Coil Voltage Codes

100-C/104-C Contactors

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. 100-C09⊗10 becomes Cat. No.100-C09D10.

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(1)	—	—

(1) Not available on 100/104-C90 or -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(1)	KF	—	KA	—	—	—	—	KN	—	KB	—	—	—	—

(1) Not available on 100/104-C90 or -C97 contactors.

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

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

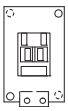
DC Voltages [V]		72	80	110	110…125	115	125	220	220…250	230	250
100-C09…C55	Electronic with Integrated Diode	—	—	—	ED	—	—	—	EA	—	—
100-C60…C97	with Integrated Diode	DG	DE	DD	—	DP	DS	DA	—	DF	DT

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. 100-C09UD10.

Cat. No.100-C09⊗10 Line Side



Cat. No.100-C09U⊗10 Load Side

100S-C/104S-C Safety Contactors

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-C09⊗05BC 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(1)	—	—

(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(1)	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(1)	—	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.100-C09⊗10 Line Side

Cat. No.100-C09U⊗10 Load Side

100Q-C Contactors

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. 100Q-C16⊗11 becomes Cat. No.100Q-C16D11.

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	—	—

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	KF	—	KA	—	—	—	—	KN	—	KB	—	—	—	—

DC Voltages [V]	9	12	24	36	48	60	64	72
Electronic with Integrated Diode	—	EQ	EJ	—	—	—	—	—

DC Voltages [V]	80	110	110…125	115	125	220	220…250	230	250
Electronic with Integrated Diode	—	—	ED	—	—	—	EA	—	—

Maximum Operational Rates

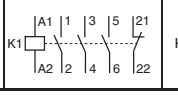
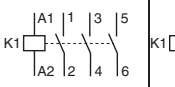
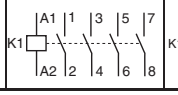
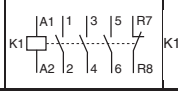
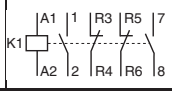
100Q-C16 200 operations/hour

100Q-C37 100 operations/hour

Assignment of Contacts

Device Combinations in Accordance with IEC 60947-1 / -4-1

Table valid for : AC / DC = 0.85…1.1 x U_s, $T_{amb.}$ = -25 °C…+60 °C, normal position (horizontal rail mounting)

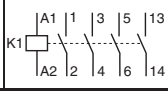
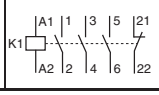
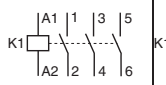
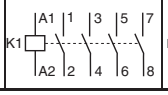
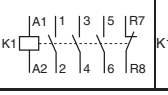
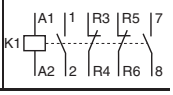
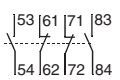
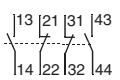
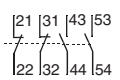
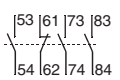
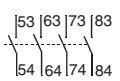
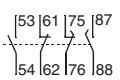
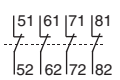
Auxiliary Contact Blocks		100-C Contactors (AC and DC Control)						
	Circuit Diagram	Control	100-C09_⊗10 100-C12_⊗10 100-C16_⊗10 100-C23_⊗10	100-C09_⊗01 100-C12_⊗01 100-C16_⊗01 100-C23_⊗01	100-C30_⊗00 100-C37_⊗00 100-C43_⊗00 100-C55_⊗00 100-C60_⊗00 100-C72_⊗00 100-C85_⊗00 100-C97_⊗00	100-C09_⊗400 100-C12_⊗400 100-C16_⊗400 100-C23_⊗400 100-C40_⊗400 100-C90_⊗400	100-C09_⊗300 100-C12_⊗300 100-C16_⊗300 100-C23_⊗300	100-C09_⊗200 100-C12_⊗200 100-C16_⊗200 100-C23_⊗200 100-C40_⊗200 100-C90_⊗200
								
Side Mounting (1)								
100-SB01		AC/DC	10 + 01 = 11	01 + 01 = 02 (3)	00 + 01 = 01	00 + 01 = 01	00 + 01 = 01	00 + 01 = 01
100-SB10		AC/DC	10 + 10 = 20 (3)	01 + 10 = 11	00 + 10 = 10	00 + 10 = 10	00 + 10 = 10	00 + 10 = 10
100-SB02		AC/DC	10 + 02 = 12 (3)	—	00 + 02 = 02	00 + 02 = 02	00 + 02 = 02	00 + 02 = 02
100-SB11		AC/DC	10 + 11 = 21 (3)	01 + 11 = 12 (3)	00 + 11 = 11	00 + 11 = 11	00 + 11 = 11	00 + 11 = 11
100-SB20		AC/DC	10 + 20 = 30 (3)	01 + 20 = 21 (3)	00 + 20 = 20	00 + 20 = 20	00 + 20 = 20	00 + 20 = 20
100-SBL11 (2)		AC/DC	10 + L11 = L21 (3)	01 + L11 = L12 (3)	00 + L11 = L11	00 + L11 = L11	00 + L11 = L11	00 + L11 = L11

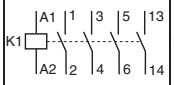
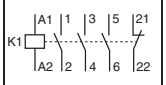
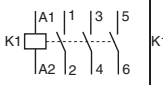
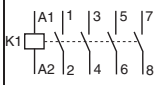
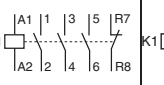
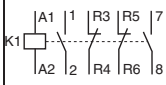
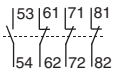
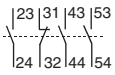
(1) Up to 8 auxiliary contacts possible: contactor + front mounted (AC max. 4 N.C. / DC max. 4 N.C.), side mounted (AC max. 2 N.O. / DC max. 2 N.O. and max. 2 N.C.).

(2) Early make and/or late break.

(3) Double numbering: because of double numbering only left-side mounting is recommended.

Device Combinations in Accordance with IEC 60947-1 / -4-1

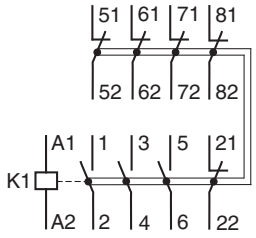
Auxiliary Contact Blocks		100-C Contactors (AC and DC Control)						
	Circuit Diagram	Control	100-C09_⊗10 100-C12_⊗10 100-C16_⊗10 100-C23_⊗10	100-C09_⊗01 100-C12_⊗01 100-C16_⊗01 100-C23_⊗01	100-C30_⊗00 100-C37_⊗00 100-C43_⊗00 100-C55_⊗00 100-C60_⊗00 100-C72_⊗00 100-C85_⊗00 100-C97_⊗00	100-C09_⊗400 100-C12_⊗400 100-C16_⊗400 100-C23_⊗400 100-C40_⊗400 100-C90_⊗400	100-C09_⊗300 100-C12_⊗300 100-C16_⊗300 100-C23_⊗300	100-C09_⊗200 100-C12_⊗200 100-C16_⊗200 100-C23_⊗200 100-C40_⊗200 100-C90_⊗200
								
Front Mounting (1)								
100-FA02, 100-FAB02		AC/DC	10 + 02 = 12	01 + 02 = 03	00 + 02 = 02	00 + 02 = 02	00 + 02 = 02	00 + 02 = 02
100-FA11, 100-FAB11		AC/DC	10 + 11 = 21	01 + 11 = 12	00 + 11 = 11	00 + 11 = 11	00 + 11 = 11	00 + 11 = 11
100-FB11, 100-FBB11		AC/DC	—	—	00 + 11 = 11	00 + 11 = 11	00 + 11 = 11	00 + 11 = 11
100-FC11, 100-FCB11		AC/DC	10 + 11 = 21	—	—	—	—	—
100-FA20, 100-FAB20		AC/DC	10 + 20 = 30	01 + 20 = 21	00 + 20 = 20	00 + 20 = 20	00 + 20 = 20	00 + 20 = 20
100-FBL11 (2)		AC/DC	—	—	00 + L11 = L11	00 + L11 = L11	00 + L11 = L11	00 + L11 = L11
100-FA22, 100-FAB22		AC/DC	10 + 22 = 32	01 + 22 = 23	00 + 22 = 22	00 + 22 = 22	00 + 22 = 22	00 + 22 = 22
100-FB22, 100-FBB22		AC/DC	—	—	00 + 22 = 22	00 + 22 = 22	00 + 22 = 22	00 + 22 = 22
100-FC22, 100-FCB22		AC/DC	10 + 22 = 32	—	—	—	—	—
100-FA31, 100-FAB31		AC/DC	10 + 31 = 41	01 + 31 = 32	00 + 31 = 31	00 + 31 = 31	00 + 31 = 31	00 + 31 = 31
100-FA40, 100-FAB40		AC/DC	10 + 40 = 50	01 + 40 = 41	00 + 40 = 40	00 + 40 = 40	00 + 40 = 40	00 + 40 = 40
100-FAL22 (2)		AC/DC	10 + L22 = L32	01 + L22 = L23	00 + L22 = L22	00 + L22 = L22	00 + L22 = L22	00 + L22 = L22
100-FA04, 100-FAB04		AC/DC	10 + 04 = 14	01 + 04 = 05	00 + 04 = 04	00 + 04 = 04	00 + 04 = 04	00 + 04 = 04

Auxiliary Contact Blocks		100-C Contactors (AC and DC Control)						
	Circuit Diagram	Control	100-C09_⊗10 100-C12_⊗10 100-C16_⊗10 100-C23_⊗10	100-C09_⊗01 100-C12_⊗01 100-C16_⊗01 100-C23_⊗01	100-C30_⊗00 100-C37_⊗00 100-C43_⊗00 100-C55_⊗00 100-C60_⊗00 100-C72_⊗00 100-C85_⊗00 100-C97_⊗00	100-C09_⊗400 100-C12_⊗400 100-C16_⊗400 100-C23_⊗400 100-C40_⊗400 100-C90_⊗400	100-C09_⊗300 100-C12_⊗300 100-C16_⊗300 100-C23_⊗300	100-C09_⊗200 100-C12_⊗200 100-C16_⊗200 100-C23_⊗200 100-C40_⊗200 100-C90_⊗200
								
100-FA13, 100-FAB13		AC/DC	10 + 13 = 23	01 + 13 = 14	00 + 13 = 13	00 + 13 = 13	00 + 13 = 13	00 + 13 = 13
100-FB02, 100-FBB02		AC/DC	10 + 02 = 12	01 + 02 = 03	00 + 02 = 02	00 + 02 = 02	00 + 02 = 02	00 + 02 = 02
100-FB20, 100-FBB20		AC/DC	10 + 20 = 30	01 + 20 = 21	00 + 20 = 20	00 + 20 = 20	00 + 20 = 20	00 + 20 = 20
100-FC31, 100-FCB31		AC/DC	10 + 31 = 41	01 + 31 = 32	00 + 31 = 31	00 + 31 = 31	00 + 31 = 31	00 + 31 = 31

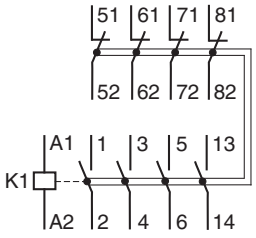
(1) Up to 8 auxiliary contacts possible: contactor + front mounted (AC max. 4 N.C. / DC max. 4 N.C.), side mounted (AC max. 2 N.O. / DC max. 2 N.C. and max. 2 N.C.).

(2) Early make and/or late break.

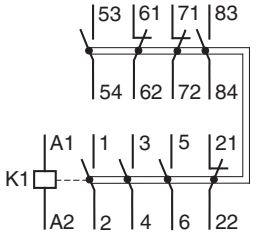
Safety Contactors with 3 Main Contacts and Standard Front-Mount Auxiliary Contacts



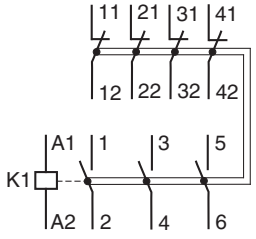
100S-C09⊗05C…C23⊗05C



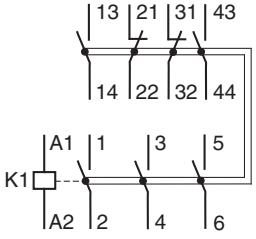
100S-C09⊗14C…C23⊗14C



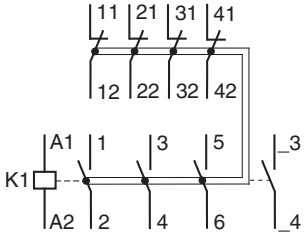
100S-C09⊗23C…C23⊗23C



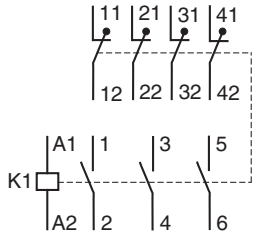
100S-C30⊗04C…C55⊗04C



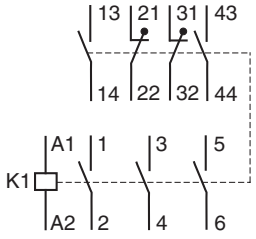
100S-C30⊗22C…C55⊗22C



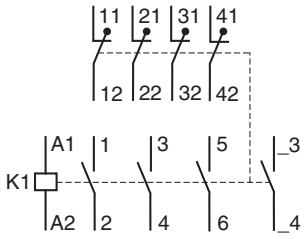
100S-C30⊗14C…C55⊗14C



100S-C60⊗04C…C97⊗04C

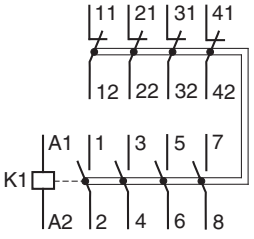


100S-C60⊗22C…C97⊗22C

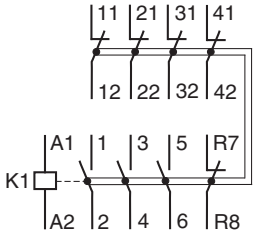


100S-C60⊗14C…C97⊗14C

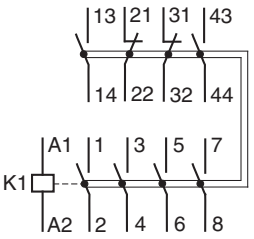
Safety Contactors with 4 Main Contacts and Standard Front-Mount Auxiliary Contacts



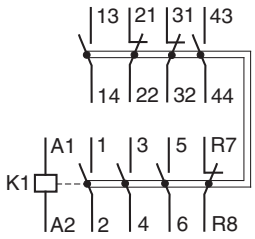
100S-C09⊗404C…C23⊗404C



100S-C09⊗304C…C23⊗304C

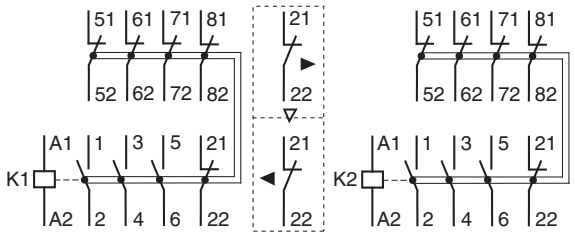


100S-C09⊗422C…C23⊗422C

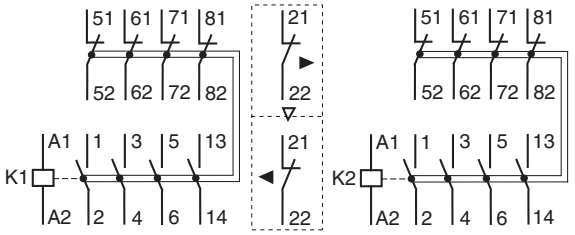


100S-C09⊗322C…C23⊗322C

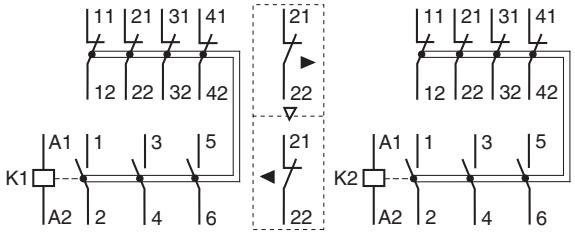
Safety Reversing Contactors with 3 Main Contacts and Standard Front-Mount Auxiliary Contacts



