

**Quattro AC Drive
(OVF30 Replacement)**

**Spare Parts Leaflet
10-AAA21290CK**

December 13, 2023 / Page 1 of 9

W/O VINTAGE



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 spare parts information for the Quattro AC (OVF30 replacement) drive.

Leaflet Revisions

Date Revised	Subject Matter Expert	Reason for Revision
July 20, 2022	Dave Gentzler	New SPL
December 13, 2023	Dave Gentzler	Added PM motor arrangements and updates

Related Drawings

Drawing No.	Title	Drawing No.	Title
AAA21290CK	Drive, ACVF	AAA27076JM	Quattro Software (AC)
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Related Documents

Document ID	Title
TIP 1.1.27.3-1	Quattro® Otis OVF30 AC Elevator Drive Technical Manual and Installation Guide
TIP 1.1.27.3-2	Quattro® Otis AC Elevator Drive Technical Manual and Installation Guide
TIP 1.1.11.2-1	GEM / MVS OVF30 Drive Replacement with Magnetek Drive
TIP 1.1.13.2-3	411M-VF OVF30 Drive Replacement with Magnetek Drive
TIP 1.1.18.2-5	Gen2/NGGC OVF30 Drive Replacement with Magnetek Quattro AC Drive

Subject Matter Expert

Name	Department
Dave Gentzler	OSC MOD Engineering

About Spare Parts Leaflets...

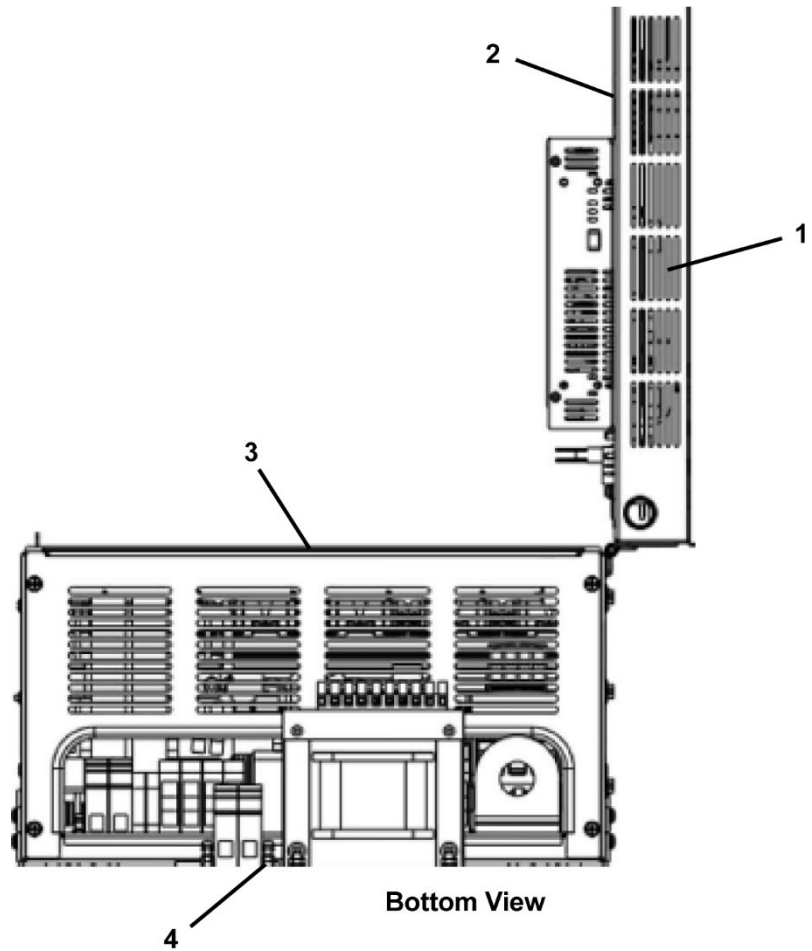
This document lists the lowest replaceable units (LRUs) for the standard version of the product. The LRUs are chosen by a team of Otis associates representing engineering and manufacturing.

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.

