

# Product Selection—100S-C/104S-C Safety Contactors

- Mechanically linked N.C. auxiliary contacts
- Front-mounted auxiliary contacts
  - Gold bifurcated
  - Permanently fixed
  - Protective cover to prevent manual operation
  - Red contact housing for easy identification
  - “Mechanically Linked” or “Mirror Contact” symbol
- AC and DC operating coils
- SUVA Third-Party certification





100S-C Safety Contactor



104S-C Reversing Safety Contactor

Bulletin 100S-C/104S-C safety contactors provide mechanically linked positively guided contacts, required in feedback circuits of modern safety applications. The mechanically linked N.C. auxiliary contacts will not change state when a power pole welds. In addition, the gold-plated bifurcated auxiliary contacts are ideally suited for low-energy applications or feedback control circuits with multiple series-connected N.C. auxiliary contacts.









## 3-Pole AC- and DC-operated Contactors

Rated Operational Current $I_e$ [A]		Ratings for switching AC motors - AC-2, AC-3, AC-4										Auxiliary Contacts		Cat. No. <sup>(1) (2)</sup>
		3-phase kW (50 Hz)				Hp (60 Hz)								
40 °C		230V	400/415V	500V	690V	1-Phase		3-Phase						
AC-3	AC-1					115V	230V	200V	230V	460V	575V			
9	32	3	4	4	4	1/2	1-1/2	2	2	5	7-1/2	0	5	100S-C09⊗05BC
														1
12	32	4	5.5	5.5	5.5	1/2	2	3	3	7-1/2	10	0	5	100S-C12⊗05BC
														1
16	32	5.5	7.5	7.5	7.5	1	3	5	5	10	15	0	5	100S-C16⊗05BC
														1
23	32	7.5	11	13	10	2	3	5	7-1/2	15	15	0	5	100S-C23⊗05BC
														1
30	65	10	15	15	15	2	5	7-1/2	10	20	25	0	4	100S-C30⊗04BC
														1
37	65	11	18.5/20	20	18.5	3	5	10	10	25	30	0	4	100S-C37⊗04BC
														1
43	85	13	22	25	22	3	7-1/2	10	15	30	30	0	4	100S-C43⊗04BC
														1
55	85	15	30	30	30	5	10	15	20	40	40	0	4	100S-C55⊗04BC
														1
60	100	18.5	32	37	32	5	10	15	20	40	50	0	4	100S-C60⊗04BC <sup>(3)</sup>
														1
72	100	22	40	45	40	5	15	20	25	50	60	0	4	100S-C72⊗04BC <sup>(3)</sup>
														1
85	100	25	45	55	45	7-1/2	15	25	30	60	60	0	4	100S-C85⊗04BC <sup>(3)</sup>
														1
97	130	30	55	55	55	10	15	30	30	75	75	0	4	100S-C97⊗04BC <sup>(3)</sup>
														1

(1) For other contact configurations and full product details, please contact your local Rockwell Automation sales office or Allen-Bradley distributor.  
 (2) If standard cross-stamped front-mount auxiliary contacts are required, remove the letter "B" before the letter "C" in the cat. no. Example: Cat. No. 100S-C09⊗05BC becomes Cat. No. 100S-C09⊗05C.  
 (3) Front- and side-mount auxiliary contacts on Cat. Nos. 100S-C60...C97 conform to mirror contact performance only.

⊗ Coil voltage code and terminal position— see [page 31](#).

## 4-Pole AC- and DC-operated Contactors

$I_e$ [A]		Ratings for Switching AC Motors										Contact Configuration				Cat. No. <sup>(1) (2)</sup>
		AC-2, AC-3, AC-4					Hp (60 Hz)					Main Pole		Auxiliary Contacts		
		3-Phase kW (50 Hz) <sup>(3)</sup>					1-Phase		3-Phase <sup>(3)</sup>							
AC-3	AC-1	230V	400V/ 415V	500V	690V	115V	230V	200V	230V	460V	575V					
9	32	3	4	4	4	1/2	1-1/2	2	2	5	7-1/2	N.O.	N.C.	N.O.	N.C.	100S-C09⊗404BC
												3	1	0	4	100S-C09⊗304BC
12	32	4	5.5	5.5	5.5	1/2	2	3	3	7-1/2	10	4	0	0	4	100S-C12⊗404BC
												3	1	0	4	100S-C12⊗304BC
16	32	5.5	7.5	7.5	7.5	1	3	5	5	10	15	4	0	0	4	100S-C16⊗404BC
												3	1	0	4	100S-C16⊗304BC
23	32	7.5	11	13	10	2	3	5	7-1/2	15	15	4	0	0	4	100S-C23⊗404BC
												3	1	0	4	100S-C23⊗304BC

(1) For other contact configurations and full product details, please contact your local Rockwell Automation sales office or Allen-Bradley distributor.



