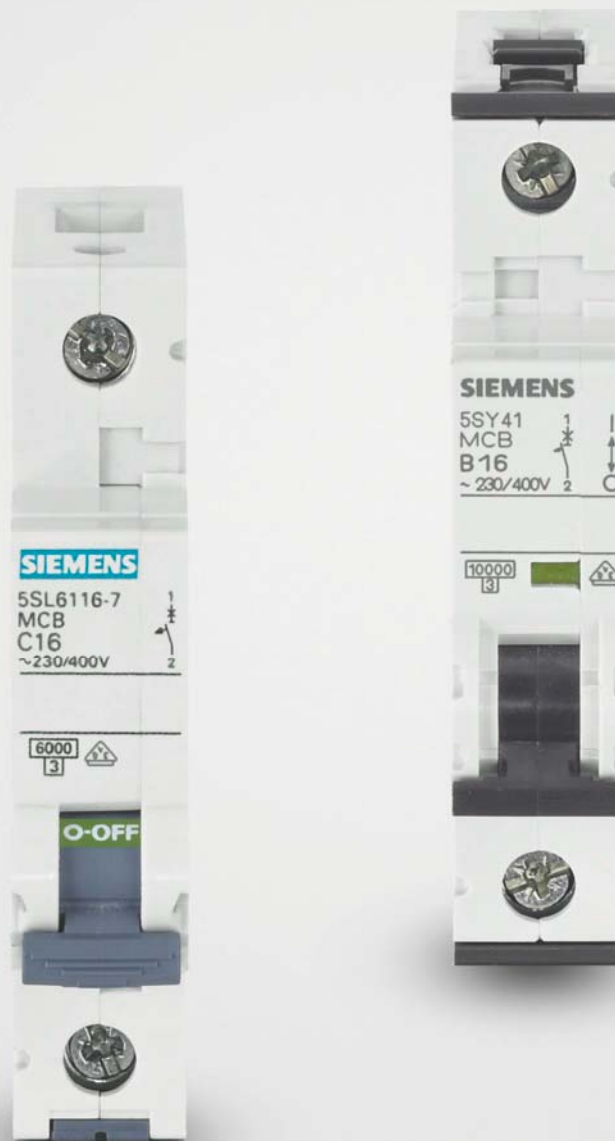


BETA Low-Voltage Circuit Protection: Miniature Circuit Breakers

Catalog News ET B1 N • March 2010



Answers for infrastructure.

SIEMENS

BETA Protecting Miniature Circuit Breakers

Miniature circuit breakers, 5SY and 5SP

Overview

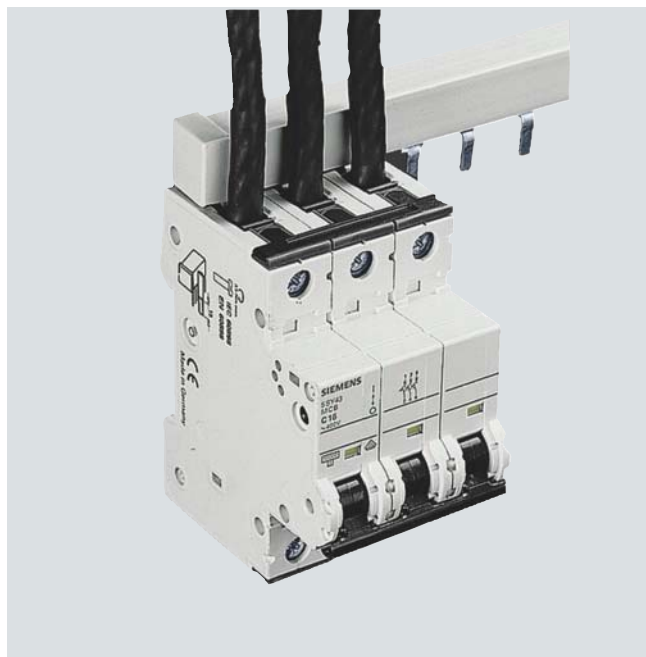
MCBs are used to protect plants in buildings and for industrial applications. The devices can be used as main control switches for the disconnection or isolation of plants.

Used in industrial applications and plant engineering, miniature circuit breakers can be supplemented with additional components, such as auxiliary switches, fault signal contacts, shunt trips, undervoltage releases, remote controls and RC units.

The devices are approved for worldwide use according to IEC standards for systems up to 250/440 V AC. 60 V DC per pole is permitted in DC systems.

For North America, we also have additional certification to UL 1077 for use as "supplementary protectors" in systems up to 480Y/277 V AC. For use in ship building, the devices also have numerous certifications according to shipping classifications; BV, DNV, GL and LRS. [Further information can be found on page 1/5.](#)

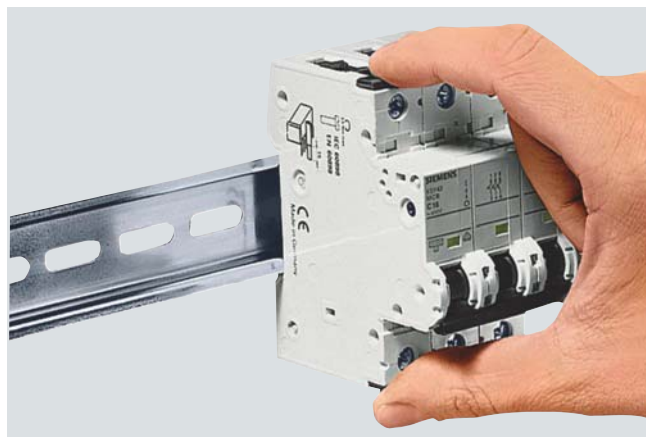
Benefits



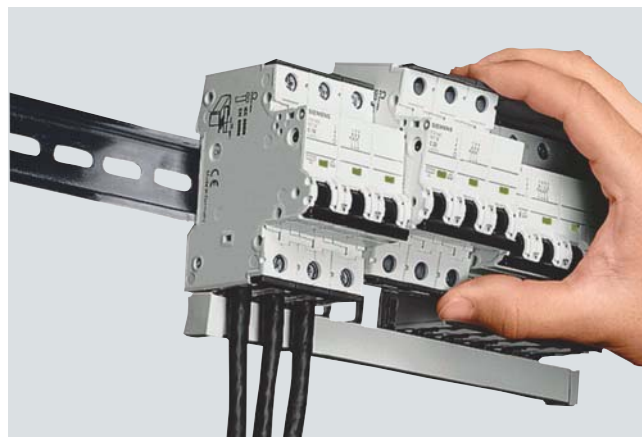
- Optional top or bottom infeed as the terminals are identical.
- Clear and visible conductor connection in front of the busbar facilitates controls.
- Large and easily accessible wiring space enables easy insertion of conductor in the terminal.



- Integrated movable terminal covers located at the cable entries ensure the terminals are fully insulated when the screws are tightened.
- The effective touch protection when grasping the device considerably exceeds the requirements of VBG 4/BGV A3.



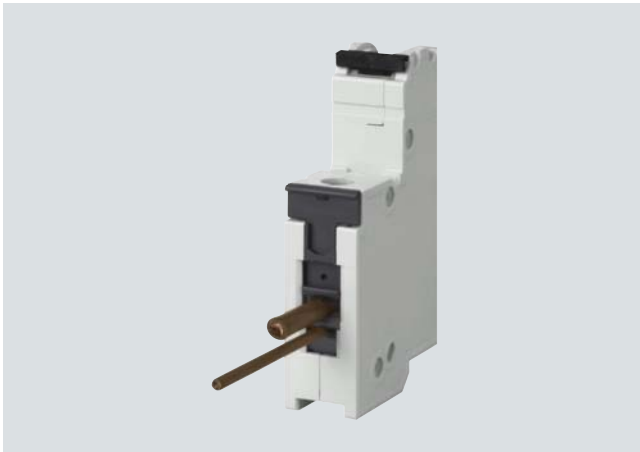
- Manual snap-on fixing and release systems that require no tools enable fast assembly and disassembly of MCBs.
- Marked labeling field on all modular installation devices for uniform, quick and easy identification.



- Quick and easy manual removal of MCBs from the busbar assembly if connections need to be changed.
- Time saving if parts need to be replaced because the busbars no longer need to be freed from the adjacent devices.

BETA Protecting Miniature Circuit Breakers

Miniature circuit breakers, 5SY and 5SP



- Double terminal chambers enable accommodation of 2 wires of different cross-sections (up to 16 mm² in the bottom chamber and 35 mm² in the top chamber; Different version of cross-section combination on request).



- 5SY miniature circuit breakers serve for easy and fast installation of auxiliary switches and fault signal contacts. Non-volatile metal brackets to be used with additional components assure easy and fast mounting of the devices on miniature circuit breakers without tools.

Technical specifications

		5SY4	5SY5	5SY7	5SY8	5SP4	5SP5
Standards		EN 60898-1; EN 60947-2	EN 60898-2	EN 60898-1; EN 60947-2	EN 60947-2	EN 60898-1; EN 60947-2	EN 60898-2
Approved acc. to		See page 1/5					
Operational voltage		V AC V DC	230/400 --	230/400 220/440/880	230/400 --	230/400 --	230/400 220/440
Acc. to EN 60898-1/-2 and EN 60947-2	Min.	V AC/DC	24	24	24	24	24
	Max.	V DC/pole	60 ¹⁾	250	60 ¹⁾	60 ¹⁾	250
Acc. to UL 1077 and CSA C22.2 No.235	Max.	V AC	440	440	440	440	440
	Max.	V AC V DC/pole	480Y/277 60	-- --	480Y/277 60	480Y/277 60	480Y/277 --
Rated switching capacity²⁾							
• I_{cn} acc. to IEC/EN 60898-1	kA AC	10	10	15	--	10	3
• I_{cn} acc. to IEC/EN 60898-2	kA DC	--	10	--	--	--	10
• I_{cu} acc. to IEC/EN 60947-2	kA AC	--	--	--	25	--	--
	kA DC	--	15	--	--	--	15
• Acc. to UL1077 and CSA C22.2 No.235	kA AC	5	--	5	5	5	--
Insulation coordination							
• Rated insulation voltage	V AC V DC/pole	250/440 --	250	--	--	--	250
Degree of pollution for overvoltage category		3/III					
Touch protection Acc. to EN 50274		Yes					
Characteristics of main switches Acc. to EN 60204		Yes					
Handle end position, sealable		Yes					
Degree of protection Acc. to EN 60529		IP20, with connected conductors					
CFC and silicone-free		Yes					
Mounting							
• Snap-on fixing system		Yes				--	
• Standard mounting rail and screw fixing		--				Yes	
Terminals							
• Tunnel terminals at both ends		--				Yes	
• Combined terminals at both ends		Yes				--	
• Terminal tightening torque	Nm lb. in	2.5 ... 3 22 ... 26				2.5 ... 3.5 22 ... 31	
Conductor cross-sections							
• Solid and stranded	mm ²	0.75 ... 35				0.75 ... 50	
• Finely stranded, with end sleeve	mm ²	0.75 ... 25				0.75 ... 35	
• AWG cables	AWG	14 ... 4				14 ... 2	
Mains connection							
• AC		Any				--	
• DC		Any	³⁾	Any			³⁾
Mounting position		Any					
Service life		Operations Operations	20000 for 5SY5 at 40 A, 50 A and 63 A 10 000				
Ambient temperature		°C -25 ... +45, occasionally +55, max. 95 % humidity					
Storage temperature		°C -40 ... +75					
Resistance to climate Acc. to IEC 60068-2-30		6 cycles					
Shock Acc. to IEC 60068-2-27		m/s ²	150 at 11 ms half-sine				
Resistance to vibrations Acc. to IEC 60068-2-6		m/s ²	50 at 25 ... 150 Hz and 60 at 35 Hz (4 sec)				

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

²⁾ For further details, please refer to page 1/56.




³⁾ Ensure compliance with the specified polarity when connecting DC.



