

Moeller® series

NZML



The circuit breaker series
NZML2 and NZML3 for high breaking
capacities at 690V

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Powering Business Worldwide

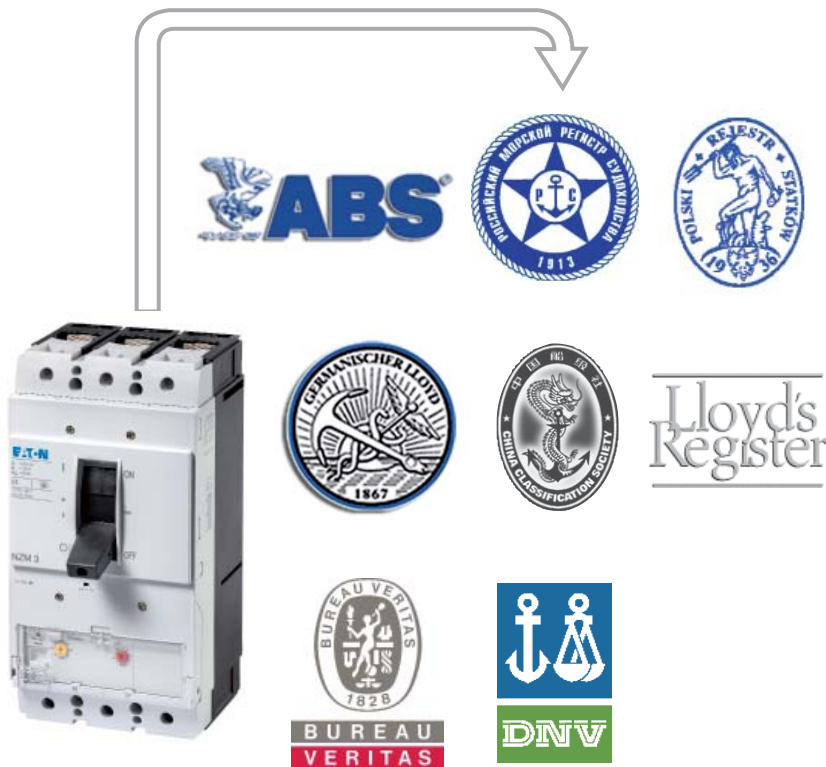
Circuit breaker series NZML2 and NZML3

Both of them complement the existing and globally approved NZM family and complete the product range in the area of systems featuring high energy density. But it is not only mining or naval applications or chemical industries that require high breaking capacities at 690VAC, our focus regarding new products is also placed on renewable sources of energy, such as wind energy plants.

The diversity of our products covers almost any requirements: The NZML2 is available up to 160A and the NZML3 is available up to 400A. Both are equipped with an electronic tripping unit. At 690VAC, they offer a breaking capacity of 80kA. These circuit breakers are available in the generally known and established VE version and come with a high-quality short-time delayed electronic

tripping unit as well as with a communication interface. To be able to cope with the different requirements and needs, these products are type-tested according to IEC 60947-2 and include comprehensive international approvals and certificates of conformity for naval applications.

The entire range of accessories is also available for users of the new NZML2 / NZML3 without any restrictions. The NZML product series has the same dimensions as the well-proven NZM2 und NZM3 circuit breakers. The ME electronic system especially developed for motor applications is available in size 2 for up to 140A / 132kW, and in size 3 for up to 350A / 315kW.



Main areas of application:

- Mining
- Shipbuilding
- Industry
- Wind energy plants
- Data centres

Advantages :



- Breaking capacity of 80kA at 690VAC
- Electronic tripping unit including a communication interface
- Same accessories and same dimensions as NZM2 and NZM3



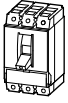
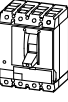
Circuit breaker

Circuit breaker, electronic tripping unit, 3- and 4-pole

NZML

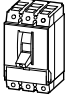
	Breaking capacity 690V 50/60 Hz I_{cu} kA	Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range Overload release I_r A	Setting range Short-circuit release non-delayed $I_i = I_n \times \dots$	Fixed Mounting Type Article no.	Plug-In/ Withdrawable Units order base separately Type Article no.
						

