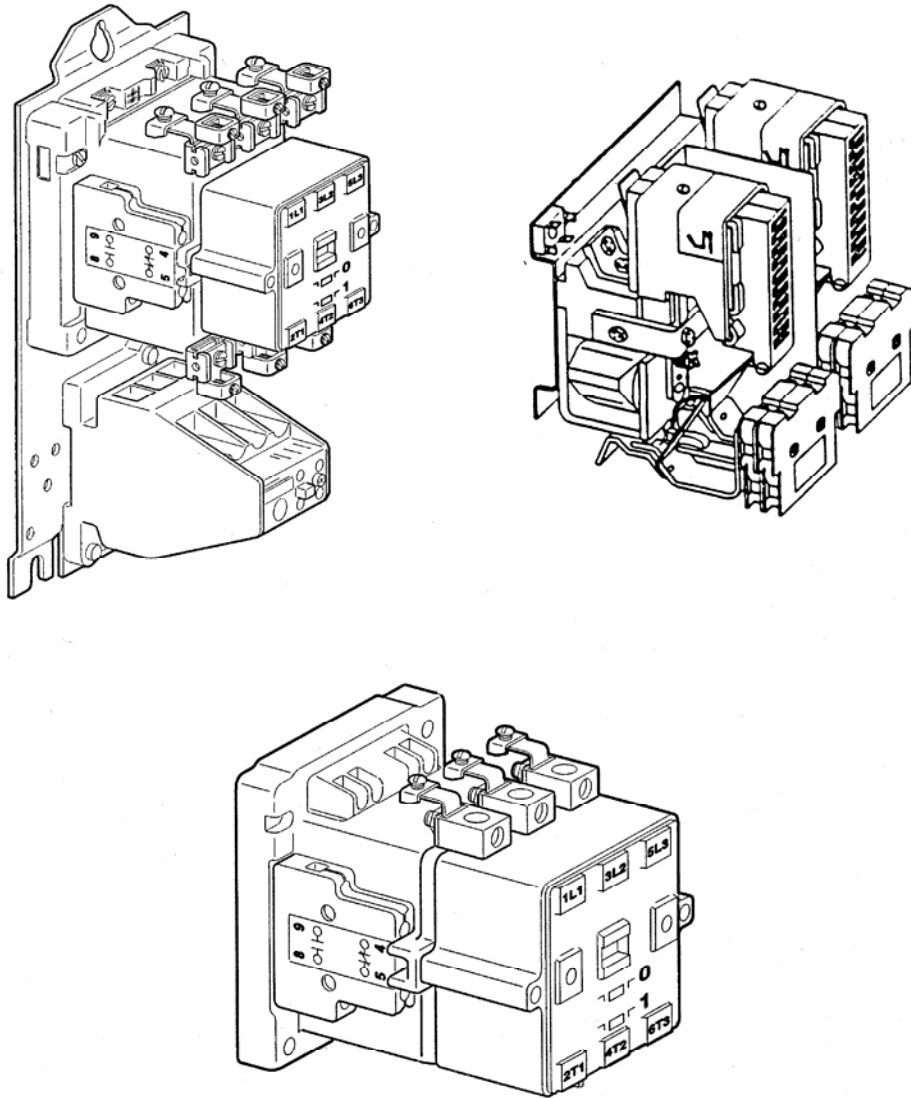


AC & DC Contactors,
Reversing/Wye-Delta Contactors,
Starters

Spare Parts Leaflet

10-7151A

June 13, 2007 / Page 1 of 20



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OTIS

Safety First!

SERVICE ENGINEERING
Otis Elevator Company
Bloomfield, Connecticut USA

Leaflet Description

This leaflet describes parts replacement information for the types and models of starters and contactors used by the Company.

NOTE: The February 13, 2004 revision to the SPL describes changes to the Siemens supplied starters/contactors as a result of their design change. With some of the new assemblies, mounting is not compatible with the old. Refer to TIP 8.0-31, *Replacement of Siemens Contactors: AAA637A, AAA638A, AAA638E, AAA638R, and AAA638AK for instructions.* OSC will use existing stock until depleted.

Leaflet Revisions

Date Revised	Subject Matter Expert	Reason for Revision
November 1995	---	Service Engineering publication
July 1997	Service Engineering	---
May 1998	Val Minnes	Revise part numbers on pp. 7, 8, and 15.
September 1, 1999	Burt Greenfield	Correct descriptions on p. 7.
June 1, 2000	Val Minnes	Update part number and add new graphic on p. 8. Correct graphic callout transposition on p. 15.
February 13, 2004	Val Minnes	List new Siemens parts (see Note above)
March 24, 2004	J. Costley, Technical Writer	Corrected p.8 picture callouts
January 15, 2007	Jason Philhower	Updated parts.
June 13, 2007	John Dwyer	Added a note and updated the parts list on p. 5

Related Drawings

Drawing No.	Title	Drawing No.	Title
AAA638C, D, E, F, G, R, W, AK	Relay, Contactor, 1, 1-1/2, 2, 2-1/2, 3, 3-1/2, 4	AAA07151AAA	Assembly, AC Reversible Contactor, NEMA Size 4
7151B, D, E, F, AA	Assembly, AC Contactor, NEMA Sizes 1, 2, 3, 3-1/2,	---	---

Related Documents

Document ID	Title
TIP 8.0-31	Replacement of Siemens Contactors: AAA637A, AAA638A, AAA638E, AAA638R, and AAA638AK

Subject Matter Expert

Name	Department
Jason Philhower	OSC Service Engineering

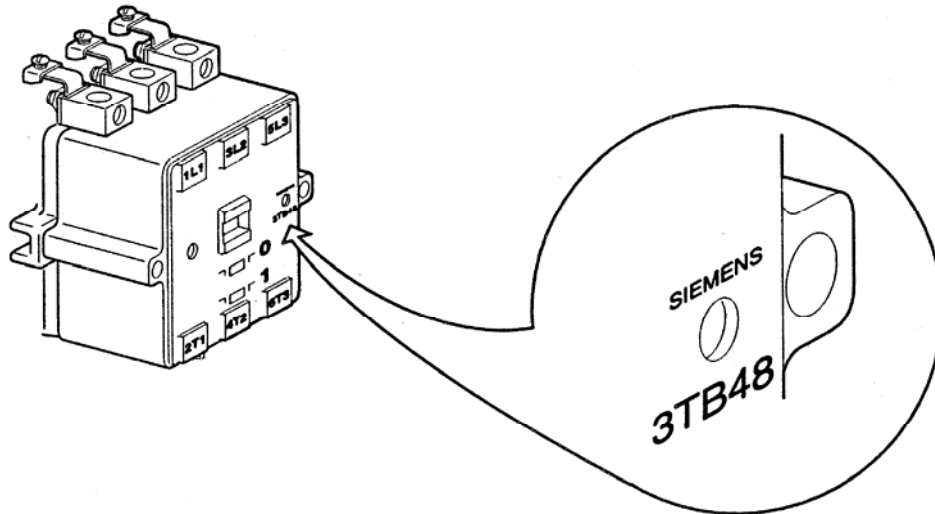
About Spare Parts Leaflets...

This document lists the lowest replaceable units (LRUs) for the standard version of the product. The LRUs are chosen by a team of Otis associates representing engineering and manufacturing.

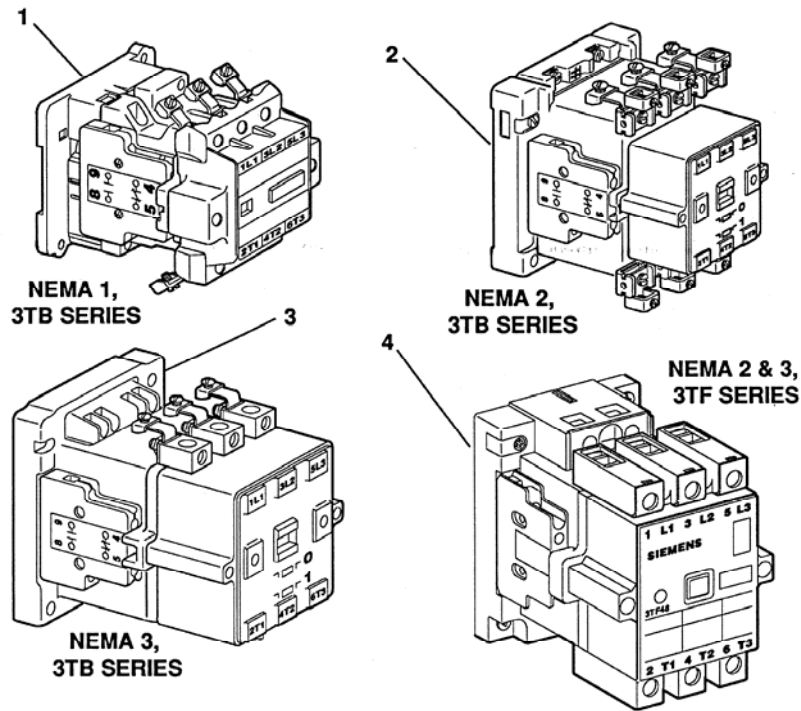
While goal of this document is to make parts identification as easy as possible, the document cannot be all-inclusive. Elevator and escalator contracts classified as "special" or "custom" are not addressed here. For such contracts, please refer to specified information, the contract folder, TIPs, Field Education Articles, Construction Letters, etc. for further information.

