SG36011

Description

- High-quality miniature circuit breakers for residential applications
- Contact position indicator red - green
- Guide for secure terminal connection
- 3-position DIN rail clip, permits removal from existing busbar system
- Comprehensive range of accessories can be mounted subsequently
- Rated currents up to 63 A
- Tripping characteristics B, C
- Rated breaking capacity 4.5 kA according to IEC/EN 60898-1

4.5 kA, Characteristic B

SG28411

1-pole

Rated current I_n (A)	Type Designation	Article No.	Units per package
1	PLS4-B1	243141	12/120
1.5	PLS4-B1,5	243142	12/120
1.6	PLS4-B1,6	243143	12/120
2	PLS4-B2	243144	12/120
2.5	PLS4-B2,5	243145	12/120
3	PLS4-B3	243146	12/120
3.5	PLS4-B3,5	243147	12/120
4	PLS4-B4	243148	12/120
5	PLS4-B5	243149	12/120
6	PLS4-B6	243150	12/120
8	PLS4-B8	243151	12/120
10	PLS4-B10	243152	12/120
12	PLS4-B12	243153	12/120
13	PLS4-B13	243154	12/120
15	PLS4-B15	243155	12/120
16	PLS4-B16	243156	12/120
20	PLS4-B20	243157	12/120
25	PLS4-B25	243158	12/120
32	PLS4-B32	243159	12/120
40	PLS4-B40	243160	12/120
50	PLS4-B50	243161	12/120
63	PLS4-B63	243162	12/120

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1+N-pole 2MU

Rated current I_n (A)	Type Designation	Article No.	Units per package
1	PLZ4-B1/1N	243189	1/60
1.5	PLZ4-B1,5/1N	243190	1/60
1.6	PLZ4-B1,6/1N	243191	1/60
2	PLZ4-B2/1N	243192	1/60
2.5	PLZ4-B2,5/1N	243193	1/60
3	PLZ4-B3/1N	243194	1/60
3.5	PLZ4-B3,5/1N	243195	1/60
4	PLZ4-B4/1N	243196	1/60
5	PLZ4-B5/1N	243197	1/60
6	PLZ4-B6/1N	243198	1/60
8	PLZ4-B8/1N	243199	1/60
10	PLZ4-B10/1N	243200	1/60
12	PLZ4-B12/1N	243201	1/60
13	PLZ4-B13/1N	243202	1/60
15	PLZ4-B15/1N	243203	1/60
16	PLZ4-B16/1N	243204	1/60
20	PLZ4-B20/1N	243205	1/60
25	PLZ4-B25/1N	243206	1/60
32	PLZ4-B32/1N	243207	1/60
40	PLZ4-B40/1N	243208	1/60
50	PLZ4-B50/1N	243209	1/60
63	PLZ4-B63/1N	243210	1/60

Explanation PLS4:
P = xPole, LS = Miniature Circuit Breaker, 4 = 4.5 kA

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Rated current I_n (A)	Type Designation	Article No.	Units per package
2-pole			
1	PLS4-B1/2	243237	1/60
1.5	PLS4-B1,5/2	243238	1/60
1.6	PLS4-B1,6/2	243239	1/60
2	PLS4-B2/2	243240	1/60
2.5	PLS4-B2,5/2	243241	1/60
3	PLS4-B3/2	243242	1/60
3.5	PLS4-B3,5/2	243243	1/60
4	PLS4-B4/2	243244	1/60
5	PLS4-B5/2	243245	1/60
6	PLS4-B6/2	243246	1/60
8	PLS4-B8/2	243247	1/60
10	PLS4-B10/2	243248	1/60
12	PLS4-B12/2	243249	1/60
13	PLS4-B13/2	243250	1/60
15	PLS4-B15/2	243251	1/60
16	PLS4-B16/2	243252	1/60
20	PLS4-B20/2	243253	1/60
25	PLS4-B25/2	243254	1/60
32	PLS4-B32/2	243255	1/60
40	PLS4-B40/2	243256	1/60
50	PLS4-B50/2	243257	1/60
63	PLS4-B63/2	243258	1/60

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3-pole			
1	PLS4-B1/3	243285	1/40
1.5	PLS4-B1,5/3	243286	1/40
1.6	PLS4-B1,6/3	243287	1/40
2	PLS4-B2/3	243288	1/40
2.5	PLS4-B2,5/3	243289	1/40
3	PLS4-B3/3	243290	1/40
3.5	PLS4-B3,5/3	243291	1/40
4	PLS4-B4/3	243292	1/40
5	PLS4-B5/3	243293	1/40
6	PLS4-B6/3	243294	1/40
8	PLS4-B8/3	243295	1/40
10	PLS4-B10/3	243296	1/40
12	PLS4-B12/3	243297	1/40
13	PLS4-B13/3	243298	1/40
15	PLS4-B15/3	243299	1/40
16	PLS4-B16/3	243300	1/40
20	PLS4-B20/3	243301	1/40
25	PLS4-B25/3	243302	1/40
32	PLS4-B32/3	243303	1/40
40	PLS4-B40/3	243304	1/40
50	PLS4-B50/3	243305	1/40
63	PLS4-B63/3	243306	1/40

