

PL10X/PL9X MCB series

More complete
More value



EATON

Powering Business Worldwide



PL10X/PL9X MCB series

New offer of Eaton power distribution LV components

Eaton is now introducing new MCB series: PL10X/PL9X which have optimized design to fit the application requirement of residential and commercial buildings, as well as OEM customers. They are designed with more advantages on safety, reliability and flexibility to fit different kinds of applications.

Features and advantages

- Contact position indicator red - green. Easy for customer to determine internal status, which makes the system more safety;
- Distinguished arc extinguishing mechanism, which can isolate your fault points reliably;
- Highly compatible with existing Eaton MCB offer, which make it easy for customers to do replacement and no need of much change on the system;
- Both top and bottom terminals can be the power or load side, without impact on breaking capability.

Miniature circuit breaker PL10X (10kA)



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MCB series

Miniature circuit breaker PL10X (10kA)

10kA Characteristics B



Rated current I_n (A)	Type designation	Article No.	Units per package
1 P			
6	PL10X-B6	CBE02842	12
10	PL10X-B10	CBE02843	12
16	PL10X-B16	CBE02844	12
20	PL10X-B20	CBE02845	12
25	PL10X-B25	CBE02846	12
32	PL10X-B32	CBE02847	12
40	PL10X-B40	CBE02848	12
50	PL10X-B50	CBE02849	12
63	PL10X-B63	CBE02850	12



1 pole+N, 2 modules			
6	PL10X-B6/1N	CBE02851	6
10	PL10X-B10/1N	CBE02852	6
16	PL10X-B16/1N	CBE02853	6
20	PL10X-B20/1N	CBE02854	6
25	PL10X-B25/1N	CBE02855	6
32	PL10X-B32/1N	CBE02856	6
40	PL10X-B40/1N	CBE02857	6
50	PL10X-B50/1N	CBE02858	6
63	PL10X-B63/1N	CBE02859	6



2 P			
6	PL10X-B6/2	CBE02860	6
10	PL10X-B10/2	CBE02861	6
16	PL10X-B16/2	CBE02862	6
20	PL10X-B20/2	CBE02863	6
25	PL10X-B25/2	CBE02864	6
32	PL10X-B32/2	CBE02865	6
40	PL10X-B40/2	CBE02866	6
50	PL10X-B50/2	CBE02867	6
63	PL10X-B63/2	CBE02868	6



3 P			
6	PL10X-B6/3	CBE02869	4
10	PL10X-B10/3	CBE02870	4
16	PL10X-B16/3	CBE02871	4
20	PL10X-B20/3	CBE02872	4
25	PL10X-B25/3	CBE02873	4
32	PL10X-B32/3	CBE02874	4
40	PL10X-B40/3	CBE02875	4
50	PL10X-B50/3	CBE02876	4
63	PL10X-B63/3	CBE02877	4



3 pole+N			
6	PL10X-B6/3N	CBE02878	3
10	PL10X-B10/3N	CBE02879	3
16	PL10X-B16/3N	CBE02880	3
20	PL10X-B20/3N	CBE02881	3
25	PL10X-B25/3N	CBE02882	3
32	PL10X-B32/3N	CBE02883	3
40	PL10X-B40/3N	CBE02884	3
50	PL10X-B50/3N	CBE02885	3
63	PL10X-B63/3N	CBE02886	3

10kA Characteristics B



Rated current I_n (A)	Type designation	Article No.	Units per package
4 P			
6	PL10X-B6/4	CBE02887	3
10	PL10X-B10/4	CBE02888	3
16	PL10X-B16/4	CBE02889	3
20	PL10X-B20/4	CBE02890	3
25	PL10X-B25/4	CBE02891	3
32	PL10X-B32/4	CBE02892	3
40	PL10X-B40/4	CBE02893	3
50	PL10X-B50/4	CBE02894	3
63	PL10X-B63/4	CBE02895	3

10kA Characteristics C



Rated current I_n (A)	Type designation	Article No.	Units per package
1 P			
6	PL10X-C6	CBE02788	12
10	PL10X-C10	CBE02789	12
16	PL10X-C16	CBE02790	12
20	PL10X-C20	CBE02791	12
25	PL10X-C25	CBE02792	12
32	PL10X-C32	CBE02793	12
40	PL10X-C40	CBE02794	12
50	PL10X-C50	CBE02795	12
63	PL10X-C63	CBE02796	12



