

# Circuit-breaker, 4p, 500A, 230A in 4th pole, withdrawable unit

Powering Business Worldwide\*

Part no. NZMC3-4-A500/320-AVE Article no. 113521

Similar to illustration

### **Delivery program**

Delivery program			
Product range			Circuit-breaker
Protective function			System and cable protection
Standard/Approval			IEC
Installation type			Withdrawable
Release system			Thermomagnetic release
Construction size			NZM3
Description			Set value in neutral conductor is synchronous with set value Ir of main pole.
Number of poles			4 pole
Standard equipment			Screw connection
Switching capacity			
400/415 V 50 Hz	I <sub>cu</sub>	kA	36
Rated current = rated uninterrupted current			
Rated current = rated uninterrupted current	$I_n = I_u$	Α	500
Neutral conductor	% of phase conductor	CSA	60
Reduced neutral conductor protection		Α	320
Neutral conductor protection			Reduced neutral conductor protection
Setting range			
Overload trip			
4	I <sub>r</sub>	Α	400 - 500
Main pole	l <sub>r</sub>	Α	250 - 320
Short-circuit releases			
Non-delayed	$I_i = I_n x \dots$		6 - 10

## **Technical data**

#### General

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

Windows   Wind				
Designe of protection         Image: Control of the content of	Mounting position			- NZM1, N1, NZM2, N2: vertical and 90° in all directions with plug-in adapter elements - NZM1, N1, NZM2, N2: vertical, 90° right/left with withdrawable unit: - NZM3, N3: vertical, 90 ° left - NZM4, N4: vertical with remote operator: - NZM2, N(S)2, NZM3, N(S)3, NZM4, N(S)4: vertical and 90° in all
Desicis	Direction of incoming supply			as required
Feminations	Degree of protection			
Terminations	Device			In the operating controls area: IP20 (basic degree of protection)
We reclaim data (sheet catalogue)	Enclosures			With insulating surround: IP40 With door coupling rotary handle: IP66
Temperature dependency, Deracting   Teleticup power loss   Teleti	Terminations			
Rated current = rated uninterropted current         In=IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Other technical data (sheet catalogue)			Temperature dependency, Derating
Rated surge voltage invariability         Ump         V         8000           Auxiliary centacts         V         9000         Commended         V         6000           Rated operational voltage         Ug         V         69         600         Commended         V         600           Rated operational voltage         Ug         V         69         600	Circuit-breakers			
Main contacts	Rated current = rated uninterrupted current		Α	500
Note	Rated surge voltage invariability	$U_{imp}$		
Rated operational voltage         Up         V AC         980           Overolitage category/pollution degree         UI         V         1000           Stand instalution voltage         V         ≤ 990           Use in unearthed supply systems         V         ≤ 990           Switching capacity         Icm         LX         121           4404 YS         Icm         LX         121           4404 YS QB0B Hz         Icm         LX         6           550 YS QB0B Hz         Icm         LX         44           880 YS QB0B Hz         Icm         Icm         LX         44           440 YS QB0B Hz         Icm         LX         55           440 YS QB0B Hz         Icm         LX         30           440 YS QB0B Hz         Icm         LX         12           450 YS QB0B Hz         Icm         LX         12           450 YS QB0B Hz         Icm         LX         25           450 YS QB	Main contacts		V	8000
Overvitage catagory/pollution degree         Ui         V         1000           Rated insulation voltage         Ui         v         2000           Use in unarthed supply systems         v         2800           Switching capacity           Stated short-circuit making capacity         Iom         KA         121           4400 V 5000 Hz         Iom         KA         36           440 V 5000 Hz         Iom         KA         36           550 V 5000 Hz         Iom         KA         36           860 V 5000 Hz         Iom         KA         36           240 V 5000 Hz         Iom         KA         36           240 V 5000 Hz         Iom         KA         36           240 V 5000 Hz         Iom         KA         36           400 V 5000 Hz         Iom         KA         36           400 V 5000 Hz         Iom         KA         36           400 V 5000 Hz         Iom         KA         36           525 V 5000 Hz         Iom         KA         36           690 V 5000 Hz         Iom         KA         36           400 V 5000 Hz         Iom         KA         36           440 V 5000 H	Auxiliary contacts		V	6000
Rated insulation voltage         Uj         V         5690           Switching capacity           Rated short-circuit making capacity         Ican         IA         121           400 V         Ican         IA         121           400 V35 V         Ican         IA         121           400 V35 V         Ican         IA         121           400 V35 V         Ican         IA         240           400 V35 V         Ican         IA         240           525 V 50/00 V2         Ican         IA         24           525 V 50/00 V2         Ican         IA         24           690 V 50/00 V2         Ican         IA         24           690 V 50/00 V2         Ican         IA         24           10 U 51/00 V3	Rated operational voltage	U <sub>e</sub>	V AC	690
