

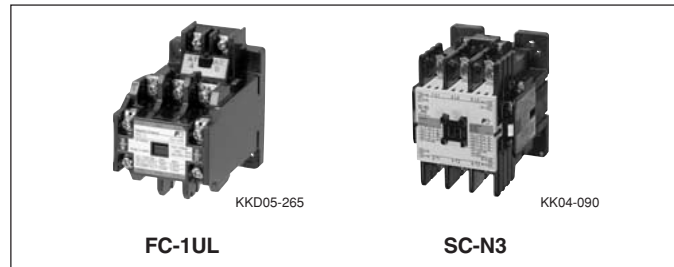
# Magnetic Contactors and Starters

## TÜV approved

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#### ■ Description

FUJI contactors and starters introduced in this section are TÜV approved products as they are.



### Contactor SC series

AC operated		DC operated		Max. motor capacity (kW)*5		Rated operational current (A)*5		Continuous current (A)	Auxiliary contact	
Type	Ordering code	Type	Ordering code	200V 240V	380V 440V	200V 240V	380V 440V		NO	NC
SC-03	SC11AA-■10	SC-03/G	SC11AG-■10	2.5	4	11	9	20	1	—*1
SC-0	SC13AA-■10	SC-0/G	SC13AG-■10	3.5	5.5	13	12	20	1	—*1
SC-05	SC14AA-■11	SC-05/G	SC14AG-■11	3.5	5.5	13	12	20	1	1*2
SC-4-0	SC18AA-■10	SC-4-0/G	SC18AG-■10	4.5	7.5	18	16	25	1	—*1
SC-4-1	SC19AA-■10	SC-4-1/G	SC19AG-■10	5.5	11	22	22	32	1	—*1
SC-5-1	SC20AA-■11	SC-5-1/G	SC20AG-■11	5.5	11	22	22	32	1	1*3
SC-N1	SC25BAA-■22	SC-N1/G	SC25BAG-■22	7.5	15	32	32	50	2	2*4
SC-N2	SC35BAA-■22	SC-N2/G	SC35BAG-■22	11	18.5	40	40	60	2	2*4
SC-N2S	SC50BAA-■22	SC-N2S/G	SC50BAG-■22	15	22	50	50	80	2	2*4
SC-N3	SC65BAA-■22	SC-N3/G	SC65BAG-■22	18.5	30	65	65	100	2	2*4
SC-N4	SC80BAA-■22	SC-N4/SE	SC80BAS-■22	22	40	80	80	135	2	2*4
SC-N5	SC93BAA-■22	SC-N5	SC93BAA-■22	30	55	105	105	150	2	2*4
SC-N6	SC1CBAA-■22	SC-N6	SC1CBAA-■22	37	60	125	125	150	2	2*4
SC-N7	SC1FBAA-■22	SC-N7	SC1FBAA-■22	45	75	150	150	200	2	2*4
SC-N8	SC1JBAA-■22	SC-N8	SC1JBAA-■22	55	90	180	180	260	2	2*4
SC-N10	SC2CBAA-■22	SC-N10	SC2CBAA-■22	65	110	220	220	260	2	2*4
SC-N11	SC3ABAA-■22	SC-N11	SC3ABAA-■22	90	160	300	300	350	2	2*4
SC-N12	SC4ABAA-■22	SC-N12	SC4ABAA-■22	120	220	400	400	450	2	2*4
SC-N14	SC6ABAA-■22	SC-N14	SC6ABAA-■22	180	315	600	600	660	2	2*4
SC-N16	SC8ABAA-■22	SC-N16	SC8ABAA-■22	220	440	800	800	800	2	2*4

Notes: \*1 Auxiliary contact 1NC is available on request.

\*2 Auxiliary contact 2NO or 2NC is available on request.

\*3 Auxiliary contact 2NC, 2NO or 2NO+2NC is available on request.

■ Coil voltage code

\*4 Auxiliary contact 4NO+4NC is available on request for frame size N1 and above.

