

**Controller Models:
E335M & E335MW**

Spare Parts Leaflet

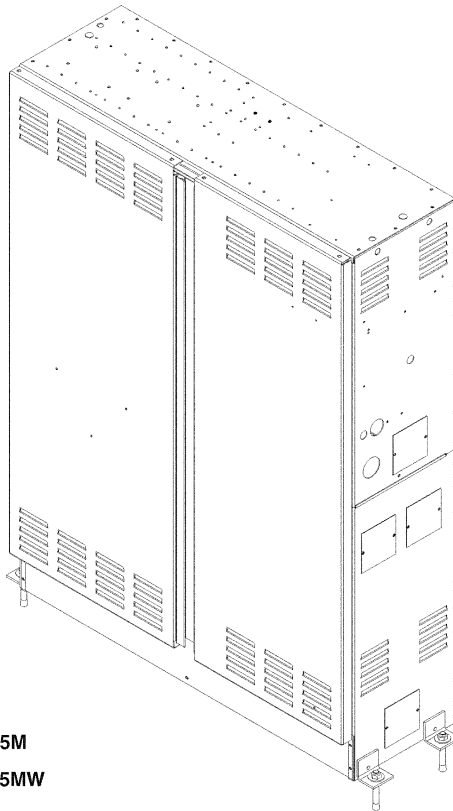
10-AAA21255C

September 21, 2022 / Page 1 of 18

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.

CONTROLLER
SERIAL No.
SERVICE ORDER No.
CONTRACT No.
MODEL No.
VOLTS AMPS
H.P. PHASES
WIRES HERTZ
COMPONENT VINTAGE NO. C-A. 21255C
COMPONENT CODE
LETTER DESIGNATION
WIRING DIAGRAM
DATE



Data tag is generally mounted on outside of front doors.

◊ NAA = 335M

◊ ETO = 335MW

OTIS

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 describes both versions of the E335 controller: E335M (NAA) & E335MW (ETO). Individual components, panels and interfaces are detailed. If necessary, parts are specified for either NAA or ETO usage. Individual door operator applications are broken out.

Leaflet Revisions

Date Revised	Subject Matter Expert	Reason for Revision
February 1998	- - -	Correct parts, add history page
July 1, 2000	Mike Boles	Update software/chip part numbers
February 24, 2003	Mike Boles	Added p/n AAA638AE110; updated History page; removed reference for 10-BSAS800590-2.
August 30, 2003	Mike Boles	Updated Relays (CGL, RCGL) on page 5
May 1, 2004	Mike Boles	Corrected part no. AAA21255AA on pages 2, 10, and 11.
January 5, 2007	Jason Philhower	Superseded p/n AAA638AE4 to p/n AAA638AE9 on p. 7
April 17, 2007	John Dwyer	Replaced wrong p/n AAA375FC2 with p/n AAA375CF2 on p. 11
June 15, 2011	Ali Bozorgzadeh	Corrected part number in ref. 10 on p. 5
September 21, 2022	Juan Murillo	Updated to include OBSOLESCENCE note on cover

Related Drawings

Drawing No.	Title	Drawing No.	Title
AAA21255C	Assembly and Arrangement: E335M & E335MW Controller	ABA21255C	Assembly and Arrangement: E335M & E335MW Controller

Related Documents

Document ID	Title
SPL 10-7151A	AC & DC Contactors Reversing/Y-Δ Contactors Starters
TIP 1.1.10.0-4	E335M MLB Relay Retrofit Assembly (p/n AAA21255AA1)
TIP 1.1.10.0-5	E335MW MLB2 Relay Retrofit Assembly (p/n AAA21255AA2)

Subject Matter Expert

Name	Department
Ali Bozorgzadeh	OSC Service Engineering

About Spare Parts Leaflets...

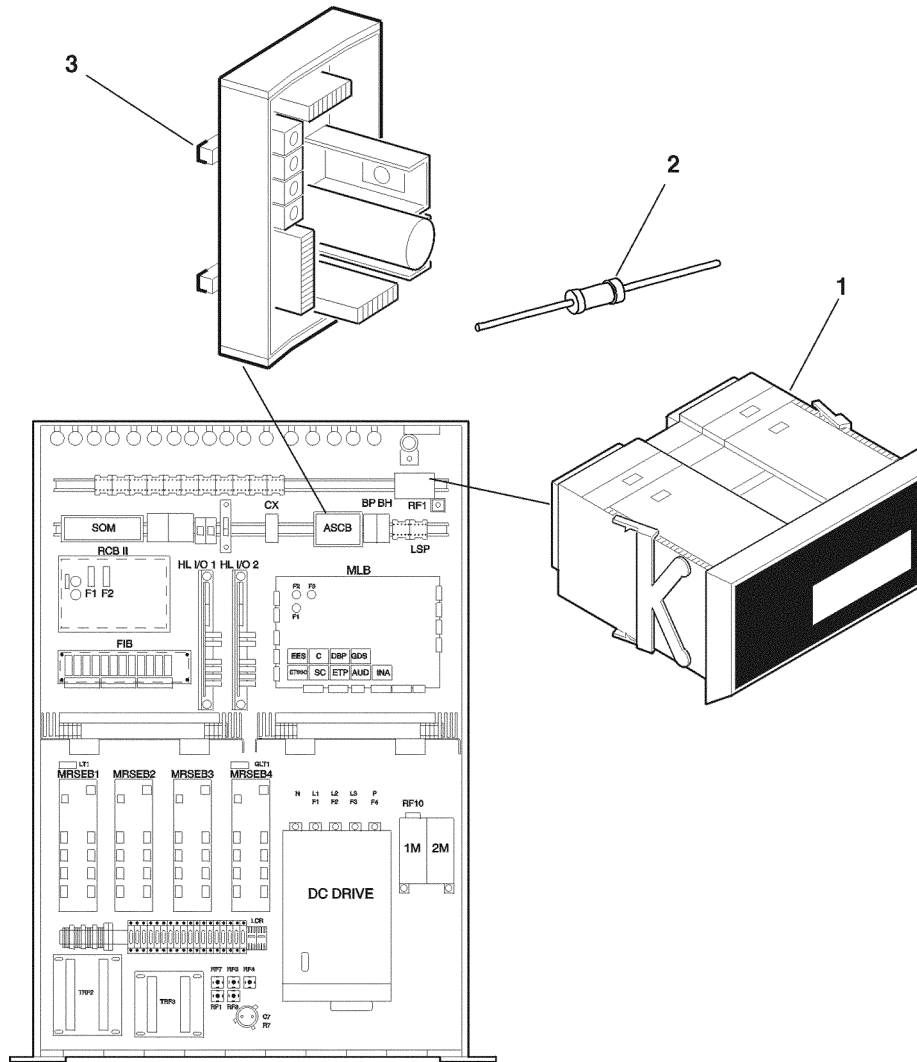
This document lists the lowest replaceable units (LRUs) for the standard version of the product. The LRUs are chosen by a team of Otis associates representing engineering and manufacturing.

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.

