NZM4 PXR20 circuit breaker, 1600A, 4p, Screw terminal, earth-fault protection



Part no. NZMH4-4-VX1600-T 193327

Product name	Eaton Moeller series NZM molded case circuit breaker electronic
Part no.	NZMH4-4-VX1600-T
EAN	9010238016729
Product Length/Depth	375 millimetre
Product height	170 millimetre
Product width	280 millimetre
Product weight	25.5 kilogram
Compliances	RoHS conform
Certifications	IEC/EN 60947 IEC
Product Tradename	NZM
Product Type	Molded case circuit breaker
Product Sub Type	Electronic
Globally Marketable	Yes
Гуре	Circuit breaker
Circuit breaker frame type	NZM4
Number of poles	Four-pole
Amperage Rating	1600 A
Release system	Electronic release
eatures	Motor drive optional Protection unit
Special features	LSI overload protection and delayed and non-delayed short-circuit protective device R.m.s. value measurement and "thermal memory" USB interface for configuration and test function with Power Xpert Protection Manager software Optionally communication-capable with interface module and internal Modbus module or CAM Maximum back-up fuse, if the expected short-circuit currents the installation location exceed the switching capacity of the circuit breaker (I short-circuit breaking capacity Icn) Rated current = rated uninterrupted current 1600 A
/oltage rating	690 V - 690 V
Rated insulation voltage (Ui)	690 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)	19.2 kA
Rated short-time withstand current (t = 0.3 s)	19.2 kA
Earth-fault current setting (Ig) - min	320 x ln
Earth-fault current setting (Ig) - max	1600 x ln
nstantaneous current setting (Ii) - min	3200 A
nstantaneous current setting (li) - max	38400 A
Overload current setting (Ir) - min	640 A
Overload current setting (Ir) - max	1600 A
Short delay current setting (Isd) - min	2 A
Short delay current setting (Isd) - max	10 A
Short-circuit release delayed setting - min	1280 A
	16000 A
Short-circuit release delayed setting - max	· · · · ·
Short-circuit release delayed setting - max Short-circuit release non-delayed setting - min Short-circuit release non-delayed setting - max	3200 A 19200 A

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 400/415 V, 50/60 Hz	50 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 440 V, 50/60 Hz	50 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 525 V, 50/60 Hz	50 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 690 V, 50/60 Hz	37 kA
Rated short-circuit making capacity Icm at 240 V, 50/60 Hz	275 kA
Rated short-circuit making capacity Icm at 400/415 V, 50/60 Hz	187 kA
Rated short-circuit making capacity Icm at 440 V, 50/60 Hz	187 kA
Rated short-circuit making capacity Icm at 525 V, 50/60 Hz	143 kA
Rated short-circuit making capacity Icm at 690 V, 50/60 Hz	100 kA
Short-circuit total breaktime	< 25 ms (≤ 415 V); < 35 ms (> 415 V)
Electrical connection type of main circuit	Screw connection
Isolation	500 V AC (between auxiliary contacts and main contacts) 300 V AC (between the auxiliary contacts)
Number of operations per hour - max	60
Handle type	Rocker lever
Utilization category	B (2000A: A, IEC/EN 60947-2)
Overvoltage category	III
Pollution degree	3
Lifespan, electrical	2000 operations at 400 V AC-3 2000 operations at 690 V AC-1 3000 operations at 415 V AC-1 1000 operations at 690 V AC-3 2000 operations at 415 V AC-3 3000 operations at 400 V AC-1
Direction of incoming supply	As required
Mounting Method	Fixed Built-in device fixed built-in technique
Degree of protection	IP20 IP20 (basic degree of protection, in the operating controls area)
Degree of protection (IP), front side	IP40 (with insulating surround) IP66 (with door coupling rotary handle)
Degree of protection (terminations)	IP10 (tunnel terminal) IP00 (terminations, phase isolator and strip terminal)
Protection against direct contact	Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110
Shock resistance	15 g (half-sinusoidal shock 11 ms)
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Position of connection for main current circuit	Front side
Climatic proofing	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
Special features	LSI overload protection and delayed and non-delayed short-circuit protective device R.m.s. value measurement and "thermal memory" USB interface for configuration and test function with Power Xpert Protection Manager software Optionally communication-capable with interface module and internal Modbus RTI module or CAM Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit breaker (Rate short-circuit breaking capacity Icn) Rated current = rated uninterrupted current: 1600 A
Lifespan, mechanical	10000 operations
Standard terminals	Screw terminal
Optional terminals	Connection on rear. Strip terminal. Tunnel terminal
Terminal capacity (control cable)	0.75 mm ² - 2.5 mm ² (1x) 0.75 mm ² - 1.5 mm ² (2x)
Terminal capacity (aluminum stranded conductor/cable)	50 mm ² - 240 mm ² (4x) at 4-hole tunnel terminal
Terminal capacity (copper busbar)	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 Max. 80 mm x 10 mm (2x) at rear-side width extension Min. 25 mm x 5 mm direct at switch rear-side connection 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. 60 mm x 10 mm at rear-side width extension M10 at rear-side screw connection
Terminal capacity (copper solid conductor/cable)	300 mm² (4x) at rear-side width extension 50 mm² - 240 mm² (4x) at 4-hole tunnel terminal

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Functions Systems, cable, selectivity and generator protection	10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
	10.13 Mechanical function	
Integrated earth fault protection	Functions	Earth-fault protection

Technical data ETIM 8.0

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

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])

Rated permanent current lu	Α	1,600
Rated voltage	V	690 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	50
Overload release current setting	Α	640 - 1,600
Adjustment range short-term delayed short-circuit release	А	2 - 10
Adjustment range undelayed short-circuit release	Α	3,200 - 38,400
Integrated earth fault protection		Yes

Screw connection
Built-in device fixed built-in technique
No
No
0
0
0
No
No
4
Front side
Rocker lever
Yes
No
Yes
IP20