



Switch-disconnector 3p, 200A

Part no. PN2-200
Article no. 266006


Similar to illustration

Delivery programme

Product range			Switch-disconnectors
Protective function			Disconnectors/main switches
Standard/Approval			IEC
Installation type			Fixed
Construction size			PN2
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 poles			3 pole
Standard equipment			Screw connection
Switch positions			I, 0
Rated current = rated uninterrupted current	$I_n = I_u$	A	200
Short-circuit protection max. fuse gL-characteristic		A gL	250

Technical data

Switch-disconnectors

Rated surge voltage invariability	U_{imp}		
Main contacts		V	8000
Auxiliary contacts		V	6000
Rated operational voltage	U_e	V AC	690
Rated current = rated uninterrupted current	$I_n = I_u$	A	200
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U_i	V	690
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	I_c	kA	5.5
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Rated short-time withstand current

t = 0.3 s	I_{cw}	kA	3.5
t = 1 s	I_{cw}	kA	3.5
			The rated short-time withstand current for PN2/N2 in conjunction with earth-fault release NZM2-4-XFI... $I_{cw} = 1.5$ kA

Rated conditional short-circuit current

With back-up fuse		A gG/gL	PN2(N2)-160...250: 250
400 ... 415 V		kA	100
690 V		kA	80
With downstream fuse		A gG/gL	PN2(N2)-160...250: 250
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	250
690 V	I_e	A	250

415 V	I_e	A	250																																			
690 V	I_e	A	250																																			
Lifespan, mechanical	Operations		20000																																			
Max. operating frequency		Ops/h	120																																			
Lifespan, electrical																																						
400 V 50/60 Hz	Operations		10000																																			
415 V 50/60 Hz	Operations		10000																																			
690 V 50/60 Hz	Operations		7500																																			
400 V 50/60 Hz	Operations		7500																																			
415 V 50/60 Hz	Operations		7500																																			
690 V 50/60 Hz	Operations		5000																																			
			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	16																																			
			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			Screw connection																																			
Overview			<p>Basic equipment</p> <table border="0"> <tr> <td>Box terminal</td> <td>●</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Screw connection</td> <td>-</td> <td>●</td> <td>●</td> <td>●</td> </tr> </table> <p>Accessories</p> <table border="0"> <tr> <td>Box terminal</td> <td>-</td> <td>●</td> <td>●</td> <td>-</td> </tr> <tr> <td>Screw connection</td> <td>●</td> <td>-</td> <td>-</td> <td>●</td> </tr> <tr> <td>Tunnel terminal</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>Connection on rear</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>Flat conductor terminal</td> <td>-</td> <td>-</td> <td>-</td> <td>●</td> </tr> </table>	Box terminal	●	-	-	-	Screw connection	-	●	●	●	Box terminal	-	●	●	-	Screw connection	●	-	-	●	Tunnel terminal	●	●	●	●	Connection on rear	●	●	●	●	Flat conductor terminal	-	-	-	●
Box terminal	●	-	-	-																																		
Screw connection	-	●	●	●																																		
Box terminal	-	●	●	-																																		
Screw connection	●	-	-	●																																		
Tunnel terminal	●	●	●	●																																		
Connection on rear	●	●	●	●																																		
Flat conductor terminal	-	-	-	●																																		
Round copper conductor																																						
Box terminal																																						
Solid		mm ²	1 x (4 - 16) 2 x (4 - 16)																																			
Stranded		mm ²	1 x (25 - 185) 2 x (25 - 70)																																			
Tunnel terminal																																						
Solid		mm ²	1 x (16 - 185)																																			
Stranded		mm ²																																				
Stranded		mm ²	1 x (25 - 185)																																			
Bolt terminal and rear-side connection																																						
Direct on the switch																																						
Solid		mm ²	1 x (4 - 16) 2 x (4 - 16)																																			
Stranded		mm ²	1 x (25 - 185) 2 x (25 - 70)																																			
Al conductors, Cu cable																																						
Solid		mm ²	1 x 16																																			
Stranded		mm ²																																				
Stranded		mm ²	1 x (25 - 185)																																			
Bolt terminal and rear-side connection																																						
Flat copper strip, with holes	min.	mm	2 x 16 x 0.8																																			
Flat copper strip, with holes	max.	mm	10 x 16 x 0.8																																			
Cu strip (number of segments x width x segment thickness)																																						
Box terminal																																						

