

5SL Miniature Circuit Breakers



BETA Low-Voltage Circuit Protection



The new 5SL miniature circuit breaker is intended for use up to 6 kA. The devices have the system features characteristic of all Siemens miniature circuit breakers.

■ Main switch characteristics

The 5SL miniature circuit breakers can be used as main switches for the disconnection or isolation of plants. They are also suitable for the quick and easy mounting of additional components, such as auxiliary switches and fault signal contacts.

■ Easy cable entry

To facilitate cable entry, the devices are equipped with square terminals for the joint accommodation of pin busbars with cables from 0.75 to 35 mm². The rated current range is between 0.3 and 63 A. The 5SL miniature circuit breakers are available in characteristics B and C.

Highlights

- Attractive design and easily recognizable color-coded switching position indication integrated in the handle
- Easy-to-mount busbar system
- Consistent bus-mounting concept throughout the Siemens miniature circuit breaker range
- Individual devices can be removed from the bus-mounted assembly without the use of tools

Miniature Circuit Breakers

5SL miniature circuit breakers, 6000 A **NEW**

Benefits



- Attractive device design
- Easily recognizable, color-coded switching position indication integrated in the handle.



- Ergonomic handle and enclosure for user-friendly switching.



- Square terminal design for accommodation of pin busbars together with cables from 0.75 - 35 mm² to facilitate cable entry.



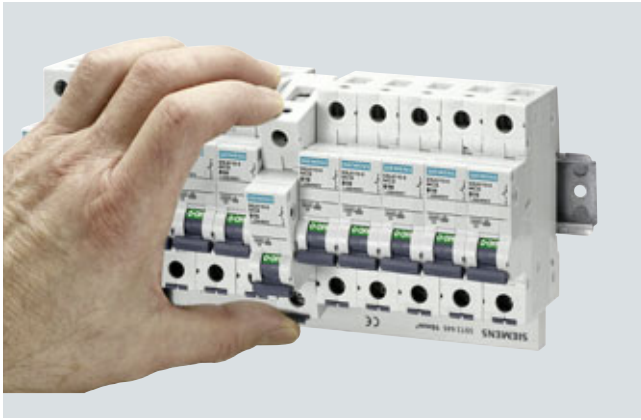
- Easy-to-mount busbar assembly
- Consistent bus-mounting concept throughout the Siemens miniature circuit breaker range.



- Effective touch protection when grasping and manually operating the latching slide with latch-down option.



- Terminal for the accommodation of 2 cables of the same cross-section (solid up to 2 x 10 mm², finely stranded with end sleeve, up to 2 x 4 mm²).



- Individual devices can be removed from the bus-mounted assembly without the use of tools.






- The 5SL miniature circuit breakers are ideal for the quick and easy mounting of auxiliary switches and fault signal contacts.

Technical specifications




		5SL6
Standards		EN 60 898
Approvals		VDE
Tripping characteristic		B, C
Rated voltage U_n	V AC	230/400
Operational voltage		
• Min.	V AC/DC	24
• Max.	V AC	250/440
• Max.	V DC/pole	60 ¹⁾
Rated breaking capacity I_{cn}	Acc. to EN 60898	kA AC 6
Insulation coordination		
• Rated insulation voltage	V AC	250/440
• Degree of pollution for overvoltage category		2/III
Touch protection	Acc. to EN 50274	Yes
Handle end position, sealable		Yes
Degree of protection		IP20
CFC and silicone-free		Yes
Conductor cross-sections		
• Solid and stranded	mm ²	0.75 ... 35
• Finely stranded, with end sleeve	mm ²	0.75 ... 25
Terminals		
• Terminal tightening torque	Nm	2.5 ... 3
Mounting position		Any
Service life on average, with rated load		20 000 actuations
Ambient temperature	°C	-25 ... +45, occasionally +55, max. 95 % humidity, storage temperature: -40 ... +75
Resistance to climate	Acc. to IEC 60068-2-30	6 cycles
Resistance to vibrations	Acc. to IEC 60068-2-6	m/s ² 60 at 10 Hz ... 150 Hz

¹⁾ The operational voltage 60 V DC/pole takes into account a battery charging voltage with a peak value of 72 V.

