

LRV5L, LHML2ST Controller

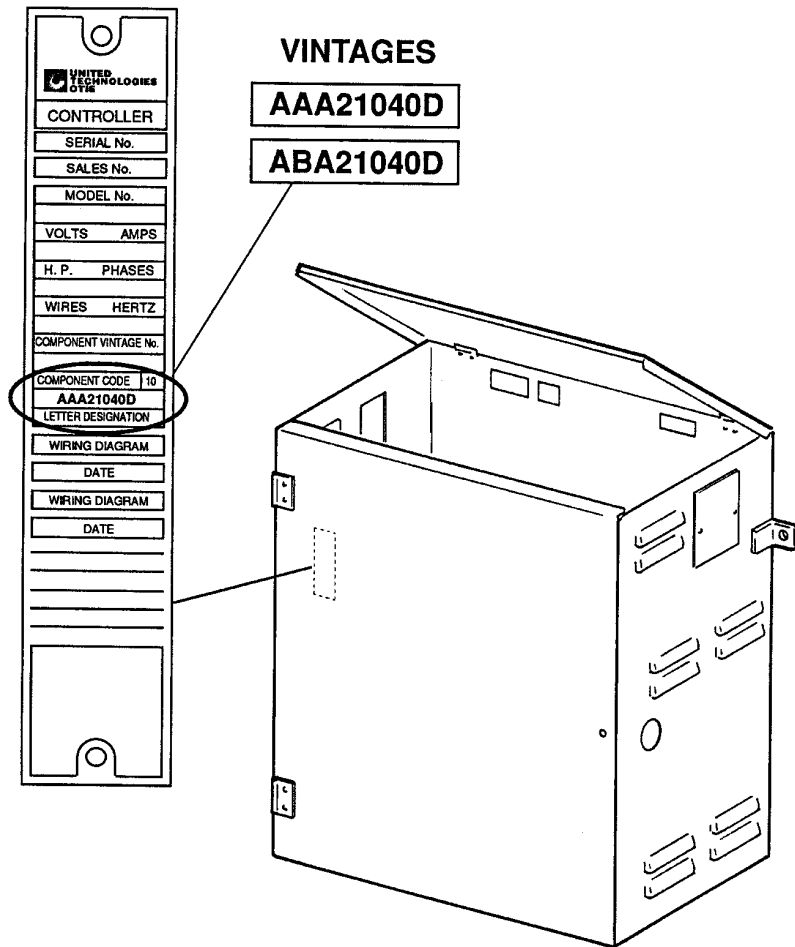
Spare Parts Leaflet

10-AAA21040D

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OBSOLESCENCE NOTICE

The product covered in this SPL has been designated as obsolete and is no longer supported. See TIP 32.2-1, *Obsolete Components*, for potential upgrade. Replacement lower-level parts listed within and unique to this design will be reviewed for obsolescence.



This document does not contain any technical data subject to EAR or ITAR

SERVICE ENGINEERING
Otis Elevator Company
Bloomfield, Connecticut USA

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Leaflet Description

This leaflet provides replacement part information for the LRV5L and LHML2ST controllers for hydro systems.

Leaflet Revisions

Date Revised	Subject Matter Expert	Reason for Revision
July 1990	Jeff Costley, Technical Writer	New SPL
March 1994	---	---
September 20, 2006	John Dwyer	Updated parts listing.
June 1, 2007	John Dwyer	Updated p. 10
September 28, 2009	Matt Fournier	p.8 update parts 613BY17, 19, and 20 to 613BY23 and 613BY24. Update pp. 4 and 5 overload relay pics, p/ns.
February 20, 2013	Ali Bozorgzadeh	Corrected pages 5 and 6
September 21, 2022	Juan Murillo	Updated to include OBSOLESCENCE note on cover

Related Drawings

Drawing No.	Title	Drawing No.	Title
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Related Documents

Document ID	Title
SPL 10-7151A	AC & DC Contactors, Reversing/Wye-Delta Contactors & Starters
TIP 1.2.0-37	Replacing Obsolete Commercial Relays
TIP 1.2.0-38	P613AP6, 7 and 9 Aromat Relay Replacements

Subject Matter Expert

Name	Department
John Dwyer	OSC Service Engineering

About Spare Parts Leaflets...

