


SG67912



Description

- Residual current device / miniature circuit breaker combination, line voltage-independent
- 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 40 A
- Tripping characteristics B, C
- Rated breaking capacity 4.5 kA
- Frost resistance 

$I_n/I_{\Delta n}$ (A)	Type Designation	Article No.	Units per package
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Type G

4.5 kA, 1+N-pole
Surge current-proof 3 kA, type G (ÖVE E 8601)

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Characteristic B

13/0.03	PFL4-13/1N/B/003-G	165368	1/60
16/0.03	PFL4-16/1N/B/003-G	165388	1/60
20/0.03	PFL4-20/1N/B/003-G	165420	1/60
25/0.03	PFL4-25/1N/B/003-G	165434	1/60
32/0.03	PFL4-32/1N/B/003-G	165448	1/60
40/0.03	PFL4-40/1N/B/003-G	165478	1/60
13/0.3	PFL4-13/1N/B/03-G	165373	1/60
16/0.3	PFL4-16/1N/B/03-G	165392	1/60
20/0.3	PFL4-20/1N/B/03-G	165424	1/60
25/0.3	PFL4-25/1N/B/03-G	165438	1/60
32/0.3	PFL4-32/1N/B/03-G	165452	1/60
40/0.3	PFL4-40/1N/B/03-G	165482	1/60

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Characteristic C

13/0.03	PFL4-13/1N/C/003-G	165378	1/60
16/0.03	PFL4-16/1N/C/003-G	165397	1/60
20/0.03	PFL4-20/1N/C/003-G	165427	1/60
25/0.03	PFL4-25/1N/C/003-G	165441	1/60
32/0.03	PFL4-32/1N/C/003-G	165455	1/60
40/0.03	PFL4-40/1N/C/003-G	165485	1/60
13/0.3	PFL4-13/1N/C/03-G	165383	1/60
16/0.3	PFL4-16/1N/C/03-G	165401	1/60
20/0.3	PFL4-20/1N/C/03-G	165431	1/60
25/0.3	PFL4-25/1N/C/03-G	165445	1/60
32/0.3	PFL4-32/1N/C/03-G	165459	1/60
40/0.3	PFL4-40/1N/C/03-G	165489	1/60

$I_n/I_{\Delta n}$ (A)	Type Designation	Article No.	Units per package
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Type A

4.5 kA, 1+N-pole

Conditionally surge current-proof 250 A, sensitive to residual pulsating DC, type A

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Characteristic B

2/0.01	PFL4-2/1N/B/001-A	165409	1/60
4/0.01	PFL4-4/1N/B/001-A	165461	1/60
6/0.01	PFL4-6/1N/B/001-A	165491	1/60
10/0.01	PFL4-10/1N/B/001-A	165351	1/60
13/0.01	PFL4-13/1N/B/001-A	165365	1/60
16/0.01	PFL4-16/1N/B/001-A	165385	1/60
2/0.03	PFL4-2/1N/B/003-A	165411	1/60
4/0.03	PFL4-4/1N/B/003-A	165463	1/60
6/0.03	PFL4-6/1N/B/003-A	165493	1/60
10/0.03	PFL4-10/1N/B/003-A	165353	1/60
13/0.03	PFL4-13/1N/B/003-A	165367	1/60
16/0.03	PFL4-16/1N/B/003-A	165387	1/60
20/0.03	PFL4-20/1N/B/003-A	165419	1/60
25/0.03	PFL4-25/1N/B/003-A	165433	1/60
32/0.03	PFL4-32/1N/B/003-A	165447	1/60
40/0.03	PFL4-40/1N/B/003-A	165477	1/60
2/0.1	PFL4-2/1N/B/01-A	165413	1/60
4/0.1	PFL4-4/1N/B/01-A	165465	1/60
6/0.1	PFL4-6/1N/B/01-A	165494	1/60
10/0.1	PFL4-10/1N/B/01-A	165354	1/60
13/0.1	PFL4-13/1N/B/01-A	165370	1/60
16/0.1	PFL4-16/1N/B/01-A	165389	1/60
20/0.1	PFL4-20/1N/B/01-A	165421	1/60
25/0.1	PFL4-25/1N/B/01-A	165435	1/60
32/0.1	PFL4-32/1N/B/01-A	165449	1/60
40/0.1	PFL4-40/1N/B/01-A	165479	1/60
2/0.3	PFL4-2/1N/B/03-A	165415	1/60
4/0.3	PFL4-4/1N/B/03-A	165467	1/60
6/0.3	PFL4-6/1N/B/03-A	165496	1/60
10/0.3	PFL4-10/1N/B/03-A	165356	1/60
13/0.3	PFL4-13/1N/B/03-A	165372	1/60
16/0.3	PFL4-16/1N/B/03-A	165391	1/60
20/0.3	PFL4-20/1N/B/03-A	165423	1/60
25/0.3	PFL4-25/1N/B/03-A	165437	1/60
32/0.3	PFL4-32/1N/B/03-A	165451	1/60
40/0.3	PFL4-40/1N/B/03-A	165481	1/60