BETA Protecting Miniature Circuit Breakers

Miniature circuit breakers, 5SY and 5SP
10 000 A, 5SY4

Selection and ordering data

10 000 3		I_n	Moun- ting width MW ¹⁾	DT	Characteristic A		Characteristic B		PU	PS*/ P. unit	PG	Weight per PU approx. kg		
		A			Order No.	Price per PU	PG	DT	Order No.	Price per PU	Unit(s)	Unit(s)		
MCBs 10 000 A														
1P, 230/400 V AC														
	0.5	1	C		5SY4 105-5		001	--			1	1	0.165	
	1		A		5SY4 101-5		001	--			1	1	0.165	
	1.6		B		5SY4 115-5		001	--			1	1	0.165	
	2		A		5SY4 102-5		001	--			1	1	0.165	
	3		A		5SY4 103-5		001	--			1	1	0.165	
	4		A		5SY4 104-5		001	--			1	1/12	0.165	
	6		A		5SY4 106-5		001 A		5SY4 106-6		1	1/12	002	0.165
	8		B		5SY4 108-5		001	--			1	1	0.165	
	10		A		5SY4 110-5		001	▶	5SY4 110-6		1	1/12	002	0.165
	13		C		5SY4 113-5		001 A		5SY4 113-6		1	1	002	0.165
	16		A		5SY4 116-5		001	▶	5SY4 116-6		1	1/12	002	0.165
	20		A		5SY4 120-5		001 A		5SY4 120-6		1	1	002	0.165
	25		A		5SY4 125-5		001	▶	5SY4 125-6		1	1	002	0.165
	32		B		5SY4 132-5		001 A		5SY4 132-6		1	1	002	0.165
	40		B		5SY4 140-5		001 B		5SY4 140-6		1	1	002	0.165
	50		C		5SY4 150-5		001 B		5SY4 150-6		1	1	002	0.165
63		C		5SY4 163-5		001 B		5SY4 163-6		1	1	002	0.165	
80		--						5SY4 180-6		1	1	002	0.162	
1P+N, 230 V AC														
	1	2	C		5SY4 501-5		001	--			1	1	0.330	
	1.6		B		5SY4 515-5		001	--			1	1	0.330	
	2		B		5SY4 502-5		001	--			1	1	0.330	
	3		C		5SY4 503-5		001	--			1	1	0.330	
	4		B		5SY4 504-5		001	--			1	1	0.330	
	6		C		5SY4 506-5		001 A		5SY4 506-6		1	1	002	0.330
	8		C		5SY4 508-5		001	--			1	1	0.330	
	10		B		5SY4 510-5		001 A		5SY4 510-6		1	1	002	0.330
	13		C		5SY4 513-5		001 A		5SY4 513-6		1	1/6	002	0.330
	16		C		5SY4 516-5		001 A		5SY4 516-6		1	1/6	002	0.330
	20		C		5SY4 520-5		001 B		5SY4 520-6		1	1	002	0.330
	25		C		5SY4 525-5		001 B		5SY4 525-6		1	1	002	0.330
	32		C		5SY4 532-5		001 B		5SY4 532-6		1	1	002	0.330
40		C		5SY4 540-5		001 C		5SY4 540-6		1	1	002	0.330	
50		C		5SY4 550-5		001 C		5SY4 550-6		1	1	002	0.330	
63		C		5SY4 563-5		001 C		5SY4 563-6		1	1	002	0.330	
2P, 400 V AC														
	0.5	2	C		5SY4 205-5		001	--			1	1	0.330	
	1		B		5SY4 201-5		001	--			1	1	0.330	
	1.6		B		5SY4 215-5		001	--			1	1	0.330	
	2		A		5SY4 202-5		001	--			1	1	0.330	
	3		B		5SY4 203-5		001	--			1	1	0.330	
	4		A		5SY4 204-5		001	--			1	1	0.330	
	6		A		5SY4 206-5		001 A		5SY4 206-6		1	1	002	0.330
	8		C		5SY4 208-5		001	--			1	1	0.330	
	10		A		5SY4 210-5		001 A		5SY4 210-6		1	1/6	002	0.330
	13		C		5SY4 213-5		001 B		5SY4 213-6		1	1	002	0.330
	16		A		5SY4 216-5		001	▶	5SY4 216-6		1	1/6	002	0.330
	20		B		5SY4 220-5		001 A		5SY4 220-6		1	1	002	0.330
	25		B		5SY4 225-5		001 A		5SY4 225-6		1	1	002	0.330
	32		A		5SY4 232-5		001 B		5SY4 232-6		1	1	002	0.330
	40		B		5SY4 240-5		001 B		5SY4 240-6		1	1	002	0.330
	50		C		5SY4 250-5		001 B		5SY4 250-6		1	1	002	0.330
	63		C		5SY4 263-5		001 B		5SY4 263-6		1	1	002	0.330
	80		--						5SY4 280-6		1	1	002	0.324




¹⁾ 1 MW (modular width) = 18 mm.



BETA Protecting Miniature Circuit Breakers

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Miniature circuit breakers, 5SY and 5SP
10 000 A, 5SY4




10 000		I_n	Mounting width MW ¹⁾	DT	Characteristic A			Characteristic B			PU Unit(s)	PS*/ P. unit Unit(s)	PG	Weight per PU approx. kg
3	Order No.				Price per PU	PG	DT	Order No.	Price per PU					
MCBs 10 000 A														
3P, 400 V AC														
	0.5	3	C	5SY4 305-5			001	--		1	1		0.495	
	1		C	5SY4 301-5			001	--		1	1		0.495	
	1.6		C	5SY4 315-5			001	--		1	1		0.495	
	2		B	5SY4 302-5			001	--		1	1		0.495	
	3		C	5SY4 303-5			001	--		1	1		0.495	
	4		B	5SY4 304-5			001	--		1	1		0.495	
	6		B	5SY4 306-5			001	A	5SY4 306-6	1	1	002	0.495	
	8		C	5SY4 308-5			001	--		1	1		0.495	
	10		B	5SY4 310-5			001	▶	5SY4 310-6	1	1	002	0.495	
	13		C	5SY4 313-5			001	B	5SY4 313-6	1	1	002	0.495	
	16		A	5SY4 316-5			001	▶	5SY4 316-6	1	1/4	002	0.495	
	20		B	5SY4 320-5			001	A	5SY4 320-6	1	1	002	0.495	
	25		B	5SY4 325-5			001	A	5SY4 325-6	1	1	002	0.495	
	32		B	5SY4 332-5			001	▶	5SY4 332-6	1	1/4	002	0.495	
	40		B	5SY4 340-5			001	A	5SY4 340-6	1	1	002	0.495	
	50		B	5SY4 350-5			001	A	5SY4 350-6	1	1	002	0.495	
63		C	5SY4 363-5			001	A	5SY4 363-6	1	1	002	0.495		
80		--	--				B	5SY4 380-6	1	1	002	0.486		
3P+N, 400 V AC														
	1	4	C	5SY4 601-5			001	--		1	1		0.660	
	1.6		C	5SY4 615-5			001	--		1	1		0.660	
	2		C	5SY4 602-5			001	--		1	1		0.660	
	3		C	5SY4 603-5			001	--		1	1		0.660	
	4		C	5SY4 604-5			001	--		1	1		0.660	
	6		C	5SY4 606-5			001	B	5SY4 606-6	1	1	002	0.660	
	8		C	5SY4 608-5			001	--		1	1		0.660	
	10		C	5SY4 610-5			001	B	5SY4 610-6	1	1	002	0.660	
	13		C	5SY4 613-5			001	C	5SY4 613-6	1	1	002	0.660	
	16		C	5SY4 616-5			001	A	5SY4 616-6	1	1	002	0.660	
	20		C	5SY4 620-5			001	B	5SY4 620-6	1	1	002	0.660	
	25		C	5SY4 625-5			001	A	5SY4 625-6	1	1	002	0.660	
	32		C	5SY4 632-5			001	B	5SY4 632-6	1	1	002	0.660	
	40		C	5SY4 640-5			001	C	5SY4 640-6	1	1	002	0.660	
50		C	5SY4 650-5			001	C	5SY4 650-6	1	1	002	0.660		
63		C	5SY4 663-5			001	A	5SY4 663-6	1	1	002	0.660		
4P, 400 V AC														
	1	4	C	5SY4 401-5			001	--		1	1		0.660	
	1.6		C	5SY4 415-5			001	--		1	1		0.660	
	2		C	5SY4 402-5			001	--		1	1		0.660	
	3		C	5SY4 403-5			001	--		1	1		0.660	
	4		C	5SY4 404-5			001	--		1	1		0.660	
	6		C	5SY4 406-5			001	A	5SY4 406-6	1	1	002	0.660	
	8		C	5SY4 408-5			001	--		1	1		0.660	
	10		C	5SY4 410-5			001	B	5SY4 410-6	1	1	002	0.660	
	13		C	5SY4 413-5			001	C	5SY4 413-6	1	1	002	0.660	
	16		C	5SY4 416-5			001	A	5SY4 416-6	1	1	002	0.660	
	20		C	5SY4 420-5			001	C	5SY4 420-6	1	1	002	0.660	
	25		C	5SY4 425-5			001	B	5SY4 425-6	1	1	002	0.660	
	32		C	5SY4 432-5			001	B	5SY4 432-6	1	1	002	0.660	
	40		C	5SY4 440-5			001	B	5SY4 440-6	1	1	002	0.660	
	50		C	5SY4 450-5			001	B	5SY4 450-6	1	1	002	0.660	
	63		C	5SY4 463-5			001	B	5SY4 463-6	1	1	002	0.660	
80		--	--				B	5SY4 480-6	1	1	002	0.648		

¹⁾ 1 MW (modular width) = 18 mm.



