

Part no. PN1-125

Article no. 259142

### Program

Range			Switch-disconnectors
Protective function			Disconnectors/main switches
Standard/Approval			IEC
Installation type			Fixed
Construction size			PN1
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	125
Short-circuit protection max. fuse gL-characteristic		A gL	125

### Switch-disconnectors

Rated surge voltage invariability	$U_{imp}$		
Main contacts		V	6000
Auxiliary contacts		V	6000
Rated operational voltage	$U_e$	V AC	690
Rated current = rated uninterrupted current	$I_n = I_u$	A	125
Rated uninterrupted current	$I_u$	A	
IEC/EN 61131-3	$I_u$	A	160
Overvoltage category/pollution degree			III/3
Rated insulation voltage	$U_i$	V	690
For use in IT electrical power networks		V	690
Other technical data (sheet catalogue)			Rated operating voltage: 40-60 Hz Weight Temperature dependency, Derating Effective power loss

### Rated short-circuit making capacity

690 V 50/60 H	$I_c$	kA	2.8
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### Rated short-time withstand current

t = 0.3 s	$I_{cw}$	kA	2
t = 1 s	$I_{cw}$	kA	2

### Rated conditional short-circuit current

With back-up fuse		A gG/ gL	PN1(N1)-63...125: 125 PN1(N1)-160: 160
400 ... 415 V		kA	100
690 V		kA	80
With downstream fuse		A gG/ gL	PN1(N1)-63...125: 125 PN1(N1)-160: 160
400 ... 415 V		kA	100
690 V		kA	10

### Rated making and breaking capacity

Rated operational current	$I_e$	A	
415 V	$I_e$	A	160
690 V	$I_e$	A	160
415 V	$I_e$	A	160

