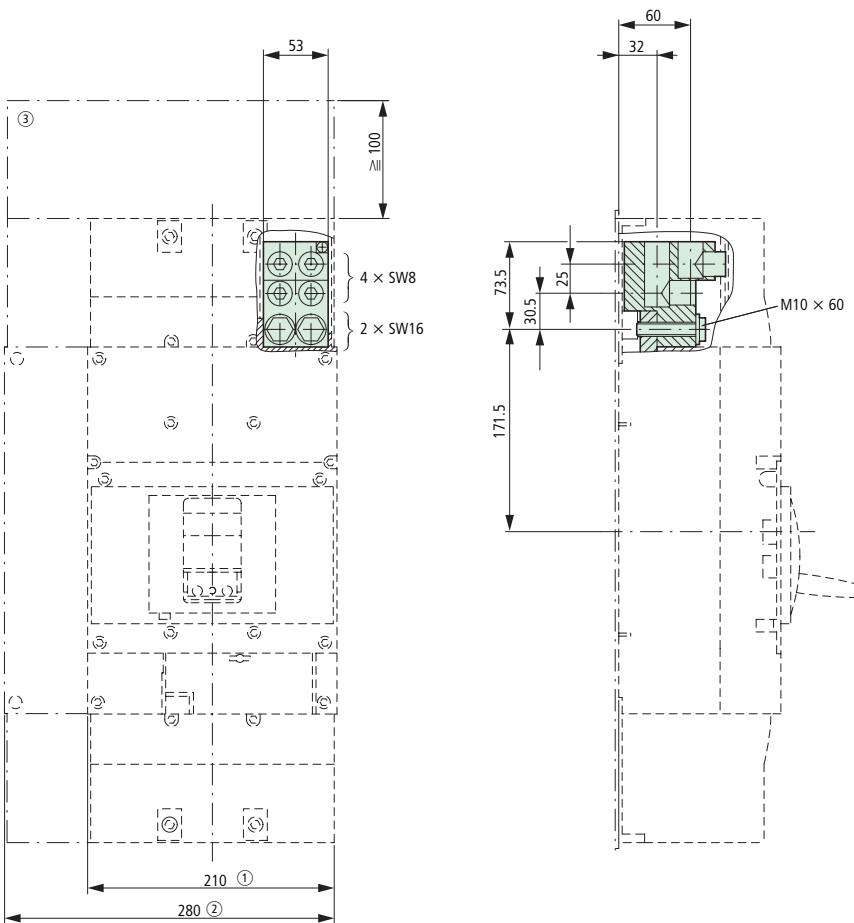
NZM4-XKSA



- 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

NZM4-XKA



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

Screw connection

Module plate 1-hole

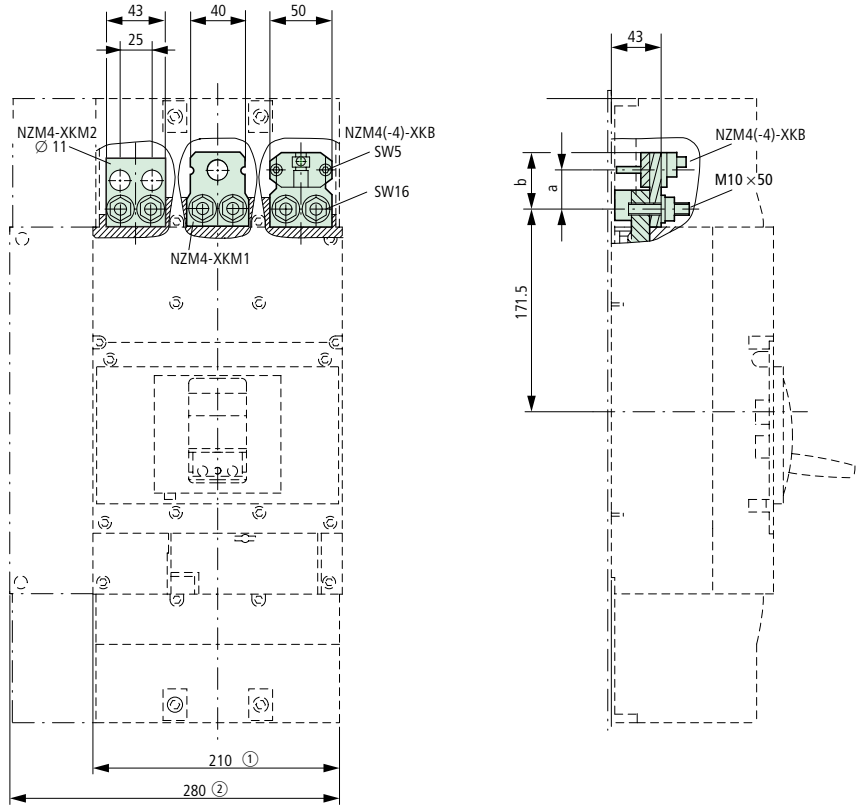
NZM4-XKM1

Module plate 2-hole

NZM4-XKM2

Flat cable terminal

NZM4-XKB

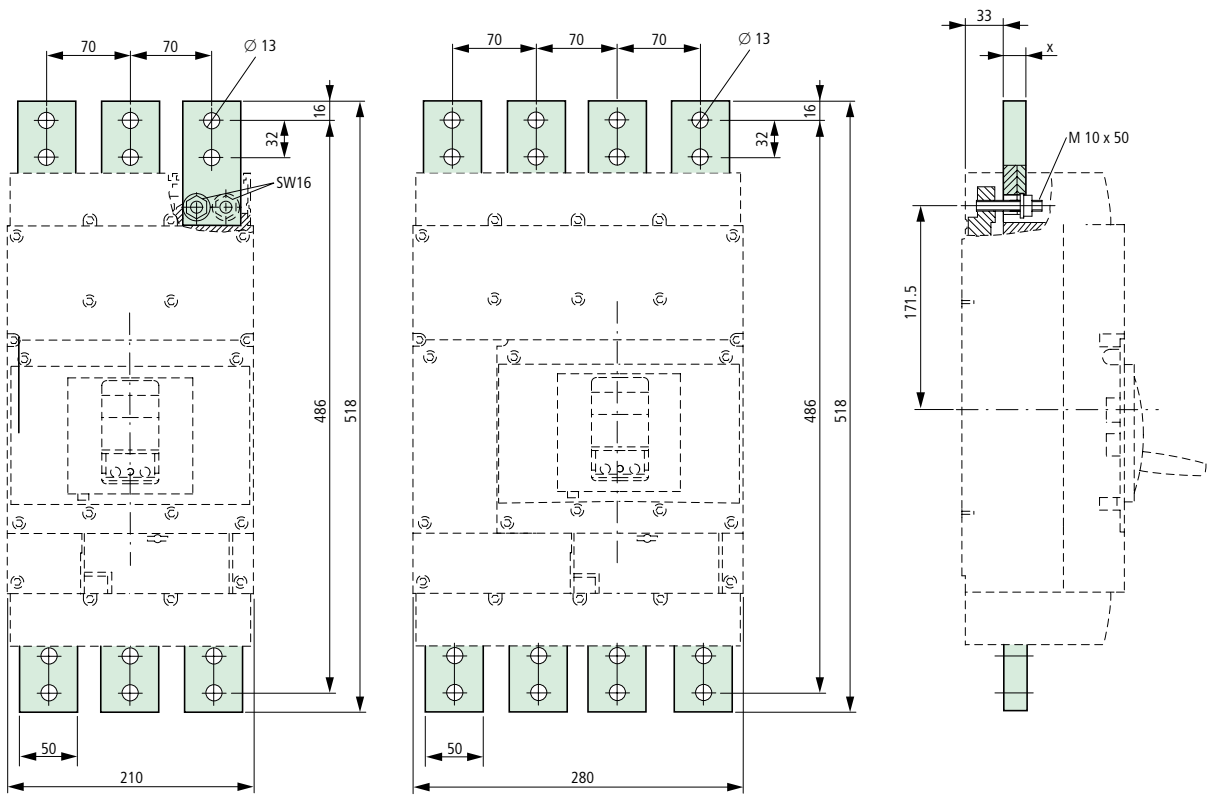


- ① 3-pole
- ② 4-pole
- ③ Clearance from conductive parts ≥ 100 mm up to 690 V

		b
NZM4(-4)-XKM1	36	47
