

Protective Devices Miniature Circuit Breakers PL6



Catalog



Powering Business Worldwide

SG62211



Description

- High-quality miniature circuit breakers for commercial and 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, D
- Rated breaking capacity 6 kA according to IEC/EN 60898-1



Rated current I_n (A)	Type Designation	Article No.	Units per package
6 kA, Characteristic B			
1-pole			
1	PL6-B1/1	164740	12/120
2	PL6-B2/1	286516	12/120
4	PL6-B4/1	286517	12/120
6	PL6-B6/1	286518	12/120
10	PL6-B10/1	286519	12/120
12	PL6-B12/1	164738	12/120
13	PL6-B13/1	286520	12/120
16	PL6-B16/1	286521	12/120
20	PL6-B20/1	286522	12/120
25	PL6-B25/1	286523	12/120
32	PL6-B32/1	286524	12/120
40	PL6-B40/1	286525	12/120
50	PL6-B50/1	286526	12/120
63	PL6-B63/1	286527	12/120

Rated current I_n (A)	Type Designation	Article No.	Units per package
1+N-pole			
1	PL6-B1/1N	164903	8/80
2	PL6-B2/1N	164907	8/80
4	PL6-B4/1N	164913	8/80
6	PL6-B6/1N	106025	8/80
10	PL6-B10/1N	106026	8/80
13	PL6-B13/1N	106027	8/80
16	PL6-B16/1N	106028	8/80
20	PL6-B20/1N	164908	8/80
25	PL6-B25/1N	164909	8/80
32	PL6-B32/1N	164912	8/80



Rated current I_n (A)	Type Designation	Article No.	Units per package
2-pole			
1	PL6-B1/2	164803	6/60
2	PL6-B2/2	286550	6/60
4	PL6-B4/2	286551	6/60
6	PL6-B6/2	286552	6/60
10	PL6-B10/2	286553	6/60
13	PL6-B13/2	286554	6/60
16	PL6-B16/2	286555	6/60
20	PL6-B20/2	286556	6/60
25	PL6-B25/2	286557	6/60
32	PL6-B32/2	286558	6/60
40	PL6-B40/2	286559	6/60
50	PL6-B50/2	286560	6/60
63	PL6-B63/2	286561	6/60

Rated current I_n (A)	Type Designation	Article No.	Units per package
3-pole			
1	PL6-B1/3	164868	4/40
2	PL6-B2/3	286584	4/40
4	PL6-B4/3	286585	4/40
6	PL6-B6/3	286586	4/40
10	PL6-B10/3	286587	4/40
13	PL6-B13/3	286588	4/40
16	PL6-B16/3	286589	4/40
20	PL6-B20/3	286590	4/40
25	PL6-B25/3	286591	4/40
32	PL6-B32/3	286592	4/40
40	PL6-B40/3	286593	4/40
50	PL6-B50/3	286594	4/40
63	PL6-B63/3	286595	4/40

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Rated current I_n (A)	Type Designation	Article No.	Units per package
3+N-pole			
1	PL6-B1/3N	165002	3/30
2	PL6-B2/3N	165007	3/30
4	PL6-B4/3N	165010	3/30
6	PL6-B6/3N	106035	3/30
10	PL6-B10/3N	106036	3/30
13	PL6-B13/3N	165004	3/30
16	PL6-B16/3N	106037	3/30
20	PL6-B20/3N	106038	3/30
25	PL6-B25/3N	106039	3/30
32	PL6-B32/3N	106040	3/30
40	PL6-B40/3N	106041	3/30
50	PL6-B50/3N	106903	3/30
63	PL6-B63/3N	106904	3/30