BETA Protecting Miniature Circuit Breakers

Miniature circuit breakers, 5SY and 5SP
10 000 A, 5SY4

10 000 3	I_n A	Mounting width MW ¹⁾	DT	Characteristic C			Characteristic D			PU Unit(s)	PS/ P. unit Unit(s)	PG	Weight per PU approx. kg
				Order No.	Price per PU	PG DT	Order No.	Price per PU	PG				
MCBs 10 000 A													
1P, 230/400 V AC													
	0.3	1	B	5SY4 114-7		003 C	5SY4 114-8		1	1	004	0.165	
	0.5		A	5SY4 105-7		003 B	5SY4 105-8		1	1	004	0.165	
	1		▶	5SY4 101-7		003 A	5SY4 101-8		1	1	004	0.165	
	1.6		A	5SY4 115-7		003 B	5SY4 115-8		1	1	004	0.165	
	2		▶	5SY4 102-7		003 A	5SY4 102-8		1	1/12	004	0.165	
	3		A	5SY4 103-7		003 A	5SY4 103-8		1	1	004	0.165	
	4		▶	5SY4 104-7		003 A	5SY4 104-8		1	1/12	004	0.165	
	5		C	5SY4 111-7		003	--		1	1		0.165	
	6		▶	5SY4 106-7		003 A	5SY4 106-8		1	1	004	0.165	
	8		A	5SY4 108-7		003 A	5SY4 108-8		1	1	004	0.165	
	10		▶	5SY4 110-7		003 A	5SY4 110-8		1	1/12	004	0.165	
	13		A	5SY4 113-7		003 B	5SY4 113-8		1	1	004	0.165	
	15		C	5SY4 118-7		003	--		1	1		0.165	
	16		▶	5SY4 116-7		003 A	5SY4 116-8		1	1	004	0.165	
	20		▶	5SY4 120-7		003 A	5SY4 120-8		1	1	004	0.165	
	25		▶	5SY4 125-7		003 B	5SY4 125-8		1	1	004	0.165	
	30		B	5SY4 130-7		003	--		1	1		0.165	
	32		▶	5SY4 132-7		003 B	5SY4 132-8		1	1	004	0.165	
	35		B	5SY4 135-7		003	--		1	1		0.165	
	40		A	5SY4 140-7		003 B	5SY4 140-8		1	1	004	0.165	
	45		B	5SY4 145-7		003	--		1	1		0.165	
	50		A	5SY4 150-7		003 B	5SY4 150-8		1	1	004	0.165	
	60		B	5SY4 160-7		003	--		1	1		0.165	
	63		B	5SY4 163-7		003 B	5SY4 163-8		1	1	004	0.165	
	80		B	5SY4 180-7		003	--		1	1		0.161	
1P+N, 230 V AC													
	0.3	2	C	5SY4 514-7		003 C	5SY4 514-8		1	1	004	0.330	
	0.5		B	5SY4 505-7		003 C	5SY4 505-8		1	1	004	0.330	
	1		A	5SY4 501-7		003 B	5SY4 501-8		1	1	004	0.330	
	1.6		C	5SY4 515-7		003 C	5SY4 515-8		1	1	004	0.330	
	2		A	5SY4 502-7		003 A	5SY4 502-8		1	1	004	0.330	
	3		A	5SY4 503-7		003 B	5SY4 503-8		1	1	004	0.330	
	4		A	5SY4 504-7		003 B	5SY4 504-8		1	1	004	0.330	
	6		A	5SY4 506-7		003 A	5SY4 506-8		1	1	004	0.330	
	8		B	5SY4 508-7		003 C	5SY4 508-8		1	1	004	0.330	
	10		A	5SY4 510-7		003 A	5SY4 510-8		1	1	004	0.330	
	13		A	5SY4 513-7		003 B	5SY4 513-8		1	1	004	0.330	
	16		A	5SY4 516-7		003 A	5SY4 516-8		1	1	004	0.330	
	20		A	5SY4 520-7		003 B	5SY4 520-8		1	1	004	0.330	
	25		A	5SY4 525-7		003 B	5SY4 525-8		1	1	004	0.330	
	32		A	5SY4 532-7		003 B	5SY4 532-8		1	1	004	0.330	
	40		B	5SY4 540-7		003 C	5SY4 540-8		1	1	004	0.330	
	50		C	5SY4 550-7		003 C	5SY4 550-8		1	1	004	0.330	
	63		C	5SY4 563-7		003 C	5SY4 563-8		1	1	004	0.330	
	80		B	5SY4 580-7		003	--		1	1		0.323	
2P, 400 V AC													
	0.3	2	A	5SY4 214-7		003 B	5SY4 214-8		1	1	004	0.330	
	0.5		A	5SY4 205-7		003 A	5SY4 205-8		1	1	004	0.330	
	1		A	5SY4 201-7		003 A	5SY4 201-8		1	1	004	0.330	
	1.6		A	5SY4 215-7		003 A	5SY4 215-8		1	1	004	0.330	
	2		A	5SY4 202-7		003 A	5SY4 202-8		1	1	004	0.330	
	3		A	5SY4 203-7		003 A	5SY4 203-8		1	1	004	0.330	
	4		A	5SY4 204-7		003 A	5SY4 204-8		1	1	004	0.330	
	5		C	5SY4 211-7		003	--		1	1		0.330	
	6		A	5SY4 206-7		003 A	5SY4 206-8		1	1	004	0.330	
	8		A	5SY4 208-7		003 A	5SY4 208-8		1	1	004	0.330	
	10		▶	5SY4 210-7		003 A	5SY4 210-8		1	1	004	0.330	
	13		A	5SY4 213-7		003 A	5SY4 213-8		1	1	004	0.330	
	15		C	5SY4 218-7		003	--		1	1		0.330	
	16		▶	5SY4 216-7		003 A	5SY4 216-8		1	1	004	0.330	
	20		A	5SY4 220-7		003 A	5SY4 220-8		1	1	004	0.330	
	25		A	5SY4 225-7		003 A	5SY4 225-8		1	1	004	0.330	
	30		C	5SY4 230-7		003	--		1	1		0.330	
	32		A	5SY4 232-7		003 A	5SY4 232-8		1	1	004	0.330	
	35		B	5SY4 235-7		003	--		1	1		0.330	
	40		A	5SY4 240-7		003 A	5SY4 240-8		1	1	004	0.330	
	45		B	5SY4 245-7		003	--		1	1		0.330	
	50		A	5SY4 250-7		003 B	5SY4 250-8		1	1	004	0.330	
	60		B	5SY4 260-7		003	--		1	1		0.330	
	63		A	5SY4 263-7		003 B	5SY4 263-8		1	1	004	0.330	
	80		B	5SY4 280-7		003	--		1	1/6		0.323	




* You can order this quantity or a multiple thereof.



BETA Protecting Miniature Circuit Breakers

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Miniature circuit breakers, 5SY and 5SP
10 000 A, 5SY4

10 000		I_n	Mounting width DT	Characteristic C			Characteristic D			PU	PS*/ P. unit	PG	Weight per PU approx.
3	A			Order No.	Price per PU	PG DT	Order No.	Price per PU	Unit(s)				
MCBs 10 000 A													
3P, 400 V AC													
	0.3	3	C	5SY4 314-7		003 C	5SY4 314-8		1	1	004	0.495	
	0.5		B	5SY4 305-7		003 B	5SY4 305-8		1	1	004	0.495	
	1		A	5SY4 301-7		003 A	5SY4 301-8		1	1	004	0.495	
	1.6		C	5SY4 315-7		003 B	5SY4 315-8		1	1	004	0.495	
	2		A	5SY4 302-7		003 A	5SY4 302-8		1	1	004	0.495	
	3		A	5SY4 303-7		003 A	5SY4 303-8		1	1	004	0.495	
	4		A	5SY4 304-7		003 A	5SY4 304-8		1	1	004	0.495	
	5		C	5SY4 311-7		003	--		1	1		0.495	
	6		▶	5SY4 306-7		003 A	5SY4 306-8		1	1	004	0.495	
	8		A	5SY4 308-7		003 B	5SY4 308-8		1	1	004	0.495	
	10		▶	5SY4 310-7		003 A	5SY4 310-8		1	1	004	0.495	
	13		A	5SY4 313-7		003 B	5SY4 313-8		1	1	004	0.495	
	15		C	5SY4 318-7		003	--		1	1		0.495	
	16		▶	5SY4 316-7		003 A	5SY4 316-8		1	1/4	004	0.495	
	20		▶	5SY4 320-7		003 A	5SY4 320-8		1	1	004	0.495	
	25		▶	5SY4 325-7		003 A	5SY4 325-8		1	1	004	0.495	
30		C	5SY4 330-7		003	--		1	1		0.495		
32		▶	5SY4 332-7		003 A	5SY4 332-8		1	1	004	0.495		
35		C	5SY4 335-7		003	--		1	1		0.495		
40		A	5SY4 340-7		003 A	5SY4 340-8		1	1	004	0.495		
45		B	5SY4 345-7		003	--		1	1		0.495		
50		A	5SY4 350-7		003 A	5SY4 350-8		1	1	004	0.495		
60		C	5SY4 360-7		003	--		1	1		0.495		
63		A	5SY4 363-7		003 A	5SY4 363-8		1	1	004	0.495		
80		B	5SY4 380-7		003	--		1	1		0.482		
3P+N, 400 V AC													
	0.3	4	C	5SY4 614-7		003 C	5SY4 614-8		1	1	004	0.660	
	0.5		C	5SY4 605-7		003 C	5SY4 605-8		1	1	004	0.660	
	1		C	5SY4 601-7		003 C	5SY4 601-8		1	1	004	0.660	
	1.6		C	5SY4 615-7		003 C	5SY4 615-8		1	1	004	0.660	
	2		B	5SY4 602-7		003 C	5SY4 602-8		1	1	004	0.660	
	3		B	5SY4 603-7		003 C	5SY4 603-8		1	1	004	0.660	
	4		C	5SY4 604-7		003 C	5SY4 604-8		1	1	004	0.660	
	6		B	5SY4 606-7		003 C	5SY4 606-8		1	1	004	0.660	
	8		C	5SY4 608-7		003 C	5SY4 608-8		1	1	004	0.660	
	10		A	5SY4 610-7		003 B	5SY4 610-8		1	1	004	0.660	
	13		B	5SY4 613-7		003 C	5SY4 613-8		1	1	004	0.660	
	16		A	5SY4 616-7		003 A	5SY4 616-8		1	1	004	0.660	
	20		A	5SY4 620-7		003 B	5SY4 620-8		1	1	004	0.660	
	25		A	5SY4 625-7		003 A	5SY4 625-8		1	1	004	0.660	
	32		A	5SY4 632-7		003 A	5SY4 632-8		1	1	004	0.660	
	40		A	5SY4 640-7		003 A	5SY4 640-8		1	1	004	0.660	
50		B	5SY4 650-7		003 A	5SY4 650-8		1	1	004	0.660		
63		A	5SY4 663-7		003 B	5SY4 663-8		1	1	004	0.660		
80		B	5SY4 680-7		003	--		1	1		0.647		
4P, 400 V AC													
	0.3	4	C	5SY4 414-7		003 C	5SY4 414-8		1	1	004	0.660	
	0.5		C	5SY4 405-7		003 C	5SY4 405-8		1	1	004	0.660	
	1		C	5SY4 401-7		003 C	5SY4 401-8		1	1	004	0.660	
	1.6		C	5SY4 415-7		003 C	5SY4 415-8		1	1	004	0.660	
	2		B	5SY4 402-7		003 C	5SY4 402-8		1	1	004	0.660	
	3		C	5SY4 403-7		003 C	5SY4 403-8		1	1	004	0.660	
	4		B	5SY4 404-7		003 C	5SY4 404-8		1	1	004	0.660	
	6		A	5SY4 406-7		003 B	5SY4 406-8		1	1	004	0.660	
	8		C	5SY4 408-7		003 C	5SY4 408-8		1	1	004	0.660	
	10		A	5SY4 410-7		003 A	5SY4 410-8		1	1	004	0.660	
	13		C	5SY4 413-7		003 C	5SY4 413-8		1	1	004	0.660	
	16		A	5SY4 416-7		003 ▶	5SY4 416-8		1	1	004	0.660	
	20		A	5SY4 420-7		003 A	5SY4 420-8		1	1	004	0.660	
	25		A	5SY4 425-7		003 A	5SY4 425-8		1	1	004	0.660	
	32		A	5SY4 432-7		003 ▶	5SY4 432-8		1	1	004	0.660	
	40		A	5SY4 440-7		003 A	5SY4 440-8		1	1	004	0.660	
50		A	5SY4 450-7		003 A	5SY4 450-8		1	1	004	0.660		
63		A	5SY4 463-7		003 A	5SY4 463-8		1	1	004	0.660		
80		B	5SY4 480-7		003	--		1	1		0.647		

¹⁾ 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

BETA Protecting Miniature Circuit Breakers

Miniature circuit breakers, 5SY and 5SP
10 000 A, high current, 5SP4

10 000		I_n	Mounting width	DT	Characteristic B		PU	PS*/ P. unit	PG	Weight per PU approx.
		A	MW ¹⁾		Order No.	Price per PU	Unit(s)	Unit(s)		kg
MCBs 10 000 A, high current										
1P, 230/400 V AC										
	80	1.5		B	5SP4 180-6		1	1	002	0.258
	100			C	5SP4 191-6		1	1	002	0.258
	125			B	5SP4 192-6		1	1	002	0.258
2P, 400 V AC										
	80	3		C	5SP4 280-6		1	1	002	0.516
	100			C	5SP4 291-6		1	1	002	0.516
	125			C	5SP4 292-6		1	1	002	0.516
3P, 400 V AC										
	80	4.5		B	5SP4 380-6		1	1	002	0.762
	100			B	5SP4 391-6		1	1	002	0.762
	125			C	5SP4 392-6		1	1	002	0.762
4P, 400 V AC										
	80	6		B	5SP4 480-6		1	1	002	1.032
	100			C	5SP4 491-6		1	1	002	1.032
	125			C	5SP4 492-6		1	1	002	1.032

10 000		I_n	Mounting width	DT	Characteristic C		Characteristic D		PU	PS*/ P. unit	PG	Weight per PU approx.		
		A	MW ¹⁾		Order No.	Price per PU	PG	DT	Order No.	Price per PU	Unit(s)	Unit(s)	kg	
MCBs 10 000 A, high current														
1P, 230/400 V AC														
	80	1.5	A		5SP4 180-7		003	B	5SP4 180-8		1	1	004	0.258
	100		A		5SP4 191-7		003	C	5SP4 191-8		1	1	004	0.258
	125		A		5SP4 192-7		003		--		1	1		0.258
2P, 400 V AC														
	80	3	A		5SP4 280-7		003	C	5SP4 280-8		1	1	004	0.516
	100		A		5SP4 291-7		003	C	5SP4 291-8		1	1	004	0.516
	125		A		5SP4 292-7		003		--		1	1		0.516
3P, 400 V AC														
	80	4.5	A		5SP4 380-7		003	A	5SP4 380-8		1	1	004	0.762
	100		A		5SP4 391-7		003	A	5SP4 391-8		1	1	004	0.762
	125		A		5SP4 392-7		003		--		1	1		0.762
4P, 400 V AC														
	80	6	A		5SP4 480-7		003	A	5SP4 480-8		1	1	004	1.032
	100		A		5SP4 491-7		003	C	5SP4 491-8		1	1	004	1.032
	125		A		5SP4 492-7		003		--		1	1		1.032

¹⁾ 1 MW (modular width) = 18 mm.