If you have any suggestions about this document, please contact the subject matter expert listed on this page.

In 1989 Siemens® made a design change to the AC contactors. Identification is either “3TB...” or “3TF...” as marked on the arc chute of the contactor.



Between designs, contactors are interchangeable as complete assemblies, but component replacement parts are not interchangeable.



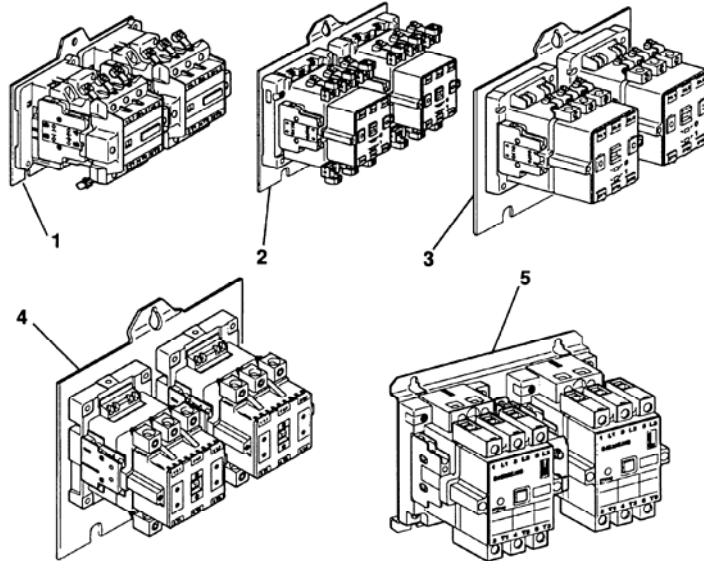
REF.No.	OLD PART No.	NEW PART No.	DESCRIPTION	NEMA SIZE	TYPE of MAGNET SWITCH
	NOTE 1				NOTE 2
1	7151B4 AAA638AK1	AAA638AK201	120 V, 60 HZ, 3 Main Contacts, 2 NO, 2 NC Auxiliary Contacts	1	CXL1013, 3TB44
2	7151D4 AAA638R2	AAA638R107		2	3TB46
	7151AE2 AAA638R2	AAA638R107			CXL2013
3	7151F4 AAA638A2	AAA638A110		3	3TB48
	7151AA1 AAA638A2	AAA638A110			CXL3013
4	AAA638AK1	AAA638AK201		1	3TF44
	AAA638R2	AAA638R107		2	3TF46
	AAA638A2	AAA638A110		3	3TF48

NOTE 1: New parts are not illustrated. They will be supplied once existing stock of old part is exhausted (denoted by strikethrough). Refer to description area on page 2 for additional information.

For replacement parts to the new part assemblies, refer to table on page 20.

NOTE 2: The “CLX” and “3TB” series were replaced by the “3TF” series contactors and apply only to old part numbers. Use designators for ordering replacement parts (pages 8 and 9) to the old part assemblies only.

IMPORTANT NOTE: The mechanical interlock on reversing contactors must be checked before the contactor is installed to ensure that no damage occurred during shipping. Do this by fully depressing and holding down one of the auxiliary contact actuating tabs on the front face of one contactor of the pair and verifying that the tabs on the other cannot be depressed the full travel. Perform again in reverse order. **Do not use a contactor that exhibits no mechanical interlocking**, return it to the Otis Service Center and note on the return authorization “defective, no mechanical interlock.”



REF. No.	OLD PART No.	NEW PART No.	DESCRIPTION	NEMA SIZE	TYPE of MAGNET SWITCH
	NOTE 1				NOTE 2
1	7151AB1	7151AB105	120 V, 60 HZ, 3 Main Contacts, 2 NO, 2 NC Auxiliary Contacts	1	CRL1013
2	7151AB2 7151AB4	AAA638W107		2	CRL2013
3	7151AD1 7151AD2	AAA638D107		3	CRL3013
4	AAA07151AAA001 AAA07151AAA002	AAA638F107		4	CRL0B52
5	7151AB5	7151AB105		1	CRLOF44
	AAA638W2	AAA638W107		2	CRLOF46
	AAA638C2 AAA638C6	AAA638C106		2-1/2	CRLOF47
	AAA07151AAB002 AAA638D2 AAA638D7	AAA638D107		3	CRLOF48
	AAA638E2 AAA638E6	AAA638E106		3-1/2	CRLOF50
	AAA638F2 AAA638F7	AAA638F107		4	CRLOF52
	AAA638G2 AAA638G7	AAA638G107		4-1/2	CRLOF54

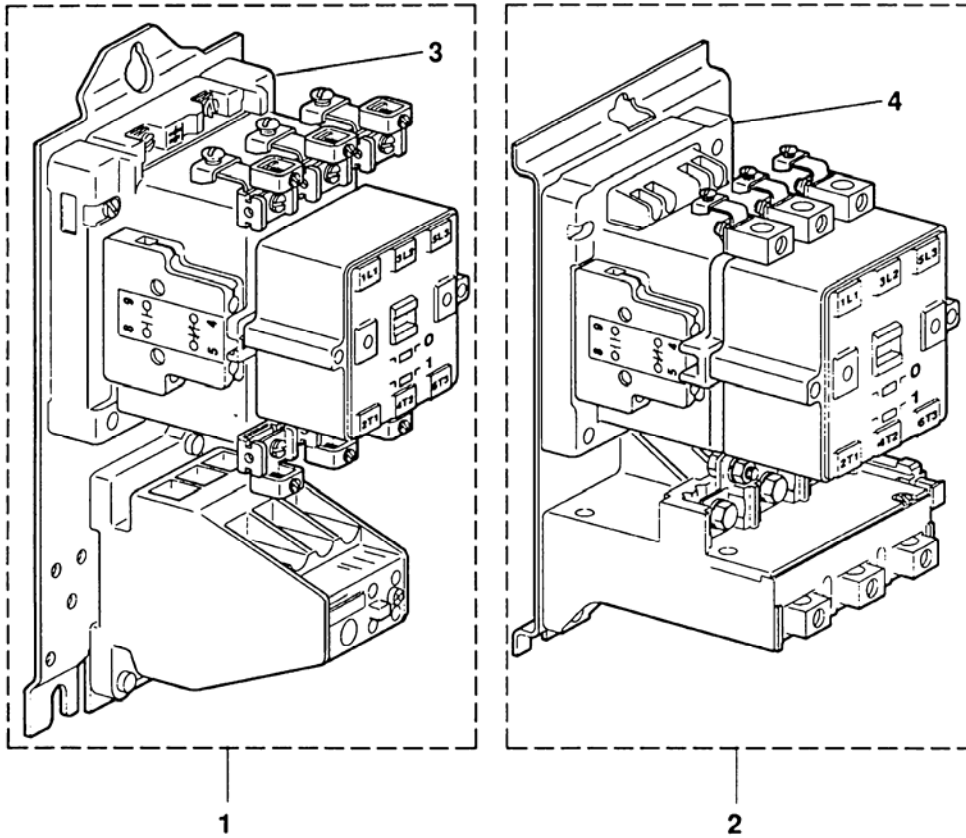
NOTE 1: New parts are not illustrated. They will be supplied once existing stock of old part is exhausted (denoted by strikethrough). Refer to description area on page 2 for additional information.

For replacement parts to the new part assemblies, refer to table on page 20.

NOTE 2: The “CRL” series were replaced by the “CRLOF” series contactors and apply only to old part numbers. Use for ordering replacement parts (pages 8 and 9) to the old part assemblies only.

