

Type: **PN2–160**Article No.: **266005** 

Sales text Switch-disconnector 3p 160A



Ordering information					
Number of poles			3 pole		
Description			Terminal screws standard, terminals as accessories		
Rated current = rated uninterrupted current					
Rated uninterrupted current	<i>I</i> <sub>u</sub>	Α	160		
Short-circuit protection max. fuse gL-characteristic		A gL	250		

### Notes concerning the product group

Notes for terminals → 262240

### Notes concerning the product group

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 100

With the switch–disconnector N additional voltage releases NZM...–XU, NZM...–XA and trip–indicating auxiliary contacts (HIA) can be used.

N2..., N3... and N4... can also be combined with the NZM...–XR... remote operator.

Switch-disconnectors			
Rated impulse withstand voltage $U_{\rm imp}$			
Main contacts		V	8000
Auxiliary contacts		V	6000
Rated operational voltage	<i>U</i> e	V AC	690
Rated uninterrupted current max.			
IEC/EN 61131-3	<i>l</i> <sub>u</sub>	Α	250
Technical data, divergent from the products for the IEC market UL489, CSA 22.2 No. 5.1	<i>I</i> u	Α	160 (N2)
Overvoltage category/pollution degree			III/3
Rated insulation voltage	<i>U</i> i	V AC	690
For use in IT electrical power networks		٧	690
Switching capacity			
Rated short-circuit making capacity	<i>I</i> <sub>cm</sub>	kA	5,5
Rated short-time withstand current			
t = 0.3 s	<i>I</i> <sub>CW</sub>	kA	3,5
t = 1 s	<b>I</b> <sub>CW</sub>	kA	3,5
Rated conditional short–circuit current			
With back-up fuse		A gG/gL	PN2(N2)-160250: 250
400 415 V		kA	100
690 V		kA	80
With downstream fuse		A gG/gL	PN2(N2)-160250: 250
400 415 V		kA	100
690 V		kA	80
Lifespan, mechanical	Operations		20000
Maximum operating frequency		Ops./h	120
Lifespan, electrical to IEC/EN 60947–4–1 section B			
AC-1			
400/415 V	Operations		10000
690 V	Operations		7500
AC3			
690 V	Operations		5000

Current heat loss per pole at Iu		W	16
Terminal capacities			
Round copper conductor			
Box terminal			
Solid		mm <sup>2</sup>	1 × (4 – 16) 2 × (4 – 16)
Stranded		mm <sup>2</sup>	1 × (25 – 185) 2 × (25 – 70)
Tunnel terminal			
Solid		mm <sup>2</sup>	1 × 16
Stranded			
Stranded		mm <sup>2</sup>	1 × (25 – 185)
Bolt terminal and rear-side connection			
Direct on the switch			
Solid		mm <sup>2</sup>	1 × (4 – 16) 2 × (4 – 16)
Stranded		mm <sup>2</sup>	1 × (25 – 185) 2 × (25 – 70)
Al conductors, Cu cable			
Box terminal			
Solid		mm <sup>2</sup>	1 × (16 – 185)
Tunnel terminal			
Solid		mm <sup>2</sup>	1 × 16
Stranded			
Stranded		mm <sup>2</sup>	$1 \times (25 - 185)$ je nach Kabelhersteller bis zu 240 mm² anschließbar
Bolt terminal and rear-side connection			
Direct on the switch			
Solid			1 × (10 – 16) 2 × (10 – 16)
Stranded		mm <sup>2</sup>	1 × (25 – 50) 2 × (25 – 50)
Cu strip (number of segments x width x segment thickness)			
Box terminal			
	min.	mm <sup>2</sup>	2 × 9 × 0.8
	max.	mm <sup>2</sup>	10 × 16 × 0.8
Bolt terminal and rear-side connection			

Flat copper strip, with holes	min.	mm	2 × 16 × 0.8
Flat copper strip, with holes	max.	mm	10 × 16 × 0.8
Copper busbar (width × thickness)			
Bolt terminal and rear-side connection			
Screw connection			M8
Direct on the switch			
	min.	mm <sup>2</sup>	16 × 5
	max.	$mm^2$	20 × 5
Control cables			
		mm <sup>2</sup>	1 × (0.75 – 2.5) 2 × (0.75 – 1.5)
Notes			
Notes			The rated short time withstand current for PN2/N2 in conjunction with residual–current release NZM2–4–XFI $I_{cw}$ = 1.5 kA For current heat loss per pole the specification refers to the maximum nominal current of the frame size. For the electrical life at AC–3 for PN2/N2 the following applies: 690 V: max. 160 kW For 3–pole switch–disconnectors the following applies: 400/415 V 7500 switching operations; 690 V 5000 switching operations For 3–pole switch–disconnectors the following applies: 400/415 V 6000 switching operations; 690 V 4000 switching operations; 690 V 4000 switching operations

# Overview

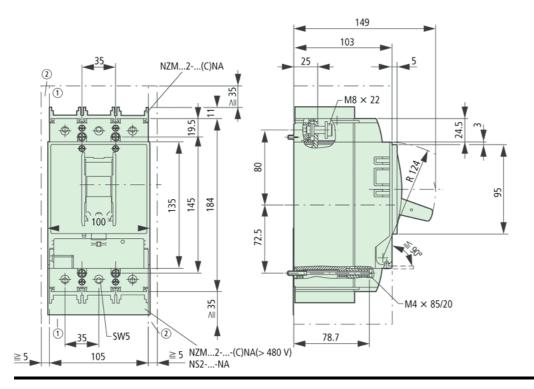
Basic equipment

Box terminal  $\bullet$  - - - Screw connection -  $\bullet$   $\bullet$ 

Accessories

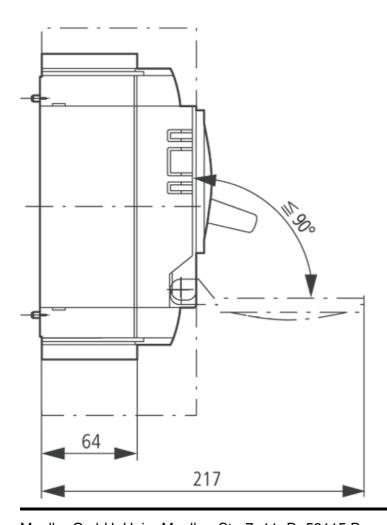
Box terminal - • • - - • Screw connection

## **Dimensions**



Clearance from conductive parts 35 mm, laterally 5 mm

### **Dimensions**



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