NZM4(-4)-XKM2	32	40
NZM4(-4)-XKB	—	47

Module plate 2-hole vertical

NZM4-XKM2S

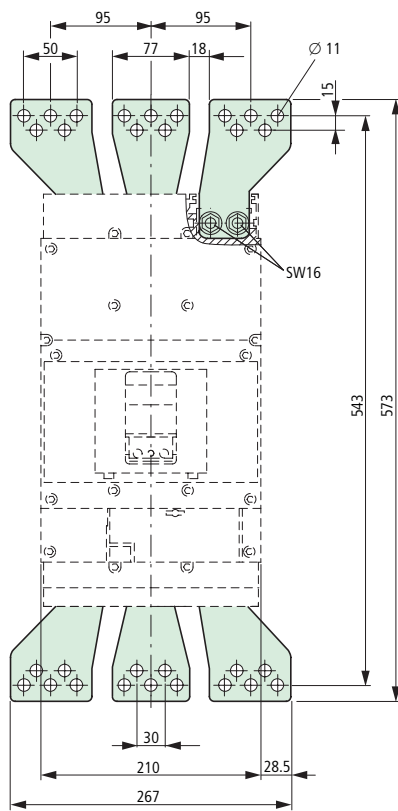


	x
NZM4-XKM2S-1250	12
NZM4-XKM2S-1600	20

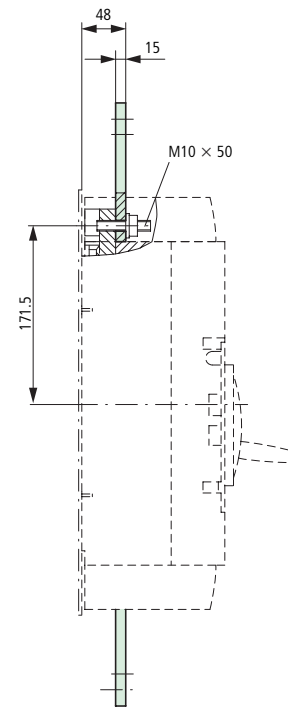
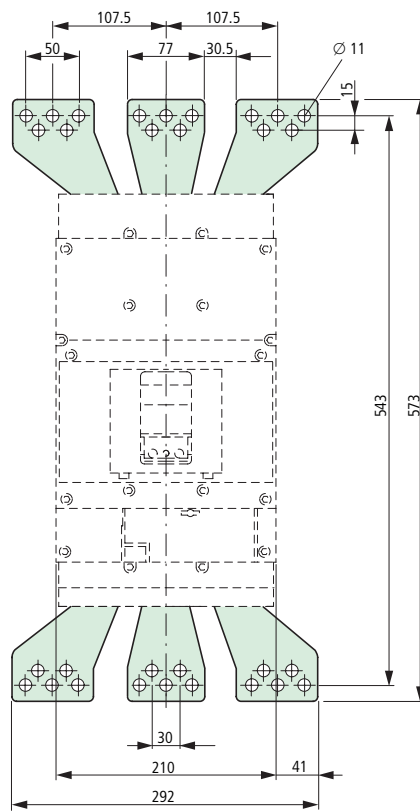
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Connection width extension

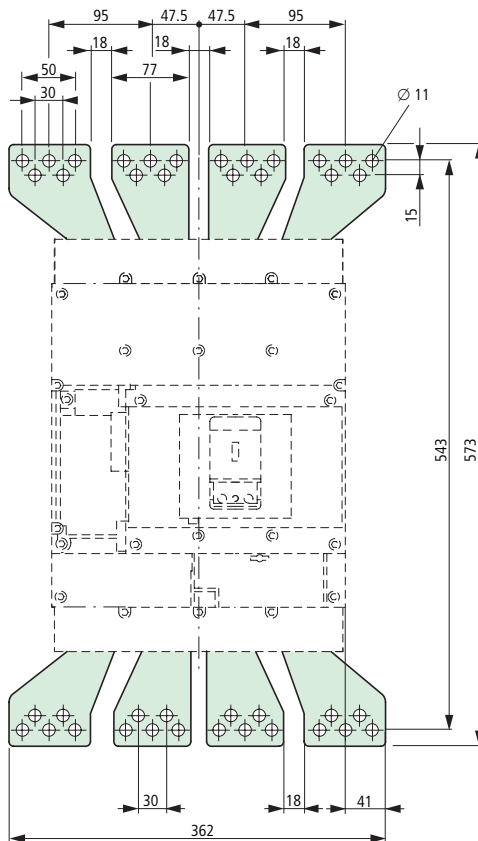
NZM4-XKV95



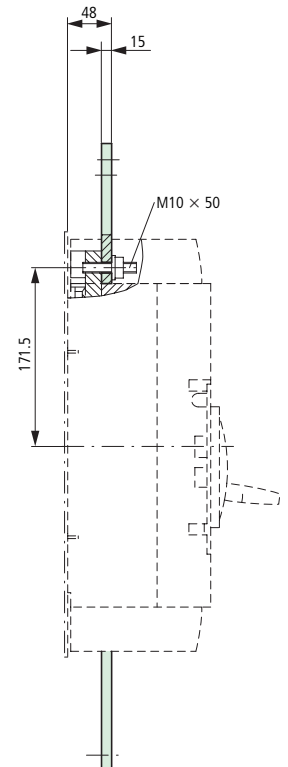
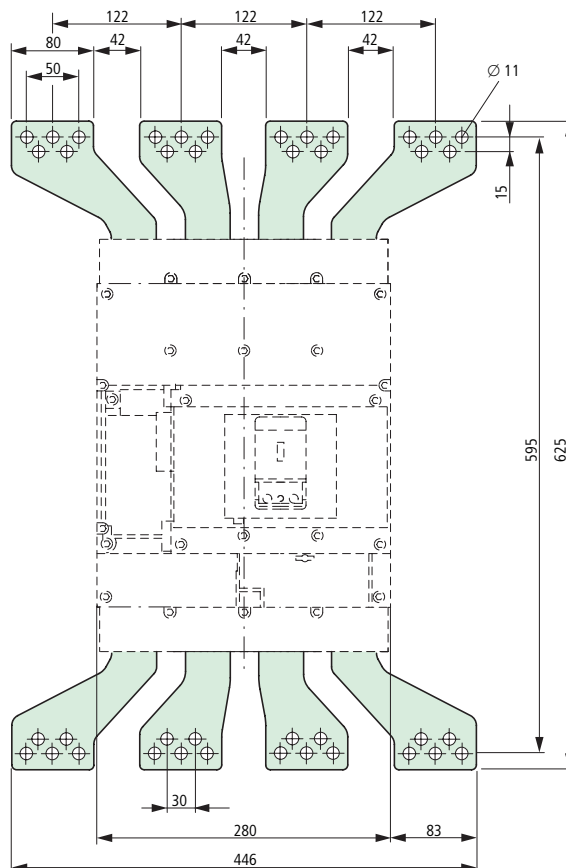
NZM4-XKV110