NOTES: The Siemens series 3TB is shown pictorially. You will receive a series 3TF when ordering a replacement starter or contactor assembly.

For parts information on the overload relay, refer to the applicable controller spare parts leaflet.



REF. No.	W/O VINTAGE		DESCRIPTION (NOTE 2)
	OLD PART No.	NEW PART No.	
	NOTE 1		
1	7151W1	---	Assembly, NEMA 2 Starter with Overload Relay, 16-25 A (Siemens series SXLOF46)
		7151W101	Assembly, NEMA 2 Starter with Overload Relay, 14-20 A
		7151W102	Assembly, NEMA 2 Starter with Overload Relay, 18-25 A
2	AAA638Y1	AAA638Y101	Assembly, NEMA 3 Starter (Siemens series SXLOF48)
3	AAA638R2	AAA638R107	Assembly, NEMA 2 Contactor (Siemens series 3TF46)
4	AAA638A2	AAA638A110	Assembly, NEMA 3 Contactor (Siemens series 3TF48)

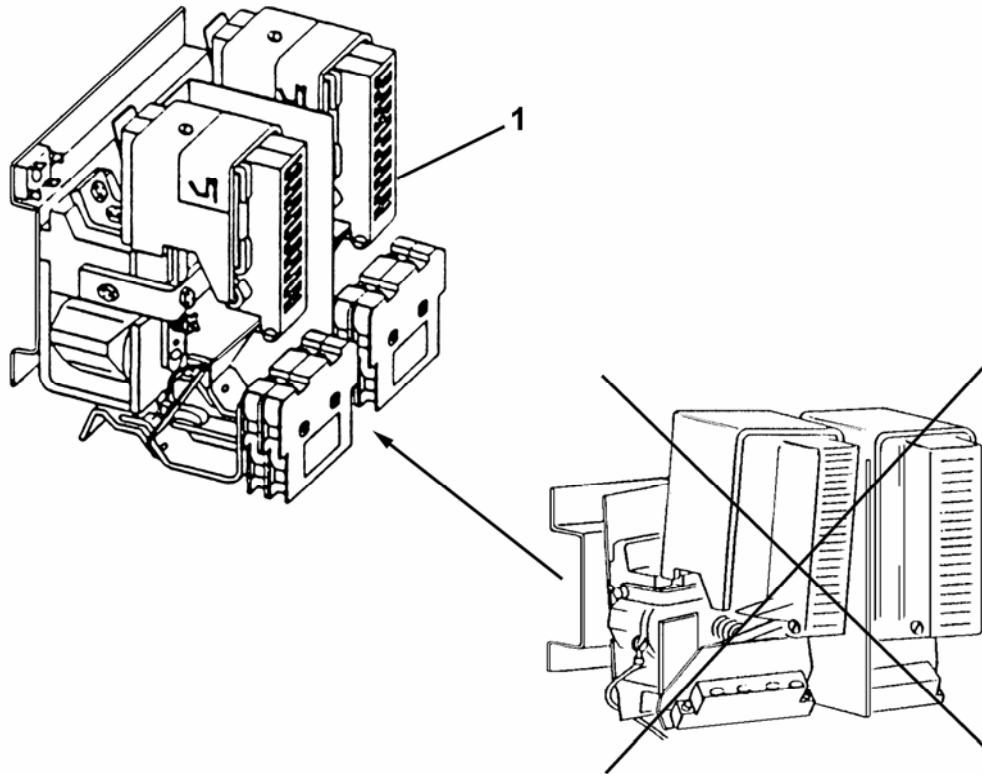
NOTE 1: New parts are not illustrated. They will be supplied once existing stock of old part is exhausted (denoted by strikethrough). Refer to description area on page 2 for additional information.

For replacement parts to the new part assemblies, refer to table on page 20.

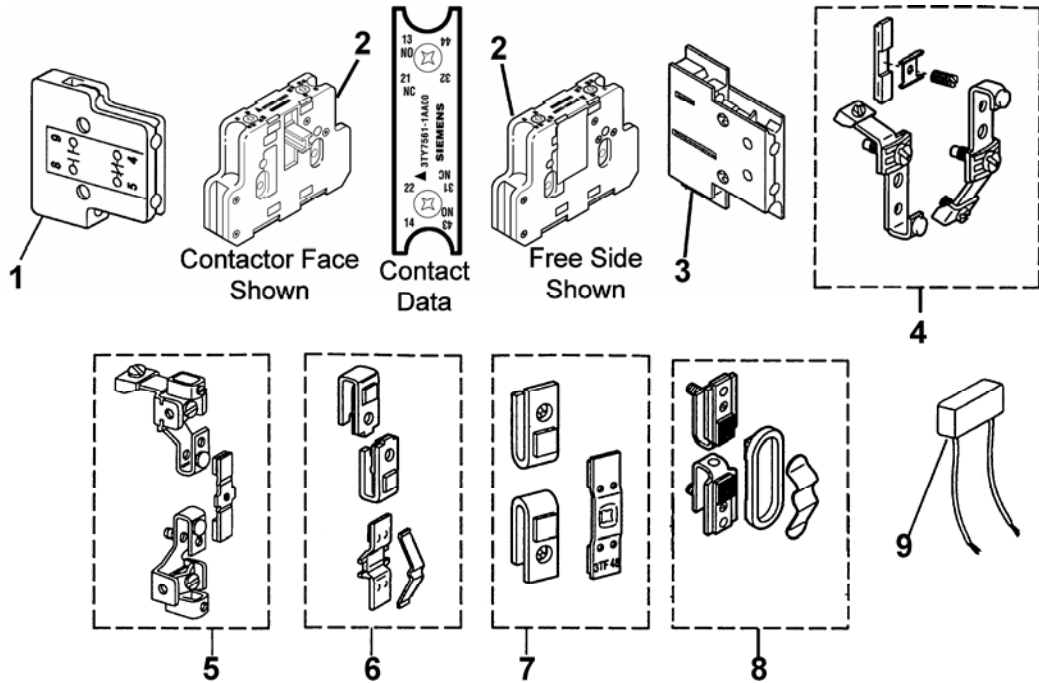
NOTE 2: Use "3TF" and "SXLOF" designators for ordering "Old Part No." replacement components (pages 8 and 9) only.

Type 7151AP Siemens DC Contactor - NEMA 4-1/2

10-7151A



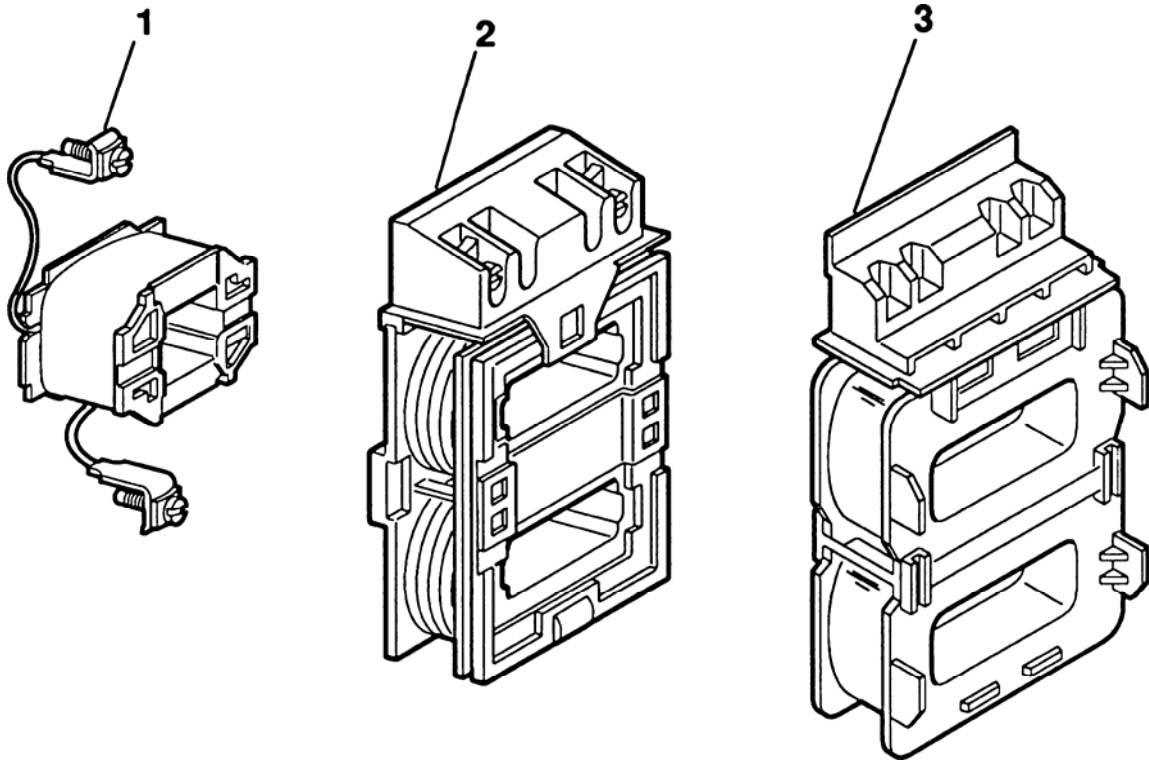
REF. No.	W/O VINTAGE PART No.	DESCRIPTION
1	7151AP4 SA14-193-770-571	Assembly, Single Contactor, DC, 250 V Coil, NEMA 4-1/2
	7151AP2 SA14-193-770-567	Assembly, Contactor, DC, 125 V Coil, NEMA 4-1/2,
	7151AP3 SA14-193-770-572	Assembly, Contactor, DC, Reversing, NEMA 4-1/2, 250 V Coil, w/Rectifier (E401 Drive Application)
	7151AP4 SA14-193-770-570	Assembly, Contactor, DC, Reversing, NEMA 4-1/2, 125 V Coil, w/o Rectifier (E401 Drive Application)
	LA5P31-0093 SA14-193-770-568	Assembly, Contactor, DC, Reversing, NEMA 4-1/2, 125 V Coil, w/Rectifier (E411 Drive Application)