Controller—Top Half

10-AAA21255C

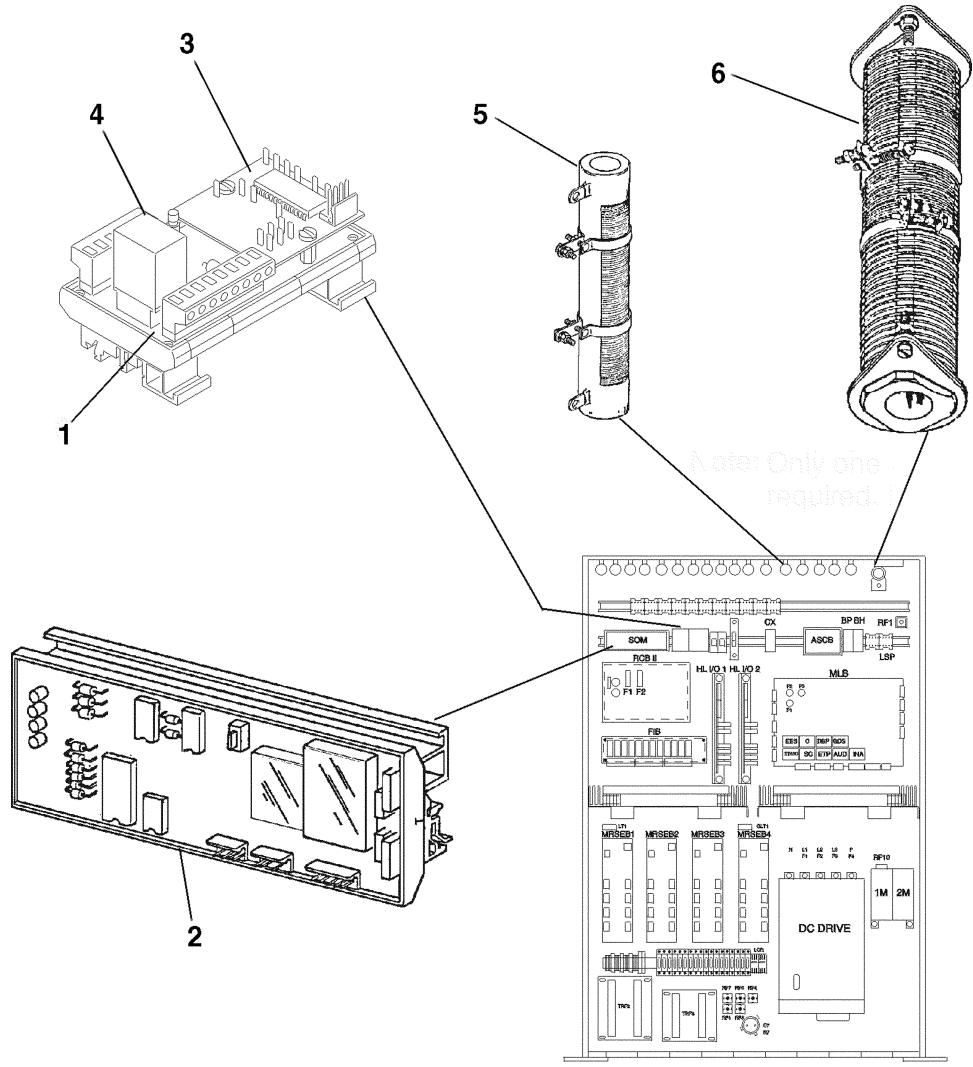


REF. No.	PART No.	DESCRIPTION	SYMBOL
1	CAA623C1 CAA623C2	Counter	---
	AAA375BM7	Fuse, Picofuse, 1.0 A, 125 V (to speed check)	F1, F2
2	AAA375BX13 AAA375BX10	Fuse, Picofuse, Slow-Blo, 4.0 A, 125 V (to speed check)	F3
3	AAA26800GG1	PC Board, Speed Check, ANSI	ASCB

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10-AAA21255C

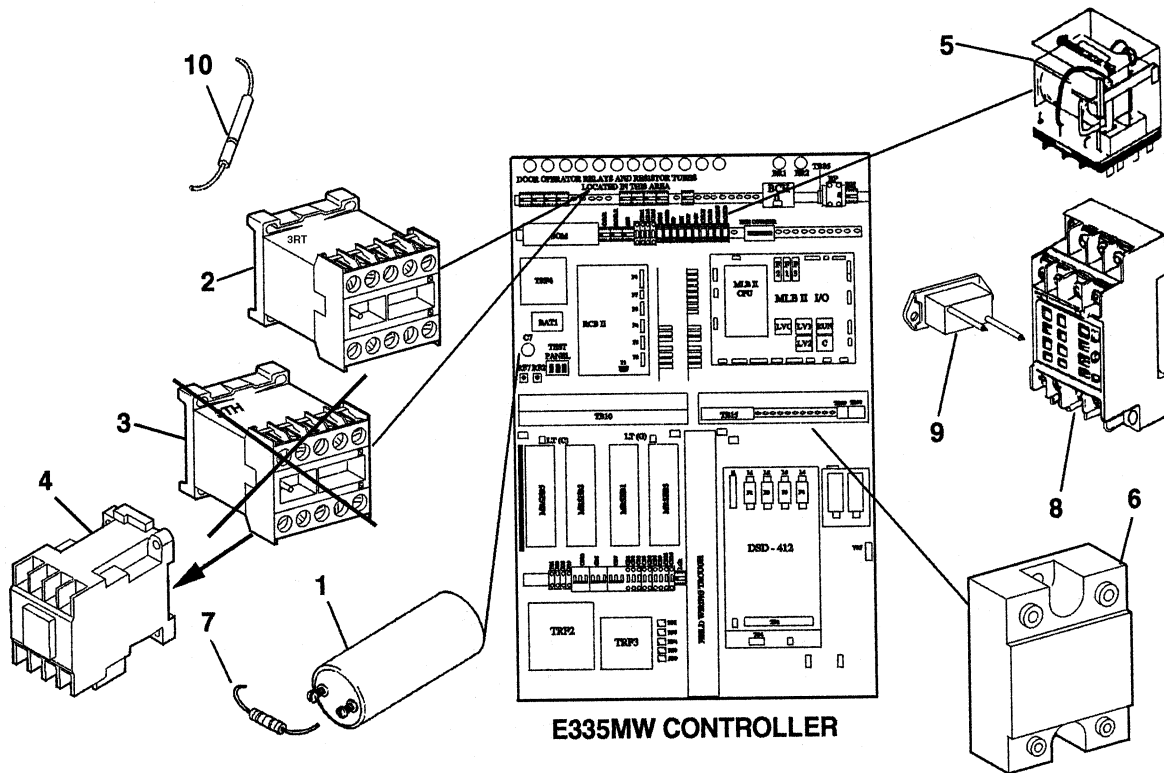
Controller—Top Half



AAA21255C ABA21255C			
REF. No.	PART No.	DESCRIPTION	SYMBOL
1	AAA26800KT1	Module, Seismic PC Board w/o Base	EQM
2	9693F2 GAA26800AL1	Module, Switchover	SOM
3	A9693C4 GBA23550D1	PC Board, Remote Station	- - -
4	AAA613CZ2	Relay, 24 VDC, 4-Pole	EQR
5	232EH26	Resistor, 250 ohm, 225 Watt	BR2
	232EH34	Resistor, 100 ohm 225 Watt	BR1
6	AAA617R1	Resistor, Dynamic Brake, 0.6 ohm, 750 Watt (only 1 required)	DBR1

ETO Controller—Top Half

10-AAA21255C

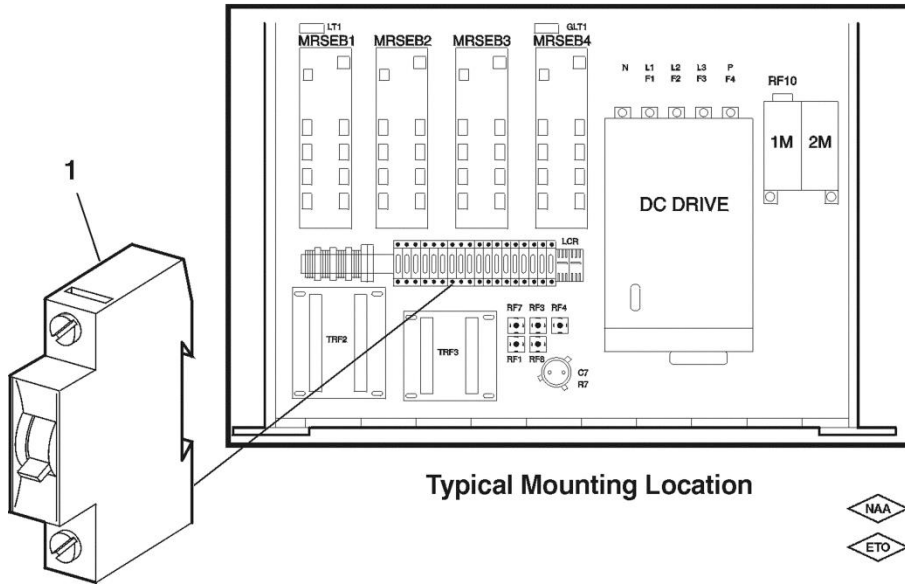


REF. No.	ABA21255C PART No.	DESCRIPTION	SYMBOL
1	226EJ2	Capacitor (w/discrete hall lanterns)	C7
2	AAA638B5 AAA638B105	Contactor, 24 VDC, 3 NO, 1 NC Contacts, w/Car Gate Locking Front/Rear (Siemens 3RT)	CGL, RCGL
3	AAA613CX114	Relay, 24 VDC, 3 NO, 1 NC Contacts, w/EFO & ESS (Siemens 3TH)	BH, SES
4	AAA613DL91	Relay (Fuji replaces Siemens 3TH)	BH, SES
5	AAA613CZ8	Relay, 24 VDC, 4 NO Contacts, w/LED, w/In-Car Front/Rear Hall Lanterns, Car Direction Lantern, w/CEN EPO w/Firefighters Position Indicator	DCLU, CDLD, RCDLU, RCDLD, NUSD, NUG, UP, DN, TOP, BOT
6	AAA645D4	Relay, SCR, (w/fan & light protection)	FLP
7	232T46	Resistor, 47 kOhm, 2 W	R7
8	618AE2	Socket, Relay	---
9	AAA00605AAA017	Suppressor (for AAA613CZ8)	---
10	AAA613CX304 AAA612T7	Suppressor Diode (IN4007)	BH, SES

