

REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD

Spare Parts Leaflet

10-GAA21150-2

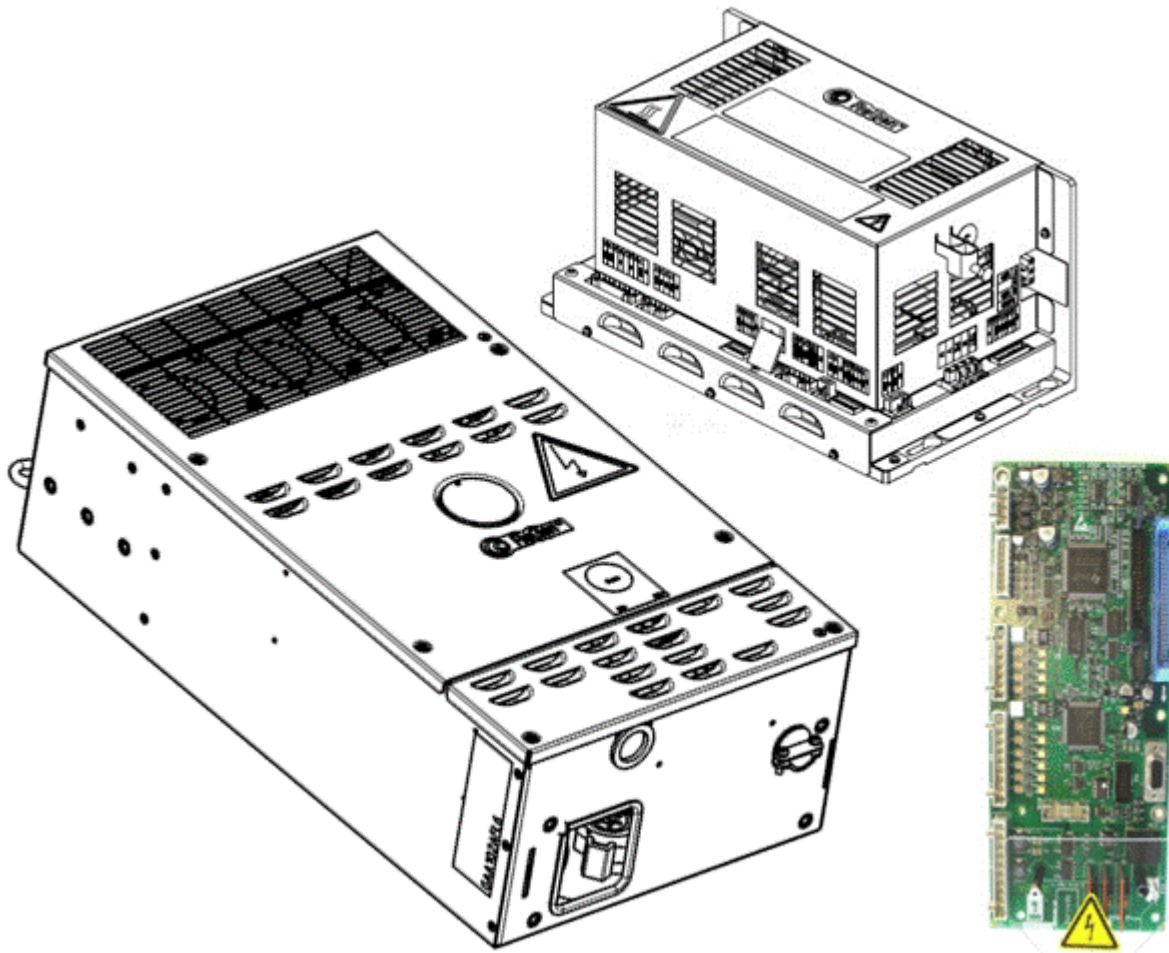
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**VF-DRIVES, OVF20CR, PDB
MCB, FAN, FILTER, DBR**



S.P.L. 10/21150-1

S.P.L. 10/21150-3



OTIS

Safety First!

**SSI - ENG BERLIN
Otis Elevator Company
Berlin, Germany**

Leaflet Description

The leaflet describes components with the corresponding parts as listed below

- Regenerative drive 404R/406R, brake module
- LCRD 401/402/403/404
- Drive assembly with HVIB and with HVIB_II
- Drive OVFR02A-406/412, OVFR02E-416
- Low Voltage Switch Drive & Ultra Drive
- GDCB, GDCB_X, OMU, EEPROM
- Ultra Drive, Ziehl Abbeg Drive
- Fan, Filter, Relays, rectifier, varistor, line reactor

Leaflet Revisions

Date Revised	Subject Matter Expert	Reason for Revision
October, 2014	Mustapha Toutaoui	OVFR02E-416 updated
		LVA: parts added

Related Drawings

Drawing No.	Title	Drawing No.	Title

Related Documents

Document ID	Title

Subject Matter Expert

Name	Department
Mustapha Toutaoui	SSI - Engineering Berlin

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.

REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD

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CAUTION

For some parts in this spare parts leaflet is the ordering No. and the part No. not identical.

e. g. CAPACITOR BOARD

Part No. GAA26800R1 (w/o packing material)
Ordering No. GAA26800R10 (with packing material)

ATTENTION

Pour certains composants de cette liste de pièces de rechange le No. de commande ne correspond pas au numéro de la pièce.

Par exemple: CAPACITOR BOARD

No. de la pièce GAA26800R1 (sans emballage)
No. de la commande GAA26800R10 (avec emballage)

ACHTUNG

Bei einigen Teilen in dieser Ersatzteilliste ist die Bestell-Nr. nicht identisch mit der vorhandenen Teil-Nr. auf dem betreffenden Teil.

z. B.: CAPACITOR BOARD

Teil-Nr. GAA26800R1 (ohne Verpackung)
Bestell-Nr. GAA26800R10 (mit Verpackung)

ATTENZIONE

Per alcuni componenti di questa lista, il No. di ordinazione non corrisponde con il No. del pezzi de ricambio.

Per esempio: CAPACITOR BOARD

No. pezzo di ricambio GAA26800R1 (senza imballaggio)
No. di ordinazione GAA26800R10 (con imballaggio)

ATENCIÓN

En ciertas piezas en esta lista de requestos el No. del pedido no corresponde con el No. de la pieza.

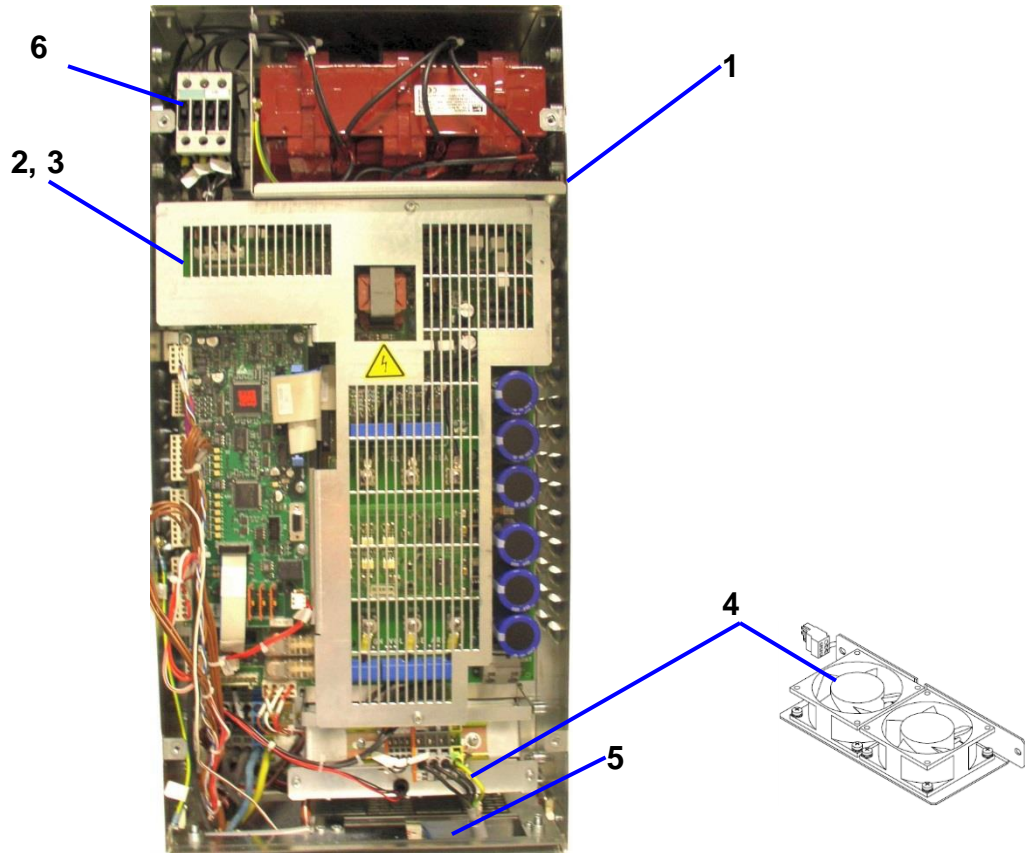
Por ejemplo: CAPACITOR BOARD

No. de la pieza GAA26800R1 (sin enpacar)
No. del pedido GAA26800R10 (enpacado)