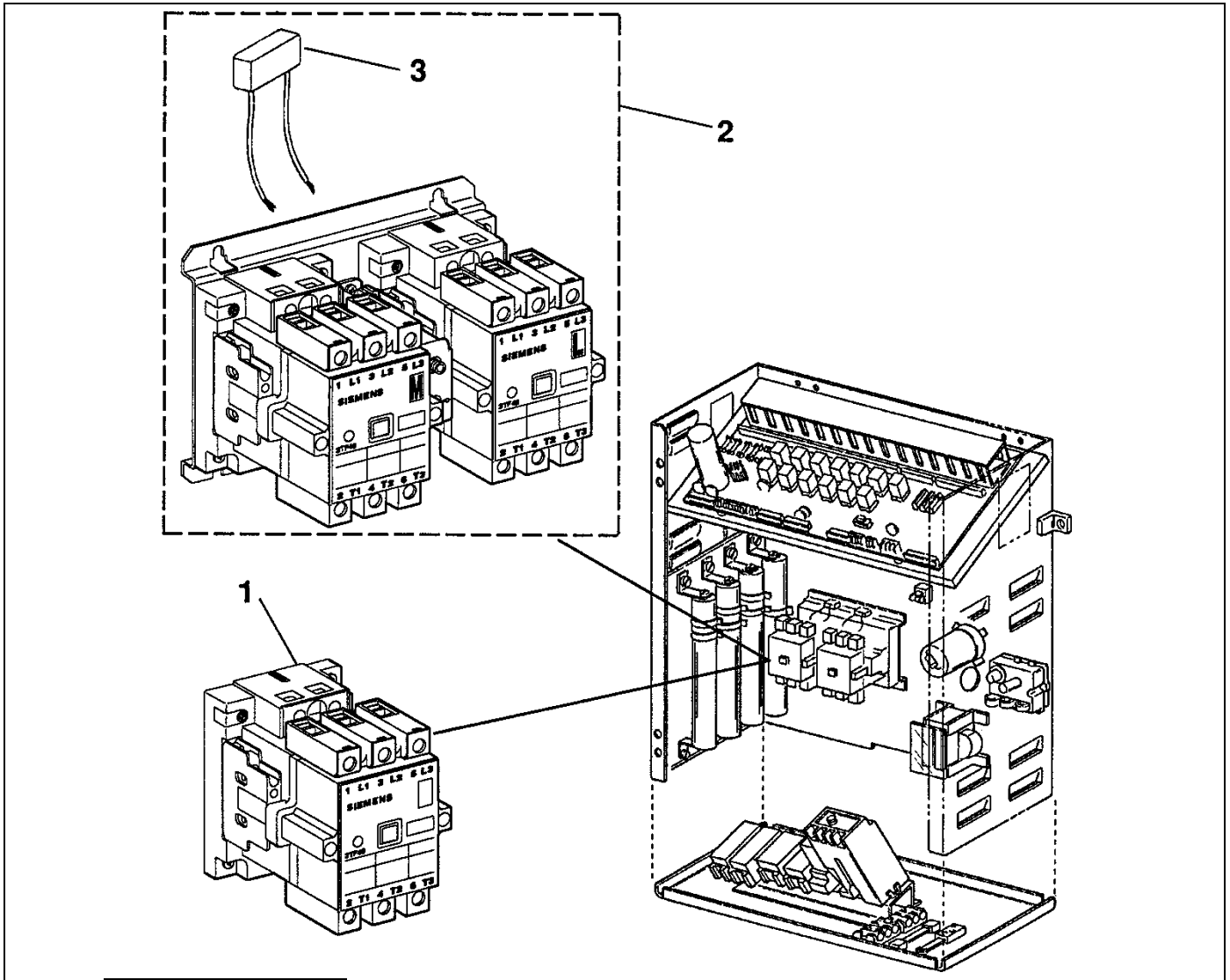
This document lists the lowest replaceable units (LRUs) for the standard version of the product. The LRUs are chosen by a team of Otis associates representing engineering and manufacturing.

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.

