#### **DATASHEET - NZMB2-4-A125**



Circuit-breaker, 4p, 125A

Part no. NZMB2-4-A125 Catalog No. 265847



Similar to illustration

Delivery program			
Installation type			Fixed
Description			Set value in neutral conductor is synchronous with set value Ir of main pole.
Standard equipment			Screw connection
Switching capacity			
400/415 V 50 Hz	I <sub>cu</sub>	kA	25
Rated current = rated uninterrupted current			
Rated current = rated uninterrupted current	$I_n = I_u$	Α	125
Neutral conductor	% of phase conductor	CSA	100
Setting range			
Overload trip			
4	I <sub>r</sub>	Α	100 - 125
Main pole	I <sub>r</sub>	A	100 - 125
Short-circuit releases			
Non-delayed	$I_i = I_n x \dots$		6 - 10
Short-circuit releases	I <sub>rm</sub>	A	750 - 1250

#### **Technical data**

Conoral

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
Safe isolation to EN 61140			
Between auxiliary contacts and main contacts		V AC	500
between the auxiliary contacts		V AC	300
Circuit-breakers			
Rated current = rated uninterrupted current	$I_n = I_u$	Α	125
Use in unearthed supply systems		V	≦ 440
Switching capacity			
Rated short-circuit breaking capacity I <sub>cn</sub>	I <sub>cn</sub>		
Icu to IEC/EN 60947 test cycle 0-t-C0	Icu	kA	
400/415 V 50/60 Hz	I <sub>cu</sub>	kA	25

Terminal capacity			
Standard equipment			Screw connection
Round copper conductor			
Box terminal			
Solid		$mm^2$	1 x (4 - 16) 2 x (4 - 16)
Stranded		mm <sup>2</sup>	1 x (25 - 185) 2 x (25 - 70)
Tunnel terminal			
Solid		$mm^2$	1 x 16
Stranded			
1-hole		mm <sup>2</sup>	1 x (25 - 185)
Bolt terminal and rear-side connection			
Direct on the switch			
Solid		mm <sup>2</sup>	1 x (4 - 16) 2 x (4 - 16)
Stranded		$mm^2$	1 x (25 - 185) 2 x (25 - 70)
Al circular conductor			
Tunnel terminal			
Solid		$\text{mm}^2$	1 x 16
Stranded			
Stranded		mm <sup>2</sup>	1 x (25 - 185)
Bolt terminal and rear-side connection			
Direct on the switch			
Solid		mm <sup>2</sup>	1 x (10 - 16)
On and add		2	2 x (10 - 16)
Stranded		mm <sup>2</sup>	1 x (25 - 50) 2 x (25 - 50)
Cu strip (number of segments x width x segment thickness)			
Box terminal			
	min.	mm	2 x 9 x 0.8
	max.	mm	10 x 16 x 0.8
Bolt terminal and rear-side connection			
Flat copper strip, with holes	min.	mm	2 x 16 x 0.8
Flat copper strip, with holes	max.	mm	10 x 16 x 0.8
Copper busbar (width x thickness)	mm		
Bolt terminal and rear-side connection			
Screw connection			M8
Direct on the switch			
	min.	mm	16 x 5
	max.	mm	20 x 5
Control cables			
		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)

# Design verification as per IEC/EN 61439

Technical data for design verification			
Equipment heat dissipation, current-dependent	$P_{\text{vid}}$	W	27.61
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.

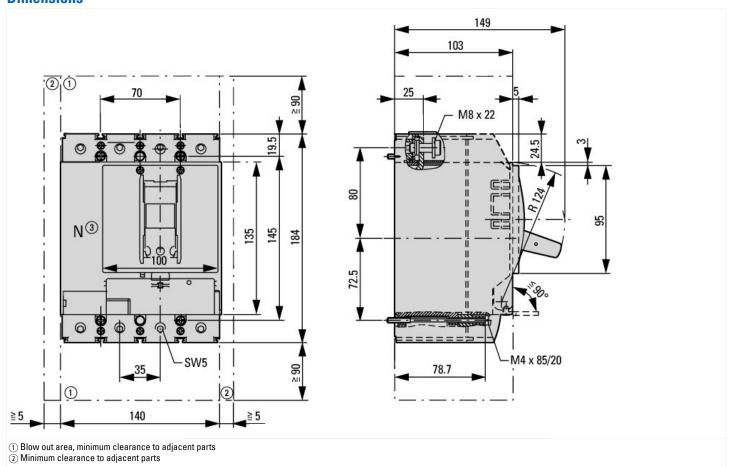
#### **Technical data ETIM 7.0**

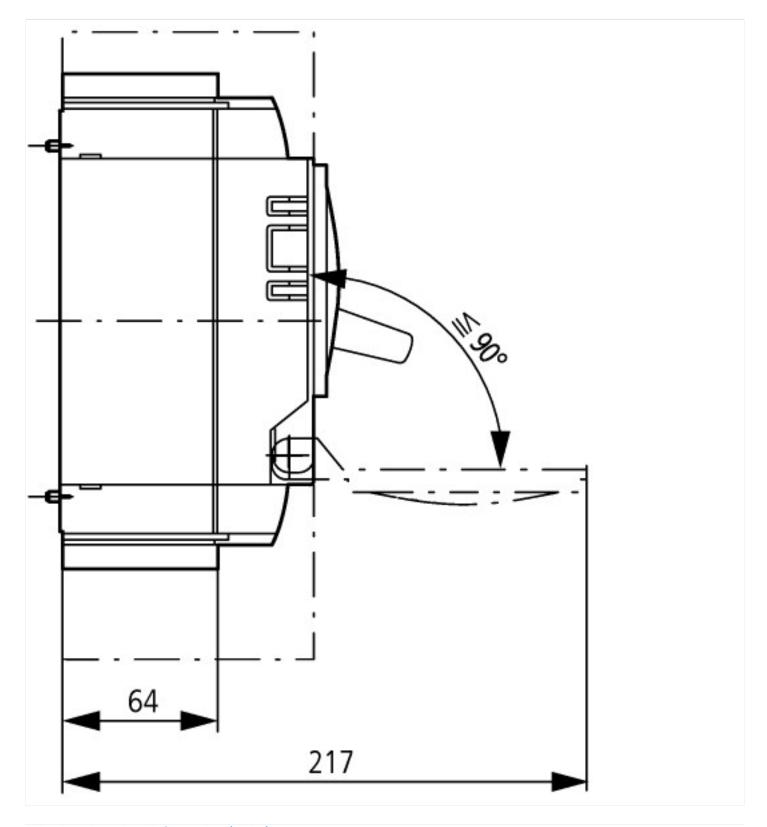
Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228)

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])

protection (corespondent 27 or or or protection)		
Rated permanent current lu	Α	125
Rated voltage	V	440 - 440
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	25
Overload release current setting	Α	100 - 125
Adjustment range short-term delayed short-circuit release	Α	0 - 0
Adjustment range undelayed short-circuit release	А	6 - 10
Integrated earth fault protection		No
Type of electrical connection of main circuit		Screw connection
Device construction		Built-in device fixed built-in technique
Suitable for DIN rail (top hat rail) mounting		No
DIN rail (top hat rail) mounting optional		Yes
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 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

## **Dimensions**





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

additional technical information for NZM power switch

 $ftp://ftp.moeller.net/DOCUMENTATION/PDF/nzm\_technic\_de\_en.pdf$