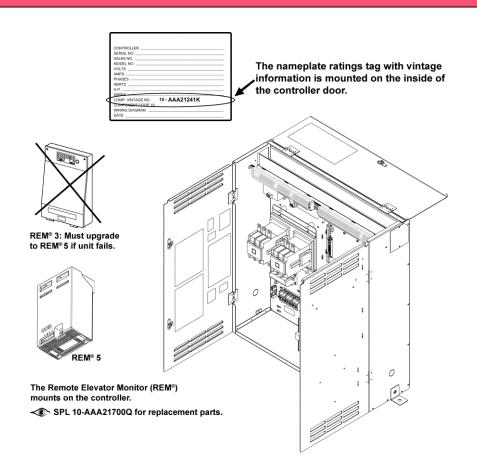
# Hydraulic Controller Microprocessor 211 (LR95)

# Spare Parts Leaflet 10-AAA21241K

September 21, 2022 / Page 1 of 11

# **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.



**OTIS** 

This document contains technical data subject to EAR. ECCN: EAR99

SERVICE ENGINEERING
Otis Elevator Company
Bloomfield, Connecticut USA

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#### **History**

#### **Leaflet Description**

This leaflet details replacement parts for 211 (LR95) hydraulic controllers.

#### **Leaflet Revisions**

Date Revised	Subject Matter Expert	Reason for Revision
January 1997		New SPL
Sept. 30, 2003	Mike Boles	Added history page; updated relay contact parts on pp.4 and 5.
June 22, 2007	Jeffrey A. Holmes	Update: p.1–p.8
January 12, 2009	Jeffrey A. Holmes	Corrected part number on p. 9 from p/n AAA530AF7 to p/n AAA618AF7
November 4, 2009	Matt Fournier	Updated AAA660B arrangement and illustration on page 8.
October 23, 2013	Anh Pham	Added p/n AAA27076FX1 on p. 6
December 7, 2016	Taye Gebrewold	Corrected description for p/n AAA225JH2 on p. 8
September 21, 2022	Juan Murillo	Updated to include OBSOLESCENCE note on cover

#### **Related Drawings**

Drawing No.	Title	Drawing No.	Title
AAA21241K	Assembly and Arrangement: 211 Controller		

#### **Related Documents**

Document ID	Title

#### **Subject Matter Expert**

Name	Department	
Anh Pham	OSC Service Engineering	

#### **About Spare Parts Leaflets...**

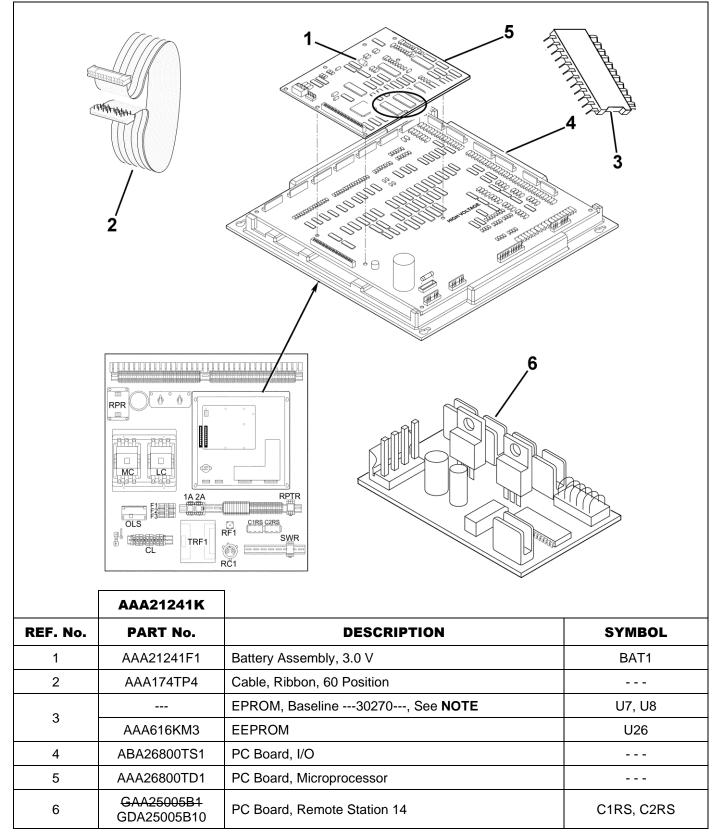
This document lists the lowest replaceable units (LRUs) for the standard version of the product. The LRUs are chosen by a team of Otis associates representing engineering and manufacturing.