(2) If standard cross-stamped front-mount auxiliary contacts are required, remove the letter "B" before the letter "C" in the cat. no. Example: Cat. No. 100S-C09⊗404BC becomes Cat. No. 100S-C09⊗404C.

(3) Three-phase ratings only apply to contactors with at least three N.O. power poles.

⊗ Coil voltage code and terminal position — see [page 31](#).

## Reversing AC- and DC-Operated Contactors

- 3 Main Contacts
- Includes Mechanical/Electrical Interlock
- Includes Reversing Power Wiring

Rated Operational Current $I_e$ [A]		Ratings for switching AC motors - AC-2, AC-3, AC-4										Auxiliary Contacts		Cat. No. <sup>(1) (2)</sup>
		3-phase kW (50 Hz)				Hp (60 Hz)								
40 °C	230V	400/415V	500V	690V	1-Phase		3-Phase				N.O.			
					115V	230V	200V	230V	460V	575V				
AC-3	AC-1													
9	32	3	4	4	4	1/2	1-1/2	2	2	5	7-1/2	0	6	104S-C09⊗012BC
												1	5	104S-C09⊗210BC
12	32	4	5.5	5.5	5.5	1/2	2	3	3	7-1/2	10	0	6	104S-C12⊗012BC
												1	5	104S-C12⊗210BC
16	32	5.5	7.5	7.5	7.5	1	3	5	5	10	15	0	6	104S-C16⊗012BC
												1	5	104S-C16⊗210BC
23	32	7.5	11	13	10	2	3	5	7-1/2	15	15	0	6	104S-C23⊗012BC
												1	5	104S-C23⊗210BC
30	65	10	15	15	15	2	5	7-1/2	10	20	25	0	5	104S-C30⊗010BC
												1	5	104S-C30⊗210BC
37	65	11	18.5/20	20	18.5	3	5	10	10	25	30	0	5	104S-C37⊗010BC
												1	5	104S-C37⊗210BC
43	85	13	22	25	22	3	7-1/2	10	15	30	30	0	5	104S-C43⊗010BC
												1	5	104S-C43⊗210BC
55	85	15	30	30	30	5	10	15	20	40	40	0	5	104S-C55⊗010BC
												1	5	104S-C55⊗210BC
60	100	18.5	32	37	32	5	10	15	20	40	50	0	5	104S-C60⊗010BC <sup>(4)</sup>
												1	5	104S-C60⊗210BC <sup>(4)</sup>
72	100	22	40	45	40	5	15	20	25	50	60	0	5	104S-C72⊗010BC <sup>(4)</sup>
												1	5	104S-C72⊗210BC <sup>(4)</sup>
85	100	25	45	55	45	7-1/2	15	25	30	60	60	0	5	104S-C85⊗010BC <sup>(4)</sup>
												1	5	104S-C85⊗210BC <sup>(4)</sup>
97	130	30	55	55	55	10	15	30	30	75	75	0	5	104S-C97⊗010BC <sup>(4)</sup>
												1	5	104S-C97⊗210BC <sup>(4)</sup>

- (1) For other contact configurations and full product details, please contact your local Rockwell Automation sales office or Allen-Bradley distributor.  
 (2) If standard cross-stamped front-mount auxiliary contacts are required, remove the letter "B" before the letter "C" in the cat. no. Example: Cat. No. 104S-C09⊗05BC becomes Cat. No. 104S-C09⊗05C.  
 (3) One of the N.C. auxiliary contacts is supplied as part of the mechanical/electrical interlock.  
 (4) Front- and side-mount auxiliary contacts on Cat. Nos. 104S-C60...C97 conform to mirror contact performance only.

⊗ Coil voltage code and terminal position— see [page 31](#).

## Coil Voltage Codes

The Cat. No. as listed is incomplete. Select a coil voltage code from the table below to complete the Cat. No. Example: 120V, 60 Hz: Cat. No. 100S-C09005BC becomes Cat. No.100S-C09D05BC.