BETA Protecting Miniature Circuit Breakers

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Miniature circuit breakers, 5SY and 5SP
10 000 A, universal current, 5SP5, 5SY5

10 000		I_n	Mounting width	DT	Characteristic B			Characteristic C			PU	PS*/P. unit	PG	Weight per PU approx.	
3	Order No.				Price per PU	PG	DT	Order No.	Price per PU	Unit(s)					Unit(s)
MCBs 10 000 A, universal current															
1P, 230/400 V AC, 220 V DC															
	0.3	1	--				C		5SY5 114-7		1	1	003	0.165	
	0.5		--				B		5SY5 105-7		1	1	003	0.165	
	1		--				A		5SY5 101-7		1	1	003	0.147	
	1.6		--				A		5SY5 115-7		1	1	003	0.165	
	2		--				A		5SY5 102-7		1	1	003	0.165	
	3		--		C	5SY5 102-6		002	A	5SY5 103-7		1	1	003	0.165
	4		--						5SY5 104-7		1	1	003	0.165	
	6		--		B	5SY5 104-6		002	A	5SY5 104-7		1	1	003	0.165
	8		--		A	5SY5 106-6		002	B	5SY5 106-7		1	1	003	0.165
			--						A	5SY5 108-7		1	1	003	0.165
	10		--		A	5SY5 110-6		002	B	5SY5 110-7		1	1	003	0.165
	13		--		C	5SY5 113-6		002	A	5SY5 113-7		1	1	003	0.165
	16		--		A	5SY5 116-6		002	B	5SY5 116-7		1	1	003	0.165
	20		--		C	5SY5 120-6		002	A	5SY5 120-7		1	1	003	0.165
	25		--		C	5SY5 125-6		002	B	5SY5 125-7		1	1	003	0.165
	32		--		C	5SY5 132-6		002	A	5SY5 132-7		1	1	003	0.165
40		--		C	5SY5 140-6		002	B	5SY5 140-7		1	1	003	0.165	
50		--		C	5SY5 150-6		002	A	5SY5 150-7		1	1	003	0.165	
63		--		C	5SY5 163-6		002	B	5SY5 163-7		1	1	003	0.165	
1P, 230/400 V AC, 220 V DC															
	80	1.5	--				B		5SP5 180-7		1	1	003	0.258	
	100		--				B		5SP5 191-7		1	1	003	0.258	
	125		--				B		5SP5 192-7		1	1	003	0.258	
			--												
2P, 400 V AC, 440 V DC															
	0.3	2	--				C		5SY5 214-7		1	1	003	0.330	
	0.5		--				B		5SY5 205-7		1	1	003	0.330	
	1		--				A		5SY5 201-7		1	1	003	0.330	
	1.6		--				B		5SY5 215-7		1	1	003	0.330	
	2		--				B		5SY5 202-7		1	1	003	0.330	
	3		--				B		5SY5 203-7		1	1	003	0.330	
	4		--				A		5SY5 204-7		1	1	003	0.330	
	6		--		A	5SY5 206-6		002	B	5SY5 206-7		1	1/6	003	0.330
	8		--						5SY5 208-7		1	1	003	0.330	
	10		--		A	5SY5 210-6		002	B	5SY5 210-7		1	1	003	0.330
	13		--		C	5SY5 213-6		002	A	5SY5 213-7		1	1	003	0.330
	16		--		A	5SY5 216-6		002	B	5SY5 216-7		1	1	003	0.330
	20		--		A	5SY5 220-6		002	A	5SY5 220-7		1	1	003	0.330
	25		--		C	5SY5 225-6		002	B	5SY5 225-7		1	1	003	0.330
	32		--		B	5SY5 232-6		002	A	5SY5 232-7		1	1	003	0.330
	40		--		C	5SY5 240-6		002	B	5SY5 240-7		1	1	003	0.330
50		--		C	5SY5 250-6		002	A	5SY5 250-7		1	1	003	0.330	
63		--		C	5SY5 263-6		002	B	5SY5 263-7		1	1	003	0.330	
2P, 400 V AC, 440 V DC															
	80	3	--				B		5SP5 280-7		1	1	003	0.516	
	100		--				B		5SP5 291-7		1	1	003	0.516	
	125		--				B		5SP5 292-7		1	1	003	0.516	

For application examples, see page 1/82.


¹⁾ 1 MW (modular width) = 18 mm.



BETA Protecting Miniature Circuit Breakers

Miniature circuit breakers, 5SY and 5SP
10 000 A, universal current, 5SP5, 5SY5



10 000		I_n	Moun- ting width MW ¹⁾	DT	Characteristic B			Characteristic C							
3	Order No.				Price per PU	PG	DT	Order No.	Price per PU	PU	PS*/ P. unit	PG	Weight per PU approx. kg		
		A							Unit(s)	Unit(s)					
															
MCBs 10 000 A, universal current															
4P, 400 V AC, 880 V DC															
		0.3	1	--				C				1	1	003	0.660
		0.5		--				C				1	1	003	0.660
		1		--				C				1	1	003	0.660
		1.6		--				C				1	1	003	0.660
		2		--				C				1	1	003	0.660
		3		--				C				1	1	003	0.660
		4		--				C				1	1	003	0.660
		6		C	5SY5 406-6			002	C			1	1	003	0.660
		8		--				C				1	1	003	0.660
		10		C	5SY5 410-6			002	C			1	1	003	0.660
		13		C	5SY5 413-6			002	C			1	1	003	0.660
		16		C	5SY5 416-6			002	C			1	1	003	0.660
		20		C	5SY5 420-6			002	C			1	1	003	0.660
		25		C	5SY5 425-6			002	C			1	1	003	0.660
		32		C	5SY5 432-6			002	C			1	1	003	0.660
		40		C	5SY5 440-6			002	C			1	1	003	0.660
		50		C	5SY5 450-6			002	C			1	1	003	0.660
		63		C	5SY5 463-6			002	C			1	1	003	0.660

For application examples, see page 1/82.

¹⁾ 1 MW (modular width) = 18 mm.



BETA Protecting Miniature Circuit Breakers

Miniature circuit breakers, 5SY and 5SP
15 000 A, 5SY7

1

15 000 3	I_n	Mounting width	DT	Characteristic B		PU	PS* P. unit	PG	Weight per PU approx.
				Order No.	Price per PU				
A		MW ¹⁾				Unit(s)	Unit(s)		kg
MCBs 15 000 A									
	1P, 230/400 V AC								
	6	1	▶	5SY7 106-6		1	1	002	0.165
	10		▶	5SY7 110-6		1	1	002	0.165
	13		C	5SY7 113-6		1	1	002	0.165
	16		▶	5SY7 116-6		1	1	002	0.165
	20		B	5SY7 120-6		1	1	002	0.165
	25		B	5SY7 125-6		1	1	002	0.165
	32		B	5SY7 132-6		1	1	002	0.165
	40		C	5SY7 140-6		1	1	002	0.165
50		C	5SY7 150-6		1	1	002	0.165	
63		C	5SY7 163-6		1	1	002	0.165	
	1P+N, 230 V AC								
	6	2	C	5SY7 506-6		1	1	002	0.330
	10		C	5SY7 510-6		1	1	002	0.330
	13		C	5SY7 513-6		1	1	002	0.330
	16		C	5SY7 516-6		1	1	002	0.330
	20		C	5SY7 520-6		1	1	002	0.330
	25		C	5SY7 525-6		1	1	002	0.330
	32		C	5SY7 532-6		1	1	002	0.330
	40		C	5SY7 540-6		1	1	002	0.330
50		C	5SY7 550-6		1	1	002	0.330	
63		C	5SY7 563-6		1	1	002	0.330	
	2P, 400 V AC								
	6	2	B	5SY7 206-6		1	1	002	0.330
	10		B	5SY7 210-6		1	1	002	0.330
	13		C	5SY7 213-6		1	1	002	0.330
	16		B	5SY7 216-6		1	1	002	0.330
	20		B	5SY7 220-6		1	1	002	0.330
	25		B	5SY7 225-6		1	1	002	0.330
	32		C	5SY7 232-6		1	1	002	0.330
	40		C	5SY7 240-6		1	1	002	0.330
50		C	5SY7 250-6		1	1	002	0.330	
63		C	5SY7 263-6		1	1	002	0.330	
	3P, 400 V AC								
	6	3	B	5SY7 306-6		1	1	002	0.495
	10		B	5SY7 310-6		1	1	002	0.495
	13		C	5SY7 313-6		1	1	002	0.495
	16		A	5SY7 316-6		1	1	002	0.495
	20		B	5SY7 320-6		1	1	002	0.495
	25		B	5SY7 325-6		1	1	002	0.495
	32		B	5SY7 332-6		1	1	002	0.495
	40		B	5SY7 340-6		1	1	002	0.495
50		B	5SY7 350-6		1	1	002	0.495	
63		C	5SY7 363-6		1	1	002	0.495	
	3P+N, 400 V AC								
	6	4	C	5SY7 606-6		1	1	002	0.660
	10		C	5SY7 610-6		1	1	002	0.660
	13		C	5SY7 613-6		1	1	002	0.660
	16		C	5SY7 616-6		1	1	002	0.660
	20		C	5SY7 620-6		1	1	002	0.660
	25		C	5SY7 625-6		1	1	002	0.660
	32		C	5SY7 632-6		1	1	002	0.660
	40		C	5SY7 640-6		1	1	002	0.660
50		C	5SY7 650-6		1	1	002	0.660	
63		C	5SY7 663-6		1	1	002	0.660	
	4P, 400 V AC								
	6	4	C	5SY7 406-6		1	1	002	0.660
	10		B	5SY7 410-6		1	1	002	0.660
	13		C	5SY7 413-6		1	1	002	0.660
	16		B	5SY7 416-6		1	1	002	0.660
	20		B	5SY7 420-6		1	1	002	0.660
	25		C	5SY7 425-6		1	1	002	0.660
	32		C	5SY7 432-6		1	1	002	0.660
	40		C	5SY7 440-6		1	1	002	0.660
50		C	5SY7 450-6		1	1	002	0.660	
63		C	5SY7 463-6		1	1	002	0.660	




¹⁾ 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.