NZM4-4-XKV95

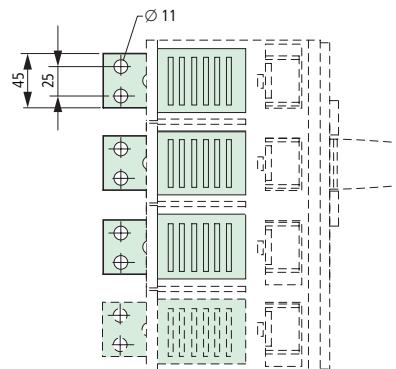
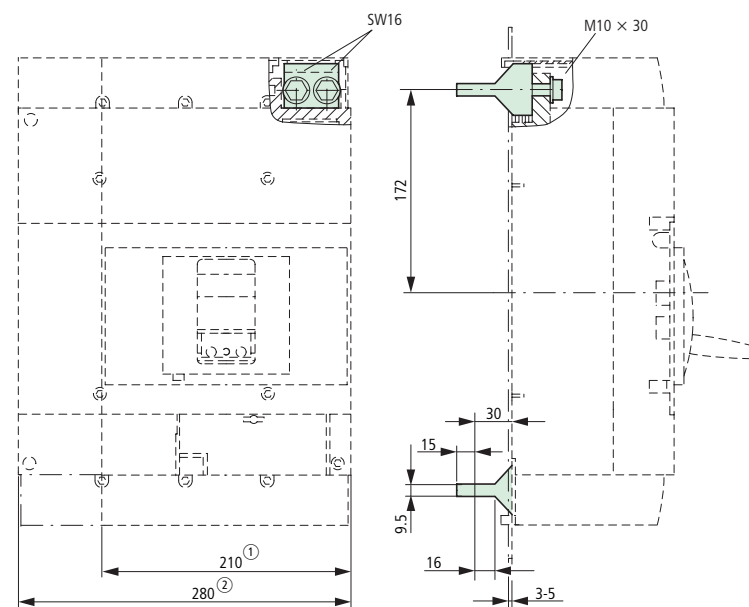


NZM4-4-XKV120

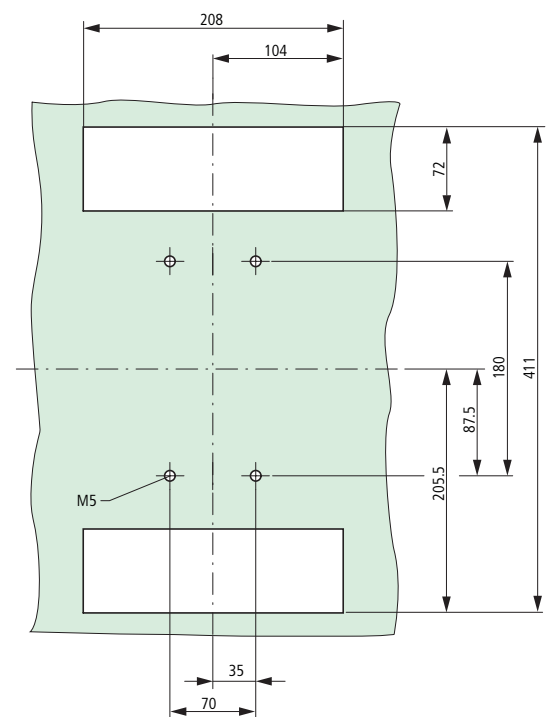
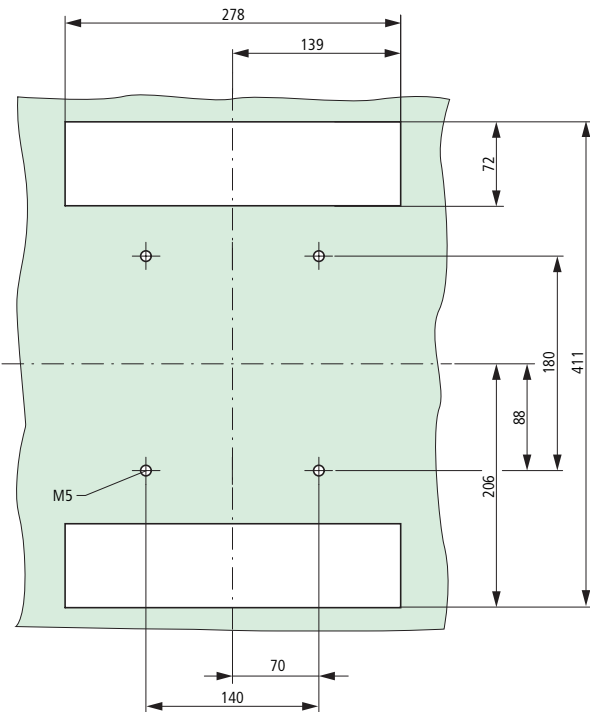


Connection on rear

NZM4-XKR



Fitting on mounting plate

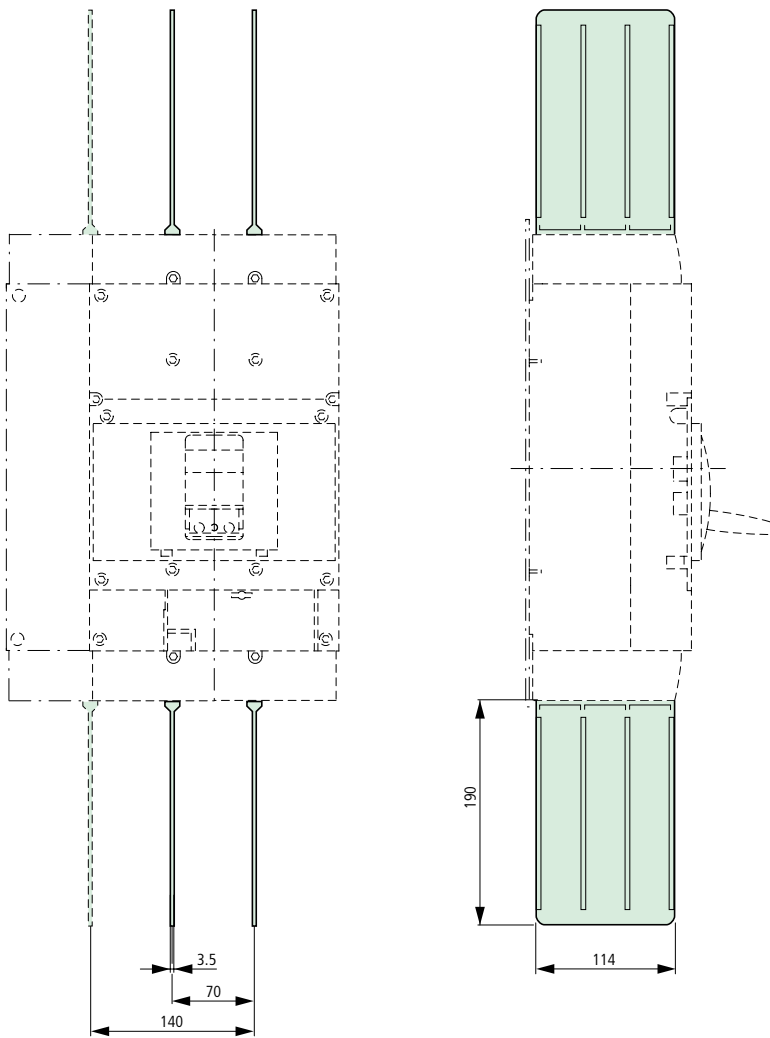


Rear connection possible also with rotation by 90°.