Switching capacity         V         ≦880           Rated short-circuit making capacity         Icm         KA         121           400 V         Icm         KA         76           440 V 5060 Hz         Icm         KA         33           252 V 5060 Hz         Icm         KA         24           880 V 5060 Hz         Icm         KA         24           Rated short-circuit breaking capacity Icm         Icm         KA         55           240 V 5060 Hz         Icm         KA         55           400 V 5060 Hz         Icm         KA         55           400 V 5060 Hz         Icm         KA         36           400 V 5060 Hz         Icm         KA         36           400 V 5060 Hz         Icm         KA         12           400 V 5060 Hz         Icm         KA         12           850 V 5060 Hz         Icm         KA         12           850 V 5060 Hz         Icm         KA         12           400 V 5060 Hz         Icm         KA         12           400 V 5060 Hz         Icm         KA         12           400 V 5060 Hz         Icm         KA         25	Overvoltage category/pollution degree			III/3
Switching capacity   Image	Rated insulation voltage	Ui	V	1000
Rated short-circuit making capacity         Icm         IA         121           240 V         Icm         IA         121           400/415 V         Icm         IA         76           440 V 50/60 Hz         Icm         IA         63           525 V 50/60 Hz         Icm         IA         24           Rated short-circuit breaking capacity Icm         Icm         IA         14           I cut to IEC/EN 69947 test cycle 0-t-CO         Icu         IA         55           400/415 V 50/60 Hz         Icu         IA         36           400/415 V 50/60 Hz         Icu         IA         30           400/415 V 50/60 Hz         Icu         IA         30           680 V 50/60 Hz         Icu         IA         30           680 V 50/60 Hz         Icu         IA         30           1cs to IEC/EN 69947 test cycle 0-t-CO-t-CO         Icu         IA         3           400 V 50/60 Hz         Icu         Icu         ICu         ICu           400 V 50/60 Hz         Icu         Icu         ICu         ICu         ICu           400 V 50/60 Hz         Icu         Icu         ICu         ICu         ICu         ICu         ICu	Use in unearthed supply systems		V	≤ <sub>690</sub>
1				
400/415 V   50/60 Hz   400/415 V   50/	, , ,		I. A	101
440 V 50/60 Hz 525 V 50/60 Hz 680 V 50/60 Hz 1c				
S25 V 50/60 Hz	·			
Rated short-circuit breaking capacity   c_n   c_n   c_n				
Rated short-circuit breaking capacity   c_n   c_n     Icu to   IEC/EN 60947 test cycle 0-t-CO   ciu   kA     240 V 50/60 Hz   ciu   kA   55     440 V 50/60 Hz   ciu   kA   36     440 V 50/60 Hz   ciu   kA   30     525 V 50/60 Hz   ciu   kA   12     690 V 50/60 Hz   ciu   kA   8     Ici to   IEC/EN 60947 test cycle 0-t-CO-t-CO   cis   kA   55     400/415 V 50/60 Hz   ciu   kA   8     Ici to   IEC/EN 60947 test cycle 0-t-CO-t-CO   cis   kA   55     400/415 V 50/60 Hz   cis   kA   55     400/415 V 50/60 Hz   cis   kA   55     400/415 V 50/60 Hz   cis   kA   66     440 V 50/60 Hz   cis   kA   68     440 V 50/60 Hz   cis   kA   9     690 V 50/60 Hz   cis   cis   kA   9     690 V 50/60 Hz   cis   cis				
	·		kA	14
240 V 50/60 Hz				
400/415 V 50/60 Hz	,			
440 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
525 V 50/60 Hz				
690 V 50/60 Hz				
240 V 50/60 Hz       Ics       kA       55         400/415 V 50/60 Hz       Ics       kA       36         440 V 50/60 Hz       Ics       kA       22.5         525 V 50/60 Hz       Ics       kA       9         690 V 50/60 Hz       Ics       kA       4         Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit-breaker.         Rated short-time withstand current       Icw       kA       3.3         t = 1 s       Icw       kA       3.3         Utilization category to IEC/EN 60947-2       A       A				8
400/415 V 50/60 Hz				
440 V 50/60 Hz 525 V 50/60 Hz 690 V 50/60 Hz Rated short-time withstand current t = 0.3 s t = 1 s Utilization category to IEC/EN 60947-2  kA  Lcs kA 22.5  kA 9  Aximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit-breaker.  kA 3.3  A  Utilization category to IEC/EN 60947-2				
525 V 50/60 Hz 690 V 50/60 Hz Lcs KA Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit-breaker.  t = 0.3 s t = 1 s Lcw KA 3.3 Utilization category to IEC/EN 60947-2  A  KA  A  4  A  A  A  A				
690 V 50/60 Hz  Rated short-time withstand current  t = 0.3 s t = 1 s  Utilization category to IEC/EN 60947-2  KA  Los  Los  KA  A  A  Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit-breaker.  KA  A  A  A  A  A  A				
Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit-breaker.  t = 0.3 s				
t = 0.3 s       I <sub>cw</sub> kA       3.3         t = 1 s       I <sub>cw</sub> kA       3.3         Utilization category to IEC/EN 60947-2       A       A	690 V 50/60 Hz	I <sub>cs</sub>	kA	Maximum back-up fuse, if the expected short-circuit currents at the installation
t = 1 s	Rated short-time withstand current			
Utilization category to IEC/EN 60947-2  A	t = 0.3 s	I <sub>cw</sub>	kA	3.3
Utilization category to IEC/EN 60947-2	t = 1 s	I <sub>cw</sub>	kA	3.3
Rated making and breaking capacity	Utilization category to IEC/EN 60947-2			A
	Rated making and breaking capacity			