Explanation PLS4:
P = xPole, LS = Miniature Circuit Breaker, 4 = 4.5 kA

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Rated current I_n (A)	Type Designation	Article No.	Units per package
3+N-pole			
1	PLS4-B1/3N	243333	1/30
1.5	PLS4-B1,5/3N	243334	1/30
1.6	PLS4-B1,6/3N	243335	1/30
2	PLS4-B2/3N	243336	1/30
2.5	PLS4-B2,5/3N	243337	1/30
3	PLS4-B3/3N	243338	1/30
3.5	PLS4-B3,5/3N	243339	1/30
4	PLS4-B4/3N	243340	1/30
5	PLS4-B5/3N	243341	1/30
6	PLS4-B6/3N	243342	1/30
8	PLS4-B8/3N	243343	1/30
10	PLS4-B10/3N	243344	1/30
12	PLS4-B12/3N	243345	1/30
13	PLS4-B13/3N	243346	1/30
15	PLS4-B15/3N	243347	1/30
16	PLS4-B16/3N	243348	1/30
20	PLS4-B20/3N	243349	1/30
25	PLS4-B25/3N	243350	1/30
32	PLS4-B32/3N	243351	1/30
40	PLS4-B40/3N	243352	1/30
50	PLS4-B50/3N	243353	1/30
63	PLS4-B63/3N	243354	1/30

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4-pole			
1	PLS4-B1/4	243381	1/30
1.5	PLS4-B1,5/4	243382	1/30
1.6	PLS4-B1,6/4	243383	1/30
2	PLS4-B2/4	243384	1/30
2.5	PLS4-B2,5/4	243385	1/30
3	PLS4-B3/4	243386	1/30
3.5	PLS4-B3,5/4	243387	1/30
4	PLS4-B4/4	243388	1/30
5	PLS4-B5/4	243389	1/30
6	PLS4-B6/4	243390	1/30
8	PLS4-B8/4	243391	1/30
10	PLS4-B10/4	243392	1/30
12	PLS4-B12/4	243393	1/30
13	PLS4-B13/4	243394	1/30
15	PLS4-B15/4	243395	1/30
16	PLS4-B16/4	243396	1/30
20	PLS4-B20/4	243397	1/30
25	PLS4-B25/4	243398	1/30
32	PLS4-B32/4	243399	1/30
40	PLS4-B40/4	243400	1/30
50	PLS4-B50/4	243401	1/30
63	PLS4-B63/4	243402	1/30

Explanation PLS4:
P = xPole, LS = Miniature Circuit Breaker, 4 = 4.5 kA

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4.5 kA, Characteristic C

1-pole

Rated current I_n (A)	Type Designation	Article No.	Units per package
0.16	PLS4-C0.16	243163	12/120
0.25	PLS4-C0,25	243164	12/120
0.5	PLS4-C0,5	243166	12/120
0.75	PLS4-C0,75	243165	12/120
1	PLS4-C1	243167	12/120
1.5	PLS4-C1,5	243168	12/120
1.6	PLS4-C1,6	243169	12/120
2	PLS4-C2	243170	12/120
2.5	PLS4-C2,5	243171	12/120
3	PLS4-C3	243172	12/120
3.5	PLS4-C3,5	243173	12/120
4	PLS4-C4	243174	12/120
5	PLS4-C5	243175	12/120
6	PLS4-C6	243176	12/120
8	PLS4-C8	243177	12/120
10	PLS4-C10	243178	12/120
12	PLS4-C12	243179	12/120
13	PLS4-C13	243180	12/120
15	PLS4-C15	243181	12/120
16	PLS4-C16	243182	12/120
20	PLS4-C20	243183	12/120
25	PLS4-C25	243184	12/120
32	PLS4-C32	243185	12/120
40	PLS4-C40	243186	12/120
50	PLS4-C50	243187	12/120
63	PLS4-C63	243188	12/120

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1+N-pole 2MU

0.16	PLZ4-C0.16/1N	243211	1/60
0.25	PLZ4-C0,25/1N	243212	1/60
0.5	PLZ4-C0,5/1N	243214	1/60
0.75	PLZ4-C0,75/1N	243213	1/60
1	PLZ4-C1/1N	243215	1/60
1.5	PLZ4-C1,5/1N	243216	1/60
1.6	PLZ4-C1,6/1N	243217	1/60
2	PLZ4-C2/1N	243218	1/60
2.5	PLZ4-C2,5/1N	243219	1/60
3	PLZ4-C3/1N	243220	1/60
3.5	PLZ4-C3,5/1N	243221	1/60
4	PLZ4-C4/1N	243222	1/60
5	PLZ4-C5/1N	243223	1/60
6	PLZ4-C6/1N	243224	1/60
8	PLZ4-C8/1N	243225	1/60
10	PLZ4-C10/1N	243226	1/60
12	PLZ4-C12/1N	243227	1/60
13	PLZ4-C13/1N	243228	1/60
15	PLZ4-C15/1N	243229	1/60
16	PLZ4-C16/1N	243230	1/60
20	PLZ4-C20/1N	243231	1/60
25	PLZ4-C25/1N	243232	1/60
32	PLZ4-C32/1N	243233	1/60
40	PLZ4-C40/1N	243234	1/60
50	PLZ4-C50/1N	243235	1/60
63	PLZ4-C63/1N	243236	1/60