System protection, Cable Protection, selectivity, generator protection

Special performing switching capacity							
	3-pole	80	100	50-100	1200 fixed	NZML2-VE100 259128	NZML2-VE100-SVE 169023
			160	80-160	1920 fixed	NZML2-VE160 259129	NZML2-VE160-SVE 169024
			250	126-250	2-11	NZML3-VE250 259137	NZML3-VE250-AVE 155416
			400	200-400	2-11	NZML3-VE400 259138	NZML3-VE400-AVE 155417
	4-pole	80	100	50-100	1200 fixed	NZML2-4-VE100 265949	NZML2-4-VE100-SVE 169027
			160	80-160	1920 fixed	NZML2-4-VE160 265951	NZML2-4-VE160-SVE 169028
			160/100	80-160/50-100	1920 fixed	NZML2-4-VE160/100 265952	NZML2-4-VE160/100-SVE 169029
			250	125-250	2-10	NZML3-4-VE250 155415	NZML3-4-VE250-AVE 155418
			400	200-400	2-10	NZML3-4-VE400 265969	NZML3-4-VE400-AVE 155419
			400/250	200-400/125-250	2-10	NZML3-4-VE400/250 265970	NZML3-4-VE400/250-AVE 155430

Motor protection

- In accordance to IEC 60947-2
- With phase failure sensitivity

Special performing switching capacity							
	3-pole	80	90	45-90	2-14	NZML2-ME90 265794	NZML2-ME90-SVE 169023
			140	70-140	2-14	NZML2-ME140 265795	NZML2-ME140-SVE 169024
			220	110-220	2-14	NZML3-ME220 265797	NZML3-ME220-AVE 155416
			350	175-350	2-14	NZML3-ME350 265798	NZML3-ME350-AVE 155417

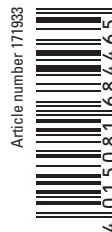
Technical data						
Rated short-circuit making capacity					NZML2	NZML3
		240 V	lcm	kA	330	330
		400/415 V	lcm	kA	330	330
		440 V	lcm	kA	286	286
		525 V	lcm	kA	220	220
		690 V	lcm	kA	176	176
Rated short-circuit breaking capacity I _{cn}						
I _{cu} according to IEC/EN 60947						
Switching sequence O-t-CO		240 V 50/60 Hz	I _{cu}	kA	150	150
		400/415 V 50/60 Hz	I _{cu}	kA	150	150
		440 V 50/60Hz	I _{cu}	kA	130	130
		525 V 50/60Hz	I _{cu}	kA	100	100
		690 V 50/60Hz	I _{cu}	kA	80	80
		500 V DC	I _{cu}	kA	-	-
		750 V DC	I _{cu}	kA	-	-
I _{cs} according to IEC/EN 60947						
Switching sequence O-t-CO-t-CO		240 V 50/60 Hz	I _{cs}	kA	150	150
		400/415 V 50/60 Hz	I _{cs}	kA	150	150
		440 V 50/60Hz	I _{cs}	kA	130	130
		525 V 50/60Hz	I _{cs}	kA	100	50
		690 V 50/60Hz	I _{cs}	kA	80	20
Rated short-time withstand current						
	t = 0.3 s		I _{cw}	kA	1,3	2,8
	t = 1 s		I _{cw}	kA	1,3	2,8
Lifespan	mechanical					
of which max. 50 % trip by shunt/undervoltage release	Operations				10.000	10.000
Lifespan	electrical	400/415 V 50/60Hz	AC-1		10.000	5.000
		690 V 50/60Hz			7.500	3.000
		400/415 V 50/60Hz	AC-3		6.500	2.000
		690 V 50/60Hz			5.000	2.000
Special characteristics Trip Unit						
Adjustable delay set tr						
		VE	sec.	at 6xlr	2-20	2-20 NZML3(-4)-VE250 2-14 NZML3(-4)-VE400
		ME			2-20	2-20 NZML3(-4)-ME220 2-14 NZML3(-4)-ME350

Other technical data similar to NZMH2/3, please refer to actual main catalogue

Eaton is dedicated to ensuring that reliable, efficient and safe power is available when it's needed most. With unparalleled knowledge of electrical power management across industries, experts at Eaton deliver customized, integrated solutions to solve our customers' most critical challenges.

Our focus is on delivering the right solution for the application. But, decision makers demand more than just innovative products. They turn to Eaton for an unwavering commitment to personal support that makes customer success a top priority.

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