10-AAA21255C

Controller—Bottom Half

Lower Section of E335M Model Shown



NOTE: 1M & 2M are Replaced by ME Contactor

Typical Mounting Location

◊ NAA = 335M
◊ ETO = 335MW

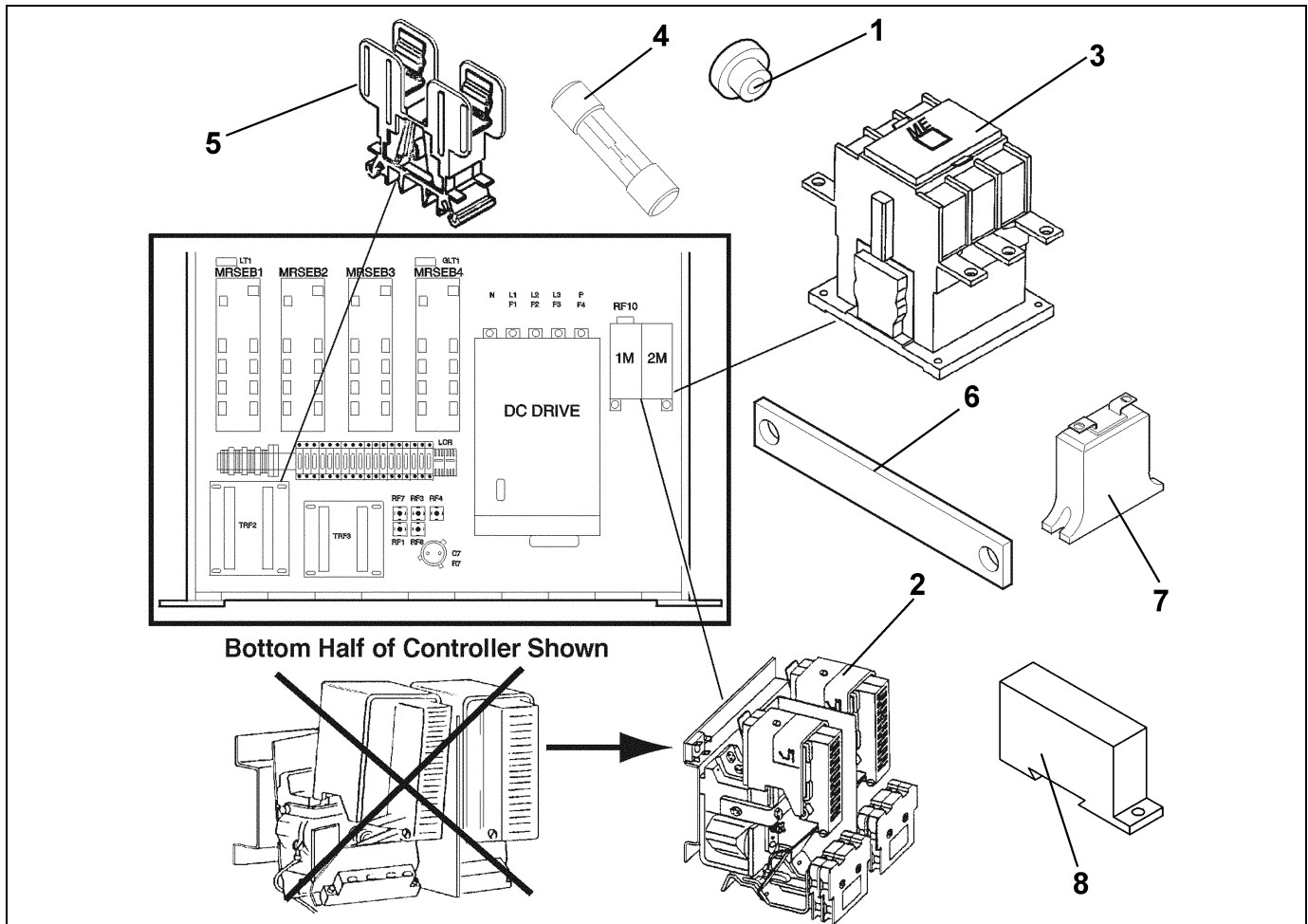
AAA21255C
ABA21255C

REF. No.	PART No.	CIRCUIT BREAKER CONDITION	AMP	APPLICATION	SYMBOL
1	AAA00375AAF001	W → 110 VAC Discrete Hall Lantern	0.5	◊ NAA ◊ ETO	CB9
		W → Simplex or Car 1		◊ NAA	CB14
		W → Simplex or Car 1 & EPO		◊ NAA	CB15
		W → Fireproof Doors		◊ ETO	CB16
	AAA00375AAF002	W → EPO, Firefighter's PI, CDL	1.0	◊ ETO	CB15
	AAA00375AAF004	W → Discrete Hall Lanterns	2.0	◊ NAA ◊ ETO	CB10, CB11
		W → 220 V Brake		◊ NAA	CB6
		W → 1st Car in Group or Simplex w/EPO or EFO		◊ ETO	CB14
		Constant		◊ NAA ◊ ETO	CB5
	AAA00375AAF005	W → 220 V Brake	3.0	◊ ETO	CB6
		W → 120 V Brake		◊ NAA	CB6
	AAA00375AAF006	Constant	4.0	◊ NAA ◊ ETO	CB4
	AAA00375AAF007	Constant	6.0	◊ NAA ◊ ETO	CB1, CB2 CB13
		W → 120 V Brake		◊ ETO	CB6
W → Simplex or Car 1		◊ NAA ◊ ETO		CB3	

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Controller—Bottom Half

10-AAA21255C

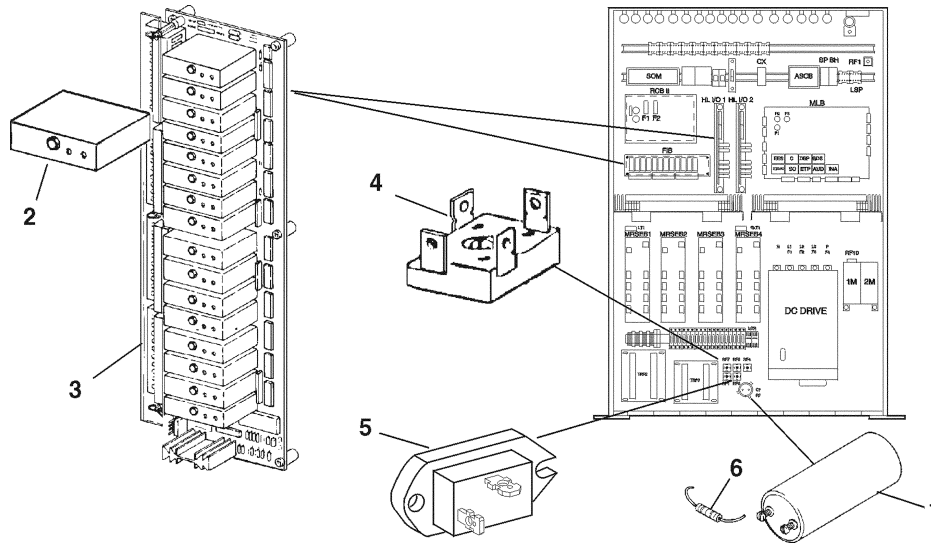


Bottom Half of Controller Shown















REF. No.	PART No.	DESCRIPTION	SYMBOL
1	334AD5	Bushing, Contactor	---
2	7454AP4 SA14-193-770-570	Contactors, Siemens-Allis, 10-7151A Contactors	1M, 2M
3	AAA638AE1 AAA638AE4 AAA638AE9	Contactors, ABB Manf., 10-7151A Contactors, ABB Manf., 130 Series Contactors, ABB Manf., 220 Series	ME,
4	AAA375BJ18	Fuse, 2 A	F20,
4	AAA375BJ35	Fuse, 10 A	F19
5	AAA653K1	Holder, Fuse	F19, F20
6	AAA276AG1	Isolator Material, Contactor	---
7	CAA604B2	Suppressor, Metal Oxide Varistor, Siemens-Allis Contactor	---
8	AAA638AE110	Suppressor, R-C Network	ME