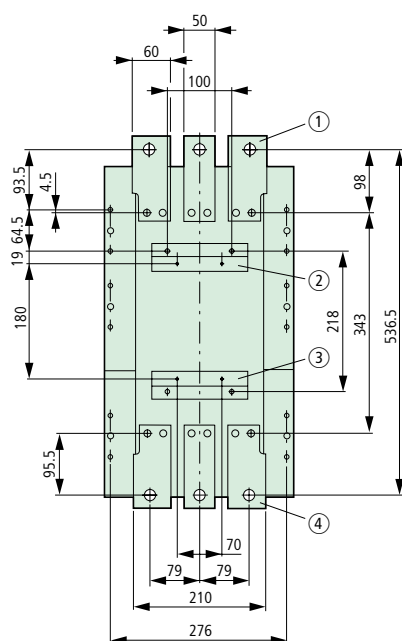
- ① 3-pole
- ② 4-pole

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Phase isolator
NZM4-XKP



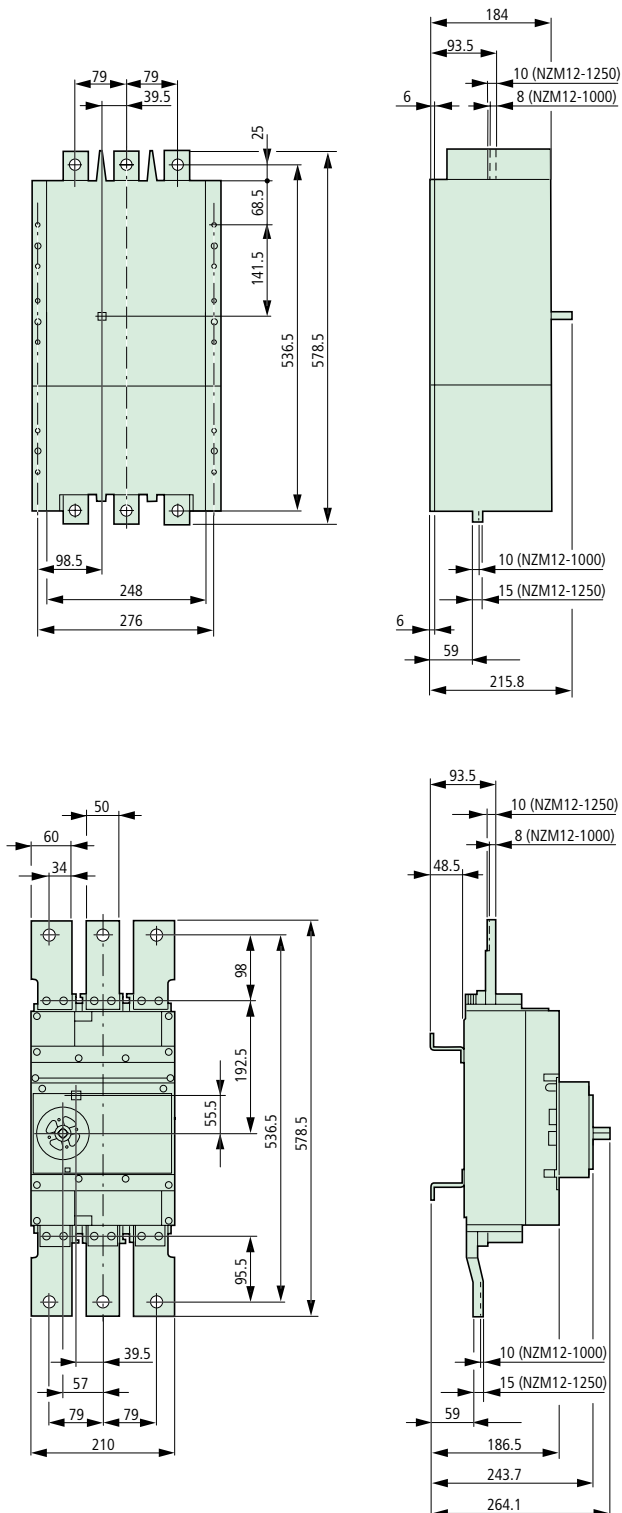
Drilling template NZM12-1000 (1250) conversion to NZM4



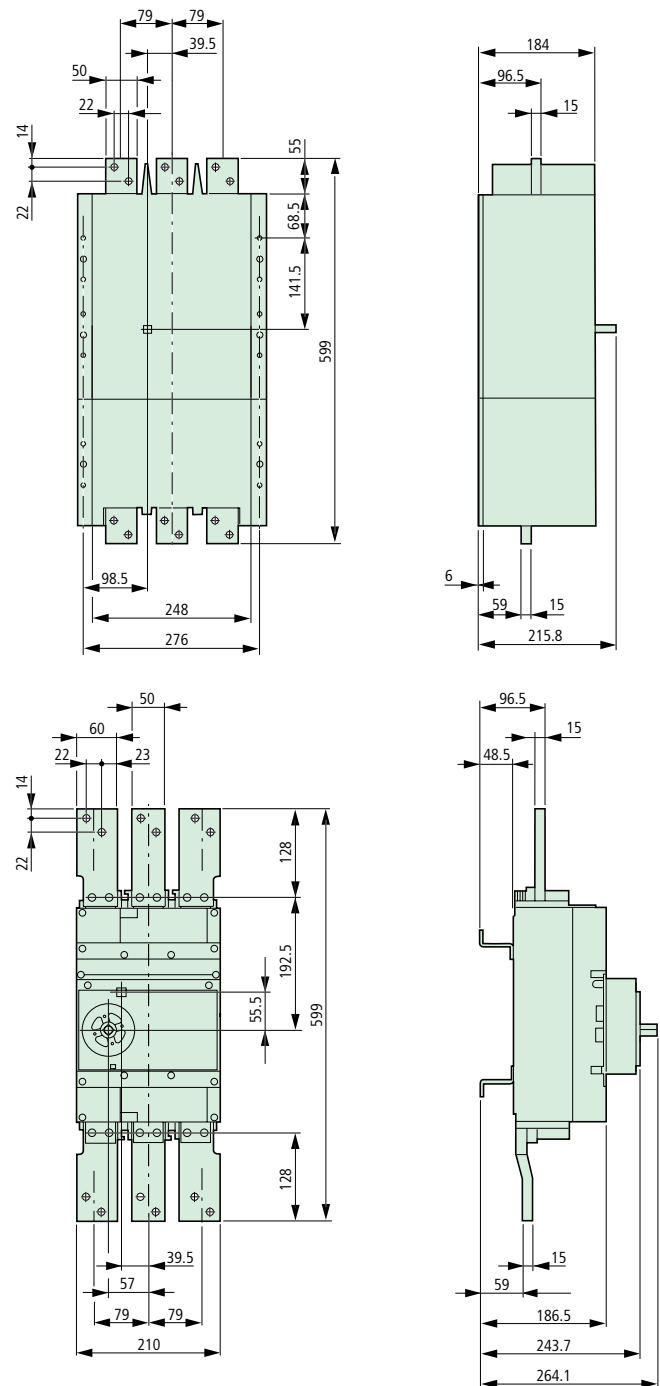
- ① Module plate NZM4-XAS12-1000(1250)
- ② Drilling dimensions for mounting bracket NZM4-XAS12(M5)
- ③ Mounting bracket NZM4-XAS12
- ④ DIN rail NZM12

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Exchange of NZM12-1000(1250) by NZM4 with module plate,
fixed mounted on mounting plate
NZM4-XAS12-1000(1250)



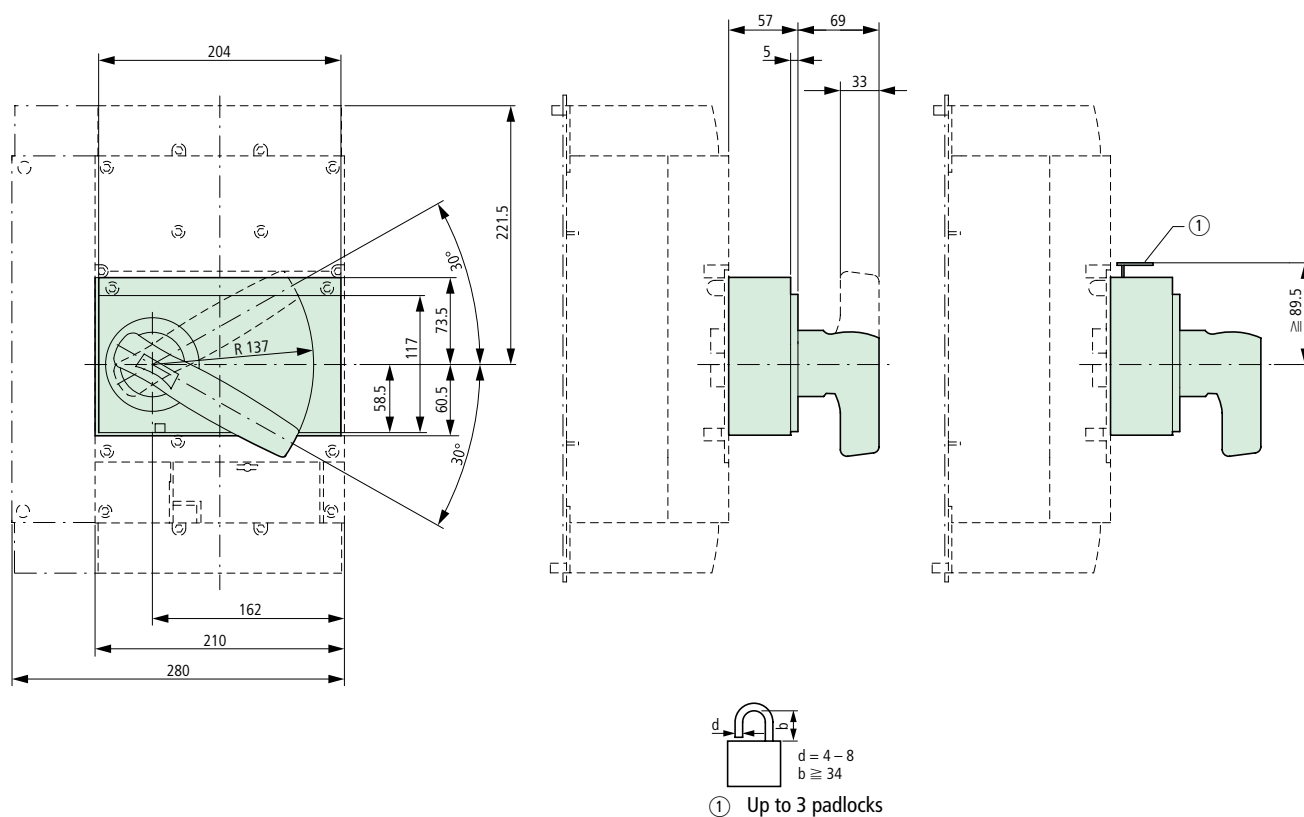
Exchange of NZM12-1600() by NZM4 with module plate,
fixed mounted on mounting plate
NZM4-XAS12-1600