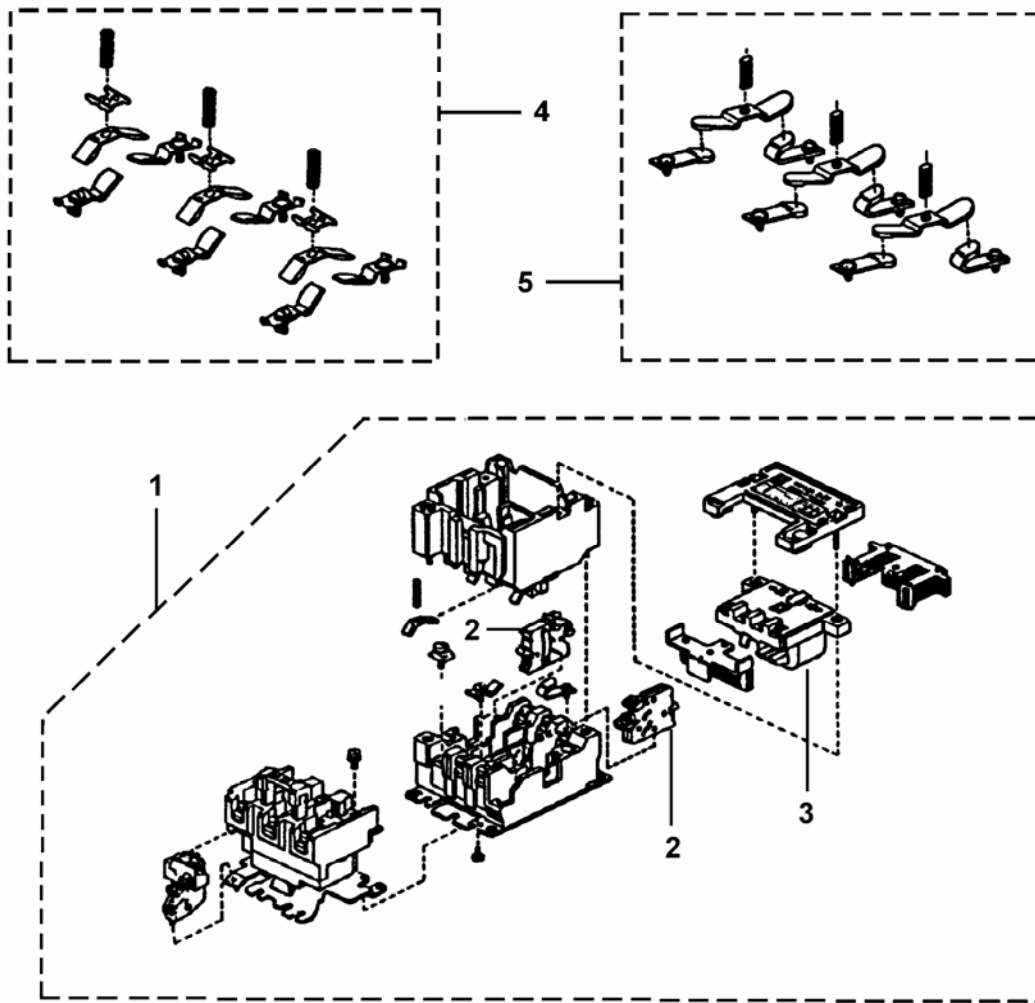
W/O VINTAGE				
REF. No.	PART No.	TYPE OF MAGNET SWITCH	NEMA SIZE	DESCRIPTION
1	7151B-SA/3TY6501-1A	CXL1013	---	Contact, Auxiliary,
	7151B-SA/3TY6501-1B	3TB		Contact, Auxiliary,
2	AAA156BN4	3TF, CRLOF		Contact, Auxiliary, or
3	AAA00156AAB001	CRLOB52	4	Contact, Auxiliary,
	AAA00156AAB002			Contact, Auxiliary,
4	7151B/3TY6440-0A	CXL1013	1	Kit, Main Contact
	7151B-SA/3TY6440-0A	3TB44		
5	7151D/3TY6460-0A	CXL2013	2	
	7151D-SA/3TY6460-0A	3TB46		
6	7151F-SA/3TY6480-0A	CXL3013	3	
	7151F/3TY6480-0A	3TB48		
7	AAA638AK101	3TF44	1	
	AAA156BM4	3TF46	2	
	AAA156BM5	CRLOF47	2-1/2	
	AAA156BM6	3TF48	3	
	AAA156BM7	CRLOF50	3-1/2	
	AAA156BM8	CRLOF52	4	
	AAA156BM9	CRLOF54	4-1/2	
8	AAA00156AAA001	CRLOB52	4	
9	605H1	---	---	Suppressor