1 pole+N, 2 modules			
6	PL10X-C6/1N	CBE02797	6
10	PL10X-C10/1N	CBE02798	6
16	PL10X-C16/1N	CBE02799	6
20	PL10X-C20/1N	CBE02800	6
25	PL10X-C25/1N	CBE02801	6
32	PL10X-C32/1N	CBE02802	6
40	PL10X-C40/1N	CBE02803	6
50	PL10X-C50/1N	CBE02804	6
63	PL10X-C63/1N	CBE02805	6



2 P			
6	PL10X-C6/2	CBE02806	6
10	PL10X-C10/2	CBE02807	6
16	PL10X-C16/2	CBE02808	6
20	PL10X-C20/2	CBE02809	6
25	PL10X-C25/2	CBE02810	6
32	PL10X-C32/2	CBE02811	6
40	PL10X-C40/2	CBE02812	6
50	PL10X-C50/2	CBE02813	6
63	PL10X-C63/2	CBE02814	6

MCB series

Miniature circuit breaker PL10X (10kA)

10kA Characteristics C



Rated current I_n (A)	Type designation	Article No.	Units per package
3 P			
6	PL10X-C6/3	CBE02815	4
10	PL10X-C10/3	CBE02816	4
16	PL10X-C16/3	CBE02817	4
20	PL10X-C20/3	CBE02818	4
25	PL10X-C25/3	CBE02819	4
32	PL10X-C32/3	CBE02820	4
40	PL10X-C40/3	CBE02821	4
50	PL10X-C50/3	CBE02822	4
63	PL10X-C63/3	CBE02823	4
3 pole+N			
6	PL10X-C6/3N	CBE02824	3
10	PL10X-C10/3N	CBE02825	3
16	PL10X-C16/3N	CBE02826	3
20	PL10X-C20/3N	CBE02827	3
25	PL10X-C25/3N	CBE02828	3
32	PL10X-C32/3N	CBE02829	3
40	PL10X-C40/3N	CBE02830	3
50	PL10X-C50/3N	CBE02831	3
63	PL10X-C63/3N	CBE02832	3
4 P			
6	PL10X-C6/4	CBE02833	3
10	PL10X-C10/4	CBE02834	3
16	PL10X-C16/4	CBE02835	3
20	PL10X-C20/4	CBE02836	3
25	PL10X-C25/4	CBE02837	3
32	PL10X-C32/4	CBE02838	3
40	PL10X-C40/4	CBE02839	3
50	PL10X-C50/4	CBE02840	3
63	PL10X-C63/4	CBE02841	3

10kA Characteristics D



Rated current I_n (A)	Type designation	Article No.	Units per package
1 P			
6	PL10X-D6	CBE02896	12
10	PL10X-D10	CBE02897	12
16	PL10X-D16	CBE02898	12
20	PL10X-D20	CBE02899	12
25	PL10X-D25	CBE02900	12
32	PL10X-D32	CBE02901	12
40	PL10X-D40	CBE02902	12
50	PL10X-D50	CBE02903	12
63	PL10X-D63	CBE02904	12

10kA Characteristics D



Rated current I_n (A)	Type designation	Article No.	Units per package
1 pole+N, 2 modules			
6	PL10X-D6/1N	CBE02905	6
10	PL10X-D10/1N	CBE02906	6
16	PL10X-D16/1N	CBE02907	6
20	PL10X-D20/1N	CBE02908	6
25	PL10X-D25/1N	CBE02909	6
32	PL10X-D32/1N	CBE02910	6
40	PL10X-D40/1N	CBE02911	6
50	PL10X-D50/1N	CBE02912	6
63	PL10X-D63/1N	CBE02913	6



2 P			
6	PL10X-D6/2	CBE02914	6
10	PL10X-D10/2	CBE02915	6
16	PL10X-D16/2	CBE02916	6
20	PL10X-D20/2	CBE02917	6
25	PL10X-D25/2	CBE02918	6
32	PL10X-D32/2	CBE02919	6
40	PL10X-D40/2	CBE02920	6
50	PL10X-D50/2	CBE02921	6
63	PL10X-D63/2	CBE02922	6