AC-1	Rated operational current	I <sub>e</sub>	Α	
	AC-1	-		
A	380 V 400 V	l <sub>e</sub>	Α	500
	415 V		Α	500
AC-3 300 V MOV 1	690 V		Α	500
Sab V & Sab V & V	AC3	· ·		
		l <sub>e</sub>	Α	450
	415 V		Α	450
Dispairs, medicinal calculor of the care	660 V 690 V		Α	450
Properties   Pro	Lifespan, mechanical(of which max. 50 % trip by shunt/undervoltage release)			15000
400 V 5000 Hz				
15	AC-1			
	400 V 50/60 Hz	Operations		5000
ACC-3	415 V 50/60 Hz	Operations		5000
MOU \$0,000 Hz	690 V 50/60 Hz	Operations		3000
15   15   15   16   16   16   16   16	AC3			
GSOU 5000 Nz		Operations		2000
Max. operating frequency         Opyth may a connection         Condomination and after-circulat         No. 2 (0)           Terminal capacity           Streamed (squipment)         Series connection           Accessories required           Round copper conductor				
Total downtine in a short-circuit         6         10	690 V 50/60 Hz	Operations		
Terminal capacity         Standard equipment         Server connection           Accessories required         NZM3-4-XAVS           Round copper conductor         NZM3-4-XAVS           Box torninal         2 x 16           Stranded         mm²         2 x 16           Stranded         mm²         2 x 16           Stranded         mm²         1 x (53-240)           Stranded         mm²         1 x (53-240)           Stranded         mm²         1 x (53-240)           Stranded         mm²         1 x (50-240)           Both terminal and rear-side connection         mm²         1 x (50-240)           Both terminal and rear-side connection         mm²         1 x (50-240)           Stranded         mm²         1 x (50-240)           Stranded         mm²         1 x (50-240)           Connection width extension         mm²         1 x (50-240)           Connection width extension         mm²         1 x (50-240)           Solid         mm²         1 x (50-240)           Solid         mm²         1 x (50-240)           Connection width extension         mm²         1 x (50-240)           Stranded         mm²         1 x (50-240)           Stranded				
Standard equipment         Service connection         Service connection         ACCESSION SET REQUIRED         NAME AS ANXS           Round copper conductors         50 km mm         2 x 16           Solid         mm         2 x 18           Stranded         mm         1 x 150 - 240           Stranded         mm         1 x 150 - 240           Double hole fitting         mm         1 x 150 - 240           Stranded         mm         2 x 300           Stranded         mm         1 x 150 - 240           Connection width extension         mm         1 x 150 - 240           Connection width extension         mm         1 x 150 - 240           Stranded         mm         1 x 150 - 240			ms	<10
Accessories required         NZM3-4-XAVS           Round capper conductor         NZM3-4-XAVS           Box terminal         NZM3-4-XAVS           Solid         mm²         2 x 16           Stranded         mm²         1 x (35 - 240)           Tunnel terminal         mm²         1 x (25 - 120)           Stranded         mm²         1 x (25 - 180)           Double hole friting         mm²         1 x (25 - 180)           Bolt terminal and rear-side connection         mm²         1 x (25 - 240)           Solid         mm²         1 x (25 - 240)           Stranded         mm²         1 x (25 - 240)           Stranded         mm²         2 x 30           Al conductors width extension         mm²         1 x (25 - 240)           Al conductors, Cu cable         mm²         1 x 16           Stranded         mm²         1 x 16           Stranded         mm²         1 x (25 - 180)           Double hole fitting         mm²         1 x (25 - 180)           Double hole fitting         mm²         1 x (25 - 180)           Bolt terminal and rear-side connection         mm²         1 x (25 - 240)           Bolt terminal and rear-side connection         mm²         1 x (25 - 240) <td></td> <td></td> <td></td> <td>Screw connection</td>				Screw connection