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Rated current I_n (A)	Type Designation	Article No.	Units per package
4-pole			
1	PL6-B1/4	166489	3/30
2	PL6-B2/4	166496	3/30
4	PL6-B4/4	166501	3/30
6	PL6-B6/4	166505	3/30
10	PL6-B10/4	166490	3/30
13	PL6-B13/4	166492	3/30
16	PL6-B16/4	166494	3/30
20	PL6-B20/4	166497	3/30
25	PL6-B25/4	166498	3/30
32	PL6-B32/4	166500	3/30
40	PL6-B40/4	166502	3/30
50	PL6-B50/4	166504	3/30
63	PL6-B63/4	166506	3/30

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Rated current I_n (A)	Type Designation	Article No.	Units per package
6 kA, Characteristic C			
1-pole			
1	PL6-C1/1	164754	12/120
2	PL6-C2/1	286528	12/120
4	PL6-C4/1	286529	12/120
6	PL6-C6/1	286530	12/120
10	PL6-C10/1	286531	12/120
13	PL6-C13/1	286532	12/120
16	PL6-C16/1	286533	12/120
20	PL6-C20/1	286534	12/120
25	PL6-C25/1	286535	12/120
32	PL6-C32/1	286536	12/120
40	PL6-C40/1	286537	12/120
50	PL6-C50/1	286538	12/120
63	PL6-C63/1	286539	12/120

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Rated current I_n (A)	Type Designation	Article No.	Units per package
1+N-pole			
1	PL6-C1/1N	164922	8/80
2	PL6-C2/1N	106029	8/80
4	PL6-C4/1N	106030	8/80
6	PL6-C6/1N	106031	8/80
10	PL6-C10/1N	106032	8/80
13	PL6-C13/1N	106033	8/80
16	PL6-C16/1N	106034	8/80
20	PL6-C20/1N	164926	8/80
25	PL6-C25/1N	164927	8/80
32	PL6-C32/1N	164930	8/80

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Rated current I_n (A)	Type Designation	Article No.	Units per package
2-pole			
1	PL6-C1/2	164817	6/60
2	PL6-C2/2	286562	6/60
4	PL6-C4/2	286563	6/60
6	PL6-C6/2	286564	6/60
10	PL6-C10/2	286565	6/60
13	PL6-C13/2	286566	6/60
16	PL6-C16/2	286567	6/60
20	PL6-C20/2	286568	6/60
25	PL6-C25/2	286569	6/60
32	PL6-C32/2	286570	6/60
40	PL6-C40/2	286571	6/60
50	PL6-C50/2	286572	6/60
63	PL6-C63/2	286573	6/60

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Rated current I_n (A)	Type Designation	Article No.	Units per package
3-pole			
1	PL6-C1/3	164882	4/40
2	PL6-C2/3	286596	4/40
4	PL6-C4/3	286597	4/40
6	PL6-C6/3	286598	4/40
10	PL6-C10/3	286599	4/40
13	PL6-C13/3	286600	4/40
20	PL6-C20/3	286602	4/40
25	PL6-C25/3	286603	4/40
32	PL6-C32/3	286604	4/40
40	PL6-C40/3	286605	4/40
50	PL6-C50/3	286606	4/40
63	PL6-C63/3	286607	4/40

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Rated current I_n (A)	Type Designation	Article No.	Units per package
3+N-pole			
1	PL6-C1/3N	165019	3/30
2	PL6-C2/3N	106905	3/30
4	PL6-C4/3N	106906	3/30
6	PL6-C6/3N	106907	3/30
10	PL6-C10/3N	106908	3/30
13	PL6-C13/3N	106909	3/30
16	PL6-C16/3N	106910	3/30
20	PL6-C20/3N	106911	3/30
25	PL6-C25/3N	106912	3/30
32	PL6-C32/3N	106913	3/30
40	PL6-C40/3N	106914	3/30
50	PL6-C50/3N	106915	3/30
63	PL6-C63/3N	106916	3/30