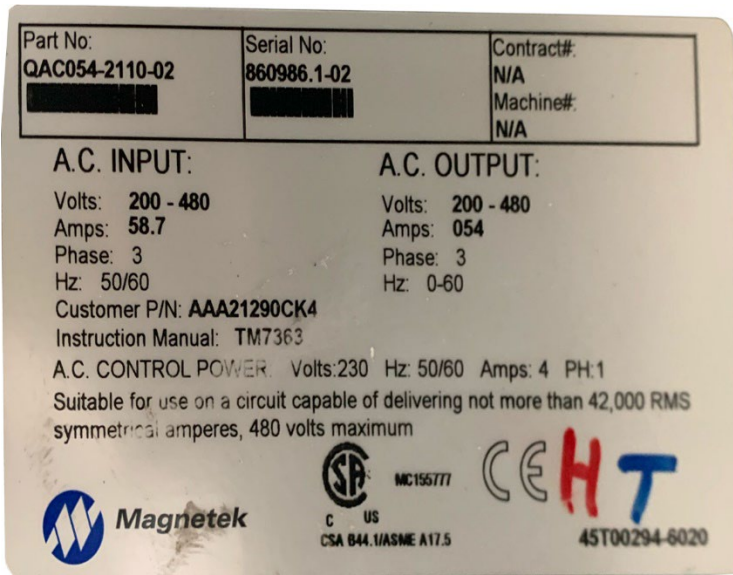
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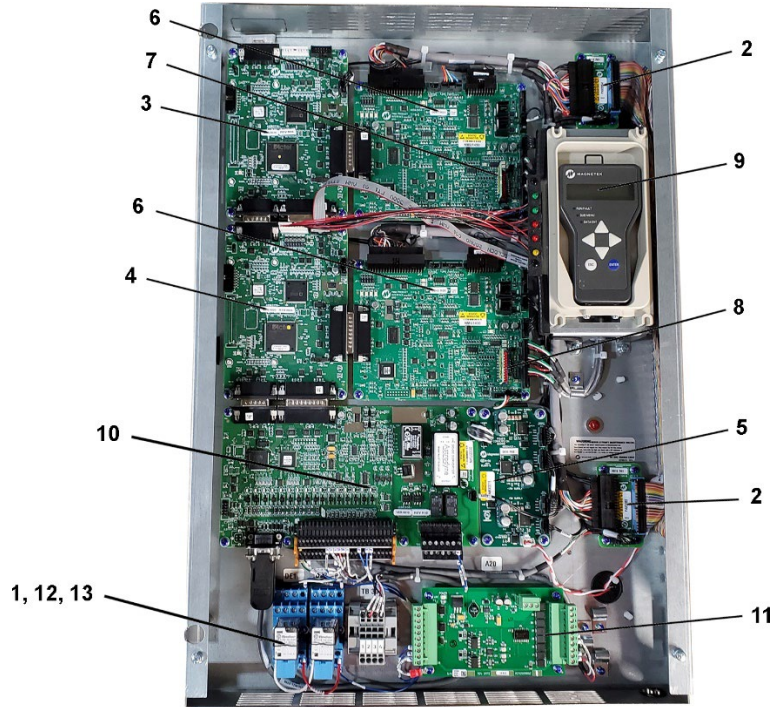
* not shown.



Otis Part Number	Magnetek Part Number	Continuous Current Rating	Motor Type	Applications
AAA21290CK1	QAC028-2110-02	28A	Induction Motor (IM)	GEM / MVS / HVS / E411MVF
AAA21290CK2	QAC034-2110-02	34A		
AAA21290CK3	QAC042-2110-02	42A		
AAA21290CK4	QAC054-2110-02	54A		
AAA21290CK5	QAC068-2110-02	68A		
AAA21290CK6	QAC085-2110-02	85A		
AAA21290CK9	QAC042-2110-05	42A	Permanent Magnet Motor (PM)	Gen2 / NGGC
AAA21290CK10	QAC054-2110-05	54A		
AAA21290CK12	QAC085-2110-05	85A	Permanent Magnet Motor (PM)	International Only
AAA21290CK11	QAC068-2110-05	68A		

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Control Tray (Swing Panel Front)