Round copper conductor         Box terminal         Imm²         2 x 16           Stranded         mm²         2 x 15 - 240]           Tunnel terminal         2 x 15 - 240]           Stranded         mm²         2 x 125 - 120 - 120           Stranded         mm²         1 x 125 - 185]           Double hole fitting         x 1 x 150 - 240]           Bolt terminal and rear-side connection         x 1 x 150 - 240]           Bolt terminal and rear-side connection         x 1 x 150 - 240]           Stranded         mm²         1 x 150 - 240]           Stranded         mm²         1 x 150 - 240]           Connection width extension         mm²         1 x 150 - 240]           Connection width extension         mm²         1 x 150 - 240]           Storanded         mm²         1 x 150 - 240]           mm²         1 x 150 - 240]           Double				
Box terminal   Solid   mm²   2 x 16				
Stranded	Solid		mm <sup>2</sup>	2 x 16
Stranded         mm²         1 x (25 - 185)           Double hole fitting         mm²         1 x (50 - 240)           Bolt terminal and rear-side connection         1 x (50 - 240)           Direct on the switch         mm²         1 x 16           Solid         mm²         1 x 16 2x 140           Stranded         mm²         1 x (25 - 240)           Connection width extension         mm²         2 x (25 - 240)           Al conductors, Cu cable         mm²         1 x 16           Stranded         mm²         1 x 16           Bolt terminal and rear-side connection         mm²         1 x 25 - 185) ²0           20 Up to 240 mm² can be connected depending on the cable manufacturer.         20 Up to 240 mm² can be connected depending on the cable manufacturer.           Bolt terminal and rear-side connection         mm²         1 x 50 - 240)           Flat copper strip, with holes         mm²         0 x 15 x 0.8	Stranded			1 x (35 - 240) 2 x (25-120)
Stranded	Tunnel terminal			
Double hole fitting	Stranded		mm <sup>2</sup>	
Bolt terminal and rear-side connection  Direct on the switch  Solid  mm² 1x (25 - 240)  2x (30 - 240)  mm² 1x (25 - 240)  2x (25 - 240)  Connection width extension  mm² 2x 300  Connection width extension  mm² 2x 300  Al conductors, Cu cable  Solid  mm² 1x 16  Stranded  mm² 1x 16  Stranded  mm² 1x 16  Stranded  mm² 1x 16  Stranded  mm² 1x (25 - 185) ²¹  2¹ Up to 240 mm² can be connected depending on the cable manufacturer.  Double hole fitting  mm² 1x (50 - 240)  2x (30 - 240)  2x (30 - 240)  Bolt terminal and rear-side connection  Flat copper strip, with holes  Flat copper strip, with holes  max. mm 10 x 32 x 1.0 + 5 x 32 x 1.0  mm (2x) 10 x 50 x 1.0	Stranded		mm <sup>2</sup>	1 x (25 - 185)
Bolt terminal and rear-side connection  Direct on the switch  Solid  Stranded  Connection width extension  Connection width extension  Al conductors, Cu cable  Solid  Stranded  Mm² 1 x (25 - 240) 2 x (25 - 240) 2 x (25 - 240) 3 x (25 - 240) 3 x (25 - 240) 4 x (25 - 240) 5 x (25 - 240) 6 x (25 - 240) 7 x (	Double hole fitting		mm <sup>2</sup>	
Num	Bolt terminal and rear-side connection			2 x (50 - 240)
	Direct on the switch			
Stranded	Solid		mm <sup>2</sup>	
Connection width extension  Connection width extension  Al conductors, Cu cable  Solid  Stranded  Stranded  Type 1 x 16  Stranded  mm²  1 x 16  Stranded  mm²  1 x (25 - 185) ²¹  2¹ Up to 240 mm² can be connected depending on the cable manufacturer.  Double hole fitting  mm²  1 x (50 - 240)  2 x (50 - 240)  8 blt terminal and rear-side connection  Flat copper strip, with holes  Flat copper strip, with holes  max. mm  10 x 32 x 1.0 + 5 x 32 x 1.0  mm²  (2 x) 10 x 50 x 1.0				