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.

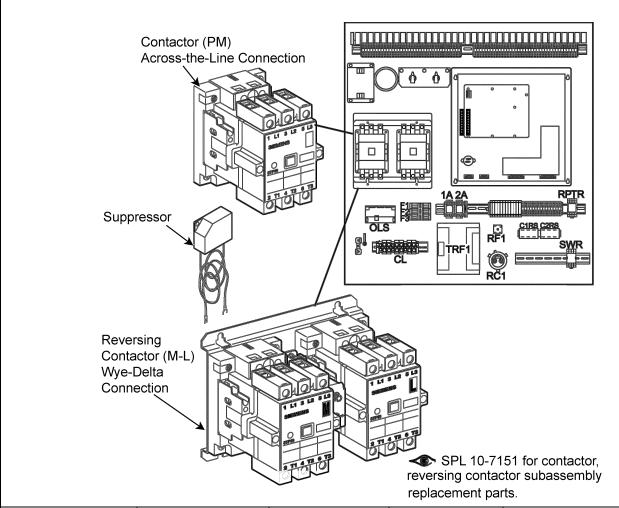
### 211 Controller (LR95)

#### 10-AAA21241K



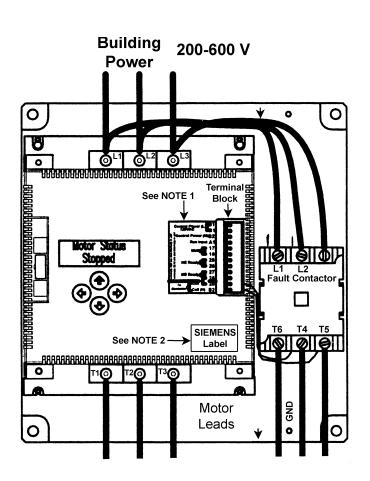
**NOTE:** Contact your OSC Customer Service Representative for the latest revision.

### 211 Controller (LR95)

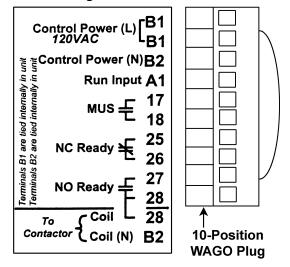


SUPPRESSOR PART No.	CONTACTOR PART No.	MOTOR H.P.	* POWER SUPPLY	CONTACTOR NAME	NEMA SIZE
	AAA638D7 AAA638D107	10–30	208–240	M-L	3
	AAA638A10 AAA638A110	10–30	208–240	PM	3
	AAA638R7 AAA638R107	10–30	440–600	PM	2
<del>605H1</del> AAA00605AAA014	AAA638W7 AAA638W107	10–30	440–600	M-L	2
	AAA638D7 AAA638D107	> 10–50	440–600	M-L	3
	AAA638F12 AAA638F107	> 30–50	208–240	M-L	4
	AAA638A10 AAA638A110	> 30–50	440–600	РМ	3

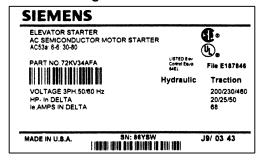
# Instructions for Replacing Existing 211 Starters



**NOTE 1: Enalrged View of Terminal Blocks** 



**NOTE 2: Enlarged View of Siemens Label** 



- Use an Allen wrench to power terminals L1, L2, L3, T1, T2, and T3.
- Use WAGO tool AAA447AP100 to insert wires into 10-position plug.
- Use cables AAA174YG35 & 36 when replacing existing 211 starters (AAA638AL or AAA638AJ).
- Use Document 55974 (shipped with every new starter) to install new contactor.