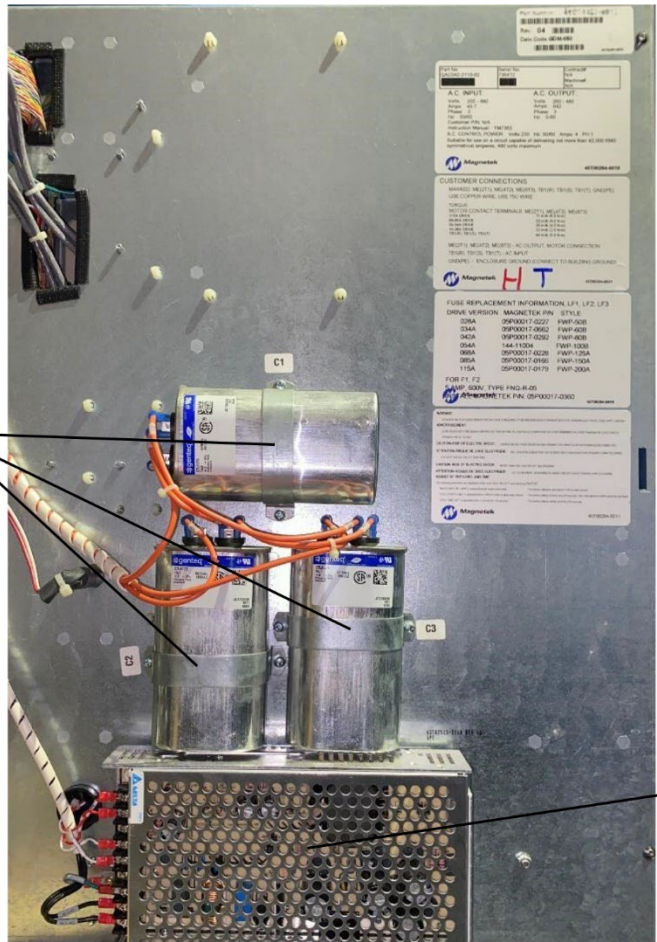
REF. No.	PART No.	DESCRIPTION
1	MAGN05P00037-0349	Base, Drive Enable Relay; for Relays Mounted to Sheet Metal (optional)
	MAGN05P00034-0422	Base, Drive Enable Relay; for Relays Mounted on DIN Rail (optional)
2	LA46S04449-0010	Board, Connection Interface
3	LA46S03776-4210	Board, Main Control (Line Side, IM Motor, AAA21290CK1–6); Includes Latest Line-Side Software
	LA46S03776-4510	Board, Main Control (Line Side, PM Motor, AAA21290CK7–12); Includes Latest Line-Side Software
4	LA46S03776-3410	Board, Main Control (Motor Side, IM Motor, AAA21290CK1–6); Includes Latest Motor-Side Software*
	LA46S03776-3510	Board, Main Control (Motor Side, PM Motor, AAA21290CK7–12); Includes Latest Motor-Side Software*
5	LA46S04421-0030	Board Power Conversion
6	LA46S03954-0041	Board, Product Interface; NOTE: Does not include items 7 or 8.
7	LA46S04187-4591	Cube ID PCB (Line Side); Used with 28A Drive (AAA21290CK1 and AAA21290CK7)
	LA46S04187-4601	Cube ID PCB (Line Side); Used with 34A Drive (AAA21290CK2 and AAA21290CK8)
	LA46S04187-4611	Cube ID PCB (Line Side); Used with 42A Drive (AAA21290CK3 and AAA21290CK9)
	LA46S04187-4621	Cube ID PCB (Line Side); Used with 54A Drive (AAA21290CK4 and AAA21290CK10)
	LA46S04187-4631	Cube ID PCB (Line Side); Used with 68A Drive (AAA21290CK5 and AAA21290CK11)
	LA46S04187-4641	Cube ID PCB (Line Side); Used with 85A Drive (AAA21290CK6 and AAA21290CK12)
8	LA46S04187-4590	Cube ID PCB (Motor Side); Use with 28A Drive (AAA21290CK1 and AAA21290CK7)
	LA46S04187-4600	Cube ID PCB (Motor Side); Used with 34A Drive (AAA21290CK2 and AAA21290CK8)
	LA46S04187-4610	Cube ID PCB (Motor Side); Used with 42A Drive (AAA21290CK3 and AAA21290CK9)
	LA46S04187-4620	Cube ID PCB (Motor Side); Used with 54A Drive (AAA21290CK4 and AAA21290CK10)
	LA46S04187-4630	Cube ID PCB (Motor Side); Used with 68A Drive (AAA21290CK5 and AAA21290CK11)
	LA46S04187-4640	Cube ID PCB (Motor Side); Used with 85A Drive (AAA21290CK6 and AAA21290CK12)
9	MAGNELEV-ELOP	Keypad, Operator
**	AAA27076JM*	Kit, Software Upgrade; NOTE: Contact OSC Customer Service for the Latest Version of Software; (IM & PM Drives Require Different Software)
10	AAA21255AH505	PCB, Customer Interface
11	ACA26800QZ1	PVT Buffer Board
12	MAGN05P00037-0348	Relays, Drive Enable, (DE1 & DE2) (optional)
13	MAGN05P00037-0350	Suppressor, Surge; for Relays Mounted to Sheet Metal (optional)