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REGENERATIVE DRIVE (404R)



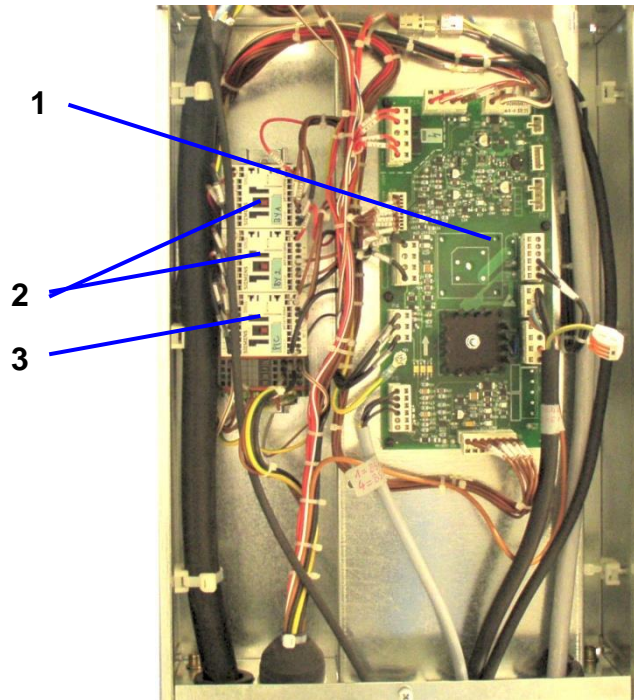
REF. No.	VINTAGE PART No.	DESCRIPTION
1	KBA21310AAA10 KBA21310AAV10	REGENERATIVE DRIVE PACKAGE (404R)
2	AAA638AM1	Relay, discharge, DCHG (404R + 406R)
3	KAA638AAB1	Relay, pre-charge, PCHG (404R)
4	KAA21305AAD4 KBA21305AAD1	Fan assembly (404R)
5	AAA737Z2	Filter (406R)
6	KAA638AAA1	RELAY, INV (404R)

REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD

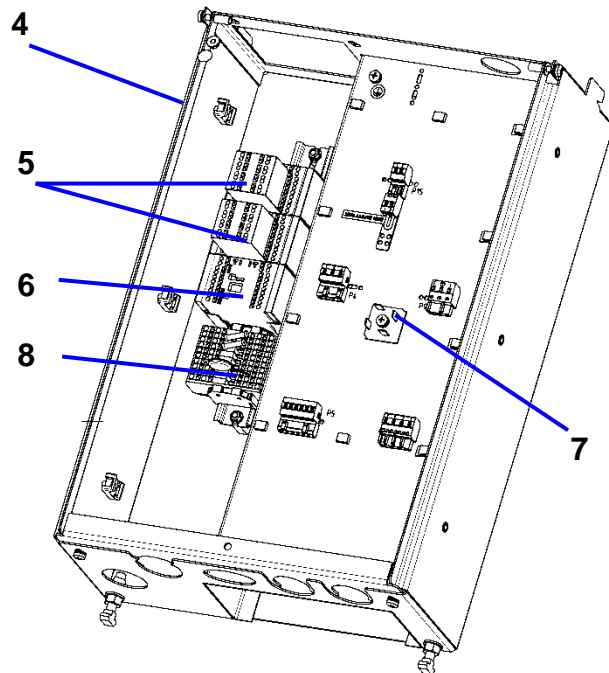
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BRAKE MODULE