# Soft Starter Assemblies AAA21240AD1-AD10

**NOTE 1:** Building power supply 200–240 V for use with 6 or 12 lead Wye-Delta wound motors only.

HP at 200- 208 V	HP at 220- 240 V	HP at 440- 480 V	Max. Operating Current (AMPS)	Overload Range (AMPS)	Existing Starter P/N	New Starter P/N	Replacement Fault Contactor	Replacement Fault Contact Cover
5	7.5	15	22	5–22	AAA638AJ1	AAA638AL1 AAA21240AD1		
7.5	10	25	35	9-35	AAA638AJ2	AAA638AL2 AAA21240AD2		
10	15	30	42	10–42	AAA638AJ3	AAA638AL3 AAA21240AD3	AAA21240AD39	A A A 24 244 A D 44
15	20	40	55	14–55	AAA638AJ4	AAA638AL4 AAA21240AD4	AAA27076FX1 AA	AAA21241AD44
20	25	50	68	17–68	AAA638AJ5	AAA638AL5 AAA21240AD5		
25	30	60	80	20–80	AAA638AJ6	AAA638AL6 AAA21240AD6		
30	40	75	105	26–105	AAA638AJ7	AAA638AL7 AAA21240AD7	AAA21240AD40	
40	50	100	130	32–130	AAA638AJ8	AAA638AL8 AAA21240AD8	AAA21240AD40	AAA21240AD45
50	60	125	156	39–156	AAA638AJ9	AAA638AL9 AAA21240AD9	AAA21240AD41	
75	100		252	63–252	AAA638AJ10**	AAA638AL10 AAA21240AD10	AAA21240AD43	AAA21240AD46

NOTE 2: Current limit % of overload current is 150%-450% (set at 230%).

NOTE 3: Consult OtisRole if you have a Wye-configured pump motor with 3 or 9 leads.

<sup>\*\*</sup> Replacement fan AAA21240AD47.

# Soft Starter Assemblies AAA21240AD1-AD10

10-AAA21241K

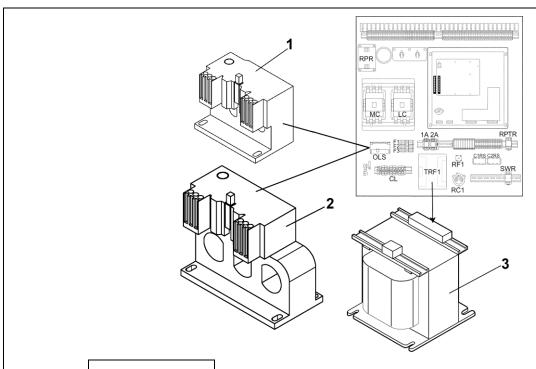
**NOTE 1:** Building power supply 440–600 V for use with 6 or 12 lead Wye-Delta wound motors only.

HP at 440- 480 V	HP at 575- 600 V	Max. Operating Current (AMPS)	Overload Range (AMPS)	Existing Starter P/N	New Starter P/N	Replacement Fault Contactor	Replacement Fault Contact Cover
15	20	22	5–22	AAA638AJ11	AAA638AL11 AAA21240AD11		
25	30	35	9–35	AAA638AJ12	AAA638AL12 AAA21240AD12	AAA21240AD40	
30	40	42	10–42	AAA638AJ13	AAA638AL13 AAA21240AD13		AAA21241AD45
40	50	55	14–55	AAA638AJ14	AAA638AL14 AAA21240AD14		
50	60	68	17–68	AAA638AJ15	AAA638AL15 AAA21240AD15	AAA21240AD9	
60	75	80	20–80	AAA638AJ16	AAA638AL16 AAA21240AD16	AAA21240AD9	
75	100	105	26–105	AAA638AJ17	AAA638AL17 AAA21240AD17		
100	125	130	32–130	AAA638AJ18	AAA638AL18 AAA21240AD18	AAA21240AD42	AAA21240AD46
125	150	156	39–195	AAA638AJ19	AAA638AL19 AAA21240AD19		

NOTE 2: Current limit % of overload current is 150%-450% (set at 230%).

