Switch-disconnector 3p 400A terminals

Part no. N3-400-BT
Article no. 110316

Catalog No.

Powering Business Worldwide™

Delivery programme

Product range			Switch-disconnectors
Protective function			Disconnectors/main switches
Standard/Approval			IEC
Installation type			Fixed
Construction size			N3
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			Box terminal
Switch positions			I, +, 0
Rated current = rated uninterrupted current	$I_n = I_u$	A	400
Short-circuit protection max. fuse gL-characteristic		A gL	630

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	400
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U_i	V	1000
Use in unearthed supply systems		V	690
			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	25

Rated short-time withstand current

t = 0.3 s	I_{cw}	kA 12
t = 1 s	I_{cw}	kA 12

Rated conditional short-circuit current

With back-up fuse	A gG/gL	PN3(N3)-400…630: 630
400 … 415 V	kA	100
690 V	kA	80
With downstream fuse	A gG/gL	PN3(N3)-400…630: 630
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	630
690 V	I_e	A	630
415 V	I_e	A	630
690 V	I_e	A	630

Lifespan, mechanical		
Max. operating frequency	Operations	15000
	Ops/h	60

Lifespan, electrical

400 V V 50/60 Hz	Operations	5000
415 V V 50/60 Hz	Operations	5000
690 V 50/60 Hz	Operations	3000
400 V 50/60 Hz	Operations	3000
415 V 50/60 Hz	Operations	3000
690 V 50/60 Hz	Operations	2000
		For current heat loss per pole the specification refers to the maximum rated operational current of the frame size.
Current heat losses per pole at I_u are based on the maximum rated operational current of the frame size.	W	40
		For current heat loss per pole the specification refers to the maximum rated operational current of the frame size.
Total downtime in a short-circuit	ms	< 10

Terminal capacity

Standard equipment		Box terminal
Overview		Basic equipment Box terminal ● - - - Screw connection - ● ● ● Accessories Box terminal - ● ● - Screw connection ● - - ● Tunnel terminal ● ● ● ● Connection on rear ● ● ● ● Flat conductor terminal - - - ●
Round copper conductor		
Box terminal		
Solid	mm^2	2 x 16
Stranded	mm^2	1 x (35 - 240) 2 x (25 - 120)
Tunnel terminal		
Solid	mm^2	1 x (16 - 185)
Stranded	mm^2	
Stranded	mm^2	1 x (25 - 185)
Double hole fitting	mm^2	1 x (50 - 240) 2 x (50 - 240)
Bolt terminal and rear-side connection		
Direct on the switch		
Solid	mm^2	1 x 16 2 x 16
Stranded	mm^2	1 x (25 - 240) 2 x (25 - 240)
Connection width extension	mm^2	
Connection width extension	mm^2	2 x 300
Al conductors, Cu cable		
Solid	mm^2	1 x 16
Stranded	mm^2	
Stranded	mm^2	1 x (25 - 185)
Double hole fitting	mm^2	1 x (50 - 240) 2 x (50 - 240)
Bolt terminal and rear-side connection		