10-AAA21255C

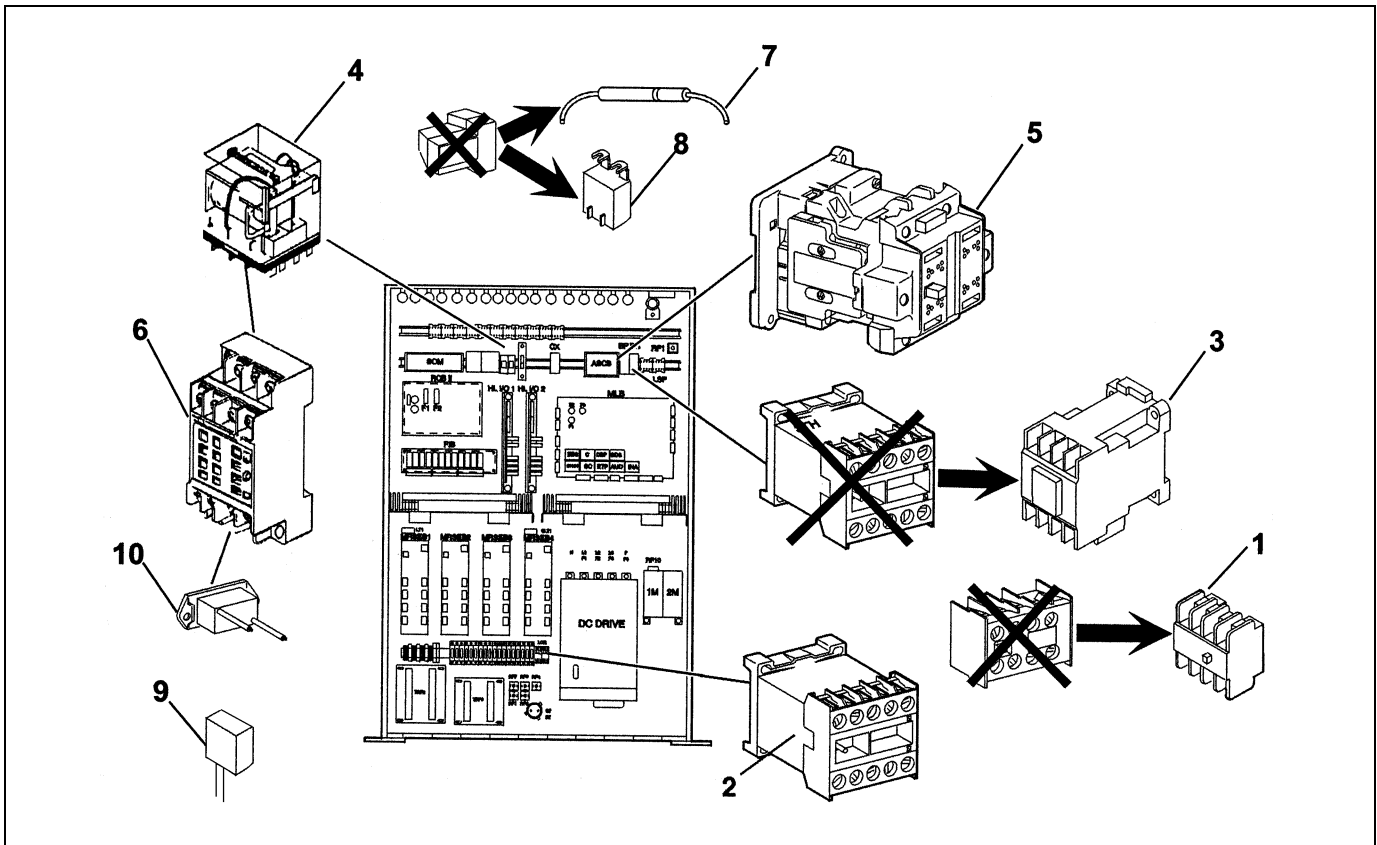
E335M/E335MW Controller



AAA21255C
ABA21255C

REF. No.	PART No.	DESCRIPTION	SYMBOL
1	226EJ2	Capacitor, 50 VDC, 9500 μ F	C7
2	AAA26890A9	Module, Input/Output, 12-75 V, 1 A, Condition: 24 VDC In-Car Front/Rear Hall Lantern	 CUDL, CUDDL, CDL
	AAA26890A2	Module, Input/Output, Input: 100-150 V, AC/DC Output: 100-150 V, AC/DC, 0.5 A, Conditions: w/Remote Key Switch (ANSI, Canada), Canadian EFO (3 Pos. Key Switch), 110 V In-Car Front/Rear Hall Lantern, w/Emerg. Power, w/Emerg Power & Intergroup Emerg. Power, w/Canada B44 Lights	 EFO, FIBM1, FIBM2, FIBM3, FIBM4, EPO, CUDL, CDDL
3	ABA26800ABV2	PC Board, Interface, 32-Channel, w/1-17 Discrete Hall Lanterns, w/18-24 Discrete Hall Lanterns	 FIB  HL I/O 1,  HL I/O 1, 2
		Rectifier, Bridge, 420 V, 10 A (Constant) w/Discrete Hall Lanterns w/Siemens Contactor	 RF2, RF7  RF7  RF10 
4	230BS3	Rectifier, Bridge, 1000 V, 35 A	 RF1 
	AAA612AJ1	w/EPO or Firefighter's PI or CDL	 RF9
5	AAA612AN1	Rectifier, Diode, 20 A, 1200 VAC	 RF8 
6	232T46	Resistor, 46 kOhm, 2 W	R7

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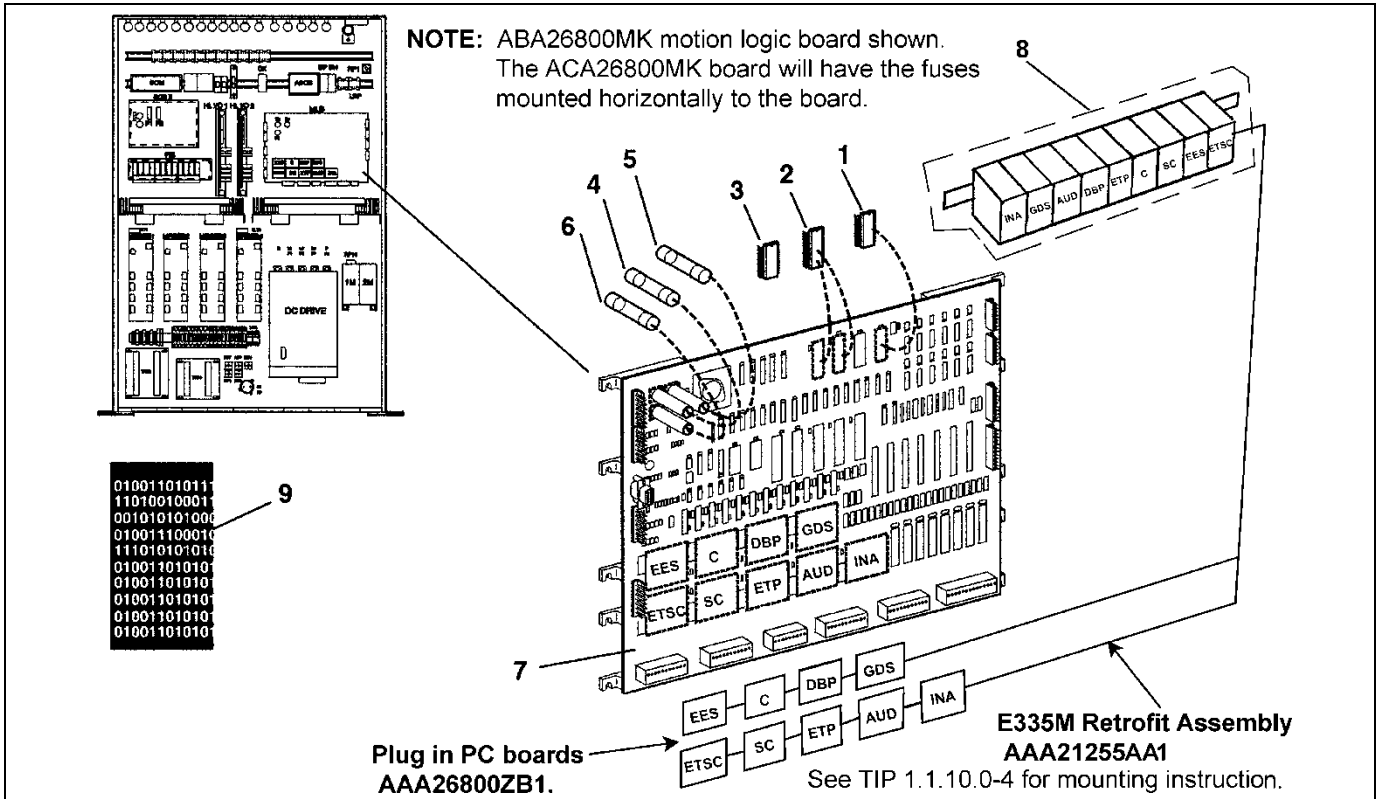


**AAA21255C
ABA21255C**

REF. No.	PART No.	DESCRIPTION	SYMBOL
1	AAA613CX206 AAA613DL72	Contact, Auxiliary, 2 NO, 2 NC Contacts Relay (Fuji replaces Siemens)	UCM, UCMX
2	AAA638B2 613BX39	Contactor, 120 VAC, 60 Hz, 3 NO, 1 NC Contactor, Sprecher & Schuh	LCR
3	AAA613CX106 AAA613DL3	Relay (Fuji replaces Siemens 3TH), 100-110 VAC, 60 Hz, 2 NO, 2 NC Contacts	UCM, UCMX
4	AAA613CZ9	Relay, 115 VAC, 4-Pole	ESVR, GT, CX
5	AAA638J6	Relay, 24 VDC, 2 NO, 2 NC Aux. Contacts	BP
6	618AE2	Socket, Relay	ESVR, GT, CX
7	AAA613CX304 AAA612T7	Suppressor, 12-250 VDC (Diode)	BP
8	AAA613CX302 AAA613DL61	Suppressor, 48-127 VAC, 70-150 VDC (Varistor) Relay (Fuji replaces Siemens)	UCM, UCMX
9	AAA613CX303 AAA00605AAA014	Suppressor, 127-240 VAC, 150-250 VDC	LCR
10	AAA00605AAA001	Suppressor	GT, CX, ESVR

