DATASHEET - NZMC1-4-A125



Similar to illustration

Circuit-breaker, 4p	, 125A
---------------------	--------

NZMC1-4-A125

271418

Part no.

Catalog No.



Delivery program			
Product range			Circuit-breaker
Protective function			System and cable protection
Standard/Approval			IEC
Installation type			Fixed
Release system			Thermomagnetic release
Construction size			NZM1
Description			Set value in neutral conductor is synchronous with set value Ir of main pole.
Number of poles			4 pole
Standard equipment			Box terminal
Switching capacity			
400/415 V 50 Hz	l _{cu}	kA	36
Rated current = rated uninterrupted current			
Rated current = rated uninterrupted current	$I_n = I_u$	A	125
Neutral conductor	% of phase conductor	CSA	100
Setting range			
Overload trip			
с‡	I _r	A	100 - 125
Main pole	I _r	A	100 - 125
Short-circuit releases			
Non-delayed	I _i = I _n x		6 - 10
Short-circuit releases	I _{rm}	A	750 - 1250

Technical data

General		
Standards		IEC/EN 60947
Protection against direct contact		Finger and back of hand proof to VDE 0106 Part 100
Climatic proofing		Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature		
Ambient temperature, storage	°C	- 40 - + 70
Operation	°C	-25 - +70
Mechanical shock resistance (10 ms half-sinusoidal shock) according to IEC 60068-2-27	g	20 (half-sinusoidal shock 20 ms)
Safe isolation to EN 61140		
Between auxiliary contacts and main contacts	V AC	500
between the auxiliary contacts	V AC	300