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$I_n/I_{\Delta n}$ (A)	Type Designation	Article No.	Units per package
Characteristic C			
2/0.01	PFL4-2/1N/C/001-A	165403	1/60
4/0.01	PFL4-4/1N/C/001-A	165469	1/60
6/0.01	PFL4-6/1N/C/001-A	165498	1/60
10/0.01	PFL4-10/1N/C/001-A	165358	1/60
13/0.01	PFL4-13/1N/C/001-A	165375	1/60
16/0.01	PFL4-16/1N/C/001-A	165394	1/60
2/0.03	PFL4-2/1N/C/003-A	165404	1/60
4/0.03	PFL4-4/1N/C/003-A	165471	1/60
6/0.03	PFL4-6/1N/C/003-A	165500	1/60
10/0.03	PFL4-10/1N/C/003-A	165360	1/60
13/0.03	PFL4-13/1N/C/003-A	165377	1/60
16/0.03	PFL4-16/1N/C/003-A	165396	1/60
20/0.03	PFL4-20/1N/C/003-A	165426	1/60
25/0.03	PFL4-25/1N/C/003-A	165440	1/60
32/0.03	PFL4-32/1N/C/003-A	165454	1/60
40/0.03	PFL4-40/1N/C/003-A	165484	1/60
2/0.1	PFL4-2/1N/C/01-A	165405	1/60
4/0.1	PFL4-4/1N/C/01-A	165473	1/60
6/0.1	PFL4-6/1N/C/01-A	165501	1/60
10/0.1	PFL4-10/1N/C/01-A	165361	1/60
13/0.1	PFL4-13/1N/C/01-A	165380	1/60
16/0.1	PFL4-16/1N/C/01-A	165398	1/60
20/0.1	PFL4-20/1N/C/01-A	165428	1/60
25/0.1	PFL4-25/1N/C/01-A	165442	1/60
32/0.1	PFL4-32/1N/C/01-A	165456	1/60
40/0.1	PFL4-40/1N/C/01-A	165486	1/60
2/0.3	PFL4-2/1N/C/03-A	165407	1/60
4/0.3	PFL4-4/1N/C/03-A	165475	1/60
6/0.3	PFL4-6/1N/C/03-A	165503	1/60
10/0.3	PFL4-10/1N/C/03-A	165363	1/60
13/0.3	PFL4-13/1N/C/03-A	165382	1/60
16/0.3	PFL4-16/1N/C/03-A	165400	1/60
20/0.3	PFL4-20/1N/C/03-A	165430	1/60
25/0.3	PFL4-25/1N/C/03-A	165444	1/60
32/0.3	PFL4-32/1N/C/03-A	165458	1/60
40/0.3	PFL4-40/1N/C/03-A	165488	1/60

$I_n/I_{\Delta n}$ (A)	Type Designation	Article No.	Units per package
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Type AC

