Molded Case Circuit Breaker NZM – 1000 VAC

Safe
Reliable
Powerful

Powering Business Worldwide

Use of NZM circuit breakers at 1000 VAC

The special series for up to 1000 VAC rated operational voltage stretches the range of application of the performance and switch disconnector continues to pull out. They are suitable for use under special environmental conditions like mines, road tunnels, refineries, chemical plants and electric railways. Typical applications are drives for high performance and general industrial power supply with long supply lines.

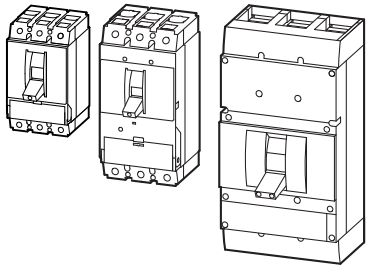
Circuit-breakers, switch-disconnectors

Technical overview for 1000 VAC

NZM...-S1

With main switch characteristics to IEC/EN 60204 and isolating characteristics to IEC/EN 60947, VDE 660

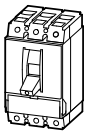
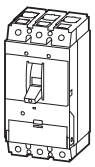
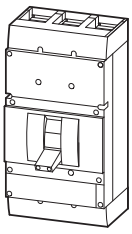
Circuit-breakers for 1000 VAC, 3 pole

			System and cable protection			**Selectivity protection**		**Motor protection**	
Switching capacity									
1000 VAC	kA/p.f.	I_{cu}	10/0.5	15/0.5	20/0.3	10/0.5	20/0.3	15/0.5	20/0.3
		I_{cs}	3/0.5	10/0.5	15/0.3	3/0.5	15/0.3	10/0.5	15/0.3
Rated uninterrupted current I_u = Rated current I_n			I_u	I_u	I_u	I_u	I_u	I_u	I_u
			NZMH2-A...-S1	NZMH3-AE...-S1	NZMH4-AE...-S1	NZMH2-VE...-S1	NZMH4-VE...-S1	NZMH3-ME...-S1	NZMH4-ME...-S1
			20	250	630	100	630	220	550
			25	400	800	160	800	350	875
			32	**630**	1000	**250**	1000	**450**	**1400**
			40		1250		1250		
			50		**1600**		**1600**		
			63						
			80						
			100						
			125						
			160						
			200						
			250						
			300						

Circuit-breakers, switch-disconnectors

Circuit-breakers for 1000 VAC, 3 pole

HPL17047EN

	Switching capacity 1000 VAC 50/60 Hz	Rated current = Rated uninterrupted current	**Setting range** Overload releases	Short-circuit releases		**Fixed mounting Part no.** Article no.	Std. pack	
				Non-delayed	Delayed			
	I_{cu} kA	$I_n = I_u$ A	I_r A	$I_i = I_n$ x …	$I_{sd} = I_r$ x …			
System and cable protection								
Thermomagnetic releases								
	**10**	20	15-20	350 A fest	–	**NZMH2-A20-S1** 290355	S	1 off
		25	20-25	350 A fest	–	**NZMH2-A25-S1** 290356	S	
		32	25-32	350 A fest	–	**NZMH2-A32-S1** 290357	S	
		40	32-40	8 - 10	–	**NZMH2-A40-S1** 290358	S	
		50	40-50	6 - 10	–	**NZMH2-A50-S1** 290359	S	
		63	50-63	6 - 10	–	**NZMH2-A63-S1** 290360	S	
		80	63-80	6 - 10	–	**NZMH2-A80-S1** 290361	S	
		100	80-100	6 - 10	–	**NZMH2-A100-S1** 290362	S	
		125	100-125	6 - 10	–	**NZMH2-A125-S1** 290363	S	
		160	125-160	6 - 10	–	**NZMH2-A160-S1** 290364	S	
		200	160-200	6 - 10	–	**NZMH2-A200-S1** 290365	S	
		250	200-250	6 - 10	–	**NZMH2-A250-S1** 290366	S	
Electronic releases R.m.s. value measurement and “thermal memory”								
	**15**	250	125-250	2 - 11	–	**NZMH3-AE250-S1** 119361	S	1 off
		400	200-400	2 - 11	–	**NZMH3-AE400-S1** 119362	S	
		630	315-630	2 - 8	–	**NZMH3-AE630-S1** 119363	S	
	**20**	630	315-630	2 - 12	–	**NZMH4-AE630-S1** 290370	S	
		800	400-800	2 - 12	–	**NZMH4-AE800-S1** 290371	S	
		1000	500-1000	2 - 12	–	**NZMH4-AE1000-S1** 290372	S	
		1250	630-1250	2 - 12	–	**NZMH4-AE1250-S1** 290373	S	
		1600	800-1600	2 - 12	–	**NZMH4-AE1600-S1** 290374	S	