InterderInterderInterderInterderDirection incomePartial interderPartial interderDirection incomePartial interderPartial interderDirection incomePartial interderPartial interderTrainationPartial interderPartial interderDirection incomePartial interderPartial interderDirection incomePa	Mounting position			Vertical and 90° in all directions With XFI earth-fault release: - NZM1, N1, NZM2, N2: vertical and 90° in all directions with plug-in unit - NZM1, N1, NZM2, N2: vertical, 90° right/left with withdrawable unit: - NZM3, N3: vertical, 90° right/left - NZM4, N4: vertical with remote operator: - NZM2, N(S)4: vertical and 90° in all
PerformancePerformanc				
IndexAnd 	Direction of incoming supply			as required
Indexes Production of the second	Degree of protection			
Induct caling may hade. PEG Mide caling may hade. PEG Transitions Description and program hade. PEG Description and program hade. PEG Description and program hade. PEG Raid caling may hade. PEG Description and program hade. PEG Raid caling may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG Min contained may hade. PEG Description and program hade. PEG </td <td>Device</td> <td></td> <td></td> <td>In the operating controls area: IP20 (basic degree of protection)</td>	Device			In the operating controls area: IP20 (basic degree of protection)
Note::::::::::::::::::::::::::::::::::::	Enclosures			
Circuit-breaker Control	Terminations			
Rate summer and unifermation of any strain of a strain s	• • •			Temperature dependency, Derating
New partner in the second se		1 -1	٨	125
Main ormansVBiolAutiny contactsUVBiolBard organization (obegeUVRedBard organization (obegeUVRedBard organization (obegeeUVRedBard organization (obegeeUVRedBard organization (obegeeUVRedBard organization (obegeeImageeVRedBard organization (obegeeImageeImageeRedBard organization (obegeeImageeImageeRedStart Start (obegeeImageeImageeRedStart Start (obegeeImageeImageeRedStart Start (obegeeImageeImageeRedStart Start (obegeeImageeImageeImageeStart Start (obegeeImageeImageeImagee <td></td> <td></td> <td>A</td> <td>123</td>			A	123
Aniliary contactsN000Retain particulation valuesV000Retain fundition valuesV000Retain fundition valuesV000Retain fundition valuesV000Retain fundition valuesV000Retain fundition valuesV000SectorV00		U _{imp}		
RateNumberNumberNumberNumberNumberNumberNumberRateNumber				
New outgoe category foil ution degreeNew ou				
Reteinuitation V 80 Unimented supply systems 600 Svittering capacity Kar 600 Svittering capacity Kar 12 240 V Can Kar 12 250 V506 H2 Can Kar 12 250 V506 H2 Can Kar 12 240 V 5060 H2 Can 12 12 240 V 5060 H2 Can 12 12 240 V 5060 H2 Can 12 12 240 V 5060 H2		U _e	VAC	
Number of the state of the s				
Switching capacityReted bort-circuit making capacityIcanKanIc	-	Ui		
Ret definition of the second secon			V	≦ 690
29 VInInInInIn404 H3 VInInInInInIn404 V500 H2InInInInInIn505 V500 H2InInInInInIn100 V500 H2InInInInInInIn100 V500 H2InInInInInInInInIn100 V500 H2In <t< td=""><td></td><td>lam</td><td></td><td></td></t<>		lam		
40/4 10 No A 40/4 50 60 H2 Ka Ka Sa 52 50 60 H2 Ka Ka Sa 50 50 60 H2 Ka Ka Sa 100 50 60 H2 Ka Ka Sa 100 50 60 H2 Ka Sa Sa			Ł۸	121
440 506 Pk 360 360 55 50 506 Pk 160 360 55 50 506 Pk 160 360 60 50 506 Pk 160 360 160 50 506 Pk 160 360 160 50 506 Pk 160 360 160 505 506 Pk 160 160 160 160 505 506 Pk 160 160 160 160 505				
557 50/60 Hz ind ind ind 557 50/60 Hz ind ind ind 600 50/60 H ind ind ind Rated short-incuit breaking capacity log ind ind ind 2400 50/60 Hz ind ind ind ind 400 50/60 Hz ind ind ind ind ind 400 50/60 Hz ind				
index index index index Bit do Shife H Index				
Redeshor-circuitbreaking capacity lan Index				
InterfactInterfactInterfactInterfactInterfact240 Y506 H2InterfactInterfactInterfactInterfact400 Y506 H2InterfactInterfactInterfactInterfact525 Y506 H2InterfactInterfactInterfactInterfact600 Y506 H2InterfactInterfactInterfactInterfact400 Y506 H2InterfactInterfactInterfactInterfact400 Y506 H2InterfactInterfactInterfactInterfact400 Y506 H2InterfactInterfactInterfactInterfact400 Y506 H2InterfactInterfactInterfactInterfact400 Y506 H2InterfactInterfactInterfactInterfact600 Y506 H2InterfactInterfactInterfactInterfact100 Y506 H2InterfactInterfactInterfactInterfact101 Y506 H2InterfactInterfactInterfactInterfact101 Y506 H2InterfactInterfactInterfactInterfact101 Y506 H2InterfactInterfactInterfactInterfact101 Y506 H2InterfactInterfactInterfactInterfact111 Y506 H2InterfactInterfactInterfactInterfact111 Y506 H2InterfactInterfactInterfactInterfact111 Y506 H2InterfactInterfactInterfactInterfact111 Y506 H2InterfactInterfactInterfactInterfact111 Y506 H2<			kA	14
40 V 50/60 Hz eu Ka 400/415 V 50/60 Hz luu Ka 40 V 50/60 Hz luu Ka 52 V 50/60 Hz luu Ka 60 V 50/60 Hz luu Ka 200 V 50/60 Hz luu Ka 400 V 50/60 Hz luu Ka 600 V 50/60 Hz Ka Sa VIIII Luu Ka Maintaback up fuse, if the expected short-circuit urrents at the installation in exceed the switching capacity of the circuit breaker. VIIII Luu Ka Ya VIIII Luu Ya Ya VIIII Luu Ya Ya VIIII Luu Ya Ya VIIII Luu Ya <td></td> <td></td> <td></td> <td></td>				
400/415 V 50/60 Hz Icu Ka 3e 400/415 V 50/60 Hz Icu Ka 3e 525 V 50/60 Hz Icu Ka 3e 500 V 50/60 Hz Icu Ka 3e 690 V 50/60 Hz Icu Ka 3e 690 V 50/60 Hz Icu Ka 3e 740 V 50/60 Hz Icu Ka 3e 750 S0/60 Hz Icu Ka 3e 750 S0/60 Hz Icu Se 3e 750 S0/60 H				
440 V 50/60 Hz Icu Ka 3 525 V 50/60 Hz Icu Ka 1 690 V 50/60 Hz Icu Ka 3 1690 V 50/60 Hz Icu Ka 3 1690 V 50/60 Hz Icu Ka 3 1600 V 50/60 Hz Icu Ka 3 1610 V 50/60 Hz Icu Xa 3 1610 V 50/60 Hz Icu A 3 1610 V 50/60 Hz Icu A 3 1610 V 50/60 Hz Icu 3 3 1610 V 50/60		I _{cu}		
525 V 50/60 Hz Icu Ka A 525 V 50/60 Hz Icu Ka 3 690 V 50/60 Hz Icu Ka 3 1 Es to IEC/EN 60947 test cycle 0-t-C0-to-C0 Ics Ka 5 240 V 50/60 Hz Ics Ka 5 400/15 V 50/60 Hz Ics Ka 5 400/15 V 50/60 Hz Ics Ka 3 690 V 50/60 Hz Ics Ka 3 690 V 50/60 Hz Ics Ka 3 690 V 50/60 Hz Ics Ka 3 1690 V 50/60 Hz Ics Ka 3 1612 V 50/60 Hz Ics Ka 3 1612 V 50/60 Hz Ics Xa 3 1612 V 50/60 Hz Ics Xa 3 1612 V 50/60 Hz Ics Xa 3		l _{cu}		
index index <td< td=""><td></td><td>l_{cu}</td><td></td><td></td></td<>		l _{cu}		
icon icon <td< td=""><td></td><td>I_{cu}</td><td></td><td></td></td<>		I _{cu}		
40 V 50/60 Hz Ics A 400/415 V 50/60 Hz Ics Ka 50 440 V 50/60 Hz Ics Ka 2.5 525 V 50/60 Hz Ics Ka 6 690 V 50/60 Hz Ics Ka 6 690 V 50/60 Hz Ics Ka 6 101 U to		l _{cu}	kA	8
40/415 V 50/60 Hz 400/415 V 50/60 Hz 40 V 50/60 Hz 40 V 50/60 Hz 525 V 50/60 Hz 600 V 50/60 V 50		lcs	kA	
Add V 50/60 Hz Ics KA Sca KA Sca KA Sca Sca KA Sca		I _{cs}	kA	55
Instrument Instrum	400/415 V 50/60 Hz	I _{cs}	kA	36
Act Act <td>440 V 50/60 Hz</td> <td>I_{cs}</td> <td>kA</td> <td>22.5</td>	440 V 50/60 Hz	I _{cs}	kA	22.5
Image: state in the state i	525 V 50/60 Hz	I _{cs}	kA	6
Idea Increase of the switching capacity of the circuit-breaker. Utilization category to IEC/EN 60947-2 A Lifespan, mechanical(of which max. 50% trip by shunt/undervoltage release) Operations 2000 Lifespan, electrical A A AC-1 A A 400 V 50/60 Hz Operations 1000 415 V 50/60 Hz Operations 500	690 V 50/60 Hz	I _{cs}	kA	4
Lifespan, electrical AC-1 Constraints of the second	Utilization category to IEC/EN 60947-2			location exceed the switching capacity of the circuit-breaker.
Lifespan, electrical AC-1 Constraints of the second		Operations		
400 V 50/60 Hz Operations 10000 415 V 50/60 Hz Operations 7500				
415 V 50/60 Hz Operations 7500	AC-1			
	400 V 50/60 Hz	Operations		10000
690 V 50/60 Hz Operations 5000	415 V 50/60 Hz	Operations		7500
	690 V 50/60 Hz	Operations		5000