Explanation PLS4:
P = xPole, LS = Miniature Circuit Breaker, 4 = 4.5 kA

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Rated current I_n (A)	Type Designation	Article No.	Units per package
2-pole			
0.16	PLS4-C0.16/2	243259	1/60
0.25	PLS4-C0,25/2	243260	1/60
0.5	PLS4-C0,5/2	243262	1/60
0.75	PLS4-C0,75/2	243261	1/60
1	PLS4-C1/2	243263	1/60
1.5	PLS4-C1,5/2	243264	1/60
1.6	PLS4-C1,6/2	243265	1/60
2	PLS4-C2/2	243266	1/60
2.5	PLS4-C2,5/2	243267	1/60
3	PLS4-C3/2	243268	1/60
3.5	PLS4-C3,5/2	243269	1/60
4	PLS4-C4/2	243270	1/60
5	PLS4-C5/2	243271	1/60
6	PLS4-C6/2	243272	1/60
8	PLS4-C8/2	243273	1/60
10	PLS4-C10/2	243274	1/60
12	PLS4-C12/2	243275	1/60
13	PLS4-C13/2	243276	1/60
15	PLS4-C15/2	243277	1/60
16	PLS4-C16/2	243278	1/60
20	PLS4-C20/2	243279	1/60
25	PLS4-C25/2	243280	1/60
32	PLS4-C32/2	243281	1/60
40	PLS4-C40/2	243282	1/60
50	PLS4-C50/2	243283	1/60
63	PLS4-C63/2	243284	1/60

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3-pole			
0.16	PLS4-C0.16/3	243307	1/40
0.25	PLS4-C0,25/3	243308	1/40
0.5	PLS4-C0,5/3	243310	1/40
0.75	PLS4-C0,75/3	243309	1/40
1	PLS4-C1/3	243311	1/40
1.5	PLS4-C1,5/3	243312	1/40
1.6	PLS4-C1,6/3	243313	1/40
2	PLS4-C2/3	243314	1/40
2.5	PLS4-C2,5/3	243315	1/40
3	PLS4-C3/3	243316	1/40
3.5	PLS4-C3,5/3	243317	1/40
4	PLS4-C4/3	243318	1/40
5	PLS4-C5/3	243319	1/40
6	PLS4-C6/3	243320	1/40
8	PLS4-C8/3	243321	1/40
10	PLS4-C10/3	243322	1/40
12	PLS4-C12/3	243323	1/40
13	PLS4-C13/3	243324	1/40
15	PLS4-C15/3	243325	1/40
16	PLS4-C16/3	243326	1/40
20	PLS4-C20/3	243327	1/40
25	PLS4-C25/3	243328	1/40
32	PLS4-C32/3	243329	1/40
40	PLS4-C40/3	243330	1/40
50	PLS4-C50/3	243331	1/40
63	PLS4-C63/3	243332	1/40

Explanation PLS4:
P = xPole, LS = Miniature Circuit Breaker, 4 = 4.5 kA

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Rated current I_n (A)	Type Designation	Article No.	Units per package
3+N-pole			
0.16	PLS4-C0.16/3N	243355	1/30
0.25	PLS4-C0,25/3N	243356	1/30
0.5	PLS4-C0,5/3N	243358	1/30
0.75	PLS4-C0,75/3N	243357	1/30
1	PLS4-C1/3N	243359	1/30
1.5	PLS4-C1,5/3N	243360	1/30
1.6	PLS4-C1,6/3N	243361	1/30
2	PLS4-C2/3N	243362	1/30
2.5	PLS4-C2,5/3N	243363	1/30
3	PLS4-C3/3N	243364	1/30
3.5	PLS4-C3,5/3N	243365	1/30
4	PLS4-C4/3N	243366	1/30
5	PLS4-C5/3N	243367	1/30
6	PLS4-C6/3N	243368	1/30
8	PLS4-C8/3N	243369	1/30
10	PLS4-C10/3N	243370	1/30
12	PLS4-C12/3N	243371	1/30
13	PLS4-C13/3N	243372	1/30
15	PLS4-C15/3N	243373	1/30
16	PLS4-C16/3N	243374	1/30
20	PLS4-C20/3N	243375	1/30
25	PLS4-C25/3N	243376	1/30
32	PLS4-C32/3N	243377	1/30
40	PLS4-C40/3N	243378	1/30
50	PLS4-C50/3N	243379	1/30
63	PLS4-C63/3N	243380	1/30