OLD VERSION



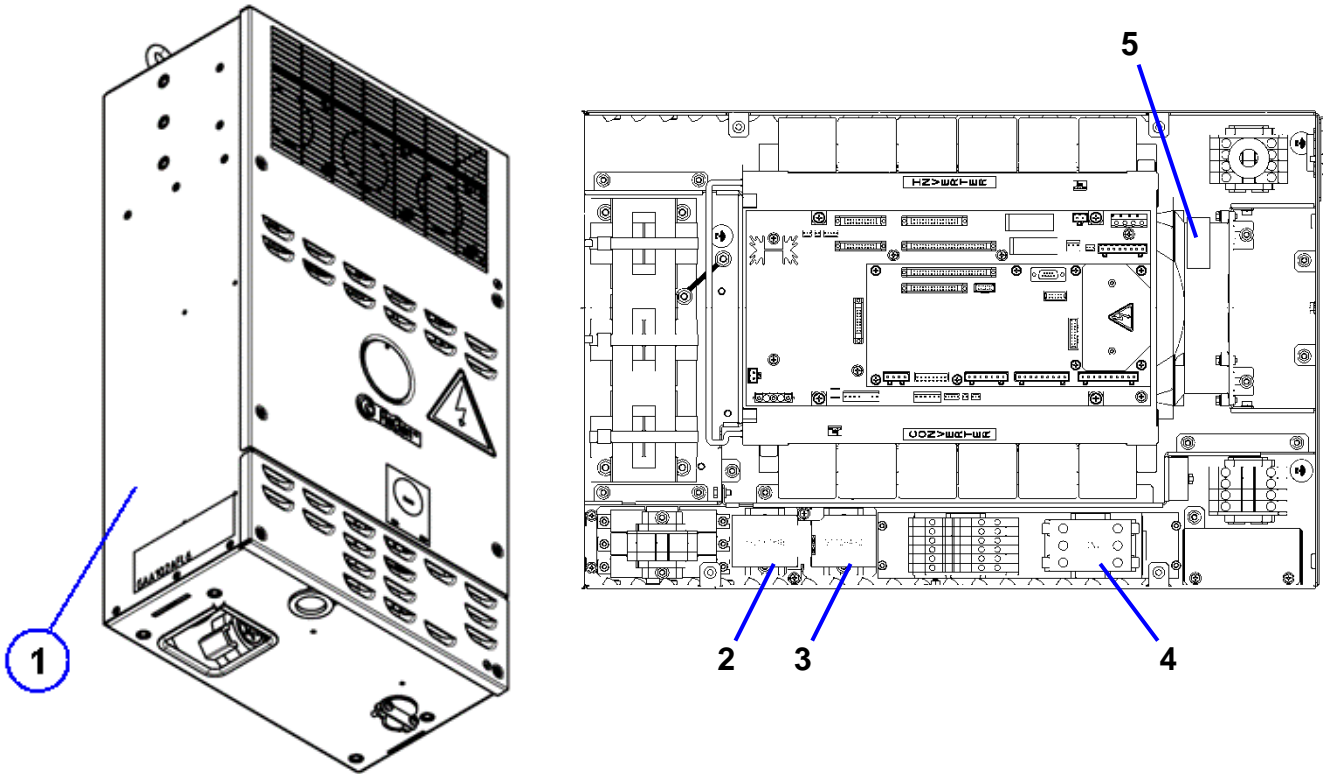
NEW VERSION



REF. No.	VINTAGE PART No.	DESCRIPTION
1	AAA26800AKY3	Brake control and power conditioning (BCPC) without HOLD
4	GAA21305LM10 GAA21305SY10	
2	AAA638AM5	Relay, BY1, BY2, 110VDC
3	AAA638AM6	Relay, PIC, 24 VDC
5	GAA638FD3 GAA638ER1	BY1, BY2 Relais 110 VAC
6	GAA638FF1	PIC Relais 24 VDC
7	GAA230BA1	Rectifier
8	GO232AD2 GO232AD18	Varistor

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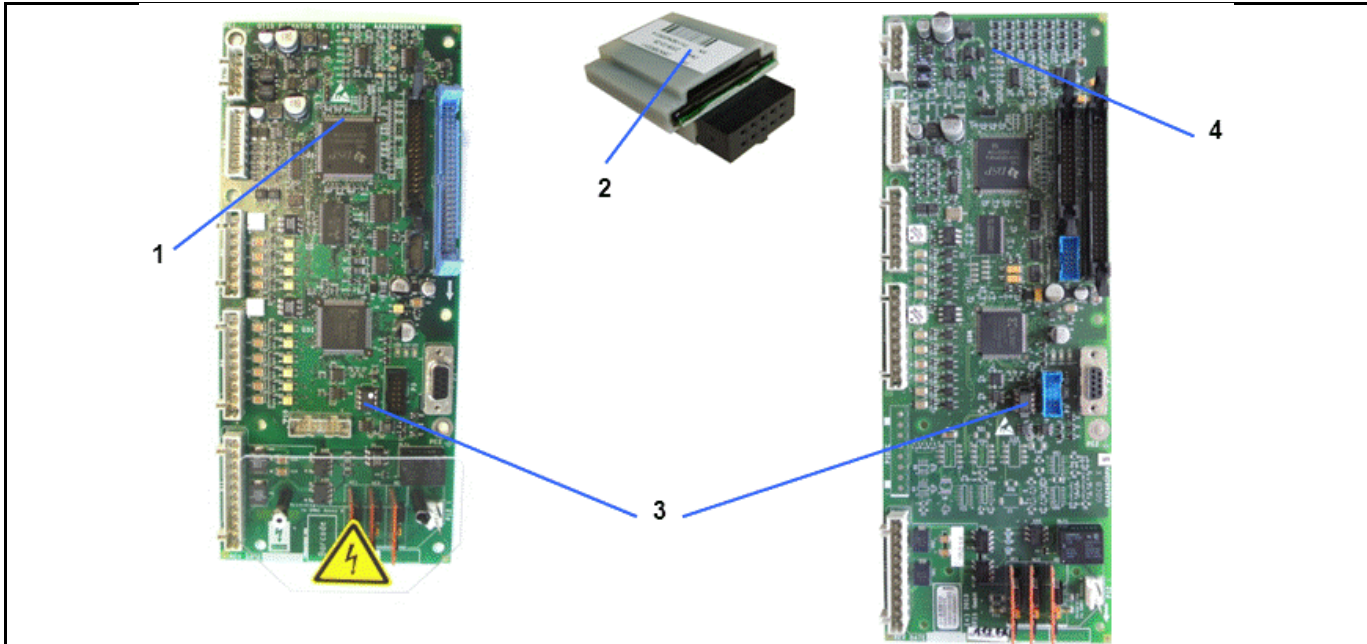
REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD



REF. No.	VINTAGE PART No.	DESCRIPTION
1	ABA21310Z1 GCA21310A1 GDA21310A1 GAA21310GN1	REGENERATIVE DRIVE PACKAGE (406R)
2	AAA638AM3	Relay, precharge, PCHG (406R)
3	AAA638AM1	Relay, discharge, DCHG (406R)
4	AAA638AM7	RELAY, INV (406R)
5	AAA6091AJ3	Fan (406R)

REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD

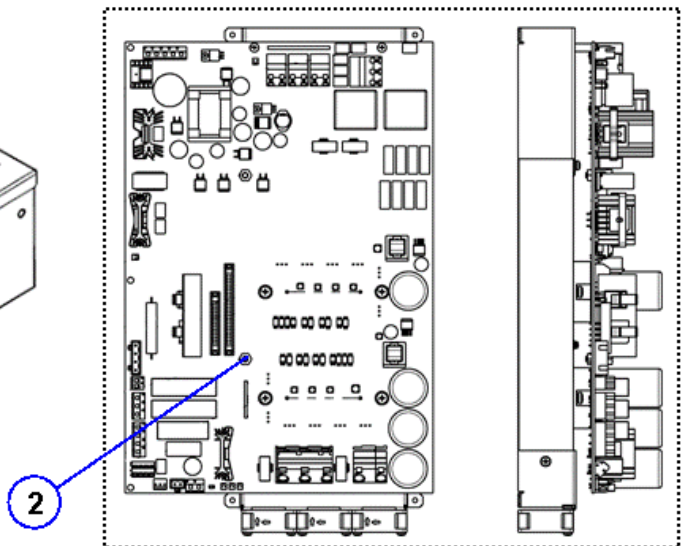
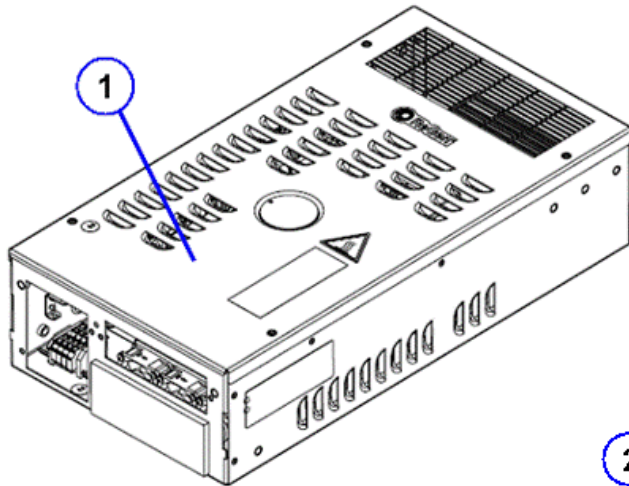
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VINTAGE			
REF. No.	PART No.	DESCRIPTION	
1	AAA26800AKT1 ABA26800AKT1 ACA26800AKT1 ACA26800AKT2 ADA26800AKT2 AEA26800AKT2	GDCB (Global Drive Control Board)	
2	AAA30924CAC AP230924CAB AP230924CAE AP330924CAG AP430924CAG AP530924CAG AAA30924CAJ AAA30924CAM AP230924CAP	(Otis Memory Unit - OMU) Software	GDCB / GDCB-X
3	AAA616NL15	EEPROM	
4	GAA26800PH1 GBA26800PH1	GDCB + Filter board; Sinus Cosines Encoder	GDCB_X (Global Drive Control Board X)
	GAA26800PH2 GBA26800PH2	GDCB + Filter board; 15V Encoder; MCSS Interface	
	GAA26800PH3 GBA26800PH3	GDCB + Filter board; 9V Encoder; MCSS Interface	
	GAA26800PH4 GBA26800PH4	GDCB + Filter board; 9V Encoder	
	GAA26800PH5 GBA26800PH5	GDCB + Filter board; (5V, 15V Encoder)	