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Rated current I_n (A)	Type Designation	Article No.	Units per package
4-pole			
1	PL6-C1/4	166514	3/30
2	PL6-C2/4	166521	3/30
4	PL6-C4/4	166527	3/30
6	PL6-C6/4	166531	3/30
10	PL6-C10/4	166515	3/30
13	PL6-C13/4	166517	3/30
16	PL6-C16/4	166519	3/30
20	PL6-C20/4	166522	3/30
25	PL6-C25/4	166523	3/30
32	PL6-C32/4	166526	3/30
40	PL6-C40/4	166528	3/30
50	PL6-C50/4	166530	3/30
63	PL6-C63/4	166532	3/30

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Rated current I_n (A)	Type Designation	Article No.	Units per package
6 kA, Characteristic D			
1-pole			
1	PL6-D1/1	164765	12/120
2	PL6-D2/1	286540	12/120
4	PL6-D4/1	286541	12/120
6	PL6-D6/1	286542	12/120
10	PL6-D10/1	286543	12/120
13	PL6-D13/1	286544	12/120
16	PL6-D16/1	286545	12/120
20	PL6-D20/1	286546	12/120
25	PL6-D25/1	286547	12/120
32	PL6-D32/1	286548	12/120
40	PL6-D40/1	286549	12/120

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Rated current I_n (A)	Type Designation	Article No.	Units per package
1+N-pole			
1	PL6-D1/1N	164936	8/80
2	PL6-D2/1N	164943	8/80
4	PL6-D4/1N	164948	8/80
6	PL6-D6/1N	164950	8/80
10	PL6-D10/1N	164937	8/80
13	PL6-D13/1N	164939	8/80
16	PL6-D16/1N	164941	8/80
20	PL6-D20/1N	164944	8/80
25	PL6-D25/1N	164945	8/80

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Rated current I_n (A)	Type Designation	Article No.	Units per package
2-pole			
1	PL6-D1/2	164828	6/60
2	PL6-D2/2	286574	6/60
4	PL6-D4/2	286575	6/60
6	PL6-D6/2	286576	6/60
10	PL6-D10/2	286577	6/60
13	PL6-D13/2	286578	6/60
16	PL6-D16/2	286579	6/60
20	PL6-D20/2	286580	6/60
25	PL6-D25/2	286581	6/60
32	PL6-D32/2	286582	6/60
40	PL6-D40/2	286583	6/60

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Rated current I_n (A)	Type Designation	Article No.	Units per package
3-pole			
1	PL6-D1/3	164893	4/40
2	PL6-D2/3	286608	4/40
4	PL6-D4/3	286609	4/40
6	PL6-D6/3	286610	4/40
10	PL6-D10/3	286611	4/40
13	PL6-D13/3	286612	4/40
16	PL6-D16/3	286613	4/40
20	PL6-D20/3	286614	4/40
25	PL6-D25/3	286615	4/40
32	PL6-D32/3	286616	4/40
40	PL6-D40/3	286617	4/40

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Rated current I_n (A)	Type Designation	Article No.	Units per package
3+N-pole			
1	PL6-D1/3N	165030	3/30
2	PL6-D2/3N	165037	3/30
4	PL6-D4/3N	165043	3/30
6	PL6-D6/3N	165046	3/30
10	PL6-D10/3N	165031	3/30
13	PL6-D13/3N	165033	3/30
16	PL6-D16/3N	165035	3/30
20	PL6-D20/3N	165038	3/30
25	PL6-D25/3N	165039	3/30
32	PL6-D32/3N	165042	3/30
40	PL6-D40/3N	165044	3/30

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Rated current I_n (A)	Type Designation	Article No.	Units per package
4-pole			
1	PL6-D1/4	166537	3/30
2	PL6-D2/4	166544	3/30
4	PL6-D4/4	166550	3/30
6	PL6-D6/4	166553	3/30
10	PL6-D10/4	166538	3/30
13	PL6-D13/4	166540	3/30
16	PL6-D16/4	166542	3/30
20	PL6-D20/4	166545	3/30
25	PL6-D25/4	166546	3/30
32	PL6-D32/4	166549	3/30
40	PL6-D40/4	166551	3/30