Max. operating frequency		0ps/h	120
Total break time at short-circuit		ms	< 10
Terminal capacity			
Standard equipment			Box terminal
Optional accessories			Screw connection Tunnel terminal connection on rear
Round copper conductor			
Box terminal			
Solid		mm ²	1 x (10 - 16) 2 x (6 - 16)
Stranded		mm ²	1 x (10 - 70) ³⁾ 2 x (6-25)
Turnel terminel			³⁾ Up to 95 mm ² can be connected depending on the cable manufacturer.
Tunnel terminal		0	1 16
Solid		mm ²	1 x 16
Stranded			
1-hole		mm ²	1 x (25 - 95)
Bolt terminal and rear-side connection			
Direct on the switch			
Solid		mm ²	1 x (10 - 16) 2 x (6 - 16)
Stranded		mm ²	1 x (10 - 70) ³⁾ 2 x 25
			$^{3)}$ Up to 95 $\rm mm^2$ can be connected depending on the cable manufacturer.
Al circular conductor			
Tunnel terminal			
Solid		mm ²	1 x 16
Stranded			
Stranded		mm ²	1 x (25 - 95)
Bolt terminal and rear-side connection			
Direct on the switch			
Solid		mm ²	1 x (10 - 16) 2 x (10 - 16)
Stranded		mm ²	1 × (25 - 35) 2 × (25 - 35)
Cu strip (number of segments x width x segment thickness)			
Box terminal			
	min.	mm	2 x 9 x 0.8
	max.	mm	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	12 x 5
	max.	mm	16 x 5
Control cables			
		mm ²	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	l _n	А	125
Equipment heat dissipation, current-dependent	P _{vid}	W	26.72
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			

