DATASHEET - NZMN4-4-AE1000



Circuit-breaker, 4p, 1000A

Part no.

NZMN4-4-AE1000 265912



General specifications

Product name	Eaton Moeller series NZM molded case circuit breaker electronic
Part no.	NZMN4-4-AE1000
EAN	4015082659127
Product Length/Depth	401 millimetre
Product height	207 millimetre
Product width	280 millimetre
Product weight	27 kilogram
Compliances	RoHS conform
Certifications	IEC/EN 60947 IEC
Product Tradename	NZM
Product Type	Molded case circuit breaker
Product Sub Type	Electronic
Delivery program	
Application	Use in unearthed supply systems at 525 V
Туре	Circuit breaker
Circuit breaker frame type	NZM4
Connection	Front screw
Number of poles	Four-pole
Amperage Rating	1000 A
Release system	Electronic release
Features	Protection unit Motor drive optional
Special features	Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit breaker (Rated short-circuit breaking capacity Icn) Rated current = rated uninterrupted current: 1000 A Set value in neutral conductor is synchronous with set value Ir of main pole. R.m.s. value measurement and "thermal memory"
Frame	NZM4
Technical Data - Electrical	
Voltage rating	690 V - 690 V
Rated insulation voltage (Ui)	1000 V AC
Rated impulse withstand voltage (Uimp) at auxiliary contacts	6000 V
Rated impulse withstand voltage (Uimp) at main contacts	8000 V
Current rating of neutral conductor	200% of phase conductor
Rated short-time withstand current (t = 0.3 s)	12 kA
Rated short-time withstand current (t = 1 s)	12 kA
Instantaneous current setting (li) - min	2000 A
Instantaneous current setting (li) - max	12000 A
Overload current setting (Ir)	500 A - 1000 A
Overload current setting (Ir) - min	500 A
Overload current setting (Ir) - max	1000 A
Short delay current setting (Isd) - min	0 A
Short delay current setting (Isd) - max	0 A
Short-circuit release non-delayed setting - min	2000 A
Short-circuit release non-delayed setting - max	12000 A
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 230 V, 50/60 Hz	37 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 400/415 V, 50/60 Hz	37 kA
	37 KA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 440 V, 50/60 Hz	26 kA

Heads show circuit making support/yr mm 200419 y 2008 it/c 180 k Made down circuit making capacity mark 2004 it/c 180 k Made down circuit making capacity mark 2004 it/c 180 k Made down circuit making capacity mark 2004 it/c 180 k Made down circuit making capacity mark 2004 it/c 180 k Made down circuit making capacity mark 2004 it/c 200 k Start-scruit tase lareaktine 200 k Start-scruit tase lareaktine 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Mashed form circuit making capacity mark 200 k 200 k Ma	Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 525 V, 50/60 Hz	19 kA
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Pated after carcat making casacity for at 680 Y 500 Pz 600 A Struct carcat data beaking 600 A Struct carcat data beaking 500 Y AC (bartwas an unitary context) and man context) Struct carcat data beaking 500 Y AC (bartwas an unitary context) and man context) Number of operations per hour - max 60 Handin type 60 Ubitariat manager 60 Designed interpret 60	Rated short-circuit making capacity Icm at 440 V, 50/60 Hz	74 kA
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Electical connection type of main circuit Screw connection Istation SCR Convecome tauking verticals and main contexts) SOV X.G. Between the auxility verticals and main contexts) SOV X.G. Between the auxility verticals and main contexts) SOV X.G. Between the auxility verticals and main contexts) SOV X.G. Between the auxility verticals and main contexts) SOV X.G. Between the auxility verticals and main contexts) SOV X.G. Between the auxility verticals Ubliantion category ALECEN BORT-2 Downships entropy ALECEN BORT-2 Downships entropy ALECEN BORT-2 Downships entropy ALECEN BORT-2 Downships entropy SOV	Rated short-circuit making capacity Icm at 690 V, 50/60 Hz	40 kA
kelation SSV 2.6 Decisions surface protects on their certacted) Number of operations per hour - max 60 Derive large or targety 00 Derive large or targety 00 Polition of segree 00 Litergen, electrical 000 operations at 415 VAC3 2000 operations at 415 VAC3 2000 operations at 415 VAC3 2000 operations at 415 VAC3 2000 operations at 415 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40 VAC3 2000 operations at 40	Short-circuit total breaktime	< 25 ms (≦ 415 V); < 35 ms (> 415 V)