Starters

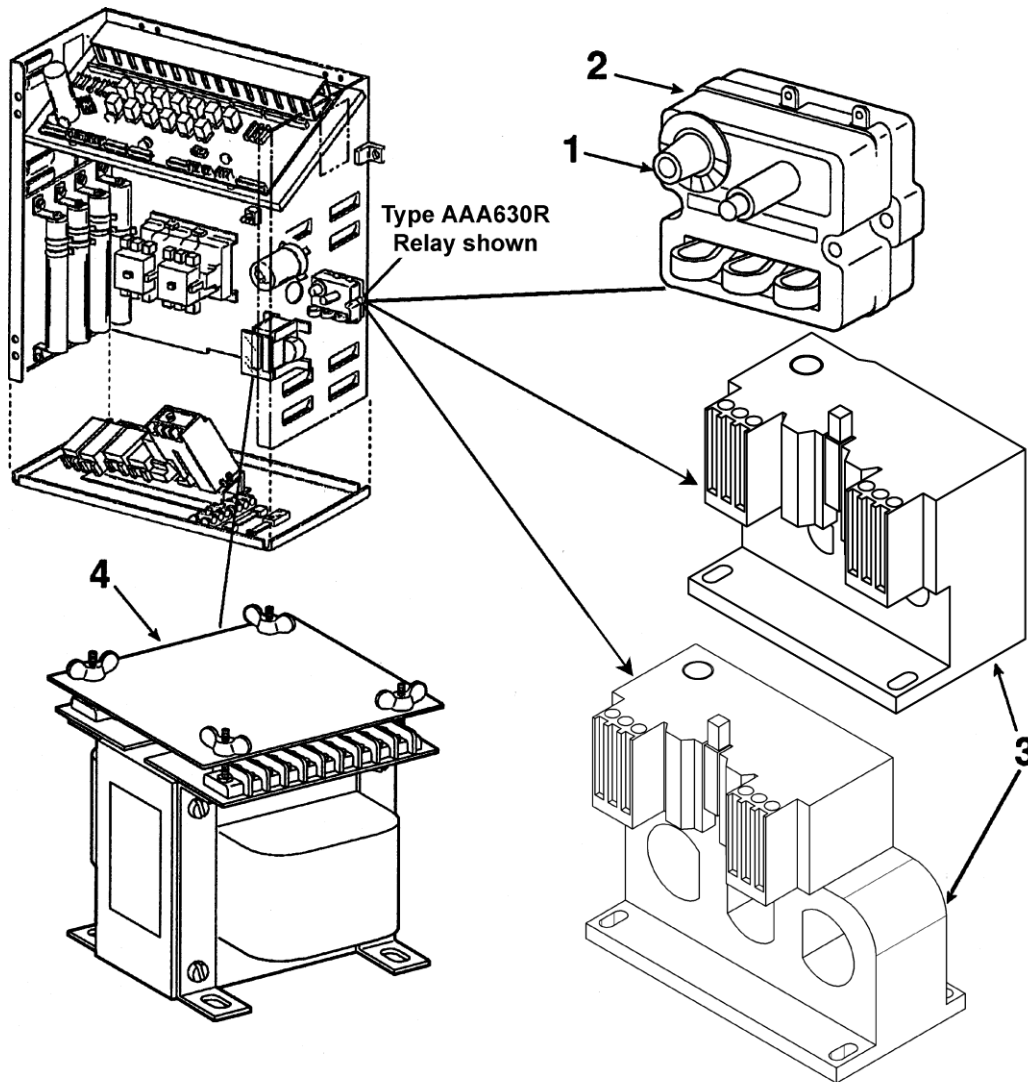
10-AAA21040D




**AAA21040D
ABA21040D**

REF. No.	PART No.	DESCRIPTION	SYMBOL	NEMA	STARTING	VOLTS
1	AAA638A10 AAA638A110	Starter,	PMC	3	Across Line	200–240
	AAA638R7 AAA638R107	See Detail in SPL		2		440–600
2	AAA638W7 AAA638W107	10-7151A	LC-MC	2	Wye-Delta	440–600
	AAA638D7 AAA638D107			3		200–240
3	AAA00605AAA014 or AAA00605AAA114	Suppressor, Transient, 125 VAC, See NOTE				

NOTE: AAA00605AAA014 is used with all earlier version contactors whereas AAA00605AAA114 is used with the latest version contactors (Siemens type 3RT10).



**AAA21040D
ABA21040D**

REF. No.	PART No.	DESCRIPTION	SYMBOL
1	AAA630R7	Overload Adjustment Knob	---
2	AAA630R	Relay, Overload	PTO
3	---	Relay, Overload, Type AAA660B, 10–200 A Adjustable,  Page 5 for Selection and Setting	
4	235DN1	Transformer, 200–240 V	TRF
	235DN2	Transformer, 440–480 V	
	235DN3	Transformer, 550–600 V	

Overload Relay Selection Table

10-AAA21040D

H.P.	VOLTAGE	OTIS P/N	MUST HOLD AMPERES (MHA)	DIAL SETTINGS	TEST CURRENT (2 TO 5 SECONDS)
15	200	AAA660B9 AAA660B109 AAA660B209	55	55	225
15	230	AAA660B9 AAA660B109 AAA660B209	48	48	196
15	460	AAA660B7 AAA660B107 AAA660B207	24	24	98
15	575	AAA660B7 AAA660B107 AAA660B207	20	20	78
20	200	AAA660B40 AAA660B110 AAA660B210	77	77	260
20	230	AAA660B40 AAA660B110 AAA660B210	67	67	227
20	460	AAA660B8 AAA660B108 AAA660B208	33	33	113
20	575	AAA660B7 AAA660B107 AAA660B207	26	26	91
25	200	AAA660B40 AAA660B110 AAA660B210	87	87	357
25	230	AAA660B40 AAA660B110 AAA660B210	76	76	310
25	460	AAA660B8 AAA660B108 AAA660B208	38	38	155
25	575	AAA660B8 AAA660B108 AAA660B208	30	30	124
30	200	AAA660B11 AAA660B111 AAA660B211	106	106	366
30	230	AAA660B11 AAA660B111 AAA660B211	92	92	319
30	460	AAA660B9 AAA660B109 AAA660B209	46	46	159