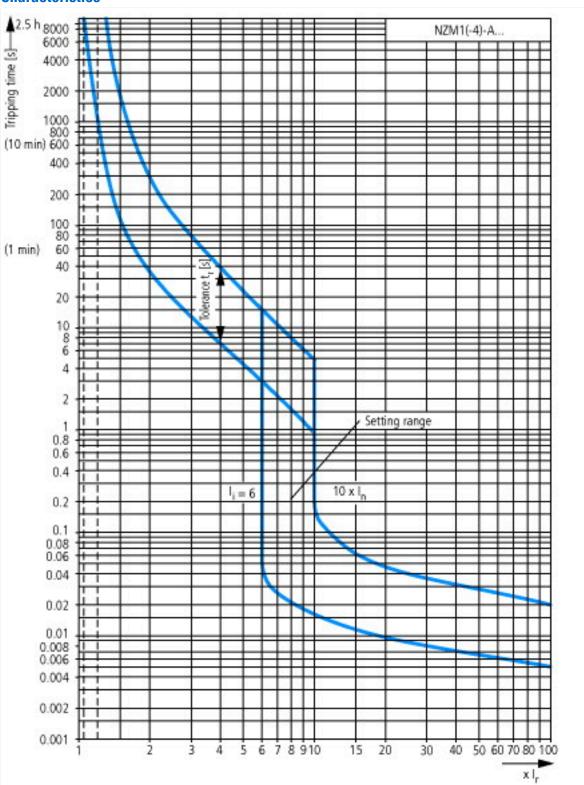
10.2.2 Corresion resistance Meets the product standard's requirements. 10.2.3 Verification of thermal stability of enclosures Meets the product standard's requirements. 10.2.3 Verification of resistance of insulating materials to abnormal heat Meets the product standard's requirements. 10.2.3 Verification of resistance of insulating materials to abnormal heat 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. 10.2.5 Lifting Does not apply, since the entire switchgear needs to be evaluated. 10.2.5 Lifting Meets the product standard's requirements. 10.2.5 Lifting Does not apply, since the entire switchgear needs to be evaluated. 10.2.5 Lifting Meets the product standard's requirements. 10.3.5 Degree of protection of ASSEMBLIES Does not apply, since the entire switchgear needs to be evaluated. 10.4.1 Incriptions Meets the product standard's requirements. 10.4.2 Formation of switching devices and components Does not apply, since the entire switchgear needs to be evaluated. 10.8 Incorporation of switching devices and components Is the panel builder's responsibility. 10.8 Lorporerifeg Does not apply, since the entire switchgear needs to		
102.3.2 Verification of resistance of insulating materials to abnormal heat Meets the product standard's requirements. 102.3.3 Verification of resistance of insulating materials to abnormal heat Meets the product standard's requirements. 102.4 Resistance to ultra-violet (UV) radiation Meets the product standard's requirements. 102.5 Lifting Does not apply, since the entire switchgear needs to be evaluated. 102.5 Log Mechanical impact. Does not apply, since the entire switchgear needs to be evaluated. 103.2 Degree of protection of ASSEMBLIES Does not apply, since the entire switchgear needs to be evaluated. 104.0 Learances and creepage distances Meets the product standard's requirements. 105.0 Forcetion against electric shock Does not apply, since the entire switchgear needs to be evaluated. 105.1 Internal electrical circuits and components Does not apply, since the entire switchgear needs to be evaluated. 105.2 Power-frequency electric strength Is the panel builder's responsibility. 108.2 Innegrature rise Is the panel builder's responsibility. 109.3 Power-frequency electric strength Is the panel builder's responsibility. 109.4 Testing of enclosures made of insulating material Is the panel builder's responsibility. 10.10 Temperature rise Is the panel builder's responsibility. 10.11 Short-circuit rating	10.2.2 Corrosion resistance	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 effectsMeets the product standard's requirements.10.2.4 Resistance to ultra-violet (UV) radiationMeets the product standard's requirements.10.2.5 LiftingDoes not apply, since the entire switchgear needs to be evaluated.10.2.6 Mechanical impactDoes not apply, since the entire switchgear needs to be evaluated.10.3.2 InscriptionsMeets the product standard's requirements.10.3 Degree of protection of ASSEMBLIESDoes not apply, since the entire switchgear needs to be evaluated.10.4 Clearances and creepage distancesDoes not apply, since the entire switchgear needs to be evaluated.10.5 Protection against electric shockDoes not apply, since the entire switchgear needs to be evaluated.10.6 Incorporation of switching devices and componentsDoes not apply, since the entire switchgear needs to be evaluated.10.9.1 Internal electrical circuits and connectionsIs the panel builder's responsibility.10.9.2 Power-frequency electric strengthIs the panel builder's responsibility.10.9.1 Subation propertiesIs the panel builder's responsibility.10.9.1 Subation of enclosures made of insulating materialIs the panel builder's responsibility.10.1 Short-circuit ratingIs the panel builder's responsibility.10.1 Short-circuit ratingIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.1.2 Electromagnetic compatibilityIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.1.3 Mechanical functionIt devi	10.2.3.1 Verification of thermal stability of enclosures	Meets the product standard's requirements.
and fire due to internal electric effectsA fire due to internal electric effects10.2.4 Resistance to ultra-violet (UV) radiationMeets the product standard's requirements.10.2.5 LiftingDees not apply, since the entire switchgear needs to be evaluated.10.2.6 Mechanical impactDees not apply, since the entire switchgear needs to be evaluated.10.2.7 InscriptionsMeets the product standard's requirements.10.3.0 Egree of protection of ASSEMBLIESDees not apply, since the entire switchgear needs to be evaluated.10.4 Clearances and creepage distancesMeets the product standard's requirements.10.5 Protection against electric shockDees not apply, since the entire switchgear needs to be evaluated.10.6 Incorporation of switching devices and componentsDees not apply, since the entire switchgear needs to be evaluated.10.8 Connections for external conductorsEntire switching and entire switching and ent	10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the product standard's requirements.
10.2.5 LiftingDoes not apply, since the entire switchgear needs to be evaluated.10.2.6 Mechanical impactDoes not apply, since the entire switchgear needs to be evaluated.10.2.7 InscriptionsMeets the product standard's requirements.10.3 Degree of protection of ASSEMBLIESDoes not apply, since the entire switchgear needs to be evaluated.10.4 Clearances and creepage distancesMeets the product standard's requirements.10.5 Protection against electric shockDoes not apply, since the entire switchgear needs to be evaluated.10.6 Incorporation of switching devices and componentsDoes not apply, since the entire switchgear needs to be evaluated.10.7 Internal electrical circuits and connectionsIs the panel builder's responsibility.10.8 Connections for external conductorsIs the panel builder's responsibility.10.9.1 Neuroing of enclosures made of insulating materialIs the panel builder's responsibility.10.9.2 Power-frequency electric strengthIs the panel builder's responsibility.10.9.1 Temperature riseIs the panel builder's responsibility.10.10 Temperature riseIs the panel builder's responsibility.10.11 Short-circuit ratingIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.12 Electromagnetic compatibilityIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.13 Mechanical functionIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.13 Mechanical functionIs the panel builder's responsibility. The specifications for the switchgear must be observed. <td></td> <td>Meets the product standard's requirements.</td>		Meets the product standard's requirements.