Connection width extension  Al conductors, Cu cable  Solid  Stranded  Stranded  The stranded stranded  Double hole fitting  Bolt terminal and rear-side connection  Flat copper strip, with holes  Flat copper strip, with holes  Flat copper strip, with holes  Connection width extension  mm²  1 x 16  mm²  1 x 16  mm²  1 x (25 - 185) ²)  2¹ Up to 240 mm² can be connected depending on the cable manufacturer.  mm²  1 x (50 - 240)  2 x (50 - 240)  mm  6 x 16 x 0.8  max.  mm  10 x 32 x 1.0 + 5 x 32 x 1.0  mm  (2 x) 10 x 50 x 1.0	Stranded		mm <sup>2</sup>	1 x (25 - 240) 2 x (25 - 240)
Al conductors, Cu cable  Solid  mm² 1 x 16  Stranded  mm² 1 x (25 - 185) ²)  The stranded mm² 1 x (25 - 185) ²)  The stranded mm² 1 x (25 - 185) ²)  The stranded mm² 1 x (25 - 185) ²)  The stranded mm² 1 x (25 - 185) ²)  The stranded mm² 2 x (25 - 185) ²  The stranded mm² 2 x (25 - 185) ²  The stranded mm² 2 x (25 - 185) ²  The stranded mm² 2 x (25 - 185) ²  The stranded mm² 2 x (25 - 18	Connection width extension		mm <sup>2</sup>	
Al conductors, Cu cable  Solid  mm²  1 x 16  mm²  Stranded  mm²  1 x (25 - 185) ²)  2) Up to 240 mm² can be connected depending on the cable manufacturer.  mm²  1 x (50 - 240) 2 x (50 - 240) 2 x (50 - 240)  Bolt terminal and rear-side connection  Flat copper strip, with holes  Flat copper strip, with holes  max.  mm  10 x 32 x 1.0 + 5 x 32 x 1.0  Connection width extension  mm  (2 x) 10 x 50 x 1.0	Connection width extension		mm <sup>2</sup>	2 x 300
Stranded  Stranded  mm²  1 x (25 - 185) 2)  2) Up to 240 mm² can be connected depending on the cable manufacturer.  mm²  1 x (50 - 240) 2 x (50 - 240)  Bolt terminal and rear-side connection  Flat copper strip, with holes  min.  mm  6 x 16 x 0.8  Flat copper strip, with holes  max.  mm  10 x 32 x 1.0 + 5 x 32 x 1.0  mm  (2 x) 10 x 50 x 1.0	Al conductors, Cu cable			
Stranded  Stranded  mm²  1 x (25 - 185) 2)  2) Up to 240 mm² can be connected depending on the cable manufacturer.  mm²  1 x (50 - 240) 2 x (50 - 240)  Bolt terminal and rear-side connection  Flat copper strip, with holes  min.  mm  6 x 16 x 0.8  Flat copper strip, with holes  max.  mm  10 x 32 x 1.0 + 5 x 32 x 1.0  mm  (2 x) 10 x 50 x 1.0				
Stranded  mm²  1 x (25 - 185) ²)  2) Up to 240 mm² can be connected depending on the cable manufacturer.  mm²  1 x (50 - 240) 2 x (50 - 240)  Bolt terminal and rear-side connection  Flat copper strip, with holes  min.  mm  6 x 16 x 0.8  Flat copper strip, with holes  max.  mm  10 x 32 x 1.0 + 5 x 32 x 1.0  Connection width extension  mm  (2 x) 10 x 50 x 1.0	Solid		mm <sup>2</sup>	1 x 16
Stranded  mm²  1 x (25 - 185) ²)  2) Up to 240 mm² can be connected depending on the cable manufacturer.  mm²  1 x (50 - 240) 2 x (50 - 240)  Bolt terminal and rear-side connection  Flat copper strip, with holes  min.  mm  6 x 16 x 0.8  Flat copper strip, with holes  max.  mm  10 x 32 x 1.0 + 5 x 32 x 1.0  Connection width extension  mm  (2 x) 10 x 50 x 1.0	Stranded		mm <sup>2</sup>	
2) Up to 240 mm² can be connected depending on the cable manufacturer.    Double hole fitting	Stranded			1 x (25 - 185) <sup>2)</sup>
Double hole fitting mm² 1 x (50 - 240)  Bolt terminal and rear-side connection  Flat copper strip, with holes min. mm 6 x 16 x 0.8  Flat copper strip, with holes max. mm 10 x 32 x 1.0 + 5 x 32 x 1.0  Connection width extension mm (2 x) 10 x 50 x 1.0				
Bolt terminal and rear-side connection  Flat copper strip, with holes  Flat copper strip, with holes  max.  mm  10 x 32 x 1.0 + 5 x 32 x 1.0  Connection width extension  mm  (2 x) 10 x 50 x 1.0	Double hole fitting		mm <sup>2</sup>	1 x (50 - 240)
Flat copper strip, with holes max. mm 10 x 32 x 1.0 + 5 x 32 x 1.0  Connection width extension mm (2 x) 10 x 50 x 1.0	Bolt terminal and rear-side connection			
Connection width extension mm (2 x) 10 x 50 x 1.0	Flat copper strip, with holes	min.	mm	6 x 16 x 0.8
	Flat copper strip, with holes	max.	mm	10 x 32 x 1.0 + 5 x 32 x 1.0
	Connection width extension		mm	(2 x) 10 x 50 x 1.0
Cu strip (number of segments x width x segment thickness)	Cu strip (number of segments x width x segment thickness)			