Notes

B = box terminals
S = screw terminals

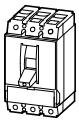
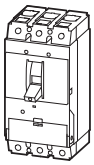
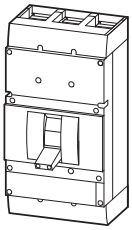
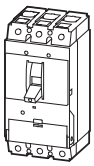
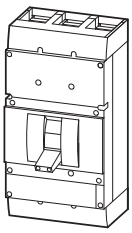
IEC/EN 60947-2

Terminal type:
NZM2: Cover NZM2-XKSA required
NZM3: Cover NZM3-XKSA required
NZM4: Isolated bar connection (screw terminal NZM4-XKS)

Circuit-breakers, switch-disconnectors

Circuit-breakers for 1000 VAC, 3 pole

HPL17048EN

	Switching capacity 1000 VAC 50/60 Hz	Rated current = Rated uninterrupted current	**Setting range** Overload releases	Short-circuit releases		**Fixed mounting Part no.** Article no.	Std. pack	
				Non-delayed	Delayed			
	I_{cu} kA	$I_n = I_u$ A	I_r A	$I_i = I_n$ x …	$I_{sd} = I_r$ x …			
				I>	I>			
Systems protection, cable protection, selectivity, generator protection								
IEC/EN 60947-2 R.m.s. value measurement and "thermal memory" Adjustable delay setting t_r • 2 – 20 s at 6 x I_r and infinite (without overload release) Adjustable delay t_{sd} • Steps: 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms i^2t constant function • NZM2 fixed OFF • NZM3, NZM4 switchable								
	**10**	100	50-100	1200 A fest	2 - 10	**NZMH2-VE100-S1** 100777	S	1 off
		160	80-160	1920 A fest	2 - 10	**NZMH2-VE160-S1** 100778	S	
		250	125-250	3000 A fest	2 - 10	**NZMH2-VE250-S1** 100779	S	
		400	200-400	2 - 11	2 - 10	**NZMH3-VE400-S1** 119367	S	
		630	315-630	2 - 8	1,5 - 7	**NZMH3-VE630-S1** 119368	S	
	**20**	630	315-630	2 - 12	2 - 10	**NZMH4-VE630-S1** 290375	S	
		800	400-800	2 - 12	2 - 10	**NZMH4-VE800-S1** 290376	S	
		1000	500-1000	2 - 12	2 - 10	**NZMH4-VE1000-S1** 290377	S	
		1250	630-1250	2 - 12	2 - 10	**NZMH4-VE1250-S1** 290378	S	
		1600	800-1600	2 - 12	2 - 10	**NZMH4-VE1600-S1** 290379	S	
Motor protection								
IEC/EN 60947-4-1, IEC/EN 60947-2 Phase-failure sensitivity R.m.s. value measurement and "thermal memory" Adjustable delay setting t_r • 2 – 20 s at 6 x I_r and infinite (without overload release)								
	**15**	220	110-220	2 - 14	–	**NZMH3-ME220-S1** 119364	S	1 off
		350	175-350	2 - 14	–	**NZMH3-ME350-S1** 119365	S	
		450	225-450	2 - 12	–	**NZMH3-ME450-S1** 119366	S	
	**20**	550	275-550	2 - 14	–	**NZMH4-ME550-S1** 290383	S	
		875	438-875	2 - 14	–	**NZMH4-ME875-S1** 290384	S	
		1400	700-1400	2 - 14	–	**NZMH4-ME1400-S1** 290385	S	

Notes

B = box terminals
S = screw terminals

Terminal type:
NZM2: Cover NZM2-XKSA required
NZM3: Cover NZM3-XKSA required
NZM4: Isolated bus connection (screw terminal NZM4-XKS)

Eaton is a power management company with 2018 sales of $21.6 billion. Its energy-efficient solutions help customers effectively manage electrical, hydraulic and mechanical power more reliably, safely and sustainably. The company is dedicated to improving the quality of life and the environment through the use of power management technologies and services. Eaton employs 99,000 people worldwide, and sells products to customers in more than 175 countries.

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