10.2.6 Mechanical impactDoes not apply, since the entire switchgear needs to be evaluated.10.2.7 InscriptionsMeets the product standard's requirements.10.3 Degree of protection of ASSEMBLIESDoes not apply, since the entire switchgear needs to be evaluated.10.4 Clearances and creepage distancesMeets the product standard's requirements.10.5 Protection against electric shockDoes not apply, since the entire switchgear needs to be evaluated.10.6 Incorporation of switching devices and componentsDoes not apply, since the entire switchgear needs to be evaluated.10.7 Internal electrical circuits and connectionsIs the panel builder's responsibility.10.8 Connections for external conductorsIs the panel builder's responsibility.10.9.1 Neulanio propertiesIs the panel builder's responsibility.10.9.2 Power-frequency electric strengthIs the panel builder's responsibility.10.3 Impulse withstand voltageIs the panel builder's responsibility.10.10 Temperature riseIs the panel builder's responsibility.10.11 Short-circuit ratingIs the panel builder's responsibility.10.12 Electromagnetic compatibilityIs the panel builder's responsibility.10.13 Mechanical functionIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.13 Mechanical functionIs the panel builder's responsibility. The specifications for the switchgear must be observed.	10.2.4 Resistance to ultra-violet (UV) radiation	Meets the product standard's requirements.
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 Is the panel builder's responsibility. 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. 10.10 Temperature rise Is the panel builder's responsibility. 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	10.2.5 Lifting	Does not apply, since the entire switchgear needs to be evaluated.
10.3 Degree of protection of ASSEMBLIES Des not apply, since the entire switchgear needs to be evaluated. 10.4 Clearances and creepage distances Dees not apply, since the entire switchgear needs to be evaluated. 10.5 Protection against electric shock Dees not apply, since the entire switchgear needs to be evaluated. 10.6 Incorporation of switching devices and components Dees 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 Is the panel builder's responsibility. 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. 10.10 Temperature rise Is the panel builder is responsibility. 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 Is the opanel builder's responsibility. The specifications for the switchgear must be observed.	10.2.6 Mechanical impact	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 Is the panel builder's responsibility. 10.9.1 Rules withstand voltage Is the panel builder's responsibility. 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. 10.9.1 Temperature rise Is the panel builder's responsibility. 10.10 Temperature rise Is the panel builder's responsibility. 10.11 Short-circuit rating 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	10.2.7 Inscriptions	Meets the product standard's requirements.
10.5 Protection against electric shockDees not apply, since the entire switchgear needs to be evaluated.10.6 Incorporation of switching devices and componentsDoes not apply, since the entire switchgear needs to be evaluated.10.7 Internal electrical circuits and connectionsIs the panel builder's responsibility.10.8 Connections for external conductorsIs the panel builder's responsibility.10.9 Insulation propertiesIs the panel builder's responsibility.10.9.2 Power-frequency electric strengthIs the panel builder's responsibility.10.9.3 Impulse withstand voltageIs the panel builder's responsibility.10.9.4 Testing of enclosures made of insulating materialIs the panel builder's responsibility.10.10 Temperature riseIs the panel builder's responsibility.10.11 Short-circuit ratingIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.12 Electromagnetic compatibilityIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.13 Mechanical functionThe device meets the requirements, provided the information in the instruction	10.3 Degree of protection of ASSEMBLIES	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 Is the panel builder's responsibility. 10.9.1 Supulse 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 Is the panel builder's responsibility. 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	10.4 Clearances and creepage distances	Meets the product standard's requirements.
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 Is the panel builder's responsibility. 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 Is the panel builder's responsibility. 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	10.5 Protection against electric shock	Does not apply, since the entire switchgear needs to be evaluated.
10.8 Connections for external conductors Is the panel builder's responsibility. 10.9 Insulation properties Is the panel builder's responsibility. 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 Is the panel builder's responsibility. 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	10.6 Incorporation of switching devices and components	Does not apply, since the entire switchgear needs to be evaluated.
10.9 Insulation properties10.9 Insulation properties10.9.2 Power-frequency electric strengthIs the panel builder's responsibility.10.9.3 Impulse withstand voltageIs the panel builder's responsibility.10.9.4 Testing of enclosures made of insulating materialIs the panel builder's responsibility.10.10 Temperature riseIs the panel builder's responsibility.10.11 Short-circuit ratingIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.12 Electromagnetic compatibilityIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.13 Mechanical functionThe device meets the requirements, provide the information in the instruction	10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
10.9.2 Power-frequency electric strengthIs the panel builder's responsibility.10.9.3 Impulse withstand voltageIs the panel builder's responsibility.10.9.4 Testing of enclosures made of insulating materialIs the panel builder's responsibility.10.10 Temperature riseIs the panel builder is responsibility.10.11 Short-circuit ratingIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.12 Electromagnetic compatibilityIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.13 Mechanical functionThe device meets the requirements, provide the information in the instruction	10.8 Connections for external conductors	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 responsibile 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, provide the information in the instruction	10.9 Insulation properties	
10.9.4 Testing of enclosures made of insulating material Is the panel builder's responsibility. 10.10 Temperature rise The panel builder is responsibility. 10.11 Short-circuit rating Is the panel builder's responsibility. 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, provide the information in the instruction	10.9.2 Power-frequency electric strength	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, provide the information in the instruction	10.9.3 Impulse withstand voltage	Is the panel builder's responsibility.
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, provide the information in the instruction	10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
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	10.10 Temperature rise	
10.13 Mechanical function The device meets the requirements, provided the information in the instruction	10.11 Short-circuit rating	
	10.12 Electromagnetic compatibility	
	10.13 Mechanical function	

