

■ Contactors and Starters

● AC operated magnetic contactors

Type		Specification				EN/IEC/ others	TÜV license No.	CE marking
Magnetic contactor	Combined thermal overload relay	3-phase squirrel-cage motor capacity (AC3) ^{*1}		Continu- ous current [A]	Auxiliary contact arrangement			
		220-240V AC	380-440V AC					
SC-03	TR-0N/3,TK-0N	2.5kW 11A	4kW 9A	20	1NO, 1NC	EN60947-4-1 IEC60947-4-1	R9151511	Done (on nameplate)
SC-0		3.5kW 13A	5.5kW 12A					
SC-05								
SC-4-0	TR-5-1N/3,TK-5-1N	4.5kW 18A	7.5kW 16A	25	1NO, 1NC		R9151513	
SC-4-1		5.5kW 22A	11kW 22A					
SC-5-1								
SC-N1	TR-N2/3,TK-N2	7.5kW 32A	15kW 32A	50	2NO+2NC (Can be extended up to 4NO+4NC)		R9950397	Done (on nameplate)
SC-N2		11kW 40A	18.5kW 40A					
SC-N2S	TR-N3/3,TK-N3	15kW 50A	22kW 50A	80				
SC-N3		18.5kW 65A	30kW 65A					
SC-N4	TR-N5/3,TK-N5	22kW 80A	40kW 80A	135				Done (on nameplate)
SC-N5		30kW 105A	55kW 105A					
SC-N6	TR-N6/3,TK-N6	37kW 125A	60kW 125A	200				
SC-N7		45kW 150A	75kW 150A					
SC-N8	TR-N8/3,TK-N8	55kW 180A	90kW 180A	260			R9950561	
SC-N10	TR-N10/3,TK-N10	65kW 220A	110kW 220A	350				
SC-N11	TR-N12/3,TK-N12	90kW 300A	160kW 300A	450				
SC-N12		120kW 400A	220kW 400A	660				
SC-N14	TR-N14/3,T-N14	180kW 600A	315kW 600A					Applying for certification

Note 1: SC-03Y to SC-5-1Y will also be CE-marked.

*1 Rated values conforming to IEC standards.

● DC operated magnetic contactors

Type		Specification				EN/IEC/ others	TÜV license No.	CE marking
Magnetic contactor	Combined thermal overload relay	3-phase squirrel-cage motor capacity (AC3)		Continu- ous current [A]	Auxiliary contact arrangement			
		220-240V AC	380-440V AC					
SC-03/G	TR-0N/3,TK-0N	2.5kW 11A	4kW 9A	20	1NO, 1NC	EN60947-4-1 Conforming to IEC60947-4-1	R9151532	Done (on nameplate)
SC-0/G		3.5kW 13A	5.5kW 12A					
SC-05/G								
SC-4-0/G	TR-5-1N/3,TK-5-1N	4.5kW 18A	7.5kW 16A	25	1NO, 1NC		R9051276	
SC-4-1/G		5.5kW 22A	11kW 22A					
SC-5-1/G								
SC-N1/G	TR-N2/3,TK-N2	7.5kW 32A	15kW 32A	50	2NO+2NC (Can be extended up to 4NO+4NC)		R9950696	Done (on nameplate)
SC-N2/G		11kW 40A	18.5kW 40A					
SC-N2S/G	TR-N3/3,TK-N3	15kW 50A	22kW 50A	80				
SC-N3/G		18.5kW 65A	30kW 65A					

● Magnetic contactors (reversing type)

