Similar to illustration

Circuit-breaker, 3p, 26A

Part no. NZMB1-S26-CNA
Catalog No. 103023

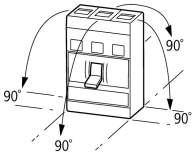
Powering Business Worldwide

Delivery program

Product range			Circuit-breaker
Protective function			Short-circuit protection
Standard/Approval			UL/CSA
Installation type			Fixed
Release system			Thermomagnetic release
Description			This circuit-breaker is only allowed to be used for UL/CSA applications. Motor protection in conjunction with contactor and overload relay With short-circuit release Without overload release Ir
Number of poles			3 pole
Standard equipment			Box terminal
Rated current = rated uninterrupted current	$I_n = I_u$	A	26
Setting range			
Short-circuit releases			
Non-delayed	$I_i = I_n$ x …		8 - 13

Technical data

General

Standards			UL/CSA
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
Mounting position			
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)2, NZM3, N(S)3, NZM4, N(S)4: vertical and 90° in all directions
Direction of incoming supply			as required
Degree of protection			
Device			In the operating controls area: IP20 (basic degree of protection)

Enclosures			With insulating surround: IP40 With door coupling rotary handle: IP66
Terminations			Tunnel terminal: IP10 Phase isolator and strip terminal: IP00
Other technical data (sheet catalogue)			Weight Temperature dependency, Derating Effective power loss

Circuit-breakers

Rated surge voltage invariability	U_{imp}		
Main contacts		V	6000
Auxiliary contacts		V	6000
Rated operational voltage	U_e	V AC	440
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U_i	V	690

Switching capacity

Lifespan, mechanical(of which max. 50 % trip by shunt/undervoltage release)	Operations		20000
Lifespan, electrical			
AC--3			
415 V 50/60 Hz	Operations		7500
Max. operating frequency		Ops/h	120
Total downtime in a short-circuit		ms	< 10

Terminal capacity

Standard equipment			Box terminal
Round copper conductor			
Box terminal			
Solid		mm^2	1 x (12 … 6)
Stranded		mm^2	1 x (4 … 2/0)
Tunnel terminal			
Solid		mm^2	1 x 6
Stranded		mm^2	
Stranded		mm^2	1 x (4 … 3/0)
Bolt terminal and rear-side connection			
Direct on the switch			
Solid		mm^2	1 x (12 … 6) 2 x (9 … 6)
Stranded		mm^2	1 x (4 … 2/0)
Al conductors, Cu cable			
Solid		mm^2	1 x 16
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 (18 … 14) 2 x (18 … 16)

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	26
Equipment heat dissipation, current-dependent	P_{vid}	W	2.13

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 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.