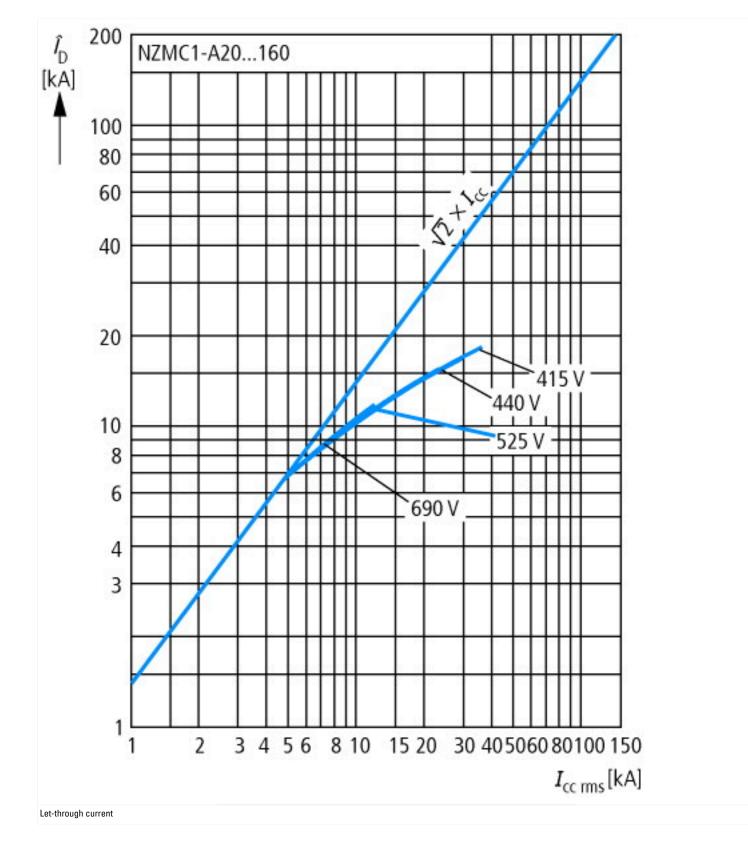
Technical data ETIM 7.0

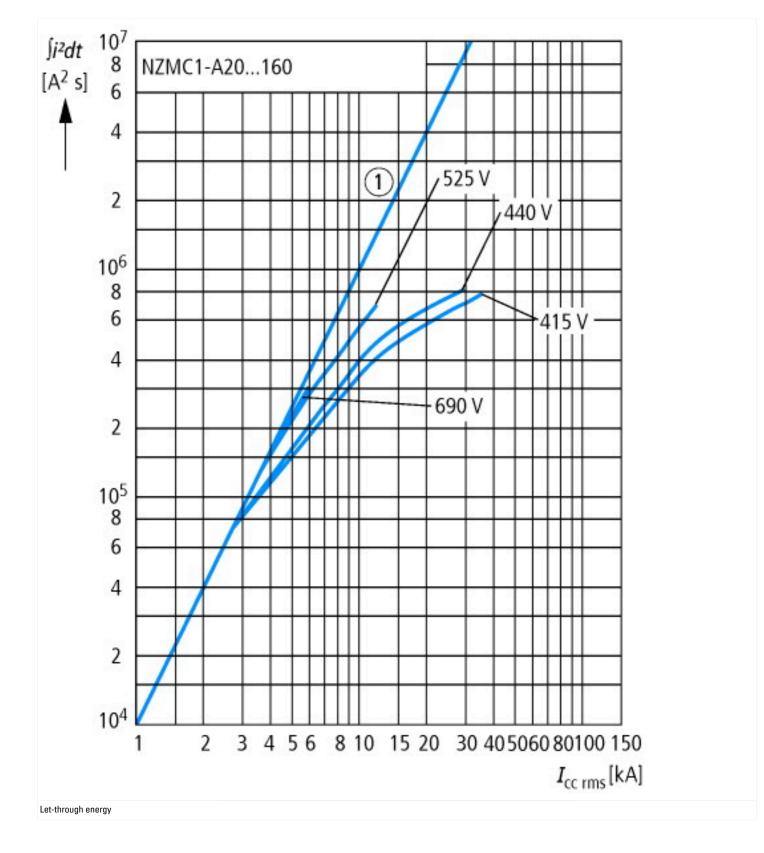
Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss10.0.1-27-37-04-09 [AJZ716013])