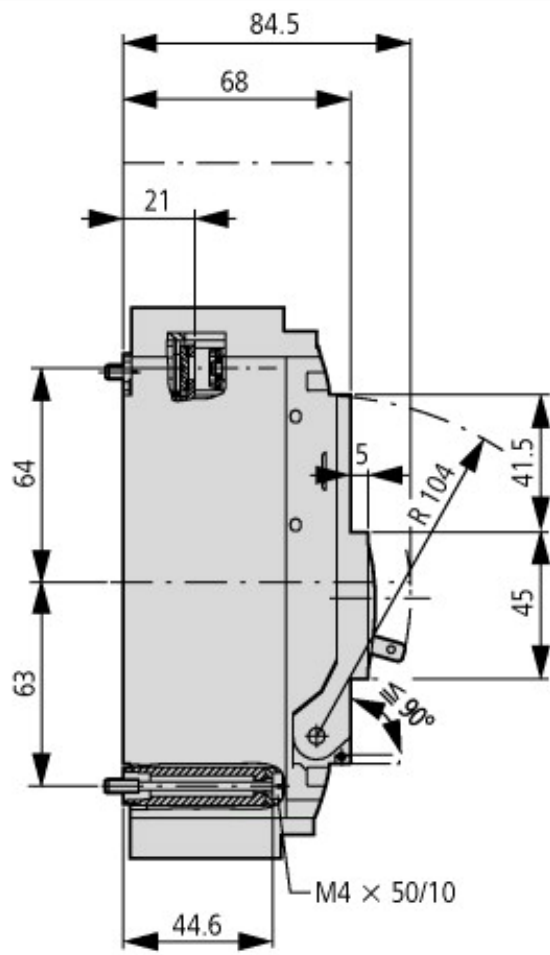
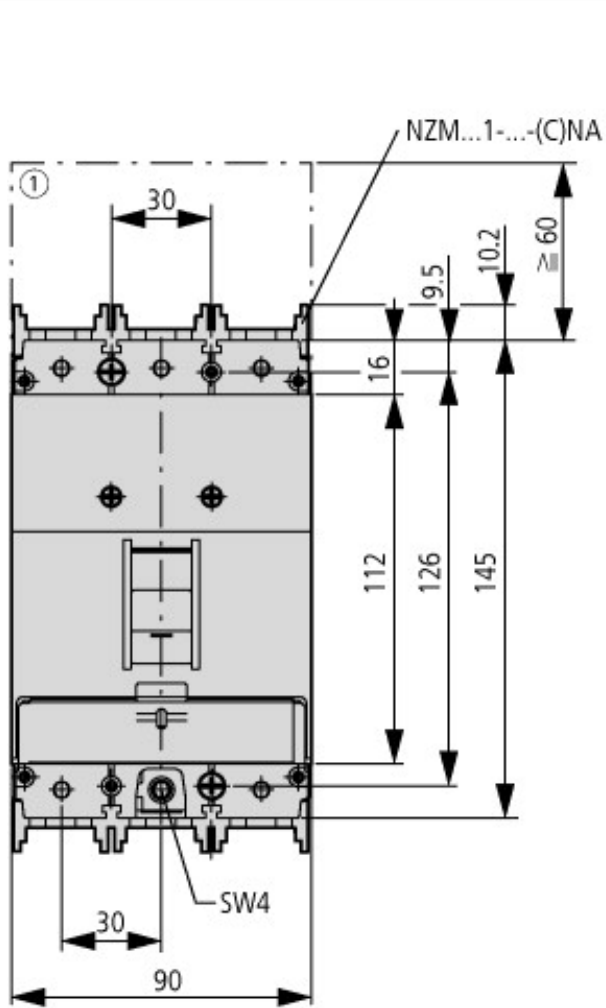
690 V	$I_e$	A	160																																													
Lifespan, mechanical	Operations		20000																																													
Max. operating frequency		Ops/h	120																																													
<b>Lifespan, electrical</b>																																																
400 V V 50/60 Hz	Operations		10000																																													
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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	12.7																																													
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Total downtime in a short-circuit		ms	< 10																																													
<b>Terminal capacity</b>																																																
Standard equipment			Box terminal																																													
Overview			<table border="0"> <tr> <td>Basic equipment</td> <td></td> <td></td> <td></td> <td></td> </tr> <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>Accessories</td> <td></td> <td></td> <td></td> <td></td> </tr> <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>	Basic equipment					Box terminal	●	-	-	-	Screw connection	-	●	●	●	Accessories					Box terminal	-	●	●	-	Screw connection	●	-	-	●	Tunnel terminal	●	●	●	●	Connection on rear	●	●	●	●	Flat conductor terminal	-	-	-	●
Basic equipment																																																
Box terminal	●	-	-	-																																												
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Tunnel terminal	●	●	●	●																																												
Connection on rear	●	●	●	●																																												
Flat conductor terminal	-	-	-	●																																												
Round copper conductor																																																
Box terminal																																																
Solid		mm <sup>2</sup>	1 x (10 - 16) 2 x (6 - 16)																																													
Stranded		mm <sup>2</sup>	1 x (25 - 70) depending on the cable manufacturer up to 95 mm <sup>2</sup> can be connected. 2 x 25																																													
Tunnel terminal																																																
Solid		mm <sup>2</sup>	1 x 16																																													
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Bolt terminal and rear-side connection																																																
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Al conductors, Cu cable																																																
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Cu strip (number of segments x width x segment thickness)																																																
Box terminal																																																
	min.	mm <sup>2</sup>	2 x 9 x 0.8																																													
	max.	mm <sup>2</sup>	9 x 9 x 0.8																																													

Copper busbar (width x thickness)	mm		
Bolt terminal and rear-side connection			
Screw connection			M6
Direct on the switch			
	min.	mm <sup>2</sup>	12 x 5
	max.	mm <sup>2</sup>	16 x 5
Control cables			
		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)