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Handle type Rocket level Ublication actegory NIECKN UBM-12; Pollution degree 3 Uffragene electrical Stock presentions at 154 V.C.3 Direction degree 3 Ublication degree 3 Direction of Incenting supply Comparison at 154 V.C.3 Direction of Incenting supply Comparison at 154 V.C.3 Direction of Incenting supply Comparison at 154 V.C.1 Direction of printection Direction degree Piply bink door comparison at 154 V.C.1 Direction of printection Piply bink door comparison at 154 V.C.1 Piply bink door comparison at 154 V.C.1 Direction of printection Piply bink door comparison at 154 V.C.1 Piply bink door comparison at 154 V.C.1 Direction of printection Piply bink door comparison at 154 V.C.1 Piply bink door comparison at 154 V.C.1 Di	Isolation	
Ubilization category ABECEN 8081-20 Overwohsige category III Pollutan dogoes 3 Lifespan, electrical 200 operations at 415 VAC-1 200 operations at 400 VAC-3 200 operations at	Number of operations per hour - max	60
Devrembage citegory III Pollution degree 3 Lifegram, electrical 3000 operations at 415 V AC3 3000 operations at 415 V AC3 30000 operations 3000 operations at 415 V AC3 3000 operations at 41	Handle type	Rocker lever
Polladio degree 3 Uhspan, electrical 2000 operations at 415 V AC-3 2000 operations 2000 operations at 415 V AC-3 2000 operations 2000 operations	Utilization category	A (IEC/EN 60947-2)
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Technical Data - Mechanical Built-in dorice fixed built-in technique Mounting Mothod Built-in dorice fixed built-in technique Degree of protection [P20 (basic degree of protection, in the operating controls area) Degree of protection (IPP, front side [P56 (with dorice coupling rotary handle) Performations) [P66 (with dorice coupling rotary handle) Protection against direct contact [P66 (with dorice during), phase isolator and strip terminal) Shock resistance [P06 (commission, phase isolator and strip terminal) Number of auxiliary contacts (change-over contacts) 0 Number of auxiliary contacts (change-over contacts) 0 Number of auxiliary contacts (comally epose contacts) 0 Number of auxiliary contacts (comally epose contacts) 0 Special features 0 Uffspan, mechanical 0 Uffspan, mechanical 0 Special features 0 Standard terminals 0 Optional terminals 0 Special features 0 Uffspan, mechanical 0 Terminal capacity (control cable) 0 Special features 0 Strandard terminals	Lifespan, electrical	3000 operations at 415 V AC-1 2000 operations at 400 V AC-3 1000 operations at 690 V AC-3 3000 operations at 400 V AC-1
Mounting Method Built-in device fixed built-in technique Fixed Degree of protection (IP), front side Fixed Degree of protection (IP), front side IP80 (with doc coupling rotary handle) (IP40 (with insulating surround) Degree of protection (terminations) IP40 (with insulating surround) Protection against direct contact IP40 (with insulating surround) Shock resistance Finger and back-of-hand proof to DN EN S0274/VDE 0166 part 110 Number of auxiliary contacts (chang-over contacts) 0 Dimatic proofing Front side Dimatic proofing Front side Special features 10000 operations Ulfespan, mechanical 10000 operations Terminal capacity (aluminum solid conductor/cable) 115 gm mail capacity (aluminum solid conductor/cable) Terminal capacity (aluminum stranded conductor/cable) 125 mm² (23 mm²	Direction of incoming supply	As required
Degree of protection Fixed Degree of protection (P), font side IP20 (basic degree of protection, in the operating controls area) IP20 (with door coupling rotary handle) IP40 (with inseling surround) Degree of protection (terminations) IP20 (terminations, phose isolator and strip terminal) IP40 (terminations, phose isolator and strip terminal) Protection against direct contact IP20 (terminations, phose isolator and strip terminal) Protection against direct contact IP20 (terminations, phose isolator and strip terminal) Number of auxiliary contacts (change-over contacts) IP30 (terminations, phose isolator and strip terminal) Number of auxiliary contacts (normally closed contacts) 0 Position of connection for main current circuit IP30 (terminations, phose isolator and strip terminal) Position of connection for main current circuit IP30 (terminations, phose isolator and strip terminal) Special features 0 IP30 (terminations, phose isolator and strip terminal) Lifespan, mechanical IP30 (terminations, phose isolator and strip terminal) Terminal capacity (aluminum solid conductor/cable) IP30 (terminal terminal) Optional terminals IP30 (terminations, phose isolator and strip terminal) Terminal capacity (aluminum stranded conductor/cable) IP30 (terminations, phose isolator and strip terminal) Terminal capacity (aluminum stranded conductor/cable) IP30 (terminatis) Terminal capacity (control	Technical Data - Mechanical	