Specifications | Miniature Circuit Breakers PL6

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

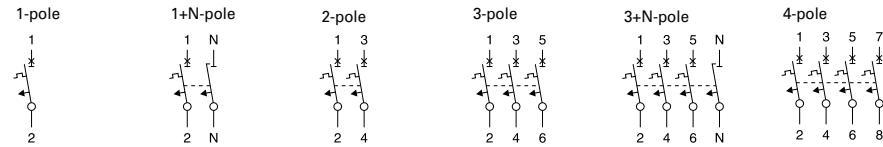
Accessories:

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
Additional terminal 35 mm ²	BB-UL-TEPA/35	169823
Switching interlock	Z-IS/SPE-1TE	274418

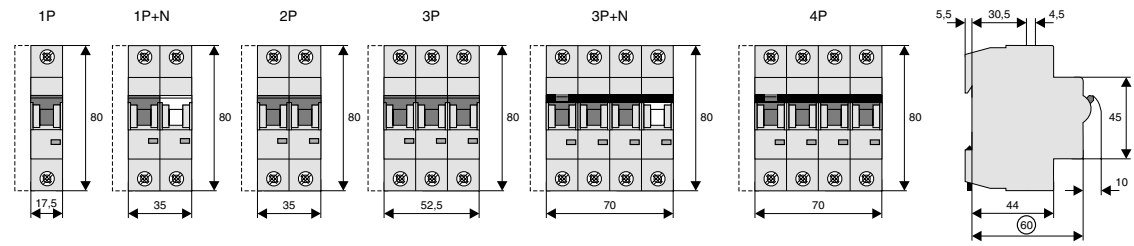
Technical Data

		PL6
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}	6 kA
Characteristic		B, C, D
Back-up fuse		max. 100 A gL
Selectivity class		3
Rated impulse withstand voltage	U_{imp}	4 kV (1.2/50 μ s)
Endurance		
electrical components		$\geq 10,000$ switching operations
mechanical components		$\geq 20,000$ switching operations
Line voltage connection		at will (above/below)
Minimal voltage		12 V AC/DC
Mechanical		
Frame size		45 mm
Device height		80 mm
Device width		17.5 mm per pole (1MU)
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 mm ²
Terminal torque		2-2.4 Nm
Busbar thickness		0.8 - 2 mm
Mounting		independent of position
Operation temperature		-25°C to +75°C
Storage- and transport temperature		-40°C up to +75°C

Connection diagrams

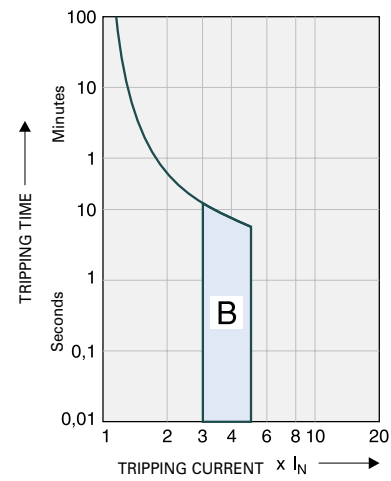


Dimensions (mm)

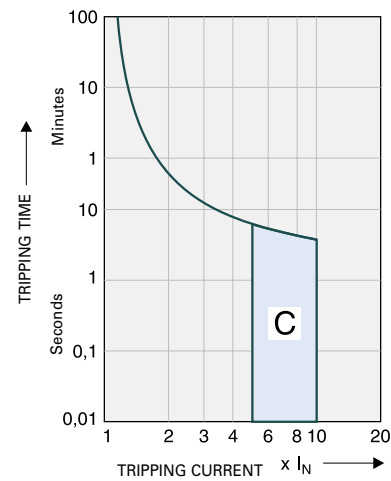


Tripping Characteristics (IEC/EN 60898-1)