Siemens Replacement Coils

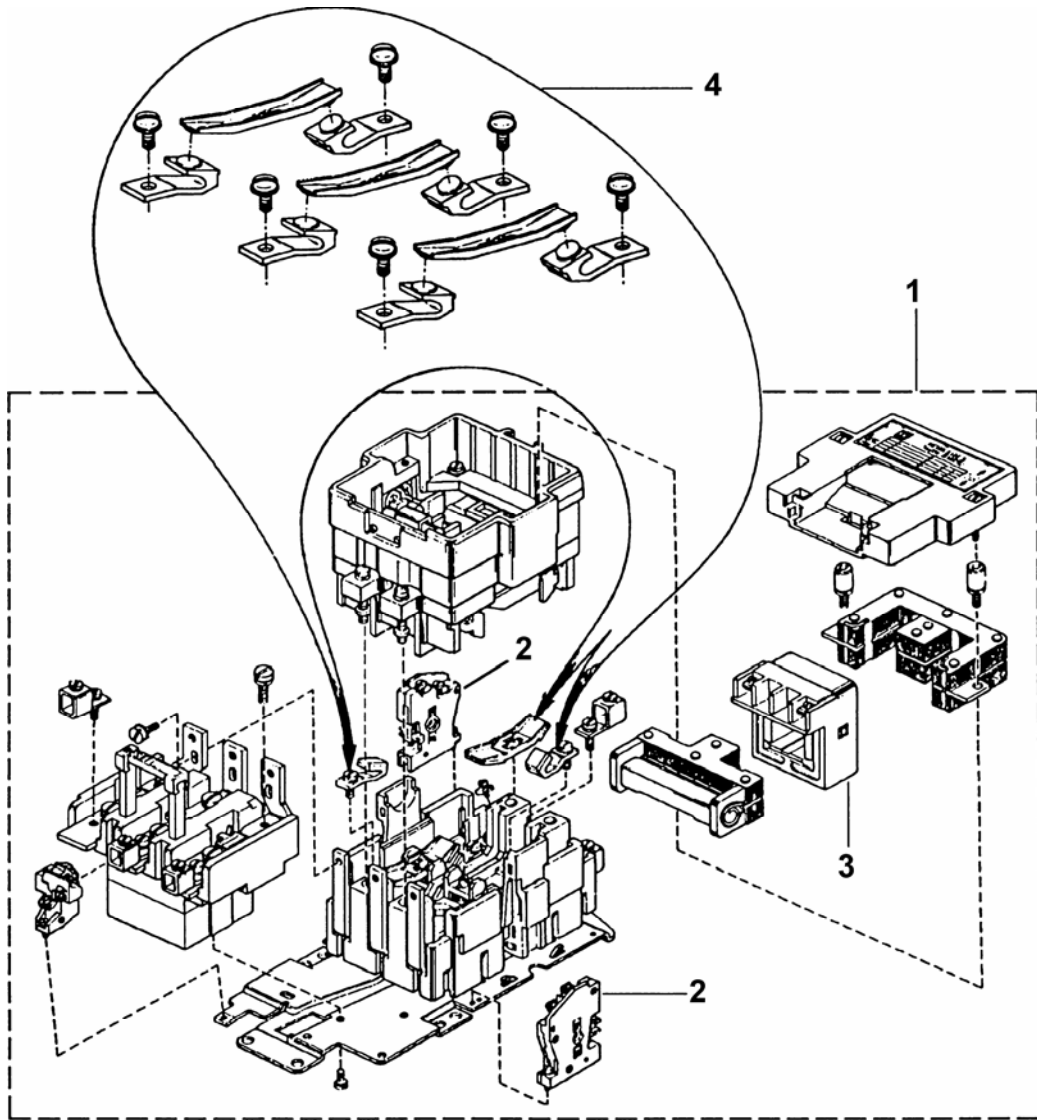
10-7151A



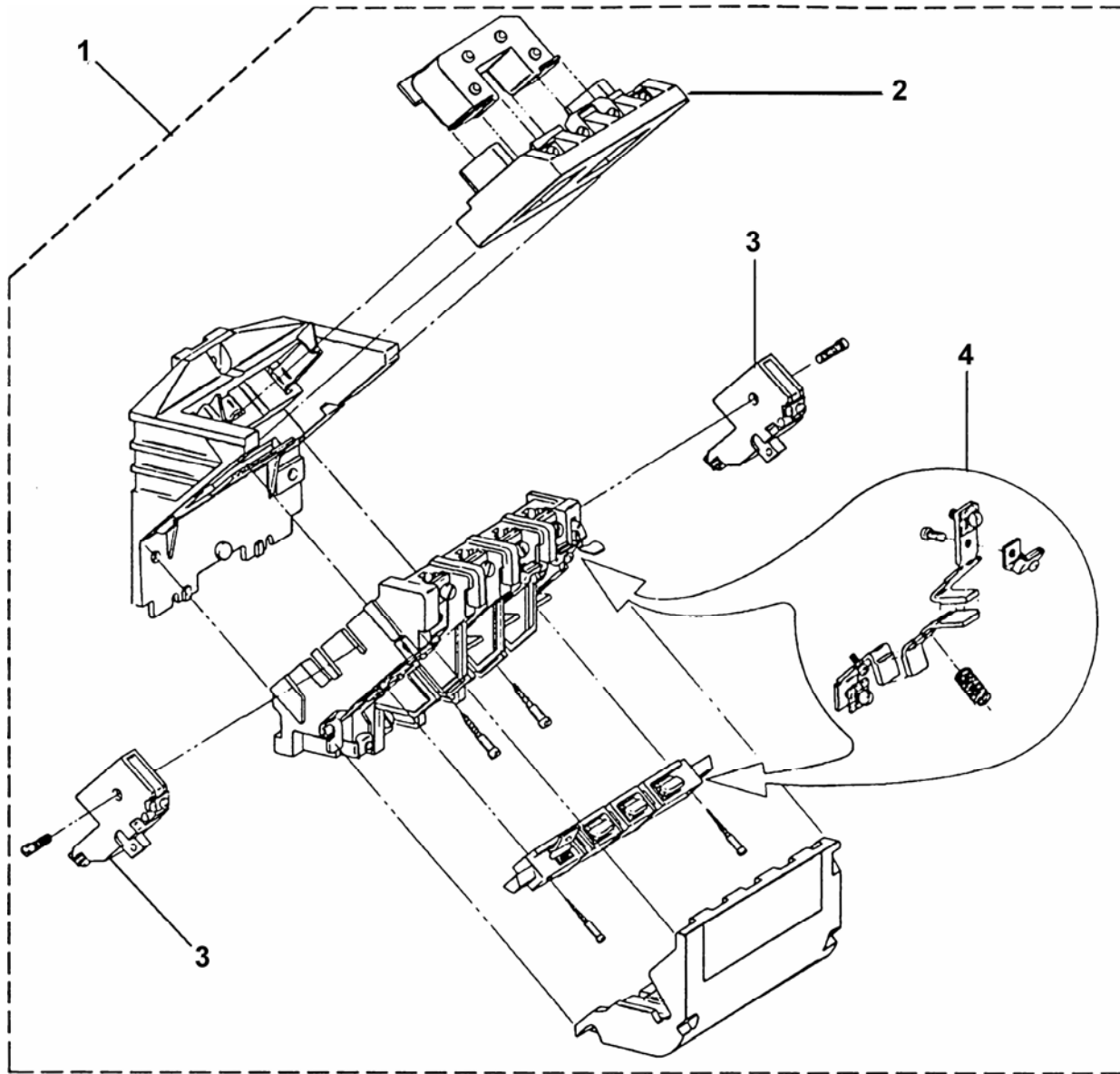
W/O VINTAGE				
REF.NO.	PART NO.	TYPE of MAGNET SWITCH	NEMA SIZE	DESCRIPTION
1	7151B/3TY4803-OAK6	3TB44	1	Coil, 110 V, 60 Hz
		CXL1013		
	AAA638AK100	3TF44	2	
	7151D/3TY6465-OAA8	3TB46		
CXL2013		2		
AAA234AD4	3TF46	2		
		2-1/2		
2	7151F/3TY6485-OAA8	3TB48	3	
		CXL3013		
	AAA234AD6	3TF52	4	
	AAA234AD5	3TF48	3	
	AAA234AD8	3TF50	3-1/2	
AAA234AD9	3TF54	4-1/2		
3	AAA00222AAA001	CRLOB52	4	
		3TB52		