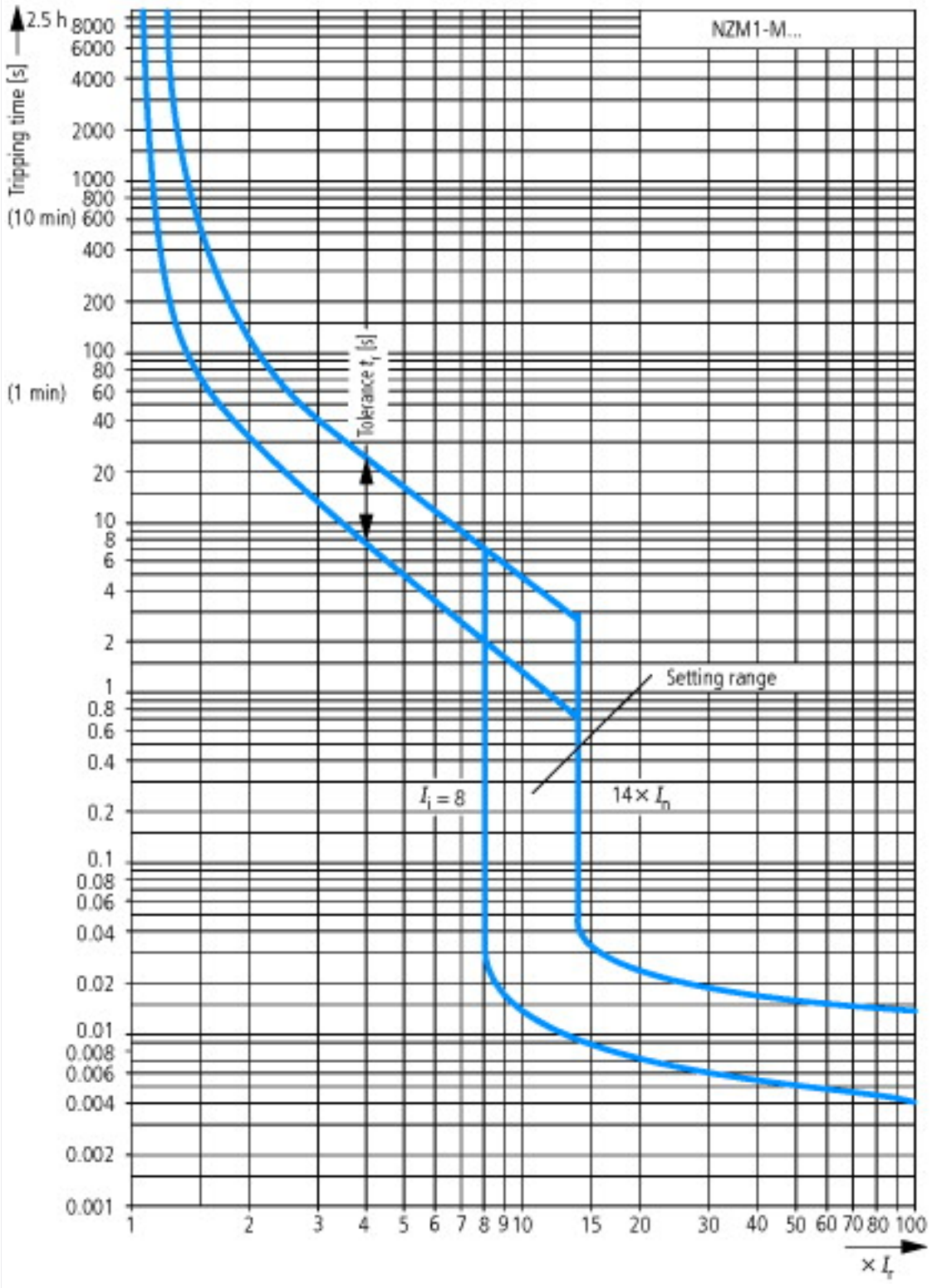
Technical data ETIM 6.0

Low-voltage industrial components (EG000017) / Motor protection circuit-breaker (EC000074)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (ecl@ss8.1-27-37-04-01 [AGZ529013])		
Overload release current setting	A	0 - 0
Adjustment range undelayed short-circuit release	A	208 - 338
Thermal protection		No
Phase failure sensitive		No
Switch off technique		Magnetic
Rated operating voltage	V	440 - 440
Rated permanent current Iu	A	26
Rated operation power at AC-3, 230 V	kW	5.5
Rated operation power at AC-3, 400 V	kW	11
Type of electrical connection of main circuit		-
Type of control element		Rocker lever
Device construction		Built-in device fixed built-in technique
With integrated auxiliary switch		No
With integrated under voltage release		No
Number of poles		3
Rated short-circuit breaking capacity Icu at 400 V, AC	kA	25
Degree of protection (IP)		IP20
Height	mm	165.5
Width	mm	90
Depth	mm	88