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4-pole			
0.16	PLS4-C0.16/4	243403	1/30
0.25	PLS4-C0,25/4	243404	1/30
0.5	PLS4-C0,5/4	243406	1/30
0.75	PLS4-C0,75/4	243405	1/30
1	PLS4-C1/4	243407	1/30
1.5	PLS4-C1,5/4	243408	1/30
1.6	PLS4-C1,6/4	243409	1/30
2	PLS4-C2/4	243410	1/30
2.5	PLS4-C2,5/4	243411	1/30
3	PLS4-C3/4	243412	1/30
3.5	PLS4-C3,5/4	243413	1/30
4	PLS4-C4/4	243414	1/30
5	PLS4-C5/4	243415	1/30
6	PLS4-C6/4	243416	1/30
8	PLS4-C8/4	243417	1/30
10	PLS4-C10/4	243418	1/30
12	PLS4-C12/4	243419	1/30
13	PLS4-C13/4	243420	1/30
15	PLS4-C15/4	243421	1/30
16	PLS4-C16/4	243422	1/30
20	PLS4-C20/4	243423	1/30
25	PLS4-C25/4	243424	1/30
32	PLS4-C32/4	243425	1/30
40	PLS4-C40/4	243426	1/30
50	PLS4-C50/4	243427	1/30
63	PLS4-C63/4	243428	1/30

Explanation PLS4:
P = xPole, LS = Miniature Circuit Breaker, 4 = 4.5 kA

Specifications | Miniature Circuit Breakers PLS..., PLZ...

Description

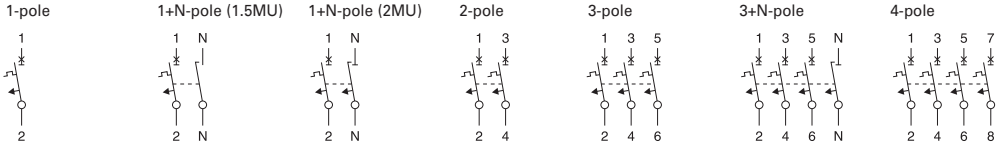
- High selectivity between MCB and back-up fuse due to low let-through energy
- Compatible with standard busbar
- Twin-purpose terminal (lift/open-mouthed) above and below
- Busbar positioning optionally above or below
- Meets the requirements of insulation co-ordination, distance between contacts ≥ 4 mm, for secure isolation
- Suitable for applications up to 48 V DC (use PLS6-DC for higher DC voltages)

Accessories:		
Auxiliary switch for subsequent installation	ZP-IHK	286052
	ZP-WHK	286053
Tripping signal switch for subsequent installation	ZP-NHK	248437
Remote control and automatic switching device	Z-FW/LP	248296
Shunt trip release	ZP-ASA/..	248438, 248439
Undervoltage release	Z-USA/..	248288-248291
Compact enclosure	KLV-TC-2	276240
	KLV-TC-4	276241
Additional terminal 35 mm²	Z-HA-EK/35	263960
Switching interlock	Z-IS/SPE-1TE	274418

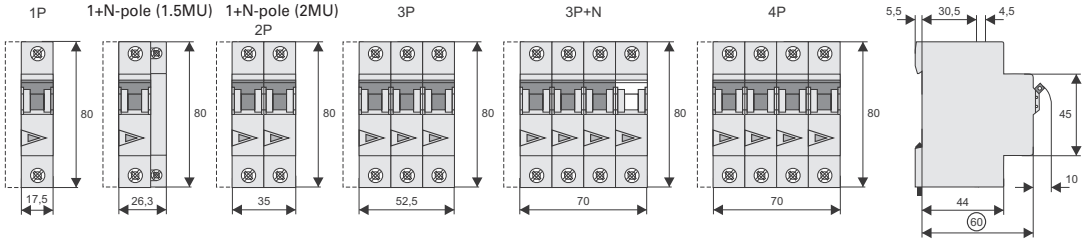
Technical Data

		PLS..., PLZ...
Electrical		
Design according to		IEC/EN 60898-1
Current test marks as printed onto the device		
Rated voltage	U_n	AC: 230/400 V
		DC: 48 V (per pole, max. 2 poles)
Rated frequency		50/60 Hz
Rated breaking capacity according to IEC/EN 60898-1	I_{cn}	
PLSM, PLZM		10 kA
PLS6, PLZ6		6 kA
PLS4, PLZ4		4.5 kA
Characteristic		B, C, D
Back-up fuse		
PLSM, PLZM		max. 125 A gL
PLS6, PLZ6		max. 100 A gL
PLS4, PLZ4		max. 80 A gL
Selectivity class		3
Endurance		
electrical components		≥ 10,000 switching operations
mechanical components		≥ 20,000 switching operations
Line voltage connection		at will (above/below)
Mechanical		
Frame size		45 mm
Device height		80 mm
Device width		17.5 mm per pole (1MU)
		26.3 mm: device 1P+N (1.5MU)
Mounting		quick fastening with 3 lock-in positions on DIN rail IEC/EN 60715
Degree of protection		IP20
Upper and lower terminals		open mouthed/lift terminals
Terminal protection		finger and hand touch safe, DGUV VS3, EN 50274
Terminal capacity		1-25 mm²
(1p+N, 1,5TE)		1-25 mm² / 1-16 mm² (N)
Terminal torque		2-2.4 Nm
(1p+N, 1,5TE)		2-2.4 Nm / 1.2-1.5 Nm (N)
Busbar thickness		0.8 - 2 mm (except N 0.5MU)
Mounting		independent of position