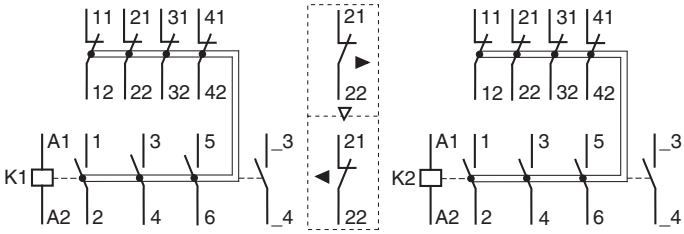
104S-C09⊗012C…C23⊗012C



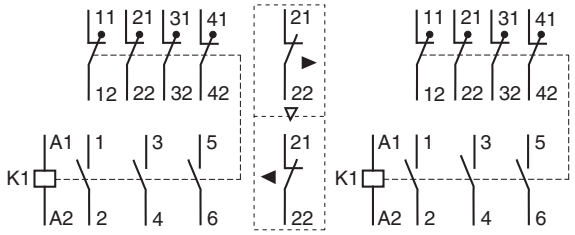
104S-C09⊗210C…C23⊗210C



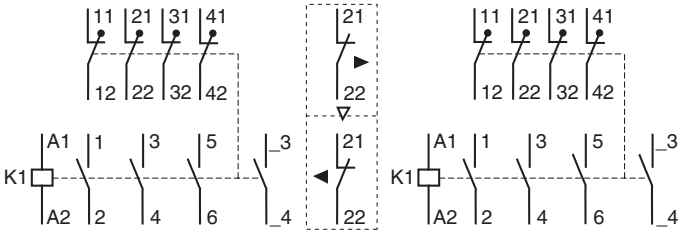
104S-C30⊗010C…C55⊗010C



104S-C30⊗210C…C55⊗210C

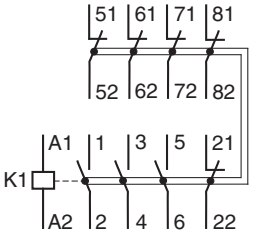


104S-C60⊗010C…C97⊗010C

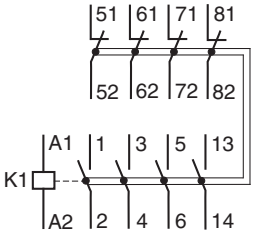


104S-C60⊗210C…C97⊗210C

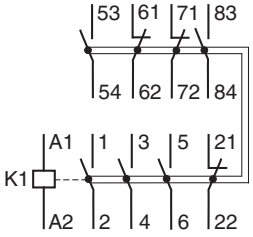
Safety Contactors with 3 Main Contacts and Bifurcated Front-Mount Auxiliary Contacts



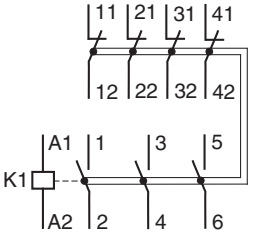
100S-C09⊗05BC…C23⊗05BC



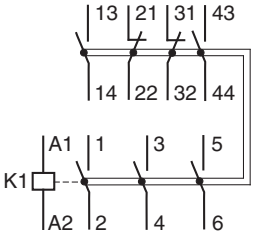
100S-C09⊗14BC…C23⊗14BC



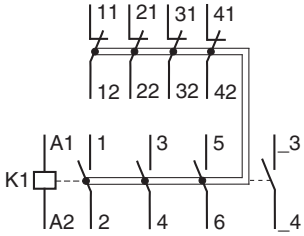
100S-C09⊗23BC…C23⊗23BC



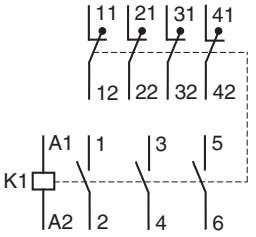
100S-C30⊗04BC…C55⊗04BC



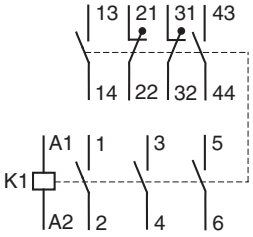
100S-C30⊗22BC…C55⊗22BC



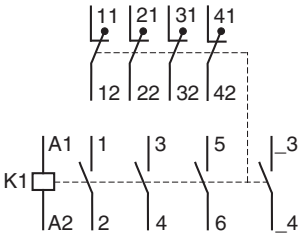
100S-C30⊗14BC…C55⊗14BC



100S-C60⊗04BC…C97⊗04BC

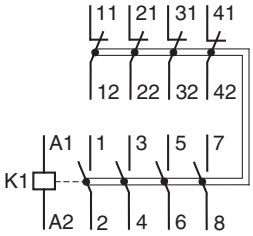


100S-C60⊗22BC…C97⊗22BC

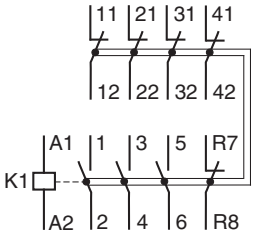


100S-C60⊗14BC…C97⊗14BC

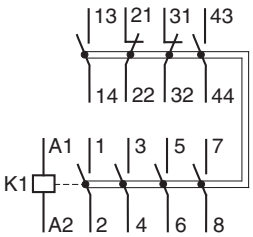
Safety Contactors with 4 Main Contacts and Bifurcated Front-Mount Auxiliary Contacts



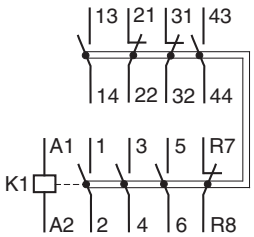
100S-C09⊗404BC…C23⊗404BC



100S-C09⊗304BC…C23⊗304BC

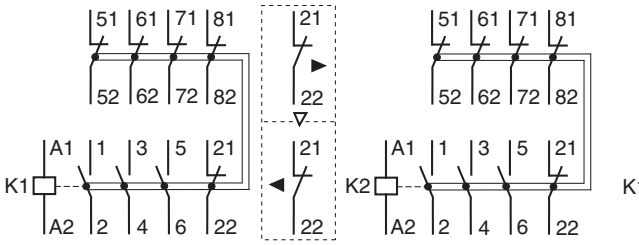


100S-C09⊗422BC…C23⊗422BC

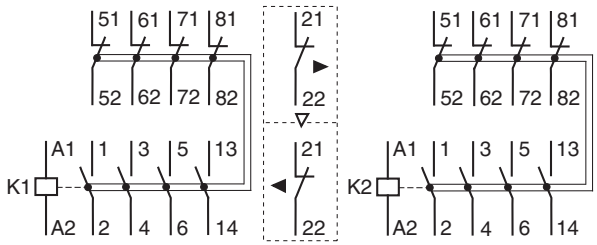


100S-C09⊗322BC…C23⊗322BC

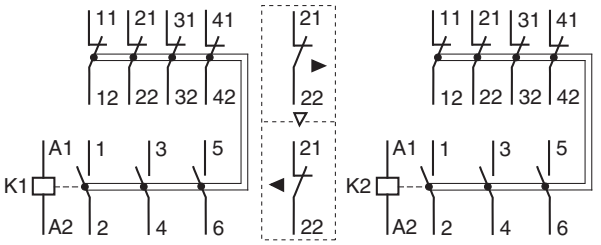
Safety Reversing Contactors with 3 Main Contacts and Bifurcated Front-Mount Auxiliary Contacts



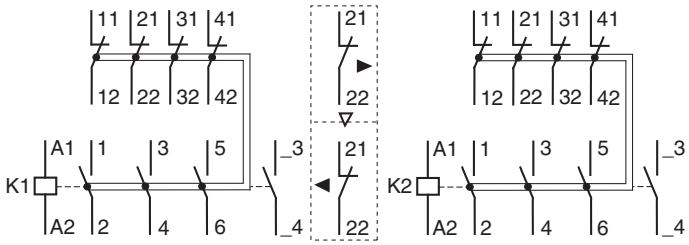
104S-C09⊗012BC…C23⊗012BC



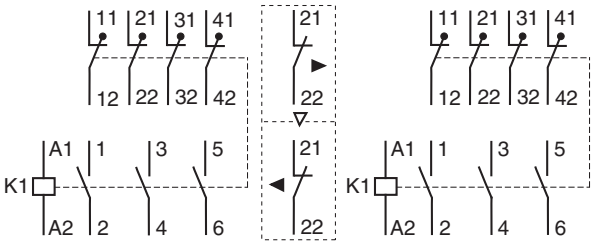
104S-C09⊗210BC…C23⊗210BC



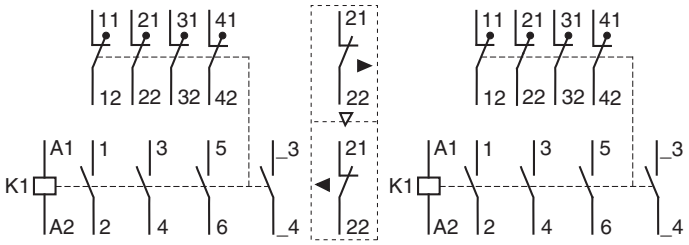
104S-C30⊗010BC…C55⊗010BC



104S-C30⊗210BC…C55⊗210BC



104S-C60⊗010BC…C97⊗010BC



104S-C60⊗210BC…C97⊗210BC

Specifications

			100/104-C, 100S/104S-C															
			09	12	16	23	30	37	40*200	40*400	43	55	60	72	85	90*200	90*400	97
Coil Type:	Conventional		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Electronic — EI		X	X	X	X	X	X	X	X	X	X	—	—	—	—	—	—
AC-1 Active Power Load (50 Hz); Ambient temperature 40 °C																		
Rated Operational Current, I_e	≤500V	[A]	32	32	32	32(40)[1]	65	65	75	75	85	85	100	100	100	130	130	130
	690V	[A]	32	32	32	32(40)[1]	65	65	75	75	85	85	100	100	100	130	130	130
	230V	[kW]	13	13	13	13	26	26	30	30	34	34	40	40	40	52	52	52
	240V	[kW]	13	13	13	13	27	27	31	31	35	35	42	42	42	54	54	54
	400V	[kW]	22	22	22	22	45	45	52	52	59	59	69	69	69	90	90	90
	415V	[kW]	23	23	23	23	47	47	54	54	61	61	72	72	72	93	93	93
	500V	[kW]	28	28	28	28	56	56	65	65	74	74	87	87	87	113	113	113
	690V	[kW]	38	38	38	38	78	78	90	90	102	102	120	120	120	155	155	155
AC-1 Active Power Load (50 Hz); Ambient temperature 60 °C																		
Rated Operational Current, I_e	≤500V	[A]	32	32	32	32	65	65	60	60	75	75	100	100	100	110	110	110
	690V	[A]	32	32	32	32	65	65	60	60	75	75	100	100	100	110	110	110
	230V	[kW]	13	13	13	13	26	26	24	24	25	25	40	40	40	44	44	44
	240V	[kW]	13	13	13	13	27	27	25	25	26	26	42	42	42	46	46	46
	400V	[kW]	22	22	22	22	45	45	42	42	44	44	69	69	69	76	76	76
	415V	[kW]	23	23	23	23	47	47	43	43	45	45	72	72	72	79	79	79
	500V	[kW]	28	28	28	28	56	56	52	52	55	55	87	87	87	95	95	95
	690V	[kW]	38	38	38	38	78	78	72	72	75	75	120	120	120	131	131	131
Switching of 3-phase Motors; (50 Hz) Ambient temperature 60 °C, AC-2, AC-3																		
Rated Operational Current, I_e	230V	[A]	12	15	20	26.5	35	38	38	38	44	56	62	72	85	85	85	96
	240V	[A]	12	15	20	26.5	35	38	38	38	44	56	62	72	85	85	85	95
	400V	[A]	9	12	16	23	30	37	37	37	43	55	60	72	85	85	85	97
	415V	[A]	9	12	16	23	30	37	37	37	43	55	60	72	85	85	85	97
	500V	[A]	7	10	14	20	25	30	29	30	38	44	55	67	80	80	80	78
	690V	[A]	5	7	9	12	18	21	9	21	25	25	34	42	49	22	49	57
	230V	[kW]	3	4	5.5	7.5	10	11	11	11	13	15	18.5	22	25	25	25	30
	240V	[kW]	3	4	5.5	7.5	10	11	11	11	13	15	18.5	22	25	25	25	30
	400V	[kW]	4	5.5	7.5	11	15	18.5	18.5	18.5	22	30	32	40	45	45	45	55
	415V	[kW]	4	5.5	7.5	11	15	20	20	20	22	30	32	40	45	45	45	55
	500V	[kW]	4	5.5	7.5	13	15	20	18.5	20	25	30	37	45	55	55	55	55
	690V	[kW]	4	5.5	7.5	10	15	18.5	7.5	18.5	22	22	32	40	45	18.5	45	55
Load Carrying Capacity per UL/CSA																		
General Purpose Current (enclosed)		[A]	25	25	30	30	55	60	60	60	75	75	90	90	100	125	130	120
Rated power (enclosed) 1-phase	115V	[A]	9.8	9.8	16	24	24	34	34	34	34	56	56	56	80	80	80	100
	230V	[A]	10	12	17	17	28	28	28	28	40	50	50	68	68	68	68	88
	115V	[Hp]	0.5	0.5	1	2	2	3	3	3	3	5	5	5	7.5	7.5	7.5	10
	230V	[Hp]	1.5	2	3	3	5	5	5	5	7.5	10	10	15	15	15	15	20
Rated power (enclosed) 3-phase	200V	[A]	7.8	11	17.5	17.5	25.3	32.2	32.2	32.2	32.2	48.3	48.3	62.1	78.2	78.2	78.2	92
	230V	[A]	6.8	9.6	15.2	22	28	28	28	28	42	54	54	68	80	80	80	80
	460V	[A]	7.6	11	14	21	27	34	34	34	40	52	52	65	77	65	77	96
	575V	[A]	9	11	17	17	27	32	17	32	32	41	52	62	62	22	52	77
	200V	[Hp]	2	3	5	5	7.5	10	10	10	10	15	15	20	25	25	25	30
	230V	[Hp]	2	3	5	7.5	10	10	10	10	15	20	20	25	30	30	30	30
	460V	[Hp]	5	7.5	10	15	20	25	25	25	30	40	40	50	60	50	60	75
	575V	[Hp]	7.5	10	15	15	25	30	15	30	30	40	50	60	60	20	50	75