Circuit-breakers, disconnect switches
up to 1200 A

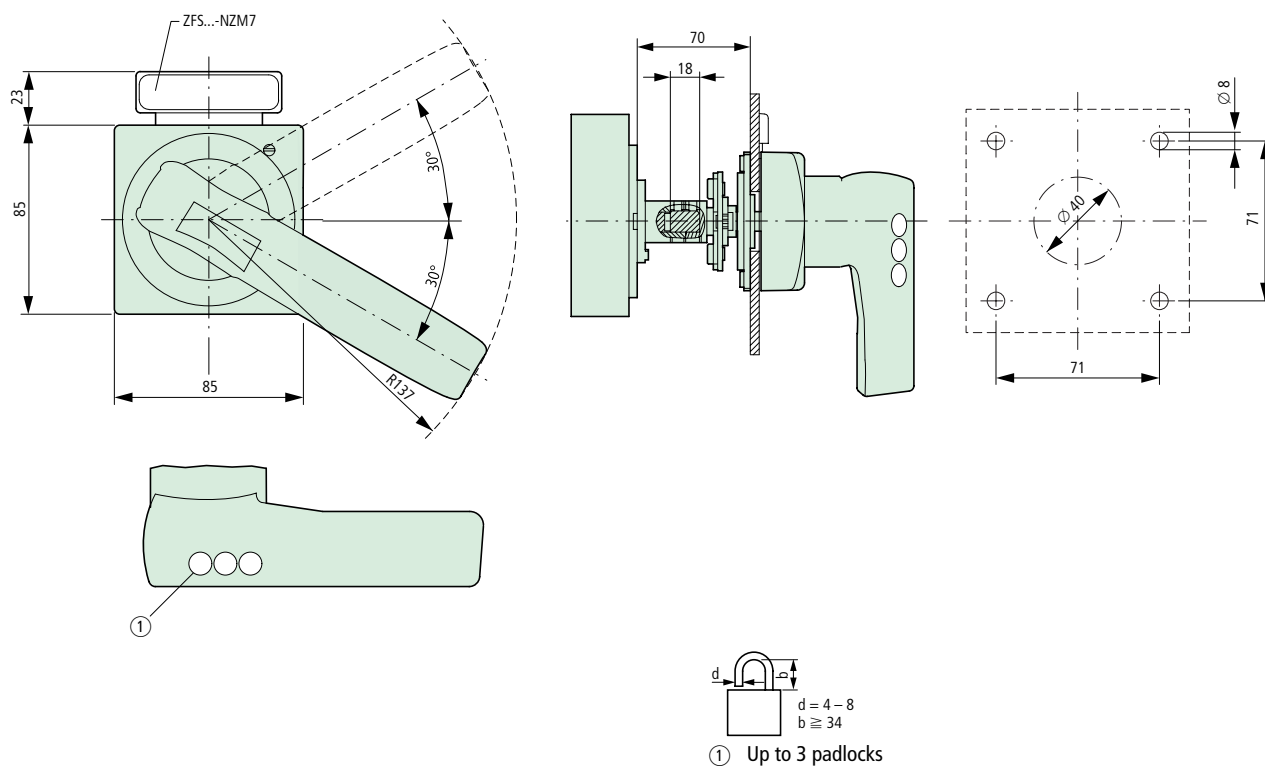
Rotary handle on circuit-breaker

NZM4-XDV(R)



Door coupling rotary handle

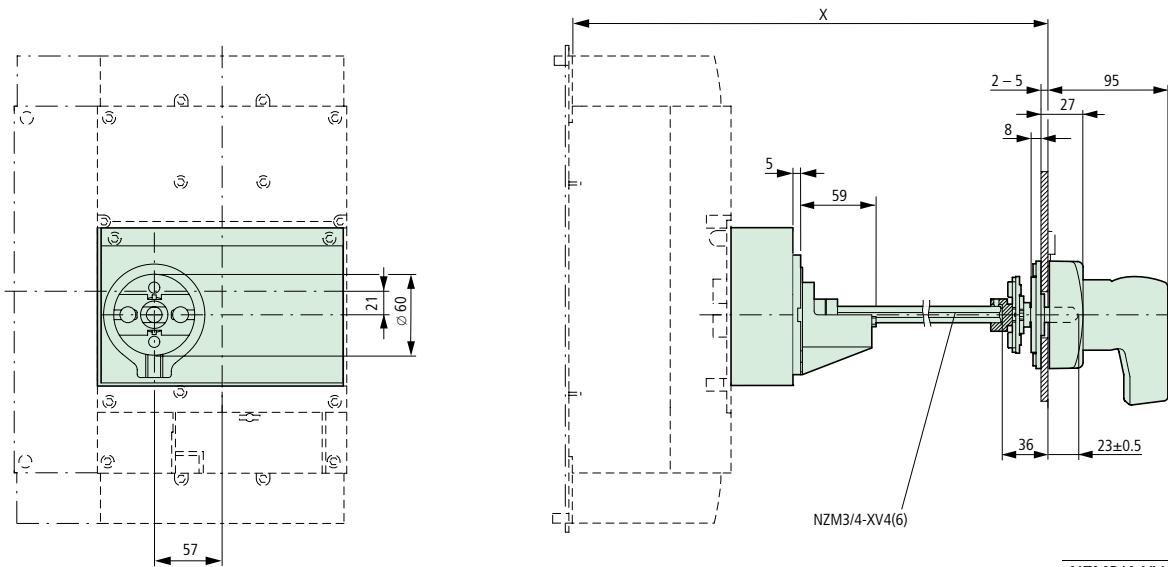
NZM4-XT(V)D(V)(R)



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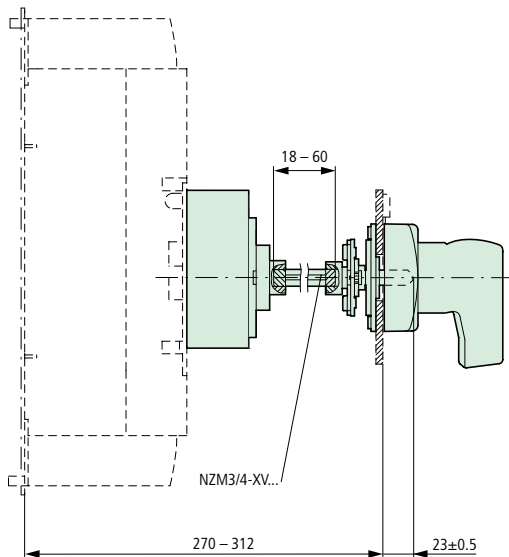
Door coupling rotary handle with extension shaft