Type	Specification				EN/IEC/ others	TÜV license No.	CE marking
	3-phase squirrel-cage motor capacity (AC3)		Continuous current [A]	Auxiliary contact arrangement			
	220-240V AC	380-440V AC					
SC-03RM	2.5kW 11A	4kW 9A	20	1NC×2 ^{*1}	EN60947-4-1 Conforming to IEC60947-4-1	-	Done (on nameplate)
SC-0RM	3.5kW 13A	5.5kW 12A	20	1NC×2 ^{*1}			
SC-05RM	3.5kW 13A	5.5kW 12A	20	(1NO+1NC)×2, 2NC×2			
SC-4-0RM	4.5kW 18A	7.5kW 16A	25	1NC×2 ^{*1}			
SC-4-1RM	5.5kW 22A	11kW 22A	32	1NC×2 ^{*1}			
SC-5-1RM	5.5kW 22A	11kW 22A	32	(1NO+1NC)×2, 2NC×2, (2NO+2NC)×2			
SC-N1RM	7.5kW 32A	15kW 32A	50	(2NO+2NC)×2	EN60947-4-1 Conforming to IEC60947-4-1	-	Done (on nameplate)
SC-N2RM	11kW 40A	18.5kW 40A	60	(2NO+2NC)×2			
SC-N2SRM	15kW 50A	22kW 50A	80	(2NO+2NC)×2			
SC-N3RM	18.5kW 65A	30kW 65A	100	(2NO+2NC)×2			
SC-N4RM	22kW 80A	40kW 80A	135	(2NO+2NC)×2			
SC-N5RM	30kW 105A	55kW 105A	150	(2NO+2NC)×2			
SC-N6RM	37kW 125A	60kW 125A	150	(2NO+2NC)×2			
SC-N7RM	45kW 150A	75kW 150A	200	(2NO+2NC)×2			
SC-N8RM	55kW 180A	90kW 180A	260	(2NO+2NC)×2			
SC-N10RM	65kW 220A	110kW 220A	260	(2NO+2NC)×2			
SC-N11RM	90kW 300A	160kW 300A	350	(2NO+2NC)×2			
SC-N12RM	120kW 400A	220kW 400A	450	(2NO+2NC)×2			
SC-N14RM	180kW 600A	315kW 600A	660	(2NO+2NC)×2			

*1 1NO×2 auxiliary contact is also available, which, however, is not electrically interlocked. To use this, provide electrical interlock by external operation circuit.

● Magnetic starters (with 3 heat elements and thermal overload relay)

Type	Specification				EN/IEC/ others	TÜV license No.	CE marking
	3-phase squirrel-cage motor capacity (AC3)		Continuous current [A]	Auxiliary contact arrangement			
	220-240V AC	380-440V AC					
SW-03/3H	2.5kW 11A	4kW 9A	20	1NO, 1NC	EN60947-4-1 Conforming to IEC60947-4-1	R9151511	Done (on nameplate)
SW-0/3H	3.5kW 13A	5.5kW 12A		25			
SW-05/3H	4.5kW 18A	7.5kW 16A	1NO, 1NC				
SW-4-0/3H	4.5kW 18A	7.5kW 16A	32	2NO, 1NO+1NC, 2NC			
SW-4-1/3H	5.5kW 22A	11kW 22A					
SW-5-1/3H	5.5kW 22A	11kW 22A	50	2NO+2NC (Can be extended up to 4NO+4NC) ^{*1}			
SW-N1/3H	7.5kW 32A	15kW 32A					
SW-N2/3H	11kW 40A	18.5kW 40A					
SW-N2S/3H	15kW 50A	22kW 50A					
SW-N3/3H	18.5kW 65A	30kW 65A					
SW-N4/3H	22kW 80A	40kW 80A					
SW-N5/3H	30kW 105A	55kW 105A					
SW-N6/3H	37kW 125A	60kW 125A					
SW-N7/3H	45kW 150A	75kW 150A					
SW-N8/3H	55kW 180A	90kW 180A					
SW-N10/3H	65kW 220A	110kW 220A					
SW-N11/3H	90kW 300A	160kW 300A					
SW-N12/3H	120kW 400A	220kW 400A					
SW-N14/3H	180kW 600A	315kW 600A			660		
							Applying for certification

Notes 1: The CE mark is also indicated on the product with 2E thermal overload relay (SW-03/2E to N14/2E).

2: The CE mark is also indicated on the quick terminal (SW-03Y/3H to 5-1Y/3H).

*1 The TÜV license is obtained in combination with magnetic contactor and thermal overload relay.

