

Type: **PN1–100** Article No.: **259141** 

Sales text Switch-disconnector 3p



Ordering information					
Number of poles			3 pole		
Description			Terminals standard, terminal screws as accessories		
Rated current = rated uninterrupted current					
Rated uninterrupted current	<i>I</i> <sub>u</sub>	Α	100		
Short–circuit protection max. fuse gL–characteristic		A gL	125		

### Notes concerning the product group

Notes for terminals → 260015

### 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		٧	6000
Auxiliary contacts		٧	6000
Rated operational voltage	<i>U</i> e	V AC	690
Rated uninterrupted current max.			
IEC/EN 61131-3	<i>I</i> <sub>u</sub>	Α	160
Technical data, divergent from the products for the IEC market UL489, CSA 22.2 No. 5.1	<i>I</i> <sub>u</sub>	Α	125 (N1)
Overvoltage category/pollution degree			III/3
Rated insulation voltage	<i>U</i> i	V AC	690
For use in IT electrical power networks		V	690
Switching capacity			
Rated short-circuit making capacity	<i>I</i> <sub>cm</sub>	kA	2,8
Rated short-time withstand current			
t = 0.3  s	I <sub>CW</sub>	kA	2
t = 1 s	I <sub>cw</sub>	kA	2
Rated conditional short-circuit current			
With back-up fuse		A gG/gL	PN1(N1)–63125: 125PN1(N1)–160: 160
400 415 V		kA	100
690 V		kA	80
With downstream fuse		A gG/gL	PN1(N1)-63125: 125PN1(N1)-160: 160
400 415 V		kA	100
690 V		kA	10
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	12.7
Terminal capacities			
Round copper conductor			
Box terminal			
Solid		mm <sup>2</sup>	$1 \times (10 - 16)$ $2 \times (6 - 16)$
Stranded		mm <sup>2</sup>	$1 \times (25 - 70)$ depending on the cable manufacturer up to 95 mm <sup>2</sup> can be connected. $2 \times 25$
Tunnel terminal			
Solid		mm <sup>2</sup>	1 × 16
Stranded			
Stranded		mm <sup>2</sup>	1 × (25 – 95)
Bolt terminal and rear-side connection			
Direct on the switch			
Solid		mm <sup>2</sup>	$1 \times (10 - 16)$ $2 \times (6 - 16)$
Stranded		mm <sup>2</sup>	1 × (25 – 70) 2 × 25
Al conductors, Cu cable			
Box terminal			
Solid		mm <sup>2</sup>	1 × (16 – 95)
Tunnel terminal			
Solid		mm <sup>2</sup>	1 × 16
Stranded			
Stranded		mm <sup>2</sup>	1 × (25 – 95)
Bolt terminal and rear-side connection			
Direct on the switch			
Solid		mm <sup>2</sup>	1 × (10 – 16) 2 × (10 – 16)
Stranded		mm <sup>2</sup>	1 × (25 – 35) 2 × (25 – 35)
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>	9 × 9 × 0.8
Copper busbar (width × thickness)			

Bolt terminal and rear-side connection			
Screw connection			M6
Direct on the switch			
	min.	mm <sup>2</sup>	12 × 5
	max.	mm <sup>2</sup>	16 × 5
Control cables			
		mm <sup>2</sup>	1 × (0.75 – 2.5) 2 × (0.75 – 1.5)
Notes			
Notes			The current heat loss per pole ratings refer to the maximum current rating of the frame size.

## Overview

Basic equipment

Box terminal 
● - - -

Screw connection − • • •

Accessories

Box terminal − • • −

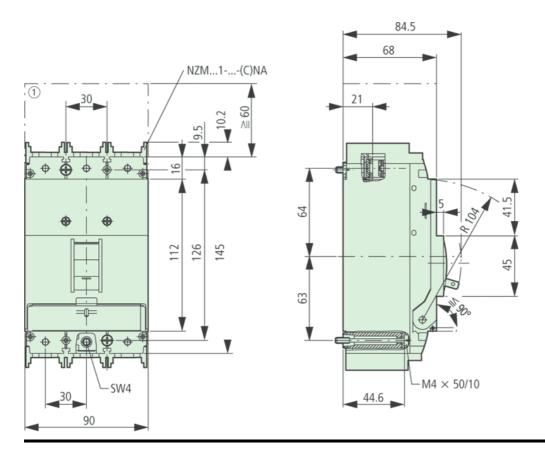
Screw connection • - -

Tunnel terminal • • • •

Connection on rear  $\bullet$   $\bullet$   $\bullet$ 

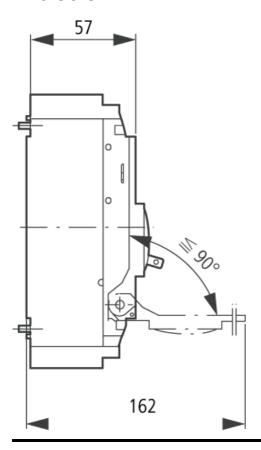
Flat conductor terminal - - - ●

## **Dimensions**



Clearance from conductive parts 60 mm

# **Dimensions**



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