* Drive parameters are stored on this board and must be transferred manually when the board is replaced.

** Not shown.

Swing Panel Rear

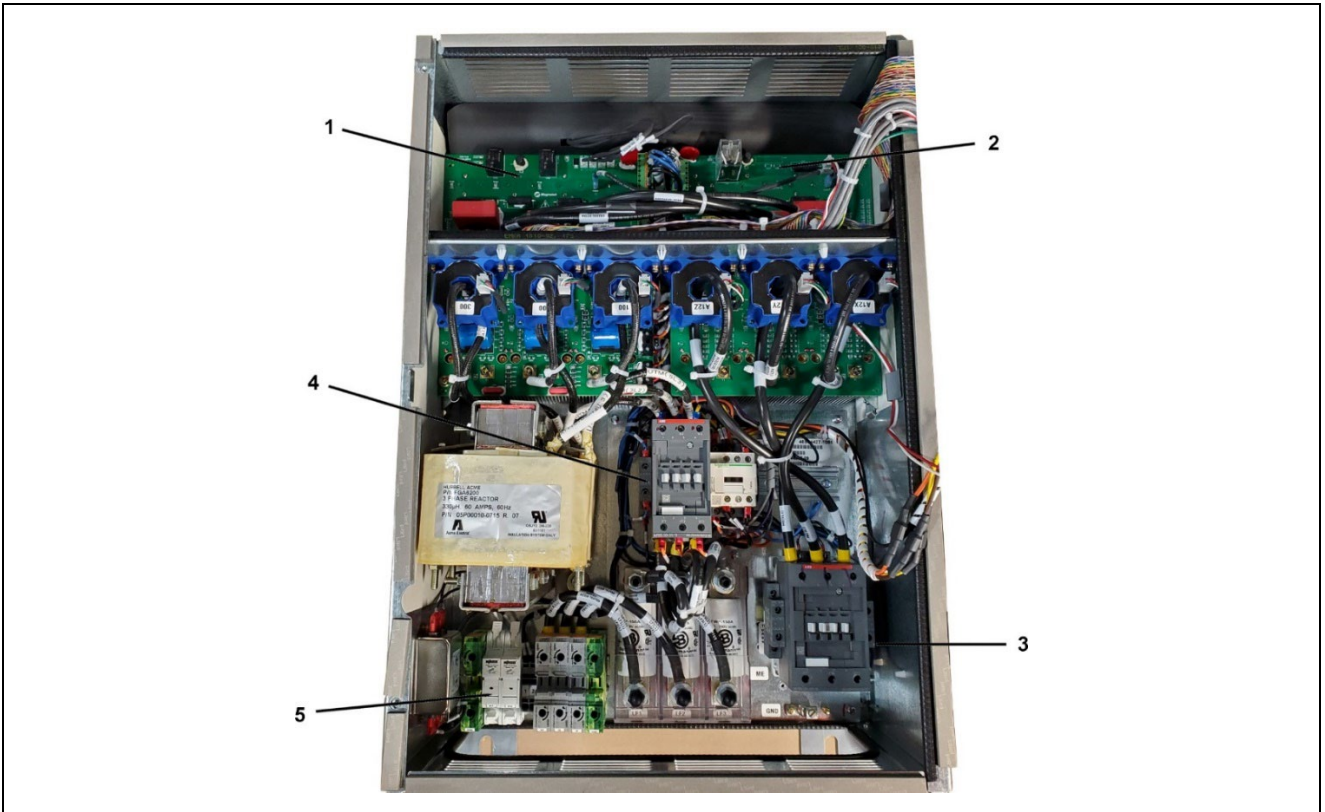
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REF. No.	PART No.	DESCRIPTION
1	LA05P00003-0816	Capacitor, AC
2	LA05P00090-0881	Supply, Power