4.5 kA, 1+N-pole Conditionally surge current-proof 250 A, type AC

Characteristic B

2/0.01	PFL4-2/1N/B/001	165410	1/60
4/0.01	PFL4-4/1N/B/001	165462	1/60
6/0.01	PFL4-6/1N/B/001	165492	1/60
10/0.01	PFL4-10/1N/B/001	165352	1/60
13/0.01	PFL4-13/1N/B/001	165366	1/60
16/0.01	PFL4-16/1N/B/001	165386	1/60
2/0.03	PFL4-2/1N/B/003	165412	1/60
4/0.03	PFL4-4/1N/B/003	165464	1/60
6/0.03	PFL4-6/1N/B/003	293179	1/60
10/0.03	PFL4-10/1N/B/003	293290	1/60
13/0.03	PFL4-13/1N/B/003	165369	1/60
16/0.03	PFL4-16/1N/B/003	293291	1/60
20/0.03	PFL4-20/1N/B/003	293292	1/60
25/0.03	PFL4-25/1N/B/003	293293	1/60
32/0.03	PFL4-32/1N/B/003	293294	1/60
40/0.03	PFL4-40/1N/B/003	293295	1/60
2/0.1	PFL4-2/1N/B/01	165414	1/60
4/0.1	PFL4-4/1N/B/01	165466	1/60
6/0.1	PFL4-6/1N/B/01	165495	1/60
10/0.1	PFL4-10/1N/B/01	165355	1/60
13/0.1	PFL4-13/1N/B/01	165371	1/60
16/0.1	PFL4-16/1N/B/01	165390	1/60
20/0.1	PFL4-20/1N/B/01	165422	1/60
25/0.1	PFL4-25/1N/B/01	165436	1/60
32/0.1	PFL4-32/1N/B/01	165450	1/60
40/0.1	PFL4-40/1N/B/01	165480	1/60
2/0.3	PFL4-2/1N/B/03	165416	1/60
4/0.3	PFL4-4/1N/B/03	165468	1/60
6/0.3	PFL4-6/1N/B/03	165497	1/60
10/0.3	PFL4-10/1N/B/03	165357	1/60
13/0.3	PFL4-13/1N/B/03	165374	1/60
16/0.3	PFL4-16/1N/B/03	165393	1/60
20/0.3	PFL4-20/1N/B/03	165425	1/60
25/0.3	PFL4-25/1N/B/03	165439	1/60
32/0.3	PFL4-32/1N/B/03	165453	1/60
40/0.3	PFL4-40/1N/B/03	165483	1/60

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$I_n/I_{\Delta n}$ (A)	Type Designation	Article No.	Units per package
Characteristic C			
2/0.01	PFL4-2/1N/C/001	165417	1/60
4/0.01	PFL4-4/1N/C/001	165470	1/60
6/0.01	PFL4-6/1N/C/001	165499	1/60
10/0.01	PFL4-10/1N/C/001	165359	1/60
13/0.01	PFL4-13/1N/C/001	165376	1/60
16/0.01	PFL4-16/1N/C/001	165395	1/60
2/0.03	PFL4-2/1N/C/003	165418	1/60
4/0.03	PFL4-4/1N/C/003	165472	1/60
6/0.03	PFL4-6/1N/C/003	293296	1/60
10/0.03	PFL4-10/1N/C/003	293297	1/60
13/0.03	PFL4-13/1N/C/003	165379	1/60
16/0.03	PFL4-16/1N/C/003	293298	1/60
20/0.03	PFL4-20/1N/C/003	293299	1/60
25/0.03	PFL4-25/1N/C/003	293300	1/60
32/0.03	PFL4-32/1N/C/003	293301	1/60
40/0.03	PFL4-40/1N/C/003	293302	1/60
2/0.1	PFL4-2/1N/C/01	165406	1/60
4/0.1	PFL4-4/1N/C/01	165474	1/60
6/0.1	PFL4-6/1N/C/01	165502	1/60
10/0.1	PFL4-10/1N/C/01	165362	1/60
13/0.1	PFL4-13/1N/C/01	165381	1/60
16/0.1	PFL4-16/1N/C/01	165399	1/60
20/0.1	PFL4-20/1N/C/01	165429	1/60
25/0.1	PFL4-25/1N/C/01	165443	1/60
32/0.1	PFL4-32/1N/C/01	165457	1/60
40/0.1	PFL4-40/1N/C/01	165487	1/60
2/0.3	PFL4-2/1N/C/03	165408	1/60
4/0.3	PFL4-4/1N/C/03	165476	1/60
6/0.3	PFL4-6/1N/C/03	165504	1/60
10/0.3	PFL4-10/1N/C/03	165364	1/60
13/0.3	PFL4-13/1N/C/03	165384	1/60
16/0.3	PFL4-16/1N/C/03	165402	1/60
20/0.3	PFL4-20/1N/C/03	165432	1/60
25/0.3	PFL4-25/1N/C/03	165446	1/60
32/0.3	PFL4-32/1N/C/03	165460	1/60
40/0.3	PFL4-40/1N/C/03	165490	1/60

