

Protective Devices Miniature Circuit Breakers PLS6-DC for direct current application

Catalog



Powering Business Worldwide

SG45311



Description

- High-quality miniature circuit breakers for DC-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 50 A
- Tripping Characteristic C
- Rated breaking capacity 10 kA according to IEC/EN 60947-2
- Up to 250 V DC per pole

Miniature Circuit Breakers PLS6-DC for direct current application (MW)

SG45311

Rated current
 I_n (A)Type
DesignationArticle No.
Units per
package**10 kA, Characteristic C****1-pole**

1	PLS6-C1-DC	243115	12/120
2	PLS6-C2-DC	243116	12/120
3	PLS6-C3-DC	243117	12/120
4	PLS6-C4-DC	243118	12/120
6	PLS6-C6-DC	243119	12/120
10	PLS6-C10-DC	243120	12/120
13	PLS6-C13-DC	243121	12/120
16	PLS6-C16-DC	243122	12/120
20	PLS6-C20-DC	243123	12/120
25	PLS6-C25-DC	243124	12/120
32	PLS6-C32-DC	243125	12/120
40	PLS6-C40-DC	243126	12/120
50	PLS6-C50-DC	243127	12/120

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**2-pole**

1	PLS6-C1/2-DC	243128	1/60
2	PLS6-C2/2-DC	243129	1/60
3	PLS6-C3/2-DC	243130	1/60
4	PLS6-C4/2-DC	243131	1/60
6	PLS6-C6/2-DC	243132	1/60
10	PLS6-C10/2-DC	243133	1/60
13	PLS6-C13/2-DC	243134	1/60
16	PLS6-C16/2-DC	243135	1/60
20	PLS6-C20/2-DC	243136	1/60
25	PLS6-C25/2-DC	243137	1/60
32	PLS6-C32/2-DC	243138	1/60
40	PLS6-C40/2-DC	243139	1/60
50	PLS6-C50/2-DC	243140	1/60

Specifications | Miniature Circuit Breakers PLS6-DC

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
- Rated breaking capacity 10 kA according to IEC/EN 60947
- Rated voltage to 250 V (per pole), $\tau = 4$ ms
- Take into account polarity!

Accessories:

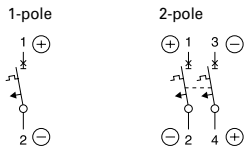
Auxiliary switch for subsequent installation	ZP-IHK	286052
	ZP-WHK	286053
Tripping signal switch for subsequent installation	ZP-NHK	248437
Remote control and automatic switching device	Z-FW/LP	248296
Shunt trip release	ZP-ASA/..	248438, 248439
Undervoltage release	Z-USA/..	248288-248291
Additional terminal 35 mm ²	BB-UL-TEPA/35	169823
Switching interlock	Z-IS/SPE-1TE	274418

Technical Data

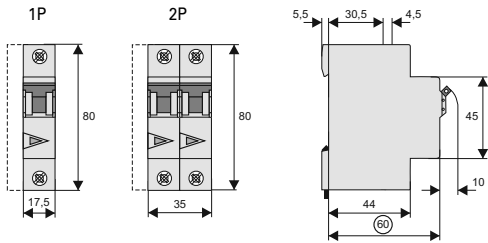
PLS6-DC	
Electrical	
Design according to	IEC/EN 60947-2
Current test marks as printed onto the device	
Rated voltage DC	1-2 A types: 220 V (per pole) 3-50 A types: 250 V (per pole)
Rated frequency	50/60 Hz
Rated breaking capacity according to IEC/EN 60947-2	10 kA
Characteristic	C
Back-up fuse	max. 100 A gL
Selectivity class	3
Rated impulse withstand voltage	U_{imp} 4 kV (1.2/50 μ s)
Endurance	
electrical components	$\geq 4,000$ switching operations
mechanical components	$\geq 20,000$ 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)
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 +55°C
Storage- and transport temperature	-40°C up to +60°C

Note: not for PV string protection!