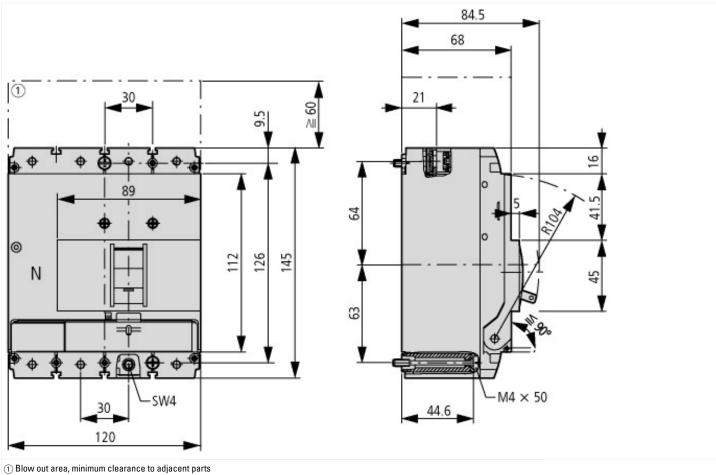
And votage V 600-600 Based short-circuit breaking capacity lue at 400 V, 50 Hz KA 3 Overload release current setting 100-125 0 Adjustment range short-terrouit release A 0-0 Adjustment range undelayed short-circuit release A 0-0 Adjustment range undelayed short-circuit release A 0-0 Date of electrical connection of main circuit F 6-10 Device construction F F F Date of policy and trail) mounting optional F F F Number of auxiliary contacts as normally option contact F F F Number of policy F F F F Number of policy F	protection (eci@ss10.0.1-27-37-04-09 [AJZ710013])		
Restar Restar Rated short-circuit breaking capacity lou at 400 V, 50 Hz 6 Adjustment-circuit release current setting 6 Adjustment range short-terr delayed short-circuit release 6 Adjustment range undelayed short-circuit release 6 Adjustment range undelayed short-circuit release 6 Adjustment range undelayed short-circuit release 6 Integrated earth fault protection 8 Type of electrical connection of main circuit 8 Device construction 8 Suitable for DIN rail (top hat rail) mounting optional 8 Number of auxiliary contacts as normally closed contact 8 Number of auxiliary contacts as normally closed contact 8 With under voltage release 8 Number of poles 8 Position of connection for main current circuit 8 Type of control element 8 Complete device with protection unit 8 Motor drive integrated 9 Motor drive optional 8	Rated permanent current lu	А	125
Overload release current setting A 00 - 125 Adjustment range short-ter delayed short-circuit release A 0 - 0 Adjustment range undelayed short-circuit release A 6 - 10 Adjustment range undelayed short-circuit release A 6 - 10 Integrated earth fault protection Fame clamp No Type of electrical connection of main circuit Image short-ter circuit release No Suitable for DIN rail (top hat rail) mounting Image short-ter circuit release No Number of auxiliary contacts as normally closed contact Image short-ter contact Ves Number of auxiliary contacts as change-over contact Image short-ter contact Image short-ter contact With under voltage release Image short-ter contact Image short-ter contact Image short-ter contact Number of poles Image short-ter contact Image short-ter contact Image short-ter contact Number of poles Image short-ter contact Image short-ter contact Image short-ter contact Number of poles Image short-ter contact Image short-ter contact Image short-ter contact Number of poles Image short-ter contact	Rated voltage	V	690 - 690
Adjustment range short-terr delayed short-circuit release Adjustment range undelayed short-circuit Adjustment range undelayed short-circuit release Adjustment range undelayed short-circuit Adjustment range undelayed short-circuit Adjustment range undelayed short-circuit Adjustment range undelayed short-circuit release Adjustment range undelayed short-circuit Adjustment range unde	Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	36
Adjustment range undelayed short-circuit release Integrated earth fault protection Type of electrical connection of main circuit Device construction Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Number of puese Number of control element Complete device with protection unit Mtor drive integrated Mtor drive integrated Number of tup data Number of used Number of tup data Number of puese	Overload release current setting	А	100 - 125
Integrated earth fault protection No Type of electrical connection of main circuit Frame clamp Device construction Built-in device fixed built-in technique Suitable for DIN rail (top hat rail) mounting No DIN rail (top hat rail) mounting optional Ves Number of auxiliary contacts as normally closed contact Yes Number of auxiliary contacts as normally closed contact O Number of auxiliary contacts as normally closed contact Yes Number of auxiliary contacts as normally closed contact O Number of auxiliary contacts as normally closed contact Yes Number of auxiliary contacts as normally closed contact Yes Number of auxiliary contacts as change-over contact Yes Number of auxiliary contacts as change-over contact Yes Number of poles No Number of poles No Number of poles Fort side Number of connection for main current circuit Yes Number of control element Yes Complete device with protection unit Yes Motor drive integrated Yes Motor drive integrated No	Adjustment range short-term delayed short-circuit release	А	0 - 0
Type of electrical connection of main circuit Frame clamp Device construction Built-in device fixed built-in technique Suitable for DIN rail (top hat rail) mounting No DIN rail (top hat rail) mounting optional Ves Number of auxiliary contacts as normally closed contact Ves Number of auxiliary contacts as normally open contact Ves Number of auxiliary contacts as change-over contact O With under voltage release Ves Number of poles Ves Position of connection for main current circuit Ves Type of control element Ves Complete device with protection unit Ves Motor drive integrated Ves Motor drive optional Ves	Adjustment range undelayed short-circuit release	А	6 - 10
Device construction Built-in device fixed built-in technique Suitable for DIN rail (top hat rail) mounting No DIN rail (top hat rail) mounting optional Yes 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 Number of auxiliary contacts as change-over contact 0 Number of auxiliary contacts as change-over contact No Number of poles No Number of poles No Type of control element Front side Complete device with protection unit Yes Motor drive integrated No Motor drive optional No	Integrated earth fault protection		No
Suitable for DIN rail (top hat rail) mounting No DIN rail (top hat rail) mounting optional Yes Number of auxiliary contacts as normally closed contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as change-over contact 0 Number of poles No Number of poles No Number of poles Front side Type of control element Rocker lever Complete device with protection unit Yes Motor drive integrated No Motor drive integrated No	Type of electrical connection of main circuit		Frame clamp
DIN rail (top hat rail) mounting optional Yes Number of auxiliary contacts as normally closed contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as change-over contact 0 With switched-off indicator No With under voltage release No Number of poles Font side Position of connection for main current circuit Font side Type of control element Kes elever Complete device with protection unit Yes Motor drive pitonal No Motor drive pitonal No	Device construction		Built-in device fixed built-in technique
Number of auxiliary contacts as normally closed contact O Number of auxiliary contacts as normally open contact O Number of auxiliary contacts as change-over contact O With switched-off indicator No With under voltage release No Number of poles A Position of connection for main current circuit Font side Type of control element Scker lever Complete device with protection unit Yes Motor drive integrated No Motor drive optional Yes Motor drive optional Yes Motor drive optional No	Suitable for DIN rail (top hat rail) mounting		No
Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as change-over contact 0 With switched-off indicator 0 With under voltage release No Number of poles 4 Position of connection for main current circuit Font side Type of control element Kocker lever Complete device with protection unit Yes Notor drive integrated No Motor drive optional No	DIN rail (top hat rail) mounting optional		Yes
Number of auxiliary contacts as change-over contact Image: Content of the conten	Number of auxiliary contacts as normally closed contact		0
With switched-off indicatorNoWith under voltage releaseNoNumber of poles4Position of connection for main current circuitFord SType of control elementScker leverComplete device with protection unitYesMotor drive integratedNoMotor drive optionalScher leverMotor drive optionalScher leverMotor drive optionalNo	Number of auxiliary contacts as normally open contact		0
With under voltage releaseNoNumber of poles4Position of connection for main current circuitFront sideType of control elementRocker leverComplete device with protection unitYesMotor drive integratedNoMotor drive optionalSole SoleMotor drive optionalSole Sole SoleMotor drive optionalSole Sole SoleMotor drive optionalSole Sole Sole Sole Sole Sole Sole Sole	Number of auxiliary contacts as change-over contact		0
Number of poles 4 Position of connection for main current circuit Ford side Type of control element Rocker lever Complete device with protection unit Yes Motor drive integrated No Motor drive optional Sole	With switched-off indicator		No
Position of connection for main current circuit Front side Type of control element Rocker lever Complete device with protection unit Yes Motor drive integrated No Motor drive optional Socker lever	With under voltage release		No
Type of control element Rocker lever Complete device with protection unit Yes Motor drive integrated No Motor drive optional Solution	Number of poles		4
Complete device with protection unit Yes Motor drive integrated No Motor drive optional No	Position of connection for main current circuit		Front side
Motor drive optional Model	Type of control element		Rocker lever
Motor drive optional No	Complete device with protection unit		Yes
· · · · · · · · · · · · · · · · · · ·	Motor drive integrated		No
Degree of protection (IP) IP20	Motor drive optional		No
	Degree of protection (IP)		IP20