Connection diagrams

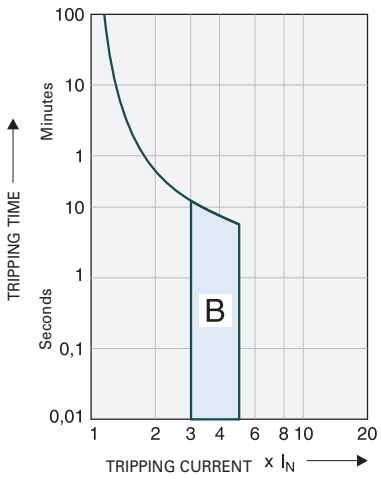


Dimensions (mm)

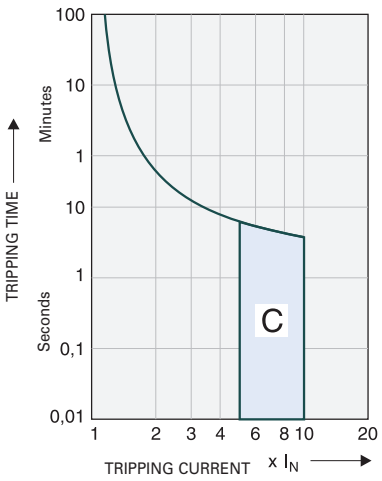


Tripping Characteristics (IEC/EN 60898-1)

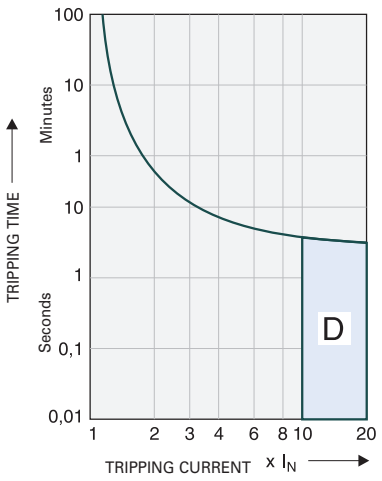
Tripping characteristic B



Tripping characteristic C



Tripping characteristic D



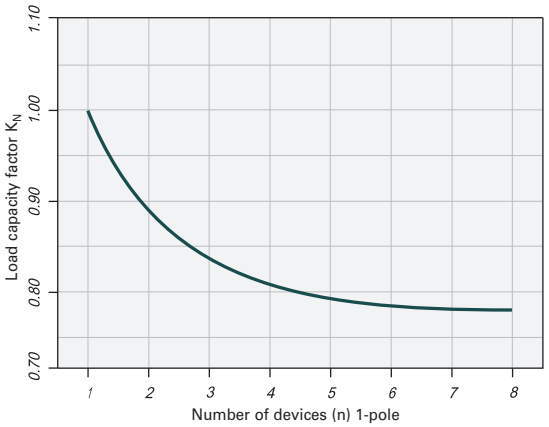
Quick-acting (B), slow (C), very slow (D)

Effect of the Ambient Temperature on Thermal Tripping Behaviour

Adjusted rated current values according to the ambient temperature

	Ambient temperature T [°C]															
I_n [A]	-25	-20	-10	0	10	20	30	35	40	45	50	55	60	65	70	75
0.16	0.20	0.19	0.19	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.13
0.25	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21
0.5	0.61	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.48	0.47	0.46	0.45	0.44	0.43	0.42	0.41
0.75	0.92	0.90	0.87	0.84	0.81	0.78	0.75	0.74	0.73	0.71	0.69	0.68	0.66	0.65	0.64	0.62
1	1.2	1.2	1.2	1.1	1.1	1.0	1.0	0.99	0.97	0.95	0.93	0.90	0.89	0.87	0.85	0.83
1.5	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.2
1.6	2.0	1.9	1.9	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.3
2	2.4	2.4	2.3	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.7	1.7	1.7
2.5	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.4	2.4	2.3	2.3	2.2	2.2	2.1	2.1
3	3.7	3.6	3.5	3.4	3.3	3.1	3.0	3.0	2.9	2.8	2.8	2.7	2.7	2.6	2.5	2.5
3.5	4.3	4.2	4.1	3.9	3.8	3.7	3.5	3.4	3.4	3.3	3.2	3.2	3.1	3.0	3.0	2,9
4	4.9	4.8	4.7	4.5	4.3	4.2	4.0	3.9	3.9	3.8	3.7	3.6	3.5	3.5	3.4	3.3
5	6.1	6.0	5.8	5.6	5.4	5.2	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1
6	7.3	7.2	7.0	6.7	6.5	6.3	6.0	5.9	5.8	5.7	5.6	5.4	5.3	5.2	5.1	5.0
8	9.8	9.6	9.3	9.0	8.7	8.4	8.0	7.9	7.7	7.6	7.4	7.2	7.1	6,9	6,8	6,6
10	12	12	12	11	11	10	10	9.9	9.7	9.5	9.3	9.0	8.9	8.7	8.5	8.3
12	15	14	14	13	13	13	12	12	12	11	11	11	11	10	10	10
13	16	16	15	15	14	14	13	13	13	12	12	12	12	11	11	11
15	18	18	17	17	16	16	15	15	15	14	14	14	13	13	13	12
16	20	19	19	18	17	17	16	16	15	15	15	14	14	14	14	13
20	24	24	23	22	22	21	20	20	19	19	19	18	18	17	17	17
25	31	30	29	28	27	26	25	25	24	24	23	23	22	22	21	21
32	39	38	37	36	35	33	32	32	31	30	30	29	28	28	27	26
40	49	48	47	45	43	42	40	39	39	38	37	36	35	35	34	33
50	61	60	58	56	54	52	50	49	48	47	46	45	44	43	42	41
63	77	76	73	71	68	66	63	62	61	60	58	57	56	55	53	52