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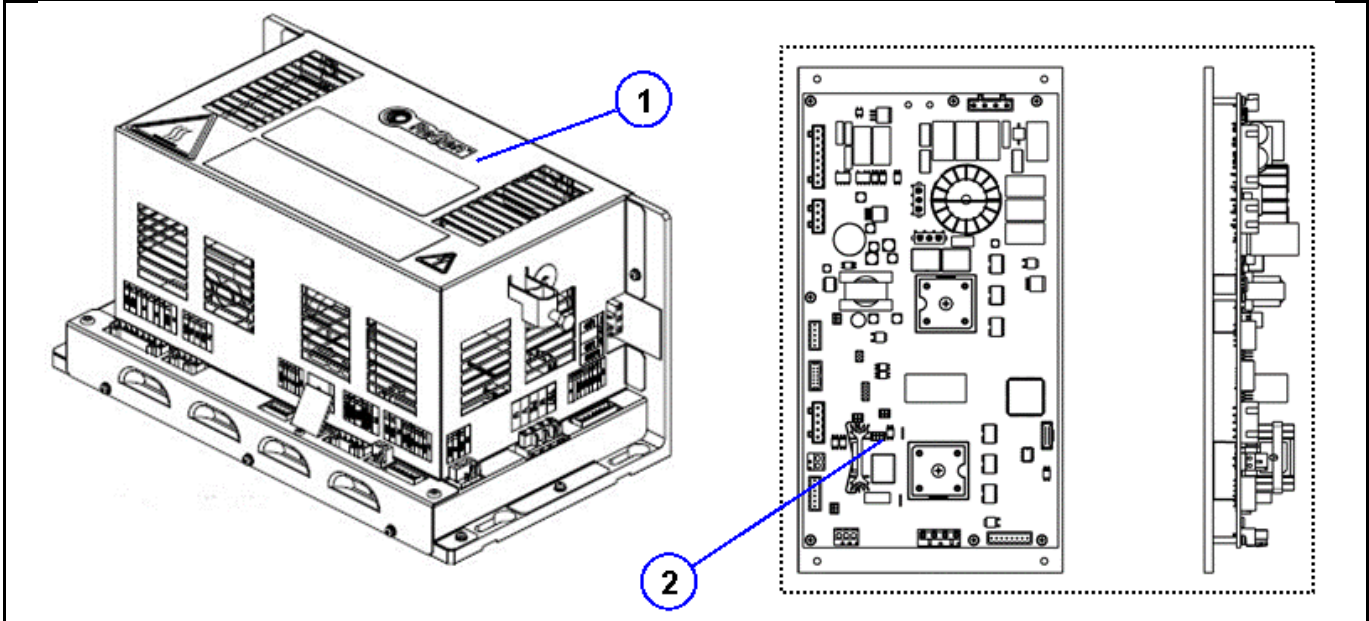
REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD



		VINTAGE		
REF. No.	PART No.	DESCRIPTION		
1	KBA21310AAL1	LOW COST REGENERATIVE DRIVE 401 FOR EN	15 A	
	KBA21310AAT1	LOW COST REGENERATIVE DRIVE 402 FOR EN	20 A	
	KBA21310AAN1	LOW COST REGENERATIVE DRIVE 403 FOR EN	30 A	
	KBA21310AAV1	LOW COST REGENERATIVE DRIVE 404 FOR EN	40 A	
-	GAA21305SL1	LCRD 40A WITH BRAMO (BRAKE MODULE)		
2	GAA21305SQ1 GBA21305SQ10 GBA21305SQ20	DRIVE ASSEMBLY OF 401 (15 A) FOR PSRBD		
	GAA21305SQ2 GBA21305SQ20	DRIVE ASSEMBLY OF 402 (20 A) FOR PSRBD		
	GAA21305LA10	DRIVE ASSEMBLY OF 403 (30 A) FOR PSRBD (LCRD) (OVFR02B)		
	GAA21305VE100 GBA21305VE100	DRIVE ASSEMBLY with HVIB2 for brake current up to 3A FOR PSRBD (OVFRM3B)		
	GAA21305VE112 GBA21305VE112	DRIVE ASSEMBLY with HVIB2 for brake current up to 5,6A FOR PSRBD (OVFRM3B)		
	GAA21310GT1	Drive Assembly (HVIB2) for brake current <=3,3A; brake Volt. <=110VDC		
	GAA21310GT2	Drive Assembly (HVIB2) for brake current <=5,6A; brake Volt. <=48VDC		
	GAA21342V30	DRIVE ASSEMBLY OF 401 RX2 (OVFR02B)		
	GAA21342V40	DRIVE ASSEMBLY OF 402 RX2 (OVFR02B)		
	GAA21342V60	DRIVE ASSEMBLY OF 402 RX2 CES (OVFR02B)		
	GAA21342T20	DRIVE ASSEMBLY OF 403 (30 A) FOR GEN2-RX2 (LCRD) (OVFR02B)		
	GBA21310GB20	DRIVE ASSEMBLY OF 403 (30 A) FOR GEN2-RX2 (HVIB2) (OVFRM3B)		
	-	JBA21312AAA2	CSA DRIVE 120 A FROM MAGNETEK	

REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD

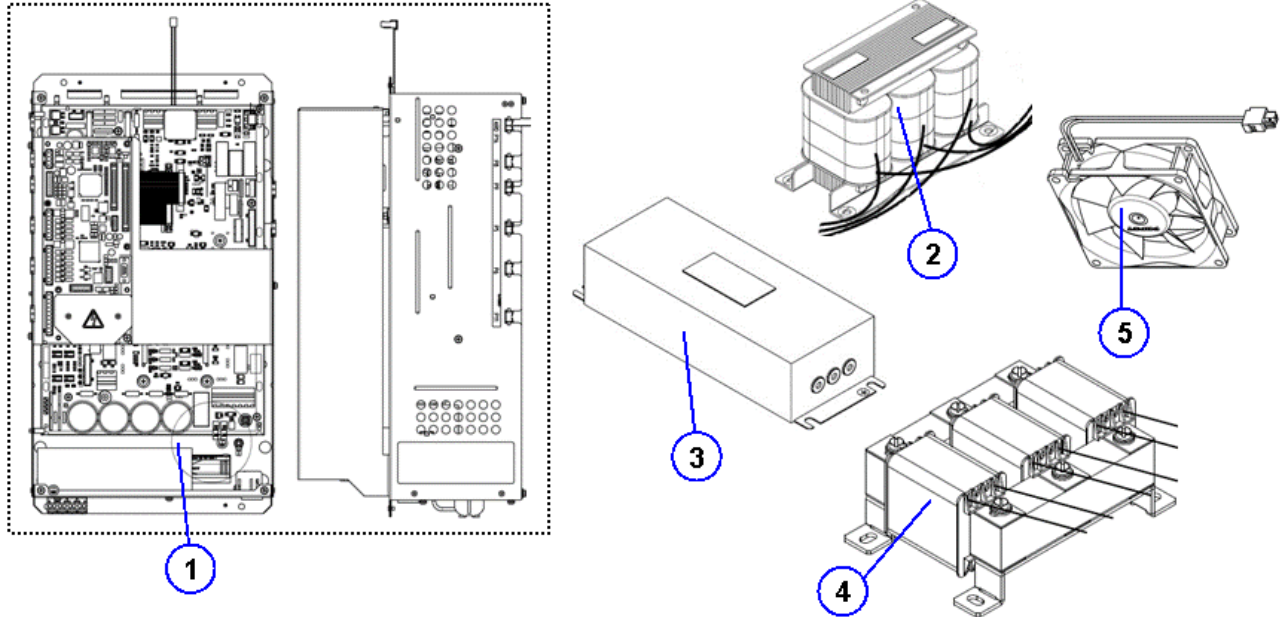
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REF. No.	VINTAGE PART No.	DESCRIPTION	
1	KCA21310AAX1 KDA21310AAX1	Ultra Drive OVFR03B-401 (630kg)	STAND ALONE VERSION
	KCA21310AAX2 KDA21310AAX2	Ultra Drive OVFR03B-402 (1000kg)	
2	G BA21305KY5 G CA21305KY5	Ultra Drive OVFR03B-401 (630kg)	Integrated version for GCS222MRL
	G BA21305KY6 G CA21305KY6	Ultra Drive OVFR03B-402 (1000kg)	
	G CA21305KY60	Ultra Drive OVFR03B-401 (630kg)	Integrated version for Genesis 1
	G BA21305KY7	Ultra Drive OVFR03B-401 (630kg)	
-	AP131400AAE	Software (Otis Memory Unit - OMU) for Ultra Drive	