Selection and ordering data (Dated 08/2009)

6 000 3		I_n	Width	DT	Characteristic B		Characteristic C		PG	DT	PG	PU	PS*/ P. unit	Weight per PU approx.
		A	MW ¹⁾		Order No.		Order No.					Unit(s)	Unit(s)	kg
MCB 6000 A														
1P, 230/400 V AC														
														
		0.3	1	--			A	5SL6 114-7			003	1	1	0.165
		0.5		--			A	5SL6 105-7			003	1	1	0.165
		1		--			A	5SL6 101-7			003	1	1	0.165
		1.6		--			A	5SL6 115-7			003	1	1	0.165
		2		--			A	5SL6 102-7			003	1	1	0.165
		3		--			A	5SL6 103-7			003	1	1	0.165
		4		--			A	5SL6 104-7			003	1	1	0.165
		6	A		5SL6 106-6			5SL6 106-7	002		003	1	1	0.165
		8		--			A	5SL6 108-7			003	1	1	0.165
		10	A		5SL6 110-6			5SL6 110-7	002	A	003	1	1	0.165
		13	A		5SL6 113-6			5SL6 113-7	002	A	003	1	1	0.165
		16	A		5SL6 116-6			5SL6 116-7	002	A	003	1	1	0.165
		20	A		5SL6 120-6			5SL6 120-7	002	A	003	1	1	0.165
		25	A		5SL6 125-6			5SL6 125-7	002	A	003	1	1	0.165
		32	A		5SL6 132-6			5SL6 132-7	002	A	003	1	1	0.165
		40	A		5SL6 140-6			5SL6 140-7	002	A	003	1	1	0.165
		50	A		5SL6 150-6			5SL6 150-7	002	A	003	1	1	0.165
		63	A		5SL6 163-6			5SL6 163-7	002	A	003	1	1	0.165
1P+N, 230 V AC														
														
		0.3	2	--			A	5SL6 514-7			003	1	1	0.330
		0.5		--			A	5SL6 505-7			003	1	1	0.330
		1		--			A	5SL6 501-7			003	1	1	0.330
		1.6		--			A	5SL6 515-7			003	1	1	0.330
		2		--			A	5SL6 502-7			003	1	1	0.330
		3		--			A	5SL6 503-7			003	1	1	0.330
		4		--			A	5SL6 504-7			003	1	1	0.330
		6	A		5SL6 506-6			5SL6 506-7	002		003	1	1	0.330
		8		--			A	5SL6 508-7			003	1	1	0.330
		10	A		5SL6 510-6			5SL6 510-7	002	A	003	1	1	0.330
		13	A		5SL6 513-6			5SL6 513-7	002	A	003	1	1	0.330
		16	A		5SL6 516-6			5SL6 516-7	002	A	003	1	1	0.330
		20	A		5SL6 520-6			5SL6 520-7	002	A	003	1	1	0.330
		25	A		5SL6 525-6			5SL6 525-7	002	A	003	1	1	0.330
		32	A		5SL6 532-6			5SL6 532-7	002	A	003	1	1	0.330
		40	A		5SL6 540-6			5SL6 540-7	002	A	003	1	1	0.330
		50	A		5SL6 550-6			5SL6 550-7	002	A	003	1	1	0.330
		63	A		5SL6 563-6			5SL6 563-7	002	A	003	1	1	0.330
2P, 400 V AC														
														
		0.3	2	--			A	5SL6 214-7			003	1	1	0.330
		0.5		--			A	5SL6 205-7			003	1	1	0.330
		1		--			A	5SL6 201-7			003	1	1	0.330
		1.6		--			A	5SL6 215-7			003	1	1	0.330
		2		--			A	5SL6 202-7			003	1	1	0.330
		3		--			A	5SL6 203-7			003	1	1	0.330
		4		--			A	5SL6 204-7			003	1	1	0.330
		6	A		5SL6 206-6			5SL6 206-7	002	A	003	1	1	0.330
		8		--			A	5SL6 208-7			003	1	1	0.330
		10	A		5SL6 210-6			5SL6 210-7	002	A	003	1	1	0.330
		13	A		5SL6 213-6			5SL6 213-7	002	A	003	1	1	0.330
		16	A		5SL6 216-6			5SL6 216-7	002	A	003	1	1	0.330
		20	A		5SL6 220-6			5SL6 220-7	002	A	003	1	1	0.330
		25	A		5SL6 225-6			5SL6 225-7	002	A	003	1	1	0.330
		32	A		5SL6 232-6			5SL6 232-7	002	A	003	1	1	0.330
		40	A		5SL6 240-6			5SL6 240-7	002	A	003	1	1	0.330
		50	A		5SL6 250-6			5SL6 250-7	002	A	003	1	1	0.330
		63	A		5SL6 263-6			5SL6 263-7	002	A	003	1	1	0.330







