Switch-disconnector 3p 1600A

Part no. **N4-1600**

Article no. **266028**

Delivery programme

Range			Switch-disconnectors
Protective function			Disconnectors/main switches
Standard/Approval			IEC
Installation type			Fixed mounted
Construction size			N4
Description			Main switch characteristics including positive drive to IEC/EN 60204 and VDE 0113. Isolating characteristics to IEC/EN 60947-3 and VDE 0660. Busbar tag shroud to VDE 0160 Part 100.
Number of conductors			3 pole
Standard equipment			Screw connection
Switch positions			I, +, 0
Rated current = rated uninterrupted current	$I_n = I_u$	A	1600
Short-circuit protection max. fuse gL-characteristic		A gL	1600

Switch-disconnectors

Rated surge voltage invariability	U_{imp}		
Main contacts		V	8000
Auxiliary contacts		V	6000
Rated operational voltage	Ue	V AC	690
Rated current = rated uninterrupted current	$I_n = I_u$	A	1600
Rated uninterrupted current	I_u	A	
IEC/EN 61131-3	I_u	A	1600
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U_i	V	1000
For use in IT electrical power networks		V	525
			Rated operating voltage: 40-60 Hz
Other technical data (sheet catalogue)			Weight Temperature dependency, Derating Effective power loss

Rated short-circuit making capacity

690 V 50/60 H	Ic	kA	53

Rated short-time withstand current

t = 0.3 s	I_{cw}	kA	25
t = 1 s	I_{cw}	kA	25

Rated conditional short-circuit current

With back-up fuse		A gG/gL	N4-630…1600: 2 x 800
400 … 415 V		kA	100
690 V		kA	80
With downstream fuse		A gG/gL	N4-630…1600: 2 x 800
400 … 415 V		kA	100
690 V		kA	80

Rated making and breaking capacity

Rated operational current	I_e	A	
415 V	I_e	A	1600
690 V	I_e	A	1600

415 V	I_e	A	1600
690 V	I_e	A	1600
Lifespan, mechanical	Operations		10000
Max. operating frequency		Ops/h	60

Lifespan, electrical

400 V V 50/60 Hz	Operations		3000
415 V V 50/60 Hz	Operations		3000
690 V 50/60 Hz	Operations		2000
400 V 50/60 Hz	Operations		2000
415 V 50/60 Hz	Operations		2000
690 V 50/60 Hz	Operations		1000
Current heat losses per pole at I_u are based on the maximum rated operational current of the frame size.		W	97
Total downtime in a short-circuit		ms	< 10

Terminal capacity

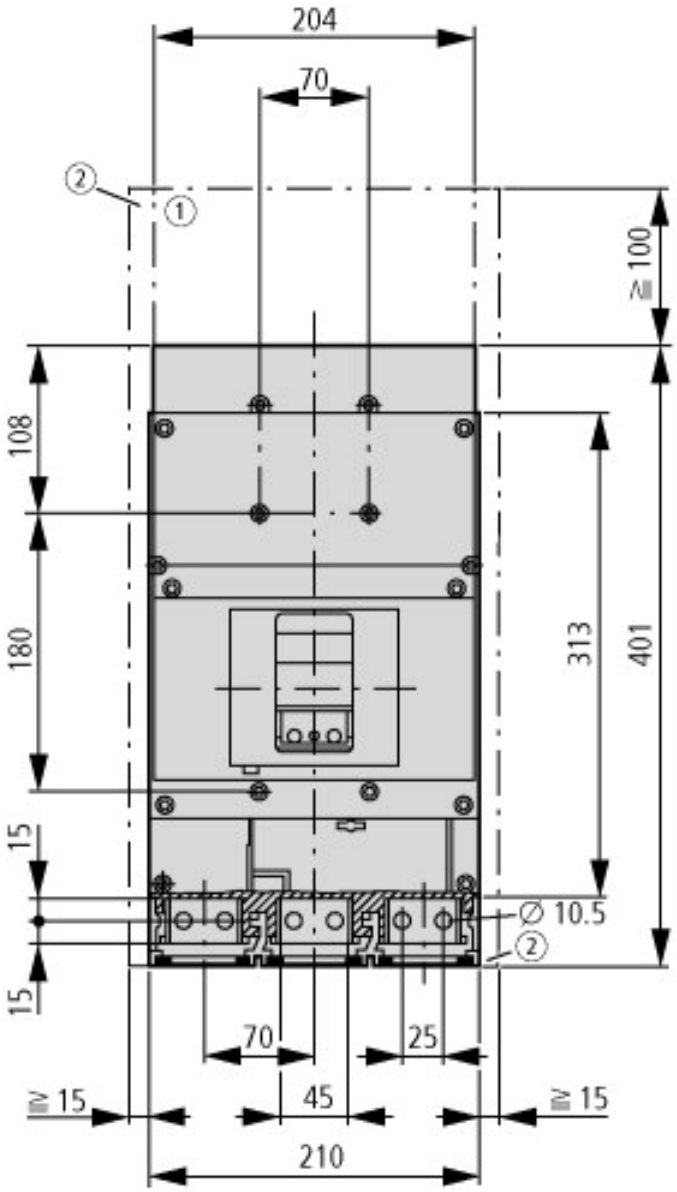
Standard equipment			Screw connection
Overview			Basic equipment Box terminal ● - - - Screw connection - ● ● ● Accessories Box terminal - ● ● - Screw connection ● - - ● Tunnel terminal ● ● ● ● Connection on rear ● ● ● ● Flat conductor terminal - - - ●
Round copper conductor			
Tunnel terminal			
Stranded		mm^2	
4-hole		mm^2	4 x (50 - 240)
Bolt terminal and rear-side connection			
Direct on the switch			
Stranded		mm^2	1 x (120 … 185) 4 x (50 … 185)
Module plate			
Single hole	min.	mm^2	1 x (120 - 300)
Single hole	max.	mm^2	2 x (95 - 300)
Module plate			
Double hole	min.	mm^2	2 x (95 - 185)
Double hole	max.	mm^2	4 x (35 - 185)
Connection width extension		mm^2	
Connection width extension		mm^2	4 x 300 6 x (95 - 240)
Al conductors, Cu cable			
Stranded		mm^2	
4-hole		mm^2	4 x (50 - 240)
Bolt terminal and rear-side connection			
Flat copper strip, with holes	min.	mm	(2 x) 10 x 50 x 1.0
Flat copper strip, with holes	max.	mm	(2 x) 10 x 50 x 1.0
Connection width extension		mm^2	(2 x) 10 x 80 x 1.0
Cu strip (number of segments x width x segment thickness)			
Flat conductor terminal			