(1) Values in () with increased cross-section and cable lug

			100/104-C, 100S/104S-C											
			09	12	16	23	30	37	43	55	60	72	85	97
Coil Type:	Conventional		X	X	X	X	X	X	X	X	X	X	X	X
	Electronic — EI		X	X	X	X	X	X	X	X	—	—	—	—
Switching of 3-phase Motors, (50 Hz); Ambient temperature 60 °C, AC-4														
	230V	[A]	12	15	20	26.5	35	38	44	56	62	72	85	96
	240V	[A]	12	15	20	26.5	35	38	44	56	62	72	85	95
	400V	[A]	9	12	16	23	30	37	43	55	60	72	85	97
	415V	[A]	9	12	16	23	30	37	43	55	60	72	85	97
	500V	[A]	7	10	14	20	25	30	38	44	55	67	80	78
	690V	[A]	5	7	9	12	18	21	25	25	34	42	49	57
	230V	[kW]	3	4	5.5	7.5	10	11	13	15	18.5	22	25	30
	240V	[kW]	3	4	5.5	7.5	10	11	13	15	18.5	22	25	30
	400V	[kW]	4	5.5	7.5	11	15	18.5	22	30	32	40	45	55
	415V	[kW]	4	5.5	7.5	11	15	20	22	30	32	40	45	55
	500V	[kW]	4	5.5	7.5	13	15	20	25	30	37	45	55	55
	690V	[kW]	4	5.5	7.5	10	15	18.5	22	22	32	40	45	55
AC-4 at approximately 200,000 operations														
	230V	[A]	4.3	6.6	9	9	12	14	16.5	22	25.5	31	38	44
	240V	[A]	4.3	6.6	9	9	12	14	16.5	22	25.5	31	38	44
	400/415V	[A]	4.3	6.6	9	9	12	14	16.5	22	25.5	31	38	44
	500V	[A]	4.3	6.6	9	9	12	14	16.5	22	25.5	31	38	44
	690V	[A]	4.3	6.6	9	9	12	14	16.5	22	25.5	31	38	44
	230V (1)	[kW]	0.75	1.5	2.2	2.2	3	3.7	4	5.5	6.3	7.5	11	11
	240V (1)	[kW]	0.75	1.5	2.2	2.2	3	4	4	5.5	7.5	7.5	11	11
	400V (1)	[kW]	1.8	3	4	4	5.5	6.3	7.5	11	13	15	20	22
	415V (1)	[kW]	1.8	3	4	4	5.5	6.3	7.5	11	13	17	20	22
	500V (1)	[kW]	2.2	3.7	5.5	5.5	7.5	7.5	10	11	15	20	25	30
	690V (1)	[kW]	3	5.5	7.5	7.5	10	11	15	18.5	22	25	32	37
Max. switching frequency		Ops/hour	250	250	220	200	200	200	200	200	120	120	120	120
Wye-Delta (60 Hz)														
	200V	[Hp]	5	5	7½	7½	10	15	20	25	30	40	50	50
	230V	[Hp]	5	7½	10	10	15	20	25	30	40	50	60	60
	460V	[Hp]	10	15	20	25	30	40	50	60	75	100	125	125
	575V	[Hp]	10	15	20	25	30	40	50	60	75	100	125	125
UL/CSA Elevator Duty														
	200V	[A]	7.8	11.0	11.0	17.5	25.3	25.3	32.2	TBD	32.2	48.3	62.1	TBD
	230V	[A]	6.8	9.6	15.2	15.2	22.0	28.0	28.0	TBD	42.0	54.0	68.0	TBD
	460V	[A]	7.6	11.0	04.0	21.0	27.0	27.0	34.0	TBD	40.0	52.0	65.0	TBD
	575V	[A]	6.1	9.0	11.0	17.0	22.0	27.0	32.0	TBD	41.0	52.0	62.0	TBD
	200V	[Hp]	2	3	3	5	7-1/2	7-1/2	10	TBD	10	15	20	TBD
	230V	[Hp]	2	3	5	5	7-1/2	10	10	TBD	15	20	25	TBD
	460V	[Hp]	5	7-1/2	10	15	20	20	25	TBD	30	40	50	TBD
	575V	[Hp]	5	7-1/2	10	15	20	25	30	TBD	40	50	60	TBD

(1) Power ratings at 50 Hz: Preferred values according to IEC 60072-1

			100/104-C, 100S/104S-C											
			09	12	16	23	30	37	43	55	60	72	85	97
Coil Type:	Conventional		X	X	X	X	X	X	X	X	X	X	X	X
	Electronic — EI		X	X	X	X	X	X	X	X	—	—	—	—
Star-Delta Starting (50 Hz)														
	≤ 230V	[A]	21	26	35	46	61	66	76	96	107	125	147	166
	≤ 240V	[A]	21	26	35	46	61	66	76	96	107	125	47	165
	400V	[A]	16	21	28	40	52	64	74	95.3	104	125	147	168
	415V	[A]	16	21	28	40	52	64	74	95.3	104	125	47	168
	500V	[A]	12	17	24	35	43	52	66	76.2	95	116	139	135
	690V	[A]	8.6	12	16	21	31	36	43	55.4	59	73	85	99
	230V (1)	[kW]	5.5	7.5	10	13	17	20	22	30	32	37	45	50
	240V (1)	[kW]	5.5	7.5	10	13	18.5	20	22	30	32	40	50	50
	400V (1)	[kW]	7.5	10	13	20	25	32	40	45	55	63	80	90
	415V (1)	[kW]	7.5	11	15	22	25	37	40	45	55	63	80	90
	500V (1)	[kW]	7.5	11	15	22	25	32	45	45	63	80	90	90
	690V (1)	[kW]	7.5	10	13	18.5	25	32	40	45	55	63	80	90
Switching of Power Transformers, AC-6a (50 Hz)														
Inrush Current		=n												
Rated transformer current														
	≤ 230V	[A]	10.9	10.9	10.9	10.9	20	20	23	23	40.8	40.8	40.8	48.5
	≤ 240V	[A]	10.9	10.9	10.9	10.9	20	20	23	23	40.8	40.8	40.8	48.5
	≤ 400V	[A]	10.9	10.9	10.9	10.9	20	20	23	23	40.8	40.8	40.8	48.5
	≤ 415V	[A]	10.9	10.9	10.9	10.9	20	20	23	23	40.8	40.8	40.8	48.5
	≤ 500V	[A]	10.9	10.9	10.9	10.9	20	20	23	23	40.8	40.8	40.8	48.5
	≤ 690V	[A]	10.9	10.9	10.9	10.9	20	20	23	23	40.8	40.8	40.8	48.5
n= 30	230V	[kVA]	4.3	4.3	4.3	4.3	8	8	9.2	9.2	16	16	16	19.3
	240V	[kVA]	4.5	4.5	4.5	4.5	8.3	8.3	10	10	17	17	17	20.2
	400V	[kVA]	7.5	7.5	7.5	7.5	14	14	16	16	28	28	28	33.6
	415V	[kVA]	7.8	7.8	7.8	7.8	14	14	17	17	29	29	29	34.9
	500V	[kVA]	9.4	9.4	9.4	9.4	17	17	20	20	35	35	35	42
	690V	[kVA]	13	13	13	13	24	24	27	27	49	49	49	58
n=20	≤ 690V	[A]	16.3	16.3	16.3	16.3	30	30	34.5	34.5	61.3	61.3	61.3	72.8
n=15	≤ 690V	[A]	22	22	22	22	40	40	46	46	82	82	82	97
60 Hz Peak Inrush/peak rated transformer current														
	n=30	[A]	10.9	10.9	10.9	10.9	20	20	23	23	40.8	40.8	40.8	48.5
	200V	[kVA]	3.8	3.8	3.8	3.8	6.9	6.9	8.0	8	14.1	14.4	14.4	16.8
	208V	[kVA]	3.9	3.9	3.9	3.9	7.2	7.2	8.3	8.3	14.7	14.7	14.7	17.5
	240V	[kVA]	4.5	4.5	4.5	4.5	8.3	8.3	9.6	9.6	17.0	17.0	17.0	20.2
	480V	[kVA]	9.1	9.1	9.1	9.1	16.6	16.6	19.1	19.1	33.9	33.9	33.9	40.3
	600V	[kVA]	11.3	11.3	11.3	11.3	20.8	20.8	23.9	23.9	42.4	42.4	42.4	50.4
	660V	[kVA]	12.5	12.5	12.5	12.5	22.9	22.9	26.3	26.3	46.6	46.6	46.6	55.4
60 Hz Peak Inrush/peak rated transformer current														
	n=20	[A]	16.3	16.3	16.3	16.3	30	30	34.5	34.5	61.3	61.3	61.3	72.8
	200V	[kVA]	5.6	5.6	5.6	5.6	10.4	10.4	12.0	12	21.2	21.2	21.2	25.2
	208V	[kVA]	5.9	5.9	5.9	5.9	10.8	10.8	12.4	12.4	22.1	22.1	22.1	26.2
	240V	[kVA]	6.8	6.8	6.8	6.8	12.5	12.5	14.3	14.3	25.5	25.5	25.5	30.3
	480V	[kVA]	13.6	13.6	13.6	13.6	24.9	24.9	28.7	28.7	51.0	51.0	51.0	60.5
	600V	[kVA]	16.9	16.9	16.9	16.9	31.2	31.2	35.9	35.9	63.7	63.7	63.7	75.7
	660V	[kVA]	18.6	18.6	18.6	18.6	34.3	34.3	39.4	39.4	70.1	70.1	70.1	83.2

(1) Power ratings at 50 Hz: Preferred values according to IEC 60072-1

			100/104-C, 100S/104S-C											
			09	12	16	23	30	37	43	55	60	72	85	97
Coil Type:	Conventional		X	X	X	X	X	X	X	X	X	X	X	X
	Electronic — EI		X	X	X	X	X	X	X	X	—	—	—	—
60 Hz Peak Inrush/peak rated transformer current														
	n=15	[A]	22	22	22	22	40	40	46	46	82	82	82	97
	200V	[kVA]	7.5	7.5	7.5	7.5	13.9	13.9	15.9	15.9	28.4	28.4	28.4	33.6
	208V	[kVA]	7.8	7.8	7.8	7.8	14.4	14.4	16.6	16.6	29.5	29.5	29.5	34.9
	240V	[kVA]	9.0	9.0	9.0	9.0	16.6	16.6	19.1	19.1	34.1	34.1	34.1	40.3
	480V	[kVA]	18.1	18.1	18.1	18.1	33.3	33.3	38.2	38.2	68.2	68.2	68.2	80.6
	600V	[kVA]	22.6	22.6	22.6	22.6	41.6	41.6	47.8	47.8	85.2	85.2	85.2	100.8
	660V	[kVA]	24.9	24.9	24.9	24.9	45.7	45.7	52.6	52.6	93.7	93.7	93.7	110.9

			100/104-C, 100S/104S-C															
			09	12	16	23	30	37	40*200	40*400	43	55	60	72	85	90*200	90*400	97
Coil Type:	Conventional		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Electronic — EI		X	X	X	X	X	X	X	X	X	X	—	—	—	—	—	—
Switching of 3-phase Capacitors, AC-6b (50 Hz)[1]																		
Single capacitor 40°C	230V	[kVar]	8	8	8.5	9	14	14	—	—	24	24	28	28	28	—	—	28
	240V	[kVar]	8	8	8.5	9	14	14	—	—	25	25	29	29	29	—	—	29
	400V	[kVar]	8	8	10	12.5	20	24	—	—	35	35	48	48	48	—	—	48
	415V	[kVar]	8	8	10	12.5	20	25	—	—	35	35	50	50	50	—	—	50
	500V	[kVar]	8	8	10	12.5	20	25	—	—	35	35	50	55	60	—	—	60
	690V	[kVar]	8	8	10	12.5	20	25	—	—	35	35	50	55	60	—	—	60
Single capacitor 60 °C	230V	[kVar]	8	8	8.5	9	12.5	12.5	—	—	18	18	28	28	28	—	—	28
	240V	[kVar]	8	8	8.5	9	12.5	12.5	—	—	18	18	29	29	29	—	—	29
	400V	[kVar]	8	8	10	12.5	20	21.5	—	—	30	30	42	48	48	—	—	48
	415V	[kVar]	8	8	10	12.5	20	22	—	—	30	30	42	50	50	—	—	50
	500V	[kVar]	8	8	10	12.5	20	25	—	—	30	30	42	50	55	—	—	55
	690V	[kVar]	8	8	10	12.5	20	25	—	—	30	30	42	50	55	—	—	55
Group capacitors 40°C	230V	[kVar]	5	5	8	9	12.5	14	—	—	20	20	28	28	28	—	—	28
	240V	[kVar]	5	5	8	9	12.5	14	—	—	20	20	29	29	29	—	—	29
	400V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	48	48	—	—	48
	415V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	50	50	—	—	50
	500V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	50	50	—	—	50
	690V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	50	50	—	—	50
Group capacitors 60 °C	230V	[kVar]	5	5	8	9	12.5	12.5	—	—	18	18	28	28	28	—	—	28
	240V	[kVar]	5	5	8	9	12.5	12.5	—	—	18	18	29	29	29	—	—	29
	400V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	48	48	—	—	48
	415V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	50	50	—	—	50
	500V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	50	50	—	—	50
	690V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	50	50	—	—	50
60 Hz Single Capacitor — 40 °C	200V	[kVar]	5	5	8	9	12.5	14	—	—	20	20	28	28	28	—	—	28
	230V	[kVar]	5	5	8	9	12.5	14	—	—	20	20	29	29	29	—	—	29
	460V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	50	50	—	—	50
	600V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	50	50	—	—	50
60 Hz Group Capacitors — 40 °C	200V	[kVar]	5	5	8	9	12.5	12.5	—	—	18	18	28	28	28	—	—	28
	230V	[kVar]	5	5	8	9	12.5	12.5	—	—	18	18	29	29	29	—	—	29
	460V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	50	50	—	—	50
	600V	[kVar]	5	5	8	10	15	20	—	—	25	25	40	50	50	—	—	50

(1) Inductance of leads between capacitors in parallel: min. 6 µH (100-C09. . .C30 contactors: min 30 µH)