BETA Protecting Miniature Circuit Breakers

Miniature circuit breakers, 5SY and 5SP
15 000 A, 5SY7

15 000		I_n	Moun- ting width MW ¹⁾	DT	Characteristic C			Characteristic D			PU Unit(s)	PS*/ P. unit Unit(s)	PG	Weight per PU approx. kg
3	Order No.				Price per PU	PG	DT	Order No.	Price per PU					
MCBs 15 000 A														
1P, 230/400 V AC														
	0.3	1	B	5SY7 114-7			003	C	5SY7 114-8		1	1	004	0.165
	0.5		B	5SY7 105-7			003	C	5SY7 105-8		1	1	004	0.165
	1		A	5SY7 101-7			003	C	5SY7 101-8		1	1	004	0.165
	1.6		B	5SY7 115-7			003	C	5SY7 115-8		1	1	004	0.165
	2		▶	5SY7 102-7			003	C	5SY7 102-8		1	1	004	0.165
	3		A	5SY7 103-7			003	C	5SY7 103-8		1	1	004	0.165
	4		A	5SY7 104-7			003	B	5SY7 104-8		1	1	004	0.165
	6		▶	5SY7 106-7			003	B	5SY7 106-8		1	1	004	0.165
	8		B	5SY7 108-7			003	C	5SY7 108-8		1	1	004	0.165
	10		▶	5SY7 110-7			003	B	5SY7 110-8		1	1	004	0.165
	13		B	5SY7 113-7			003	C	5SY7 113-8		1	1	004	0.165
	16		▶	5SY7 116-7			003	B	5SY7 116-8		1	1	004	0.165
	20		A	5SY7 120-7			003	C	5SY7 120-8		1	1	004	0.165
	25		B	5SY7 125-7			003	C	5SY7 125-8		1	1	004	0.165
	32		B	5SY7 132-7			003	C	5SY7 132-8		1	1	004	0.165
	40		B	5SY7 140-7			003	C	5SY7 140-8		1	1	004	0.165
50		C	5SY7 150-7			003	C	5SY7 150-8		1	1	004	0.165	
63		B	5SY7 163-7			003	C	5SY7 163-8		1	1	004	0.165	
1P+N, 230 V AC														
	0.3	2	C	5SY7 514-7			003	C	5SY7 514-8		1	1	004	0.330
	0.5		C	5SY7 505-7			003	C	5SY7 505-8		1	1	004	0.330
	1		B	5SY7 501-7			003	C	5SY7 501-8		1	1	004	0.330
	1.6		C	5SY7 515-7			003	C	5SY7 515-8		1	1	004	0.330
	2		B	5SY7 502-7			003	C	5SY7 502-8		1	1	004	0.330
	3		B	5SY7 503-7			003	C	5SY7 503-8		1	1	004	0.330
	4		B	5SY7 504-7			003	B	5SY7 504-8		1	1	004	0.330
	6		A	5SY7 506-7			003	C	5SY7 506-8		1	1	004	0.330
	8		C	5SY7 508-7			003	C	5SY7 508-8		1	1	004	0.330
	10		A	5SY7 510-7			003	C	5SY7 510-8		1	1	004	0.330
	13		B	5SY7 513-7			003	C	5SY7 513-8		1	1	004	0.330
	16		A	5SY7 516-7			003	B	5SY7 516-8		1	1	004	0.330
	20		B	5SY7 520-7			003	C	5SY7 520-8		1	1	004	0.330
	25		B	5SY7 525-7			003	C	5SY7 525-8		1	1	004	0.330
	32		B	5SY7 532-7			003	C	5SY7 532-8		1	1	004	0.330
	40		C	5SY7 540-7			003	C	5SY7 540-8		1	1	004	0.330
50		C	5SY7 550-7			003	C	5SY7 550-8		1	1	004	0.330	
63		C	5SY7 563-7			003	C	5SY7 563-8		1	1	004	0.330	
2P, 400 V AC														
	0.3	2	C	5SY7 214-7			003	C	5SY7 214-8		1	1	004	0.330
	0.5		B	5SY7 205-7			003	C	5SY7 205-8		1	1	004	0.330
	1		A	5SY7 201-7			003	B	5SY7 201-8		1	1	004	0.330
	1.6		C	5SY7 215-7			003	C	5SY7 215-8		1	1	004	0.330
	2		A	5SY7 202-7			003	A	5SY7 202-8		1	1	004	0.330
	3		A	5SY7 203-7			003	B	5SY7 203-8		1	1	004	0.330
	4		A	5SY7 204-7			003	A	5SY7 204-8		1	1	004	0.330
	6		▶	5SY7 206-7			003	A	5SY7 206-8		1	1	004	0.330
	8		B	5SY7 208-7			003	B	5SY7 208-8		1	1	004	0.330
	10		▶	5SY7 210-7			003	A	5SY7 210-8		1	1	004	0.330
	13		B	5SY7 213-7			003	C	5SY7 213-8		1	1	004	0.330
	16		▶	5SY7 216-7			003	A	5SY7 216-8		1	1	004	0.330
	20		A	5SY7 220-7			003	B	5SY7 220-8		1	1	004	0.330
	25		A	5SY7 225-7			003	B	5SY7 225-8		1	1	004	0.330
	32		A	5SY7 232-7			003	C	5SY7 232-8		1	1	004	0.330
	40		A	5SY7 240-7			003	C	5SY7 240-8		1	1	004	0.330
50		B	5SY7 250-7			003	C	5SY7 250-8		1	1	004	0.330	
63		B	5SY7 263-7			003	C	5SY7 263-8		1	1	004	0.330	




¹⁾ 1 MW (modular width) = 18 mm.



BETA Protecting Miniature Circuit Breakers

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Miniature circuit breakers, 5SY and 5SP
15 000 A, 5SY7

15 000 3	I_n	Mounting width MW ¹⁾	DT	Characteristic C			Characteristic D			PU Unit(s)	PS*/ P. unit Unit(s)	PG	Weight per PU approx. kg
				Order No.	Price per PU	PG DT	Order No.	Price per PU	PG DT				
MCBs 15 000 A													
3P, 400 V AC													
	0.3	3	C	5SY7 314-7		003 C	5SY7 314-8		1	1	004	0.495	
	0.5		C	5SY7 305-7		003 C	5SY7 305-8		1	1	004	0.495	
	1		C	5SY7 301-7		003 C	5SY7 301-8		1	1	004	0.495	
	1.6		C	5SY7 315-7		003 C	5SY7 315-8		1	1	004	0.495	
	2		B	5SY7 302-7		003 C	5SY7 302-8		1	1	004	0.495	
	3		C	5SY7 303-7		003 C	5SY7 303-8		1	1	004	0.495	
	4		A	5SY7 304-7		003 C	5SY7 304-8		1	1	004	0.495	
	6		A	5SY7 306-7		003 C	5SY7 306-8		1	1	004	0.495	
	8		C	5SY7 308-7		003 B	5SY7 308-8		1	1	004	0.495	
	10		A	5SY7 310-7		003 B	5SY7 310-8		1	1	004	0.495	
	13		B	5SY7 313-7		003 C	5SY7 313-8		1	1	004	0.495	
	16		▶	5SY7 316-7		003 A	5SY7 316-8		1	1	004	0.495	
	20		▶	5SY7 320-7		003 B	5SY7 320-8		1	1	004	0.495	
	25		▶	5SY7 325-7		003 A	5SY7 325-8		1	1	004	0.495	
	32		▶	5SY7 332-7		003 B	5SY7 332-8		1	1	004	0.495	
	40		▶	5SY7 340-7		003 B	5SY7 340-8		1	1	004	0.495	
	50		▶	5SY7 350-7		003 B	5SY7 350-8		1	1	004	0.495	
	63		▶	5SY7 363-7		003 B	5SY7 363-8		1	1	004	0.495	
3P+N, 400 V AC													
	0.3	4	C	5SY7 614-7		003 C	5SY7 614-8		1	1	004	0.660	
	0.5		C	5SY7 605-7		003 C	5SY7 605-8		1	1	004	0.660	
	1		C	5SY7 601-7		003 C	5SY7 601-8		1	1	004	0.660	
	1.6		C	5SY7 615-7		003 C	5SY7 615-8		1	1	004	0.660	
	2		C	5SY7 602-7		003 C	5SY7 602-8		1	1	004	0.660	
	3		C	5SY7 603-7		003 C	5SY7 603-8		1	1	004	0.660	
	4		C	5SY7 604-7		003 C	5SY7 604-8		1	1	004	0.660	
	6		C	5SY7 606-7		003 C	5SY7 606-8		1	1	004	0.660	
	8		C	5SY7 608-7		003 C	5SY7 608-8		1	1	004	0.660	
	10		B	5SY7 610-7		003 C	5SY7 610-8		1	1	004	0.660	
	13		C	5SY7 613-7		003 C	5SY7 613-8		1	1	004	0.660	
	16		A	5SY7 616-7		003 C	5SY7 616-8		1	1	004	0.660	
	20		B	5SY7 620-7		003 C	5SY7 620-8		1	1	004	0.660	
	25		B	5SY7 625-7		003 C	5SY7 625-8		1	1	004	0.660	
	32		B	5SY7 632-7		003 C	5SY7 632-8		1	1	004	0.660	
	40		B	5SY7 640-7		003 C	5SY7 640-8		1	1	004	0.660	
	50		B	5SY7 650-7		003 C	5SY7 650-8		1	1	004	0.660	
	63		B	5SY7 663-7		003 C	5SY7 663-8		1	1	004	0.660	
4P, 400 V AC													
	0.3	4	C	5SY7 414-7		003 C	5SY7 414-8		1	1	004	0.660	
	0.5		C	5SY7 405-7		003 C	5SY7 405-8		1	1	004	0.660	
	1		C	5SY7 401-7		003 C	5SY7 401-8		1	1	004	0.660	
	1.6		C	5SY7 415-7		003 C	5SY7 415-8		1	1	004	0.660	
	2		C	5SY7 402-7		003 C	5SY7 402-8		1	1	004	0.660	
	3		C	5SY7 403-7		003 C	5SY7 403-8		1	1	004	0.660	
	4		B	5SY7 404-7		003 C	5SY7 404-8		1	1	004	0.660	
	6		B	5SY7 406-7		003 C	5SY7 406-8		1	1	004	0.660	
	8		C	5SY7 408-7		003 C	5SY7 408-8		1	1	004	0.660	
	10		▶	5SY7 410-7		003 B	5SY7 410-8		1	1	004	0.660	
	13		C	5SY7 413-7		003 C	5SY7 413-8		1	1	004	0.660	
	16		▶	5SY7 416-7		003 B	5SY7 416-8		1	1	004	0.660	
	20		A	5SY7 420-7		003 B	5SY7 420-8		1	1	004	0.660	
	25		▶	5SY7 425-7		003 B	5SY7 425-8		1	1	004	0.660	
	32		▶	5SY7 432-7		003 B	5SY7 432-8		1	1	004	0.660	
	40		A	5SY7 440-7		003 B	5SY7 440-8		1	1	004	0.660	
	50		A	5SY7 450-7		003 B	5SY7 450-8		1	1	004	0.660	
	63		▶	5SY7 463-7		003 B	5SY7 463-8		1	1	004	0.660	

¹⁾ 1 MW (modular width) = 18 mm.




BETA Protecting Miniature Circuit Breakers

Miniature circuit breakers, 5SY and 5SP
25 kA, 5SY8

I_n	Mounting width MW ¹⁾	DT	Characteristic C			Characteristic D			PU Unit(s)	PS*/ P. unit Unit(s)	PG	Weight per PU approx. kg
			Order No.	Price per PU	PG DT	Order No.	Price per PU	PG DT				
MCBs 25 kA												
1P, 230/400 V AC												
	0.3	1	C	5SY8 114-7		003 C	5SY8 114-8		1	1	004	0.165
	0.5		C	5SY8 105-7		003 C	5SY8 105-8		1	1	004	0.165
	1		B	5SY8 101-7		003 C	5SY8 101-8		1	1	004	0.165
	1.6		C	5SY8 115-7		003 C	5SY8 115-8		1	1	004	0.165
	2		A	5SY8 102-7		003 B	5SY8 102-8		1	1	004	0.165
	3		C	5SY8 103-7		003 C	5SY8 103-8		1	1	004	0.165
	4		B	5SY8 104-7		003 C	5SY8 104-8		1	1	004	0.165
	6		A	5SY8 106-7		003 C	5SY8 106-8		1	1	004	0.165
	8		C	5SY8 108-7		003 C	5SY8 108-8		1	1	004	0.165
	10		A	5SY8 110-7		003 C	5SY8 110-8		1	1	004	0.165
	13		C	5SY8 113-7		003 C	5SY8 113-8		1	1	004	0.165
	16		A	5SY8 116-7		003 C	5SY8 116-8		1	1	004	0.165
	20		A	5SY8 120-7		003 C	5SY8 120-8		1	1	004	0.165
	25		C	5SY8 125-7		003 C	5SY8 125-8		1	1	004	0.165
	32		B	5SY8 132-7		003 C	5SY8 132-8		1	1	004	0.165
	40		C	5SY8 140-7		003 C	5SY8 140-8		1	1	004	0.165
	50		C	5SY8 150-7		003 C	5SY8 150-8		1	1	004	0.165
	63		C	5SY8 163-7		003 C	5SY8 163-8		1	1	004	0.165
1P+N, 230 V AC												
	0.3	2	C	5SY8 514-7		003 C	5SY8 514-8		1	1	004	0.330
	0.5		C	5SY8 505-7		003 C	5SY8 505-8		1	1	004	0.330
	1		C	5SY8 501-7		003 C	5SY8 501-8		1	1	004	0.330
	1.6		C	5SY8 515-7		003 C	5SY8 515-8		1	1	004	0.330
	2		C	5SY8 502-7		003 C	5SY8 502-8		1	1	004	0.330
	3		C	5SY8 503-7		003 C	5SY8 503-8		1	1	004	0.330
	4		C	5SY8 504-7		003 C	5SY8 504-8		1	1	004	0.330
	6		B	5SY8 506-7		003 C	5SY8 506-8		1	1	004	0.330
	8		C	5SY8 508-7		003 C	5SY8 508-8		1	1	004	0.330
	10		B	5SY8 510-7		003 C	5SY8 510-8		1	1	004	0.330
	13		C	5SY8 513-7		003 C	5SY8 513-8		1	1	004	0.330
	16		B	5SY8 516-7		003 C	5SY8 516-8		1	1	004	0.330
	20		C	5SY8 520-7		003 C	5SY8 520-8		1	1	004	0.330
	25		C	5SY8 525-7		003 C	5SY8 525-8		1	1	004	0.330
	32		B	5SY8 532-7		003 C	5SY8 532-8		1	1	004	0.330
	40		C	5SY8 540-7		003 B	5SY8 540-8		1	1	004	0.330
	50		B	5SY8 550-7		003 B	5SY8 550-8		1	1	004	0.330
	63		B	5SY8 563-7		003 B	5SY8 563-8		1	1	004	0.330
2P, 400 V AC												
	0.3	2	C	5SY8 214-7		003 C	5SY8 214-8		1	1	004	0.330
	0.5		C	5SY8 205-7		003 C	5SY8 205-8		1	1	004	0.330
	1		B	5SY8 201-7		003 C	5SY8 201-8		1	1	004	0.330
	1.6		C	5SY8 215-7		003 C	5SY8 215-8		1	1	004	0.330
	2		B	5SY8 202-7		003 B	5SY8 202-8		1	1	004	0.330
	3		C	5SY8 203-7		003 C	5SY8 203-8		1	1	004	0.330
	4		A	5SY8 204-7		003 C	5SY8 204-8		1	1	004	0.330
	6		A	5SY8 206-7		003 A	5SY8 206-8		1	1	004	0.330
	8		C	5SY8 208-7		003 C	5SY8 208-8		1	1	004	0.330
	10		A	5SY8 210-7		003 B	5SY8 210-8		1	1	004	0.330
	13		C	5SY8 213-7		003 C	5SY8 213-8		1	1	004	0.330
	16		A	5SY8 216-7		003 C	5SY8 216-8		1	1	004	0.330
	20		B	5SY8 220-7		003 C	5SY8 220-8		1	1	004	0.330
	25		B	5SY8 225-7		003 B	5SY8 225-8		1	1	004	0.330
	32		B	5SY8 232-7		003 C	5SY8 232-8		1	1	004	0.330
	40		C	5SY8 240-7		003 C	5SY8 240-8		1	1	004	0.330
	50		C	5SY8 250-7		003 C	5SY8 250-8		1	1	004	0.330
	63		C	5SY8 263-7		003 C	5SY8 263-8		1	1	004	0.330

¹⁾ 1 MW (modular width) = 18 mm.