3 P			
6	PL10X-D6/3	CBE02923	4
10	PL10X-D10/3	CBE02924	4
16	PL10X-D16/3	CBE02925	4
20	PL10X-D20/3	CBE02926	4
25	PL10X-D25/3	CBE02927	4
32	PL10X-D32/3	CBE02928	4
40	PL10X-D40/3	CBE02929	4
50	PL10X-D50/3	CBE02930	4
63	PL10X-D63/3	CBE02931	4



3 pole+N			
6	PL10X-D6/3N	CBE02932	3
10	PL10X-D10/3N	CBE02933	3
16	PL10X-D16/3N	CBE02934	3
20	PL10X-D20/3N	CBE02935	3
25	PL10X-D25/3N	CBE02936	3
32	PL10X-D32/3N	CBE02937	3
40	PL10X-D40/3N	CBE02938	3
50	PL10X-D50/3N	CBE02939	3
63	PL10X-D63/3N	CBE02940	3



4 P			
6	PL10X-D6/4	CBE02941	3
10	PL10X-D10/4	CBE02942	3
16	PL10X-D16/4	CBE02943	3
20	PL10X-D20/4	CBE02944	3
25	PL10X-D25/4	CBE02945	3
32	PL10X-D32/4	CBE02946	3
40	PL10X-D40/4	CBE02947	3
50	PL10X-D50/4	CBE02948	3
63	PL10X-D63/4	CBE02949	3

MCB series

Miniature circuit breaker PL9X (6kA)

Miniature circuit breaker PL9X (6kA)



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6kA Characteristics B



Rated current I_n (A)	Type designation	Article No.	Units per package
1 P			
6	PL9X-B6	CBE02680	12
10	PL9X-B10	CBE02681	12
16	PL9X-B16	CBE02682	12
20	PL9X-B20	CBE02683	12
25	PL9X-B25	CBE02684	12
32	PL9X-B32	CBE02685	12
40	PL9X-B40	CBE02686	12
50	PL9X-B50	CBE02687	12
63	PL9X-B63	CBE02688	12



1 pole+N, 2 modules			
6	PL9X-B6/1N	CBE02689	6
10	PL9X-B10/1N	CBE02690	6
16	PL9X-B16/1N	CBE02691	6
20	PL9X-B20/1N	CBE02692	6
25	PL9X-B25/1N	CBE02693	6
32	PL9X-B32/1N	CBE02694	6
40	PL9X-B40/1N	CBE02695	6
50	PL9X-B50/1N	CBE02696	6
63	PL9X-B63/1N	CBE02697	6



2 P			
6	PL9X-B6/2	CBE02698	6
10	PL9X-B10/2	CBE02699	6
16	PL9X-B16/2	CBE02700	6
20	PL9X-B20/2	CBE02701	6
25	PL9X-B25/2	CBE02702	6
32	PL9X-B32/2	CBE02703	6
40	PL9X-B40/2	CBE02704	6
50	PL9X-B50/2	CBE02705	6
63	PL9X-B63/2	CBE02706	6



3 P			
6	PL9X-B6/3	CBE02707	4
10	PL9X-B10/3	CBE02708	4
16	PL9X-B16/3	CBE02709	4
20	PL9X-B20/3	CBE02710	4
25	PL9X-B25/3	CBE02711	4
32	PL9X-B32/3	CBE02712	4
40	PL9X-B40/3	CBE02713	4
50	PL9X-B50/3	CBE02714	4
63	PL9X-B63/3	CBE02715	4



3 pole+N			
6	PL9X-B6/3N	CBE02716	3
10	PL9X-B10/3N	CBE02717	3
16	PL9X-B16/3N	CBE02718	3
20	PL9X-B20/3N	CBE02719	3
25	PL9X-B25/3N	CBE02720	3
32	PL9X-B32/3N	CBE02721	3
40	PL9X-B40/3N	CBE02722	3
50	PL9X-B50/3N	CBE02723	3
63	PL9X-B63/3N	CBE02724	3

MCB series

Miniature circuit breaker PL9X (6kA)



6kA Characteristics B

Rated current I_n (A)	Type designation	Article No.	Units per package
4 P			
6	PL9X-B6/4	CBE02725	3
10	PL9X-B10/4	CBE02726	3
16	PL9X-B16/4	CBE02727	3
20	PL9X-B20/4	CBE02728	3
25	PL9X-B25/4	CBE02729	3
32	PL9X-B32/4	CBE02730	3
40	PL9X-B40/4	CBE02731	3
50	PL9X-B50/4	CBE02732	3
63	PL9X-B63/4	CBE02733	3