AC Voltages [V]	12	24	32	36	42	48	100	100... 110	110	120	127	200	200... 220	208	208... 240
50 Hz	R	K	V	W	X	Y	KP	—	D	P	S	KG	L	—	—
60 Hz	Q	J	—	V	—	X	—	KP	—	D	—	—	KG	H	L
50/60 Hz	—	KJ	—	—	—	KY	KP	—	KD	—	—	KG	KL <sup>(1)</sup>	—	—

(1) Not available on 100S/104S-C97 contactors.

AC Voltages [V]	220... 230	230	230... 240	240	277	347	380	380... 400	400	400... 415	440	480	500	550	600
50 Hz	F	—	VA	T	—	—	—	N	—	G	B	—	M	C	—
60 Hz	—	—	—	A	T	I	E	—	—	—	N	B	—	—	C
50/60 Hz	KL <sup>(1)</sup>	KF	—	KA	—	—	—	—	KN	—	KB	—	—	—	—

(1) Not available on 100S/104S-C97 contactors.

DC Voltages [V]		9	12	24	24	36	36...48	48	48...72	60	64
100S-C09...C55	Electronic with Integrated Diode	—	EQ	EJ	QJ <sup>(1)</sup>	—	EW	—	EY	—	—
100S-C60...C97	with Integrated Diode	DR	DQ	DJ	—	DW	—	DY	—	DZ	DB

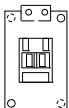
(1) "QJ" coil has faster dropout time (16...21 ms).

DC Voltages [V]		72	80	110	110...125	115	125	220	220...250	230	250
100S-C09...C55	Electronic with Integrated Diode	—	—	—	ED	—	—	—	EA	—	—
100S-C60...C97	with Integrated Diode	DG	DE	DD	—	DP	DS	DA	—	DF	DT

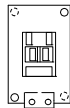
## Coil Terminal Position

All contactors are delivered with the coil terminals located on the line side.

For load side coil terminations, insert a "U" prior to the coil voltage code. Ordering example: Cat. No. 100S-C09UD05BC.



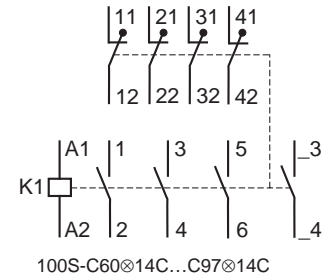
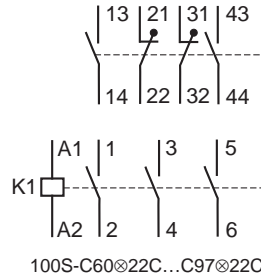
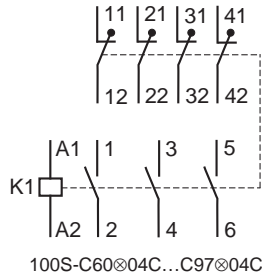
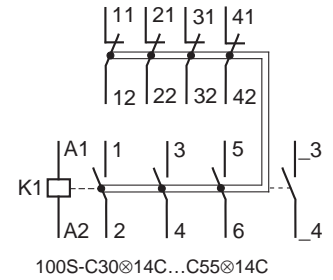
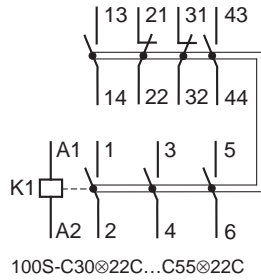
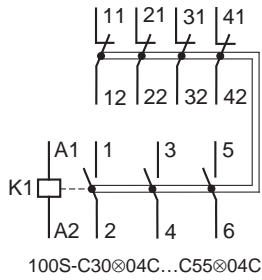
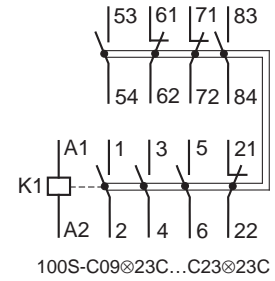
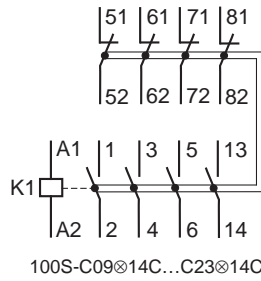
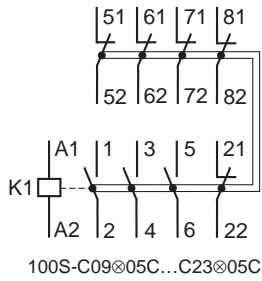
Cat. No.100S-C09005CLine Side