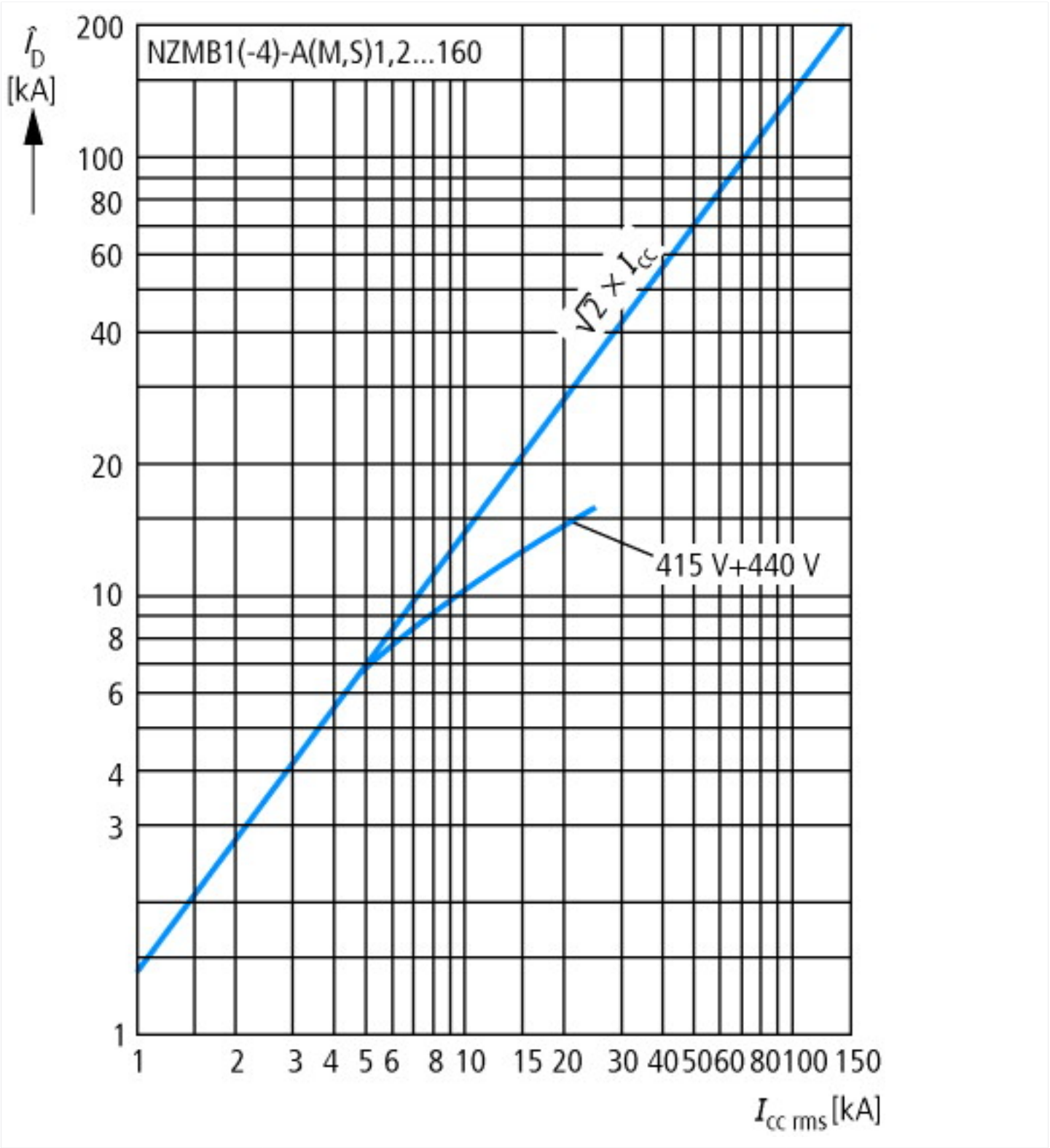
Approvals

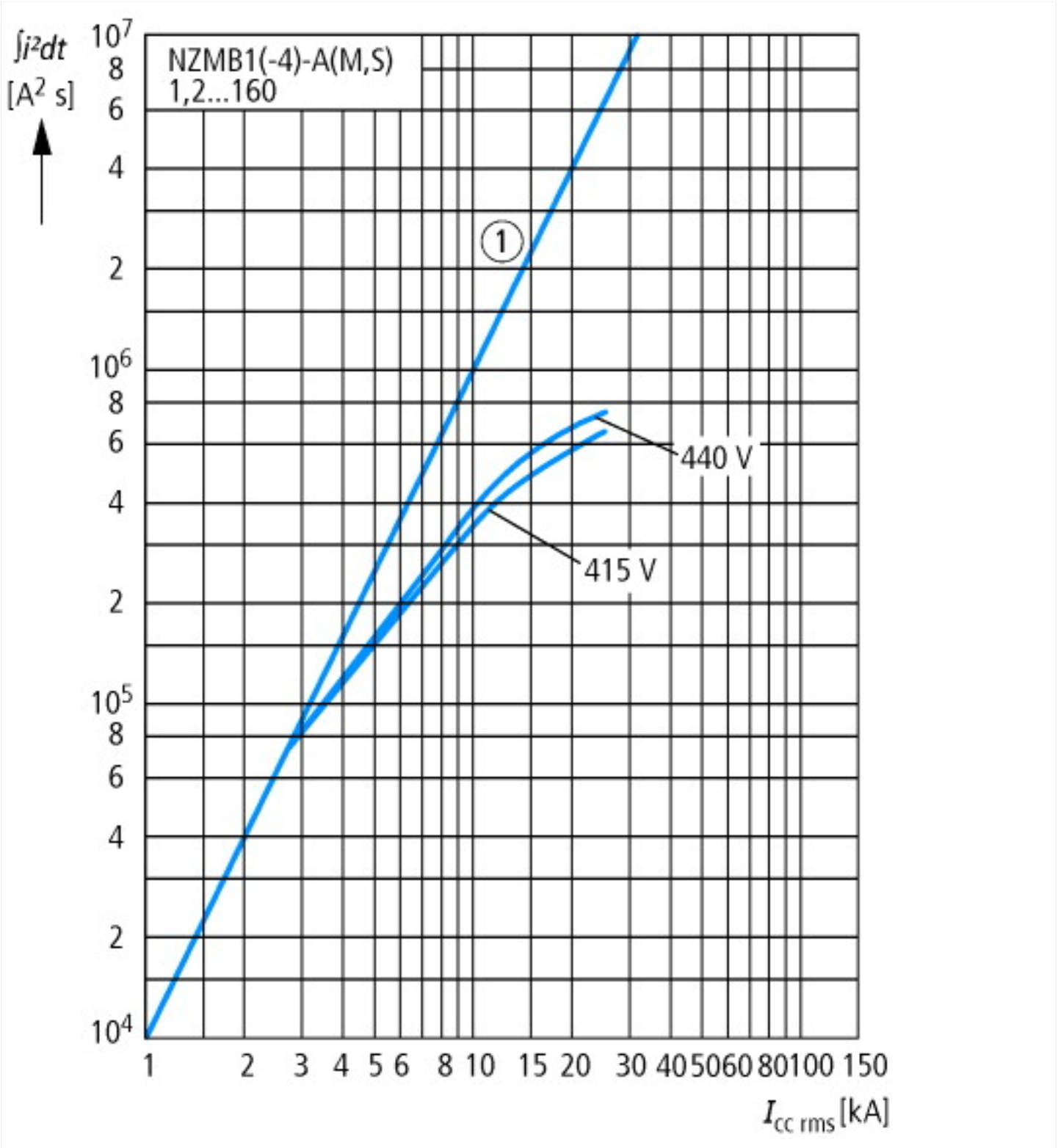
Product Standards	UL 489; CSA-C22.2 No. 5-09
UL File No.	E31593
UL Category Control No.	DKPU2
CSA File No.	022086
CSA Class No.	1432-01
North America Certification	UL recognized, CSA certified
Conditions of Acceptability	Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker, contactor and overload relay.
Specially designed for North America	Yes
Suitable for	Branch circuits, feeder circuits
Current Limiting Circuit-Breaker	No
Max. Voltage Rating	480Y/277 V
Degree of Protection	UL/CSA Type: -