			100/104-C, 100S/104S-C															
			09	12	16	23	30	37	40*200	40*400	43	55	60	72	85	90*200	90*400	97
Coil Type:	Conventional		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Electronic — EI		X	X	X	X	X	X	X	X	X	X	—	—	—	—	—	—
Switching of Lamps																		
Gas discharge lamps AC-5a, 40 °C																		
open		[A]	22.5	25	28	29	40.5	45	65	65	77	77	81	85	90	115	115	115
enclosed		[A]	22.5	25	28	29	37	41	54	54	57	57	77	81	90	95	95	100
Individually compensated:																		
Max. capacitance at expected																		
Short-circuit current of	10 kA	[µF]	1000	1000	1000	1000	2700	2700	—	—	3200	3200	4000	4000	4700	—	—	4700
	20 kA	[µF]	500	500	500	500	1350	1350	—	—	1600	1600	2000	2000	2350	—	—	2350
	50 kA	[µF]	200	200	200	200	540	540	—	—	640	640	800	800	940	—	—	940
Filament AC-5b	230/240V	[A]	12	16	18	22	30	37	18	25	43	51	60	70	76	60	75	90
Switching of Low Inductive Loads in Home Appliances and Similar Applications per IEC 61095 (50 Hz)																		
AC-7a	230V	[A]	32	32	32	32	45	45	—	—	63	63	—	—	—	—	—	—
	400V	[A]	32	32	32	32	45	45	—	—	63	63	—	—	—	—	—	—
	440V	[A]	32	32	32	32	45	45	—	—	63	63	—	—	—	—	—	—
Switching of Motor Load for Home Appliances (50 Hz)																		
AC-7b	230V	[A]	10.5	14	19	23	30	—	—	—	—	—	—	—	—	—	—	—
	400V	[A]	9	12	16	20	30	—	—	—	—	—	—	—	—	—	—	—
	440V	[A]	7.5	10	13.5	18	27	—	—	—	—	—	—	—	—	—	—	—
Switching of Hermetically Sealed Cooling Compressor Motors - manual reset of overload release (50 Hz)																		
AC-8a	400V	[A]	12	16	22	32	38	45	—	—	63	63	72	85	100	—	—	115
	500V	[A]	12	16	22	32	38	45	—	—	63	63	72	85	100	—	—	115
	690V	[A]	8	10	14	20	28	35	—	—	42	42	56	67	80	—	—	90
- automatic reset of overload release																		
AC-8b	400V	[A]	5.5	7	9.3	12	13	14	—	—	16	16	24	30	35	—	—	35
	500V	[A]	5.5	7	9.3	12	13	14	—	—	16	16	24	30	35	—	—	35
	690V	[A]	5.5	7	9.3	12	13	14	—	—	16	16	24	30	35	—	—	35
Switching of DC Loads																		
Non-inductive or slightly inductive loads or resistance furnaces DC-1, 60 °C																		
1 pole	24V	[A]	25	25	32	32	45	45	45	45	50	50	70	80	80	80	80	80
	48/60V	[A]	20	20	20	20	25	25	25	25	30	30	40	40	40	40	40	40
	110V	[A]	6	6	6	6	8	8	10	10	9	9	11	11	11	11	11	11
	220V	[A]	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2	2	2	1.8	1.8	2
	440V	[A]	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2 poles in series	24V	[A]	25	25	32	32	45	45	45	45	50	50	70	80	80	80	80	80
	48/60V	[A]	25	25	32	32	45	45	45	45	50	50	70	80	80	80	80	80
	110V	[A]	25	25	32	32	45	45	45	45	50	50	70	80	80	80	80	80
	220V	[A]	8	8	8	10	10	10	10	10	10	10	15	15	15	15	15	15
	440V	[A]	1	1	1	1	1	1	1	1	1	1	1.5	1.5	1.5	1.5	1.5	1.5
3 poles in series	24V	[A]	25	25	32	32	45	45	—	—	63	63	90	90	100	—	100	100
	48/60V	[A]	25	25	32	32	45	45	—	—	50	50	70	90	100	—	100	100
	110V	[A]	20	20	25	25	30	30	—	—	35	35	70	90	100	—	100	100
	220V	[A]	6	6	6	10	15	15	—	—	20	20	25	80	80	—	80	80
	440V	[A]	0.6	0.6	0.6	0.6	0.6	0.6	—	—	0.6	0.6	0.6	5	5	—	5	5

			100/104-C, 100S/104S-C															
			09	12	16	23	30	37	40*200	40*400	43	55	60	72	85	90*200	90*400	97
Coil Type:	Conventional		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Electronic — EI		X	X	X	X	X	X	X	X	X	X	—	—	—	—	—	—
Switching of DC Loads, Continued																		
Series-wound Motors, Starting, reverse current braking, reversing, stepping DC-3, 60 °C																		
3 poles in series	24V	[A]	25	25	32	32	45	45	—	—	63	63	90	90	100	—	—	100
	48/60V	[A]	25	25	32	32	45	45	—	—	50	50	70	70	80	—	—	80
	110V	[A]	20	20	25	25	30	30	—	—	35	35	70	70	80	—	—	80
	220V	[A]	6	6	6	10	15	15	—	—	20	20	25	25	30	—	—	30
	440V	[A]	0.6	0.6	0.6	0.6	0.6	0.6	—	—	0.6	0.6	0.6	0.6	0.6	—	—	0.6
Series-wound Motors, Starting, reverse current braking, reversing, stepping DC-5, 60 °C																		
3 poles in series	24V	[A]	25	25	32	32	45	45	—	—	63	63	90	90	100	—	—	100
	48/60V	[A]	25	25	32	32	45	45	—	—	50	50	70	70	80	—	—	80
	110V	[A]	20	20	25	25	30	30	—	—	35	35	70	70	80	—	—	80
	220V	[A]	6	6	6	10	15	15	—	—	20	20	25	25	30	—	—	30
	440V	[A]	0.6	0.6	0.6	0.6	0.6	0.6	—	—	0.6	0.6	0.6	0.6	0.6	—	—	0.6
Short Time Withstand I_{CW}, 60 °C	10 s	[A]	170	170	170	215	300	304	304	304	375	375	700	700	700	700	700	840
Resistance and Power Dissipation																		
Main current circuit resistance		[mΩ]	2.7	2.7	2.7	2	2	2	2	1.5	1.5	1	0.9	0.9	0.9	0.8	0.7	0.6
Power dissipation by all circuits at I_e AC-3/400V		[W]	0.66	1.2	2.1	3.2	5.4	8.2	11.3	8.4	8.3	9.1	9.7	14	19.5	13.5	11.8	17
Total power dissipation At I_e AC-3/400V	AC control	[W]	3.4	3.9	4.8	6.3	8.5	11.3	8.8	9.5	11.6	12.4	16.2	13.8	17.5	36	56.3	26
	DC control (conv.)	[W]	—	—	—	—	—	—	—	—	—	—	13.7	13.8	17.5	32.5	52.8	23
	DC control (elect.)	[W]	2.4	2.9	3.8	4.9	7.1	9.9	8	8.7	10.8	11.6	—	—	—	—	—	—
Lifespan																		
Mechanical AC control		[Million ops.]	13	13	13	13	13	13	10	10	12	12	6	6	6	6	6	6
Mechanical DC control		[Million ops.]	13	13	13	13	13	13	10	10	13	13	6	6	6	6	6	6
Electrical AC-3 (400 V)		[Million ops.]	1.3	1.3	1.3	1.3	1.3	1.3	—	—	1	0.8	1	1	1	—	—	1
Weight																		
AC	Non-Rev.	[kg (lbs)]	0.39 (0.86)	0.39 (0.86)	0.39 (0.86)	0.39 (0.86)	0.48 (1.06)	0.49 (1.08)	0.63 (1.39)	0.63 (1.39)	0.51 (1.12)	0.51 (1.12)	1.45 (3.20)	1.45 (3.20)	1.45 (3.20)	—	—	1.45 (3.20)
	Rev.	[kg (lbs)]	0.85 (1.89)	0.85 (1.89)	0.85 (1.89)	0.85 (1.89)	1.08 (2.39)	1.08 (2.39)	—	—	1.15 (2.54)	1.15 (2.54)	3.14 (6.92)	3.14 (6.92)	3.14 (6.92)	—	—	3.14 (6.92)
DC	Non-Rev.	[kg (lbs)]	0.6 (1.32)	—	—	—	—	—	—	—	—	—	1.47 (3.24)	1.47 (3.24)	1.47 (3.24)	—	—	1.47 (3.24)
	Rev.	[kg (lbs)]	1.27 (2.81)	—	—	—	—	—	—	—	—	—	3.22 (7.1)	3.22 (7.1)	3.22 (7.1)	—	—	3.22 (7.1)
DC (Electronic-EQ, EJ)	Non-Rev.	[kg (lbs)]	—	0.40 (0.88)	0.40 (0.88)	0.40(0.88)	0.40 (0.88)	0.49 (1.08)	0.49 (1.08)	0.57 (1.25)	0.57 (1.25)	0.57 (1.25)	0.57 (1.25)	—	—	—	—	—
	Rev.	[kg (lbs)]	—	0.87 (1.91)	0.87 (1.91)	0.87(1.91)	0.87 (1.91)	1.08 (2.39)	1.08 (2.39)	—	—	1.27 (2.79)	1.27 (2.79)	—	—	—	—	—
DC (Electronic- EW, EY, ED, EA)	Non-Rev.	[kg (lbs)]	—	0.43 (0.95)	0.43 (0.95)	0.43(0.95)	0.43 (0.95)	0.52 (1.14)	0.52 (1.14)	0.60 (1.32)	0.60 (1.32)	0.60 (1.32)	0.60 (1.32)	—	—	—	—	—
	Rev.	[kg (lbs)]	—	0.93 (2.05)	0.93 (2.05)	0.93(2.05)	0.93 (2.05)	1.14 (2.51)	1.14 (2.51)	—	—	1.33 (2.93)	1.33 (2.93)	—	—	—	—	—

			100/104-C, 100S/104S-C													
			09	12	16	23	30	37	40	43	55	60	72	85	90	97
Coil Type:	**Conventional**		X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Electronic — EI		X	X	X	X	X	X	X	X	X	—	—	—	—	—
Conductor Cross Sections - Main Contacts Terminal type			(1)						(2)					(3)		
	1 conductor	[mm^2]	1…4				2.5…10		2.5…16			2.5…35				
	2 conductors	[mm^2]	1…4				2.5…10		2.5…10			2.5…25				2.5…35
	1 conductor	[mm^2]	1.5…6				2.5…16		2.5…25			2.5…50				
	2 conductors	[mm^2]	1.5…6				2.5…16		2.5…16			2.5…35				
Recommended torque		[N•m]	1.5…2.0				2.5…3.5		2.5…3.5			4.5…6				
Cross section per UL/CSA		[AWG]	16…10				14…4		14…6	14…4		14…1				
Recommended torque		[lb-in]	13.3…17.7				22…31		22…31			40…53				

(1) Pozidriv No. 2 / Blade No. 3 screw
(2) Pozidriv No. 2 / Blade No. 4 screw
(3) Hexagonal socket screw

Short-Circuit Coordination Data

See www.ab.com/certifications/ul508a for complete short-circuit current ratings.

		100/104-C, 100S/104S-C															
		09	12	16	23	30	37	40*200	40*400	43	55	60	72	85	90*200	90*400	97
Coil Type:	**Conventional**	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Electronic - EI	X	X	X	X	X	X	X	X	X	X	—	—	—	—	—	—
Short Circuit Coordination (Max. Fuse or Circuit Breaker Rating) Per IEC 60947-4-1 (contactor and fuses only)																	
DIN Fuses- gG, gL		50 kA Available Fault Current															
Type"1"(690V)	[A]	50	50	50	80	125	125	160	160	160	160	250	250	250	250	250	250
Type"2"(400V)	[A]	25	35	35	40	80	80	63	80	100	100	160	160	160	160	100	200
Type"2"(690V)	[A]	25	35	35	40	80	80	63	80	100	100	160	160	160	160	100	200
BS88Fuses		65kA Available Fault Current															
Type"1"(415V)	[A]	25	32	40	50	63	80	—	—	80	TBD	100	160	160	—	—	TBD
Type"2"(415V)	[A]	20	25	32	50	63	80	—	—	80	TBD	100	125	160	—	—	TBD
Per UL 508 and CSA 22.2 No. 14 (contactor and fuses or circuit breaker only)																	
UL Class K5 and RK5 Fuses		5 kA Available Fault Current															
UL Listed Combination (600V)	[A]	35	40	70	90	110	125	125	125	150	200	200	—	—	—	—	—
UL Class K5 and RK5 Fuses		10 kA Available Fault Current															
UL Listed Combination (600V)	[A]	—	—	—	—	—	—	—	—	—	—	—	250	300	300	300	350
UL Class CC and CSA HRCI-MISC Fuses		100 kA Available Fault Current															
UL verified combination to IEC60947-4-1 "Type2"	[A]	20(1)	20	30	40	—	—	—	—	—	—	—	—	—	—	—	—
UL Class J and CSA HRCI-J Fuses		100 kA Available Fault Current															
UL verified combination to IEC60947-4-1 "Type2"	[A]	20(1)	20	30	40	50	50	—	—	70	TBD	80	100	150	—	—	175
UL Inverse-Time Circuit Breaker		5 kA Available Fault Current															
UL Listed Combination (480V)	[A]	30	30	50	50	125	125	—	—	125	150	250	—	—	—	—	—
UL Listed Combination (600V)	[A]	—	—	—	—	125	125	—	—	125	150	250	—	—	—	—	—
UL Inverse-Time Circuit Breaker		10 kA Available Fault Current															
UL Listed Combination (600V)	[A]	—	—	—	—	—	—	—	—	—	—	—	250	250	—	—	250
UL Inverse-Time Circuit Breaker		18 kA Available Fault Current															
UL Listed Combination (600V)	[A]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
UL Inverse-Time Circuit Breaker		25 kA Available Fault Current															
UL Listed Combination (600Y/347V)	[A]	30(2)	30(2)	30(2)	30(2)	50(3)	50(3)	—	—	50(3)	—	110	110	110	—	—	—
UL Inverse-Time Circuit Breaker		25 kA Available Fault Current															
UL Listed Combination (600V)	[A]	—	—	—	—	100(4)	100(4)	—	—	100(4)	125	200(4)	225(4)	225(4)	—	—	225(4)
UL Inverse-Time Circuit Breaker		50 kA Available Fault Current															
UL Listed Combination (480V)	[A]	—	—	—	—	50(3)	50(3)	—	—	50(3)	—	—	—	—	—	—	—
UL Inverse-Time Circuit Breaker		65 kA Available Fault Current															
UL Listed Combination (480Y/277V)	[A]	30‡	30‡	30‡	30‡	—	—	—	—	—	—	—	—	—	—	—	—
UL Inverse-Time Circuit Breaker		65 kA Available Fault Current															
UL Listed Combination (480V)	[A]	—	—	—	—	100(4)	100(4)	—	—	100(4)	125	200(4)	225(4)	225(4)	—	—	225(4)

(1) 15 A max. fuse for Type 2 coordination.

(2) Ratings apply when used with Bulletin 140U-D circuit breakers only.

(3) Minimum enclosure size 12-3/8 x 7-5/8 s 7-1/4 inches

(4) Minimum enclosure size 20 x 12 x 8 inches with two latches.