Box terminal			
	min.	mm	6 x 16 x 0.8
	max.	mm	10 x 24 x 1.0 + 5 x 24 x 1.0 (2 x) 8 x 24 x 1.0
Bolt terminal and rear-side connection			
Flat copper strip, with holes	min.	mm	6 x 16 x 0.8
Flat copper strip, with holes	max.	mm	10 x 32 x 1.0 + 5 x 32 x 1.0
Connection width extension		mm	(2 x) 10 x 50 x 1.0
Copper busbar (width x thickness)	mm		
Bolt terminal and rear-side connection			
Screw connection			M10
Direct on the switch			
	min.	mm	20 x 5
	max.	mm	20 x 5
Connection width extension		mm	
Connection width extension	max.	mm	2 x (10 x 50)

## Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	500
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	130.5
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 switch gear must be observed. $\label{eq:constraint}$
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.

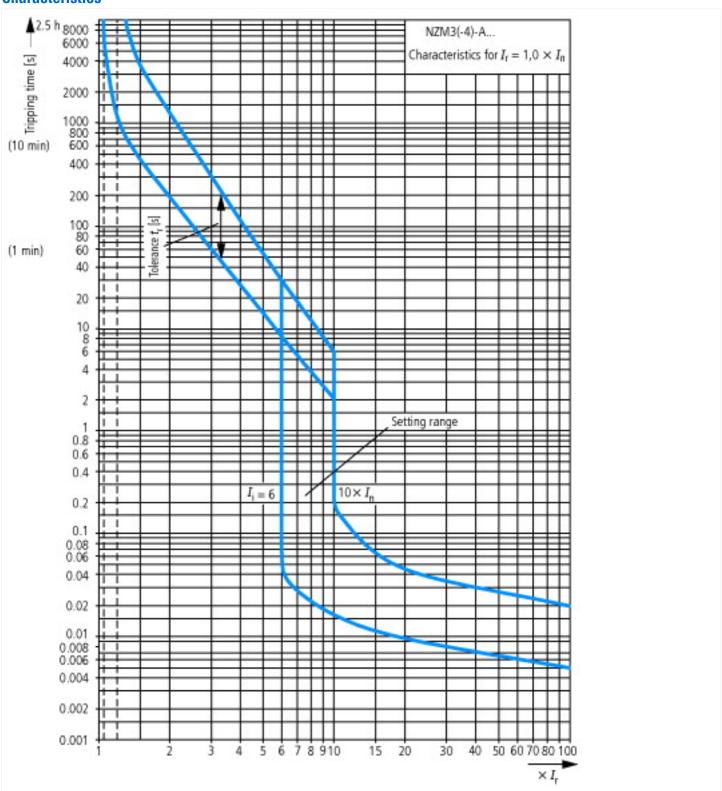
#### **Technical data ETIM 6.0**

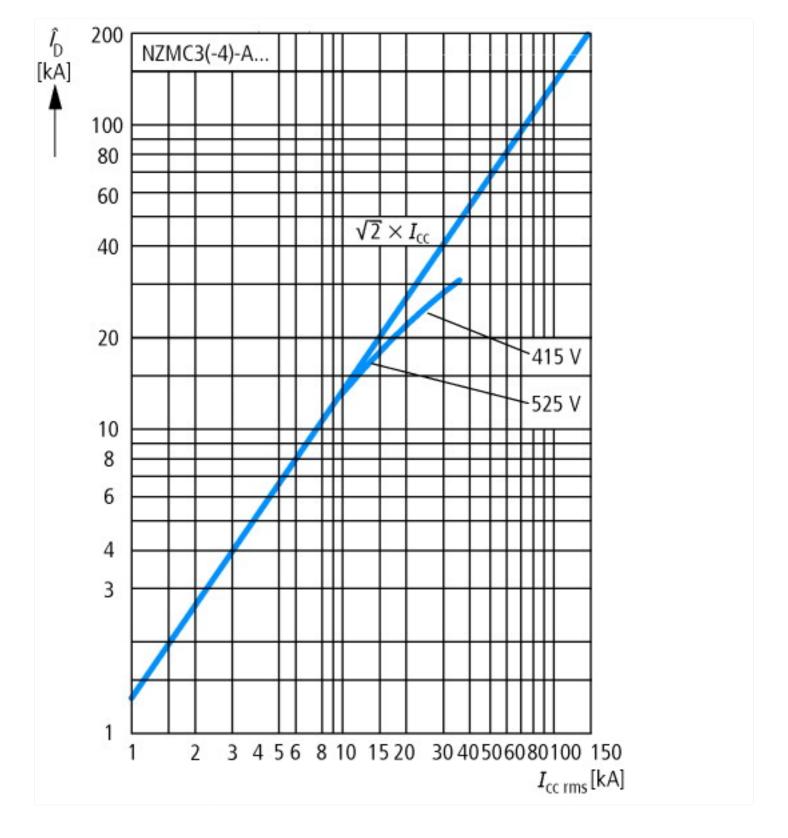
Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation prot. (EC000228)

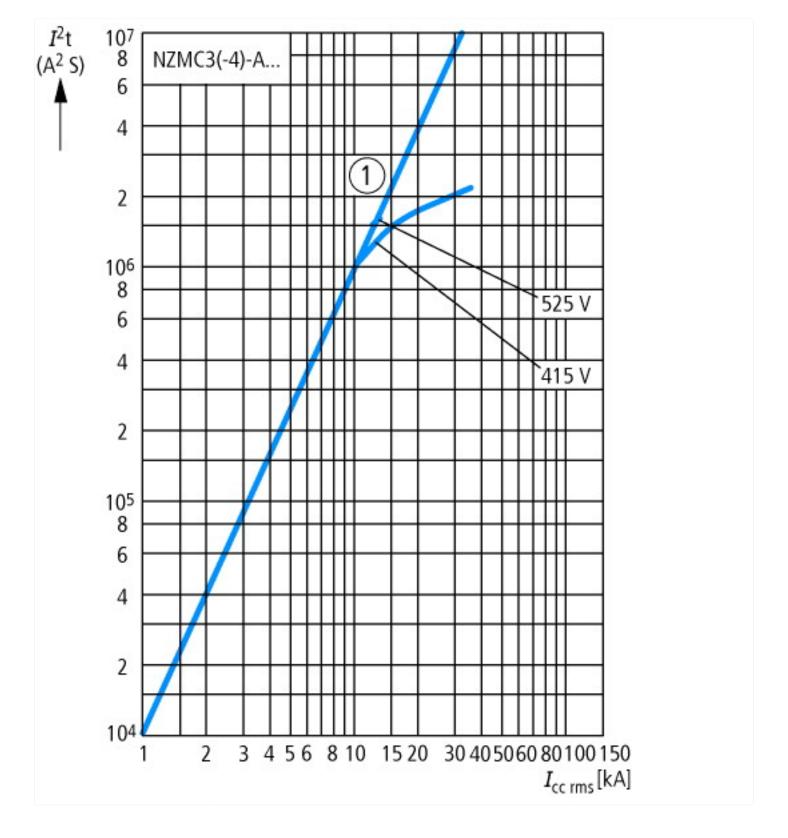
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss8.1-27-37-04-09 [AJZ716010])