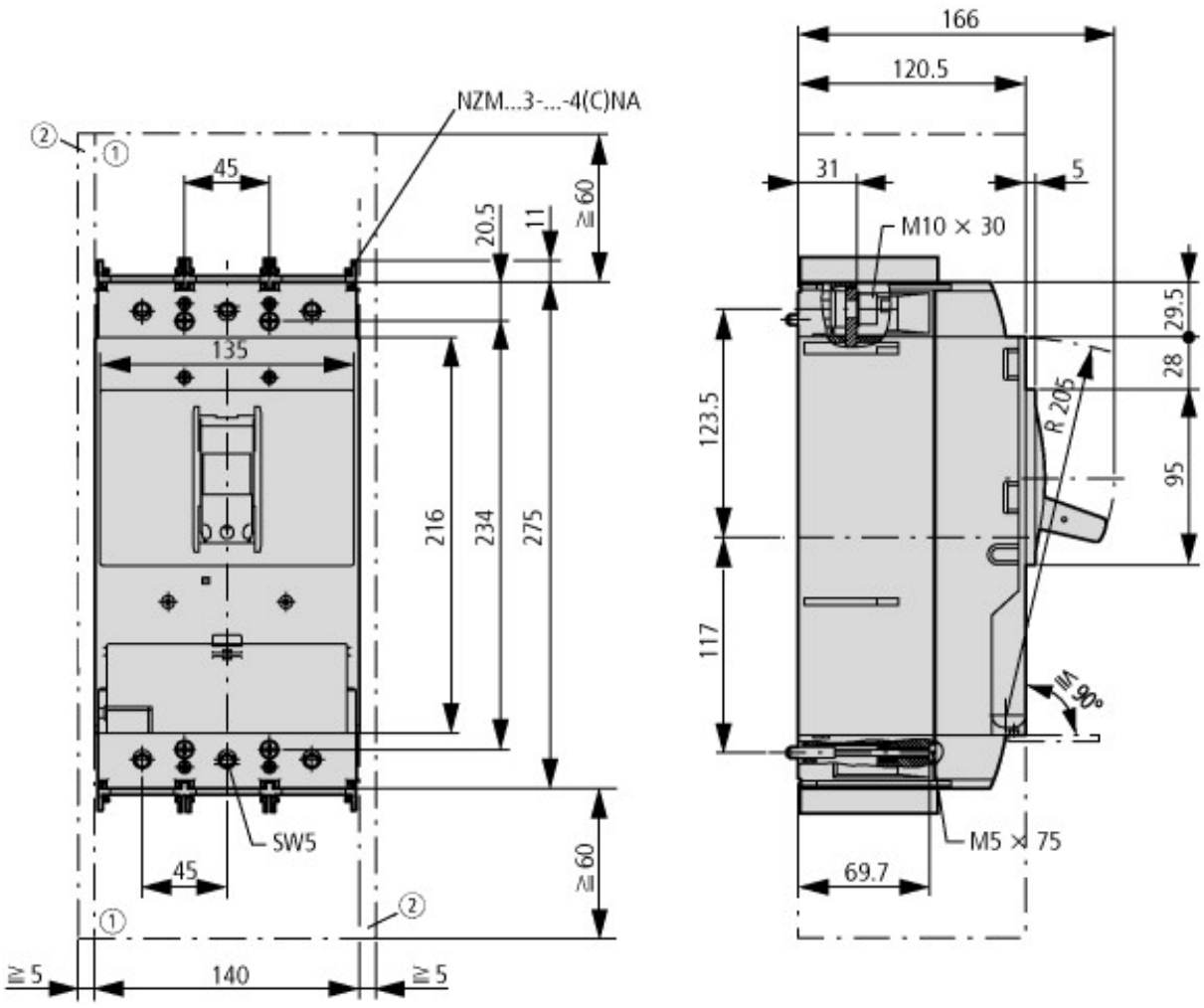
Flat copper strip, with holes	min.	mm	6 x 16 x 0.8
Flat copper strip, with holes	max.	mm	10 x 32 x 1.0 + 5 x 32 x 1.0
Connection width extension		mm^2	(2 x) 10 x 50 x 1.0
Cu strip (number of segments x width x segment thickness)			
Box terminal			
	min.	mm^2	6 x 16 x 0.8
	max.	mm^2	10 x 24 x 1.0 + 5 x 24 x 1.0 (2 x) 8 x 24 x 1.0
Bolt terminal and rear-side connection			
Flat copper strip, with holes	min.	mm	6 x 16 x 0.8
Flat copper strip, with holes	max.	mm	10 x 32 x 1.0 + 5 x 32 x 1.0
Connection width extension		mm^2	(2 x) 10 x 50 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	20 x 5
	max.	mm^2	30 x 10 + 30 x 5
Connection width extension		mm^2	
Connection width extension	max.	mm^2	2 x (10 x 50)
Control cables			
		mm^2	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)

Technical data ETIM 5.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss8-27-37-14-03 [AKF060009])

