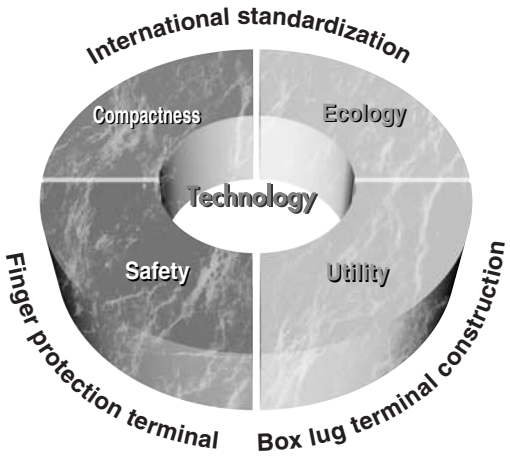
SC-M and SC-E series
General information

In addition to the five basic concepts of the existing SC series of magnetic contactors and motor starters — international standardization, compactness, safety, utility, and ecology — the SC-M and SC-E series take the line-up to the next step in utility with a new finger protection terminal and box lug terminal construction.



International standardization
IEC 60947-4-1, EN 60947-4-1, VDE 0660
UL 508, CSA C 22.2, JIS C 8201-4-1

Compactness
- SC-M01, M02: 45mm wide
  SC-E02 to E05: 43mm wide, SC-E1 to E2S: 54mm wide
  SC-E3, E4: 67mm wide, SC-E5: 88mm wide
- Reducing mounting area

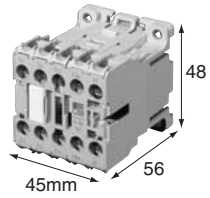
Safety
- Terminals with finger-touch protection (DIN 57106/ VDE 0106 Teil100)

Utility
- Box lug terminal construction
- Long electrical life
- Reduction of wiring work

Ecology
- Reducing power consumption
- Recycled thermoplastic resin used for plastic parts.
- The names of materials are indicated on all major parts to facilitate their recycling.

SC-M series
2.2 to 4kW, 400V AC

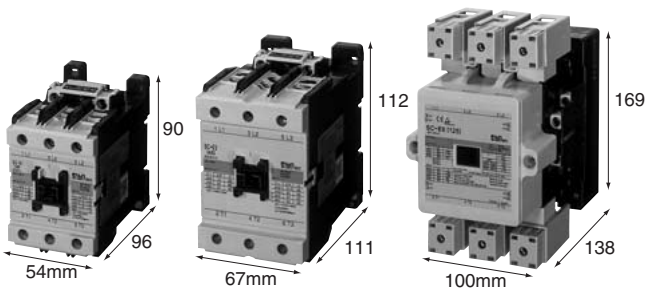
■ Description
Optimal 45mm-wide mini-magnetic contactors for small-capacity induction motor control.
A wide range of accessories ensures the flexibility to meet user needs.



SC-M01, M02

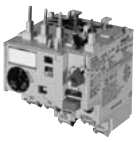
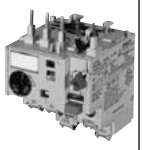
SC-E series
4 to 75kW, 400V AC

■ Description
Models SC-E02 to SC-E4 have a 3-pole main circuit structure. Available in three frame sizes, 43mm, 54mm, and 67mm wide, they enable a significantly reduced mounting area.
Models SC-E5 to SC-E7 use an IC-controlled SUPER MAGNET to ensure high operating reliability.