Degree of protection (IP), front side IP20 Degree of protection (IP), front side IP20 (twith door coupling rotary handle) Poly terminations) IP20 (twith insulating surround) Protection against direct contact IP20 (twith adapting surround) Shock resistance IP20 (twith door coupling rotary handle) Number of auxiliary contacts (hormally closed contacts) IP20 (twith door coupling rotary handle) Number of auxiliary contacts (hormally closed contacts) IP20 (twith door coupling rotary handle) Number of auxiliary contacts (hormally closed contacts) IP20 (twith door coupling rotary handle) Position of connection for main current circuit IP20 (twith door coupling rotary handle) Special features IP20 (twith door coupling rotary handle) Special features IP20 (twith door coupling rotary handle) Utfespan, mechanical IP20 (twith door coupling rotary handle) Terminal capacity (aluminum solid conductor/cable) IP20 (twith door coupling rotary handle) Standard terminals IP20 (twith door coupling rotary handle) Optional terminals IP20 (twith door coupling rotary handle) Optional terminals IP20 (twith door coupling rotary handle) Optional terminals IP20 (twith door coupling rotary handle)	Mounting Method	
Pegree of protection (terminations)Ped (with insulating surround)Protection against direct contactFinger and back-of-hand proof to DIN EN 50274/VE 0106 part 110Shock resistance5 (inalf-sinusoidal shock 11 ms)Number of auxiliary contacts (hormally closed contacts)0Number of auxiliary contacts (normally closed contacts)0Number of auxiliary contacts (normally closed contacts)0Position of auxiliary contacts (normally closed contacts)0Special features0Position of auxiliary contacts (normally closed contacts)0Special features0Uintage provide auxiliary contacts (normally closed contacts)0Position of connection for main current circuitFront sideClimatic proofingDamp heat, copile, to IE 60068-2-38Special featuresMaximum back-up fuse, if the expected short-circuit currents at the installation for agree provide current 1000 A Set value in neutral conductor is synchronous with set value ir of main pole. R.m.s. value measurement and "thermal memory"Lifespan, mechanical10Terminal capacity (control cable)0.75 mm ⁻¹ 15 mm ⁻¹ (2x)Terminal capacity (control cable)0.75 mm ⁻¹ 15 mm ⁻¹ (2x) at rear-side value for a main pole. R.m.s. value measurement and "thermain memory"Terminal capacity (aluminum solid conductor/cable)0.75 mm ⁻¹ 15 mm ⁻¹ (2x) at rear-side value due plate 70 mm ⁻¹ 240 mm ⁻¹ (4x) at 4-hole module plate 70 mm ⁻¹ 240 mm ⁻¹ (4x) at 4-hole module plate 70 mm ⁻¹ 240 mm ⁻¹ (4x) at 4-hole module plate 70 mm ⁻¹ 240 mm ⁻¹ (4x) at 7-hole module plate 70 mm ⁻¹ 240 mm ⁻¹ (4x) at 7-hole module plate 70 mm	Degree of protection	
Protection against direct contactPP10 (tunnel terminal)Protection against direct contactFinger and back-of-hand proof to DIN EN S0274/VDE 0106 part 110Shock resistance15 g (half-sinusoidal shock 11 ms)Number of auxiliary contacts (normally closed contacts)0Number of auxiliary contacts (normally closed contacts)0Position of connection for main current circuit0Climatic proofingDamp heat, ceplic, to EG 60089-278Special featuresDamp heat, ceplic, to EG 60089-270Special featuresMaximum back-up fuse, if the expected short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit breaker (Rated short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit currents at the installetic location exceed the switching capacity of the circuit breaker (Rated short-circuit currents at the installet	Degree of protection (IP), front side	
Shock resistance Is g (helf-sinusoidal shock 11 ms) Number of auxiliary contacts (normally closed contacts) 0 Number of auxiliary contacts (normally closed contacts) 0 Position of connection for main current circuit 0 Climatic proofing Damp heat, contant, to IEC 60068-2-78 Damp heat, cryclic, to IEC 60068-2-78 Special features Damp heat, contant, to IEC 60068-2-78 Lifespan, mechanical Maximum back-up fuse, if the axpacted short-circuit currents at the installatic location exceed the switching capacity (of) Rated current - trad uninterrupted current - trad A set value in neutral conductor is synchronous with set value Ir of main pole. Lifespan, mechanical Connection on rear- Strip terminal. Optional terminals Connection on rear- Strip terminal. Optional terminal capacity (aluminum solid conductor/cable) Strip terminal. Terminal capacity (aluminum stranded conductor/cable) Strip terminal. Terminal capacity (copper busbar) Stom - 240 mm ² (kg) at + nois dure there - side - hole module plate Mith extension Mith extensi	Degree of protection (terminations)	