Characteristics

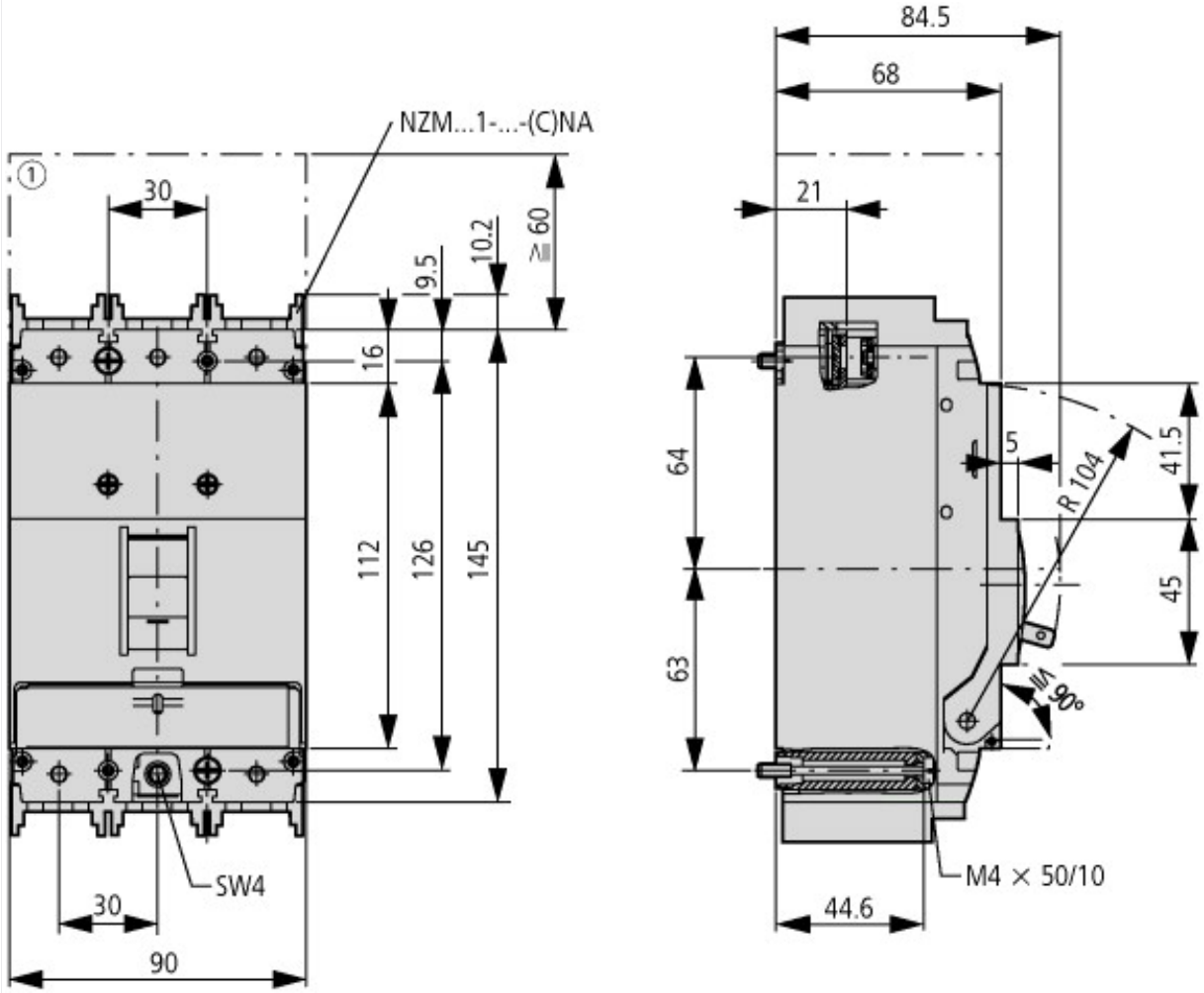


Short-circuit protection only!