Miniature circuit breakers, 5SY and 5SP 25 kA, 5SY8

I_n	Mounting width MW ¹⁾	DT	Characteristic C			Characteristic D			PU Unit(s)	PS*/ P. unit Unit(s)	PG	Weight per PU approx. kg
			Order No.	Price per PU	PG DT	Order No.	Price per PU	PG DT				
MCBs 25 kA												
3P, 400 V AC												
	0.3	3	C	5SY8 314-7		003 C	5SY8 314-8		1	1	004	0.495
	0.5		C	5SY8 305-7		003 C	5SY8 305-8		1	1	004	0.495
	1		A	5SY8 301-7		003 C	5SY8 301-8		1	1	004	0.495
	1.6		C	5SY8 315-7		003 C	5SY8 315-8		1	1	004	0.495
	2		C	5SY8 302-7		003 C	5SY8 302-8		1	1	004	0.495
	3		C	5SY8 303-7		003 C	5SY8 303-8		1	1	004	0.495
	4		C	5SY8 304-7		003 C	5SY8 304-8		1	1	004	0.495
	6		B	5SY8 306-7		003 C	5SY8 306-8		1	1	004	0.495
	8		C	5SY8 308-7		003 C	5SY8 308-8		1	1	004	0.495
	10		B	5SY8 310-7		003 C	5SY8 310-8		1	1	004	0.495
	13		C	5SY8 313-7		003 C	5SY8 313-8		1	1	004	0.495
	16		A	5SY8 316-7		003 C	5SY8 316-8		1	1	004	0.495
	20		C	5SY8 320-7		003 C	5SY8 320-8		1	1	004	0.495
	25		A	5SY8 325-7		003 B	5SY8 325-8		1	1	004	0.495
	32		A	5SY8 332-7		003 B	5SY8 332-8		1	1	004	0.495
	40		B	5SY8 340-7		003 C	5SY8 340-8		1	1	004	0.495
	50		B	5SY8 350-7		003 B	5SY8 350-8		1	1	004	0.495
	63		B	5SY8 363-7		003 C	5SY8 363-8		1	1	004	0.495
3P+N, 400 V AC												
	0.3	4	C	5SY8 614-7		003 C	5SY8 614-8		1	1	004	0.660
	0.5		C	5SY8 605-7		003 C	5SY8 605-8		1	1	004	0.660
	1		C	5SY8 601-7		003 C	5SY8 601-8		1	1	004	0.660
	1.6		C	5SY8 615-7		003 C	5SY8 615-8		1	1	004	0.660
	2		C	5SY8 602-7		003 C	5SY8 602-8		1	1	004	0.660
	3		C	5SY8 603-7		003 C	5SY8 603-8		1	1	004	0.660
	4		C	5SY8 604-7		003 C	5SY8 604-8		1	1	004	0.660
	6		C	5SY8 606-7		003 C	5SY8 606-8		1	1	004	0.660
	8		C	5SY8 608-7		003 C	5SY8 608-8		1	1	004	0.660
	10		C	5SY8 610-7		003 C	5SY8 610-8		1	1	004	0.660
	13		C	5SY8 613-7		003 C	5SY8 613-8		1	1	004	0.660
	16		B	5SY8 616-7		003 C	5SY8 616-8		1	1	004	0.660
	20		C	5SY8 620-7		003 C	5SY8 620-8		1	1	004	0.660
	25		C	5SY8 625-7		003 C	5SY8 625-8		1	1	004	0.660
	32		B	5SY8 632-7		003 C	5SY8 632-8		1	1	004	0.660
	40		C	5SY8 640-7		003 C	5SY8 640-8		1	1	004	0.660
	50		C	5SY8 650-7		003 C	5SY8 650-8		1	1	004	0.660
	63		A	5SY8 663-7		003 C	5SY8 663-8		1	1	004	0.660
4P, 400 V AC												
	0.3	4	C	5SY8 414-7		003 C	5SY8 414-8		1	1	004	0.660
	0.5		C	5SY8 405-7		003 C	5SY8 405-8		1	1	004	0.660
	1		C	5SY8 401-7		003 C	5SY8 401-8		1	1	004	0.660
	1.6		C	5SY8 415-7		003 C	5SY8 415-8		1	1	004	0.660
	2		C	5SY8 402-7		003 C	5SY8 402-8		1	1	004	0.660
	3		C	5SY8 403-7		003 C	5SY8 403-8		1	1	004	0.660
	4		C	5SY8 404-7		003 C	5SY8 404-8		1	1	004	0.660
	6		C	5SY8 406-7		003 C	5SY8 406-8		1	1	004	0.660
	8		C	5SY8 408-7		003 C	5SY8 408-8		1	1	004	0.660
	10		B	5SY8 410-7		003 C	5SY8 410-8		1	1	004	0.660
	13		C	5SY8 413-7		003 C	5SY8 413-8		1	1	004	0.660
	16		A	5SY8 416-7		003 C	5SY8 416-8		1	1	004	0.660
	20		A	5SY8 420-7		003 C	5SY8 420-8		1	1	004	0.660
	25		A	5SY8 425-7		003 C	5SY8 425-8		1	1	004	0.660
	32		A	5SY8 432-7		003 C	5SY8 432-8		1	1	004	0.660
	40		A	5SY8 440-7		003 C	5SY8 440-8		1	1	004	0.660
	50		A	5SY8 450-7		003 C	5SY8 450-8		1	1	004	0.660
	63		A	5SY8 463-7		003 C	5SY8 463-8		1	1	004	0.660

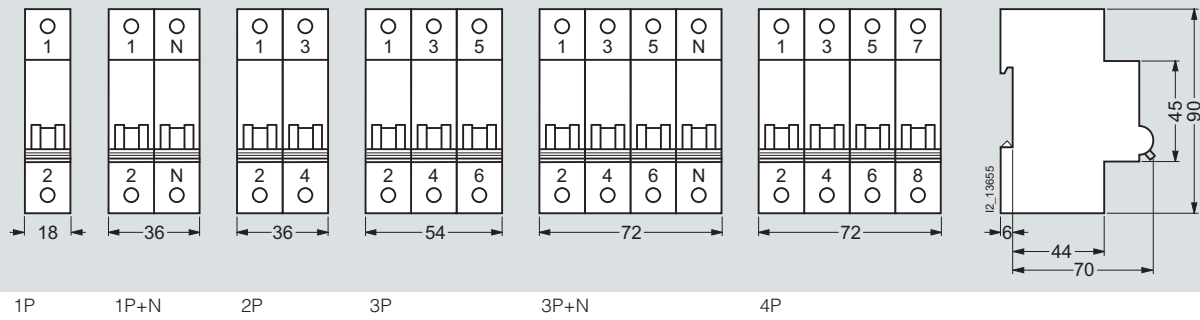
¹⁾ 1 MW (modular width) = 18 mm.

BETA Protecting Miniature Circuit Breakers

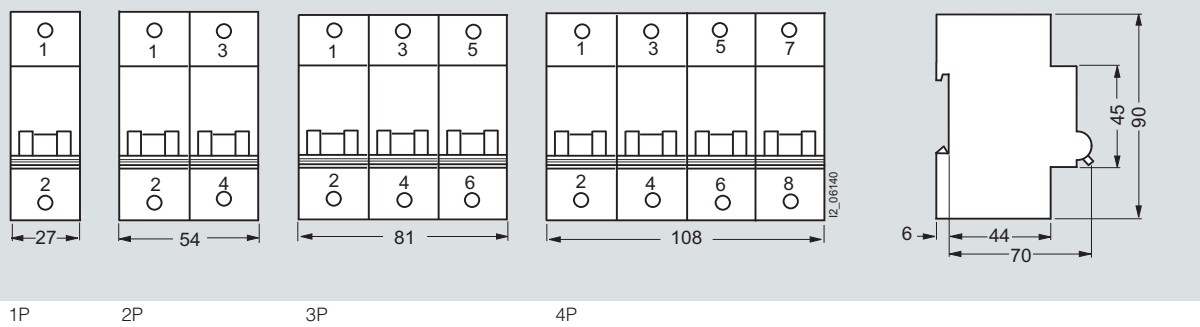
Miniature circuit breakers, 5SY and 5SP

Dimensional drawings

5SY



5SP



Schematics

Symbols

5SY4, 5SY7, 5SY8



5SP4



5SY5, 5SP5



BETA Protecting Miniature Circuit Breakers

Additional components

Overview

The Siemens mounting concept supports the combination of all 5ST3 additional components with Siemens miniature circuit breakers and 5SU1 RCBs.

Auxiliary switches (AS)

The auxiliary switch (AS) always signals the contact position of the miniature circuit breaker, regardless of whether the miniature circuit breaker was tripped manually or as the result of a fault. An additional version is also available for the switching of small currents and voltages for the control of programmable control systems (PLCs) acc. to EN 61131-2. The auxiliary switch with test button enables the testing of control circuits without the need to switch the miniature circuit breaker.

Fault signal contacts (FC)

The fault signal contact (FC) signals the automatic tripping of the miniature circuit breaker in the event of a fault, such as an overload or a short circuit. If the fault signal contact is activated, the contact position does not change if the miniature circuit breaker is tripped manually. Fault signal contacts with TEST and RESET buttons enable the testing of control circuits without the need to trip the miniature circuit breaker. The red RESET button integrated in the handle also indicates the automatic tripping of the MCB. The signal can be acknowledged manually using the RESET button.

Shunt trips (ST)

Shunt trips are used for the remote tripping of miniature circuit breakers.

Undervoltage releases (UR)

Undervoltage releases are integrated (e.g. in EMERGENCY STOP loops), thus ensuring that the MCB trips in the event of an emergency, which, in turn, ensures disconnection of the control circuit according to EN 60204. In the event that the voltage is interrupted or too low, it also trips, i.e. prevents the MCB from switching on.

Remote controlled mechanisms (RC)

Remote controlled mechanisms are used for the remote ON/OFF switching of miniature circuit breakers and the remote ON switching of RC units, as well as the local manual switching of these devices. A blocking function permits maintenance work. In the event that a miniature circuit breaker or RC unit is tripped, an acknowledgment must be carried out prior to switching back on. The remote controlled mechanism has an operating mode selector switch with the functions: "Locked", "Manual" and "Remote Switching". The mechanism can be mechanically latched and locked, which serves to protect personnel during maintenance work.

RC units

RC units can be combined with miniature circuit breakers of characteristic A, B, C and D. They then form a combination of RCCB and MCB for personnel, fire and line protection. The combinations can be tailored to suit user requirements.

For information on RC units, please refer to the section "Residual current protective devices".

Benefits

All additional components can be universally mounted



- The 5SL, 5SY and 5SP miniature circuit breakers are ideal for the quick and easy mounting of auxiliary switches and fault signal contacts. Captive metal brackets on additional components ensure the quick and easy mounting of devices on the miniature circuit breakers without the need for tools.



