DATASHEET - NZMN3-S500-SVE

Circuit-breaker, 3p, 500A, plug-in module

Part no. **NZMN3-S500-SVE**
168492

General specifications	
Product name	Eaton Moeller series NZM molded case circuit breaker magnetic
Part no.	NZMN3-S500-SVE
EAN	4015081649723
Product Length/Depth	335 millimetre
Product height	215.2 millimetre
Product width	140 millimetre
Product weight	6.38 kilogram
Compliances	RoHS conform
Product Tradename	NZM
Product Type	Molded case circuit breaker
Product Sub Type	Magnetic
Delivery program	
Type	Circuit breaker
Number of poles	Three-pole
Amperage Rating	500 A
Special features	Rated current = rated uninterrupted current: 500 A The circuit-breaker fulfills all requirements for AC-3 switching category. IEC/EN 60947-4-1, IEC/EN 60947-2 Without overload release Ir With short-circuit release Motor protection in conjunction with overload relay
Technical Data - Electrical	
Voltage rating	690 V - 690 V
Rated operational current	437 A (400 V AC-3)
Instantaneous current setting (Ii) - min	6 A
Instantaneous current setting (Ii) - max	10 A
Overload current setting (Ir) - min	0 A
Overload current setting (Ir) - max	0 A
Short-circuit release non-delayed setting - min	3000 A
Short-circuit release non-delayed setting - max	5000 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 500 V DC	30 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 750 V DC	30 kA
Rated operating power at AC-3, 230 V	160 kW
Rated operating power at AC-3, 400 V	250 kW
Electrical connection type of main circuit	Screw connection
Handle type	Rocker lever
Direction of incoming supply	As required
Technical Data - Mechanical	
Mounting Method	Built-in device plug-in technique
Degree of protection	IP20
Switch off technique	Magnetic
Special features	Rated current = rated uninterrupted current: 500 A The circuit-breaker fulfills all requirements for AC-3 switching category. IEC/EN 60947-4-1, IEC/EN 60947-2 Without overload release Ir With short-circuit release Motor protection in conjunction with overload relay
Design verification as per IEC/EN 61439 - technical data	
Equipment heat dissipation, current-dependent	93 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.

Technical data ETIM 9.0

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@ss13-27-37-04-01 [AGZ529021])

Overload release current setting	A	0 - 0
Adjustment range undelayed short-circuit release	A	6 - 10
With thermal overload protection		No
Phase failure sensitive		No
Switch off technique		Magnetic
Rated operating voltage	V	690 - 690
Rated permanent current Iu	A	500
Rated operation power at AC-3, 230 V	kW	160
Rated operation power at AC-3, 400 V	kW	250
Power loss	W	
Type of electrical connection of main circuit		Screw connection
Type of control element		Rocker lever
Device construction		Built-in device plug-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	50
Degree of protection (IP)		IP20
Height	mm	215.2
Width	mm	140
Depth	mm	335

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