Coil Data

			100/104-C, 100S/104S-C															
			09	12	16	23	30	37	40*200	40*400	43	55	60	72	85	90*200	90*400	97
Coil Type:	**Conventional**		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Electronic - EI		X	X	X	X	X	X	X	X	X	X	—	—	—	—	—	—
Operating Limits																		
50 Hz, 60 Hz, 50/60 Hz	pick-up	[x U_s]	0.85…1.1						0.85….1.1				0.85….1.1					
	dropout	[x U_s]	0.3…0.6						0.3…0.6				0.3…0.6					
DC (conventional)	pick-up	[x U_s]	—						—				0.8…1.1					
	dropout	[x U_s]	—						—				0.1…0.6					
DC (electronic—EQ, EJ, EW, QJ)	pick-up	[x U_s]	0.7…1.25										—					
	dropout	[x U_s]	0.3…0.4										—					
DC (electronic—EY)	pick-up	[x U_s]	0.8…1.25										—					
	dropout	[x U_s]	0.3…0.4										—					
DC (electronic—ED)	pick-up	[x U_s]	0.7…1.12§										—					
	dropout	[x U_s]	0.3…0.4										—					
DC (electronic—EA)	pick-up	[x U_s]	0.8…1.1										—					
	dropout	[x U_s]	0.3…0.4										—					
Coil Consumption																		
50 Hz, 60 Hz, 50/60 Hz	pick-up	[VA]	75			105			135				235			400/240		
	hold-in	[VA/W]	9.5/2.7			12.3/3.1			13.3/3.3				19.6/5			24/9		
DC (conventional)	pick-up	[W]	—			—			—				200			325		
	hold-in	[W]	—			—			—				4			5		
DC (electronic—EQ, EJ, QJ)	pick-up (avg/peak)	[W]	10/17						16/25				—			—		
	hold-in	[W]	1.7						2.5				—			—		
DC (electronic—EY, EW)	pick-up (avg/peak)	[W]	10/17						16/25				—			—		
	hold-in	[W]	1.9						2.7				—			—		
DC (electronic—ED)	pick-up (avg/peak)	[W]	12/19						16/26				—			—		
	hold-in	[W]	2.1						2.8				—			—		
DC (electronic—EA)	pick-up (avg/peak)	[W]	14/22						18/29				—			—		
	hold-in	[W]	3.0						4.0				—			—		
Operating Times																		
AC	closing delay	[ms]	15…30			15…30		15…30		15…30			20…40			20…40		
	opening delay	[ms]	10…60			10…60		10…60		10…60			10…60			20…40		
With RC module	closing delay	[ms]	10…60			10…60		10…60		10…60		10…60	10…60			20…40		
DC (conventional)	opening delay	[ms]	—			—		—		—		50…80	20…40			15…25	20…25	20…25
	closing delay	[ms]	—			—		—		—		7…15	—			—		
With integrated diode	opening delay	[ms]	—			—		—		—		17…23	≤ 220V 20…35			≤ 220V 20…35		
With external diode	opening delay	[ms]	—			—		—		—	—	80…125	—			—		
DC (electronic—EQ, EJ)	closing delay	[ms]	20…50									—	—			—		
	opening delay	[ms]	20…50									—	—			—		
	Max. Ripple		±15%									—	—			—		
	min. OFF time	[ms]	50									—	—			—		
DC (electronic—EW, EY, ED, EA)	closing delay	[ms]	25…50									—	—			—		
	opening delay	[ms]	23…33									—	—			—		
	Max. Ripple		±15%									—	—			—		
	min. OFF time	[ms]	50									—	—			—		
DC (electronic—QJ)	closing delay	[ms]	20…50									—	—			—		
	opening delay	[ms]	16…21									—	—			—		
	Max. Ripple		±15%									—	—			—		
	min. OFF time	[ms]	50									—	—			—		

Auxiliary Contacts, Auxiliary Contact Blocks, and Pneumatic Timers

			Internal	Front mounted	Front mounted (Bifurcated)	Side-mounted
Switching of AC Loads						
AC-12 I_{th}	at 40 °C	[A]	20	10	10	10
	at 60 °C	[A]	20	6	6	6
AC-15 at rated voltage of	24V	[A]	10	6	3	6
	42/48V	[A]	10	6	3	6
	120V	[A]	10	6	3	6
	230V	[A]	10	5.5	3	5.5
	240V	[A]	10	5	3	5
	400V	[A]	6	3	2	3
	415V	[A]	6	3	2	3
	500V	[A]	2.5	1.6	1.2	1.6
	690V	[A]	1	1	0.7	1
Switching of DC Loads						
DC-12 L/R < 1 ms resistive loads at	24V DC	[A]	12	12	6	6
	48V DC	[A]	9	9	3.2	3.2
	110V DC	[A]	3.5	3.5	1	1
	220V DC	[A]	0.55	0.55	0.5	0.5
	440V DC	[A]	0.2	0.2	0.2	0.2
DC-14L/R <15 ms inductive loads with economy resistor in series at	24V DC	[A]	9	9	2	2
	48V DC	[A]	5	5	1.6	1.6
	110V DC	[A]	2	2	0.3	0.3
	220V DC	[A]	0.4	0.4	0.12	0.12
	440V DC	[A]	0.16	0.16	0.05	0.05
DC-13 switching electromagnets at	24V DC	[A]	5	5	2.5	5
	48V DC	[A]	3	3	1.5	2.5
	110V DC	[A]	1.2	1.2	0.6	0.68
	220V DC	[A]	0.6	0.6	0.3	0.32
	440V DC	[A]	0.3	0.15	0.15	0.15
Fuse gG						
		[A]	20	10	10	10
		[A]	20	10	10	10
Protective Separation per IEC 60947-1, Annex N			between load and auxiliary circuit 320V	between load and auxiliary circuit 440V		
Min. switching capacity according to IEC 60947-5-4			17V/10mA	17V/5mA	5V/3mA	17V/10mA
Load Carrying Capacity per UL/CSA						
Rated voltage	AC	[V]	max.600			
Continuous rating	40 °C	[A]	10	10	10	10
Switching capacity	AC	[A]	A600			
Rated voltage	DC	[V]	max.600			
Switching capacity	DC	[A]	P600	Q600	Q600	

General

Rated Isolation Voltage U_i		
IEC	[V]	690
UL,CSA	[V]	600
Rated Impulse Voltage Withstand U_{imp}	[kV]	6
Rated Voltage U_e		
AC 50/60 Hz	[V]	115, 200, 230, 240, 400, 415, 460, 500, 575, 690
DC	[V]	24, 48, 110, 220, 440
Insulation Class of the Coil		Class F per IEC 60085
Rated coil frequency		AC50/60Hz,DC
Ambient Temperature		
Storage	[°C]	-55…+80
Operation at rated voltage	[°C]	-25…+60
at 70 °C		15% current reduction against 60 °C values
Climatic Withstand		IEC 60068-2-1/-2/-30
Max. Altitude of Installation Site	[m]	2000 NN, per IEC60947-1
Protection Class		IP2X
Single contactor cover		—
Contactor with frame terminal block		—
Auxiliary contact		IP2X
Protection against Accidental Contact		Finger- and back-of-hand proof per VDE0106, part100
Resistance to Shock		IEC60068-2-27
Resistance to Vibration		IEC60068-2-6
Mechanically Linked Contacts IEC60947-5-1,AnnexL		100-/100S-C09…C55+100-FA/-FB/-FC, (except L11, L22),100-/100S-C09…C55+ 100-FAB/-FBB/-FCB
Mirror Contacts IEC60947-4 Annex F		100-/100S-C09…C97+100-FA/-FB/-FC, (except L11, L22),100-/100S-C09…C97+ 100-SA/SB,100-/100S-C09…C97+100-FAB/-FBB/-FCB

Standards Compliance and Certifications

100-C IEC Contactors

Standards Compliance	Certifications
EN/IEC 60947-4-1, 60947-5-1	CE Marked
IEC 60947 Type "2" Coordination	CCC
CSA 22.2. No. 14	cULus Listed (File No. E3125; Guide NLDX, NLDX7)
UL 508	
Meets the material restrictions for European Directive 2002/95/IEC-EU-RoHS	

100S-C IEC Safety Contactors

Standards Compliance	Certifications
EN50205	CE Marked
CSA C22.2 No. 14	SUVA Third-Party Certified
UL 508	cULus Listed (File No. E3125; Guide NLDX, NLDX7)
EN/IEC 60947-4	
IEC 60947-4-1 Annex F — Mirror Contacts	
IEC 60947-5-1 Annex L — Mechanically Linked Contacts	
Meets the material restrictions for European Directive 2002/95/IEC-EU-RoHS	

100Q-C Capacitor-switching Contactors

Standards Compliance	Certifications
IEC 60947-4	CE Marked
CSA C22.2 No. 14	cULus Listed (File No. E 41850, Guide NLDX, NLDX7)
UL 508	
Meets the material restrictions for European Directive 2002/95/IEC-EU-RoHS	

Life-Load Curves

Bulletin 100-C/104-C IEC contactors are designed for superior performance in a wide variety of applications. When selecting IEC products, the user must give consideration to the specific load, utilization category, and required electrical life of the application. The life-load curves shown here are based on Rockwell Automation tests according to the requirements defined in IEC 60947-4-1. Since contact life in application is dependent on environmental conditions and duty cycle, actual application contact life may vary from that indicated by the curves shown here.

To find the contactor's estimated electrical life, follow these guidelines:

1. Identify the appropriate utilization category from Table 1.
2. Choose the graph for the utilization category selected.
3. Locate the intersection of the life-load curve for the appropriate contactor with the application's operational current (I_e) found on the horizontal axis.
4. Read the estimated contact life along the vertical axis.

Contact Life for Mixed Utilization Categories AC-3 and AC-4:

In many applications, the utilization category cannot be defined as either purely AC-3 or AC-4. In those applications, the electrical life of the contactor can be estimated from the following equation:

$L_{mixed} = L_{ac3}/[1 + P_{ac4}*(L_{ac3}/L_{ac4} - 1)]$, where:

L_{mixed} = Approximate contact life in operations for a mixed AC-3/AC-4 utilization category application

L_{ac3} = Approximate contact life in operations for a pure AC-3 utilization category (from the AC-3 life-load curves)

L_{ac4} = Approximate contact life in operations for a pure AC-4 utilization category (from the AC-4 life-load curves)

P_{ac4} = Percentage of AC-4 operations

Table 1 - Utilization Category Determination

Test Conditions			Making			Breaking		
			I/I_e	U/U_e	cos ϕ	I_c/I_e	U_r/U_e	cos ϕ
AC-1	Resistance Furnaces: Non inductive or slightly inductive loads		1	1	0.95	1	1	0.95
AC-2	Slip-ring motors: Starting and reversing		2.5	1	0.65	2.5	1	0.65
AC-3	Squirrel-cage motors: Starting and stopping of running motors	$I_e < 17$ A $I_e > 17$ A	6 6	1 1	0.65 0.35	1 1	0.17 0.17	0.65 0.35
AC-4	Squirrel-cage motors: Starting, plugging(1), inching(2)	$I_e < 17$ A $I_e > 17$ A	6 6	1 1	0.65 0.35	6 6	1 1	0.65 0.35
AC-15	Solenoids: Contactors, valves and lifting magnets		10	1	0.7	1	1	0.4

(1) Plugging is understood as stopping or reversing the motor rapidly by reversing motor primary connections while the motor is running.

(2) Inching (jogging) is understood as energizing a motor once or repeatedly for short periods to obtain small movements of the driven mechanism.

I_e Rated operational current

I Making Current

I_c Breaking Current

U Off-load voltage

U_e Rated voltage

U_r Recovery voltage

Figure 5 - AC-1, 40 °C Non- or slightly inductive loads, resistance furnaces; U_e = 230…690V

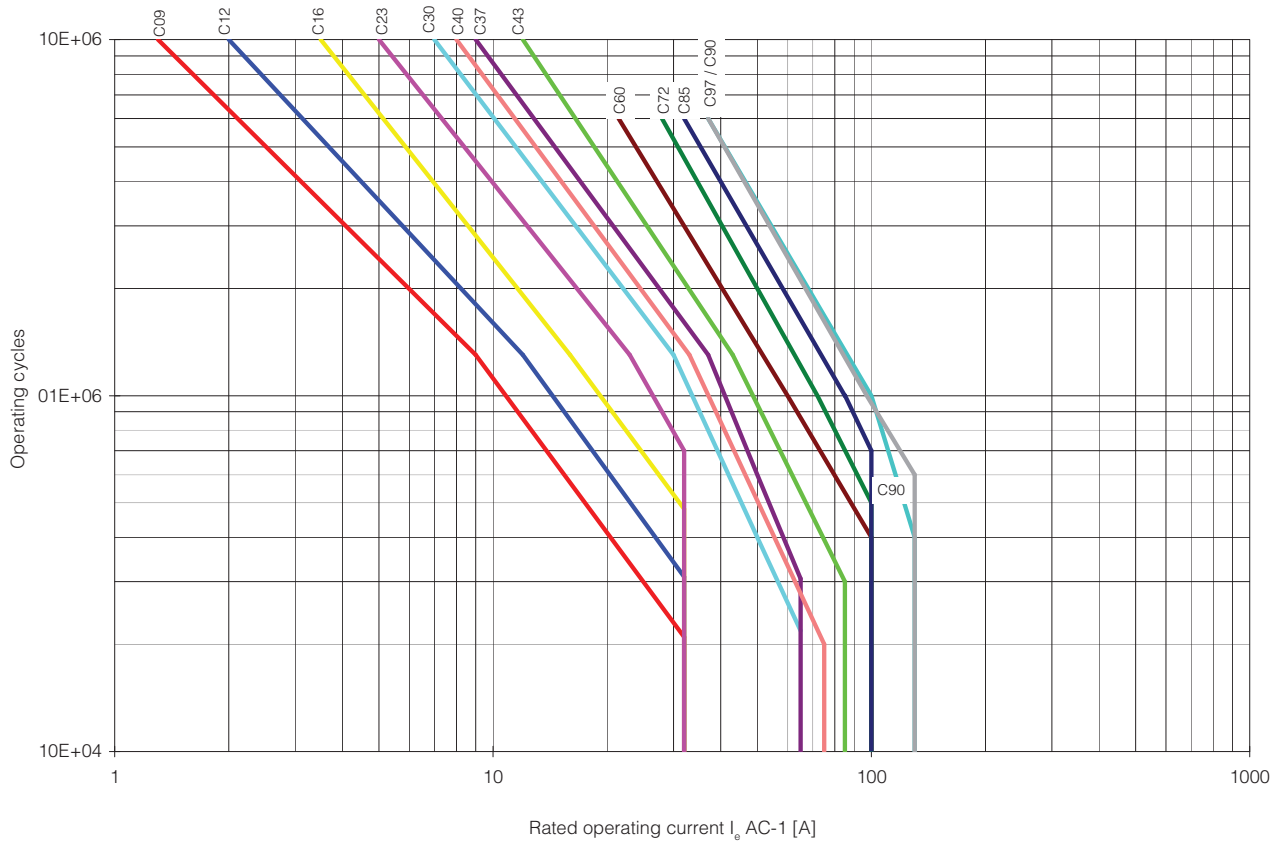


Figure 6 - AC-2, Switching of slip-ring motors; U_e = 230…400…460V

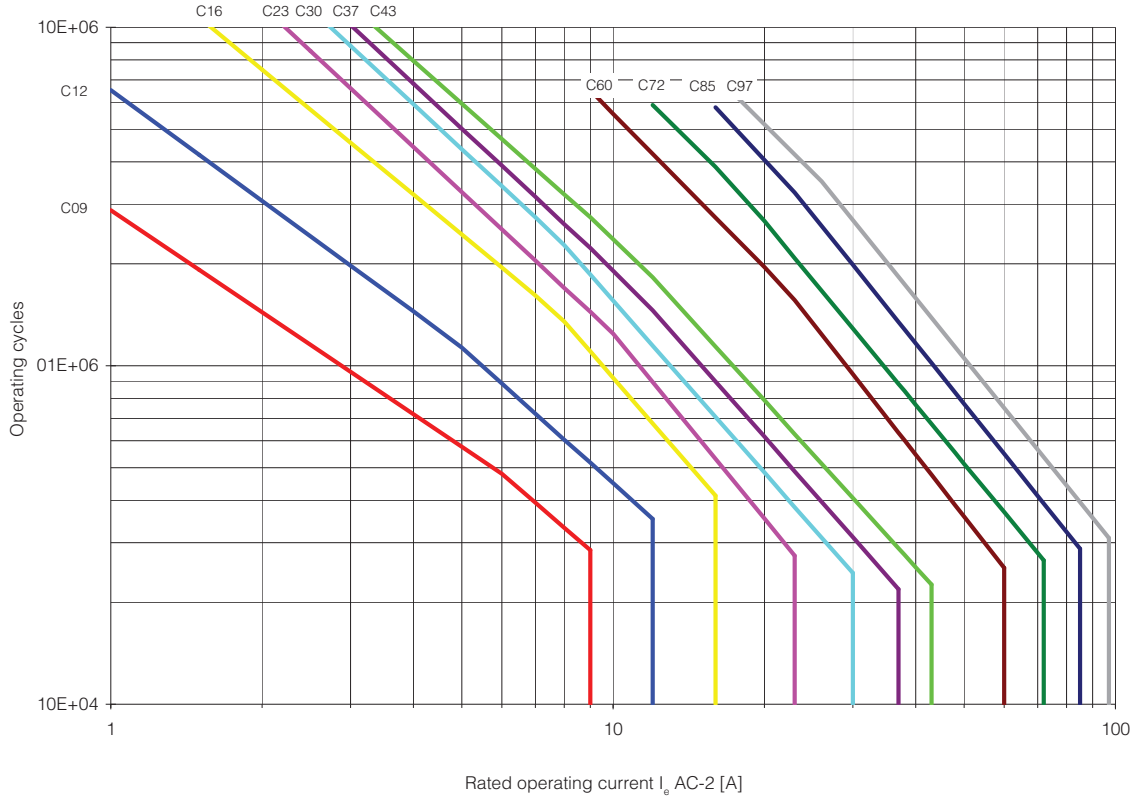


Figure 7 - AC-3, Switching of squirrel-cage motors while starting; U_e = 230…400…460V