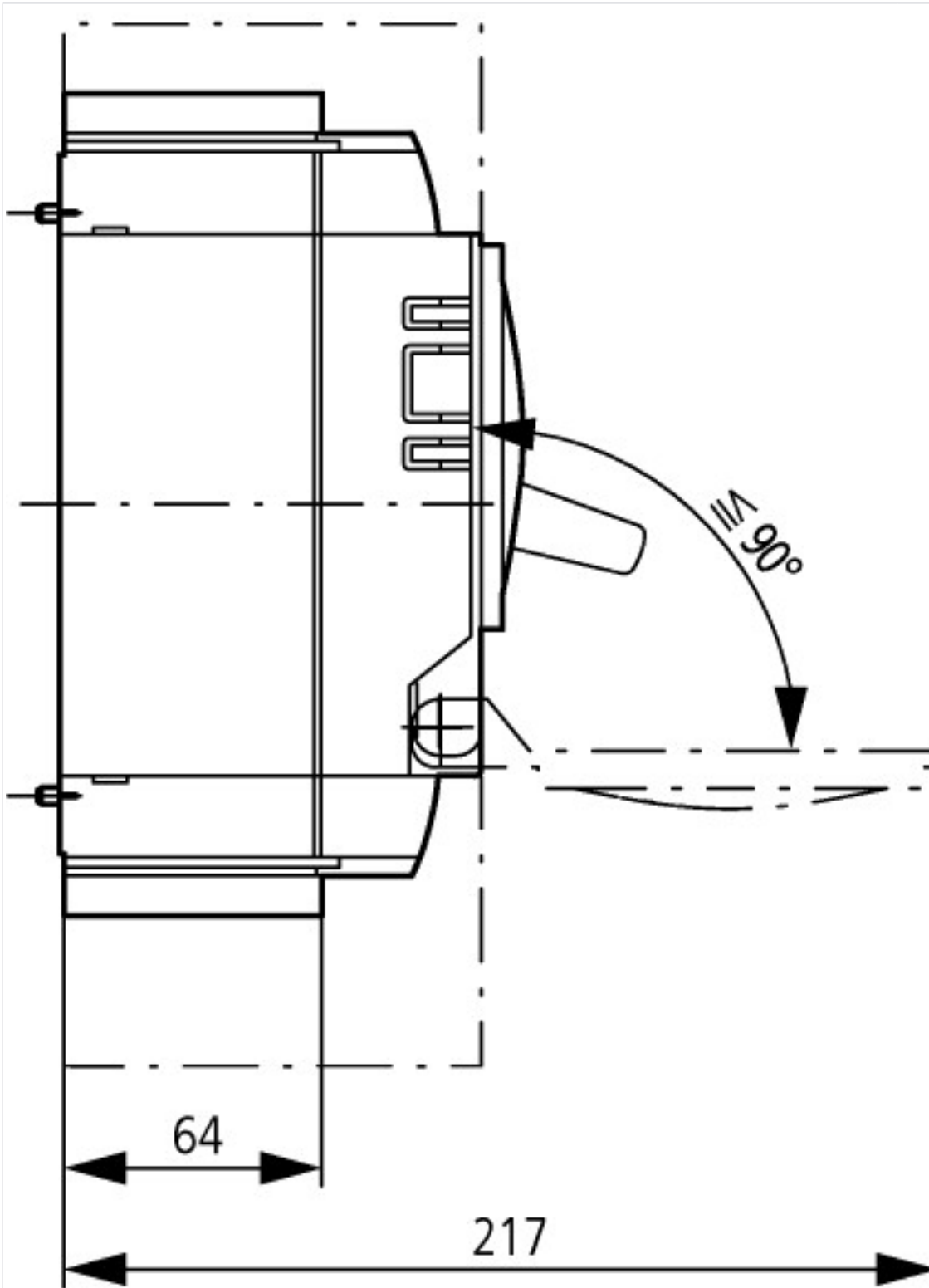
	min.	mm ²	2 x 9 x 0.8
	max.	mm ²	10 x 16 x 0.8
Bolt terminal and rear-side connection			
Flat copper strip, with holes	min.	mm	2 x 16 x 0.8
Flat copper strip, with holes	max.	mm	10 x 16 x 0.8
Copper busbar (width x thickness)			
Bolt terminal and rear-side connection			
Screw connection			M8
Direct on the switch			
	min.	mm ²	16 x 5
	max.	mm ²	20 x 5
Control cables			
		mm ²	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)

Data for design verification according to IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	200
Equipment heat dissipation, current-dependent	P _{vid}	W	30.72
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 5.0

Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecI@ss8-27-37-14-03 [AKF060009])			
Version as switch disconnecter compact			Yes
Version as main switch			Yes
Version as maintenance-/service switch			Yes
Version as safety switch			No



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/IL01206006Z2014_07.pdf

Weight <http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.171>

Temperature dependency, Derating <http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.172>

Effective power loss <http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.174>