● Magnetic starters (reversing type, with 3 heat elements and thermal overload relay)

Type	Specification		Continuous current [A]	Auxiliary contact arrangement	EN/IEC/ others	TÜV license No.	CE marking
	3-phase squirrel-cage motor capacity (AC3)						
	220-240V AC	380-440V AC					
SW-03RM/3H	2.5kW 11A	4kW 9A	20	1NC×2 ^{*1}	EN60947-4-1	-	Done (on nameplate)
SW-0RM/3H	3.5kW 13A	5.5kW 12A	20	1NC×2 ^{*1}	Conforming to IEC60947-4-1		
SW-05RM/3H	3.5kW 13A	5.5kW 12A	20	(1NO+1NC)×2, 2NC×2			
SW-4-0RM/3H	4.5kW 18A	7.5kW 16A	25	1NC×2 ^{*1}			
SW-4-1RM/3H	5.5kW 22A	11kW 22A	32	1NC×2 ^{*1}			
SW-5-1RM/3H	5.5kW 22A	11kW 22A	32	(1NO+1NC)×2, 2NC×2, (2NO+2NC)×2			
SW-N1RM/3H	7.5kW 32A	15kW 32A	50	(2NO+2NC)×2	EN60947-4-1	-	Done (on nameplate)
SW-N2RM/3H	11kW 40A	18.5kW 40A	60	(2NO+2NC)×2	Conforming to IEC60947-4-1		
SW-N2SRM/3H	15kW 50A	22kW 50A	80	(2NO+2NC)×2			
SW-N3RM/3H	18.5kW 65A	30kW 65A	100	(2NO+2NC)×2			
SW-N4RM/3H	22kW 80A	40kW 80A	135	(2NO+2NC)×2			
SW-N5RM/3H	30kW 105A	55kW 105A	150	(2NO+2NC)×2			
SW-N6RM/3H	37kW 125A	60kW 125A	150	(2NO+2NC)×2			
SW-N7RM/3H	45kW 150A	75kW 150A	200	(2NO+2NC)×2			
SW-N8RM/3H	55kW 180A	90kW 180A	260	(2NO+2NC)×2			
SW-N10RM/3H	65kW 220A	110kW 220A	260	(2NO+2NC)×2			
SW-N11RM/3H	90kW 300A	160kW 300A	350	(2NO+2NC)×2			
SW-N12RM/3H	120kW 400A	220kW 400A	450	(2NO+2NC)×2			
SW-N14RM/3H	180kW 600A	315kW 600A	660	(2NO+2NC)×2			

Note 1: The type with 2E thermal overload relay (SW-03RM/2E to N14RM/2E) will also be CE-marked.

^{*1} 1NO×2 auxiliary contact is also available, which, however, is not electrically interlocked. To use this, provide electrical interlock by external operation circuit.

● SJ Series DC operated high-sensitivity contactors

Type	Specification		Continuous current [A]	Auxiliary contact arrangement	EN/IEC/ others	TÜV license No.	CE marking
	3-phase squirrel-cage motor capacity (AC3) ^{*1}						
	220-240V AC	380-440V AC					
SJ-0G	2.2kW 8.7A	2.2kW 5A	15	1NO, 1NC	EN60947-4-1	R9151519	Done (on nameplate)
SJ-06G				3NO, 2NO+1NC, 1NO+2NC	Conforming to IEC60947-4-1	-	
SJ-1SG	4.5kW 18A	4kW 9A	25	2NO, 1NO+1NC		R9351099	
SJ-0WG/N3H	2.2kW 8.7A	2.2kW 5A	15	1NO, 1NC		-	
SJ-06WG/N3H							
SJ-1SWG/3H	4.5kW 18A	4kW 9A	25	2NO, 1NO+1NC			
SJ-0WG/2E	2.2kW 8.7A	2.2kW 5A	15	1NO, 1NC			
SJ-06WG/2E							
SJ-1SWG/2E	4.5kW 18A	4kW 9A	25	2NO, 1NO+1NC			
SJ-0GRM	2.2kW 12A	2.2kW 6A	15	1NC×2			
SJ-06GRM	2.2kW 12A	2.2kW 6A	15	(2NO+1NC)×2, (1NO+2NC)×2			
SJ-1SGRM	3.7kW 18A	3.7kW 9A	25	(1NO+1NC)×2			
SJ-06GRM/L	2.2kW 12A	2.2kW 6A	15	(2NO+1NC)×2, (1NO+2NC)×2			
SJ-0WGRM/2E	2.2kW 12A	2.2kW 6A	15	1NC×2			
SJ-06WGRM/2E	2.2kW 12A	2.2kW 6A	15	(2NO+1NC)×2, (1NO+2NC)×2			
SJ-1SWGRM/2E	3.7kW 18A	3.7kW 9A	25	(1NO+1NC)×2			
SJ-06WGRM/2EL	2.2kW 12A	2.2kW 6A	15	(2NO+1NC)×2, (1NO+2NC)×2			
SJ-0WGRM/3H	2.2kW 12A	2.2kW 6A	15	1NC×2			
SJ-06WGRM/3H	2.2kW 12A	2.2kW 6A	15	(2NO+1NC)×2, (1NO+2NC)×2			
SJ-1SWGRM/3H	3.7kW 18A	3.7kW 9A	25	(1NO+1NC)×2			
SJ-06WGRM/3HL	2.2kW 12A	2.2kW 6A	15	(2NO+1NC)×2, (1NO+2NC)×2			