10-AAA21255C

E335M Motion Logic Board



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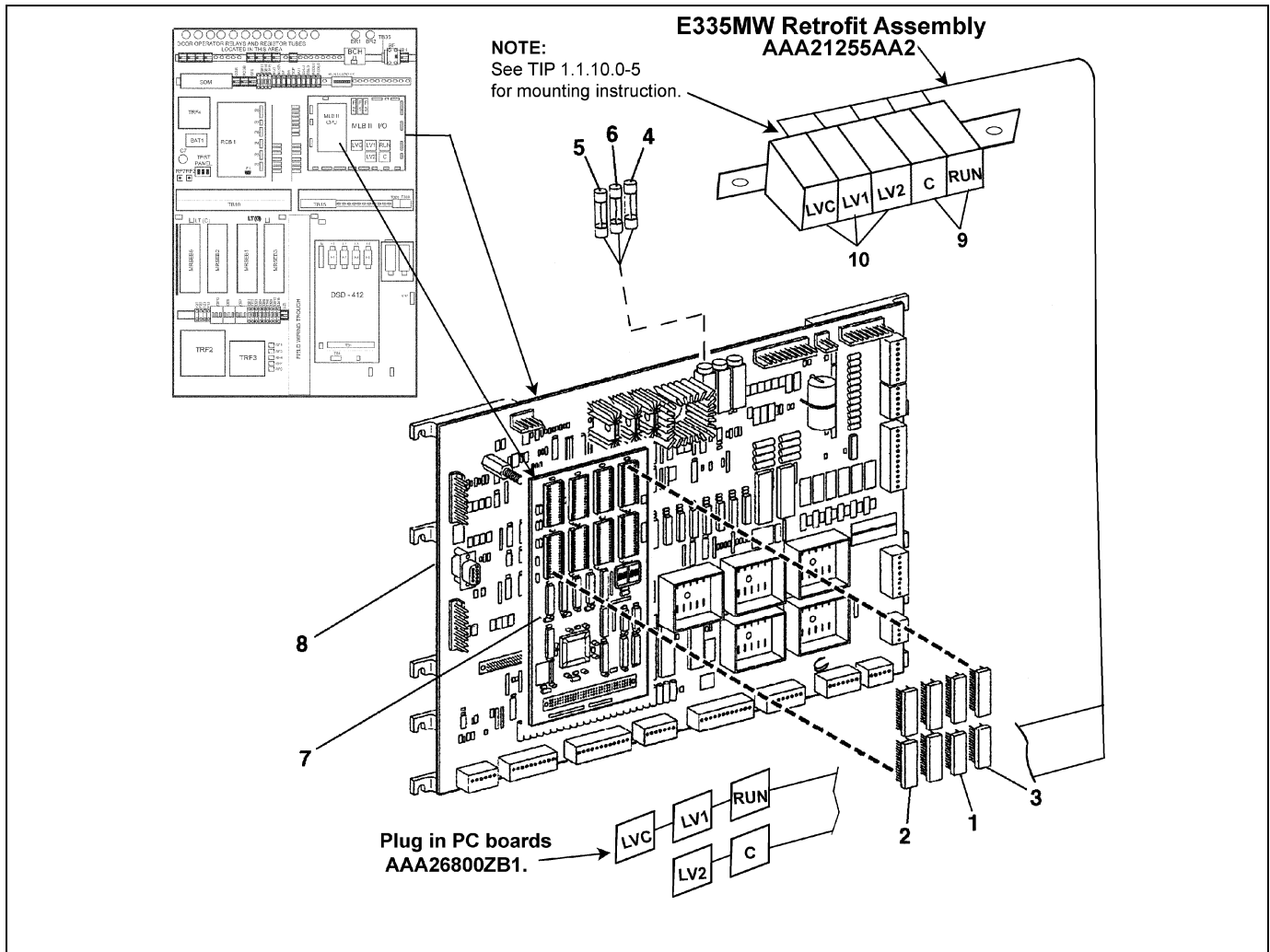
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REF. No.	PART No.	DESCRIPTION	SYMBOL
1	AAA616KM2	EEPROM, Blank	MLB: U44
2	AAA616LX2	EPROM, Blank	MLB: U37, U51
3	AAA616NG1	EPROM, 32 x 8, BAT-RAM	MLB: U33
4	AAA375BT4	Fuse, Fast Acting, 1.0 A	F2
5	AAA375BT5	Fuse, Fast Acting, 2.0 A	F3
6	AAA375BR9	Fuse, Time Delay, 2.0 A	F1
7	ABA26800MK1 ACA26800MK1	PC Board, Motion Logic, 60 Hz	MLB
	ABA26800MK2 ACA26800MK2	PC Board, Motion Logic, 50 Hz	
8	*AAA613CX129 **AAA613DL16	Relay, 110-120 VAC, 60 Hz, 3 NO, 1 NC Contacts	EES, C, DBP, GOS, ETSC, SC, ETP, AUD, INA
	*AAA613CX134 **AAA613DL16	Relay, 100-110 VAC, 50 Hz, 3 NO, 1 NC Contacts	
9	AAA30145AA*—	Software (NOTE: Contact OSC for latest version.)	---

* Siemens relays are now obsolete, and must be replaced by Fuji relays AAA613DL16 and retrofit assembly AAA21255AA1. See TIP 1.1.10.0-4 for details.
 ** Fuji relays are mounted on DIN rail as shown above.

E335MW Motion Logic Board

10-AAA21255C



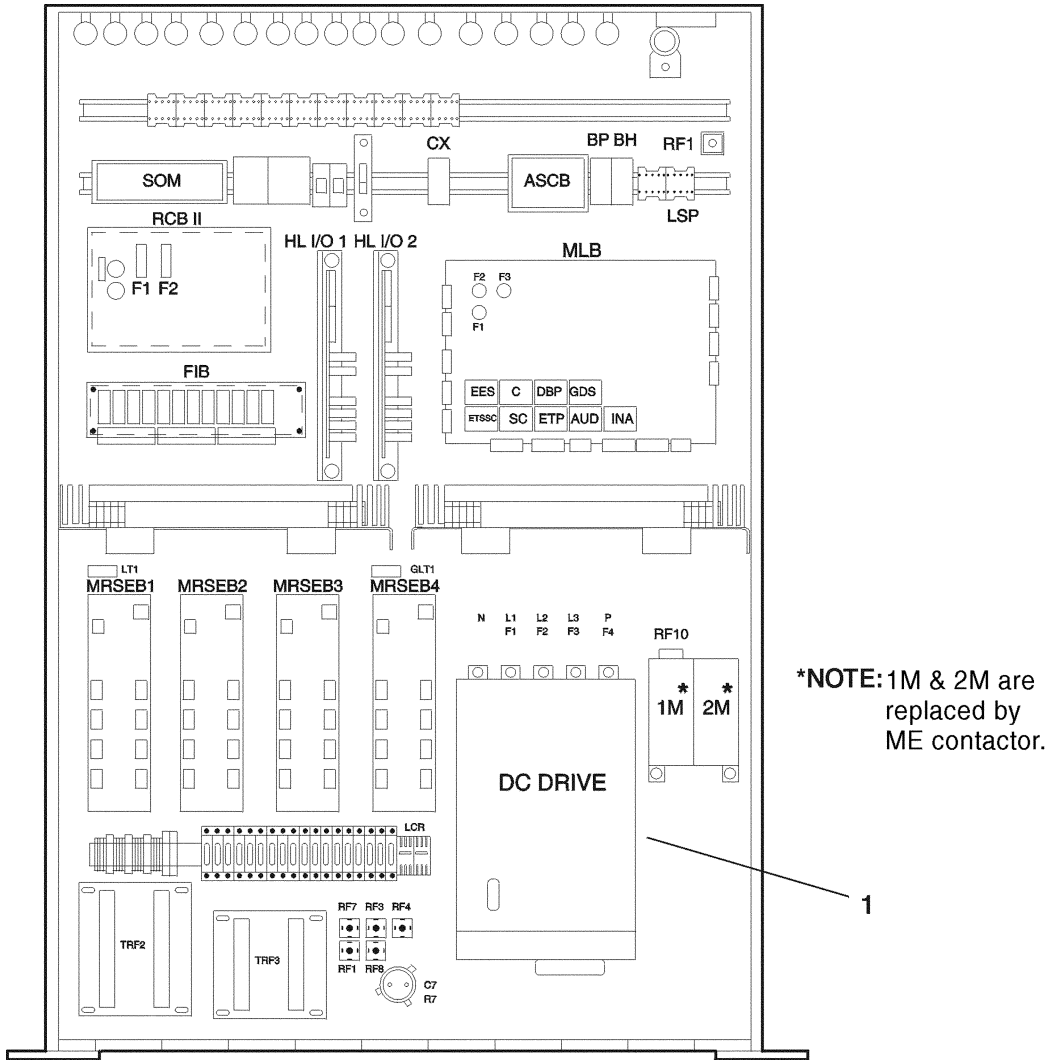
REF. No.	PART No.	DESCRIPTION	SYMBOL
	ABA21255C		
1	AAA616KM2	EEPROM, Blank	CPU: U20, U21
2	AAA616LX3	EPROM, Blank	CPU: U16, U17
3	AAA616NG1	EPROM, 32K x 8, BAT-RAM	CPU: U22, U23
4	AAA375CF2	Fuse, Fast Acting, 1.0 A	F3
5	AAA375BY8	Fuse, Time Delay, 2.0 A	F1
6	AAA375BY10	Fuse, Time Delay, 3.0 A	F2
7	AAA26800QM1	PC Board, Central Processing Unit	CPU
8	AAA26800QP1	PC Board, Motion Logic, 335MW	MLB I/O
9	* CX613CX139 ** AAA613DL104	Relay, Plug-in, Siemens, 110 VDC, 4 NO Contacts Relay, 110 VDC, 4 NO Contacts	RUN, C
10	* CX613CX140 ** AAA613DL91	Relay, Plug-in, Siemens, 3 NO, 1 NC Contacts Relay, 24 VDC, 3 NO, 1 NC Contacts	LVC, LV1, LV2

- * Siemens relays are now obsolete, and must be replaced by Fuji relays AAA613DL91 or 104. Use retrofit assembly as directed in TIP 1.1.10.0-5.