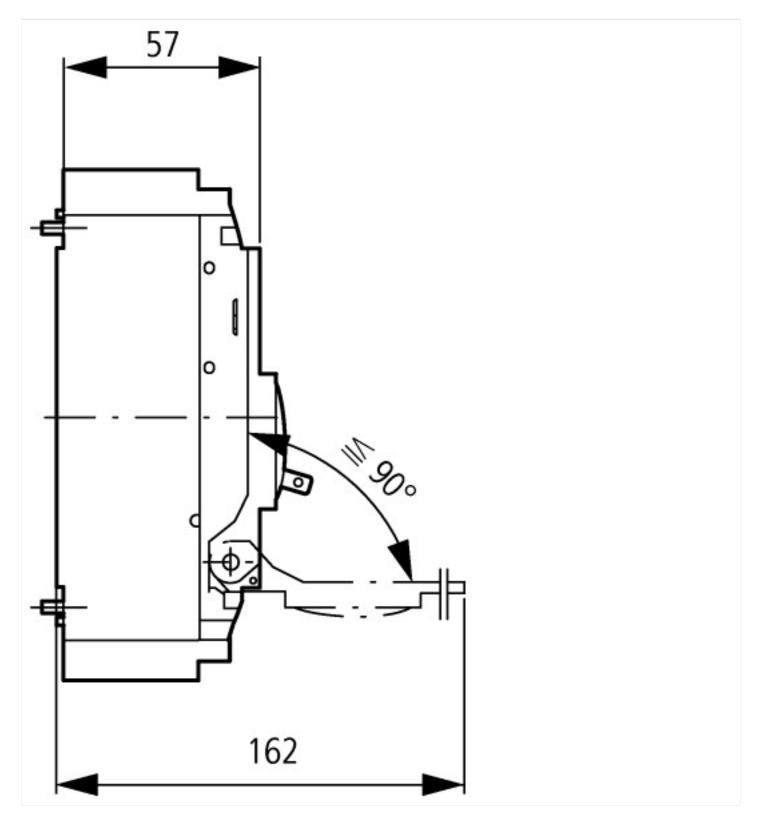












Additional product information (links)

Temperature dependency, Derating	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.172
CurveSelect characteristics program	http://www.eaton.eu/DE/Europe/Electrical/CustomerSupport/ConfigurationTools/CharacteristicsProgram/ index.htm
additional technical information for NZM power switch	https://es-assets.eaton.com/DOCUMENTATION/PDF/nzm_technic_de_en.pdf