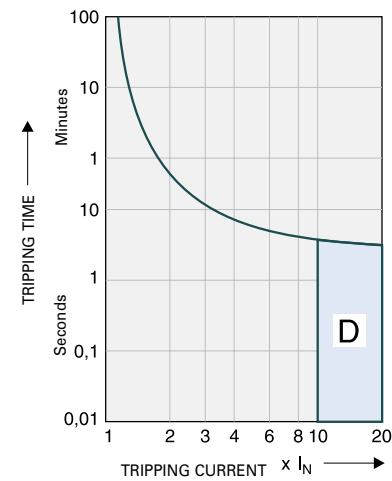
Tripping characteristic B



Tripping characteristic C



Tripping characteristic D



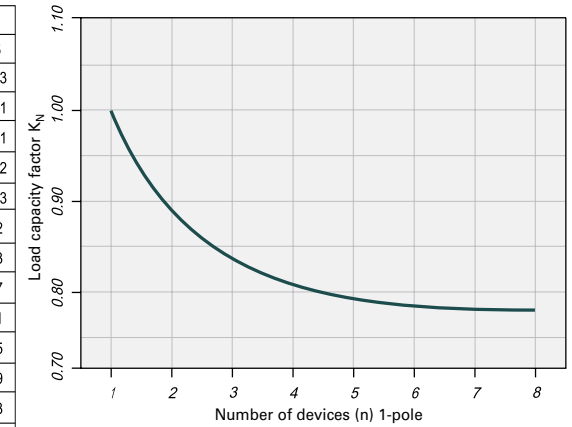
Quick-acting (B), slow (C), very slow (D)

Effect of the Ambient Temperature on Thermal Tripping Behaviour

Adjusted rated current values according to the ambient temperature

I_n [A]	Ambient temperature T [°C]															
	-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

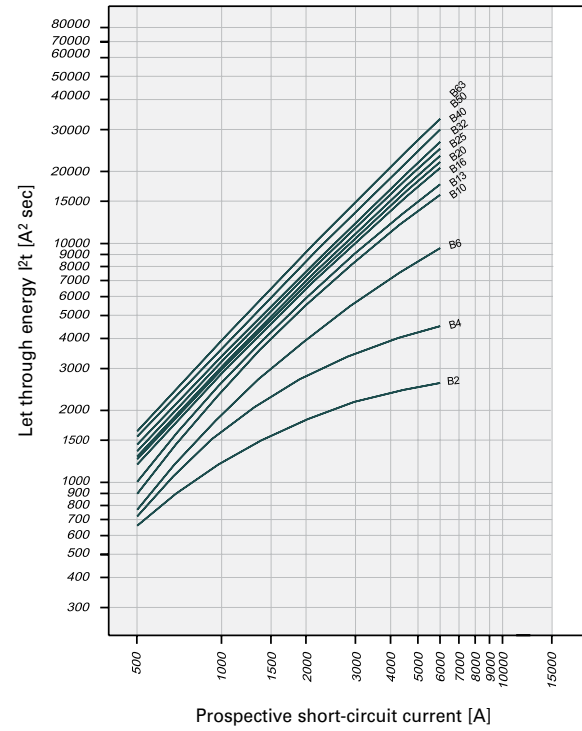
Effect of power frequency on the tripping behaviour I_{MA} of the quick release

$I_{MA}(f)/I_{MA}(50 \text{ Hz})$ [%]	Power frequency f [Hz]						
	16 $\frac{2}{3}$	50	60	100	200	300	400
	91	100	101	106	115	134	141