SC-E1 to E2S **SC-E3, E4** **SC-E6 with SUPER MAGNET**

■ Quick reference guide

Contactor Non-reversing / Reversing	**SC-M01** / **SC-M01RM**	**SC-M02** / **SC-M02RM**	**SC-E02** / **SC-E02RM**	**SC-E03** / **SC-E03RM**	**SC-E04** / **SC-E04RM**	**SC-E05** / **SC-E05RM**	**SC-E1** / **SC-E1RM**
	 KK02-292	 KK02-292	 AF01-12	 AF01-11	 AF01-10	 KK01-105	 AF01-8
Motor capacity 3-phase AC-3 (kW)							
200–240V	1.5	3	2.2	3	4	5.5	7.5
380–440V	2.2	4	4	5.5	7.5	11	15
Rated operational current AC-3 (A)							
200–240V	6	9	9	12	18	25	32
380–440V	6	9	9	12	18	25	32
Rated thermal current AC-1 (A)	20	20	20	20	25	32	50
Auxiliary contact Non-reversing	1NO, 1NC	1NO, 1NC	–	–	–	–	–
Dimensions (mm) W×H×D AC operated	45×48×56		43×81×81				54×90×96
Non-reversing DC operated	45×48×68		43×81×108				54×90×121.5
Standard	IEC 60947-4-1, EN 60947-4-1, VDE 0660, UL 508, CSA C22.2						
Further information	*Page 02/35*		*Page 02/46*				
Thermal overload relay (standard type)	**TK-M0**	**TK-M0**	**TK-E02**	**TK-E02**	**TK-E02**	**TK-E02**	**TK-E2**
	 KK02-295	 KK02-295	 KK01-86	 KK01-86	 KK01-86	 KK01-86	 KK01-88
Ampere setting range (A)	0.11–0.17	0.11–0.17	0.1–0.15	0.1–0.15	0.1–0.15	0.1–0.15	4–6
	0.17–0.26	0.17–0.26	0.13–0.2	0.13–0.2	0.13–0.2	0.13–0.2	5–8
	0.26–0.43	0.26–0.43	0.15–0.24	0.15–0.24	0.15–0.24	0.15–0.24	6–9
	0.43–0.65	0.43–0.65	0.2–0.3	0.2–0.3	0.2–0.3	0.2–0.3	7–11
	0.65–1.0	0.65–1.0	0.24–0.36	0.24–0.36	0.24–0.36	0.24–0.36	9–13
	0.85–1.3	0.85–1.3	0.3–0.45	0.3–0.45	0.3–0.45	0.3–0.45	12–18
	1.1–1.6	1.1–1.6	0.36–0.54	0.36–0.54	0.36–0.54	0.36–0.54	18–26
	1.35–2.0	1.35–2.0	0.48–0.72	0.48–0.72	0.48–0.72	0.48–0.72	24–36
	1.7–2.4	1.7–2.4	0.64–0.96	0.64–0.96	0.64–0.96	0.64–0.96	
	2.2–3.2	2.2–3.2	0.8–1.2	0.8–1.2	0.8–1.2	0.8–1.2	
	2.5–4.0	2.5–4.0	0.95–1.45	0.95–1.45	0.95–1.45	0.95–1.45	
	3.0–4.7	3.0–4.7	1.4–2.2	1.4–2.2	1.4–2.2	1.4–2.2	
	4.0–6.3	4.0–6.3	1.7–2.6	1.7–2.6	1.7–2.6	1.7–2.6	
		5.5–8.0	2.2–3.4	2.2–3.4	2.2–3.4	2.2–3.4	
		7.5–10.5	2.8–4.2	2.8–4.2	2.8–4.2	2.8–4.2	
			4–6	4–6	4–6	4–6	
			5–8	5–8	5–8	5–8	
			6–9	6–9	6–9	6–9	
			7–11	7–11	7–11	7–11	
				9–13	9–13	9–13	
					12–18	12–18	
						16–22	
						20–25	
Dimensions W×H×D (mm)	45×68.5×53		53×60.5×80.5				54×78.5×97
Standard	IEC 60947-1, EN 60947-4-1, VDE 0660, UL 508, CSA C22.2						
Further information	*Page 02/43*		*Page 02/68*				

Contactors Non-reversing / Reversing	**SC-E2** **SC-E2RM**	**SC-E2S** **SC-E2SRM**	**SC-E3** **SC-E3RM**	**SC-E4** **SC-E4RM**	**SC-E5** **SC-E5RM**	**SC-E6** **SC-E6RM**	**SC-E7** **SC-E7RM**
	 AF01-7	 AF01-6	 AF01-5	 AF01-4	 AF01-3	 AF01-2	 AF01-1
Motor capacity 3-phase AC-3 (kW)							
200–240V	11	15	18.5	22	30	37	45
380–440V	18.5	22	30	40	55	60	75
Rated operational current AC-3 (A)							
200–240V	40	50	68	80	105	125	150
380–440V	40	50	65	80	105	125	150
Rated thermal current AC-1 (A)	60	65	100	105	150	150	200
Auxiliary contact Non-reversing	–	–	–	–	2NO+2NC	2NO+2NC	2NO+2NC
Dimensions (mm) W×H×D AC operated	54×90×96		67×112×111		88×155×132	100×169×138	115×175×140
Non-reversing DC operated	54×90×121.5		67×112×130				
Standard	IEC 60947-4-1, EN 60947-4-1, VDE 0660, UL 508, CSA C22.2						
Further information	*Page 02/46*						

Thermal overload relay (standard type)	**TK-E2**	**TK-E2**	**TK-E3**	**TK-E3**	**TK-E5**	**TK-E6**	**TK-E6**
	 KK01-88	 KK01-88	 KK01-87	 KK01-87	 KK01-85	 KK01-84	 KK01-84
Ampere setting range (A)	4–6	4–6	7–11	7–11	18–26	45–65	45–65
	5–8	5–8	9–13	9–13	24–36	53–80	53–80
	6–9	6–9	12–18	12–18	28–40	65–95	65–95
	7–11	7–11	18–26	18–26	34–50	85–125	85–125
	9–13	9–13	24–36	24–36	45–65		110–160
	12–18	12–18	28–40	28–40	65–95		
	18–26	18–26	34–50	34–50	85–105		
	24–36	24–36	45–65	45–65			
	32–42	32–42	48–68	48–68			
		40–50		64–80			
		44–54					
Dimensions W×H×D (mm)	54×78.5×97		68×89.5×107.5		76.5×105×106	100×122×123	
Standard	IEC 60947-1, EN 60947-4-1, VDE 0660, UL 508, CSA C22.2						
Further information	*Page 02/68*						