Number of auxiliary contacts (change-over contacts) 0 Number of auxiliary contacts (normally closed contacts) 0 Position of connection for main current circuit 0 Climatic proofing Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 Special features Special features Maximum back-up fuse, if the expected short-circuit currents at the installatic location exceed the switching capacity of the circuit breaker (Bated short-circuit conductor is york) (no) Lifespan, mechanical Maximum back-up fuse, if the expected short-circuit conductor is york-ronous with set value Ir of main pole. R.m.s. value measurement and "thermal memory" Standard terminals Maximum back up fuse, if the expected short-circuit conductor is york-ronous with set value Ir of main pole. R.m.s. value measurement and "thermal memory" Standard terminals Maximum back up fuse, if the expected short-circuit conductor is york-ronous with set value Ir of main pole. R.m.s. value measurement and "thermal memory" Terminal capacity (control cable) Maximum back up fuse, if the expected short-circuit conductor is york-ronous with set value Ir of main pole. R.m.s. value measurement and "thermal memory" Terminal capacity (aluminum solid conductor/cable) Screw terminal Optional terminals Connection on rear. Strip terminal. Tunnel terminal Terminal capacity (aluminum stranded conductor/cable) Strew terminal	Protection against direct contact	Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110
Number of auxiliary contacts (normally closed contacts) 0 Number of auxiliary contacts (normally open contacts) 0 Position of connection for main current circuit 0 Climatic proofing 0 Special features 0 Lifespan, mechanical 0 Technical Data - Mechanical - Terminals 0 Standard terminals 0 Optional terminals 0 Optional terminals 0 Terminal capacity (aluminum solid conductor/cable) 0 Terminal capacity (aluminum stranded conductor/cable) 0 Terminal capacity (copper busbar) 0 Terminal capacity (copper busbar) 0 Markan to accurrent intervision 0 Terminal capacity (control cable) 0 Terminal capacity (aluminum stranded conductor/cable) 0 Terminal capacity (aluminum stranded conductor/cable) 0 Terminal capacity (copper busbar) 0 More the strand terminals 0 Copper busbar) 0 Terminal capacity (aluminum stranded conductor/cable) 0 Terminal capacity (aluminum stranded conductor/cable) 0 T	Shock resistance	15 g (half-sinusoidal shock 11 ms)
Number of auxiliary contacts (normally open contacts) 0 Position of connection for main current circuit Front side Climatic proofing Damp heat, constant, to IEC 60068-2-78 Special features Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit breaker (Rated short-circuit current intervipted current: 1000 A Set value in neutral conductor is synchronous with set value ir of main pole. R.m.s. value measurement and "thermal memory" Lifespan, mechanical 10000 operations Technical Data - Mechanical - Terminals Screw terminal Quotional terminals Connection on rear. Strip terminal. Tunnel terminal Optional terminals Consection on rear. Strip terminal. Tunnel terminal Terminal capacity (control cable) 075 mm² + 15 mm² (2x) done module plate Terminal capacity (aluminum solid conductor/cable) 50 mm² + 240 mm² (1x) at rear-side 1-hole module plate Terminal capacity (aluminum stranded conductor/cable) 50 mm² + 240 mm² (4x) at rear-side 1-hole module plate Terminal capacity (copper busbar) 50 mm² + 240 mm² (4x) at rear-side 1-hole module plate Min 25 mm x 10 mm (2x) at rear-side 1-hole module plate 50 mm² + 240 mm² (4x) at rear-side 1-hole module plate Min 25 mm x 10 mm (2x) at rear-side 1-hole module plate 50 mm² + 240 mm² (4x) at rear-side 1-hole module plate	Number of auxiliary contacts (change-over contacts)	0