\*5 Conforming to IEC 60947-4-1 AC-3

### Thermal overload relays

Standard Type	Ordering code	2E type Type	Ordering code	Setting current range (A)	Reset	Used with
TR-0N/3 TR-0NH/3	TR13DW-□ TR13DH-□	TK-0N TK-0NH	TR13EW-□ TR13EH-□	0.1–0.15, 0.13–0.2, 0.15–0.24, 0.2–0.3, 0.24–0.36 0.3–0.45, 0.36–0.54, 0.48–0.72, 0.64–0.96, 0.8–1.2 0.95–1.45, 1.4–2.2, 1.7–2.6, 2.2–3.4, 2.8–4.2, 4–6 5–8, 6–9, 7–11, 9–13	Manual/auto	SC-03 SC-0 SC-05
TR-5-1N/3 TR-5-1NH/3	TR20DW-□ TR20DH-□	TK-5-1N TK-5-1NH	TR20EW-□ TR20EH-□	0.1–0.15, 0.13–0.2, 0.15–0.24, 0.2–0.3, 0.24–0.36 0.3–0.45, 0.36–0.54, 0.48–0.72, 0.64–0.96, 0.8–1.2 0.95–1.45, 1.4–2.2, 1.7–2.6, 2.2–3.4, 2.8–4.2, 4–6 5–8, 6–9, 7–11, 9–13, 12–18, 16–22	Manual/auto	SC-4-0 SC-4-1 SC-5-1
TR-N2/3 TR-N2H/3	TR35BDW-□ TR35BDH-□	TK-N2 TK-N2H	TR35BEW-□	4–6, 5–8, 6–9, 7–11, 9–13, 12–18, 18–26 24–36, 32–42	Manual/auto	SC-N1 SC-N2
TR-N3/3 TR-N3H/3	TR65BDW-□ TR65BDH-□	TK-N3 TK-N3H	TR65BEW-□	7–11, 9–13, 12–18, 18–26, 24–36, 28–40 34–50, 45–65, 48–68, 53–80, 65–95, 85–105	Manual/auto	SC-N2S SC-N3
TR-N5/3	TR93BDW-□	TK-N5	TR93BEW-□ TR93BEH-□	18–26, 24–36, 28–40, 34–50, 45–65, 53–80 65–95, 85–105	Manual/auto	SC-N4 SC-N5
TR-N6/3 TR-N6H/3	TR1CBDW-□ TR1CBDH-□	TK-N6 TK-N6H	TR1CBEW-□ TR1CBEH-□	45–65, 53–80, 65–95, 85–125, 110–160	Manual/auto	SC-N6
TR-N7/3	TR1FBDW-□	TK-N7	TR1FBEW-□	45–65, 53–80, 65–95, 85–125, 110–160	Manual/auto	SC-N7
TR-N8/3	TR1JBDW-□	TK-N8	TR1JBEW-□	65–95, 85–125, 110–160, 125–185	Manual/auto	SC-N8
TR-N10/3 TR-N10H/3	TR2CBDW-□ TR2CBDH-□	TK-N10 TK-N10H	TR2CBEW-□ TR2CBEH-□	85–125, 110–160, 125–185, 160–240	Manual/auto	SC-N10
TR-N12/3 TR-N12H/3	TR4ABDW-□ TR4ABDH-□	TK-N12 TK-N12H	TR4ABEW-□ TR4ABEH-□	110–160, 125–185, 160–240, 200–300 240–360, 300–450	Manual/auto	SC-N11 SC-N12
TR-N14/3 TR-N14H/3	TR6ABDW-□ TR6ABDH-□	TK-N14 TK-N14H	TR6ABEW-□ TR6ABEH-□	240–360, 300–450, 400–600	Manual/auto	SC-N14

Note: □ Thermal overload relay ampere setting range code, see page 01/132.

**Optional units (Auxiliary contact blocks)**

Type	Ordering code	Description	Contact arrangement	Continuous current (A)	Operational current (A)				Used with
					AC-15 100–120V	200–240V	380–440V	500–600V	
<b>SZ-A40</b> <b>SZ-A31</b> <b>SZ-A22</b> <b>SZ-A20</b> <b>SZ-A11</b> <b>SZ-A02</b>	SZ1A40 SZ1A31 SZ1A22 SZ1A20 SZ1A11 SZ1A02	Front mounting	4NO 3NO+1NC 2NO+2NC 2NO 1NO+1NC 2NC	10	6	3	1.5	1.2	SC-03 to SC-N3
<b>SZ-AS1</b> <b>SZ-AS2</b>	SZ1AS1 SZ2AS2	Side mounting	1NO+1NC 1NO+1NC						
<b>SZ-AS3H</b>	SZ2AS3H		1NO+1NC						SC-N14, SC-N16