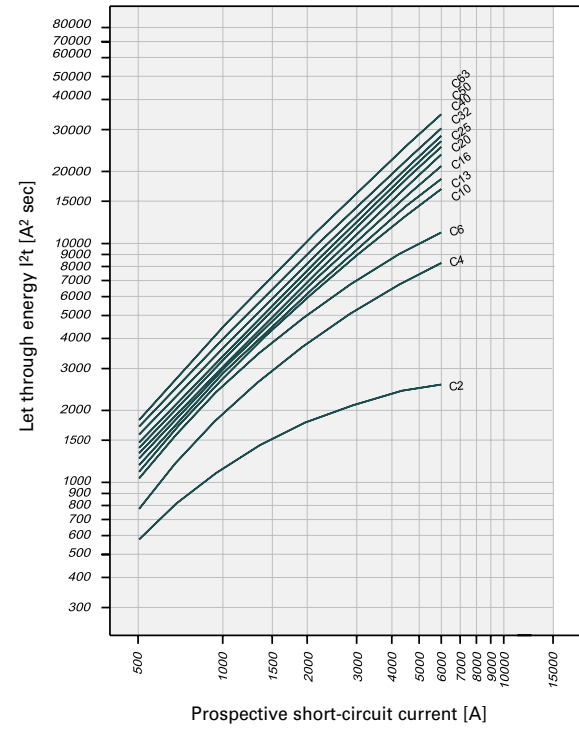
The use of the products in networks with other frequencies than 50/60 Hz is in the customer's responsibility.

Let-through Energy PL6

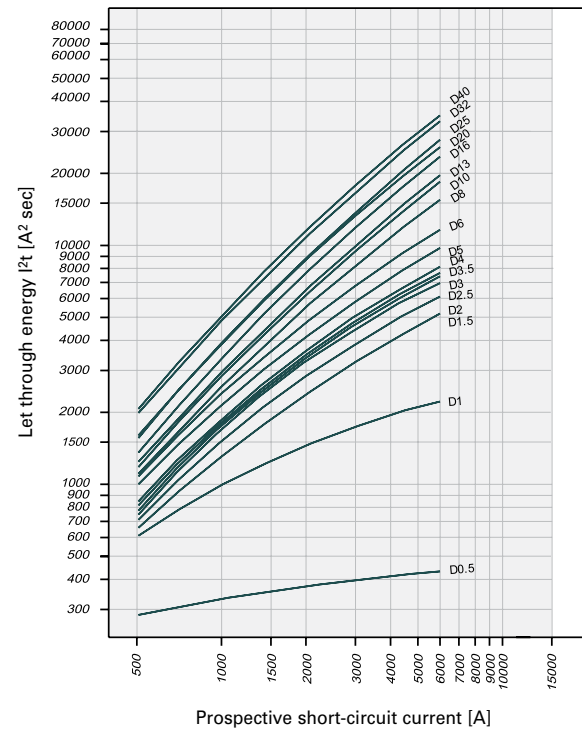
Let-through Energy PL6, Characteristic B, 1-pole



Let-through Energy PL6, Characteristic C, 1-pole



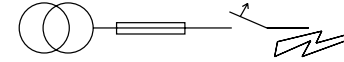
Let-through Energy PL6, Characteristic D, 1-pole



Short-circuit Selectivity PL6 towards DII-DIV fuse link

In case of short-circuit, there is selectivity between the miniature circuit breakers PL6 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***

PL6	DII-DIV gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
2	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	3.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.9	2.0	3.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.9	1.8	3.2	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8	<0.5 ¹⁾	0.5	0.8	1.6	2.6	5.2	6.0 ²⁾	6.0 ²⁾	
10			0.5	0.8	1.4	2.2	3.9	6.0 ²⁾	6.0 ²⁾
13				0.5	0.7	1.3	2.0	3.6	5.4
16					0.6	1.2	1.9	3.2	4.6
20						1.2	1.8	3.1	4.4
25							1.2	1.8	3.0
32								1.7	2.8
40									2.7
50									2.5
63									5.3