Position of connection for main current circuit Front side Climatic proofing Damp heat, constant, to IEC 60068-2-78 Special features Damp heat, cyclic, to IEC 60068-2-30 Special features Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit breaker (Rated short-circuit current rated uninterrupted current: 1000 A Set value in neutral conductor is synchronous with set value Ir of main pole. Lifespan, mechanical 10000 operations Technical Data - Mechanical - Terminals Screw terminal Quitonal terminals Connection on rear. Strip terminal. Tunnel terminal Optional terminal capacity (control cable) 075 mm² + 1.5 mm² (2x) at car-side 1-hole module plate Terminal capacity (aluminum solid conductor/cable) 50 mm² + 240 mm² (1x) at rear-side 1-hole module plate Terminal capacity (control cable) 50 mm² + 240 mm² (4x) at rear-side 1-hole module plate Terminal capacity (aluminum solid conductor/cable) 50 mm² + 240 mm² (4x) at rear-side 1-hole module plate Terminal capacity (copper busbar) 50 mm x 10 mm (2x) at rear-side 1-hole module plate Min. 25 mm x 10 mm (2x) at rear-side 1-hole module plate 50 mm x 10 mm (2x) at rear-side 1-hole module plate Min. 25 mm x 10 mm (2x) at rear-side 1-hole module plate 50 mm² - 240 mm² (4x) at rear-side 2-hole module plate <	Number of auxiliary contacts (normally closed contacts)	0
Climatic proofing Damp heat, constant, to IEC 60068-2-78 Special features Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit breaker (Rated short-circuit breaking capacity) (cn) Rated current - arted uninterrupted current: 1000 A Set value in neutral conductors is synchronous with set value Ir of main pole. Technical Data - Mechanical - Terminals Standard terminals Optional terminals Optional terminals Terminal capacity (control cable) Terminal capacity (aluminum solid conductor/cable) Terminal capacity (aluminum stranded conductor/cable) Terminal capacity (copper busbar) Marked current - are side 1-hole module plate Minut Stranded conductor/cable) Terminal capacity (copper busbar)	Number of auxiliary contacts (normally open contacts)	0
Special featuresDamp heat, cyclic, to IEC 60068-2-30Special featuresMaximum back-up fuse, if the expected short-circuit currents at the installation exceed the switching capacity of the circuit breaker (Rated short-circuit breaking capacity lon) Rated current = rated uninterrupted current: 1000 A Set value in neutral conductor is synchronous with set value Ir of main pole. R.m.s. value measurement and "thermal memory"Lifespan, mechanical10000 operationsTechnical Data - Mechanical - Terminals10000 operationsStandard terminalsScrew terminalOptional terminalsConnection on rear. Strip terminal. Tunnel terminalTerminal capacity (control cable)0.75 mm² - 15 mm² (2x) 0.75 mm² - 25 mm² (1x)Terminal capacity (aluminum solid conductor/cable)50 mm² - 240 mm² (2x) at rear-side 1-hole module plate 20 mm² (2x) at rear-side 1-hole module plate 20 mm² (2x) at rear-side 2-hole modu	Position of connection for main current circuit	Front side
Lifespan, mechanical Iocation exceed the switching capacity of the circuit breaker (Rated short-circuits breaking capacity (cn)) Lifespan, mechanical Technical Data - Mechanical - Terminals Standard terminals Iocation or ear. Strip terminal. Tunnel terminal Optional terminals Connection on rear. Strip terminal. Tunnel terminal Terminal capacity (control cable) Iocation mathematical - 100 mm² (2x) Terminal capacity (aluminum solid conductor/cable) Image: Strip and Strip a	Climatic proofing	
Technical Data - Mechanical - TerminalsStandard terminalsScrew terminalOptional terminalsConnection on rear. Strip terminal. Tunnel terminalTerminal capacity (control cable)0.75 mm² - 1.5 mm² (2x) 0.75 mm² - 2.5 mm² (1x)Terminal capacity (aluminum solid conductor/cable)185 mm² - 240 mm² (1x) at rear-side 1-hole module plate 70 mm² - 185 mm² (2x) at rear-side 1-hole module plate 240 mm² (1x) at rear-side 1-hole module plate 240 mm² (2x) at rear-side 1-hole module plate 240 mm² (2x) at rear-side 1-hole module plate 50 mm² (4x) at rear-side 1-hole module plate 50 mm² (4x) at rear-side 2-hole module plate 30 mm² (4x) at rear-side 2-hole module plate m² 240 mm² (2x) at rear-side 2-hole module plate 50 mm² (2x) at rear-side 2-hole module plate m² 240 mm² (2x) at rear-side 2-hole module plate 50 mm² - 240 mm² (4x) at 4-hole tunnel terminalTerminal capacity (copper busbar)50 mm x 10 mm (2x) at rear-side 2-hole module plate Min 25 mm x 5 mm at rear-side 1-hole module plate Min 25 mm x 5 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side connection	Special features	Rated current = rated uninterrupted current: 1000 A Set value in neutral conductor is synchronous with set value Ir of main pole.