Specifications | Combined RCD/MCB Devices PFL4, 1+N-pole

Description

- Combined RCD/MCB Devices
- Line voltage-independent tripping
- Twin-purpose terminal (lift/open-mouthed) above and below
- Busbar positioning optionally above or below
- Free terminal space despite installed busbar
- Guide for secure terminal connection
- Contact position indicator red - green
- Comprehensive range of accessories can be mounted subsequently
- The test key "T" must be pressed every 6 month. The system operator must be informed of this obligation and his responsibility in a way that can be proven (self-adhesive RCD-label enclosed). The test interval of 6 month is valid for residential and similar applications. Under all other conditions (e.g. damply or dusty environments), it's recommended to test in shorter intervals (e.g. monthly).
- Pressing the test key "T" serves the only purpose of function testing the residual current device (RCD). This test does not make earthing resistance measurement (R_E), or proper checking of the earth conductor condition redundant, which must be performed separately.
- **Type -A:** Protects against special forms of residual pulsating DC which have not been smoothed
- **Type -G:** 10 ms time delay in order to avoid unwanted tripping (e.g. during thunderstorms).
Compulsory in Austria for any circuit where personal injury or damage to property may occur in case of unwanted tripping (§12.1.6 ÖVE/ÖNORM E 8001-1).

Accessories:

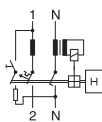
Auxiliary switch for subsequent installation	ZP-IHK	286052
	ZP-WHK	286053
Tripping signal switch for subsequent installation	ZP-NHK	248437
Shunt trip release	ZP-ASA/..	248438, 248439
Terminal cover cap	KLV-TC-2	276240
Additional terminal 35 mm ²	Z-HA-EK/35	263960

Technical Data

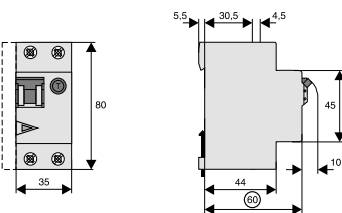
		PFL4, 1+N-pole
Electrical		
Design according to		IEC/EN 61009
Current test marks as printed onto the device		
Line voltage-independent tripping		instantaneous 250 A (8/20 μs), surge current proof
Type G		10 ms delay 3 kA (8/20 μs), surge current proof
Rated voltage	U_e	230 V AC; 50 Hz
Operational voltage range		196-253 V
Rated tripping current	$I_{\Delta n}$	10, 30, 100, 300 mA
Rated non-tripping current	$I_{\Delta no}$	0.5 $I_{\Delta n}$
Rated insulation voltage	U_i	440 VAC
Sensitivity		AC and pulsating DC
Selectivity class		3
Rated breaking capacity	I_{cn}	4.5 kA
Rated current		2 - 40 A
Rated impulse withstand voltage	U_{imp}	4 kV (1.2/50 μs)
Characteristic		B, C
Maximum back-up fuse (short circuit)		100 A gL (>10 kA)
Endurance		
electrical components		≥ 4,000 switching operations
mechanical components		≥ 20,000 switching operations
Mechanical		
Frame size		45 mm
Device height		80 mm
Device width		35 mm (2MU)
Mounting		3-position DIN rail clip, permits removal from existing busbar system
Degree of protection, switch		IP20
Degree of protection, built-in		IP40
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
Tripping temperature		-25°C to +40°C
Storage- and transport temperature		-35°C to +60°C
Resistance to climatic conditions		according to IEC/EN 61009

Connection diagram

1+N-pole



Dimensions (mm)



Load Capacity PFL4-../1N/

Effect of ambient temperature (MCB component)

I _n [A]	Ambient temperature T [°C]								
	-25	-20	-10	0	10	20	30	35	40
2	2.5	2.4	2.3	2.2	2.2	2.1	2.0	2.0	1.9
4	4.9	4.8	4.7	4.5	4.3	4.2	4.0	3.9	3.9
5	6.2	6.0	5.8	5.6	5.4	5.2	5.0	4.9	4.8
6	7.4	7.2	7.0	6.7	6.5	6.3	6.0	5.9	5.8
8	9.9	9.6	9.3	9.0	8.7	8.4	8.0	7.9	7.7
10	12	12	12	11	11	10	10	9.9	9.7
12	15	14	14	13	13	13	12	12	12
13	16	16	15	15	14	14	13	13	13
15	19	18	17	17	16	16	15	15	15
16	20	19	19	18	17	17	16	16	15
20	25	24	23	22	22	21	20	20	19
25	31	30	29	28	27	26	25	25	24
32	40	38	37	36	35	33	32	32	31
40	49	48	47	45	43	42	40	39	39

Tripping Characteristic PFL4-../1N/, Characteristics B and C