**Fuji relays are mounted on DIN rail as shown above.

10-AAA21255C

Drive Panel Assembly

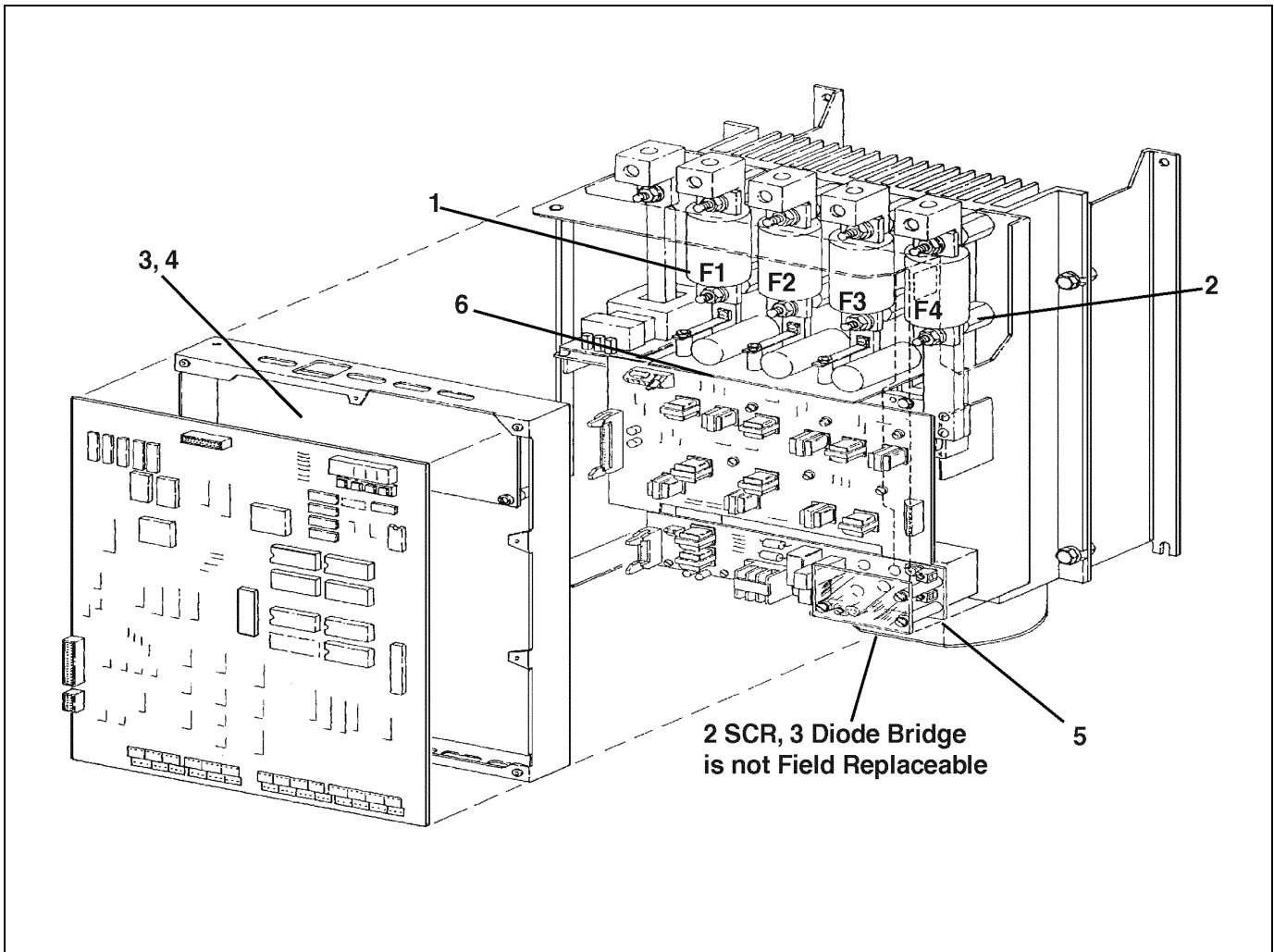


REF. No.	PART No.	DESCRIPTION	MOTOR FIELD RANGE (AMPS)	DRIVE MOTOR CURRENT (AMPS)
1	AAA21255C ABA21255C	Assembly, Drive Panel	2.0–9.6	190
	AAA21255J1		6.3–16.0	
	AAA21255J2		0.2–1.9	
	AAA21255J3		0.2–1.9	100
	AAA21255J4		2.0–9.6	
	AAA21255J5		6.3–16	
	AAA21255J6			

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Drive Panel Assembly

10-AAA21255C

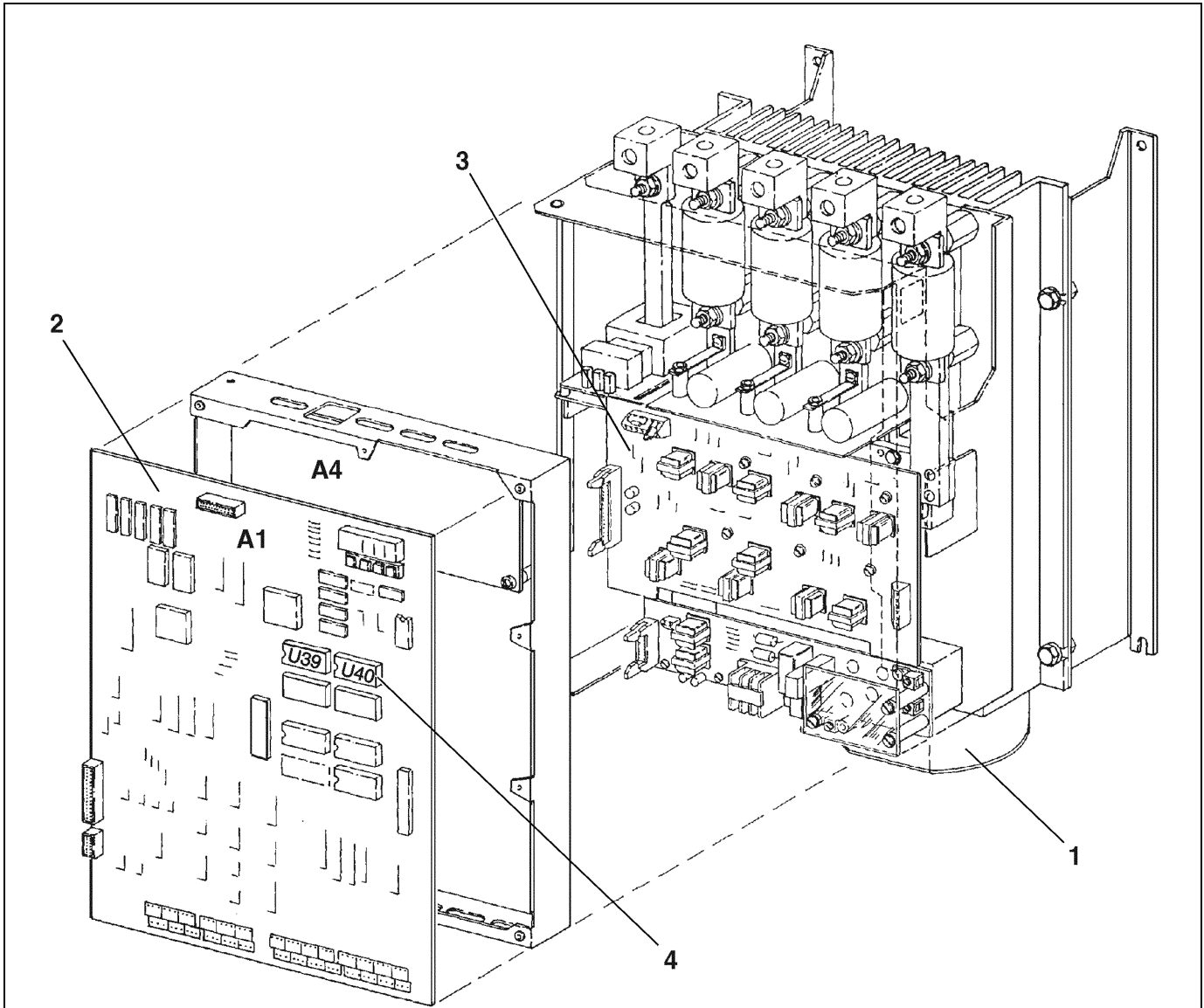


AAA21255C ABA21255C				
REF. No.	OTIS PART No.	MFR. PART No.	DESCRIPTION	SYMBOL
1	AAA21255J102	LA05P00016-0220	Fuse, 250 A, 700 V, 190 A Drive	F1, F2, F3
	AAA21255J116	LA05P00017-0166	Fuse, 150 A, 700 V, 100 A Drive	
2	AAA21255J103	LA05P00017-0366	Fuse, 300 A, 700 V, 190 A Drive	F4
	AAA21255J117	LA05P00017-0179	Fuse, 200 A, 700 V, 100 A Drive	
3	AAA375BY8	---	Fuse, 2 A, 250 V, Slow Blow (to A4)	F1
4	AAA21255J106	LA05P00090-0293	Power Supply, w/115 V Logic	A4
5	AAA21255J111	LA46S03046-0010	PC Board, Motor Field Interface, 0.2–2.0 A	A3
	AAA21255J112	LA46S03046-0040	PC Board, Motor Field Interface, 2.0–10 A	
	AAA21255J113	LA46S03046-0050	PC Board, Motor Field Interface, 6.3–16.7 A	
6	AAA21255J114	LA46S03017-0010	PC Board, Snubber Capacitor (w/190 A)	A5
	AAA21255J121	LA46SO3020-0030	PC Board, Snubber Capacitor (w/100 A)	