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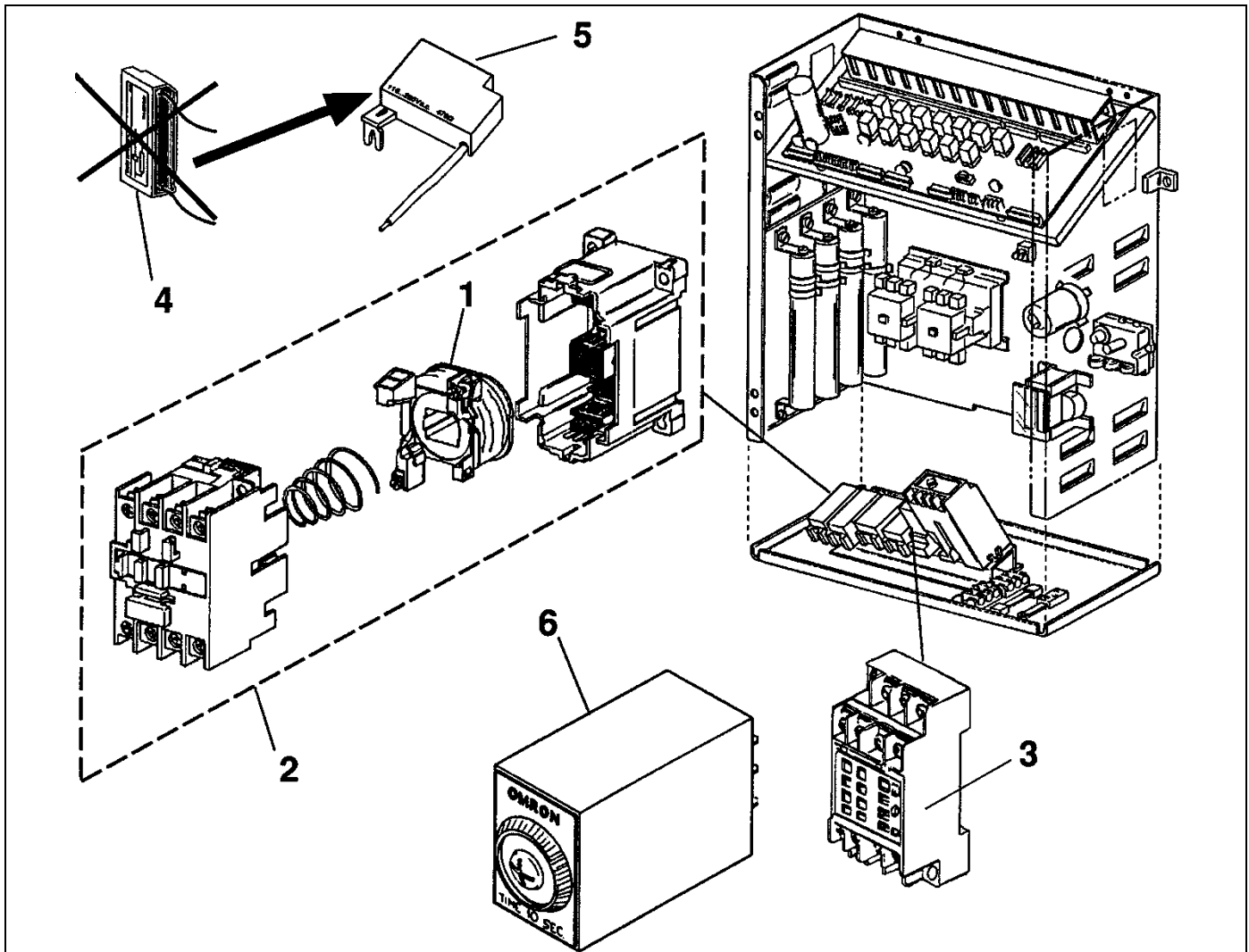
Overload Relay Selection Table

H.P.	VOLTAGE	OTIS P/N	MUST HOLD AMPERES (MHA)	DIAL SETTINGS	TEST CURRENT (2 TO 5 SECONDS)
30	575	AAA660B8 AAA660B108 AAA660B208	37	37	127
40	460	AAA660B9 AAA660B109 AAA660B209	58	58	245
40	575	AAA660B9 AAA660B109 AAA660B209	46	46	196
50	460	AAA660B10 AAA660B110 AAA660B210	72	72	255
50	575	AAA660B9 AAA660B109 AAA660B209	58	58	204
40*	200	AAA660B10 AAA660B110 AAA660B210	77	77	327
40*	230	AAA660B10 AAA660B110 AAA660B210	67	67	284
50*	200	AAA660B11 AAA660B111 AAA660B211	97	97	308
50*	230	AAA660B10 AAA660B110 AAA660B210	84	84	294

*Wired inside DELTA. Others wired in-line.