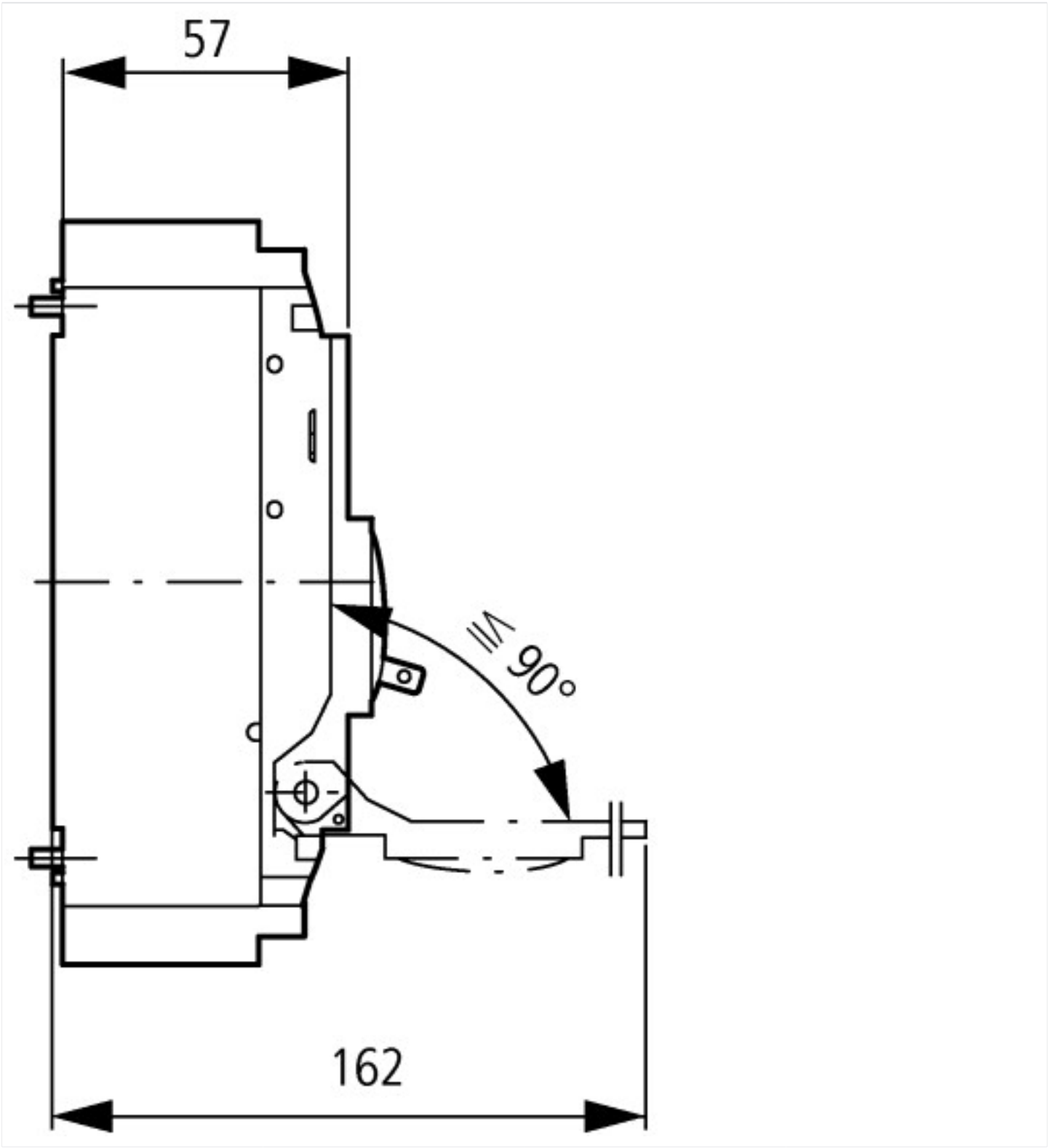

NZMB1(-4)-A(M,S)1,2...160
$\hat{I}_D$ [kA]
200
100
80
60
40
20
10
8
6
4
3
1
$\sqrt{2} \times I_{cc}$
415 V+440 V
1
2
3
4
5
6
8
10
15
20
30
40
50
60
80
100
150
$I_{cc\ rms}$ [kA]


∫i²dt
[A² s]
NZMB1(-4)-A(M,S)
1,2...160
①
440 V
415 V
$I_{cc\ rms}$ [kA]

Dimensions



① Blow out area, minimum clearance to adjacent parts



Additional product information (links)

IL01203004Z (AWA1230-1913) Circuit-breaker, Switch-Disconnector	
IL01203004Z (AWA1230-1913) Circuit-breaker, Switch-Disconnector	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01203004Z2015_11.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