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# Protective Devices Miniature Circuit Breakers PL7-DC for AC/DC

and A hours in



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Catalog

# xPole

# Protective Devices Miniature Circuit Breakers PL7-DC for AC/DC

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# 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

SG06211

# **Protective Devices**

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Rated current $I_n$ (A)	Түре Designation	Article No.	Units per package
10 kA, Characteristic C			
1-pole			
1	PL7-C1/1-DC	264851	12/120
2	PL7-C2/1-DC	264883	12/120
3	PL7-C3/1-DC	264884	12/120
4	PL7-C4/1-DC	264885	12/120
6	PL7-C6/1-DC	264886	12/120
10	PL7-C10/1-DC	264887	12/120
13	PL7-C13/1-DC	264888	12/120
16	PL7-C16/1-DC	264889	12/120
20	PL7-C20/1-DC	264890	12/120
25	PL7-C25/1-DC	264891	12/120
32	PL7-C32/1-DC	264892	12/120
40	PL7-C40/1-DC	264893	12/120
50	PL7-C50/1-DC	264894	12/120



PL7-C1/2-DC	264895	6/60
PL7-C2/2-DC	264896	6/60
PL7-C3/2-DC	264897	6/60
PL7-C4/2-DC	264898	6/60
PL7-C6/2-DC	264899	6/60
PL7-C10/2-DC	264900	6/60
PL7-C13/2-DC	264901	6/60
PL7-C16/2-DC	264902	6/60
PL7-C20/2-DC	264903	6/60
PL7-C25/2-DC	264904	6/60
PL7-C32/2-DC	264905	6/60
PL7-C40/2-DC	264906	6/60
PL7-C50/2-DC	264907	6/60
	PL7-C2/2-DC   PL7-C3/2-DC   PL7-C4/2-DC   PL7-C6/2-DC   PL7-C10/2-DC   PL7-C13/2-DC   PL7-C16/2-DC   PL7-C16/2-DC   PL7-C20/2-DC   PL7-C25/2-DC   PL7-C32/2-DC   PL7-C3/2-DC   PL7-C3/2-DC	PL7-C2/2-DC 264896   PL7-C3/2-DC 264897   PL7-C4/2-DC 264898   PL7-C6/2-DC 264899   PL7-C10/2-DC 264900   PL7-C13/2-DC 264901   PL7-C16/2-DC 264901   PL7-C16/2-DC 264902   PL7-C20/2-DC 264903   PL7-C25/2-DC 264904   PL7-C32/2-DC 264905   PL7-C40/2-DC 264906

# Specifications | Miniature Circuit Breakers PL7-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  $\geq$  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:

	000050
ZP-IHK	286052
ZP-WHK	286053
ZP-NHK	248437
Z-FW/LP	248296
ZP-ASA/	248438, 248439
Z-USA/	248288-248291
BB-UL-TEPA/35	169823
Z-IS/SPE-1TE	274418
	ZP-NHK Z-FW/LP ZP-ASA/ Z-USA/ BB-UL-TEPA/35

## **Technical Data**

		PL7-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		С
Back-up fuse		max. 100 A gL
Selectivity class		3
Rated impulse withstand voltage	U <sub>imp</sub>	4 kV (1.2/50 μs)
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 <sup>2</sup>
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!

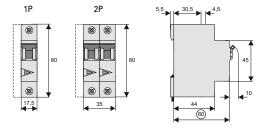
# **Protective Devices**

# Miniature Circuit Breakers PL7-DC for AC/DC

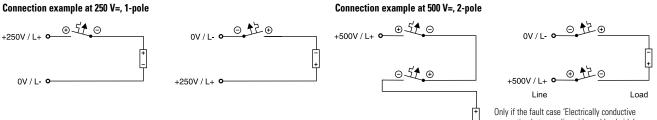
**Connection diagrams** 1-pole 2-pole  $1 \oplus \oplus 1 3 \bigoplus$  $r_1 \oplus r_2 \oplus r_3 \oplus r_4 \oplus$ 

#### **Dimensions (mm)**

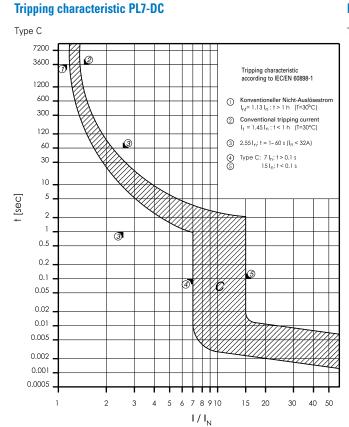
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#### **Connection examples**



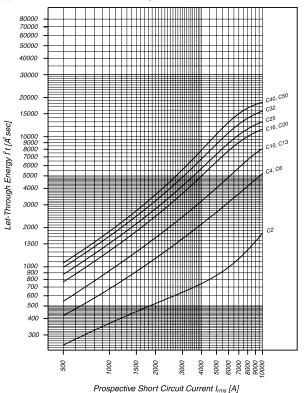
connection between line side and load side' can be definitely excluded.



#### Let-through Energy PL7-DC

0V/L- 0

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



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