6kA Characteristics C

Rated current I_n (A)	Type designation	Article No.	Units per package
1 P			
6	PL9X-C6	CBE02626	12
10	PL9X-C10	CBE02627	12
16	PL9X-C16	CBE02628	12
20	PL9X-C20	CBE02629	12
25	PL9X-C25	CBE02630	12
32	PL9X-C32	CBE02631	12
40	PL9X-C40	CBE02632	12
50	PL9X-C50	CBE02633	12
63	PL9X-C63	CBE02634	12



1 pole+N, 2 modules

6	PL9X-C6/1N	CBE02635	6
10	PL9X-C10/1N	CBE02636	6
16	PL9X-C16/1N	CBE02637	6
20	PL9X-C20/1N	CBE02638	6
25	PL9X-C25/1N	CBE02639	6
32	PL9X-C32/1N	CBE02640	6
40	PL9X-C40/1N	CBE02641	6
50	PL9X-C50/1N	CBE02642	6
63	PL9X-C63/1N	CBE02643	6



2 P			
6	PL9X-C6/2	CBE02644	6
10	PL9X-C10/2	CBE02645	6
16	PL9X-C16/2	CBE02646	6
20	PL9X-C20/2	CBE02647	6
25	PL9X-C25/2	CBE02648	6
32	PL9X-C32/2	CBE02649	6
40	PL9X-C40/2	CBE02650	6
50	PL9X-C50/2	CBE02651	6
63	PL9X-C63/2	CBE02652	6

6kA Characteristics C



Rated current I_n (A)	Type designation	Article No.	Units per package
3 P			
6	PL9X-C6/3	CBE02653	4
10	PL9X-C10/3	CBE02654	4
16	PL9X-C16/3	CBE02655	4
20	PL9X-C20/3	CBE02656	4
25	PL9X-C25/3	CBE02657	4
32	PL9X-C32/3	CBE02658	4
40	PL9X-C40/3	CBE02659	4
50	PL9X-C50/3	CBE02660	4
63	PL9X-C63/3	CBE02661	4
3 pole+N			
6	PL9X-C6/3N	CBE02662	3
10	PL9X-C10/3N	CBE02663	3
16	PL9X-C16/3N	CBE02664	3
20	PL9X-C20/3N	CBE02665	3
25	PL9X-C25/3N	CBE02666	3
32	PL9X-C32/3N	CBE02667	3
40	PL9X-C40/3N	CBE02668	3
50	PL9X-C50/3N	CBE02669	3
63	PL9X-C63/3N	CBE02670	3
4 P			
6	PL9X-C6/4	CBE02671	3
10	PL9X-C10/4	CBE02672	3
16	PL9X-C16/4	CBE02673	3
20	PL9X-C20/4	CBE02674	3
25	PL9X-C25/4	CBE02675	3
32	PL9X-C32/4	CBE02676	3
40	PL9X-C40/4	CBE02677	3
50	PL9X-C50/4	CBE02678	3
63	PL9X-C63/4	CBE02679	3

6kA Characteristics D



Rated current I_n (A)	Type designation	Article No.	Units per package
1 P			
6	PL9X-D6	CBE02734	12
10	PL9X-D10	CBE02735	12
16	PL9X-D16	CBE02736	12
20	PL9X-D20	CBE02737	12
25	PL9X-D25	CBE02738	12
32	PL9X-D32	CBE02739	12
40	PL9X-D40	CBE02740	12
50	PL9X-D50	CBE02741	12
63	PL9X-D63	CBE02742	12

MCB series

Miniature circuit breaker PL9X (6kA)

6kA Characteristics D



Rated current I_n (A)	Type designation	Article No.	Units per package
1 pole+N, 2 modules			
6	PL9X-D6/1N	CBE02743	6
10	PL9X-D10/1N	CBE02744	6
16	PL9X-D16/1N	CBE02745	6
20	PL9X-D20/1N	CBE02746	6
25	PL9X-D25/1N	CBE02747	6
32	PL9X-D32/1N	CBE02748	6
40	PL9X-D40/1N	CBE02749	6
50	PL9X-D50/1N	CBE02750	6
63	PL9X-D63/1N	CBE02751	6