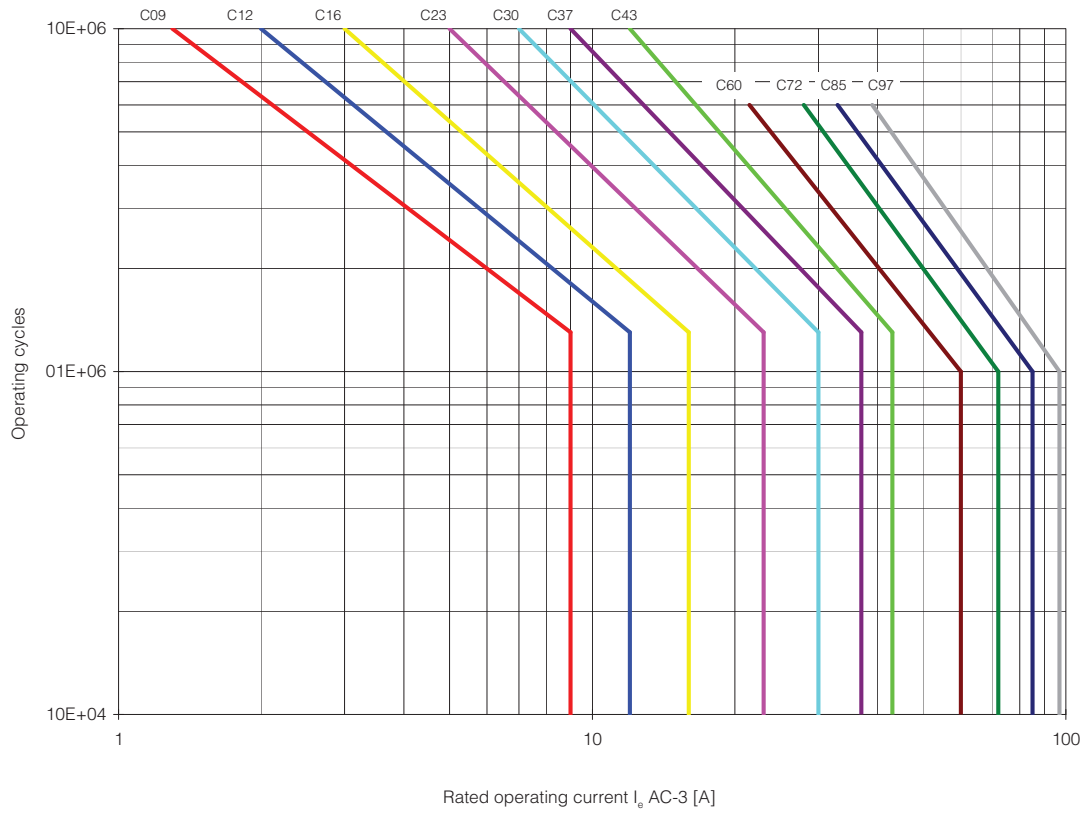


Figure 8 - AC-3, Switching of squirrel-cage motors while starting; U_e = 500…575V

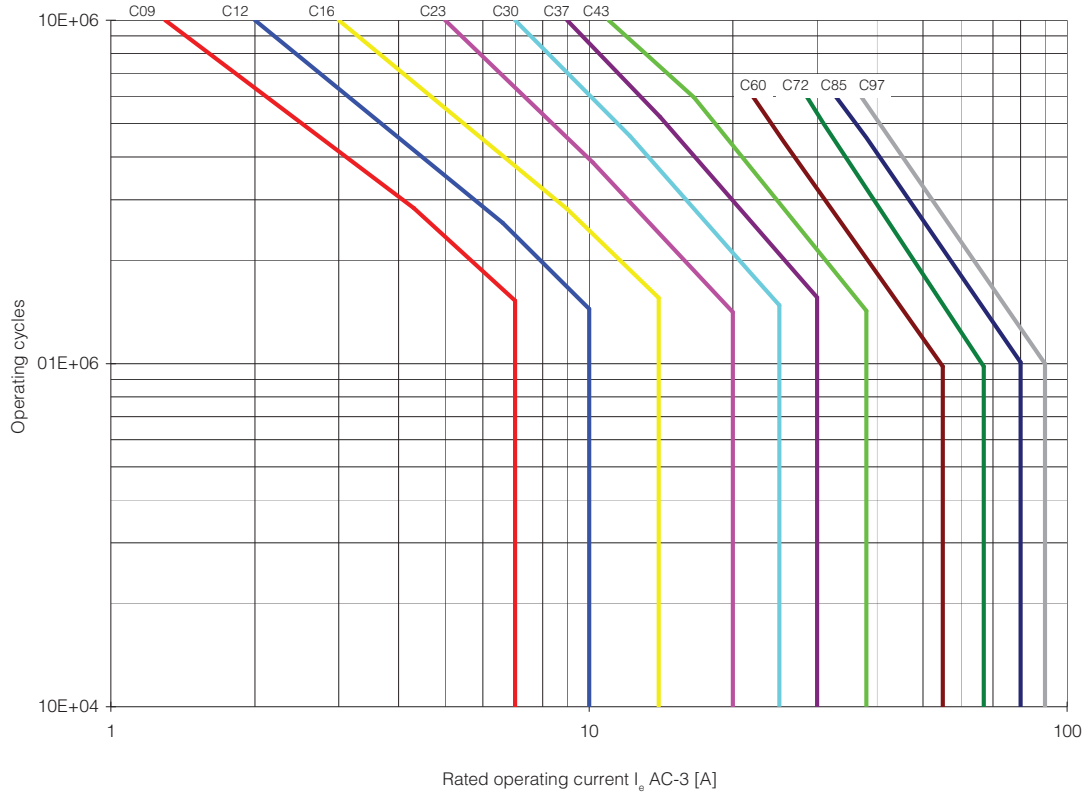


Figure 9 - AC-3, Switching of squirrel-cage motors while starting; U_e = 690V

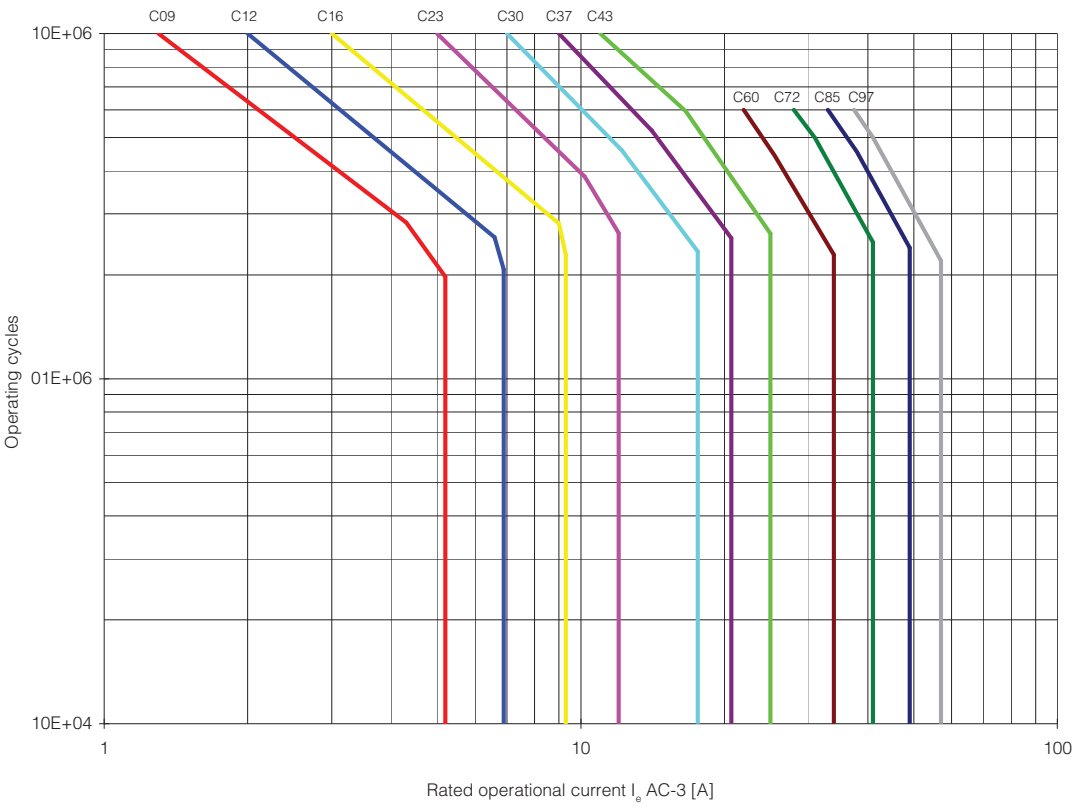


Figure 10 - AC-4, Switching of squirrel-cage motors; U_e = 230…690V

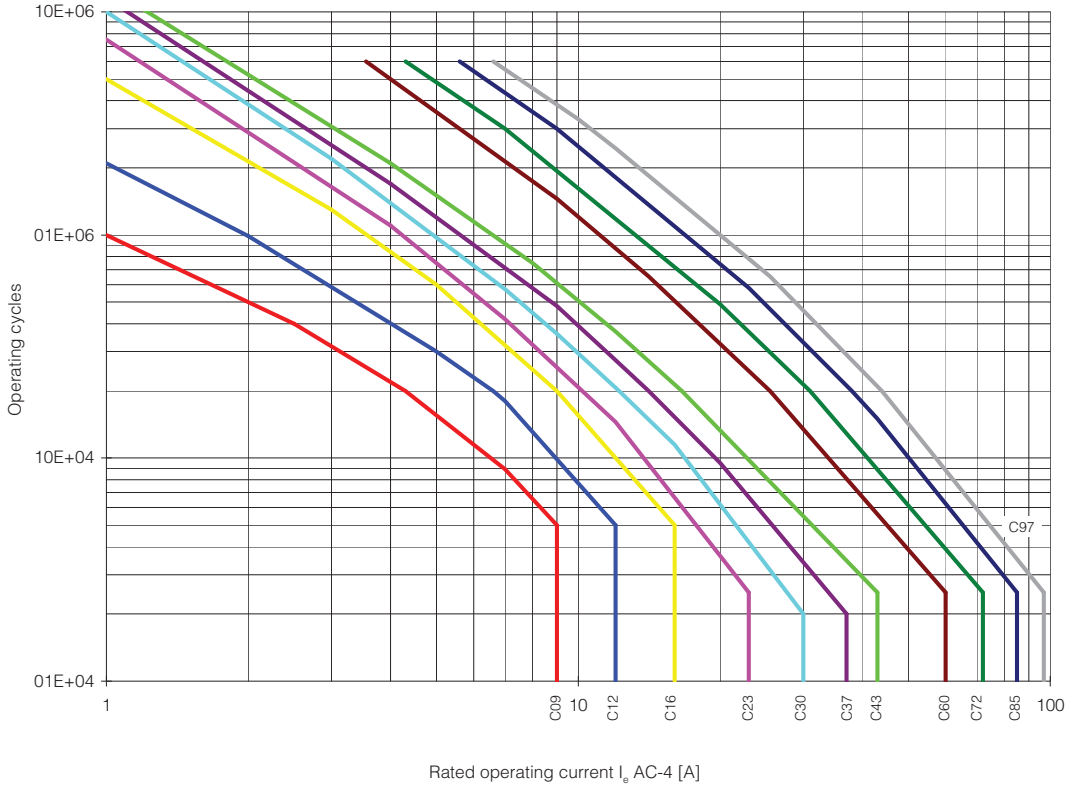


Figure 11 - AC-3 & AC-4, 10% AC-4 Mixed operation of squirrel-cage motors; U_e = 230…400…460V