Load Capacity of Series Connected Miniature Circuit Breakers



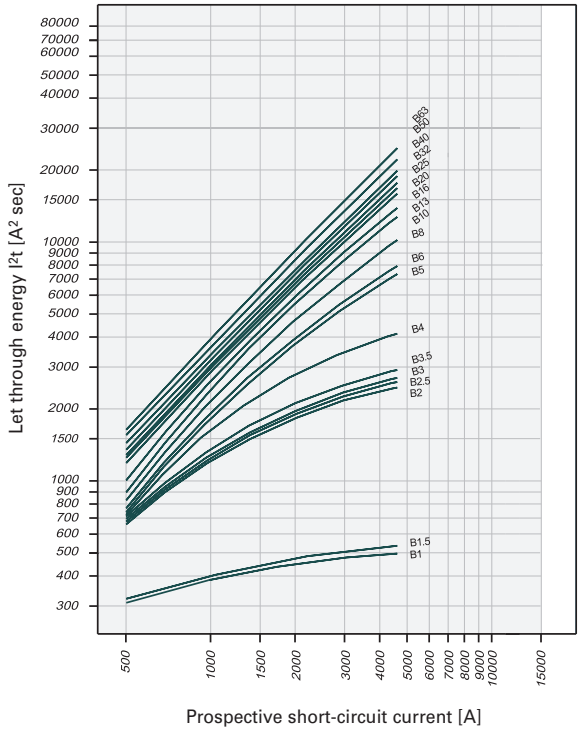
Effect of Power Frequency

Effect of power frequency on the tripping behaviour I_{MA} of the quick release

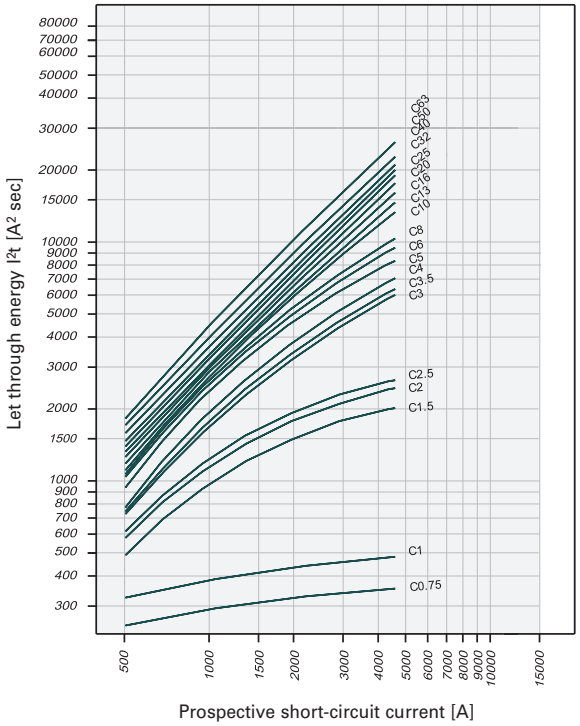
	Power frequency f [Hz]						
	$16^2/_3$	50	60	100	200	300	400
$I_{MA}(f)/I_{MA}(50\ Hz)$ [%]	91	100	101	106	115	134	141

Let-through Energy PLS4

Let-through Energy PLS4, Characteristic B, 1-pole



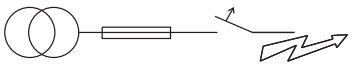
Let-through Energy PLS4, Characteristic C, 1-pole



Short Circuit Selectivity PLS4 towards DII-DIV fuse link

In case of short circuit, there is selectivity between the miniature circuit breakers PLS4 and the upstream fuses up to the specified values of the selectivity limit current I_s [kA] (i. e. in case of short-circuit currents I_{ks} under I_s only the MCB will trip, in case of short circuit currents above this value both protective devices will respond).

*) basically in accordance with EN 60898-1 D.5.2.b



Short circuit selectivity **Characteristic B** towards fuse link **DII-DIV***)

PLS4	DII-DIV gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
1.0	<0.5[1]	1.2	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
1.5	<0.5[1]	1.0	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.0	<0.5[1]	<0.5[1]	0.8	1.6	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.5	<0.5[1]	<0.5[1]	0.8	1.5	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.0	<0.5[1]	<0.5[1]	0.8	1.4	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.5	<0.5[1]	<0.5[1]	0.7	1.3	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
4	<0.5[1]	<0.5[1]	0.6	1.0	3.6	4.5[2]	4.5[2]	4.5[2]	4.5[2]
5	<0.5[1]	<0.5[1]	0.6	0.9	2.0	3.5	4.5[2]	4.5[2]	4.5[2]
6		<0.5[1]	0.6	0.9	1.8	3.2	4.5[2]	4.5[2]	4.5[2]
8		<0.5[1]	0.5	0.8	1.6	2.6	4.5[2]	4.5[2]	4.5[2]
10			0.5	0.8	1.4	2.2	3.9	4.5[2]	4.5[2]
13			0.5	0.7	1.3	2.0	3.6	4.5[2]	4.5[2]
16				0.6	1.2	1.9	3.2	4.5[2]	4.5[2]
20					1.2	1.8	3.1	4.4	4.5[2]
25					1.2	1.8	3.0	4.2	4.5[2]
32						1.7	2.8	3.9	4.5[2]
40							2.7	3.8	4.5[2]
50							2.5	3.5	4.5[2]
63									4.5[2]