Door Operator Relays

10-AAA21040D



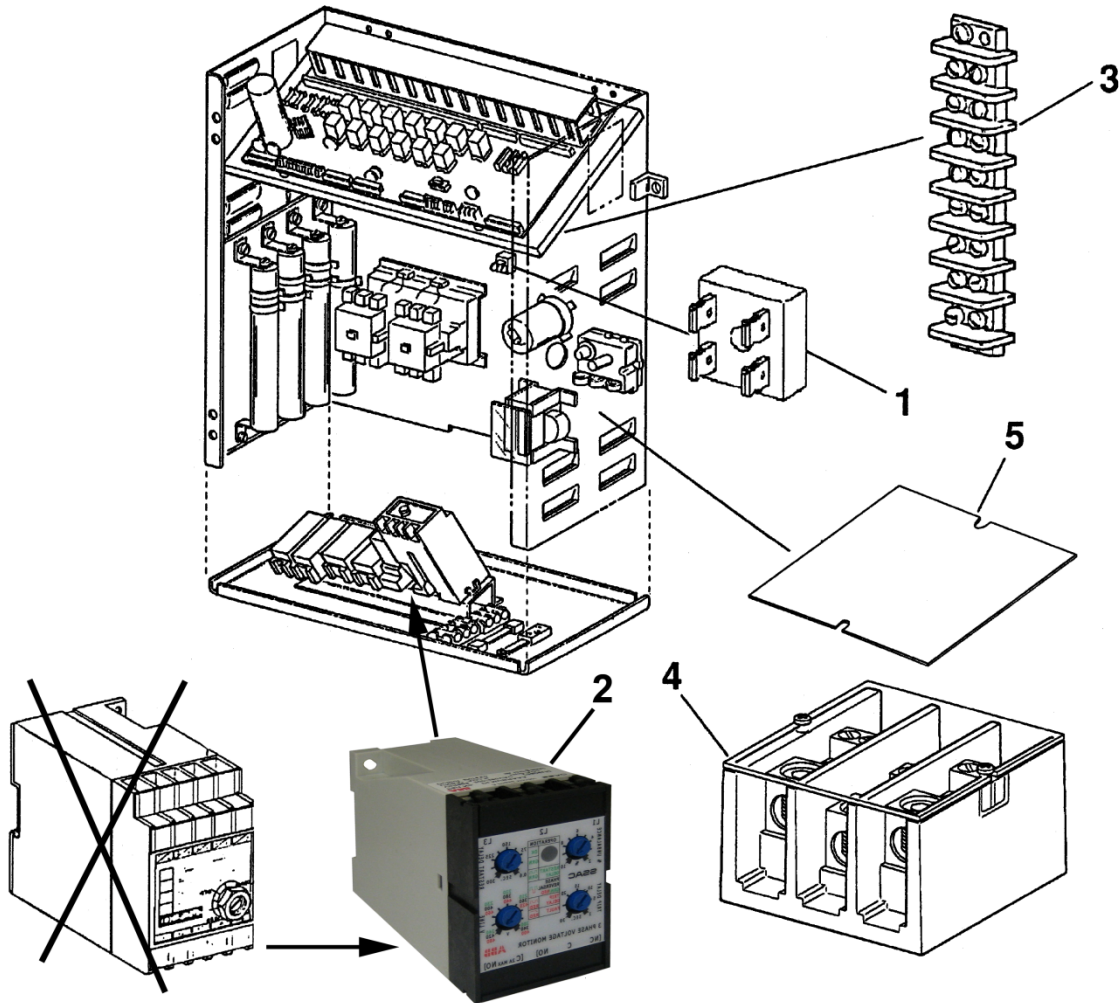
AAA21040D ABA21040D			
REF. No.	PART No.	DESCRIPTION	SYMBOL
1*	613BX /22.122.304-33	Coil	---
2**	613BX13 AAA613DL16	Relay, 120 VAC, 3 NO, 2 NC Contacts	RDOR, RDCR, CSA
	613BX4 AAA613DL17	Relay, 120 VAC, 2 NO, 2 NC Contacts	RHES
3	618AE2	Relay Socket	---
4	605T2	Suppressor, Transient	RC1, RC2, RC3
5	AAA00605AAA018 AAA00605AAA014	Suppressor, Transient, 110–280 VAC, 470 Ohms	
6	P613AY8 P613AY9	Relay, Wye-Delta Timer	---

* Obsolete. Replace it with complete relay AAA613DL16 or DL17.