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10-AAA21255C

Drive Panel Assembly

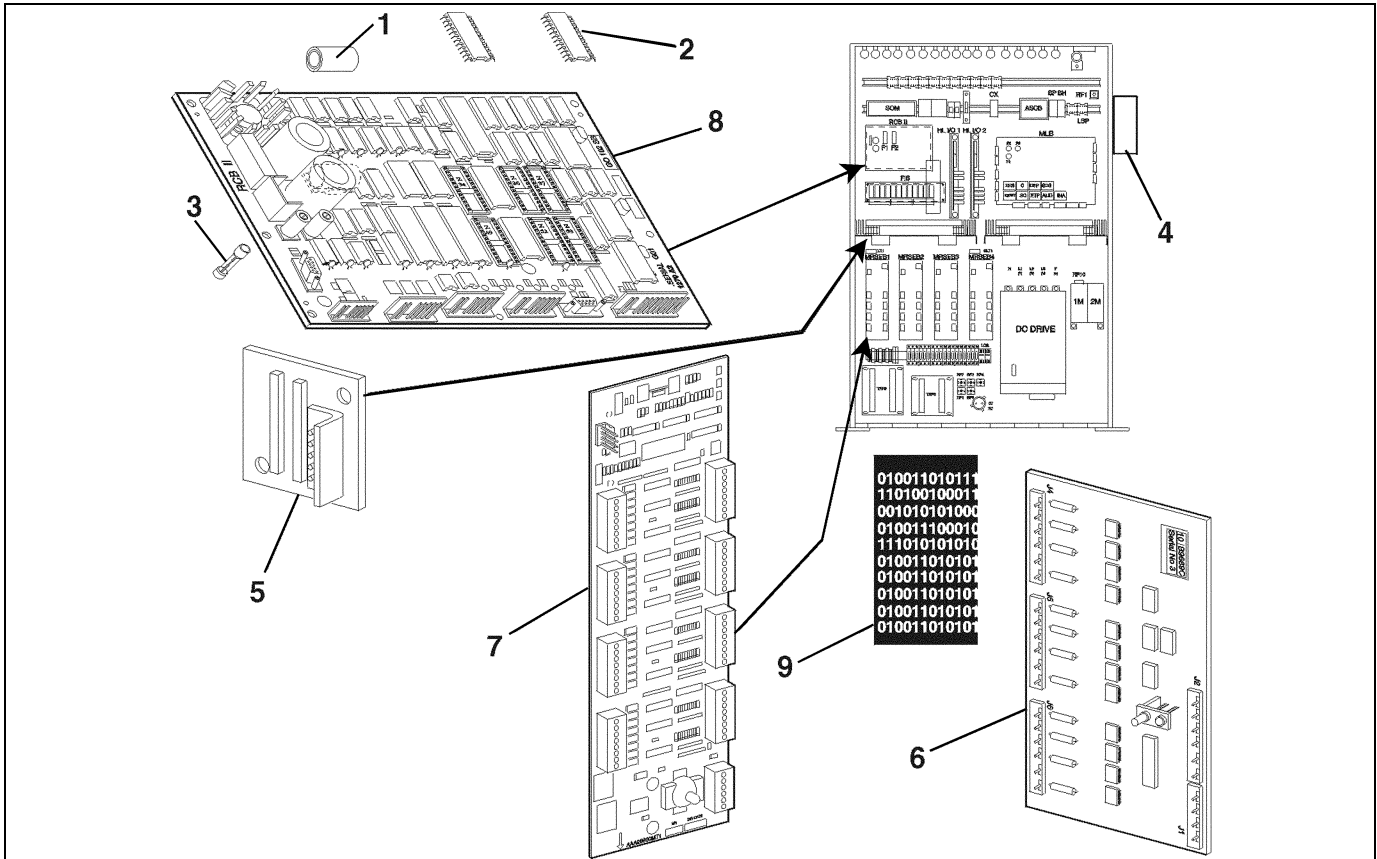




**AAA21255C
ABA21255C**

REF. No.	OTIS PART No.	MFR. PART No.	DESCRIPTION	SYMBOL
1	AAA21255J101	LA05P00016-0012	Fan, 250 cfm, 115 V, 190 A Drive	---
	AAA21255J115	LA05P00016-0043	Fan, 105 cfm, 115 V, 100 A Drive	---
2	AAA21255J109	LA46S02975-0102	PC Board, Drive Control	A1
	AAA21255J110	LA46S02976-0030	PC Board, Armature Interface 190 A Drive	A2
3	AAA21255J120	LA46S02976-0020	PC Board, Armature Interface 100 A Drive	
4	AAA30190AAB	---	Software, Drive Control PC Board	U39, U40

PC Boards

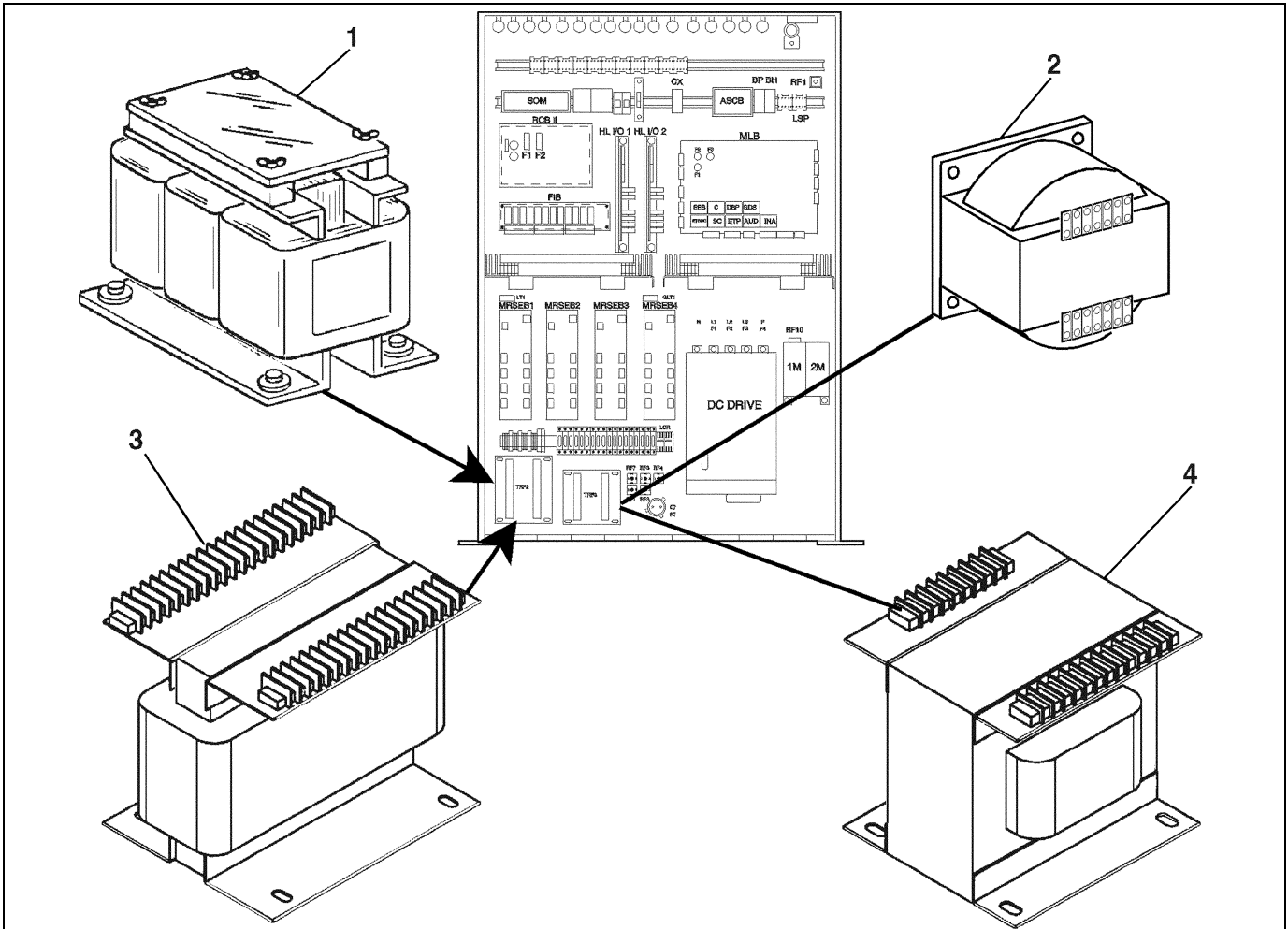
10-AAA21255C





REF. No.	PART No.	DESCRIPTION	SYMBOL
1	GAA718C1	Battery, 3 V	---
2	AAA616KM2	EEPROM, Blank	RCBII: Z34 Z49
	AAA616LX2	EPROM, Blank	RCBII: Z37 Z53
3	GO375AF22	Fuse, 2 A	RCBII: F1 F2
	AAA375BY8		
4	BSAS800590-2	Otis Reporting System (ORS)	ORS 
5	9693J1	PC Board, Line Terminator	LT1 GLT1
6	BSAS800485-2	PC Board, Remote Elevator Monitoring, Slave	
7	AAA26800MT1	PC Board, Remote Station Extender	MRSEB
8	GCA21270A3	PC Board, Ring Car II	RCBII
	GDA21270A3		
	GDA21270A4		
	GEA21270A1		
9	AAA30005AAJ-CN1	Software (NOTE: Contact OSC for most recent version.)	---