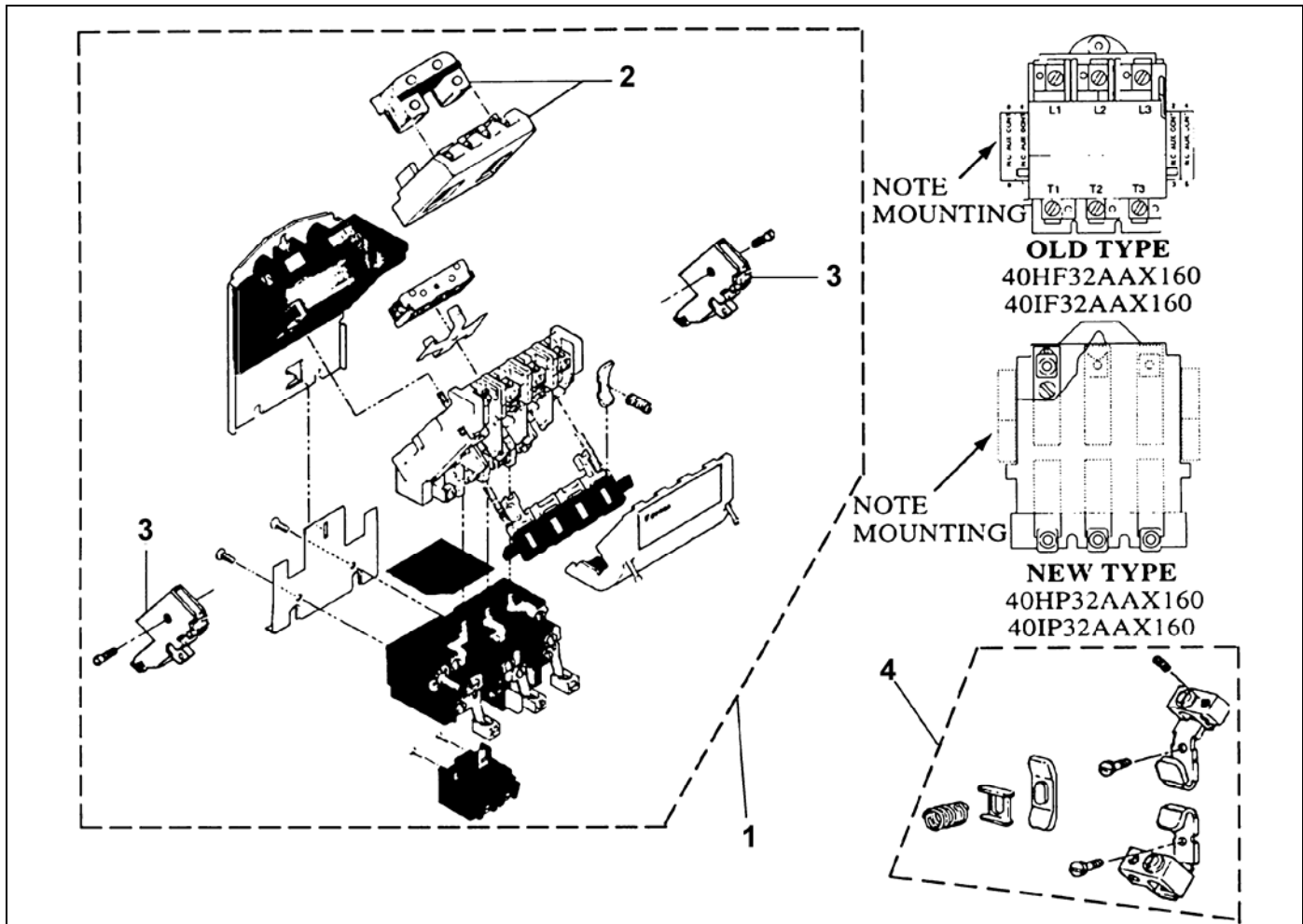
W/O VINTAGE				
REF. No.	PART No.	DESCRIPTION	NEMA SIZE	
1	7151B1/SQ-D	Assembly, Contactor, Square D Co.	1	
	AAA638AK1	Assembly, Contactor, Siemens Mfg.		
	7151D4/SQ-D	Assembly, Contactor, Square D Co.	2	
	AAA638R2 AAA638R107	Assembly, Contactor, Siemens Mfg., See p. 4		
2	7151B/9999SX-6	Contact, Auxiliary, Normally Open	---	
	7151B/9999SX-7	Contact, Auxiliary, Normally Closed		
3	7151B/31041-400-42	Coil	1	
	7151D/31063-409-38		2	
4	7151B/SL-3	Kit, Contact, 3-Pole, <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>ORDER</td></tr></table> Qty. 1	ORDER	1
ORDER				
5	7151D/SL-4	2		



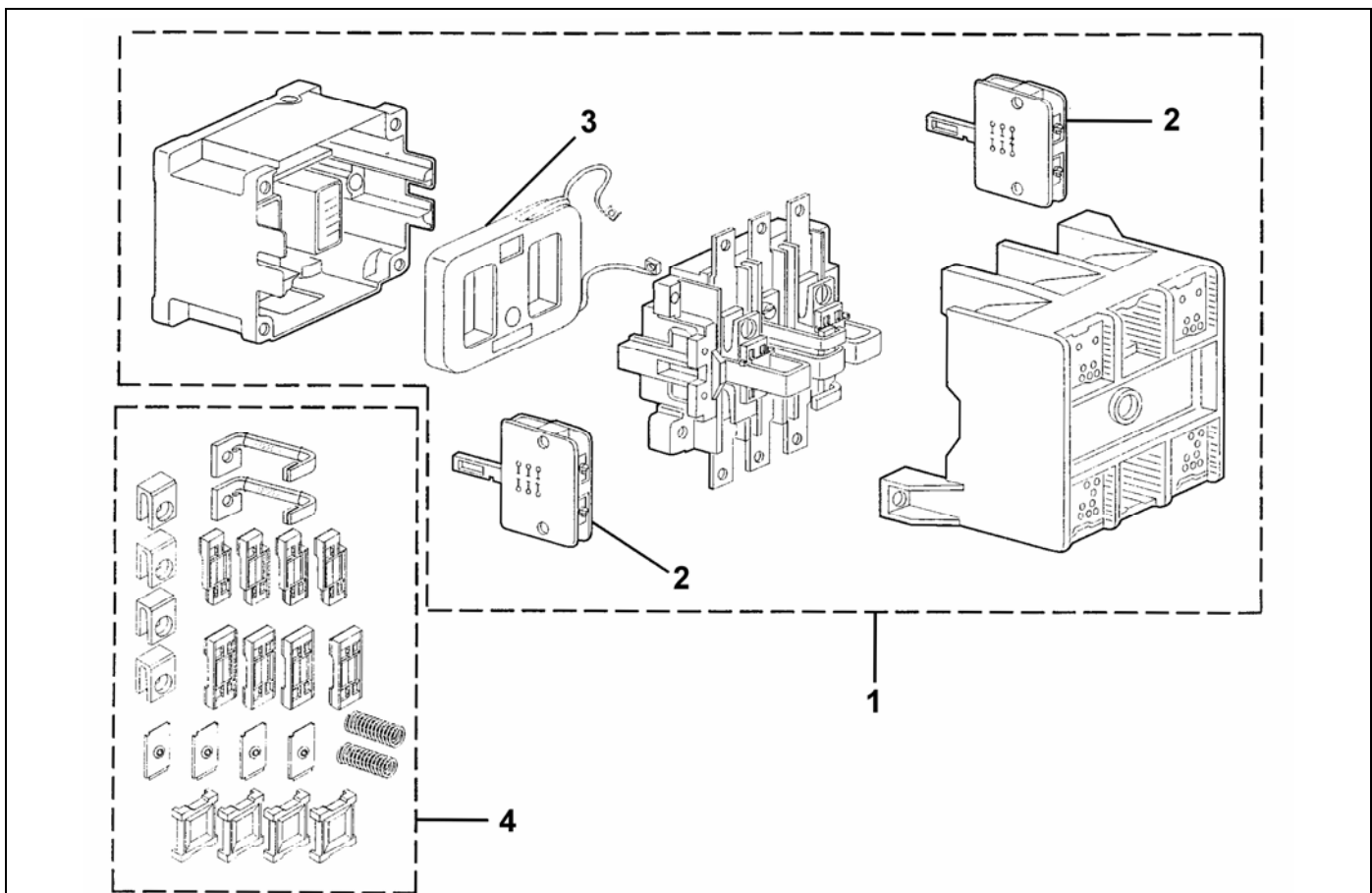
REF. No.	W/O VINTAGE PART No.	DESCRIPTION	
1	7151F1/SQ-D 7151F1 AAA638A2 AAA638A110	Assembly, Contactor, NEMA 3, See p. 4	
2	7151B/9999SX-6	Contact, Auxiliary, Normally Open	
	7151B/9999SX-7	Contact, Auxiliary, Normally Closed	
3	7151F/31074-400-38	Coil	
4	7151F/SL-7	Kit, Contact, 3-Pole, <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>ORDER</td></tr></table> Qty. 1	ORDER
ORDER			



W/O VINTAGE				
REF. No.	PART No.	DESCRIPTION	NEMA SIZE	
1	7151A1	Assembly, Contactor	1	
	7151A2		1-3/4	
2	7151A/75D73070A	Coil	1 & 1-3/4	
3	7151A/49D54682-NO	Contact, Auxiliary, Closed	1 & 1-3/4	
	7151A//49D54682-NC	Contact, Auxiliary, Open		
4	7151A/75DF14	Kit, Contact, 1-Pole, <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>ORDER</td></tr></table> Qty. 3	ORDER	1
	ORDER			
7151A/75EF14	1-3/4			