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

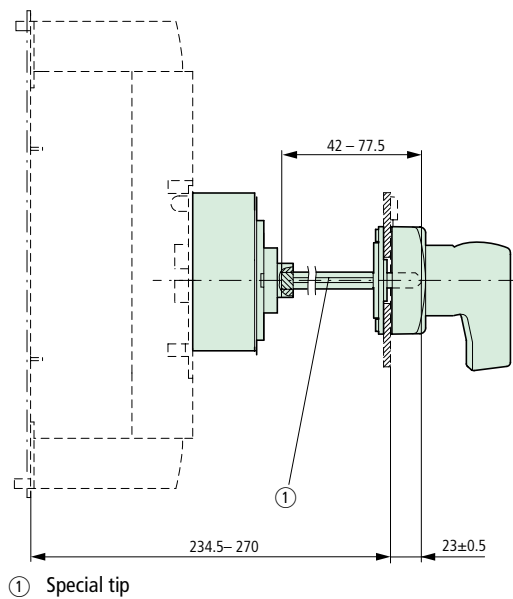


	X
NZM3/4-XV4	300 – 400
NZM3/4-XV6	400 – 600

NZM4-XT(V)D(V)(R)-60(-NA)

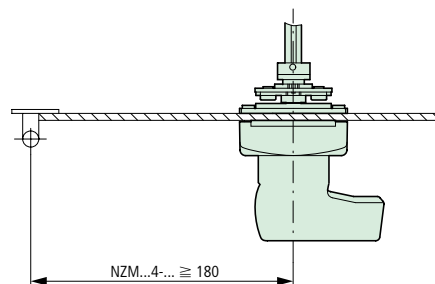


NZM4-XT(V)D(V)(R)-0(-NA)



① Special tip

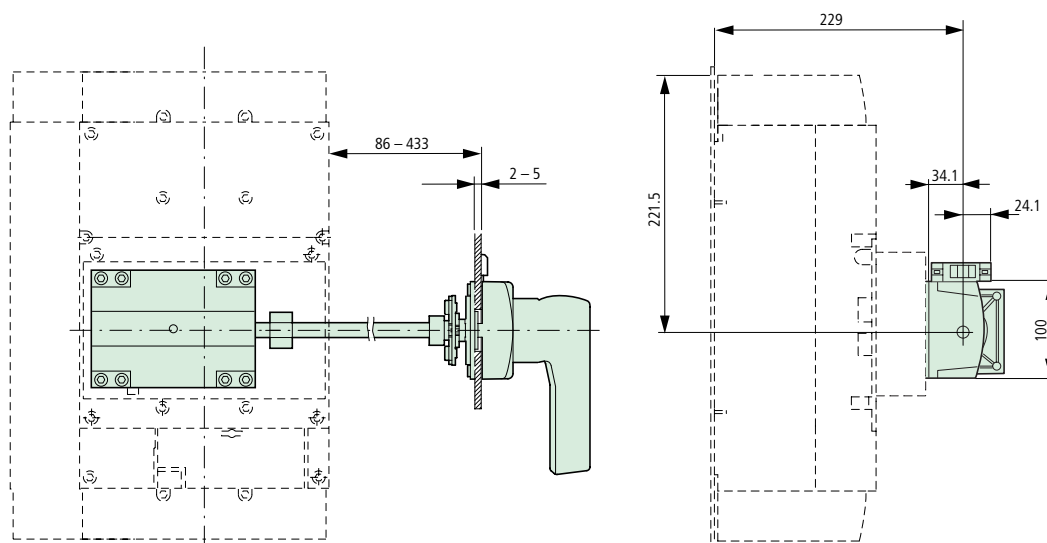
Minimum door coupling rotary handle clearance from door pivot point