6 000 3		I_n	Bau- breite	LK	Charakteristik B Bestell-Nr.	PG	LK	Charakteristik C Bestell-Nr.	PG	PE	PKG*/ VPE	Gewicht pro PE etwa
		A	TE ¹⁾							Stück	Stück	kg
MCB 6000 A												
3P, 400 V AC												
	0.3	3	--				A	5SL6 314-7	003	1	1	0.465
	0.5		--				A	5SL6 305-7	003	1	1	0.465
	1		--				A	5SL6 301-7	003	1	1	0.465
	1.6		--				A	5SL6 315-7	003	1	1	0.465
	2		--				A	5SL6 302-7	003	1	1	0.465
	3		--				A	5SL6 303-7	003	1	1	0.465
	4		--				A	5SL6 304-7	003	1	1	0.465
	6		--				A	5SL6 306-7	003	1	1	0.465
	8	A	5SL6 306-6			002	A	5SL6 308-7	003	1	1	0.465
	10	A	5SL6 310-6			002	A	5SL6 310-7	003	1	1	0.465
	13	A	5SL6 313-6			002	A	5SL6 313-7	003	1	1	0.465
	16	A	5SL6 316-6			002	A	5SL6 316-7	003	1	1	0.465
	20	A	5SL6 320-6			002	A	5SL6 320-7	003	1	1	0.465
	25	A	5SL6 325-6			002	A	5SL6 325-7	003	1	1	0.465
	32	A	5SL6 332-6			002	A	5SL6 332-7	003	1	1	0.465
	40	A	5SL6 340-6			002	A	5SL6 340-7	003	1	1	0.465
50	A	5SL6 350-6			002	A	5SL6 350-7	003	1	1	0.465	
63	A	5SL6 363-6			002	A	5SL6 363-7	003	1	1	0.465	
3P+N, 400 V AC												
	0.3	4	--				A	5SL6 614-7	003	1	1	0.660
	0.5		--				A	5SL6 605-7	003	1	1	0.660
	1		--				A	5SL6 601-7	003	1	1	0.660
	1.6		--				A	5SL6 615-7	003	1	1	0.660
	2		--				A	5SL6 602-7	003	1	1	0.660
	3		--				A	5SL6 603-7	003	1	1	0.660
	4		--				A	5SL6 604-7	003	1	1	0.660
	6		--				A	5SL6 606-7	003	1	1	0.660
	8	A	5SL6 606-6			002	A	5SL6 608-7	003	1	1	0.660
	10	A	5SL6 610-6			002	A	5SL6 610-7	003	1	1	0.660
	13	A	5SL6 613-6			002	A	5SL6 613-7	003	1	1	0.660
	16	A	5SL6 616-6			002	A	5SL6 616-7	003	1	1	0.660
	20	A	5SL6 620-6			002	A	5SL6 620-7	003	1	1	0.660
	25	A	5SL6 625-6			002	A	5SL6 625-7	003	1	1	0.660
	32	A	5SL6 632-6			002	A	5SL6 632-7	003	1	1	0.660
	40	A	5SL6 640-6			002	A	5SL6 640-7	003	1	1	0.660
50	A	5SL6 650-6			002	A	5SL6 650-7	003	1	1	0.660	
63	A	5SL6 663-6			002	A	5SL6 663-7	003	1	1	0.660	
4P, 400 V AC												
	0.3	4	--				A	5SL6 414-7	003	1	1	0.660
	0.5		--				A	5SL6 405-7	003	1	1	0.660
	1		--				A	5SL6 401-7	003	1	1	0.660
	1.6		--				A	5SL6 415-7	003	1	1	0.660
	2		--				A	5SL6 402-7	003	1	1	0.660
	3		--				A	5SL6 403-7	003	1	1	0.660
	4		--				A	5SL6 404-7	003	1	1	0.660
	6		--				A	5SL6 406-7	003	1	1	0.660
	8	A	5SL6 406-6			002	A	5SL6 408-7	003	1	1	0.660
	10	A	5SL6 410-6			002	A	5SL6 410-7	003	1	1	0.660
	13	A	5SL6 413-6			002	A	5SL6 413-7	003	1	1	0.660
	16	A	5SL6 416-6			002	A	5SL6 416-7	003	1	1	0.660
	20	A	5SL6 420-6			002	A	5SL6 420-7	003	1	1	0.660
	25	A	5SL6 425-6			002	A	5SL6 425-7	003	1	1	0.660
	32	A	5SL6 432-6			002	A	5SL6 432-7	003	1	1	0.660
	40	A	5SL6 440-6			002	A	5SL6 440-7	003	1	1	0.660
50	A	5SL6 450-6			002	A	5SL6 450-7	003	1	1	0.660	
63	A	5SL6 463-6			002	A	5SL6 463-7	003	1	1	0.660	