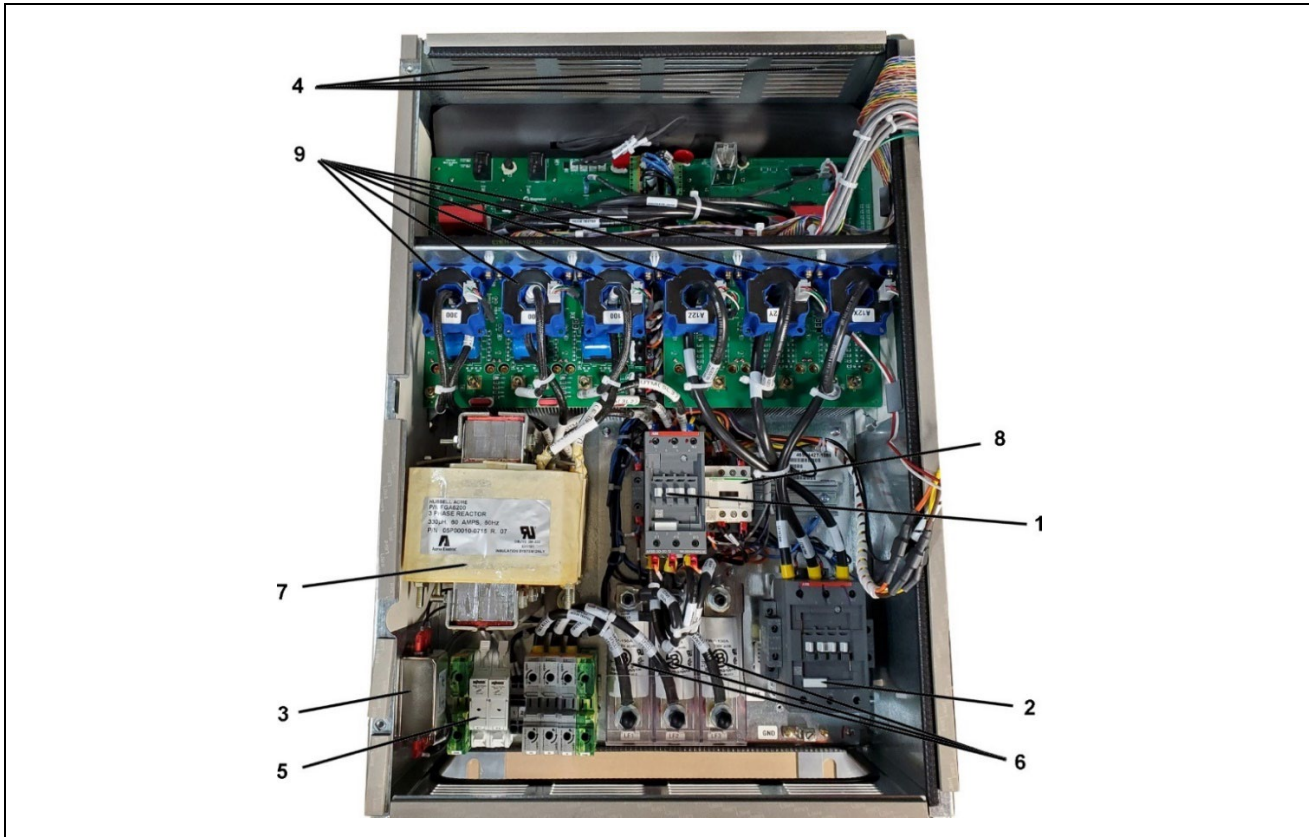
REF. No.	PART No.	DESCRIPTION
1*	LA46S04442-0042	Assembly, Gate Drive, Line Side – with ABB AF Series UTM Contactor for 28A, 34A, 42A, 54A, or 68A Drive
	LA46S04442-0068	Assembly, Gate Drive, Line Side – with ABB AF Series UTM Contactor for 85A Drive
	LA46S04442-1042	Assembly, Gate Drive, Line Side – with ABB AFC Series UTM Contactor for 42A, 54A, or 68A Drive
	LA46S04442-1068	Assembly, Gate Drive, Line Side – with ABB AFC Series UTM Contactor for 85A Drive
2*	LA46S04443-0028	Assembly, Gate Drive, Motor Side – with ABB AF Series ME Contactor for 28A, or 34A Drive
	LA46S04443-0042	Assembly, Gate Drive, Motor Side – with ABB AF Series ME Contactor for 42A Drive
	LA46S04443-0068	Assembly, Gate Drive, Motor Side – with ABB AF Series ME Contactor for 54A Drive
	LA46S04443-0115	Assembly, Gate Drive, Motor Side – with ABB AF Series ME Contactor for 68A, or 85A Drive
	LA46S04443-1042	Assembly, Gate Drive, Motor Side – with ABB AFC Series ME Contactor for 42A Drive
	LA46S04443-1068	Assembly, Gate Drive, Motor Side – with ABB AFC Series ME Contactor for 54A Drive
	LA46S04443-1115	Assembly, Gate Drive, Motor Side – with ABB AFC Series ME Contactor for 68A, or 85A Drive
3	LA05P00032-0234	Block, Contact, Auxiliary, ME – (Top Mount)
	LA05P00032-0233	Block, Contact, Auxiliary, ME – (Side Mount) Replaces Top Mount and Side Mount
4	LA05P00032-0233	Block, Contact Auxiliary, UTM
5	LA05P00019-0163	Blocks, Fuse, Control
	LA46S04415-0200	Block, Terminal Assembly – Includes Rail and All Terminal Blocks