Main switch assembly kit for side wall installation

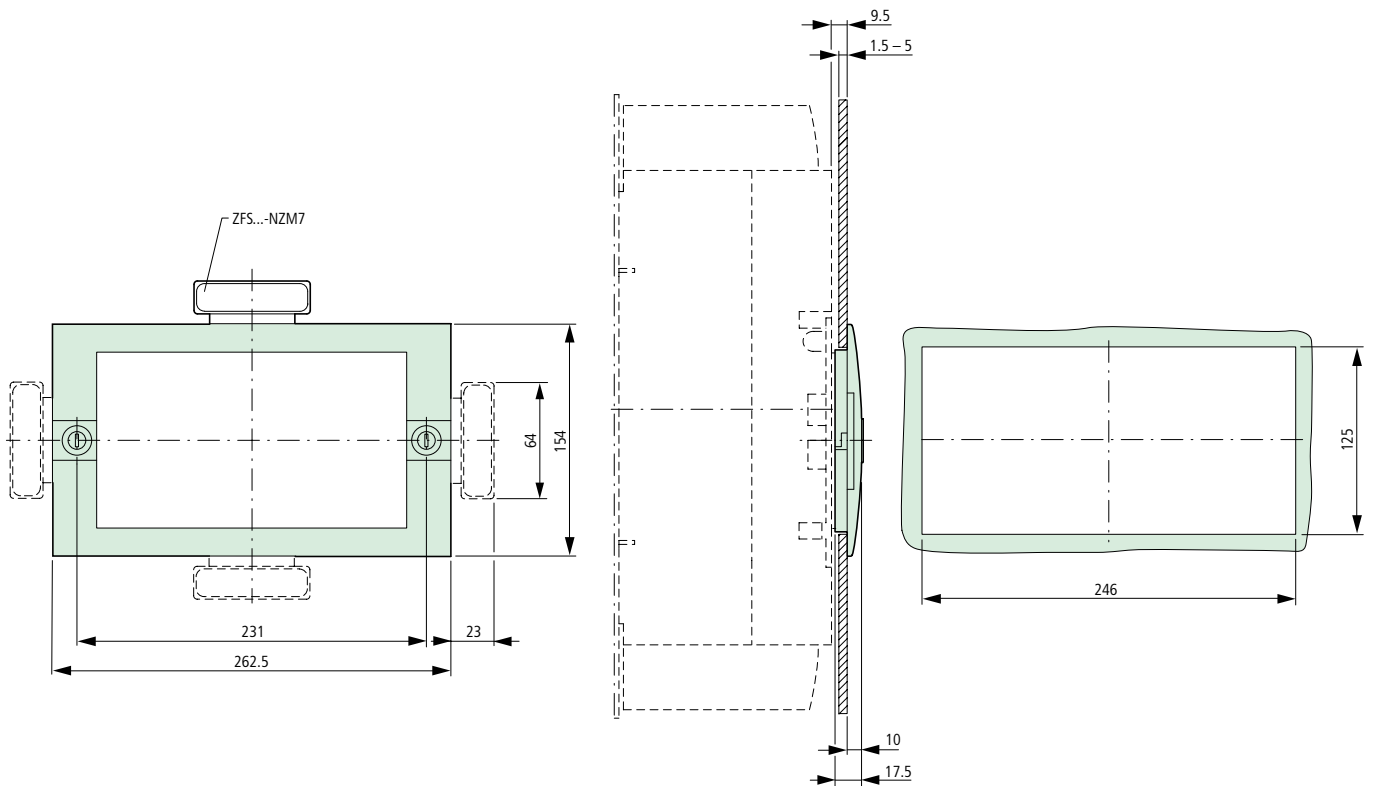
NZM4-XS(R)(F)-L

NZM4-XS(R)(F)-R



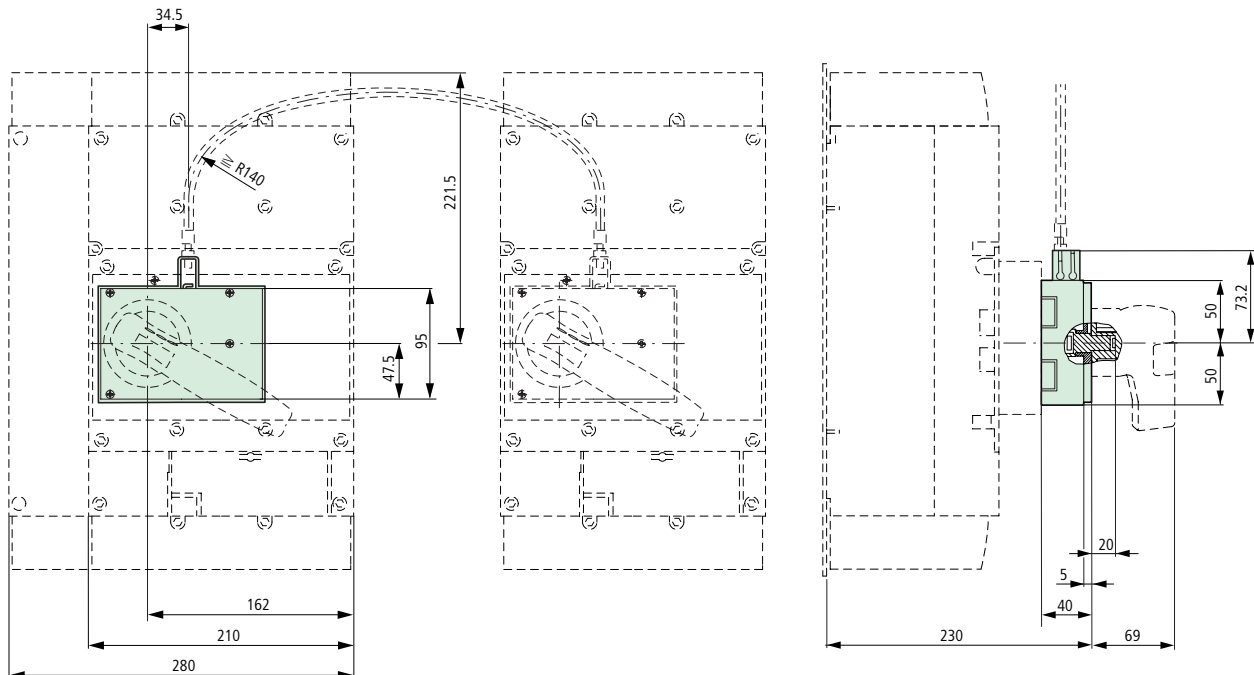
Moeller SK1230-1157EN-NA

Insulating surround
NZM4-XBR

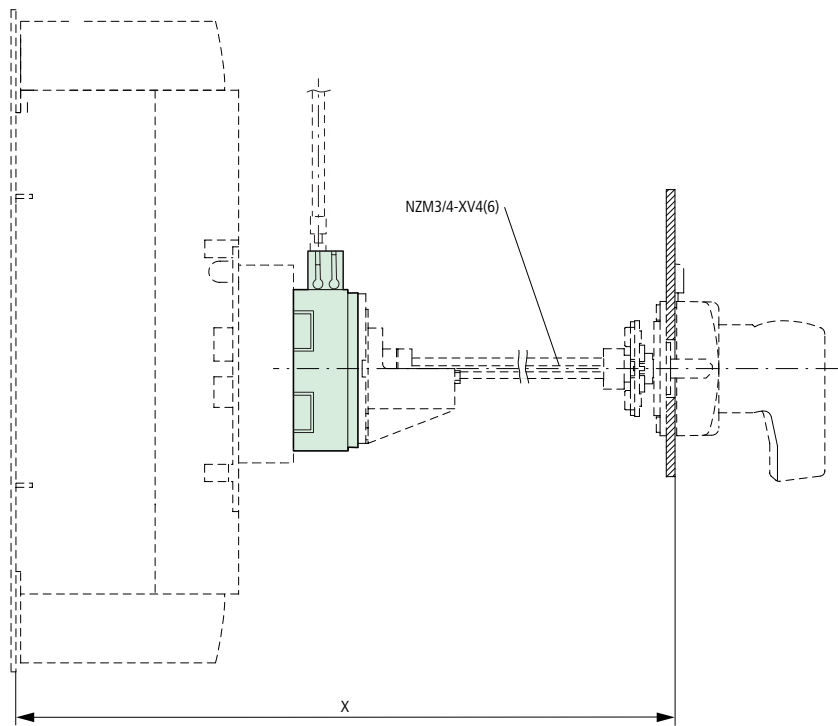


Mechanical interlock

NZM4-XMV with NZM4-XDV(R)

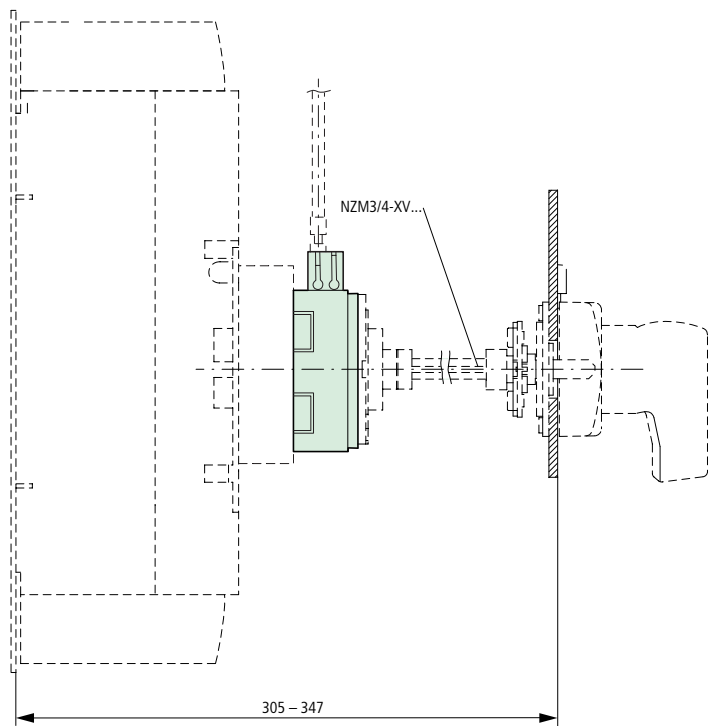


NZM4-XMV with NZM4-XT(V)D(V)(R)