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

PL6	DII-DIV gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
2	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.8	1.8	3.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.7	1.5	2.7	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.6	1.4	2.4	5.5	6.0 ²⁾	6.0 ²⁾
8	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.3	2.2	4.7	6.0 ²⁾	6.0 ²⁾	
10			<0.5 ¹⁾	0.6	1.3	2.0	3.6	6.0 ²⁾	6.0 ²⁾
13					1.3	1.9	3.3	5.0	6.0 ²⁾
16						1.2	1.8	3.2	4.4
20							1.2	1.8	3.1
25								1.7	2.8
32									2.7
40									3.5
50									5.5

Short-circuit selectivity **Characteristic D** towards fuse link **DII-DIV***

PL6	DII-DIV gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
2	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	2.8	5.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.9	2.0	3.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.7	1.7	3.1	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.7	1.5	2.6	5.3	6.0 ²⁾	6.0 ²⁾
8	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.4	2.2	3.9	6.0 ²⁾	6.0 ²⁾	
10			0.7	1.2	1.9	3.4	5.0	6.0 ²⁾	
13				1.2	1.8	3.2	4.6	6.0 ²⁾	
16					1.6	2.7	4.0	6.0 ²⁾	
20						1.5	2.5	3.5	6.0 ²⁾
25							2.4	3.4	6.0 ²⁾
32								2.8	5.0
40									4.8

1) Selectivity limit current I_s under 0.5 kA

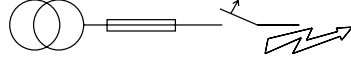
2) Selectivity limit current I_s = rated breaking capacity I_{cn} of the MCB

Darker areas: no selectivity

Short-circuit Selectivity PL6 towards D01-D03 fuse link

In case of short-circuit, there is selectivity between the miniature circuit breakers PL6 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***)

PL6	D01-D03 gL/gG									
I_n [A]	10	16	20	25	35	50	63	80	100	
2	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.9	2.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	0.5	0.8	1.7	4.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6		<0.5 ¹⁾	0.5	0.8	1.6	3.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8			0.5	0.8	1.4	2.8	4.3	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
10			0.5	0.7	1.3	2.4	3.4	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
13			<0.5 ¹⁾	0.7	1.2	2.3	3.2	5.3	6.0 ²⁾	6.0 ²⁾
16				0.6	1.1	2.2	2.9	4.6	6.0 ²⁾	6.0 ²⁾
20					1.1	2.1	2.8	4.4	6.0 ²⁾	6.0 ²⁾
25					1.1	2.0	2.7	4.2	6.0 ²⁾	6.0 ²⁾
32						2.0	2.6	4.0	6.0 ²⁾	6.0 ²⁾
40							2.5	3.8	6.0 ²⁾	6.0 ²⁾
50							2.3	3.4	6.0 ²⁾	6.0 ²⁾
63									6.0 ²⁾	6.0 ²⁾

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

PL6	D01-D03 gL/gG									
I_n [A]	10	16	20	25	35	50	63	80	100	
2	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.7	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.6	4.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	<0.5 ¹⁾	0.5	1.3	3.1	5.7	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6		<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	1.2	2.7	4.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8		<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	1.2	2.5	4.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
10			<0.5 ¹⁾	<0.5 ¹⁾	1.2	2.3	3.1	5.4	6.0 ²⁾	6.0 ²⁾
13					1.1	2.2	3.0	4.9	6.0 ²⁾	6.0 ²⁾
16					1.1	2.1	2.8	4.4	6.0 ²⁾	6.0 ²⁾
20					1.0	2.0	2.6	4.0	6.0 ²⁾	6.0 ²⁾
25						1.9	2.5	3.8	6.0 ²⁾	6.0 ²⁾
32							2.5	3.7	6.0 ²⁾	6.0 ²⁾
40								3.5	6.0 ²⁾	6.0 ²⁾
50									6.0 ²⁾	6.0 ²⁾