Short circuit selectivity **Characteristic C** towards fuse link **DII-DIV***)

PLS4	DII-DIV gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
0.75	1.0	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
1.0	<0.5[1]	1.2	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
1.5	<0.5[1]	<0.5[1]	1.0	2.2	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.0	<0.5[1]	<0.5[1]	0.8	1.6	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.5	<0.5[1]	<0.5[1]	0.8	1.4	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.0	<0.5[1]	<0.5[1]	0.8	0.9	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.5	<0.5[1]	<0.5[1]	0.6	0.9	2.2	4.5[2]	4.5[2]	4.5[2]	4.5[2]
4	<0.5[1]	<0.5[1]	0.6	0.8	1.8	3.6	4.5[2]	4.5[2]	4.5[2]
5	<0.5[1]	<0.5[1]	0.6	0.7	1.5	2.7	4.5[2]	4.5[2]	4.5[2]
6		<0.5[1]	0.5	0.6	1.4	2.4	4.5[2]	4.5[2]	4.5[2]
8		<0.5[1]	<0.5[1]	0.6	1.3	2.2	4.5[2]	4.5[2]	4.5[2]
10			<0.5[1]	0.6	1.3	2.0	3.6	4.5[2]	4.5[2]
13					1.3	1.9	3.3	4.5[2]	4.5[2]
16					1.2	1.8	3.2	4.4	4.5[2]
20					1.2	1.8	3.1	4.1	4.5[2]
25						1.7	2.8	3.8	4.5[2]
32							2.7	3.7	4.5[2]
40								3.5	4.5[2]
50									4.5[2]
63									

[1] Selectivity limit current I_s under 0.5 kA

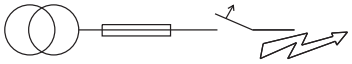
[2] Selectivity limit current I_s = rated breaking capacity I_{cn} of the MCB

Darker areas: no selectivity

Short Circuit Selectivity PLS4 towards D01-D03 fuse link

In case of short circuit, there is selectivity between the miniature circuit breakers PLS4 and the upstream fuses up to the specified values of the selectivity limit current I_s [kA] (i. e. in case of short-circuit currents I_{ks} under I_s only the MCB will trip, in case of short circuit currents above this value both protective devices will respond).

*) basically in accordance with EN 60898-1 D.5.2.b

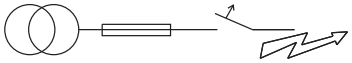


Short circuit selectivity **Characteristic B** towards fuse link **D01-D03***)

PLS4	D01-D03 gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
1.0	<0.5[1]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
1.5	<0.5[1]	4.1	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.0	<0.5[1]	<0.5[1]	0.6	1.0	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.5	<0.5[1]	<0.5[1]	0.6	1.0	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.0	<0.5[1]	<0.5[1]	0.5	1.0	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.5	<0.5[1]	<0.5[1]	0.5	0.9	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
4	<0.5[1]	<0.5[1]	0.5	0.9	2.5	4.5[2]	4.5[2]	4.5[2]	4.5[2]
5		<0.5[1]	0.5	0.8	1.7	4.0	4.5[2]	4.5[2]	4.5[2]
6		<0.5[1]	0.5	0.8	1.6	3.6	4.5[2]	4.5[2]	4.5[2]
8			0.5	0.8	1.4	2.8	4.3	4.5[2]	4.5[2]
10			0.5	0.7	1.3	2.4	3.4	4.5[2]	4.5[2]
13			<0.5[1]	0.7	1.2	2.3	3.2	4.5[2]	4.5[2]
16				0.6	1.1	2.2	2.9	4.5[2]	4.5[2]
20					1.1	2.1	2.8	4.4	4.5[2]
25					1.1	2.0	2.7	4.2	4.5[2]
32						2.0	2.6	4.0	4.5[2]
40							2.5	3.8	4.5[2]
50							2.3	3.4	4.5[2]
63									4.5[2]

Short circuit selectivity **Characteristic C** towards fuse link **D01-D03***)