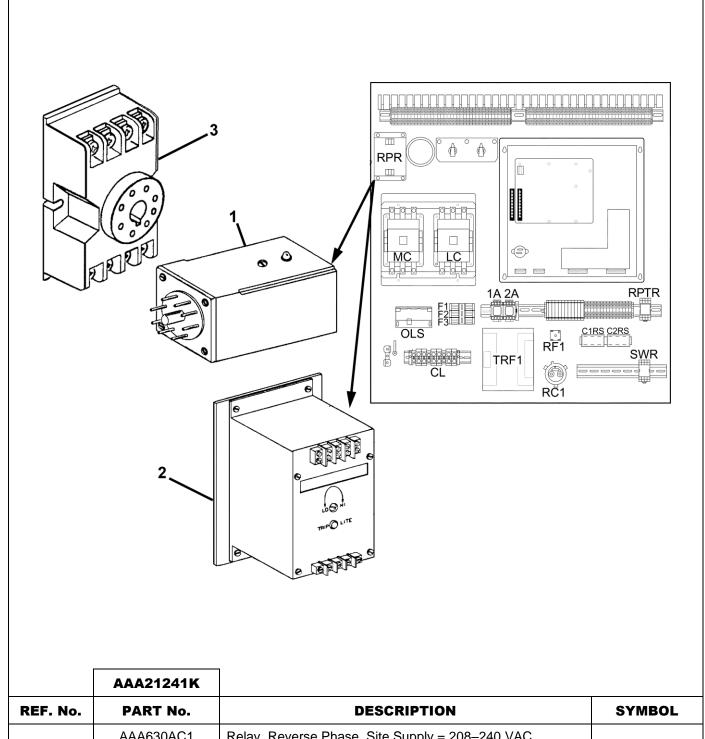
NOTE 3: Consult OtisRole if you have a Wye-configured pump motor with 3 or 9 leads.

### 211 Controller (LR95)



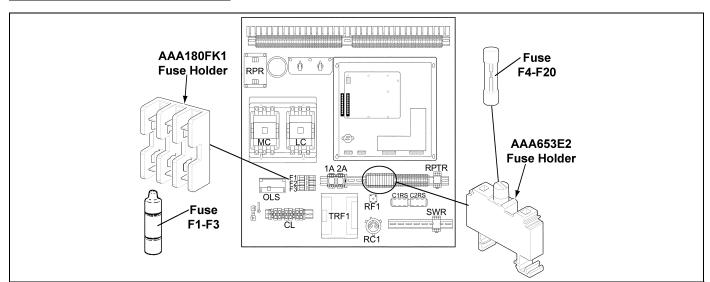
	AAA21241K		
REF. No.	PART No.	DESCRIPTION	SYMBOL
1	AAA660B7 AAA660B107 AAA660B207	Relay, Overload, 10–40 A	
-	AAA660B8 AAA660B108 AAA660B208	Relay, Overload, 10–40 A	
	AAA660B9 AAA660B109 AAA660B209	Relay, Overload, 25–100 A	OLS
2	AAA660B10 AAA660B110 AAA660B210	Relay, Overload, 25–100 A	
	AAA660B11 AAA660B111 AAA660B211	Relay, Overload, 50–200 A	
	AAA225JH1	Transformer, Site Supply = 208–240 VAC, See <b>NOTE 1</b>	
	AAA225JH2	Transformer, Site Supply = 440–480 VAC, See <b>NOTE 1</b>	
3	AAA225JH3	Transformer, Site Supply = 550–600 VAC, See <b>NOTE 1</b>	TRF1
3	AAA225JH4	Transformer, Site Supply = 208–240 VAC, See <b>NOTE 2</b>	
	AAA225JH5	Transformer, Site Supply = 440–480 VAC, See <b>NOTE 2</b>	
	AAA225JH6	Transformer, Site Supply = 550–600 VAC, See <b>NOTE 2</b>	

- **NOTE 1:** Transformers AAA225JH1 through JH3 are used with two door operators, or more than five openings, or with tank heater.
- **NOTE 2:** Transformers AAA225JH4 through JH6 are used with one door operator, and less than four openings, and without tank heater.