Note 1: SJ-0G/UL to SJ-1SG/UL will also be CE-marked.

^{*1} Rated values conforming to IEC standards.

● Magnetic contactors (FC series)

Type	Specification		Continuous current [A]	EN/IEC/ others	TUV license No.	CE marking
	3-phase squirrel-cage motor capacity (AC3)					
	200-240V AC	380-440V AC				
FC-0UL	3kW 12A	2.5kW 6A	20	EN60947-4-1 Conforming to IEC60947-4-1	R9950193	Done (on nameplate)
FC-0TUL						
FC-0/GUL						
FC-0T/GUL						
FC-0SUL	3.5kW 15A	4.5kW 10A				
FC-0STUL						
FC-0S/GUL						
FC-0ST/GUL						
FC-1UL	5.5kW 20A	5.5kW 13A	30			
FC-1SUL	7.5kW 27A	7.5kW 18A	30			
FC-2SUL	11kW 40A	11kW 26A	45			
FC-3UL	15kW 52A	18.5kW 40A	60			
FC-4UL	18.5kW 65A	30kW 65A	80			

● Auxiliary relays and auxiliary contact block

Type	Specification			Contact	EN/IEC/ others	TUV license No.	CE marking
	Voltage	Operational current [A]	Continuous current [A]				
SH-4 ^{*1}	200-240V AC	3	10	4-pole, 8-pole	EN60947-5-1 IEC60947-5-1 Conforming to ZH1/457	R9151523	Done (on nameplate)
SH-5				5-pole			
SH-4/G				4-pole, 8-pole			
SH-5/G				5-pole	EN60947-5-1 Conforming to IEC60947-5-1	E9150892E01	Done (on inner packing case)
SZ-A40				4NO			
SZ-A31				3NO+1NC			
SZ-A22				2NO+2NC			
SZ-A20				2NO			
SZ-A11				1NO+1NC			
SZ-A02				2NC			
SZ-AL				1NO+1NC	E9150893E01		
SZ-AR							

*1 SH-4Y type will also be CE-marked.

● Terminal covers

Type	Model	Remarks
SZ-T1	Magnetic contactors	- Makes it easy "to secure IP2X", a requirement of EN60204-1. - Conforms to DIN57106/VDE0106 Teil 100 and TÜV approved (see technical report No. U95478E01).
SZ-T2	Auxiliary relays	
SZ-T3		
SZ-T4		
SZ-2K/TC		
SZ-T22		
SZ-T23		
SZ-T5	Auxiliary contact block	
SZ-T6		
SZ-T7		
SZ-T10	Thermal overload relays	
SZ-T11		
SZ-T12		
SZ-T13		
SZ-T14		
SZ-T15		
SZ-T16		
SZ-T17		

● Live-section cover

形式	Model	Remarks
SZ-JC1	Magnetic contactors	- Conforms to DIN57106/VDE0106 Teil100 and TÜV approved (See technical report No. U95478 E01)
SZ-JC2	Auxiliary relays	
SZ-JC3		
SZ-JC4		
SZ-N1J		
SZ-N2SJ		
SZ-N4J		
SZ-N6J		
SZ-N7J		
SZ-N8J		
SZ-N11J		
SZ-JW1	Magnetic contactors	
SZ-JW2		
SZ-JW3		
SZ-JW4		
SZ-WN1J		
SZ-WN2SJ		
SZ-WN4J		
SZ-WN6J		
SZ-WN7J		
SZ-WN8J		
SZ-WN10J		
SZ-WN11J		