** Functional replacement. See TIP 1.2.0-37, *Replacing Obsolete Commercial Relays*.

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Reverse Phase Relay

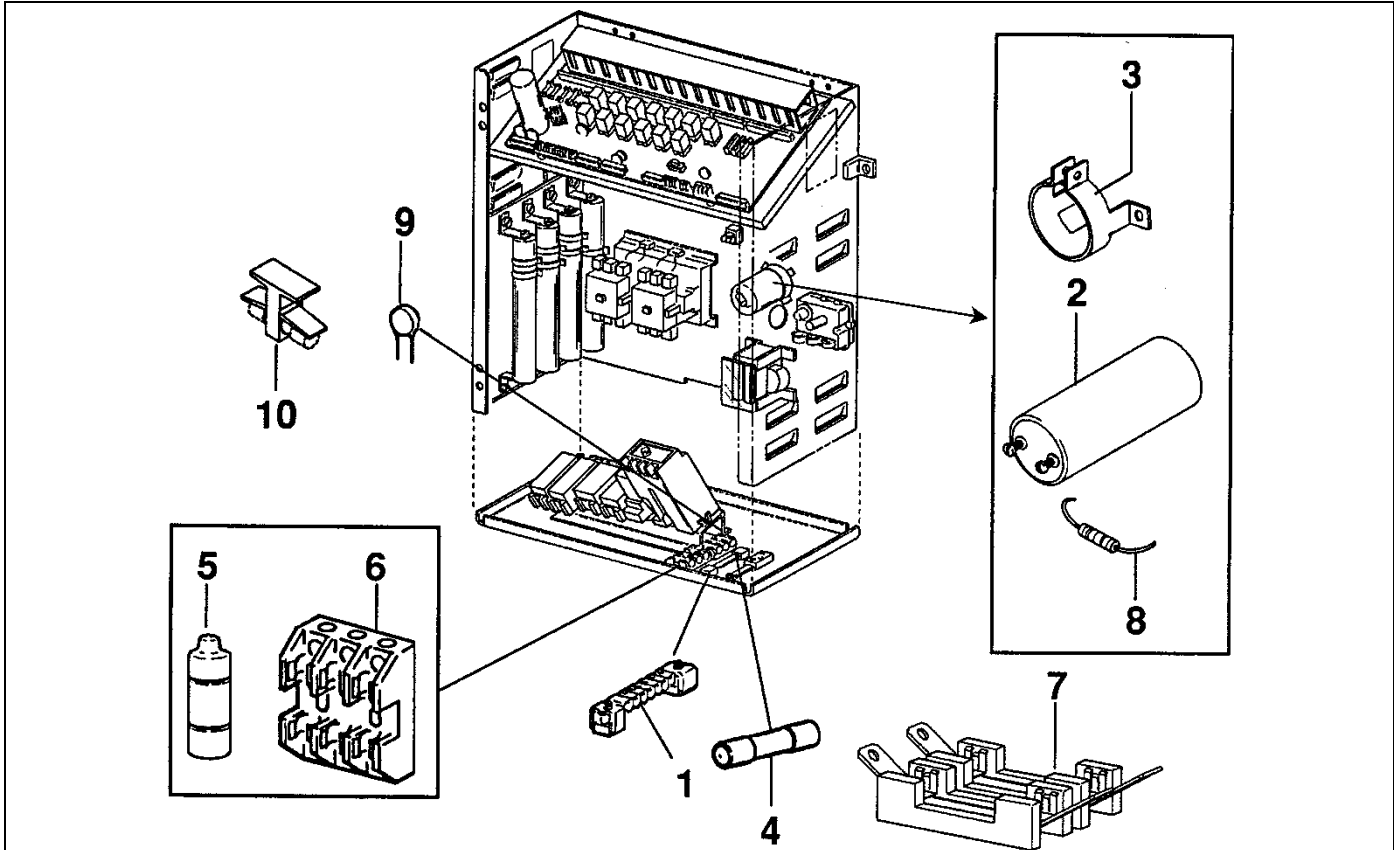


AAA21040D
ABA21040D

REF. No.	PART No.	DESCRIPTION	SYMBOL	REMARKS
1	P230BP2 AAA612AM4	Rectifier	DRF	---
2	613BY1 613BY23	Reverse Phase Relay	RPR	200–480 V
	613BY3 613BY23			200–480 V
	613BY5 613BY24			500–600 V
3	303CX3	Terminal Block, 8 Circuits, 20 A, 14 AWG Max.	---	---
4	AAA303DM1	Terminal Block, 1-Line, 4-Load Terminals	---	
	303DH16	Terminal Block, Power	PTB	
5	303DH4 AAA303FT100	Terminal Block Cover	1 & 2 MTB	