Rated permanent current lu	Į.	A	500
Rated voltage	\	V	690 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	k	kA	36
Overload release current setting	A	A	400 - 500
Adjustment range short-term delayed short-circuit release	A	A	0 - 0
Adjustment range undelayed short-circuit release	A	A	3000 - 5000
Integrated earth fault protection			No
Type of electrical connection of main circuit			Screw connection
Device construction			Built-in device slide-in technique (withdrawable)
Suitable for DIN rail (top hat rail) mounting			No
DIN rail (top hat rail) mounting optional			No
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
Switched-off indicator available			No
With under voltage release			No
Number of poles			4
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			Yes
Degree of protection (IP)			IP20

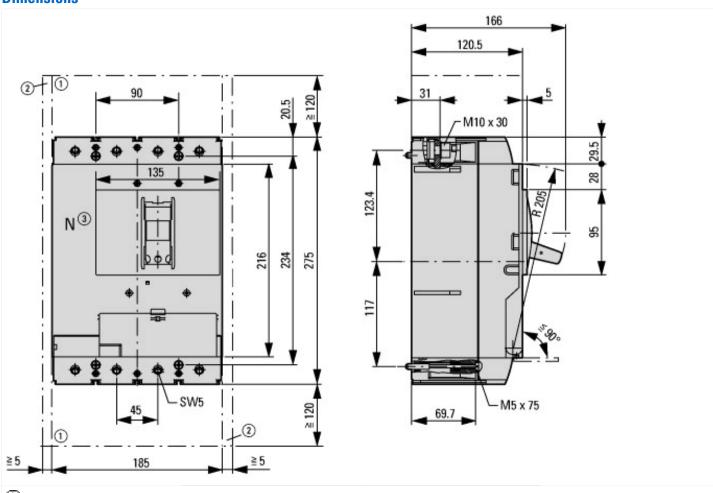
#### Characteristics



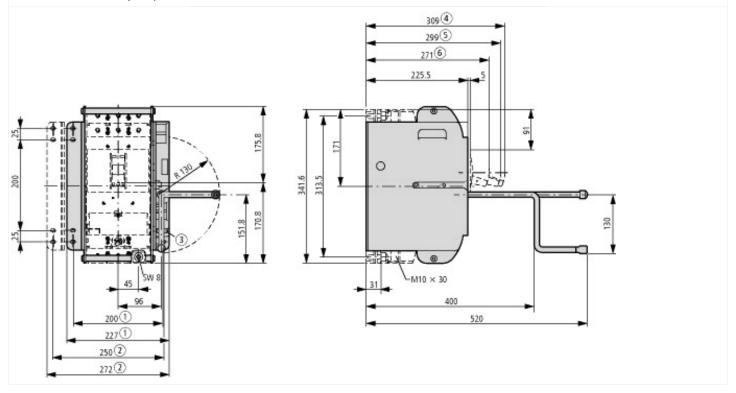




#### **Dimensions**



- Blow out area, minimum clearance to adjacent parts
- (2) Minimum clearance to adjacent parts



#### **Additional product information (links)**

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
CurveSelect characteristics program	http://www.eaton.eu/DE/Europe/Electrical/CustomerSupport/ConfigurationTools/CharacteristicsProgram/index.htm