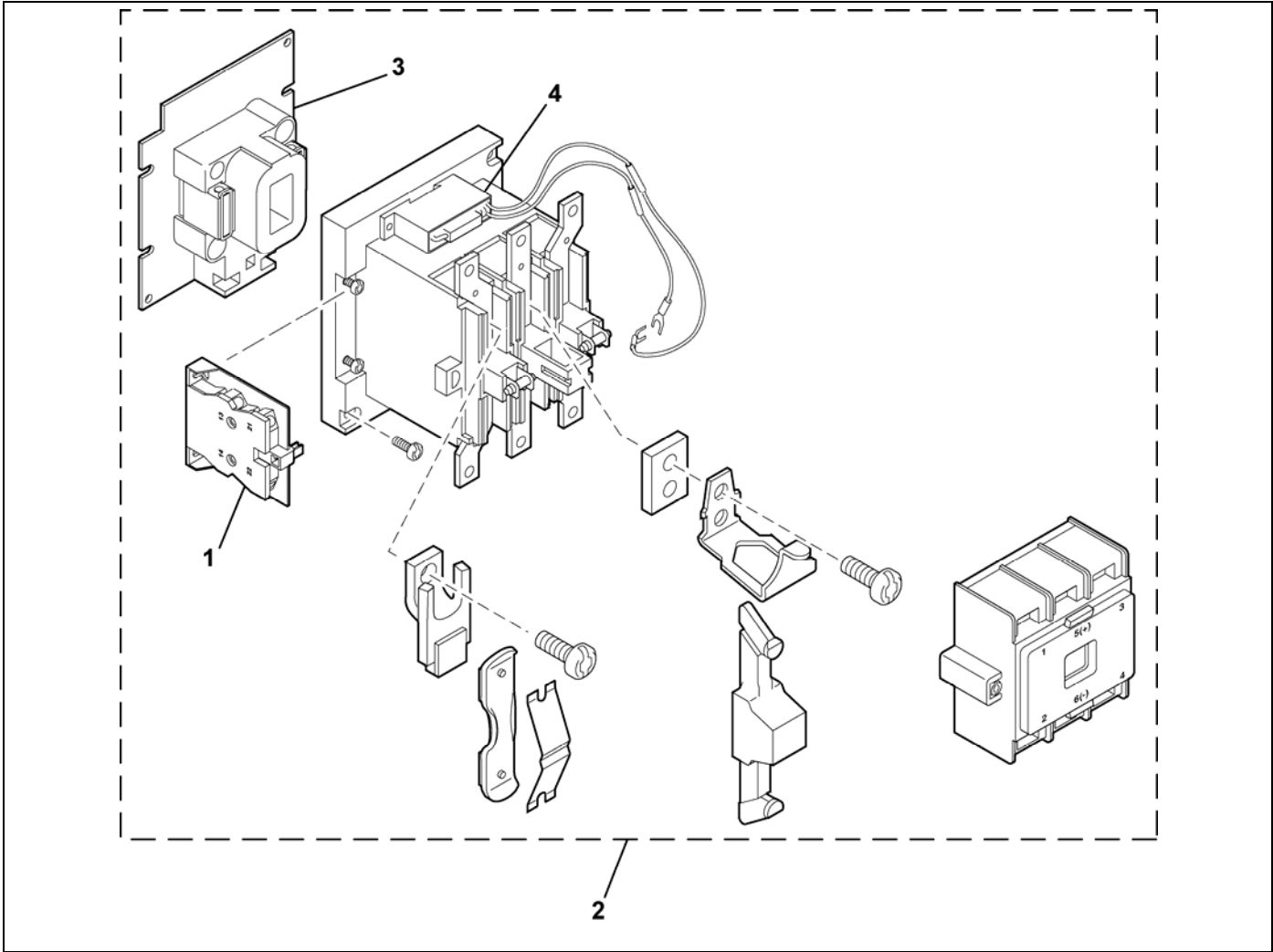


REF. No.	PART No.	DESCRIPTION	NEMA SIZE	
1	7151C1	Assembly, Contactor	2	
	7151C2		2-1/2	
	7151E1		3	
	7151E2		3-1/2	
2	7151C/75D73070A	Coil	2 & 2-1/2	
	7151E/75D73251A		3 & 3-1/2	
3	7151A/49D54682-NC	Contact, Auxiliary, Normally Closed	Old Type	
	7151A/49D54682-NO	Contact, Auxiliary, Normally Open		40HF32AAX160
	7151A/49AAFC-NC	Contact, Auxiliary, Normally Closed	New Type	
	7151A/49AAFO-NO	Contact, Auxiliary, Normally Open		40IF32AAX160
4	7151C/75FF14	Kit, Contact, 1-Pole, <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>ORDER</td></tr></table> Qty. 3	ORDER	2
	ORDER			
	7151C/75GF14		2-1/2	
	7151E/75HF14		3	
7151E/75IF14	3-1/2			

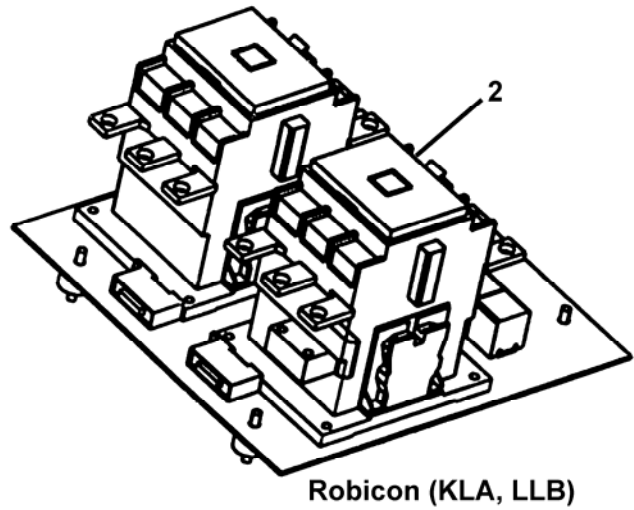
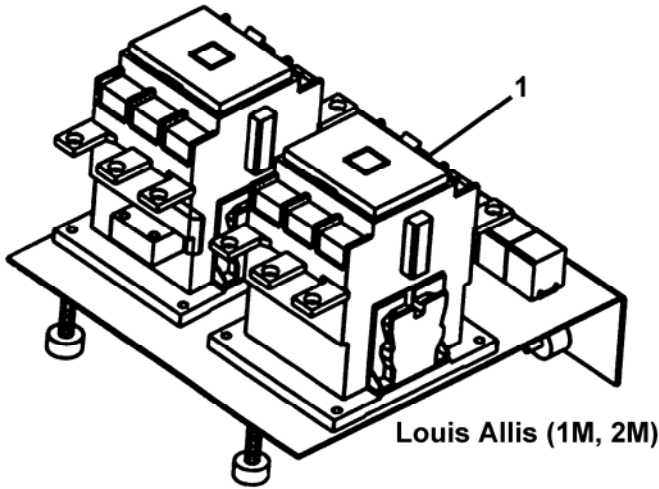


REF. No.	W/O VINTAGE PART No. (see NOTE)	DESCRIPTION
1	LA5P31-0070	Assembly, Contactor, 60 Hz, NEMA 3
	LA5P31-0071	Assembly, Contactor, 60 Hz, NEMA 4
	LA5P31-0078	Assembly, Contactor, 50 Hz, NEMA 3
	LA5P31-0079	Assembly, Contactor, 50 Hz, NEMA 4
2	ASEA-SK415037A	Contact, Auxiliary, 2 NO, 1 NC (opposite coil side)
	ASEA-SK415037B	Contact, Auxiliary, 1 NO, 1 NC (coil side)
3	ASEA-EG160RCA	Coil, 110 V AC, 60 Hz, NEMA 4
	ASEA-EG80RCA	Coil, 110 V AC, 60 Hz, NEMA 3
	ASEA-EG160RCGH	Coil, 110 V AC, 50 Hz, NEMA 4
	ASEA-EG80RCH	Coil, 110 V AC, 50 Hz, NEMA 3
4	ASEA-EFLG160CK	Kit, Contact, Main, NEMA 4
	ASEA-EFLG80CK	Kit, Contact, Main, NEMA 3

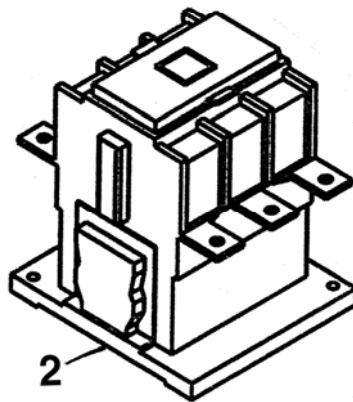
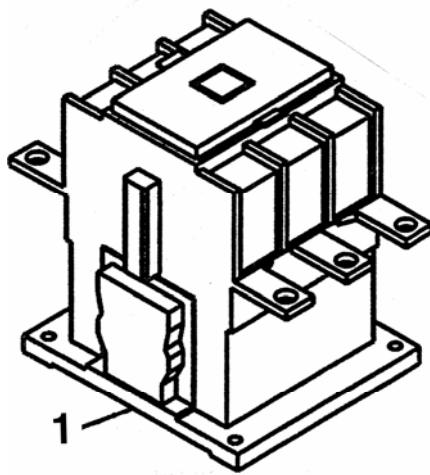
NOTE: These parts are superseded. Order replacement contactors per the table on pages 18-19. If your replacement duty number (listed on the controller cabinet) is not in the table, please contact your OSC Customer Service representative for assistance.