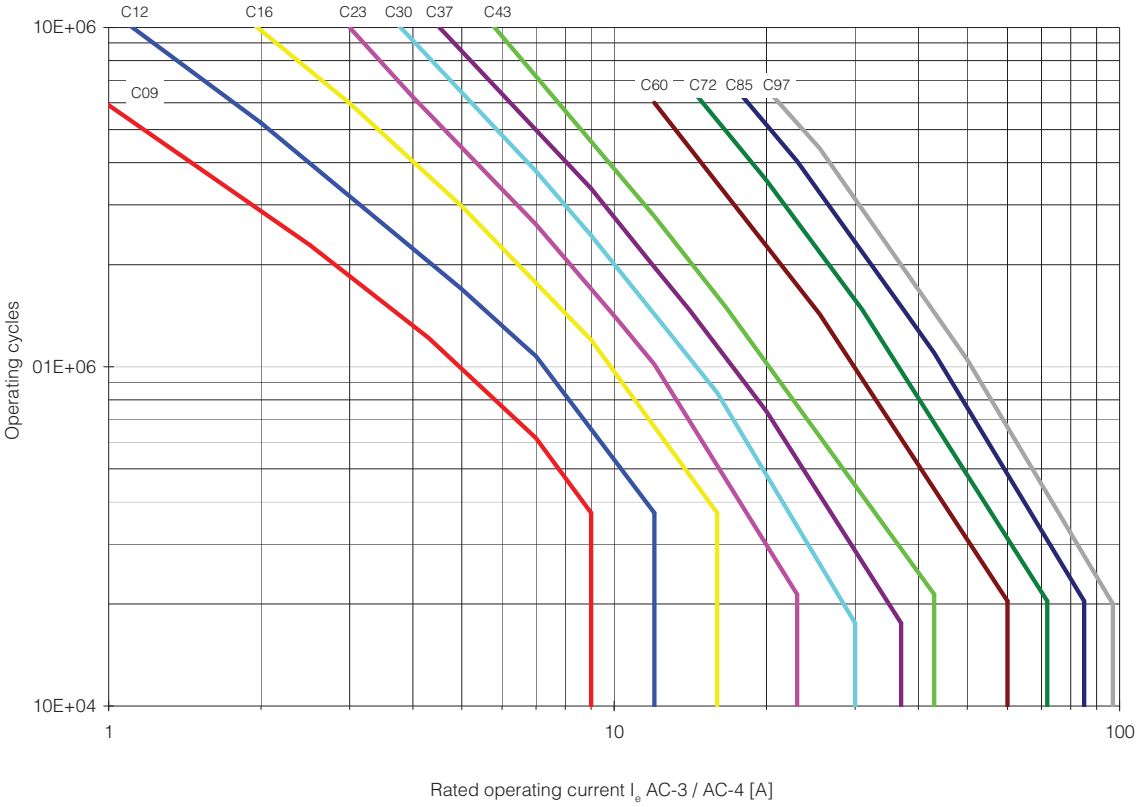
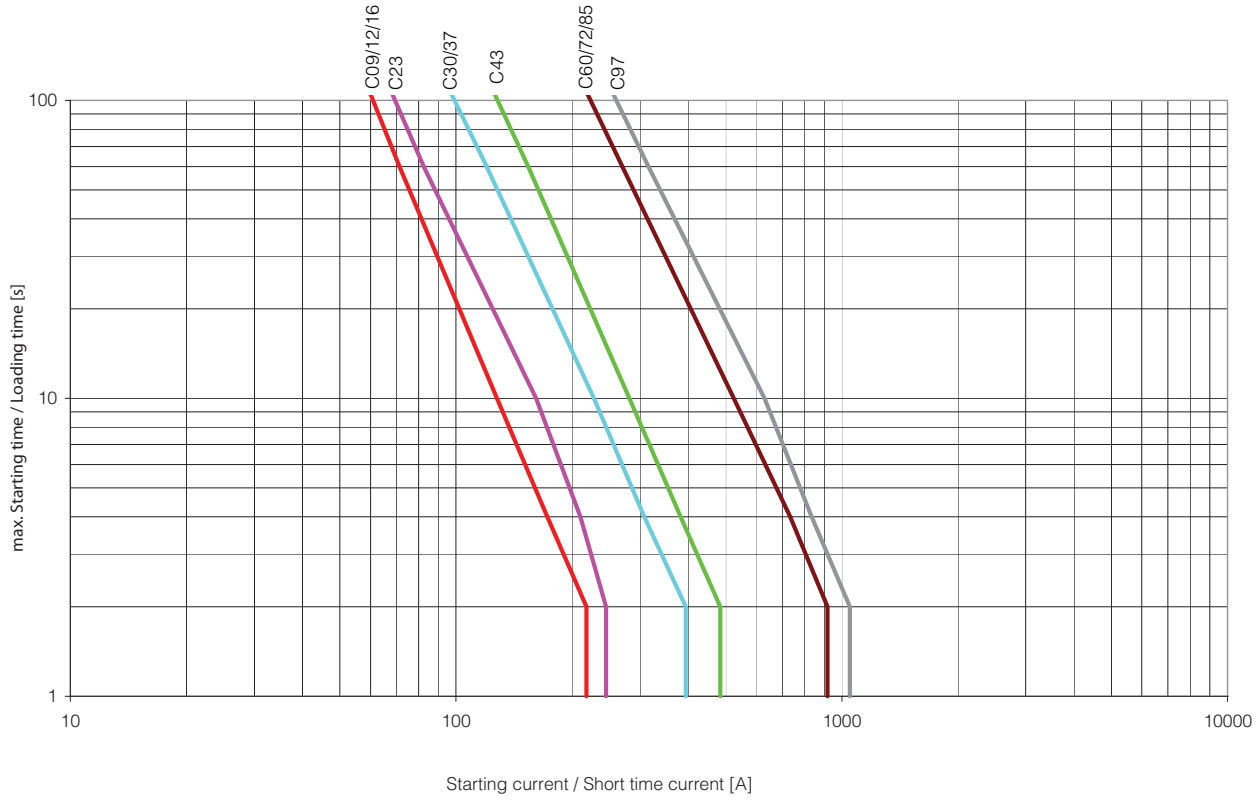


Figure 12 - Heavy Duty Starting and Regular Short-time Operation



Maximum Operating Rates

Figure 13 - AC-1, 40 °C Non- or slightly inductive loads, resistance furnaces; U_e = 230…690V

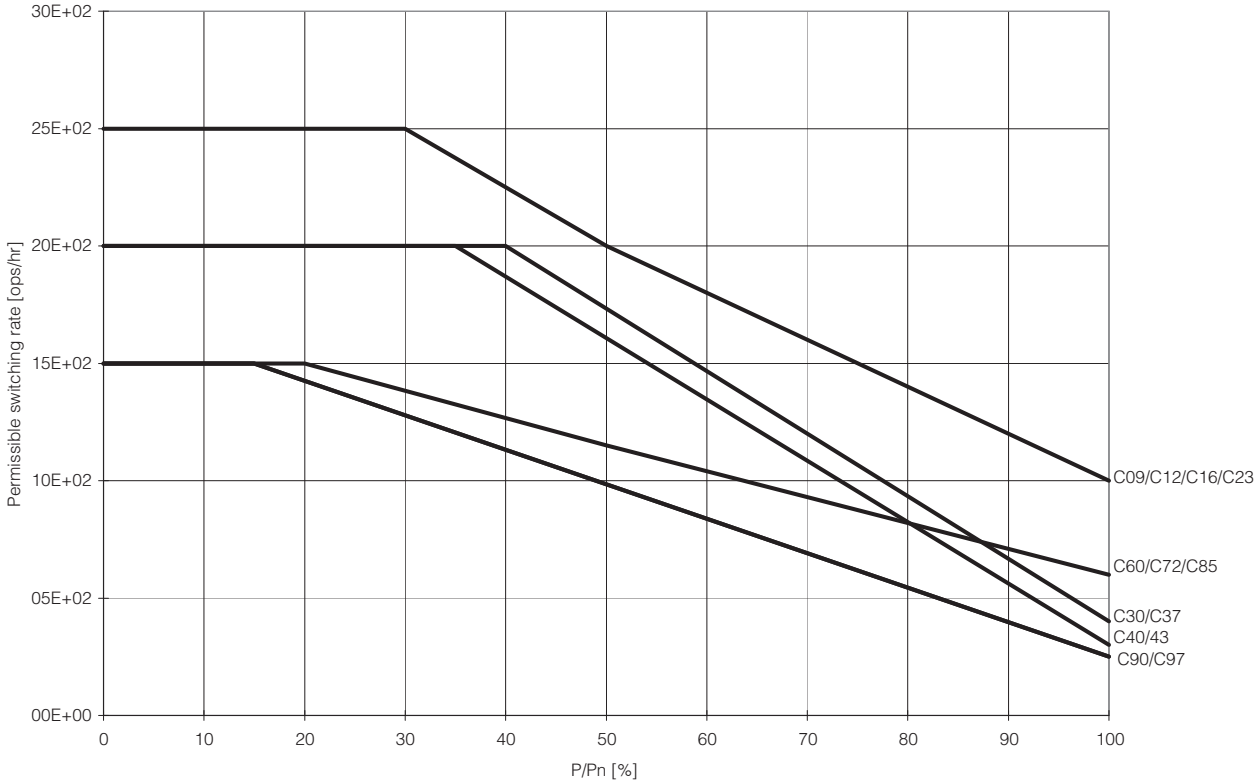


Figure 14 - AC-2, Stepping of slip-ring motors; U_e = 230…460V

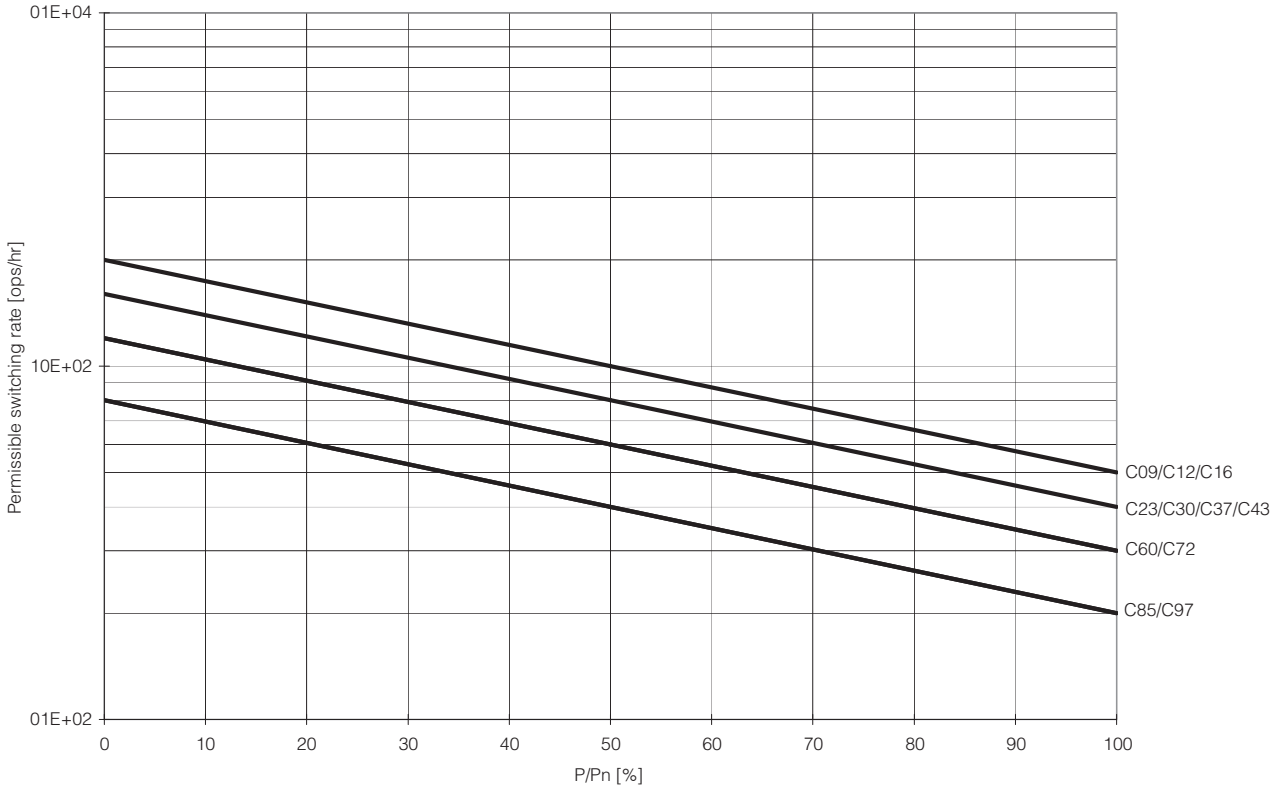


Figure 15 - AC-3, Switching of squirrel-cage motors while starting; U_e = 230…460V; Relative operating time 40%, Starting time t_A = 0.25 s

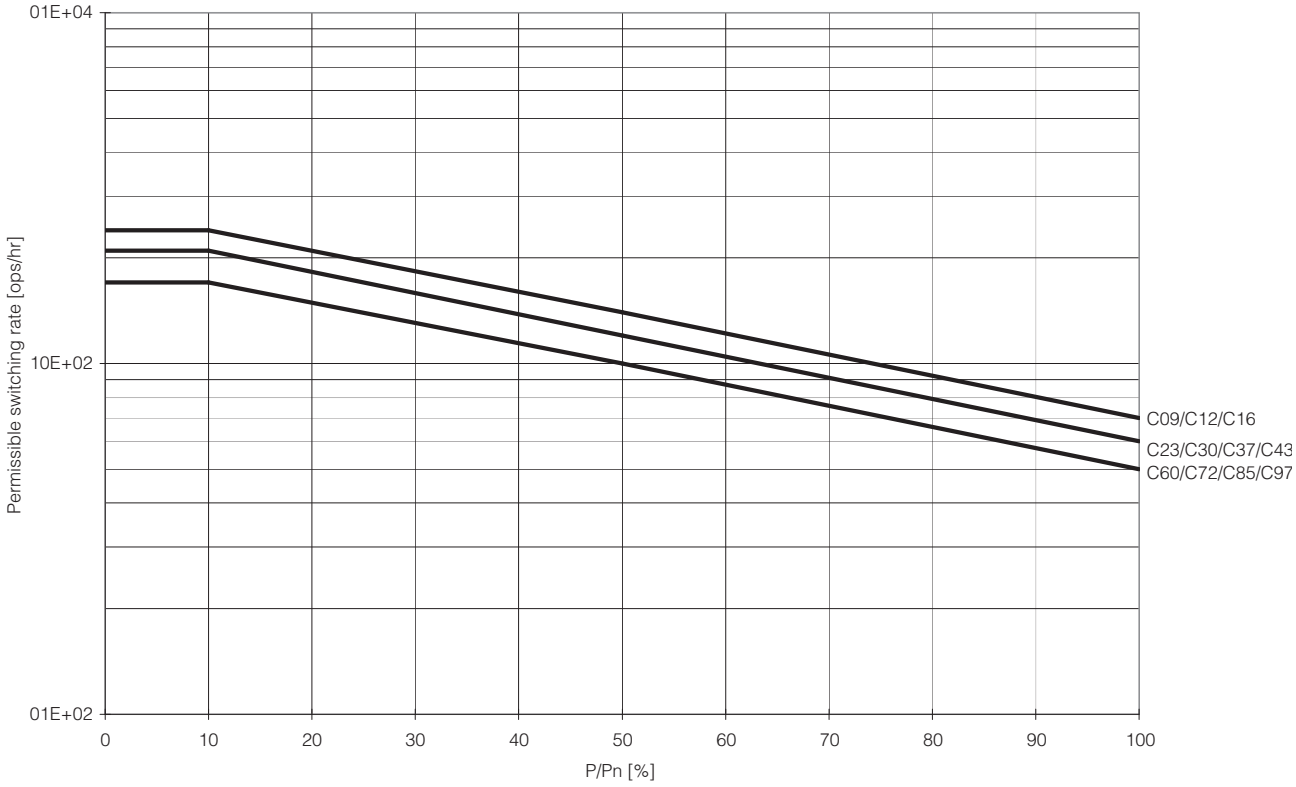
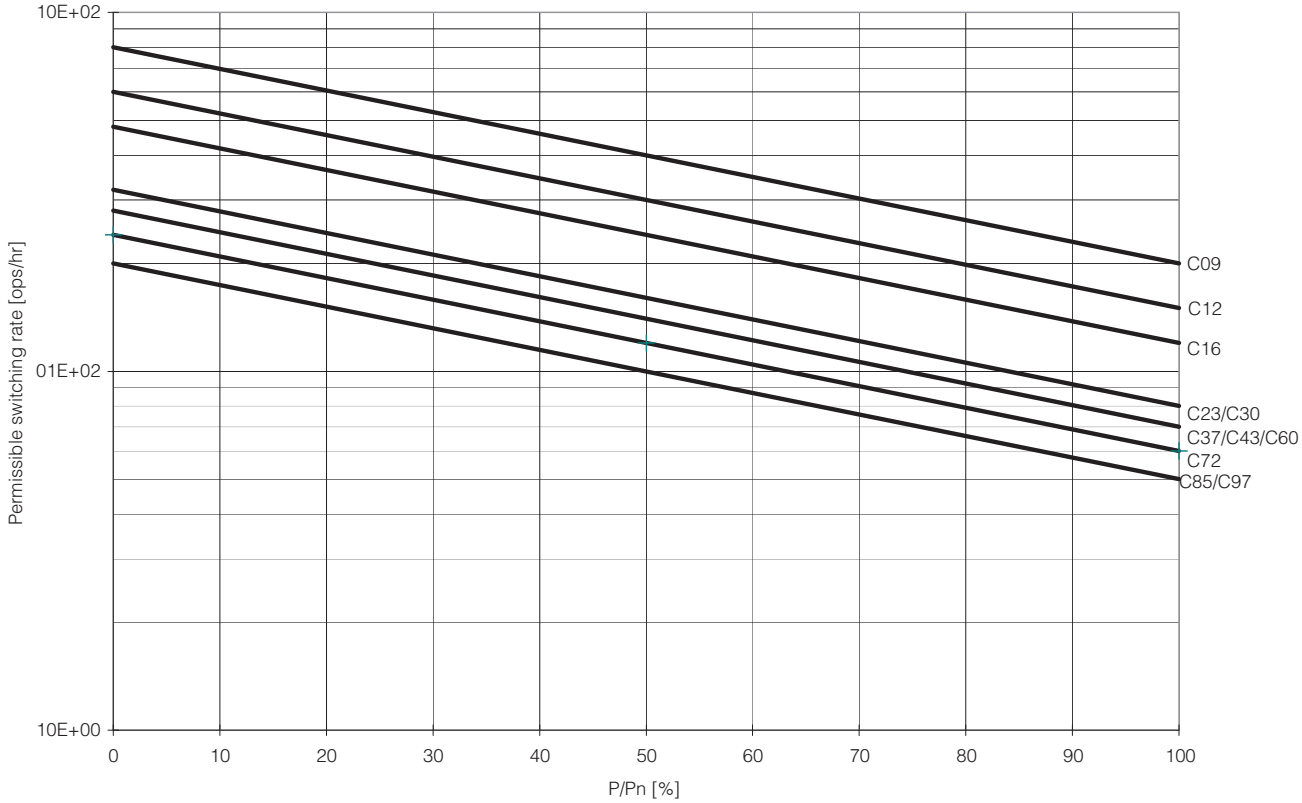


Figure 16 - AC-4, Inching of squirrel-cage motors; U_e = 230…460V, Starting time t_A = 0.25 s



Approximate Dimensions

Dimensions are shown in millimeters (inches). Dimensions are not intended for manufacturing purposes.