**Contactors FC series**

AC operated		DC operated		Max. motor capacity (kW) *3		Operational current (A) *3		Continuous current (A)	Contact arrangement	
Type	Ordering code	Type	Ordering code	3-phase 200V 240V	380V 440V	3-phase 200V 240V	380V 440V		Main contact	Aux. contact
<b>FC-0UL</b>	SF12B1A-■10	<b>FC-0/GUL</b>	SF12B1G-■10	3.0	2.5	12	6	20	3NO	1NO *1
<b>FC-0TUL</b>	SF12B3A-■10	<b>FC-0T/GUL</b>	SF12B3G-■10	2.2	2.5	12	6	20	3NO	1NO *1
<b>FC-0SUL</b>	SF15B1A-■10	<b>FC-0S/GUL</b>	SF15B1G-■10	3.5	4.5	15	10	20	3NO	1NO *1
<b>FC-0STUL</b>	SF15B3A-■10	<b>FC-0ST/GUL</b>	SF15B3G-■10	3.5	4.5	15	10	20	3NO	1NO *1
<b>FC-1UL</b>	SF20B1A-■11	–	–	5.5	5.5	20	13	30	3NO	1NO+1NC
<b>FC-1SUL</b>	SF26B1A-■11	–	–	7.5	7.5	27	18	30	3NO	1NO+1NC
<b>FC-2SUL</b>	SF35B1A-■11	–	–	11	11	40	26	45	3NO	1NO+1NC *2
<b>FC-3UL</b>	SF50B1A-■11	–	–	15	18.5	52	40	60	3NO	1NO+1NC *2
<b>FC-4UL</b>	SF65B1A-■11	–	–	18.5	30	65	65	80	3NO	1NO+1NC *2

Notes: \*1 Auxiliary contact 1NC is available on request.  
 \*2 Auxiliary contact 2NO or 2NC is available on request.  
 \*3 Conforming to IEC 60497-4-1 AC-3  
 ■Coil voltage code

# Magnetic Contactors and Starters

## TÜV approved

### Solid-state contactors SS series

#### Single pole type

#### ● Main circuit 240V AC, SS101 to SS2001

Type	<b>SS101-5Z-A3</b> <b>SS101-5Z-A4</b> <b>SS101-3Z-D3</b>	<b>SS201-5Z-A3</b> <b>SS201-5Z-A4</b> <b>SS201-3Z-D3</b>	<b>SS301-5Z-A3</b> <b>SS301-5Z-A4</b> <b>SS301-3Z-D3</b>	<b>SS401-5Z-A3</b> <b>SS401-5Z-A4</b> <b>SS401-3Z-D3</b>	<b>SS501-5Z-A3</b> <b>SS501-5Z-A4</b> <b>SS501-3Z-D3</b>
Ordering code	SS101-5ZA3 SS101-5ZA4 SS101-3ZD3	SS201-5ZA3 SS201-5ZA4 SS201-3ZD3	SS301-5ZA3 SS301-5ZA4 SS301-3ZD3	SS401-5ZA3 SS401-5ZA4 SS401-3ZD3	SS501-5ZA3 SS501-5ZA4 SS501-3ZD3
Rated thermal current(A) *	10	20	30	40	50
Control voltage	A3 : 100V-120V AC, A4 : 200-240V AC, D3 : 5-24V DC				

Type	<b>SS701-1Z-A3</b> <b>SS701-1Z-A4</b> <b>SS701-3Z-D3</b>	<b>SS1001-1Z-A3</b> <b>SS1001-1Z-A4</b> <b>SS1001-3Z-D3</b>	<b>SS1501-1Z-A3</b> <b>SS1501-1Z-A4</b> <b>SS1501-3Z-D3</b>	<b>SS2001-1Z-A3</b> <b>SS2001-1Z-A4</b> <b>SS2001-3Z-D3</b>	
Ordering code	SS701-1ZA3 SS701-1ZA4 SS701-3ZD3	SS1A1-1ZA3 SS1A1-1ZA4 SS1A1-3ZD3	SS1F1-1ZA3 SS1F1-1ZA4 SS1F1-3ZD3	SS1A1-1ZA3 SS1A1-1ZA4 SS1A1-3ZD3	
Rated thermal current(A) *	70	100	150	200	
Control voltage	A3 : 100V-120V AC, A4 : 200-240V AC, D3 : 5-24V DC				