Connection diagrams

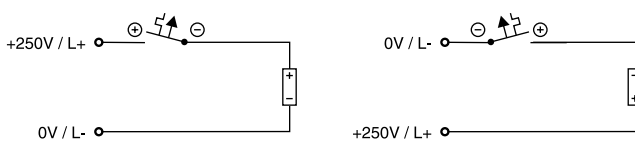


Dimensions (mm)

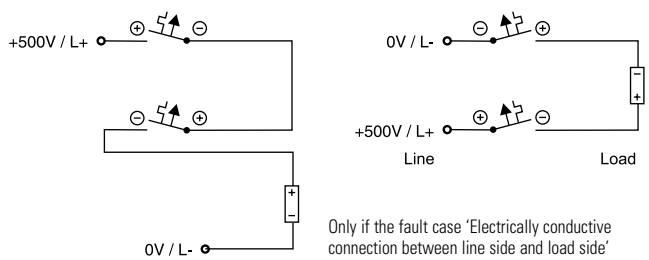


Connection examples

Connection example at 250 V=, 1-pole

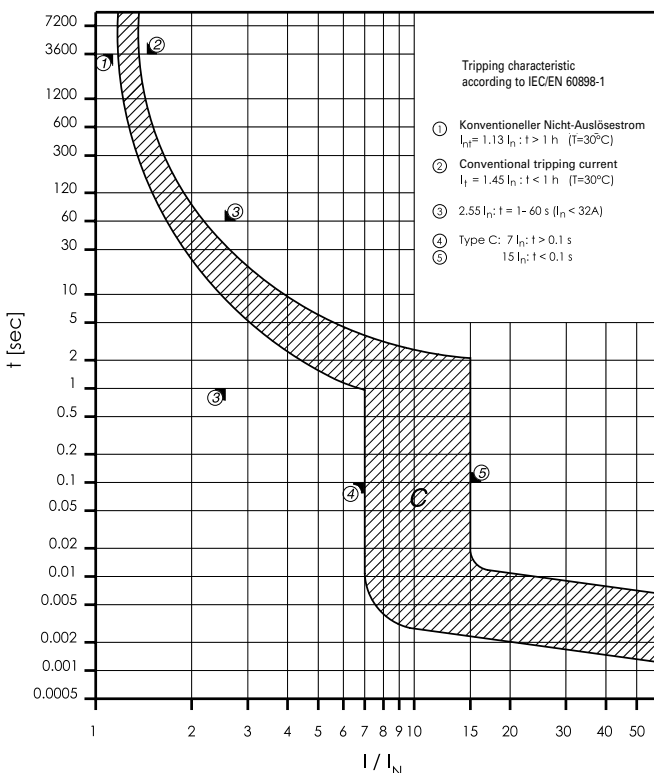


Connection example at 500 V=, 2-pole



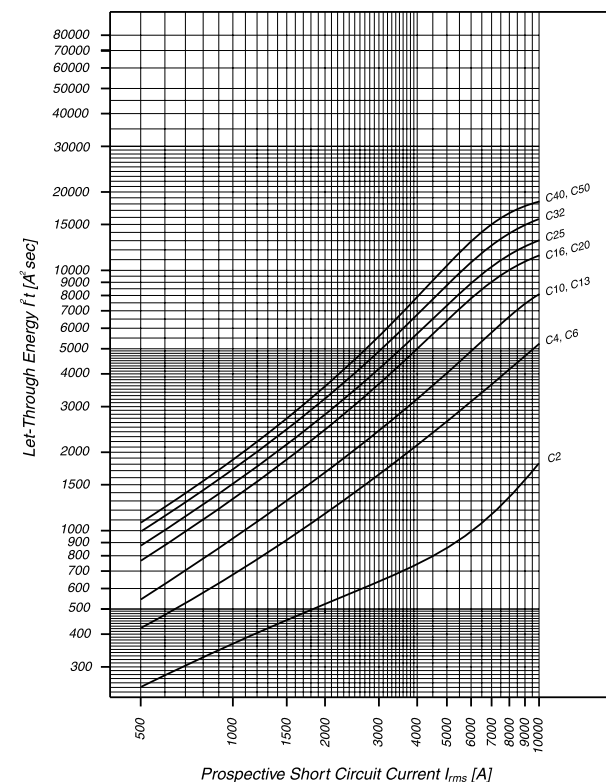
Tripping characteristic PLS6-DC

Type C



Let-through Energy PLS6-DC

Type C, 250 V d.c., $\tau = 5 \text{ ms}$ (according to IEC/EN 60947-2)



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Publication No. CA019067EN
Article number 302781-MK
February 2022

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