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

PL6	D01-D03 gL/gG									
I_n [A]	10	16	20	25	35	50	63	80	100	
2	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.8	2.2	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4		<0.5 ¹⁾	0.5	0.7	1.7	4.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.5	3.5	5.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6			<0.5 ¹⁾	0.5	1.3	2.9	4.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8			<0.5 ¹⁾	0.5	1.2	2.4	3.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
10				0.5	1.1	2.2	3.0	5.0	6.0 ²⁾	6.0 ²⁾
13					1.1	2.1	2.9	4.6	6.0 ²⁾	6.0 ²⁾
16						1.9	2.6	3.9	6.0 ²⁾	6.0 ²⁾
20						1.7	2.3	3.5	6.0 ²⁾	6.0 ²⁾
25							2.2	3.4	6.0 ²⁾	6.0 ²⁾
32								2.9	6.0 ²⁾	6.0 ²⁾
40									5.7	6.0 ²⁾

¹⁾ Selectivity limit current I_s under 0.5 kA

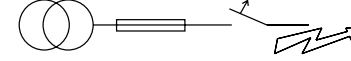
²⁾ Selectivity limit current I_s = rated breaking capacity I_{cn} of the MCB

Darker areas: no selectivity

Short-circuit Selectivity PL6 towards NH-00 fuse link

In case of short-circuit, there is selectivity between the miniature circuit breakers PL6 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 **NH-00***)

PL6	NH-00 gL/gG												
I_n [A]	16	20	25	32	35	40	50	63	80	100	125	160	
2	<0.5 ¹⁾	0.5	1.0	2.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.3	2.3	4.3	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.1	1.6	2.2	3.6	4.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6		<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.1	1.5	2.0	3.3	4.3	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8		<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	1.3	1.7	2.6	3.3	5.2	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
10		<0.5 ¹⁾	0.6	0.9	1.2	1.5	2.2	2.7	4.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
13		<0.5 ¹⁾	0.6	0.8	1.1	1.4	2.1	2.6	3.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
16			0.5	0.7	1.0	1.3	1.9	2.4	3.4	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
20				0.7	1.0	1.3	1.9	2.4	3.3	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
25				0.7	1.0	1.3	1.8	2.3	3.2	5.7	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
32					0.9	1.2	1.7	2.2	3.1	5.4	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
40								2.1	3.0	5.1	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
50									1.9	2.8	4.7	6.0 ²⁾	6.0 ²⁾
63										4.4	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾

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

PL6	NH-00 gL/gG												
I_n [A]	16	20	25	32	35	40	50	63	80	100	125	160	
2	<0.5 ¹⁾	0.6	1.0	2.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.0	1.5	2.1	3.6	5.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.8	1.2	1.7	2.8	3.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6		<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.8	1.2	1.5	2.5	3.3	5.7	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8		<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.8	1.1	1.5	2.3	2.9	4.9	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
10			0.5	0.7	1.0	1.4	2.0	2.5	3.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
13				1.0	1.3	1.9	2.4	3.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
16				1.0	1.3	1.8	2.3	3.3	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
20				1.0	1.2	1.7	2.2	3.2	5.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
25					1.6	2.1	3.0	5.2	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
32						2.1	2.9	5.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
40							2.8	4.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
50								4.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
63										5.9	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾

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

PL6	NH-00 gL/gG												
I_n [A]	16	20	25	32	35	40	50	63	80	100	125	160	
2	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.3	2.1	3.1	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.0	1.6	2.2	3.8	5.2	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	0.6	0.9	1.4	1.9	3.2	4.1	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6		<0.5 ¹⁾	0.5	0.8	1.2	1.6	2.6	3.3	5.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8			0.5	0.8	1.1	1.5	2.2	2.7	4.1	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
10			0.5	0.7	1.0	1.3	1.9	2.5	3.6	6.0 ^{2)</}			

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