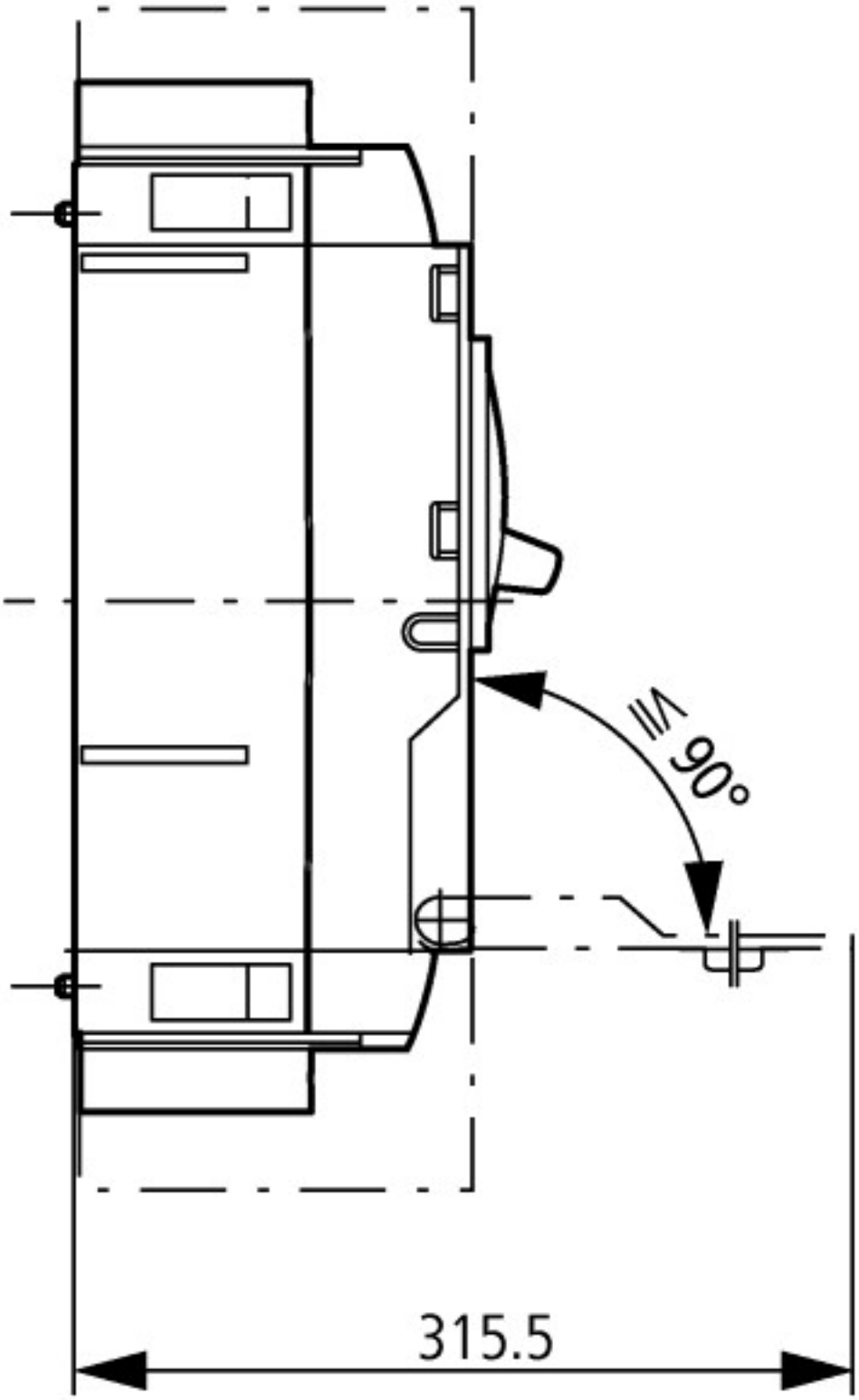
Version as switch disconnector compact		1
Version as main switch		1
Version as maintenance-/service switch		1
Version as safety switch		0
Version as emergency stop installation		1
Max. rated operation voltage Ue AC	V	690
Rated permanent current Iu	A	400
Rated operation power AC-3, 400 V	kW	200
Rated operation power at AC-23, 400 V	kW	200
Conditioned rated short-circuit current Iq	kA	100
Number of poles		3
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
Motor drive optional		1
Motor drive integrated		0
Voltage release optional		1
Device construction		Built-in device fixed built-in technique
Suitable for ground mounting		1
Suitable for front mounting		0
Suitable for front mounting center		0
Suitable for distribution board installation		1
Suitable for intermediate mounting		1
Type of control element		Rocker lever
Interlockable		1
Connection type main current circuit		Frame clamp
Degree of protection (IP), front side		IP20

Dimensions



① Blow out area, minimum clearance to adjacent parts

② Minimum clearance to adjacent parts



Additional product information (links)

IL01206006Z (AWA1230-1916) Circuit-Breaker, basic unit

IL01206006Z (AWA1230-1916) Circuit-Breaker, basic unit	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01206006Z2013_07.pdf