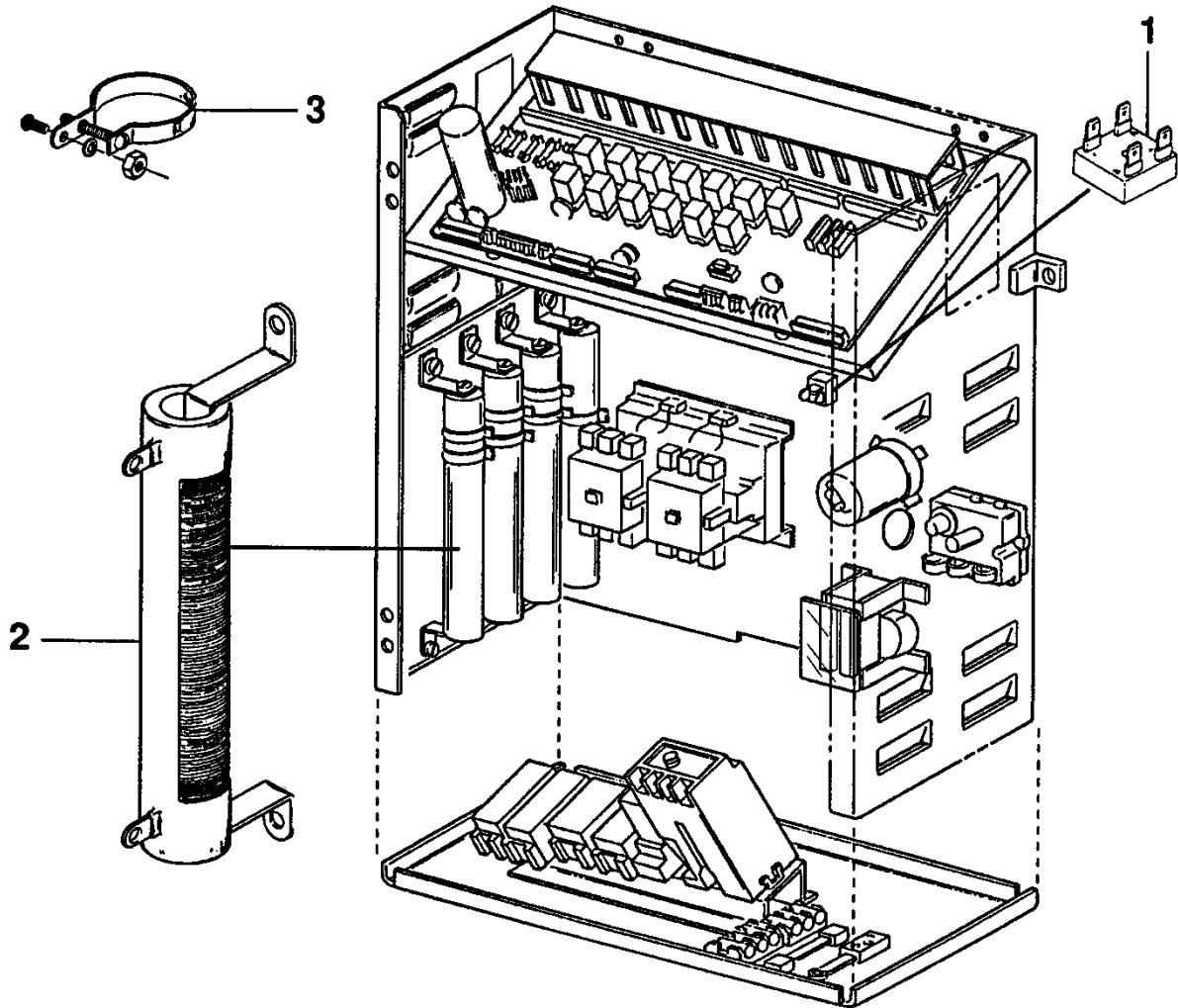
Fuses

10-AAA21040D



**AAA21040D
ABA21040D**

REF. No.	PART No.	DESCRIPTION	SYMBOL
1	252W2	Bus Bar	---
2	P226DA5	Capacitor, 2K MFD	C
3	P336JP4 336GS2	Clamp, Capacitor	---
4	375T6 AAA375BR16	Fuse, Time Delay, 6.25 A, 250 V	F12, F13
	375T28 AAA375BR12	Fuse, Time Delay, 3 A, 250 V	F17
5	AAA375BK21	Fuse, (400-600 V), 2 A, 600 V	---
	AAA375BK29	Fuse, (200-240 V), 4 A, 600 V	
6	480CP1 AAA180FK1	Fuse Holder	
7	AAA00180AAD002	Fuse Holder, 2-Pole, 16 A, 300 V	F12, F13, F17
8	232T17 AAA232FP94	Resistor, 75 kOhm, 2 W	R-5
9	604F4 AAA605AA36	Suppressor, Transient (between F12 & F13)	---
10	AAA180FK2	Puller, Fuse (Mount to Holder)	---

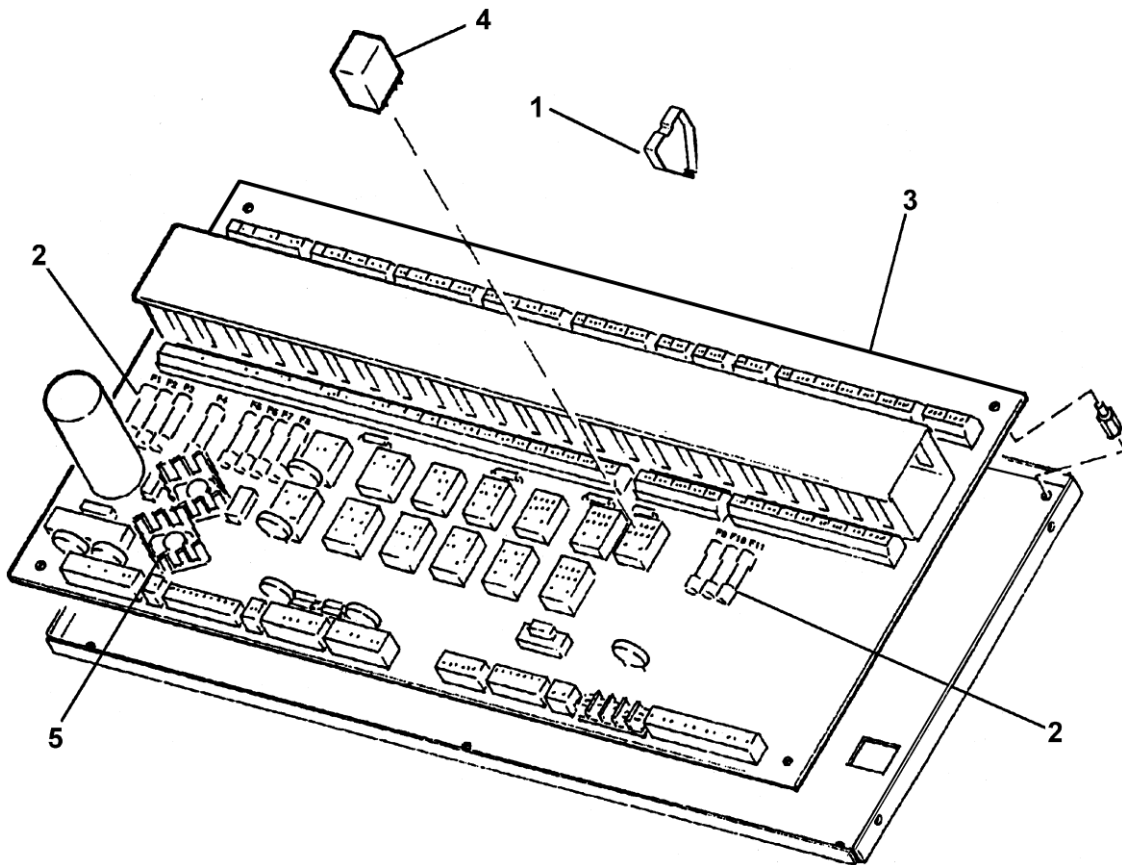


**AAA21040D
ABA21040D**

REF. No.	PART No.	DESCRIPTION	SYMBOL	OHMS	WATTS
1	P230BP2 AAA612AM4	Rectifier, Silicon Bridge, 1-Phase, 25 A, 800 V	DRF	---	---
2	AAA232FF10 AAA617K10	Resistor	R1	250	225
	AAA232FF18 AAA617K8		R2, R3, R4	50	225
3	AAA232FF101 AAA617K101	Resistor Band	---	---	---