Standard terminalsScrew terminalOptional terminalsConnection on rear. Strip terminal. Tunnel terminalTerminal capacity (control cable)0.75 mm² - 1.5 mm² (2x) 0.75 mm² - 2.5 mm² (1x)Terminal capacity (aluminum solid conductor/cable)185 mm² - 240 mm² (1x) at rear-side 1-hole module plate 70 mm² - 185 mm² (2x) at rear-side 1-hole module plate 240 mm² (2x) at rear-side 2-hole module plate 240 mm² (2x) at rear-side vidth extensionTerminal capacity (aluminum stranded conductor/cable)50 mm² - 240 mm² (4x) at 4-hole tunnel terminalTerminal capacity (copper busbar)50 mm x 10 mm (2x) at rear-side 2-hole module plate Min. 25 mm x 5 mm x 10 mm (2x) at rear-side i-hole module plate Min. 25 mm x 10 mm (2x) at rear-side i-hole module plate Min. 25 mm x 10 mm (2x) at rear-side i-hole module plate Min. 25 mm x 10 mm (2x) at rear-side i-hole module plate Min. 25 mm x 5 mm x 10 mm (2x) at rear-side i-hole module plate Min. 25 mm x 5 mm x 10 mm (2x) at rear-side i-hole module plate Min. 25 mm x 5 mm x 10 mm (2x) at rear-side i-hole module plate Min. 25 mm x 5 mm x 10 mm (2x) at rear-side i-hole module plate Min. 25 mm x 5 mm x 5 mm x 5 mm direct at switch rear-side connection	Lifespan, mechanical	10000 operations
Optional terminalsConnection on rear. Strip terminal. Tunnel terminalTerminal capacity (control cable)0.75 mm² - 1.5 mm² (2x) 0.75 mm² - 2.5 mm² (1x)Terminal capacity (aluminum solid conductor/cable)185 mm² - 240 mm² (1x) at rear-side 1-hole module plate 70 mm² - 185 mm² (2x) at rear-side 1-hole module plate 50 mm² (4x) at rear-side 2-hole module plate 240 mm² (2x) at rear-side width extension 70 mm² - 240 mm² (4x) at rear-side width extension 70 mm² - 240 mm² (4x) at rear-side width extension 70 mm² - 240 mm² (4x) at rear-side 2-hole module plate 240 mm² (2x) at rear-side width extension 70 mm² - 240 mm² (4x) at 4-hole tunnel terminalTerminal capacity (aluminum stranded conductor/cable)50 mm ² - 240 mm² (4x) at 4-hole tunnel terminalTerminal capacity (copper busbar)50 mm x 10 mm (2x) at rear-side 2-hole module plate Min. 25 mm x 10 mm (2x) at rear-side connection Max. 80 mm x 10 mm (2x) direct at switch rear-side connection Max. 80 mm x 10 mm (2x) at rear-side connection Max. 80 mm x 10 mm (2x) at rear-side connection Max. 80 mm x 10 mm (2x) at rear-side connection Max. 80 mm x 10 mm (2x) at rear-side connection	Technical Data - Mechanical - Terminals	
Optional terminalsConnection on rear. Strip terminal. Tunnel terminalTerminal capacity (control cable)0.75 mm² - 1.5 mm² (2x) 0.75 mm² - 2.5 mm² (1x)Terminal capacity (aluminum solid conductor/cable)185 mm² - 240 mm² (1x) at rear-side 1-hole module plate 70 mm² - 185 mm² (2x) at rear-side 1-hole module plate 50 mm² (4x) at rear-side 2-hole module plate 240 mm² (2x) at rear-side width extension 70 mm² - 240 mm² (4x) at rear-side width extension 70 mm² - 240 mm² (4x) at rear-side width extension 70 mm² - 240 mm² (4x) at rear-side 2-hole module plate 240 mm² (2x) at rear-side width extension 70 mm² - 240 mm² (4x) at 4-hole tunnel terminalTerminal capacity (aluminum stranded conductor/cable)50 mm ² - 240 mm² (4x) at 4-hole tunnel terminalTerminal capacity (copper busbar)50 mm x 10 mm (2x) at rear-side 2-hole module plate Min. 25 mm x 10 mm (2x) at rear-side connection Max. 80 mm x 10 mm (2x) direct at switch rear-side connection Max. 80 mm x 10 mm (2x) at rear-side connection Max. 80 mm x 10 mm (2x) at rear-side connection Max. 80 mm x 10 mm (2x) at rear-side connection Max. 80 mm x 10 mm (2x) at rear-side connection	Standard terminals	Screw terminal