*See the ABB part number on the existing contactor to determine the correct part to order.

(Continued in next page)

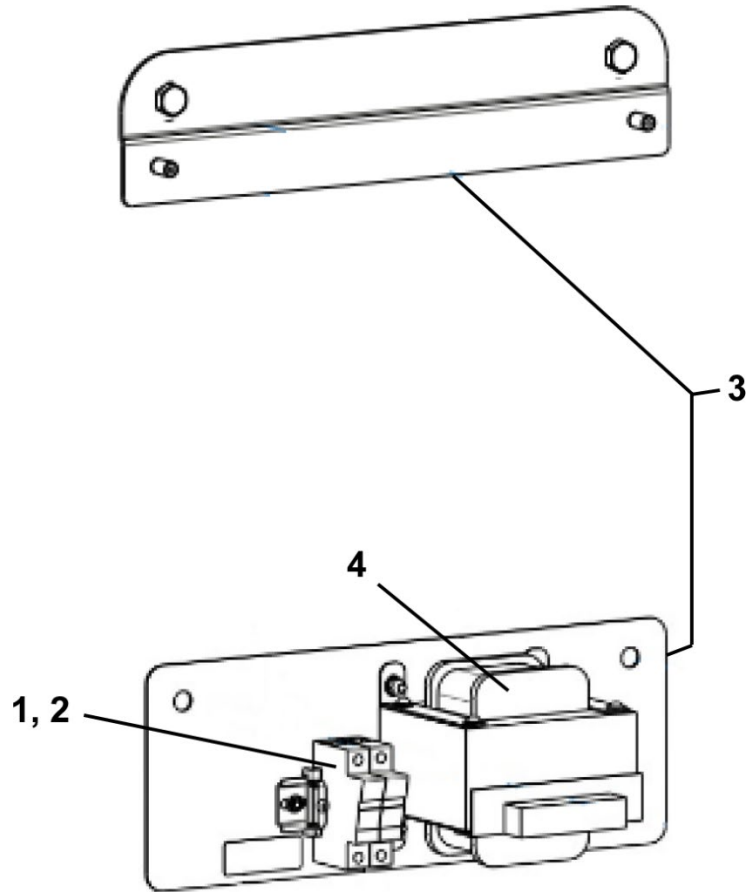
Power Section

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REF. No.	PART No.	DESCRIPTION
1*	MAGNCUBE-UTM-0230	Contactors, Line Side UTM – ABB AF Series for 28 A Drive
	MAGNCUBE-UTM-0229	Contactors, Line Side UTM – ABB AF Series for 34 A or 42 A Drive
	MAGNCUBE-UTM-0228	Contactors, Line Side UTM – ABB AF Series for 54 A, 68 A or 85 A Drive
	MAGNCUBE-UTM-0296	Contactors, Line Side UTM – ABB AFC Series for 42 A Drive
	MAGNCUBE-UTM-0297	Contactors, Line Side UTM – ABB AFC Series for 54 A, 68 A or 85 A Drive
2*	MAGNCUBE-ME-0229	Contactors, Motor Side, ME – ABB AF Series for 28 A Drive
	MAGNCUBE-ME-0228	Contactors, Motor Side, ME – ABB AF Series for 34 A, 42 A, or 54 A Drive
	MAGNCUBE-ME-0227	Contactors, Motor Side, ME – ABB AF Series for 68 A, or 85 A Drive
	MAGNCUBE-ME-0297	Contactors, Motor Side, ME – ABB AFC Series for 42 A, or 54 A Drive
	MAGNCUBE-ME-0298	Contactors, Motor Side, ME – ABB AFC Series for 68 A, or 85 A Drive
3	LA05P00010-0586	Filter, EMI, Control Power
4	LA05P00016-0135	Fans, Cooling (1 Fan with Hardware)
	LA46S04427-0055	Fans, Cooling (4 Fans Assembled with Hardware and Drive Top Panel)
5	LA05P00017-0360	Fuses, Control
6	MAGNCUBE-FUSE-028	Fuses, Input, Set of 3 AC (LF1, LF2, LF3) for 28 A Drive
	MAGNCUBE-FUSE-034	Fuses, Input, Set of 3 AC (LF1, LF2, LF3) for 34 A Drive
	MAGNCUBE-FUSE-042	Fuses, Input, Set of 3 AC (LF1, LF2, LF3) for 42 A Drive