Relay PC Board

10-AAA21040D

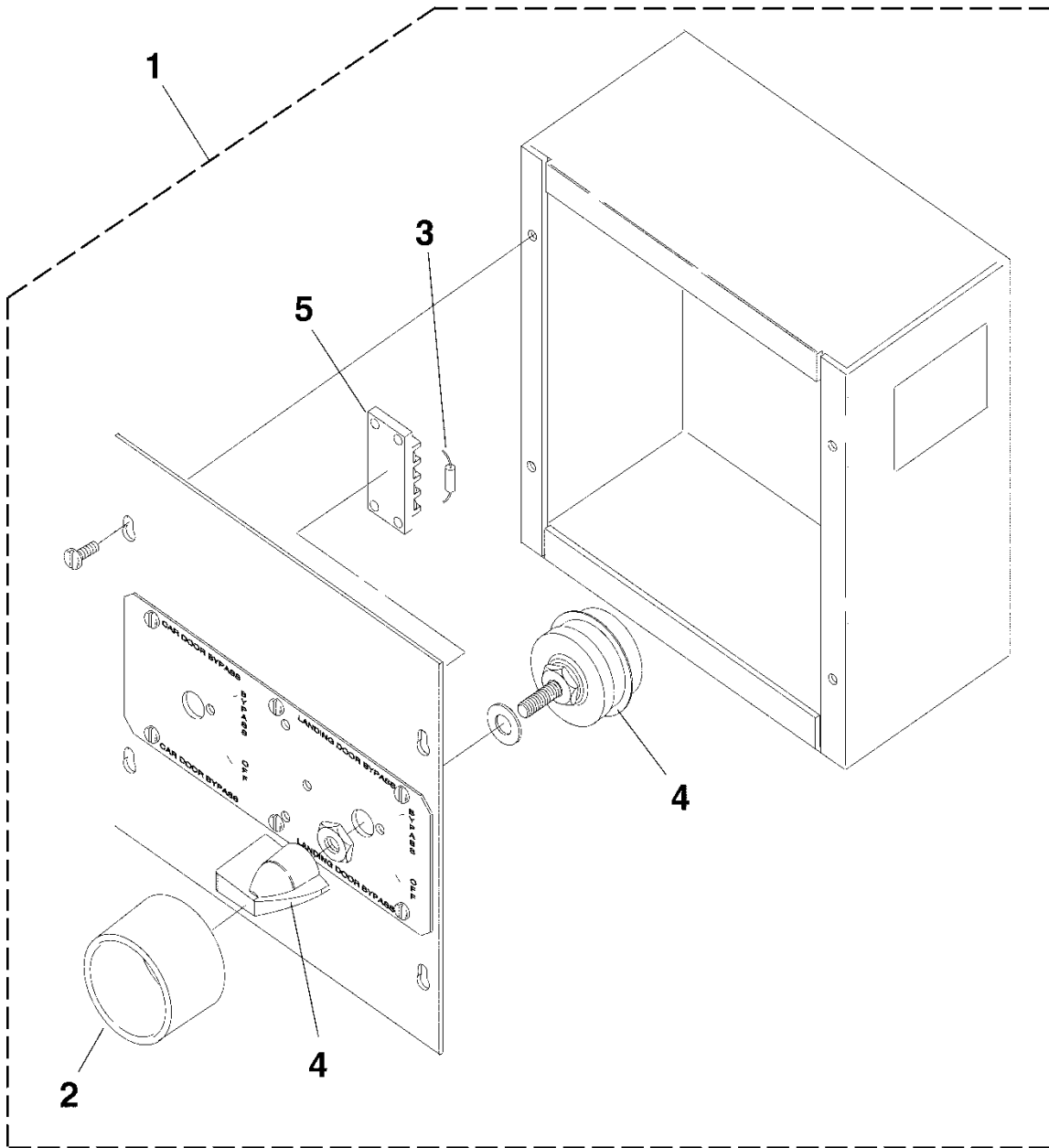


	AAA21040D	ABA21040D		
REF. No.	PART No.		DESCRIPTION	SYMBOL
1	8428EE/PYC-P AAA618AF100		Clip, Relay Hold-down	---
2	375T28 AAA375BR12		Fuse, 3 A, 125 V (MDX)	F1, F2, F3, F4
	375P3 AAA375BT18		Fuse, 3 A, 250 V (AGC)	F5, F6, F7
	375P26 AAA375BT26		Fuse, 1.5 A, 250 V (AGC)	F8
	375T6 AAA375BR16		Fuse, 6.25 A, 125 V (MDX)	F9, F10, F11
3	AAA26800KX1	AAA26800NZ1	PC Board, Controller Interface Relay	---
4	630F3 AAA613CZ8		Relay, 4-Pole, 24 VDC	DMV, UMV, DLV, ULV, DZ, DO, DC, NDG, PM, AUD
	630F4 AAA613CZ9		Relay, 4-Pole, 115 VAC	DR, LPR
5	P601EE1 (See NOTE)		Regulator	---

NOTE: Obsolete. Replace it with complete board AAA26800KX1 or NZ1.

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Door Bypass Switch



ABA21040D		
REF. No.	PART No.	DESCRIPTION
1	ABA21791A1	Assembly, Car & Landing Door Bypass Switch Box, ☒ Canada B44 Bypass Code
2	384VY1	Guard
3	AAA232GK126	Resistor, 200 Ohms, 1.0 W
4	AAA636E2	Switch, Maintained Position
5	303CX2	Terminal Block