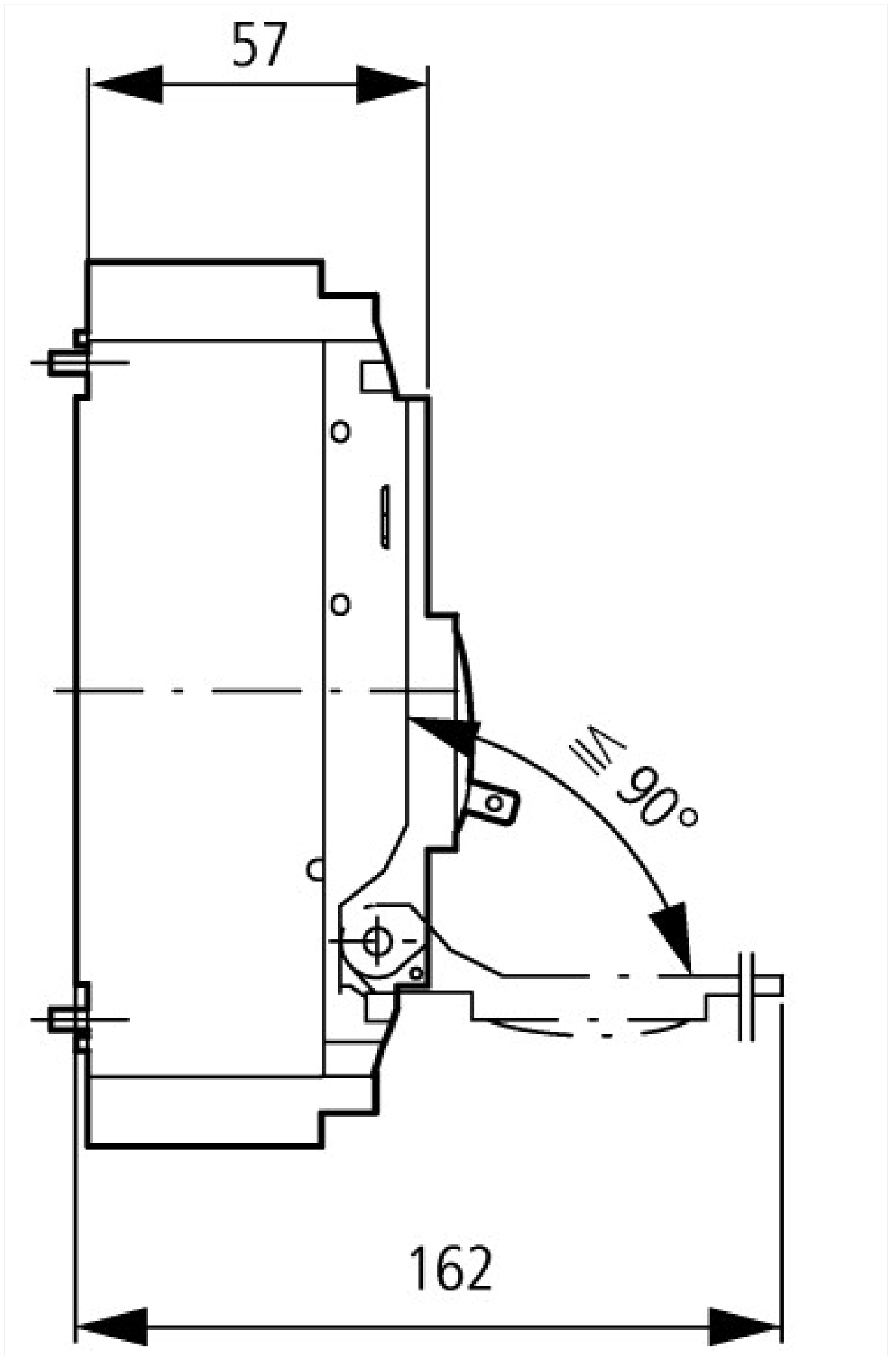
### Technical data according to ETIM 4.0

Number of auxiliary contacts as normally open contact			0
Number of auxiliary contacts as normally closed contact			0
Rated permanent current I <sub>u</sub>		A	125
Number of poles			3
Conditioned rated short-circuit current I <sub>q</sub>		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			Box terminal
Version as emergency stop installation			No
Type of control element			Toggle lever
Version as main switch			No
Version as switch disconnecter 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 U <sub>e</sub> 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



## Additional product information (links)

IL01203004Z (IL01203004Z) Circuit-breaker, Switch-Disconnecter	<a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01203004Z2010_11.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01203004Z2010_11.pdf</a>
<b>Engineering</b>	
Conversion N12 to N4	<a href="ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Umbau_N12_auf_N4_G.pdf">ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Umbau_N12_auf_N4_G.pdf</a>