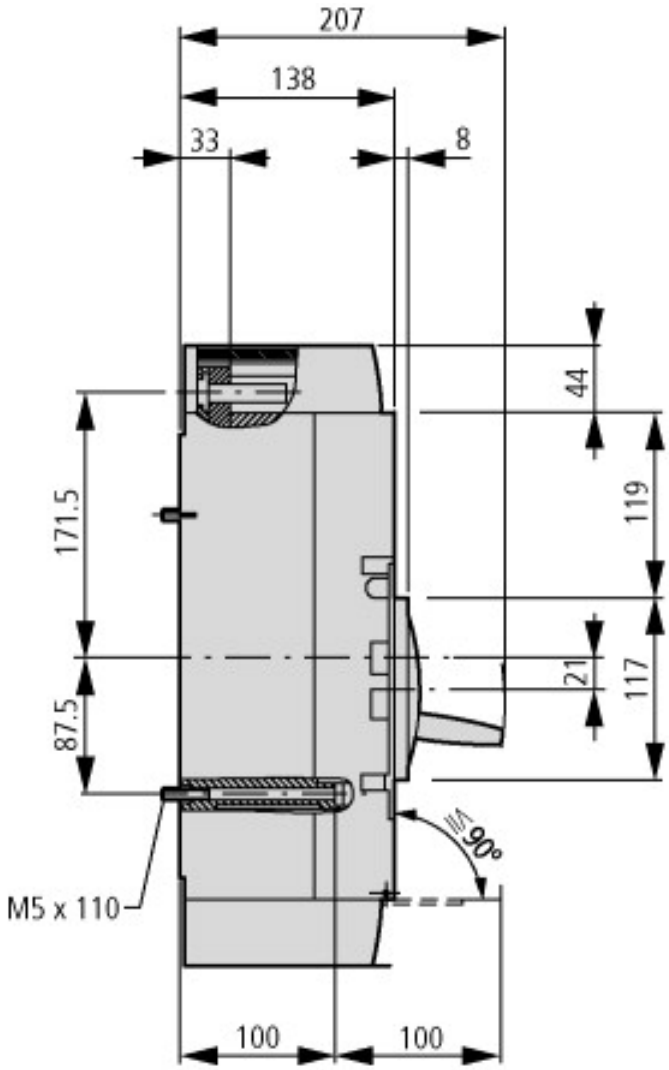
	min.	mm	6 x 16 x 0.8
	max.	mm	(2 x) 10 x 32 x 1.0
Module plate			
Single hole		mm^2	(2 x) 10 x 50 x 1.0
Bolt terminal and rear-side connection			
Flat copper strip, with holes	min.	mm	(2 x) 10 x 50 x 1.0
Flat copper strip, with holes	max.	mm	(2 x) 10 x 50 x 1.0
Connection width extension		mm^2	(2 x) 10 x 80 x 1.0
Copper busbar (width x thickness)	mm		
Bolt terminal and rear-side connection			
Screw connection			M10
Direct on the switch			
	min.	mm^2	25 x 5
	max.	mm^2	2 x (50 x 10) 2 x (80 x 10)
Module plate			
Single hole	min.	mm^2	25 x 5
Single hole	max.	mm^2	2 x (50 x 10)
Module plate			
Double hole		mm^2	2 x (50 x 10)
Connection width extension		mm^2	
Connection width extension	min.	mm^2	60 x 10
Connection width extension	max.	mm^2	2 x (80 x 10)
Control cables			
		mm^2	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)

Technische Daten nach ETIM 4.0

Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as normally closed contact		0
Rated permanent current Iu	A	1600
Number of poles		3
Conditioned rated short-circuit current Iq	kA	100
Degree of protection (IP), front side		IP20
Number of auxiliary contacts as change-over contact		0
Interlockable		YES
Motor drive integrated		No
Connection type main current circuit		Bolt connection
Version as emergency stop installation		No
Type of control element		Toggle lever
Version as main switch		No
Version as switch disconnector compact		YES
Version as safety switch		No
Version as maintenance-/service switch		No
Rated operation power at AC-23, 400V	kWh	0
Rated operation power AC-3, 400 V	kWh	0
Suitable for ground mounting		No
Suitable for front mounting		No
Suitable for front mounting center		No
Suitable for distribution board installation		YES
Suitable for intermediate mounting		No
Max. rated operation voltage Ue AC	V	690
Motor drive optional		YES
Voltage release optional		YES
Device construction		Built-in device fixed built-in technique

Dimensions





① Blow out area, minimum clearance to adjacent parts
Ui ≤ 690 V: 100 mm
Ui ≤ 1500 V: 200 mm
② Minimum clearance to adjacent parts

Additional product information (links)

IL01210010Z (AWA1230-2022) Circuit-breaker, basic device	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01210010Z2010_11.pdf

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