Bulletin 100-C/104-C, 100S-C/104S-C Approximate Dimensions

Figure 17 - Bulletin 100-C/100S-C Contactors and Accessories

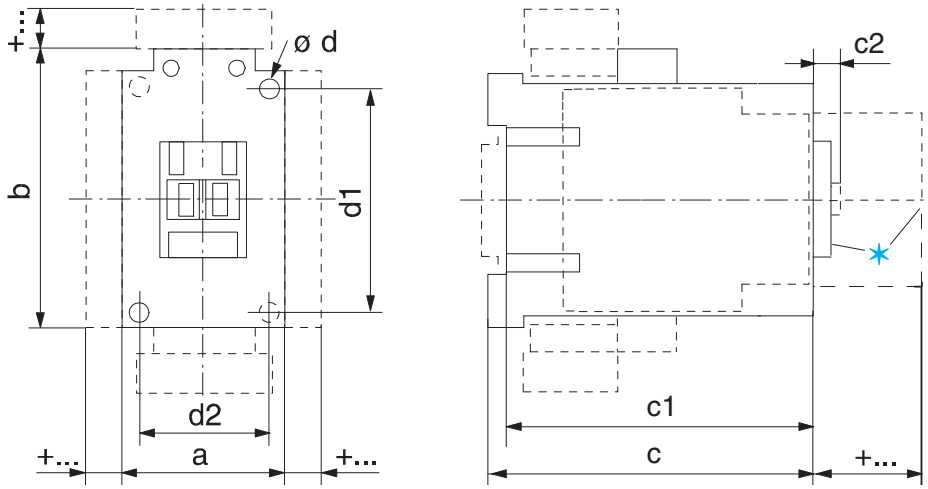


Figure 18 - Mounting Position — 100-C Contactors; 100S-C AC Contactors and DC contactors with electronic coils

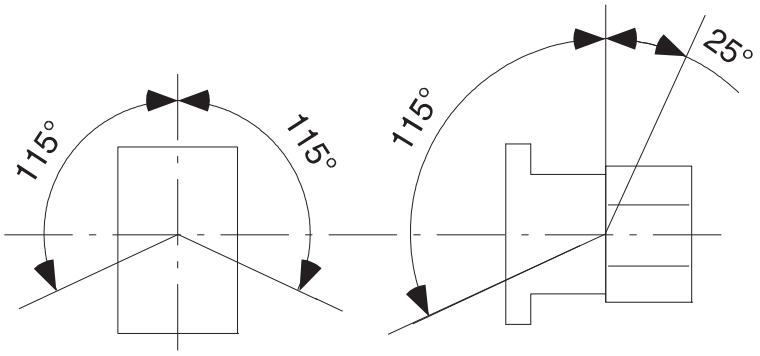


Figure 19 - Mounting Position — 100S-C DC contactors

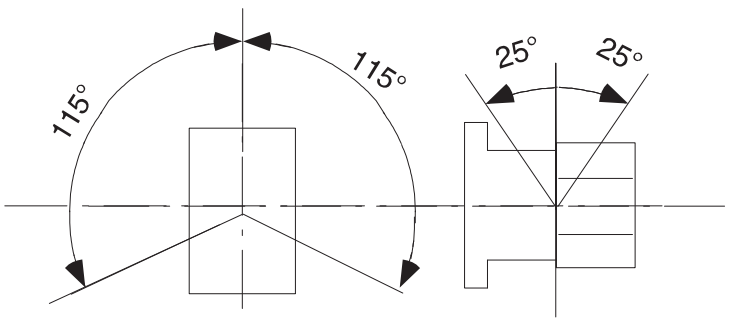


Table 2 - AC Contactors and DC Contactors with 12V or 24V Electronic Coils

Cat. No.	a	b	c	c1	c2	Ø d	d1	d2
100-C09…100-C23	45 (1-25/32)	81 (3-3/16)	80.5 (3-11/64)	75.5 (2-31/32)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C30, 100-C37	45 (1-25/32)	81 (3-3/16)	97.5 (4)	92.5 (3-41/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C40	59 (2-21/64)	81 (3-3/16)	100.5 (3-61/64)	95.5 (3-49/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100-C43, 100-C55	54 (2-1/8)	81 (3-3/16)	100.5 (3-61/64)	95.5 (3-49/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100-C60…100-C97	72 (2-53/64)	122 (4-51/64)	117 (4-39/64)	111.5 (4-25/64)	8.5 (21/64)	4 - 5.4 (4 - 7/32)	100 (3-15/16)	55 (2-11/64)
100-C90	95 (3-47/64)	122 (4-51/64)	117 (4-39/64)	111.5 (4-25/64)	8.5 (21/64)	4 - 5.4 (4 - 7/32)	100 (3-15/16)	55 (2-11/64)
100S-C09…100S-C23	45 (1-25/32)	81 (3-3/16)	119.5 (4-3/4)	114.5 (4-43/64)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100S-C30, 100S-C37	45 (1-25/32)	81 (3-3/16)	136.5 (5-37/64)	131.6 (5-11/32)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100S-C43, 100S-C55	54 (2-1/8)	81 (3-3/16)	139.5 (5-11/16)	134.6 (5-29/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100S-C60…100S-C97	72 (2-53/64)	122 (4-51/64)	156 (6-11/32)	150.5 (6-1/8)	8.5 (21/64)	4 - 5.4 (4 - 7/32)	100 (3-15/16)	55 (2-11/64)

Table 3 - DC Contactors with Conventional Coils

Cat. No.	a	b	c	c1	c2	Ø d	d1	d2
100-C60D…100-C97D	72 (2-53/64)	122 (4-51/64)	117 (4-39/64)	111.5 (4-25/64)	8.5 (21/64)	4 - 5.4 (4 -7/32)	100 (3-15/16)	55 (2-11/64)
100-C90D	95 (3-47/64)	81 (3-3/16)	117 (4-39/64)	111.5 (4-25/64)	8.5 (21/64)	4 - 5.4 (4 - 7/32)	100 (3-15/16)	55 (2-11/64)
100S-C09Z...100S-C16Z	45 (1-25/32)	81 (3-3/16)	145.5 (5-49/64)	140.5 (5-37/64)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100S-C23Z	45 (1-25/32)	81 (3-3/16)	162.5 (6-7/16)	158 (6-1/4)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100S-C30Z...100S-C37Z	45 (1-25/32)	81 (3-3/16)	180.5 (7-5/32)	175.5 (6-61/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100S-C43Z	54 (2-1/8)	81 (3-3/16)	183.5 (7-17/64)	179 (7-3/32)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100S-C60D...100S-C97D	72 (2-53/64)	122 (4-51/64)	156 (6-11/32)	150.5 (6-1/8)	8.5 (21/64)	4 - 5.4 (4 - 7/32)	100 (3-15/16)	55 (2-11/64)

Table 4 - DC Contactors with 36…48V, 48…72V, 110…125V, or 200…250V DC Electronic Coils

Cat. No.	a	b	c	c1	c2	Ø d	d1	d2
100-C09E…100-C23E	45 (1-25/32)	105 (4-1/8)	80.5 (3-11/64)	75.5 (2-31/32)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C30E…100-C37E	45 (1-25/32)	105 (4-1/8)	97.5 (4)	92.5 (3-41/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100-C40E	59 (2-21/64)	105 (4-1/8)	100.5 (3-61/64)	95.5 (3-49/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100-C43E…100-C55E	54 (2-1/8)	105 (4-1/8)	100.5 (3-61/64)	95.5 (3-49/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)
100S-C09E…100S-C23E	45 (1-25/32)	105 (4-1/8)	119.5 (4-3/4)	114.5 (4-43/64)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100S-C30E…100S-C37E	45 (1-25/32)	105 (4-1/8)	136.5 (5-37/64)	131.6 (5-11/32)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100S-C43E…100S-C55E	54 (2-1/8)	105 (4-1/8)	139.5 (5-11/16)	134.6 (5-29/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	45 (1-25/32)

Table 5 - 100-C/104-C Accessories

Contactors with		mm	(inches)
Auxiliary contact block for front mounting	2- or 4-pole	c/c1 + 39	(c/c1 + 1-37/64)
Auxiliary contact block for side mounting	1- or 2-pole	a + 9	(a + 23/64)
Pneumatic Timing Module		c/c1 + 58	(c/c1 + 2-23/64)
Electronic Timing Module	on coil terminal side	b + 24	(b + 15/16)
Mechanical Interlock	on side of contactor	a + 9	(a + 23/64)
Mechanical Latch		c/c1 + 61	(c/c1 + 2-31/64)
Interface Module	on coil terminal side	b + 9	(b + 23/64)
Surge Suppressor	on coil terminal side	b + 3	(b + 1/8)
Labeling with ?	label sheet	+ 0	(+ 0)
	marking tag sheet with clear cover	+ 0	(+ 0)
	marking tag adapter for System V4 / V5	+ 5.5	(+ 7/32)
	marking tag adapter for System Bul. 1492W	+ 5.5	(+ 7/32)
Terminal Lug Kit	100-C09…C23	b + 53	(b + 2-3/32)
	100-C30…C37	b + 44	(b + 1-47/64)
	100-C43…C55	b + 52	(b+ 2-3/64)
	100-C60…C97	b + 99	(b + 3-7/8)
Paralleling Links	100-C09…C23	b + 78	(b + 3-1/16)
		c + 9/5	(c + 3/8)
	100-C30…C37	b + 85	(b + 3-11/32)

Table 6 - 100S-C/104S-C Accessories

Contactors with		mm	(inches)
Auxiliary contact block for side mounting	1- or 2-pole	a + 9	(a + 23/64)
Electronic Timing Module	on coil terminal side	b + 24	(b + 15/16)
Mechanical Interlock	on side of contactor	a + 9	(a + 23/64)
Interface Module	on coil terminal side	b + 9	(b + 23/64)
Surge Suppressor	on coil terminal side	b + 3	(b + 1/8)
Labeling with	label sheet	+ 0	(+ 0)
	marking tag sheet with clear cover	+ 0	(+ 0)
	marking tag adapter for System V4 / V5	+ 5.5	(+ 7/32)
	marking tag adapter for System Bul. 1492W	+ 5.5	(+ 7/32)

Bulletin 100Q-C Approximate Dimensions

Figure 20 - Bulletin 100Q- Contactors

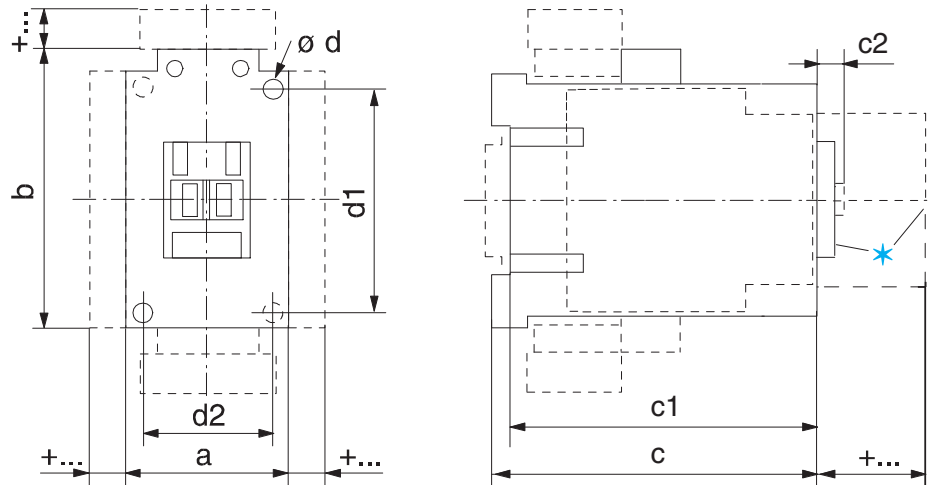


Table 7 - AC Contactors and DC Contactors with 12V or 24V Electronic Coils

Cat. No.	a	b	c	c1	c2	Ø d	d1	d2
100Q-C16	45 (1-25/32)	81 (3-3/16)	119.5 (4-3/4)	114.5 (4-43/64)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100Q-C37	45 (1-25/32)	81 (3-3/16)	136.5 (5-37/64)	131.6 (5-11/32)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)

Table 8 - DC Contactors with Conventional Coils

Cat. No.	a	b	c	c1	c2	Ø d	d1	d2
100Q-C16	45 (1-25/32)	81 (3-3/16)	145.5 (5-49/64)	140.5 (5-37/64)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100Q-C37	45 (1-25/32)	81 (3-3/16)	180.5 (7-5/32)	175.5 (6-61/64)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)

Table 9 - DC Contactors with 36…48V, 48…72V, 110…125V, or 200…250V DC Electronic Coils

Cat. No.	a	b	c	c1	c2	Ø d	d1	d2
100Q-C16EA, -ED, or -EY	45 (1-25/32)	105 (4-1/8)	119.5 (4-3/4)	114.5 (4-43/64)	6 (15/64)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)
100Q-C37EA, -ED, or -EY	45 (1-25/32)	105 (4-1/8)	136.5 (5-37/64)	131.6 (5-11/32)	6.5 (1/4)	2 - 4.5 (2 -3/16)	60 (2-23/64)	35 (1-3/8)