2 P			
6	PL9X-D6/2	CBE02752	6
10	PL9X-D10/2	CBE02753	6
16	PL9X-D16/2	CBE02754	6
20	PL9X-D20/2	CBE02755	6
25	PL9X-D25/2	CBE02756	6
32	PL9X-D32/2	CBE02757	6
40	PL9X-D40/2	CBE02758	6
50	PL9X-D50/2	CBE02759	6
63	PL9X-D63/2	CBE02760	6



3 P			
6	PL9X-D6/3	CBE02761	4
10	PL9X-D10/3	CBE02762	4
16	PL9X-D16/3	CBE02763	4
20	PL9X-D20/3	CBE02764	4
25	PL9X-D25/3	CBE02765	4
32	PL9X-D32/3	CBE02766	4
40	PL9X-D40/3	CBE02767	4
50	PL9X-D50/3	CBE02768	4
63	PL9X-D63/3	CBE02769	4



3 pole+N			
6	PL9X-D6/3N	CBE02770	3
10	PL9X-D10/3N	CBE02771	3
16	PL9X-D16/3N	CBE02772	3
20	PL9X-D20/3N	CBE02773	3
25	PL9X-D25/3N	CBE02774	3
32	PL9X-D32/3N	CBE02775	3
40	PL9X-D40/3N	CBE02776	3
50	PL9X-D50/3N	CBE02777	3
63	PL9X-D63/3N	CBE02778	3



4 P			
6	PL9X-D6/4	CBE02779	3
10	PL9X-D10/4	CBE02780	3
16	PL9X-D16/4	CBE02781	3
20	PL9X-D20/4	CBE02782	3
25	PL9X-D25/4	CBE02783	3
32	PL9X-D32/4	CBE02784	3
40	PL9X-D40/4	CBE02785	3
50	PL9X-D50/4	CBE02786	3
63	PL9X-D63/4	CBE02787	3

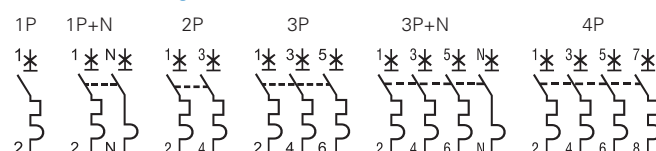
Miniature circuit breaker (MCB)PL10X, PL9X

- Contacts are made of arc-resistant materials, leading to stronger breaking capacity and longer electrical life;
- An anti-electrical shock structure is adopted, with safe and reliable wirings;
- Imported engineering plastics with high combustion retardance and stamping withstand are used for enclosures and parts;
- Integrated design of metal mechanism and mechanism thermal tripping, with high breaking capacity, long electrical life and accurate overload actions;
- Modular structures, with freely combined modules of a complete series;
- Bi-stable mounting snap-on design, easy for removal;
- Thanks for shorter internal circuits, the PL10X and PL9X series MCBs offer lower power consumption, green environment, and low carbon emission.

Accessories (on PL10X/PL9X):

Auxiliary contact	
Subsequent mounting	ZPX-IHK
Tripping signal contact	
Subsequent mounting	ZPX-NHK
Shunt trip	ZPX-ASA...
Undervoltage release	ZX-USA
Overvoltage release	ZX-OSA
Over/undervoltage release	ZX-UOSA