- Fault signal contacts with TEST and RESET button enable the simple testing of auxiliary circuits and, in the event of a fault, acknowledgement of the fault over the RESET button, without the need to switch the miniature circuit breakers.



- The auxiliary switches with TEST button enable the simple manual testing of control circuits during operation of the entire plant without the need to switch the miniature circuit breakers.

Technical specifications

	Auxiliary switches (AS)			Fault signal contacts (FC)
	5ST3 010, 5ST3 010-2 5ST3 011, 5ST3 011-2 5ST3 012, 5ST3 012-2	5ST3 013 5ST3 014 5ST3 015	5ST3 013-2 5ST3 014-2 5ST3 015-2	5ST3 020, 5ST3 020-2 5ST3 021, 5ST3 021-2 5ST3 022, 5ST3 022-2
Standards	EN 62019; IEC/EN 60947-5-1; UL 1077; CSA C22.2 No. 235			
Approved acc. to	See page 1/5			
Short-circuit protection	Miniature circuit breakers, or fuse gG 6 A			
Contact load				
• Min.	50 mA, 24 V	1 mA/5 V DC	50 mA, 24 V	
• Max.	--	50 mA/30 V DC	--	
• 400 V AC, AC-14, NO	A 2	--	2	
• 230 V AC, AC-14, NO	A 6	--	6	
• 400 V AC, AC-13, NC	A 2	--	2	
• 230 V AC, AC-13, NC	A 6	--	6	
• 220 V DC, DC-13, NO+NC	A 1	--	1	
• 110 V DC, DC-13, NO+NC	A 1	--	1	
• 60 V DC, DC-13, NO+NC	A 3	--	3	
• 24 V DC, DC-13, NO+NC	A 6	--	6	
Average service life, with rated load	6000	6000	6000	
Conductor cross-sections	mm ² AWG	0.5 ... 2.5 22 ... 14	0.5 ... 2.5 22 ... 14	0.5 ... 2.5 22 ... 14
Terminals				
• Terminal tightening torque	Nm lb/in.	0.5 4.5	0.5 4.5	0.5 4.5








	Undervoltage releases (UR)		Shunt trips (ST)		Remote controlled mechanisms (RC)
	5ST3 04.		5ST3 030	5ST3 031	5ST3 050
Standards	EN 60947-1				
Rated voltages U_n	V AC	230	110 ... 415	24 ... 60	230
	V DC	24, 110	110	24 ... 60	--
• Rated frequency f_n	Hz	--	50 ... 60		50 ... 60
Response limits					
• Acc. to EN 60947-1, 7.2.1.3					
- Releases		< 0.35 ... 0.7 × U_n	--	--	--
- Permissible fluctuations of the power supply		0.85 ... 1.1 × U_n	--	--	--
• Acc. to EN 60947-1, 7.2.1.4		--	0.7 ... 1.1 × U_n	--	--
Short-circuit protection	Miniature circuit breaker or fuse gG 6 A				
Minimum contact load	50 mA, 24 V		50 mA, 24 V		--
Tripping operations	Max. 2000		Max. 2000		--
Average service life, with rated load	6000 actuations		6000 actuations		20000 actuations
Conductor cross-sections	mm ² AWG	0.5 ... 2.5 22 ... 14	0.5 ... 2.5 22 ... 14	0.5 ... 2.5 22 ... 14	0.5 ... 2.5 22 ... 14
Terminals					
• Terminal tightening torque	Nm lb/in.	0.8 6.8	0.8 6.8		0.5 4.5

For technical specifications on the RC units, please refer to the chapter, "Residual current protective devices".

BETA Protecting Miniature Circuit Breakers






Additional components

Selection and ordering data

	Rated voltage U_n V	Moun- ting width MW ¹⁾	DT	Order No.	Price per PU	PU Unit(s)	PS*/ P. unit Unit(s)	PG	Weight per PU approx. kg
	Auxiliary switches (AS) For 5SL, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs and 5TE8 switches								
	1 NO + 1 NC For small output	0.5	▶	5ST3 010		1	1	027	0.050
			▶	5ST3 013		1	1	027	0.050
	2 NO For small output		A	5ST3 011		1	1	027	0.050
			B	5ST3 014		1	1	027	0.050
		A	5ST3 012		1	1	027	0.050	
		B	5ST3 015		1	1	027	0.050	
	Auxiliary switches (AS) with TEST button For 5SL, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs and 5TE8 switches								
	1 NO + 1 NC	0.5	A	5ST3 010-2		1	1	027	0.045
	2 NO		A	5ST3 011-2		1	1	027	0.045
	2 NC		A	5ST3 012-2		1	1	027	0.045
	Fault signal contacts (FC) For 5SL, 5SY, 5SP miniature circuit breakers and 5SU1 RCBOs								
	1 NO + 1 NC	0.5	▶	5ST3 020		1	1	027	0.050
	2 NO		B	5ST3 021		1	1	027	0.050
	2 NC		A	5ST3 022		1	1	027	0.050
	Fault signal contacts (FC) with TEST and ACKNOWLEDGE button For 5SL, 5SY, 5SP miniature circuit breakers and 5SU1 RCBOs								
	1 NO + 1 NC	0.5	A	5ST3 020-2		1	1	027	0.050
	2 NO		A	5ST3 021-2		1	1	027	0.050
	2 NC		A	5ST3 022-2		1	1	027	0.050
	Undervoltage releases (UR) For 5SY, 5SP MCBs and 5SU1 RCBOs not suitable for use with 5SY6 0.. With integrated auxiliary switch								
	230 AC	1	A	5ST3 040		1	1	027	0.115
	110 DC		B	5ST3 041		1	1	027	0.115
	24 DC		B	5ST3 042		1	1	027	0.115
	Without integrated auxiliary switch								
	230 AC	1	A	5ST3 043		1	1	027	0.115
110 DC		B	5ST3 044		1	1	027	0.115	
	24 DC		A	5ST3 045		1	1	027	0.115
	Shunt trips (ST) For 5SY, 5SP MCBs and 5SU1 RCBOs not suitable for use with 5SY6 0..								
	2 NO	1	▶	5ST3 030		1	1	027	0.098
	2 NC	1	▶	5ST3 031		1	1	027	0.098
	Remote controlled mechanisms (RC) For 5SY, 5SP miniature circuit breakers and 5SU1 RCBOs								
	230 AC	3.5	A	5ST3 050		1	1	027	0.395

¹⁾ 1 MW (modular width) = 18 mm.






Additional components

	Rated residual current $I_{\Delta n}$ mA	Rated current I_n A	Moun- ting width MW ¹⁾	DT	Order No.	Price per PU	PU Unit(s)	PS*/ P. unit Unit(s)	PG	Weight per PU approx. kg
RC units, type A, instantaneous tripping										
	For 5SY miniature circuit breakers, - not suitable for use with 5SY5, 5SY8 and 5SY6 0..., 2P, 230 ... 400 V AC, 50 ... 60 Hz									
	10	0.3 ... 16	2	B	5SM2 121-6		1	1	007	0.180
	30	0.3 ... 40		▶	5SM2 322-6		1	1	007	0.170
	300			A	5SM2 622-6		1	1	007	0.170
	30	0.3 ... 63	2	A	5SM2 325-6		1	1	007	0.170
	100			B	5SM2 425-6		1	1	007	0.170
300		B		5SM2 625-6		1	1	007	0.170	
500			B	5SM2 725-6		1	1	007	0.170	
	For 5SY miniature circuit breakers, - not suitable for use with 5SY5, 5SY8 and 5SY6 0..., 3P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	3	A	5SM2 332-6		1	1	007	0.260
	300			A	5SM2 632-6		1	1	007	0.260
	30	0.3 ... 63	3	B	5SM2 335-6		1	1	007	0.260
	100			B	5SM2 435-6		1	1	007	0.260
	300			B	5SM2 635-6		1	1	007	0.260
500		B		5SM2 735-6		1	1	007	0.260	
	For 5SY miniature circuit breakers, - not suitable for use with 5SY5, 5SY8 and 5SY6 0..., 4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	3	▶	5SM2 342-6		1	1	007	0.290
	300			▶	5SM2 642-6		1	1	007	0.290
	30	0.3 ... 63	3	A	5SM2 345-6		1	1	007	0.290
	100			B	5SM2 445-6		1	1	007	0.290
	300			A	5SM2 645-6		1	1	007	0.290
500		A		5SM2 745-6		1	1	007	0.290	
	For 5SP4 miniature circuit breakers (characteristic B and C), 2P, 125 ... 230 V AC, 50 ... 60 Hz									
	30	80 ... 100	3.5	B	5SM2 327-6		1	1	007	0.410
300		B		5SM2 627-6		1	1	007	0.410	
	For 5SP4 miniature circuit breakers (characteristic B and C), 4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	80 ... 100	5	B	5SM2 347-6		1	1	007	0.630
300		A		5SM2 647-6		1	1	007	0.630	

1) 1 MW (modular width) = 18 mm.

BETA Protecting Miniature Circuit Breakers

Additional components

	Rated residual current	Rated current	Moun- ting width	DT	Order No.	Price per PU	PU	PS*/ P. unit	PG	Weight per PU approx.	
	$I_{\Delta n}$ mA	I_n A	MW ¹⁾				Unit(s)	Unit(s)		kg	
	RC units, type A, super resistant K										
	For 5SY miniature circuit breakers, - not suitable for use with 5SY5, 5SY8 and 5SY6 0..., 2P, 230 ... 400 V AC, 50 ... 60 Hz										
	30	0.3 ... 40	2	B	5SM2 322-6KK01		1	1	007	0.350	
	30	0.3 ... 63		B	5SM2 325-6KK01		1	1	007	0.350	
	For 5SY miniature circuit breakers, - not suitable for use with 5SY5, 5SY8 and 5SY6 0..., 3P, 230 ... 400 V AC, 50 ... 60 Hz										
	30	0.3 ... 40	3	B	5SM2 332-6KK01		1	1	007	0.365	
	30	0.3 ... 63		B	5SM2 335-6KK01		1	1	007	0.365	
	RC units, type A, selective S										
	For 5SY miniature circuit breakers, - not suitable for use with 5SY5, 5SY8 and 5SY6 0..., 2P, 230 ... 400 V AC, 50 ... 60 Hz										
	300	0.3 ... 40	2	A	5SM2 622-8		1	1	007	0.170	
	300	0.3 ... 63		B	5SM2 625-8		1	1	007	0.170	
	For 5SY miniature circuit breakers, - not suitable for use with 5SY5, 5SY8 and 5SY6 0..., 3P, 230 ... 400 V AC, 50 ... 60 Hz										
	300	0.3 ... 63	3	B	5SM2 635-8		1	1	007	0.260	
	500		B	5SM2 735-8		1	1	007	0.400		
	1000		B	5SM2 835-8		1	1	007	0.260		
	For 5SY miniature circuit breakers, - not suitable for use with 5SY5, 5SY8 and 5SY6 0..., 4P, 230 ... 400 V AC, 50 ... 60 Hz										
	300	0.3 ... 63	3	A	5SM2 645-8		1	1	007	0.290	
	500			A	5SM2 745-8		1	1	007	0.400	
	1000			A	5SM2 845-8		1	1	007	0.290	
	For 5SP4 miniature circuit breakers (characteristic B and C)										
	300	80 ... 100	3.5	B	5SM2 627-8		1	1	007	0.410	
	For 5SP4 miniature circuit breakers (characteristic B and C), 4P, 230 ... 400 V AC, 50 ... 60 Hz										
	300	80 ... 100	5	A	5SM2 647-8		1	1	007	0.630	
	1000			A	5SM2 847-8		1	1	007	0.630	

¹⁾ 1 MW (modular width) = 18 mm.