	MAGNCUBE-FUSE-054	Fuses, Input, Set of 3 AC (LF1, LF2, LF3) for 54 A Drive
	MAGNCUBE-FUSE-068	Fuses, Input, Set of 3 AC (LF1, LF2, LF3) for 68 A Drive
	MAGNCUBE-FUSE-085	Fuses, Input, Set of 3 AC (LF1, LF2, LF3) for 85 A Drive
7	LA05P00010-0712	Inductor, 3-Phase, for 28 A or 34 A Drive
	LA05P00010-0713	Inductor, 3-Phase, for 42 A Drive
	LA05P00010-0714	Inductor, 3-Phase, for 54 A Drive
	LA05P00010-0715	Inductor, 3-Phase, for 68 A or 85 A Drive
8	LA05P00037-0312	Relay, Pre-Charge, PCM
9	LA05P00217-0091	Transducers, Current

* UTM and ME contactors include auxiliary contacts. See the ABB part number on the existing contactor to determine the correct part to order.



REF. No.	PART No.	DESCRIPTION
1	LA46S04415-0040	Blocks, Fuse, Transformer Primary
2	MAGNOVF FS-208V AAA21290CK101	Fuses, Replacement (F5 & F6), for 208 V Primary Voltage
	MAGNOVF FS-230-240V AAA21290CK102	Fuses, Replacement (F5 & F6), for 230 V to 240 V Primary Voltage
	MAGNOVF FS-416-480V AAA21290CK103	Fuses, Replacement (F5 & F6), for 416 V to 480 V Primary Voltage
3	AAA21290CK100	Kit, Installation; Includes: Mounting Brackets, 480 V Transformer, Fuses, and Wiring, AAA21290CK1-6 (IM Motor) Applications
	AAA21290CK104	Kit, Installation; Includes: Mounting Brackets, 480 V Transformer, Fuses, and Wiring, AAA21290CK7-12 (PM Motor) Applications
4	LA05P00058-1532	Transformer, Control Power, with 440 V to 480 V Primary Voltage*

* Replacement of old-style transformer with new style may require drilling new mounting holes and changing connection points.