Terminal capacity (control cable)0.75 mm² - 1.5 mm² (2x) 0.75 mm² - 2.5 mm² (1x)Terminal capacity (aluminum solid conductor/cable)185 mm² - 240 mm² (1x) at rear-side 1-hole module plate 70 mm² - 185 mm² (2x) at rear-side 1-hole module plate 50 mm² (4x) at rear-side 2-hole module plate 240 mm² (2x) at rear-side vidth extension 70 mm² - 240 mm² (4x) at rear-side vidth extension 70 mm² - 240 mm² (4x) at rear-side vidth extensionTerminal capacity (aluminum stranded conductor/cable)50 mm² - 240 mm² (4x) at rear-side vidth extension 70 mm² - 240 mm² (2x) at rear-side vidth extensionTerminal capacity (copper busbar)50 mmx 10 mm (2x) at rear-side 2-hole module plate Min. 25 mm x 5 mm at rear-side 1-hole module plate M10 at rear-side screw connection Max. 80 mm x 10 mm (2x) at rear-side i -hole module plate M10 at rear-side screw connection Max. 80 mm x 10 mm (2x) at rear-side connection Max. 80 mm x 10 mm (2x) at rear-side vidth extension		
Terminal capacity (aluminum solid conductor/cable)0.75 mm² - 2.5 mm² (1x)Terminal capacity (aluminum solid conductor/cable)185 mm² - 240 mm² (1x) at rear-side 1-hole module plate 50 mm² (2x) at rear-side 2-hole module plate 240 mm² (2x) at rear-side 2-hole module plate 240 mm² (2x) at rear-side width extension 70 mm² - 240 mm² (6x) at rear-side width extensionTerminal capacity (aluminum stranded conductor/cable)50 mm² - 240 mm² (4x) at 4-hole tunnel terminalTerminal capacity (copper busbar)50 mm² - 240 mm² (2x) at rear-side 2-hole module plate Min. 25 mm x 5 mm at rear-side 1-hole module plate Min 2 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) direct at switch rear-side connection Max. 50 mm x 10 mm (2x) at rear-side 1-hole module plate Min. 25 mm x 5 mm at rear-side 1-hole module plate Min. 25 mm x 10 mm (2x) at rear-side onnection		
Terminal capacity (aluminum stranded conductor/cable)So max 240 mm² (2x) at rear-side 2-hole module plate 50 mm² (2x) at rear-side width extension 70 mm² - 240 mm² (2x) at rear-side width extensionTerminal capacity (aluminum stranded conductor/cable)So mm² - 240 mm² (4x) at 4-hole tunnel terminalTerminal capacity (copper busbar)So mm² - 240 mm² (2x) at rear-side 2-hole module plate Min. 25 mm x 10 mm (2x) at rear-side 2-hole module plate Mi10 at rear-side 1-hole module plate Mi10 at rear-side 2-hole module plate Mi10 at rear-side 2-hole module plate Mi10 at rear-side 1-hole module plate Mi10 at rear-side 2-hole module plate Mi10 at rear-side 2-hole module plate Mi10 at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side 1-hole module plate Min. 25 mm x 50 mm x 10 mm (2x) at rear-side 2-hole module plate Min. 25 mm x 50 mm x 10 mm (2x) at rear-side 0-hole module plate Min. 25 mm x 50 mm x 10 mm (2x) at rear-side 0-hole module plate Min. 25 mm x 50 mm x 10 mm (2x) at rear-side 0-hole module plate		0.75 mm ² - 2.5 mm ² (1x)