	W/O VINTAGE	
REF. No.	PART No.	DESCRIPTION
1	AAA638AE100	Contact, Auxiliary, 1 NO, 1 NC Contact, Left-Side Mount
	AAA638AE101	Contact, Auxiliary, 1 NO, 1 NC Contact, Right-Side Mount
2	AAA638AE1 AAA638AE5 AAA638AE6	Contact, 280 Amps DC (steady state), 2 NO, 1 NC Power Poles, w/1 NO, 1 NC Auxiliary Contacts (per side) and w/Suppressor
	AAA638AE2 AAA638AE4 AAA638AE7 AAA638AE9	Contact, 220 Amps DC (steady state), 2 NO, 1 NC Power Poles, w/1 NO, 1 NC Auxiliary Contacts (per side),and w/Suppressor
3	AAA638AE50	Kit, Coil, W → AAA638AE1
	AAA638AE51	Kit, Coil, W → AAA638AE2
	AAA638AE53	Kit, Coil, W → AAA638AE4
	AAA638AE54	Kit, Coil, W → AAA638AE5, AAA638AE9
4	AAA638AE110	Suppressor, Surge, 120 VAC



W/O VINTAGE					
REF. No.	PART No.	RATED CURRENT	RATED VOLTAGE	MAIN CONTACTS (per contactors)	AUXILIARY CONTACTS (per contactors)
1	AAA638AB1 ABA638AB1 ABA638AB3	130	110/115, 50 Hz; 115/120, 60 Hz	2 NO, 1 NC	2 NO, 1 NC
	AAA638AB3 AAA638AB5 ABA638AB3	220			
	AAA638AB5 ABA638AB5	280			
2	AAA638AB2 ABA638AB2 ABA638AB4	130			
	AAA638AB4 ABA638AB6 ABA638AB4	220			
	AAA638AB6 ABA638AB6	280			



W/O VINTAGE

REF. No.	PART No.	HEIGHT	RATED	RATED CURRENT/ Hz	MAIN VOLTAGE CONTACTS (per contactors)	AUXILIARY CONTACTS (per contactors)
1	AAA638AE1 AAA638AE3 AAA638AE5	178 mm (7.00 in.)	280	110/115, 50	2 NO, 1 NC	2 NO, 1 NC
2	AAA638AE2 AAA638AE4 AAA638AE7 AAA638AE9		220	110/115, 50; 115/127, 60		

ABB® Contactor Replacement Table

Duty No.	Machine	Speed	Load	Otis p/n
1	131HT	500	2000	ABA638AB1 ABA638AB3
4		500	2500	ABA638AB1 ABA638AB3
8		500	3000	ABA638AB5
15		500	3500	ABA638AB5
5		600	2500	ABA638AB1 ABA638AB3
9		800	3000	ABA638AB5
2		700	2000	ABA638AB1 ABA638AB3
6		700	2500	ABA638AB1 ABA638AB3
1A		139HT	500	2000
4A	500		2500	ABA638AB1 ABA638AB3
15A/16A	500		3500	ABA638AB5
22A	500		4000	ABA638AB5
9A	600		3000	ABA638AB5
2A	700		2000	ABA638AB1 ABA638AB3
6A	700		2500	ABA638AB1 ABA638AB3
10A	700		3000	ABA638AB1 ABA638AB3
17A	700		3500	ABA638AB5
23A	700		4000	ABA638AB5
3A	800		2000	ABA638AB1 ABA638AB3
7A	800		2500	ABA638AB1 ABA638AB3
11A	800		3000	ABA638AB1 ABA638AB3
18A	800		3500	ABA638AB5

(Continued on next page)

ABB® Contactor Replacement Table

10-7151A

Duty No.	Machine	Speed	Load	Otis p/n
16	155HT	500	3500	ABA638AB1 ABA638AB3
22		500	4000	ABA638AB5
29	155HT (141 rpm)	500	4500	ABA638AB5
29A	155HT (159 rpm)	500	4500	ABA638AB5
30	155HT (141 rpm)	500	5000	ABA638AB5
30A	155HT (159 rpm)	500	5000	ABA638AB5
10	155HT	700	3000	ABA638AB1 ABA638AB3
17		700	3500	ABA638AB1 ABA638AB3
23		700	4000	ABA638AB5
18B		800	3500	ABA638AB1 ABA638AB3
24A		800	4000	ABA638AB5
31		219HT	500	5000
33	500		6000	ABA638AB5
38	500		7000	ABA638AB5
32	700		5000	ABA638AB5

Replacement Parts for New Series of Siemens Contactors

NEW P/N	COIL	MAIN CONTACT	AUX. CONTACT	SUPPRESSOR	INTERLOCK	OLD P/N (reference only)
AAA638A110	AAA234AD105	AAA156BM106	AAA156BN104	AAA00605AAA114	---	AAA638A2
AAA638A110	AAA234AD105	AAA156BM106	AAA156BN104	AAA00605AAA114	---	AAA638A10
AAA638C106	AAA234AD107	AAA156BM105	AAA156BN104	AAA00605AAA114	AAA654A102	AAA638C2
AAA638C106	AAA234AD107	AAA156BM105	AAA156BN104	AAA00605AAA114	AAA654A102	AAA638C6
AAA638D106	AAA234AD113	AAA156BM106	AAA156BN104	AAA00605AAA109	AAA654A102	AAA638D1
AAA638D106	AAA234AD113	AAA156BM106	AAA156BN104	AAA00605AAA109	AAA654A102	AAA638D6
AAA638D107	AAA234AD105	AAA156BM106	AAA156BN104	AAA00605AAA114	AAA654A102	AAA638D2
AAA638D107	AAA234AD105	AAA156BM106	AAA156BN104	AAA00605AAA114	AAA654A102	AAA638D7
AAA638D108	AAA234AD120	AAA156BM106	AAA156BN104	AAA00605AAA110	AAA654A102	AAA638D3
AAA638D109	AAA234AD127	AAA156BM106	AAA156BN104	AAA00605AAA110	AAA654A102	AAA638D4
AAA638D108	AAA234AD120	AAA156BM106	AAA156BN104	AAA00605AAA110	AAA654A102	AAA638D8
AAA638D109	AAA234AD127	AAA156BM106	AAA156BN104	AAA00605AAA110	AAA654A102	AAA638D9
AAA638E106	AAA234AD108	AAA156BM107	AAA156BN104	AAA00605AAA114	AAA654A103	AAA638E2
AAA638E106	AAA234AD108	AAA156BM107	AAA156BN104	AAA00605AAA114	AAA654A103	AAA638E6
AAA638F107	AAA234AD106	AAA156BM108	AAA156BN104	AAA00605AAA114	AAA654A103	AAA638F2
AAA638F107	AAA234AD106	AAA156BM108	AAA156BN104	AAA00605AAA114	AAA654A103	AAA638F7
AAA638F107	AAA234AD106	AAA156BM108	AAA156BN104	AAA00605AAA114	AAA654A103	AAA638F11
AAA638F107	AAA234AD106	AAA156BM108	AAA156BN104	AAA00605AAA114	AAA654A103	AAA638F12
AAA638G107	AAA234AD109	AAA156BM109	AAA156BN104	AAA00605AAA114	AAA654A103	AAA638G2
AAA638G107	AAA234AD109	AAA156BM109	AAA156BN104	AAA00605AAA114	AAA654A103	AAA638G7
AAA638R106	AAA234AD111	AAA156BM104	AAA156BN104	AAA00605AAA109	---	AAA638R1
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AAA638R107	AAA234AD104	AAA156BM104	AAA156BN104	AAA00605AAA114	---	AAA638R7
AAA638R113	AAA234AD107	AAA156BM105	AAA156BN104	AAA00605AAA114	---	AAA638R13
AAA638W106	AAA234AD111	AAA156BM104	AAA156BN104	AAA00605AAA109	AAA654A102	AAA638W1
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AAA638W107	AAA234AD104	AAA156BM104	AAA156BN104	AAA00605AAA114	AAA654A102	AAA638W7
AAA638Y101	AAA234AD105	AAA156BM106	AAA156BN104	---	---	AAA638Y1
AAA638AK201	---	---	AAA156BN104	AAA00605AAA114	---	AAA638AK1