10-AAA21255C

Transformers

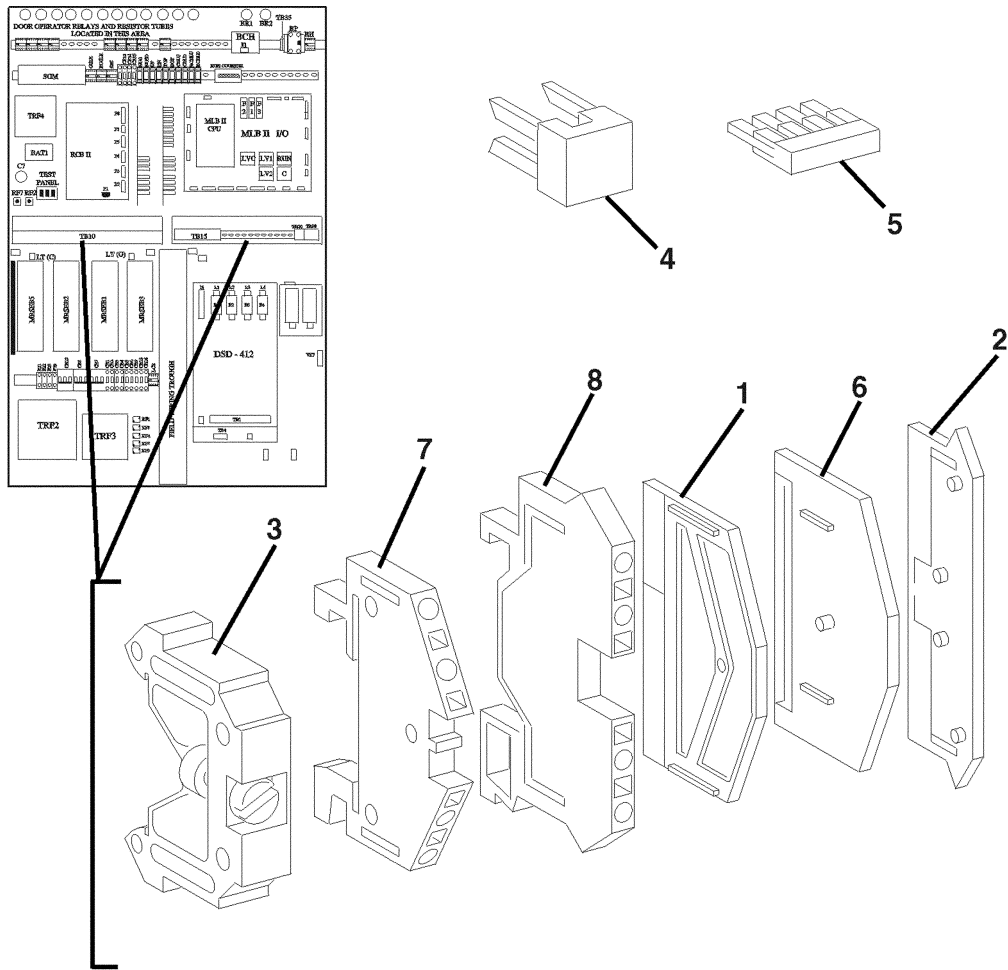


AAA21255C
ABA21255C

REF. No.	PART No.	DESCRIPTION	SYMBOL	MODEL
1	ABA225GN1	Transformer, 3-Phase, 208–240 V	TRF2	
	ABA225GN2	Transformer, 3-Phase, 440–600 V		
	ABA225GN3	Transformer, 3-Phase, 346–416 V		
2	ABA225GP1	Transformer, Single Phase, 208–240 V	TRF3	
	ABA225GP2	Transformer, Single Phase, 440–600 V		
	ABA225GP3	Transformer, Single-Phase, 346–416 V		
3	AAA225HT1	Transformer, 3-Phase, 208–240 V	TRF2	
	AAA225HT2	Transformer, 3-Phase, 346–416 V		
	AAA225HT3	Transformer, 3-Phase, 440–600 V		
4	AAA225HU1	Transformer, Single Phase, 208–240 V	TRF3	
	AAA225HU2	Transformer, Single Phase, 346–416 V		
	AAA225HU3	Transformer, Single-Phase, 440–600 V		

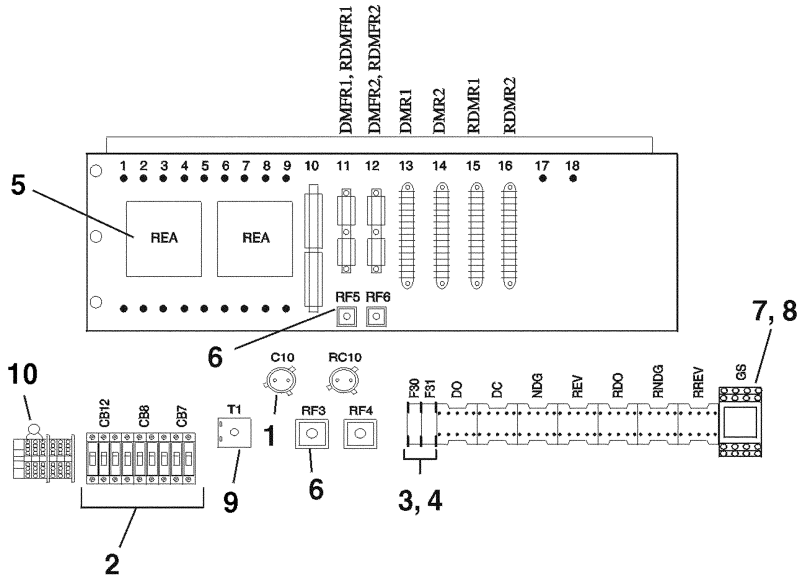
Terminal Blocks

10-AAA21255C



AAA21255C
ABA21255C

REF. No.	PART No.	DESCRIPTION	SYMBOL
1	AAA303EP3	End Plate, 0.09 in. Thick (BP relay)	---
2	AAA303EP52	End Plate, 0.098 in. Thick	---
3	AAA303EP5	End Stop, 0.39 in. Thick	---
4	AAA303EP53	Jumper, Horizontal, 2-Pole (24 VDC)	---
5	AAA303EP48	Jumper, Vertical, 2-Pole	---
	AAA303EP50	Jumper, Vertical, 10-Pole (cut to 4-position)	HL1 HL2
6	AAA303EP4	Separator, Orange, 0.16 in. Thick	---
7	AAA303EP1	Terminal Block, Gray, 26–14 AWG, 4 Entries	---
	AAA303EP19	Terminal Block, Blue, 26–14 AWG, 4 Entries	---
8	AAA303EP51	Terminal Block, Gray (24 VDC), 24–8 AWG, 2 Entries, 600 V, 35 A	---



NOTE: Typical arrangement of operator (type 6970REA) is shown. Your unit's actual parts and their arrangement will depend on operator type. Parts are located in the upper area of the controller cabinet.

AAA21255C				
REF. No.	PART No.	DESCRIPTION	SYMBOL	OPERATOR TYPE OR CONDITION
1	226H2	Capacitor, 250 μ FD.	C10	6970REA
2	AAA00375AAJ002	Circuit Breaker, 1 A, 3-Pole	CB7	7300A, O-AC
	AAA00375AAJ004	Circuit Breaker, 2 A, 3-Pole	CB7	7300A, O-AC, 6970 Timed Resistance
			CB8	6970REA O-AC
	AAA00375AAJ006	Circuit Breaker, 4 A, 3-Pole	CB12	6970REA
3	AAA775BJ23	Fuse, 3 A	F30, F31	6970REA
4	AAA653K1	Fuse, Block	F30, F31	6970REA
*	AAA653K100	Fuse Puller	---	---
5	A7011A3	Reactor, Saturable	REA	6970REA
6	AAA612AJ1	Rectifier, 3-Phase	RF3, RF4	7300A
			RF5, RF6	6970REA
7	AAA613CZ9	Relay, 115 VAC, 4-Pole	GS, RGS	6970 Timed Resistance
8	618AE2	Socket, Relay		
9	AAA623AA1	Timer	T1	6970 Timed Resistance
10	AAA605AA43	Varistor	VF1, VR2, VR3	All

* Part not shown.