Additional components

Version	Moun- ting width MW ¹⁾	DT	Order No.	Price per PU	PU Unit(s)	PS*/ P. unit Unit(s)	PG	Weight per PU approx. kg
 <p>Terminal covers For miniature circuit breakers, not suitable for use with 5SY6 0... For additional covering of the screw openings per pole, sealable. In the case of 5SY, also prevents removal of device from the standard mounting rail.</p>		B	5ST3 800		1	10	027	0.001
 <p>Handle locking devices Can be sealed against unwanted manual ON/OFF switching For 5SP and 5SY miniature circuit breakers For padlock with max. 3 mm shackle</p>		A	5ST3 801		1	1	027	0.008
 <p>For 5SL miniature circuit breakers For padlock with max. 3... 6 mm shackle</p>		A	5ST3 806		1	5	027	0.007
 <p>Padlocks For 5ST3 801 and 5ST3 806 handle locking devices</p>		▶	5ST3 802		1	1	027	0.027
<p>Locking devices For 5SP and 5SY miniature circuit breakers Comprising 5ST3 801 handle locking device and 5ST3 802 padlock</p>		B	5ST3 803		1 set	1 set	027	0.035
<p>For 5SL miniature circuit breakers Comprising 5ST3 806 handle locking device and 5ST3 802 padlock</p>		A	5ST3 807		1 set	1 set	027	0.034
 <p>Spacers Can be placed on either side of the standard mounting rail, so that two spacers allow for convenient cable routing</p>	0.5	▶	5TG8 240		1	2	027	0.010
 <p>Fixing parts Made of plastic, for use on a mounting plate</p>		B	5ST2 201		1	1	027	0.012
 <p>Inscription labels 15 mm x 9 mm, 3 frames à 44 labels, can be mounted on casing collar, white, self-adhesive</p>		B	5ST2 173		1 set	1 set	027	0.038

Labeling systems

Inscription on self-adhesive labels for a uniform and tidy appearance in electrical power distribution. The labeling program can be downloaded to your PC free of charge at:

www.siemens.com/labeling-tool





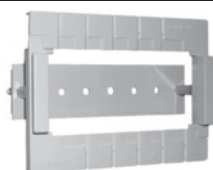

Recommended ELAT-3-747 labels for printing out on normal printers can be ordered at:

Brady GmbH
Otto-Hahn-Str. 5-7
D-63222 Langen
Germany
Tel: +49 (0) 61 03/75 98-660

¹⁾ 1 MW (modular width) = 18 mm.

BETA Protecting Miniature Circuit Breakers

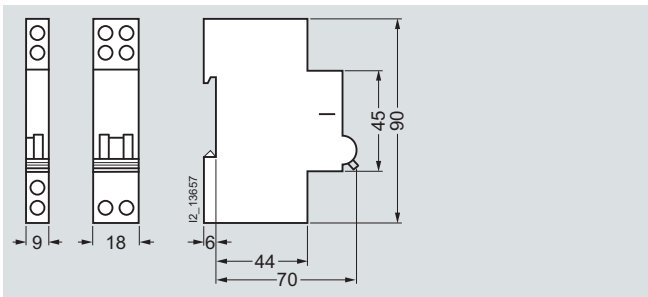
Additional components

Version	DT	Order No.	Price per PU	PU	PS*/P. unit	PG	Weight per PU approx.
				Unit(s)	Unit(s)		kg
 <p>Terminal covers, gray For surface mounting, degree of protection IP40, sealable, with 35 mm standard mounting rail</p> <ul style="list-style-type: none"> • Up to 2.5 MW • Up to 4.5 MW 	B	5SW3 004		1	1	008	0.084
	B	5SW3 005		1	1	008	0.114
 <p>Wall enclosures, gray For flush mounting, degree of protection IP40 with 35 mm standard mounting rail</p> <ul style="list-style-type: none"> • Up to 2.5 MW • Up to 4.5 MW 	B	5SW3 006		1	1/4	008	0.126
	B	5SW3 007		1	1	008	0.147
 <p>Molded-plastic enclosures, gray For surface mounting, degree of protection IP54, with 35 mm standard mounting rail, sealable, with transparent hinged lid For 4.5 MW</p>	A	5SW1 200		1	1	008	0.450
 <p>Covers Can be assembled as mini distribution board, suitable for all devices, cover parts prepared for rail mounting of conventional label caps, comprising:</p> <ul style="list-style-type: none"> • End plates (for snapping onto standard mounting rail) • Angled profile (approx. 1 m long) • Alternative flat profiles (as a cover between the rows of devices length approx. 1 m) 	A	5ST2 134		1	10	027	0.022
	A	5ST2 135		1	5	027	0.330
	B	5ST2 136		1	5	027	0.260
 <p>Holders for front panel installation Universal application for devices from 1 to 6 MW Cutout dimensions: Height 45^{+0.5} mm Width: 23, 41, 59, 77, 95 or 113 mm</p>	B	7LF9 006		1	1	027	0.071
 <p>Intermediate frames for 70 mm devices in 55 mm ALPHA SIMBOX distribution boards Versions</p> <ul style="list-style-type: none"> • 1-tier • 2-tier • 3-tier • 4-tier 	A	8GB4 561		1	1	032	0.900
	A	8GB4 562		1	1	032	1.100
	A	8GB4 563		1	1	032	1.300
	A	8GB4 564		1	1	032	1.500

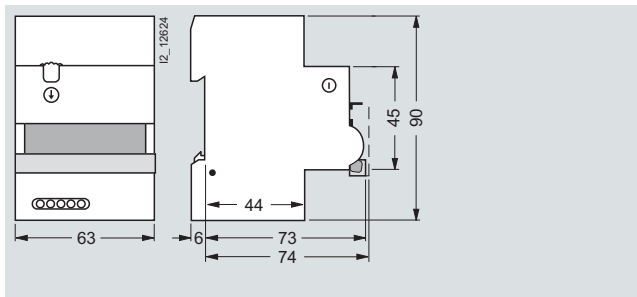
8GB4 563

For further information on the ALPHA distribution boards, ALPHA SIMBOX small distribution boards and intermediate frames, please refer to Catalog ET A1, chapter, "ALPHA SIMBOX Small Distribution Boards".

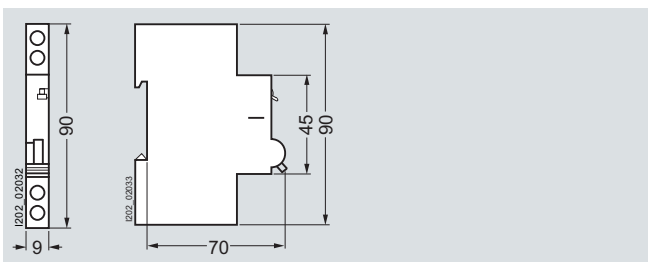
Dimensional drawings



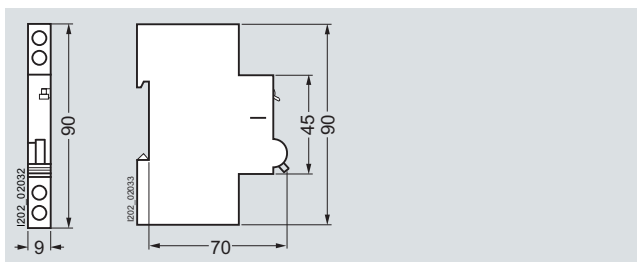
5ST3 010 5ST3 030
 5ST3 011 5ST3 031
 5ST3 012 5ST3 040
 5ST3 013 5ST3 041
 5ST3 014 5ST3 042
 5ST3 015 5ST3 043
 5ST3 020 5ST3 044
 5ST3 021 5ST3 045
 5ST3 022



5ST3 050



5ST3 010-2
 5ST3 011-2
 5ST3 012-2
 5ST3 013-2
 5ST3 014-2
 5ST3 015-2

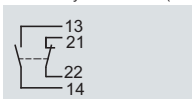


5ST3 020-2
 5ST3 021-2
 5ST3 022-2

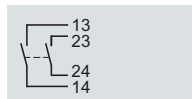
Schematics

Symbols

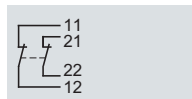
Auxiliary switches (AS)



5ST3 010
 5ST3 013
 5ST3 010-2

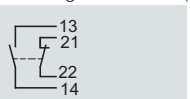


5ST3 011
 5ST3 014
 5ST3 011-2

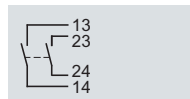


5ST3 012
 5ST3 015
 5ST3 012-2

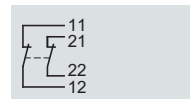
Fault signal contacts (FC)



5ST3 020
 5ST3 020-2

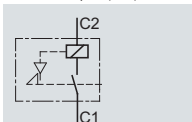


5ST3 021
 5ST3 021-2



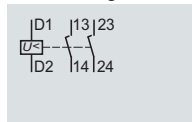
5ST3 022
 5ST3 022-2

Shunt trips (ST)

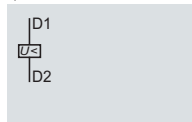


5ST3 030
 5ST3 031

Undervoltage releases (UR)

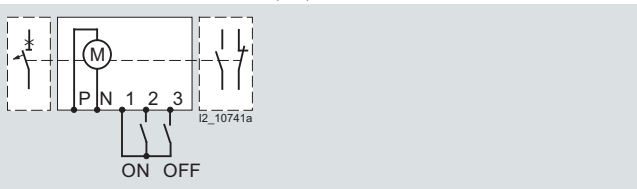


5ST3 040
 5ST3 041
 5ST3 042



5ST3 043
 5ST3 044
 5ST3 045

Remote controlled mechanisms (RC)



5ST3 050

BETA Protecting Miniature Circuit Breakers

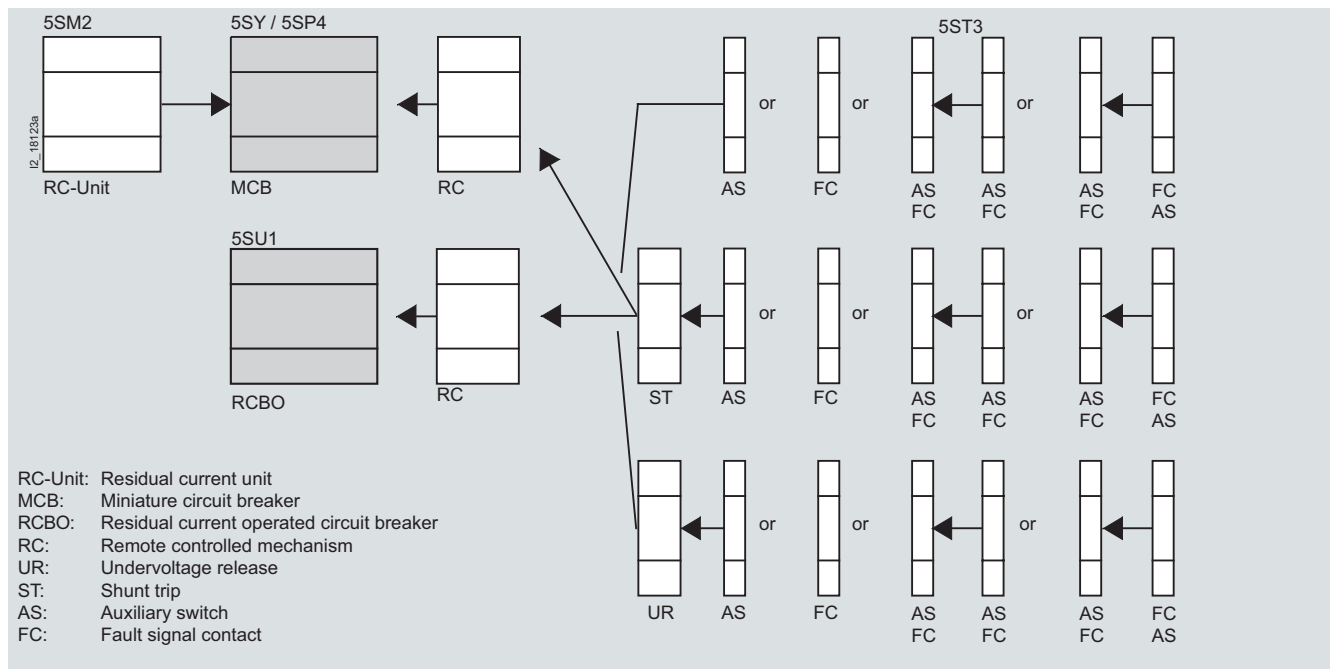
Additional components

More information

The Siemens mounting concept supports the combination of all 5ST3 additional components with miniature circuit breakers of the 5SY and 5SP series and RCBOs of the 5SU1 series.

5SL and 5SY6 0.. miniature circuit breakers are suitable for mounting auxiliary switches and fault signal contacts. Auxiliary switches can also be mounted on 5TE8 flush-mounting circuit breakers and 5SG7 1 MINIZED switch disconnectors.

The chart shows which additional components can be mounted on either the right or the left.



For further information on the mounting concept for RCBOs, please refer to the chapter, "Residual Current Protective Devices".