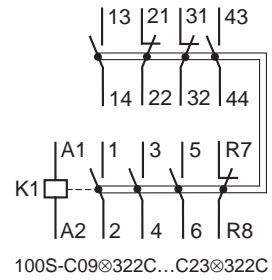
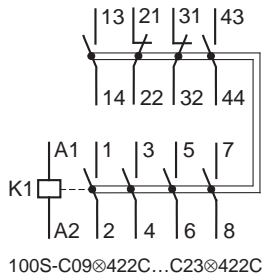
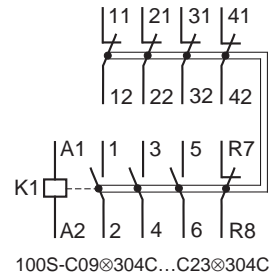
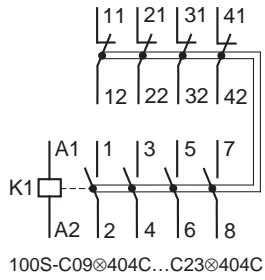
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## Assignment of Contacts

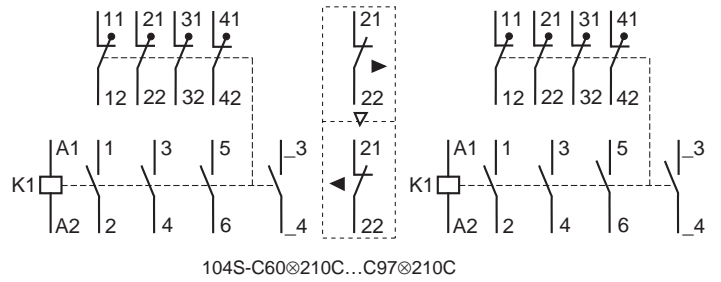
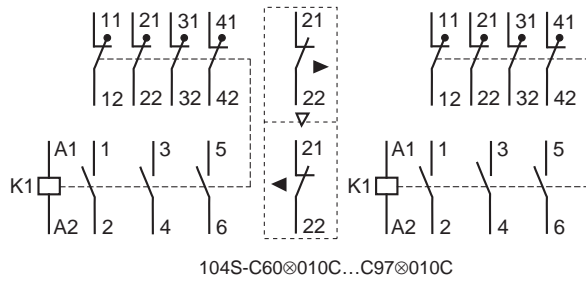
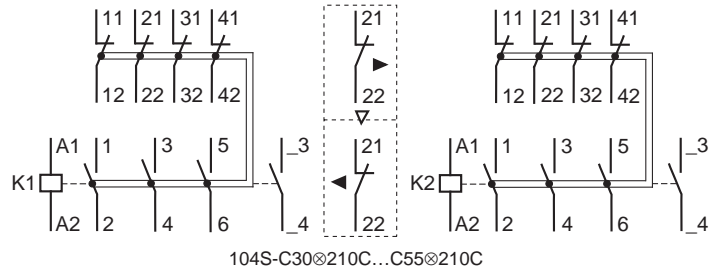
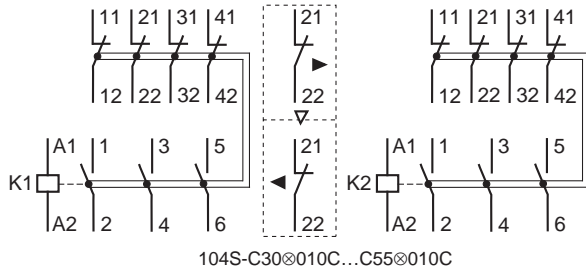
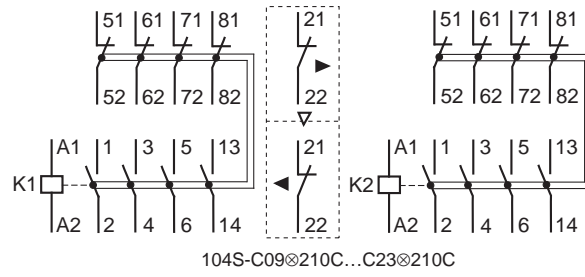
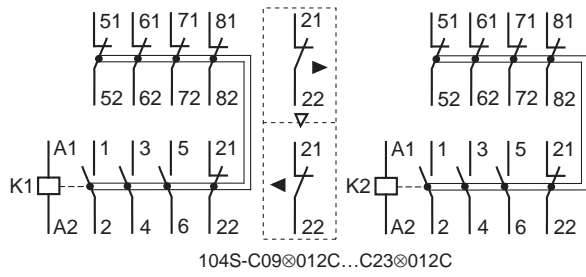
### Safety Contactors with 3 Main Contacts and Standard Front-Mount Auxiliary Contacts