#### ● Main circuit 480V AC, SS701H to SS2001H

Type	<b>SS701H-1Z-A3</b> <b>SS701H-1Z-A4</b> <b>SS701H-3Z-D3</b>	<b>SS1001H-1Z-A3</b> <b>SS1001H-1Z-A4</b> <b>SS1001H-3Z-D3</b>	<b>SS1501H-1Z-A3</b> <b>SS1501H-1Z-A4</b> <b>SS1501H-3Z-D3</b>	<b>SS2001H-1Z-A3</b> <b>SS2001H-1Z-A4</b> <b>SS2001H-3Z-D3</b>	
Ordering code	SS701H-1ZA3 SS701H-1ZA4 SS701H-3ZD3	SS1A1H-1ZA3 SS1A1H-1ZA4 SS1A1H-3ZD3	SS1F1H-1ZA3 SS1F1H-1ZA4 SS1F1H-3ZD3	SS1A1H-1ZA3 SS1A1H-1ZA4 SS1A1H-3ZD3	
Rated thermal current(A) *	70	100	150	200	
Control voltage	A3 : 100V-120V AC, A4 : 200-240V AC, D3 : 5-24V DC				

Note: \* The values are maximum ratings that apply at an ambient temperature not exceeding 40°C.

**3-pole type**

● **Main circuit 240V AC**

Contactor				Cooling fin to be combined				Continuous current (A)	Motor ratings	
3-pole, 2-element		3-pole, 3-element		3-pole, 2-element		3-pole, 3-element			3-phase 220V AC 60Hz Capacity (HP)	Full load current (A)
Basic type	Basic ordering code	Basic type	Basic ordering code	Basic type	Basic ordering code	Basic type	Basic ordering code			
<b>SS032</b>	SS032	<b>SS033</b>	SS033	–	–	–	–	3	0.5	1.8
<b>SS082</b>	SS082	<b>SS083</b>	SS083	*	*	*	*	8	0.75	3.2
<b>SS202</b>	SS202	<b>SS203</b>	SS203	<b>SX1-D10</b>	SY1D0	<b>SX1-D10</b>	SY1D0	20	1.5	8
<b>SS302</b>	SS302	<b>SS303</b>	SS303	<b>SX1-D10</b>	SY1D0	<b>SX1-E12</b>	SY1E2	30	2	11
<b>SS402</b>	SS402	<b>SS403</b>	SS403	<b>SX1-D14</b>	SY1D4	<b>SX1-E12</b>	SY1E2	40	3	17.4
<b>SS502</b>	SS502	<b>SS503</b>	SS503	<b>SX1-E12</b>	SY1E2	<b>SX1-E17</b>	SY1E7	50	5	26
<b>SS802</b>	SS802	<b>SS803</b>	SS803	<b>SX1-C12</b>	SY1C2	<b>SX1-C12</b>	SY1C2	80	10	34
<b>SS1202</b>	SS1C2	<b>SS1203</b>	SS1C3	<b>SX1-C12</b>	SY1C2	<b>SX1-C12</b>	SY1C2	120	10	34

Note: \* Cooling fin provided

● **Main circuit 480V AC**

Contactor				Cooling fin to be combined				Continuous current (A)	Motor ratings	
3-pole, 2-element		3-pole, 3-element		3-pole, 2-element		3-pole, 3-element			3-phase 440V AC 60Hz Capacity (HP)	Full load current (A)
Basic type	Basic ordering code	Basic type	Basic ordering code	Basic type	Basic ordering code	Basic type	Basic ordering code			
<b>SS302H</b>	SS302H	<b>SS303H</b>	SS303H	<b>SX1-E12</b>	SY1E2	<b>SX1-E12</b>	SY1E2	30	–	–
<b>SS502H</b>	SS502H	<b>SS503H</b>	SS503H	<b>SX1-E12</b>	SY1E2	<b>SX1-E17</b>	SY1E7	50	10	24
<b>SS802H</b>	SS802H	<b>SS803H</b>	SS803H	<b>SX1-C12</b>	SY1C2	<b>SX1-C12</b>	SY1C2	80	20	48
<b>SS1202H</b>	SS1C2H	<b>SS1203H</b>	SS1C3H	<b>SX1-C12</b>	SY1C2	<b>SX1-C12</b>	SY1C2	120	20	48

● **Input voltage**

100–120/200–240V AC	5–12V DC
100–120V AC	12–24V DC
200–240V AC	5V DC
12/24V DC	100–110/200–220V AC/DC
5–24V DC	12/24V AC/DC

Note: For details, see page 01/127.