DATASHEET - NZMN3-S250-SVE

Circuit-breaker, 3p, 250A, plug-in module

Part no.	**NZMN3-S250-SVE**
Catalog No.	**168489**
Alternate Catalog No.	**NZMN3-S250-SVE**

Powering Business Worldwide™

Delivery program

Description			Motor protection in conjunction with overload relay With short-circuit release Without overload release Ir IEC/EN 60947-4-1, IEC/EN 60947-2 The circuit-breaker fulfills all requirements for AC-3 switching category.
Rated current = rated uninterrupted current	$I_n = I_u$	A	250
Switching capacity			
400/415 V 50 Hz	I_{cu}	kA	50
Setting range			
Short-circuit releases 			
Non-delayed 	$I_i = I_n$ x …		8 - 14
Motor rating AC-3 at 400 V 50/60 Hz			
380 V 400 V	P	kW	132
Rated operational current AC-3 at 400 V 50/60 Hz			
400 V	I_e	A	231

Technical data

General

Ambient temperature			
Ambient temperature, storage		°C	- 40 - + 70
Operation		°C	-25 - +70

Circuit-breakers

Rated current = rated uninterrupted current	$I_n = I_u$	A	250

Switching capacity

Rated short-circuit breaking capacity I_{cn}	I_{cn}		
Icu to IEC/EN 60947 test cycle O-t-CO	Icu	kA	
400/415 V 50/60 Hz	I_{cu}	kA	50
500 V DC	I_{cu}	kA	30
750 V DC	I_{cu}	kA	30
Ics to IEC/EN 60947 test cycle O-t-CO-t-CO	Ics	kA	
500 V DC	I_{cs}	kA	30
750 V DC	I_{cs}	kA	30

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	250
Equipment heat dissipation, current-dependent	P_{vid}	W	68.25
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 7.0

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@ss10.0.1-27-37-04-01 [AGZ529016])		
Overload release current setting	A	0 - 0
Adjustment range undelayed short-circuit release	A	8 - 14
With thermal protection		No
Phase failure sensitive		No
Switch off technique		Magnetic
Rated operating voltage	V	690 - 690
Rated permanent current Iu	A	250
Rated operation power at AC-3, 230 V	kW	75
Rated operation power at AC-3, 400 V	kW	132
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

Additional product information (links)

additional technical information for NZM power switch	https://es-assets.eaton.com/DOCUMENTATION/PDF/nzm_technic_de_en.pdf