	AAA2 12-7 113		
REF. No.	PART No.	DESCRIPTION	SYMBOL
1	AAA630AC1	Relay, Reverse Phase, Site Supply = 208–240 VAC	
-	AAA630AC2	Relay, Reverse Phase, Site Supply = 440–480 VAC	RPR
2	AAA630AC3	Relay, Reverse Phase, Site Supply = 575–600 VAC	
3	AAA618AF7	Socket, Relay (for reverse phase relay)	

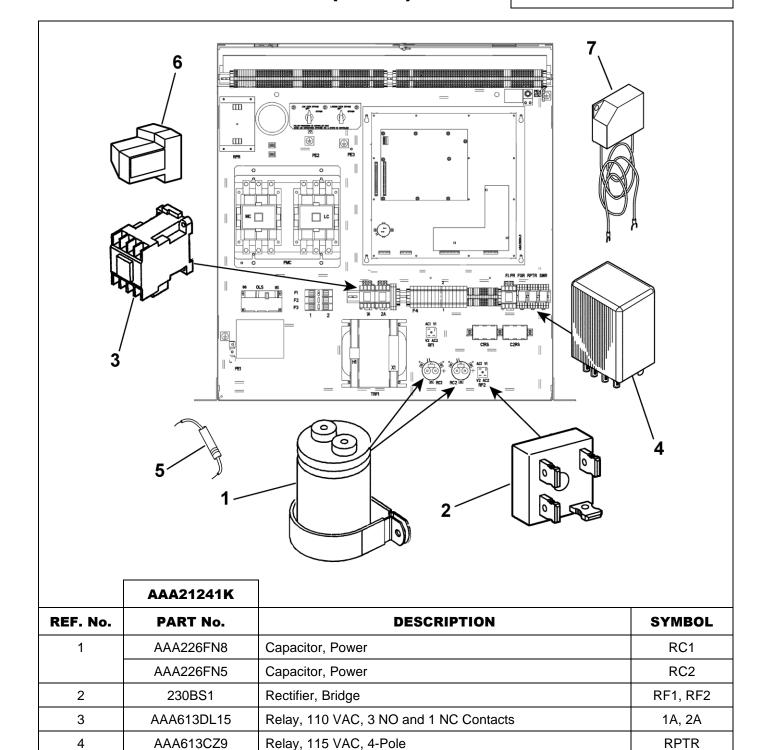
## 211 Controller (LR95)



PART No.	FUSE No.	VOLTAGE RATING	AMPERE RATING	JOB SITE OPTIONS
AAA375CE6	F1-F3	600	20	Fuse, Power Supply = 208–240 VAC
AAA375BK38	F1-F3	600	9	Fuse, Power Supply = 440–480 VAC
AAA375BK36	F1-F3	600	7.5	Fuse, Power Supply = 550–600 VAC
AAA375BR22	F4	32	25	Fuse, Constant
AAA375BR14	F5	250	4	Fuse, Two or More Car Group (G2M)
AAA375BR15	F6	250	5	Fuse, One Car Group (G1C)
AAA375BR8	F6	250	1.5	Fuse, Two or More Car Group (G2M)
<del>375P21</del> AAA375BT22	F7	250	0.125	Fuse, Constant
375P22	F8	250	0.25	Fuse, Constant
<del>375P26</del> AAA375BT26	F9	250	1.5	Fuse, Constant
AAA375BR9	F10	250	2.0	Fuse, Constant
375P23	F11	250	0.375	Fuse, Constant
AAA375BR10	F14	250	2.25	Fuse, Constant
AAA375CJ4	F15	250	10	Fuse, Rear Door Operator (RDO)
AAA375BR15	F16	250	5.0	Fuse, w/o Rear Door Operator (XRDO)
AAA375BR6	F17	250	1	Fuse, Constant
AAA375BR5	F18	250	0.75	Fuse, Constant
AAA375BR16	F19	250	6.25	Fuse, 120 VAC Light Power Supply
AAA375BR12	F19	250	3	Fuse, 240 VAC Light Power Supply
AAA375BR12	F20	250	3	Heater (HTH)
AAA180FK1	F1-F3			Holder, 3-Pole Fuse
AAA653E2	F4-F20			Holder, Din Rail Mount Fuse

### 211 Controller (LR95)

#### 10-AAA21241K



Relay, 24 VDC, 4 NC Contacts

Suppressor, 100-240 VAC

Suppressor, 220 Ω, RC Network

Resistor, Bleeder

Resistor, Bleeder

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AAA613CZ8

232T4

AAA232FP94

AAA613DL60

AAA00605AAA001

4

5

6

7

SWR

RC1

RC2

1A, 2A

RPTR