	x
NZM3/4-XV4	335 – 400
NZM3/4-XV6	400 – 600

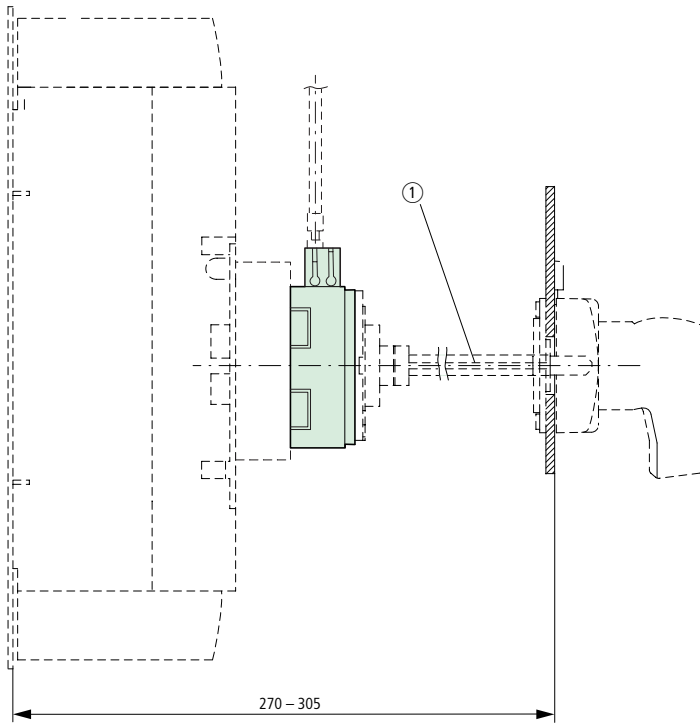
NZM4-XMV with NZM4-XT(V)D(V)(R)-60



Moeller SK1230-1157EN-NA

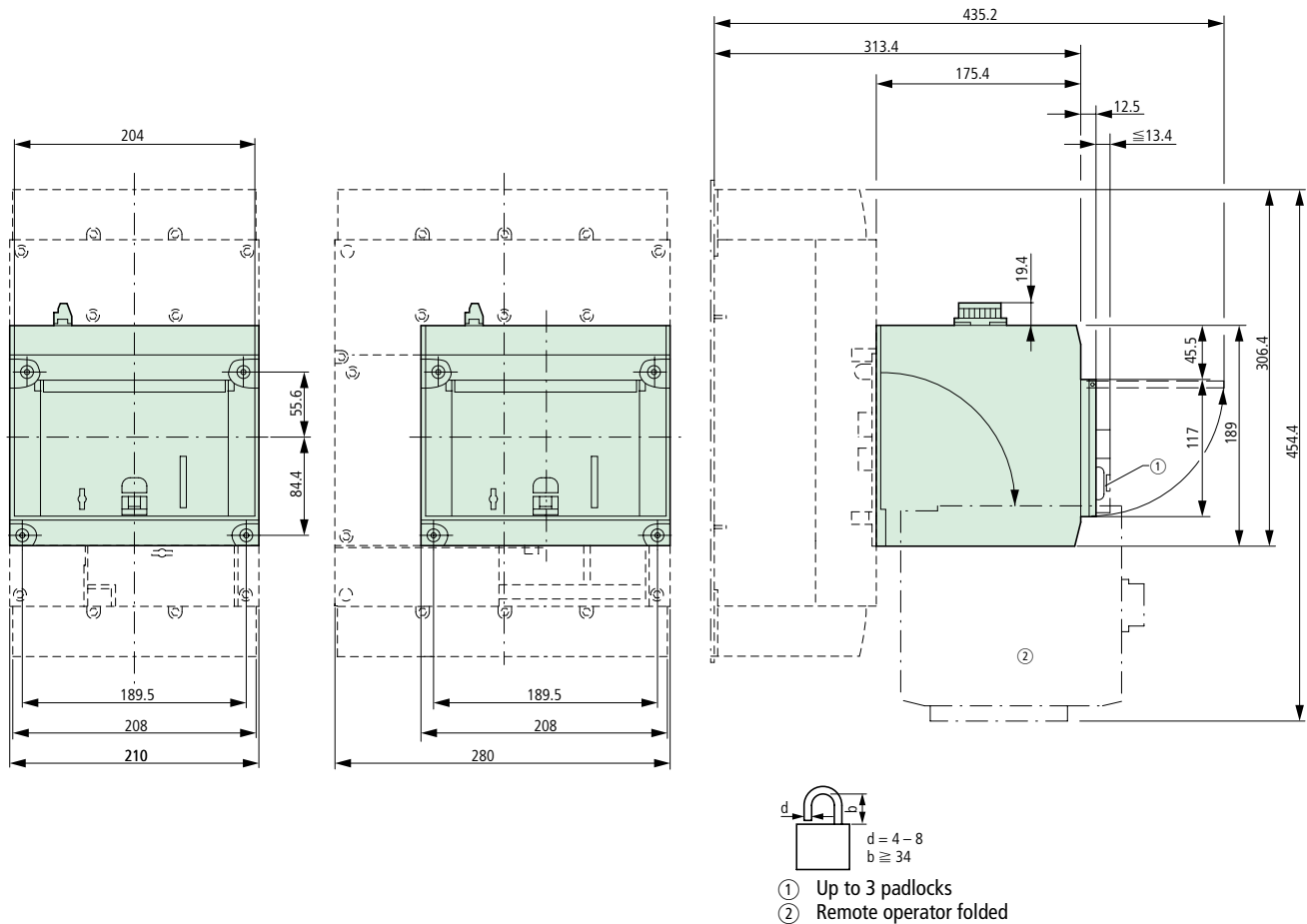
NZM4-XMV with NZM4-XT(V)D(V)(R)-0

① Special tip



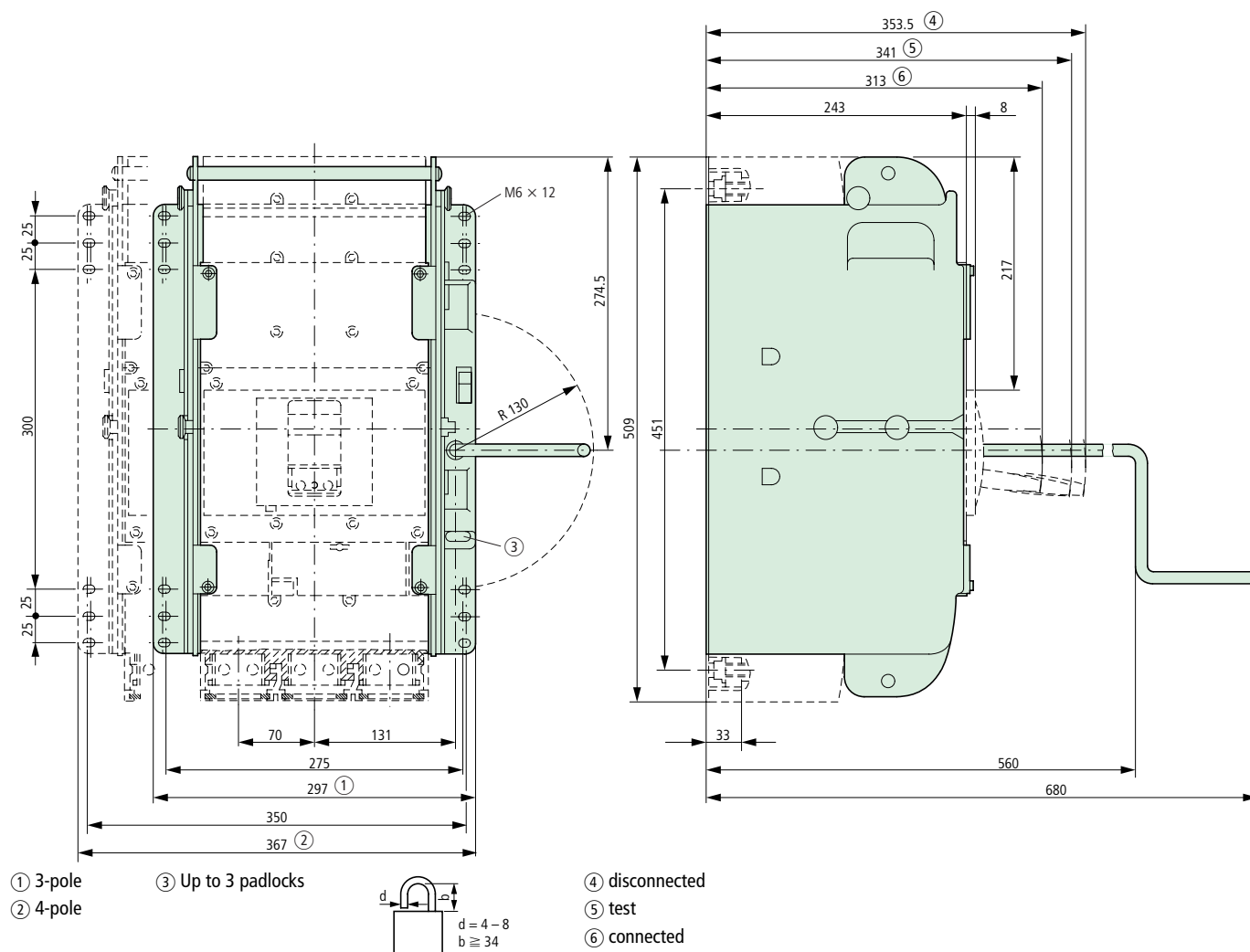
Remote operator

NZM4-XR...



Withdrawable unit
+NZM4-XAV

Circuit-breakers, disconnect switches
up to 1200 A



Moeller SK1230-1157EN-NA

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