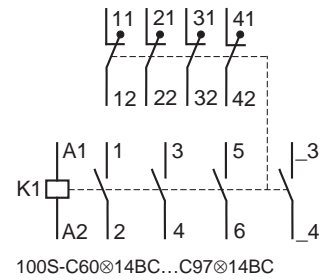
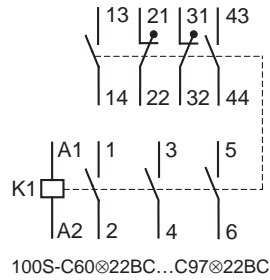
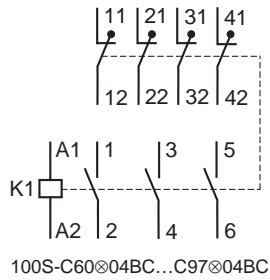
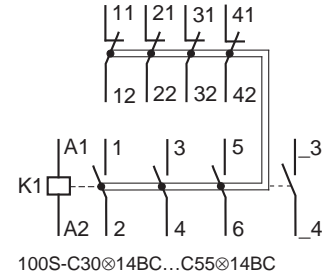
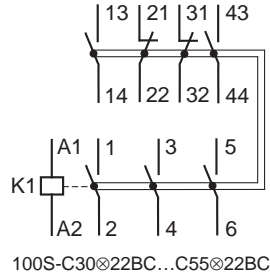
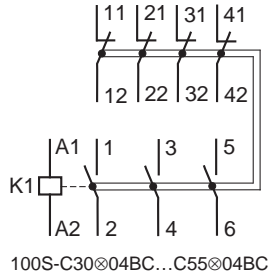
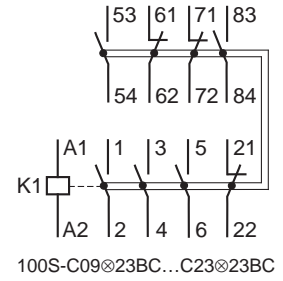
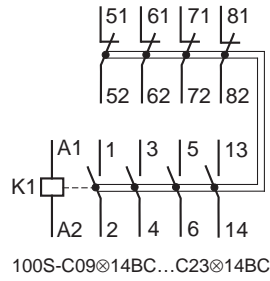
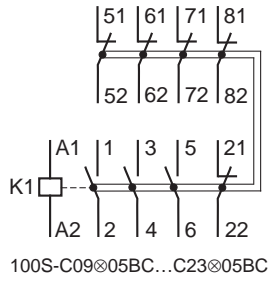
Safety Contactors with 4 Main Contacts and Standard Front-Mount Auxiliary Contacts



### Safety Reversing Contactors with 3 Main Contacts and Standard Front-Mount Auxiliary Contacts

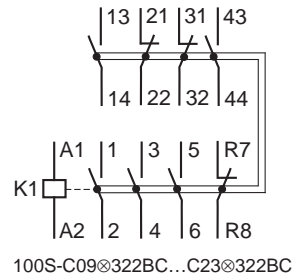
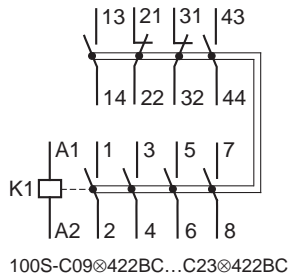
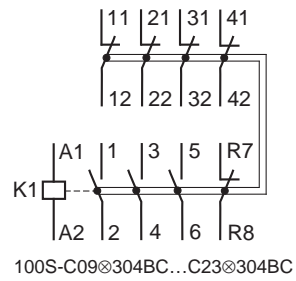
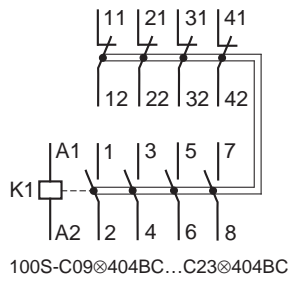


### Safety Contactors with 3 Main Contacts and Bifurcated Front-Mount Auxiliary Contacts





### Safety Contactors with 4 Main Contacts and Bifurcated Front-Mount Auxiliary Contacts



### Safety Reversing Contactors with 3 Main Contacts and Bifurcated Front-Mount Auxiliary Contacts