PLS4	D01-D03 gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
0.75	<0.5[1]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
1.0	<0.5[1]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
1.5	<0.5[1]	0.5	0.6	0.9	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.0	<0.5[1]	<0.5[1]	0.5	0.7	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.5	<0.5[1]	<0.5[1]	0.5	0.7	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.0	<0.5[1]	<0.5[1]	<0.5[1]	0.6	1.9	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.5	<0.5[1]	<0.5[1]	<0.5[1]	0.6	1.8	4.5[2]	4.5[2]	4.5[2]	4.5[2]
4	<0.5[1]	<0.5[1]	<0.5[1]	0.6	1.6	4.0	4.5[2]	4.5[2]	4.5[2]
5		<0.5[1]	<0.5[1]	0.5	1.3	3.1	4.5[2]	4.5[2]	4.5[2]
6		<0.5[1]	<0.5[1]	<0.5[1]	1.2	2.7	4.5[2]	4.5[2]	4.5[2]
8		<0.5[1]	<0.5[1]	<0.5[1]	1.2	2.5	4.0	4.5[2]	4.5[2]
10			<0.5[1]	<0.5[1]	1.2	2.3	3.1	4.5[2]	4.5[2]
13					1.1	2.2	3.0	4.5[2]	4.5[2]
16					1.1	2.1	2.8	4.4	4.5[2]
20					1.0	2.0	2.6	4.0	4.5[2]
25						1.9	2.5	3.8	4.5[2]
32							2.5	3.7	4.5[2]
40								3.5	4.5[2]
50									4.5[2]
63									



Short circuit selectivity **Characteristic B** towards fuse link **NH-00***)

PLS4	NH-00 gL/gG											
I_n [A]	16	20	25	32	35	40	50	63	80	100	125	160
1.0	0.9	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
1.5	0.8	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.0	<0.5[1]	0.5	1.0	2.5	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.5	<0.5[1]	0.5	1.0	2.3	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.0	<0.5[1]	0.5	0.9	2.1	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.5	<0.5[1]	0.5	0.9	1.8	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
4	<0.5[1]	<0.5[1]	0.8	1.3	2.3	4.3	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
5	<0.5[1]	<0.5[1]	0.7	1.1	1.6	2.2	3.6	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
6	<0.5[1]	<0.5[1]	0.7	1.1	1.5	2.0	3.3	4.3	4.5[2]	4.5[2]	4.5[2]	4.5[2]
8	<0.5[1]	<0.5[1]	0.6	1.0	1.3	1.7	2.6	3.3	4.5[2]	4.5[2]	4.5[2]	4.5[2]
10		<0.5[1]	0.6	0.9	1.2	1.5	2.2	2.7	4.0	4.5[2]	4.5[2]	4.5[2]
13		<0.5[1]	0.6	0.8	1.1	1.4	2.1	2.6	3.8	4.5[2]	4.5[2]	4.5[2]
16			0.5	0.7	1.0	1.3	1.9	2.4	3.4	4.5[2]	4.5[2]	4.5[2]
20				0.7	1.0	1.3	1.9	2.4	3.3	4.5[2]	4.5[2]	4.5[2]
25				0.7	1.0	1.3	1.8	2.3	3.2	4.5[2]	4.5[2]	4.5[2]
32					0.9	1.2	1.7	2.2	3.1	4.5[2]	4.5[2]	4.5[2]
40								2.1	3.0	4.5[2]	4.5[2]	4.5[2]
50								1.9	2.8	4.5[2]	4.5[2]	4.5[2]
63										4.4	4.5[2]	4.5[2]

Short circuit selectivity **Characteristic C** towards fuse link **NH-00***)

PLS4	NH-00 gL/gG											
I_n [A]	16	20	25	32	35	40	50	63	80	100	125	160
0.75	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
1.0	0.9	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
1.5	<0.5[1]	0.6	1.3	4.2	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.0	<0.5[1]	0.6	1.0	2.5	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
2.5	<0.5[1]	0.5	1.0	2.1	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.0	<0.5[1]	<0.5[1]	0.7	1.2	1.8	2.6	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
3.5	<0.5[1]	<0.5[1]	0.7	1.1	1.7	2.4	4.2	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
4	<0.5[1]	<0.5[1]	0.7	1.0	1.5	2.1	3.6	4.5[2]	4.5[2]	4.5[2]	4.5[2]	4.5[2]
5	<0.5[1]	<0.5[1]	0.6	0.8	1.2	1.7	2.8	3.8	4.5[2]	4.5[2]	4.5[2]	4.5[2]
6	<0.5[1]	<0.5[1]	0.5	0.8	1.2	1.5	2.5	3.3	4.5[2]	4.5[2]	4.5[2]	4.5[2]
8	<0.5[1]	<0.5[1]	0.5	0.8	1.1	1.5	2.3	2.9	4.5[2]	4.5[2]	4.5[2]	4.5[2]
10			0.5	0.7	1.0	1.4	2.0	2.5	3.8	4.5[2]	4.5[2]	4.5[2]
13					1.0	1.3	1.9	2.4	3.6	4.5[2]	4.5[2]	4.5[2]
16					1.0	1.3	1.8	2.3	3.3	4.5[2]	4.5[2]	4.5[2]
20					1.0	1.2	1.7	2.2	3.2	4.5[2]	4.5[2]	4.5[2]
25							1.6	2.1	3.0	4.5[2]	4.5[2]	4.5[2]
32								2.1	2.9	4.5[2]	4.5[2]	4.5[2]
40									2.8	4.5[2]	4.5[2]	4.5[2]
50										4.5[2]	4.5[2]	4.5[2]
63											4.5[2]	4.5[2]