¹⁾ 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

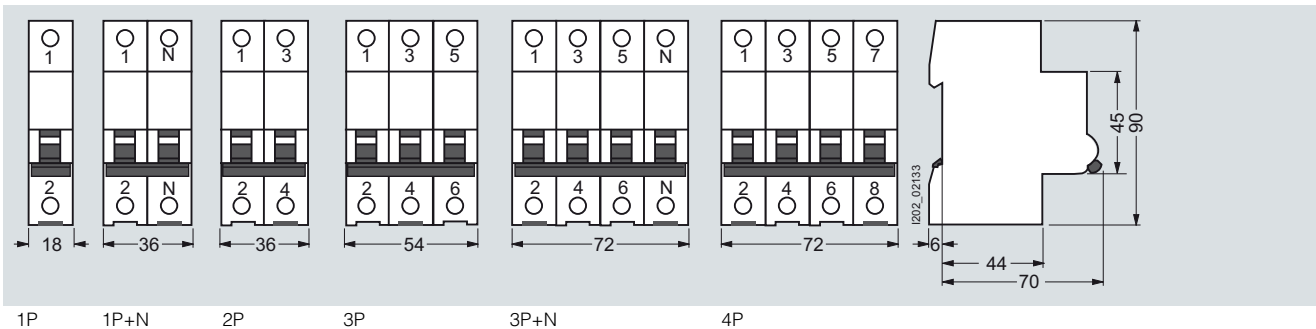
Accessories

Rated voltage	MW	DT	Order No.	PG	PU	PS*/ P. unit	Weight per PU approx.
U_n V					Unit(s)	Unit(s)	kg
Auxiliary switches (AS)							
For 5SL, 5SP4 and 5SY miniature circuit breakers							
	1 NO + 1 NC	0.5	▶ 5ST3 010	027	1	1	0.050
	For small output		▶ 5ST3 013	027	1	1	0.050
	2 NO		A 5ST3 011	027	1	1	0.050
	For small output		B 5ST3 014	027	1	1	0.050
	2 NC		A 5ST3 012	027	1	1	0.050
	For small output		B 5ST3 015	027	1	1	0.050
Fault signal contacts (FC)							
For 5SL, 5SP4 and 5SY miniature circuit breakers							
	1 NO + 1 NC	0.5	▶ 5ST3 020	027	1	1	0.050
	2 NO		B 5ST3 021	027	1	1	0.050
	2 NC		A 5ST3 022	027	1	1	0.050
Handle locking devices							
For 5SL, 5SY, 5SJ and 5SP miniature circuit breakers							
	Version		MW DT	Order No.	PG	PU	PS*/ P. unit
						Unit(s)	Unit(s) kg
			A	5ST3 806	027	1	5 0.007
Padlocks							
For 5ST3 801 and 5ST3 806 handle locking devices							
			▶	5ST3 802	027	1	1 0.027

* You can order this quantity or a multiple thereof.

Dimensional drawings

5SL6



Schematics

Symbols

5SL6



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