Terminal capacity (copper busbar) 50 mm x 10 mm (2x) at rear-side 2-hole module plate Min. 25 mm x 5 mm at rear-side 1-hole module plate Min. 25 mm x 5 mm at rear-side 1-hole module plate Min. 25 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) direct at switch rear-side connection Max. 80 mm x 10 mm (2x) at rear-side vidth extension Max. 50 mm x 10 mm (2x) at rear-side vidth extension Max. 50 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side vidth extension Max. 50 mm x 10 mm (2x) at rear-side connection Max. 50 mm x 10 mm (2x) at rear-side connection		70 mm² - 185 mm² (2x) at rear-side 1-hole module plate 50 mm² (4x) at rear-side 2-hole module plate 240 mm² (2x) at rear-side width extension 70 mm² - 240 mm² (6x) at rear-side width extension
Min. 25 mm x 5 mm at rear-side 1-hole module plate M10 at rear-side screw connection Max. 50 mm x 10 mm (2x) direct at switch rear-side connection Max. 80 mm x 10 mm (2x) at rear-side 1-hole module plate Max. 50 mm x 5 mm direct at switch rear-side connection		
	Terminal capacity (copper busbar)	Min. 25 mm x 5 mm at rear-side 1-hole module plate M10 at rear-side screw connection Max. 50 mm x 10 mm (2x) direct at switch rear-side connection Max. 80 mm x 10 mm (2x) at rear-side width extension Max. 50 mm x 10 mm (2x) at rear-side 1-hole module plate Min. 25 mm x 5 mm direct at switch rear-side connection
Terminal capacity (copper solid conductor/cable) 35 mm ² - 185 mm ² (4x) at rear-side 2-hole module plate	Terminal capacity (copper solid conductor/cable)	35 mm² - 185 mm² (4x) at rear-side 2-hole module plate

	95 mm ² - 240 mm ² (6x) at rear-side width extension 300 mm ² (4x) at rear-side width extension 95 mm ² - 300 mm ² (2x) at rear-side 1-hole module plate 95 mm ² - 185 mm ² (2x) at rear-side 2-hole module plate 120 mm ² - 300 mm ² (1x) at rear-side 1-hole module plate 50 mm ² - 240 mm ² (4x) at 4-hole tunnel terminal
Terminal capacity (copper stranded conductor/cable)	50 mm ² - 185 mm ² (4x) direct at switch rear-side connection 120 mm ² - 185 mm ² (1x) direct at switch rear-side connection
Terminal capacity (copper strip)	Min. 5 segments of 25 mm x 1 mm at rear-side connection (punched) Min. 6 segments of 16 mm x 0.8 mm at flat conductor terminal Max. 10 segments of 50 mm x 1 mm (2x) at rear-side connection (punched) Max. 10 segments of 32 mm x 1 mm (2x) at flat conductor terminal 10 segments of 50 mm x 1 mm (2x) at 1-hole module plate 10 segments of 80 mm x 1 mm (2x) at rear-side width extension
Design verification as per IEC/EN 61439 - technical data	
Rated operational current for specified heat dissipation (In)	1000 A
Equipment heat dissipation, current-dependent	165 W
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	70 °C
Ambient storage temperature - min	40 °C
Ambient storage temperature - max	70 °C
Design verification as per IEC/EN 61439	
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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.
Additional information	
Functions	System and cable protection

Technical data ETIM 9.0

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@ss13-27-37-04-09 [AJZ716018])

Rated permanent current lu	А	1000
Rated voltage	V	690 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	37
Overload release current setting	А	500 - 1000
Adjustment range short-term delayed short-circuit release	А	0 - 0
Adjustment range undelayed short-circuit release	А	2000 - 12000
Power loss	W	
Device construction		Built-in device fixed built-in technique

Integrated earth fault protection	No
Type of electrical connection of main circuit	Screw connection
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
With switched-off indicator	No
With integrated 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