Connection diagrams

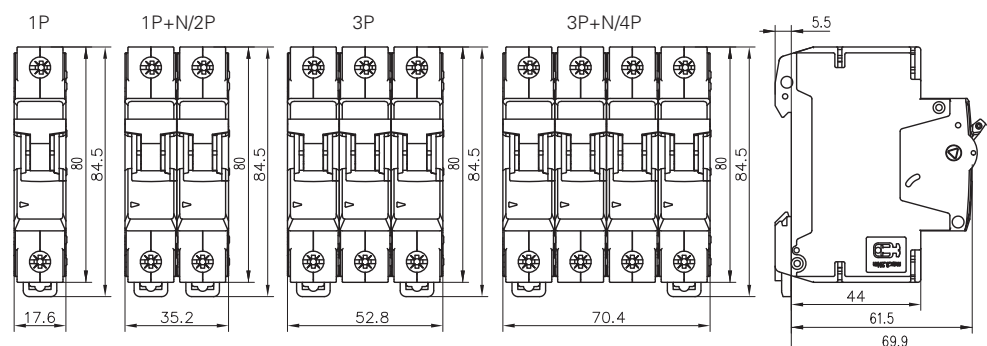


Technical data

Electrical	
Design according	GB/T10963.1 and IEC/EN 60898-1
Rated voltage U_n	230/400V
Operational voltage	240/415V
Rated insulation voltage U_i	500V
Rated frequency	50/60Hz
Rated breaking capacity I_{cn}	
PL10X	10kA
PL9X	6kA
Instantaneous tripping characteristics	B, C, D
Selective protection level	Level 3
Electrical Lifetime	10000
Mechanical Lifetime	20000
Line voltage connection	optional (above/below)
Allowable ambient temperature range	-25°C to 70°C

Humidity	Max. RH (at 25°C): ≤ 95% as daily average ≤ 90% as monthly average
Pollution degree	2
Mechanical	
Mounting	IEC standard DIN rail 35 mm
Housing protection degree	IP20
Upper and lower terminals	Open-mounted/lift terminal
Terminal protection	Finger and hand touch safe
Terminal capacity	1-25 mm ²
Fastening torque for terminal screw	2-2.4 Nm
Mounting	Functions are not subject to positions

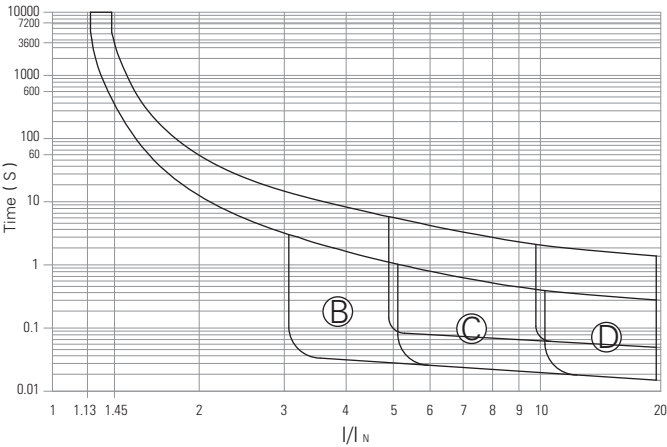
Dimension (mm)



MCB series

Miniature circuit breaker PL10/PL9X

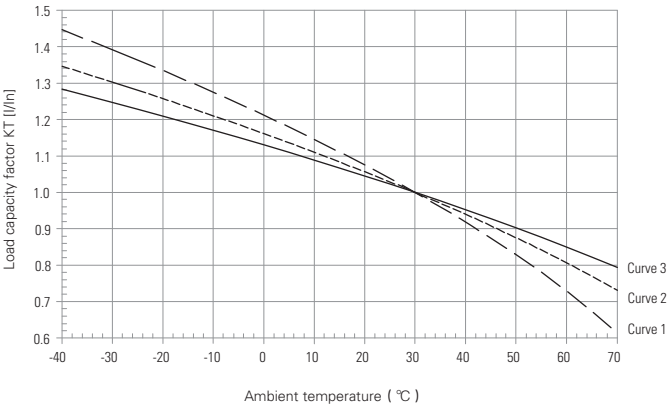
Time - Current characteristics



Temperature compensation curve

At different temperatures, the device's ratings should not exceed the replenishment coefficients corresponding to the overload tripping currents under normal conditions.

Curves corresponding to correction factors									
Rated current (A)	06	10	16	20	25	32	40	50	63
B	1	1	2	2	2	2	2	2	3
C	1	1	2	2	2	2	2	2	3
D	1	1	2	2	2	2	2	2	3



Frequency coefficient

Thermal tripping: unchanged
Electromagnetic tripping: multiply the corresponding value by the frequency coefficient (k)

F (Hz)	16Hz ~ 60Hz	100 Hz	200 Hz	300 Hz	400 Hz
K	1	1.1	1.2	1.4	1.5

Volume reduction coefficient in plateau area

Altitude (m)	2000	3000	4000	5000
Rated current I _n	1	0.97	0.91	0.86
Rated insulation voltage U _i	1	0.90	0.82	0.76
Power frequency withstand voltage	1	0.90	0.82	0.76
Rated impact withstand voltage U _{imp}	1	0.90	0.82	0.76
Rated breaking capacity I _{cn}	1	0.87	0.77	0.67
Electrical Lifetime	1	0.87	0.77	0.67

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