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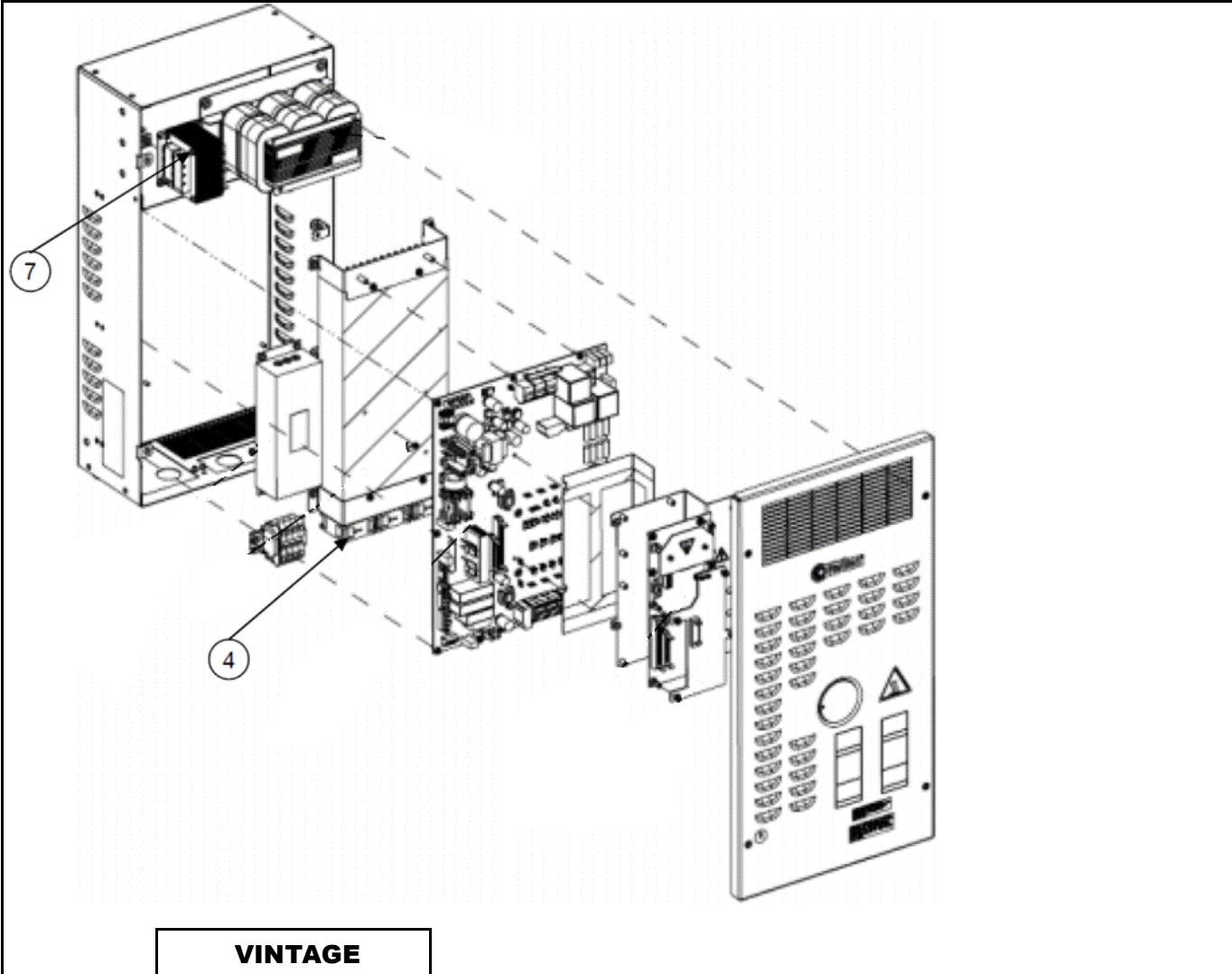
REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD



REF. No.	VINTAGE PART No.	DESCRIPTION
1	GAA21310DV1	Drive OVFRM03B-403 with HVIB2 (integrated version)
5	GAA713AF1	FAN FOR OVFRM3B-403
	GAA713AB1	FAN FOR OVFRM3B-404
2	KAA225AAH1	THREE PHASE LINE REACTOR FOR DRIVE 401
	KAA225AAH3	THREE PHASE LINE REACTOR FOR DRIVE 402
	KAA225AAJ1	THREE PHASE LINE REACTOR FOR DRIVE 403
3	KAA657AAF1	EMI-FILTER FOR OVFR02B-401/402/403/404
	KAA657AAF5	EMI-FILTER FOR OVFR02B-403
	GAA657AB1	EMI-FILTER FOR OVFRM3B-404
4	GAA234DP1 GBA234DP1	LINE REACTOR (4A) FOR OVFR03B-401
	GAA234DN1 GBA234DN1	LINE REACTOR (6A) FOR OVFR03B-402
	GAA234CW2	LINE REACTOR (8A) FOR OVFRM3B-404
	GAA234DT1	LINE REACTOR (18A) FOR OVFRM3B-404

REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD

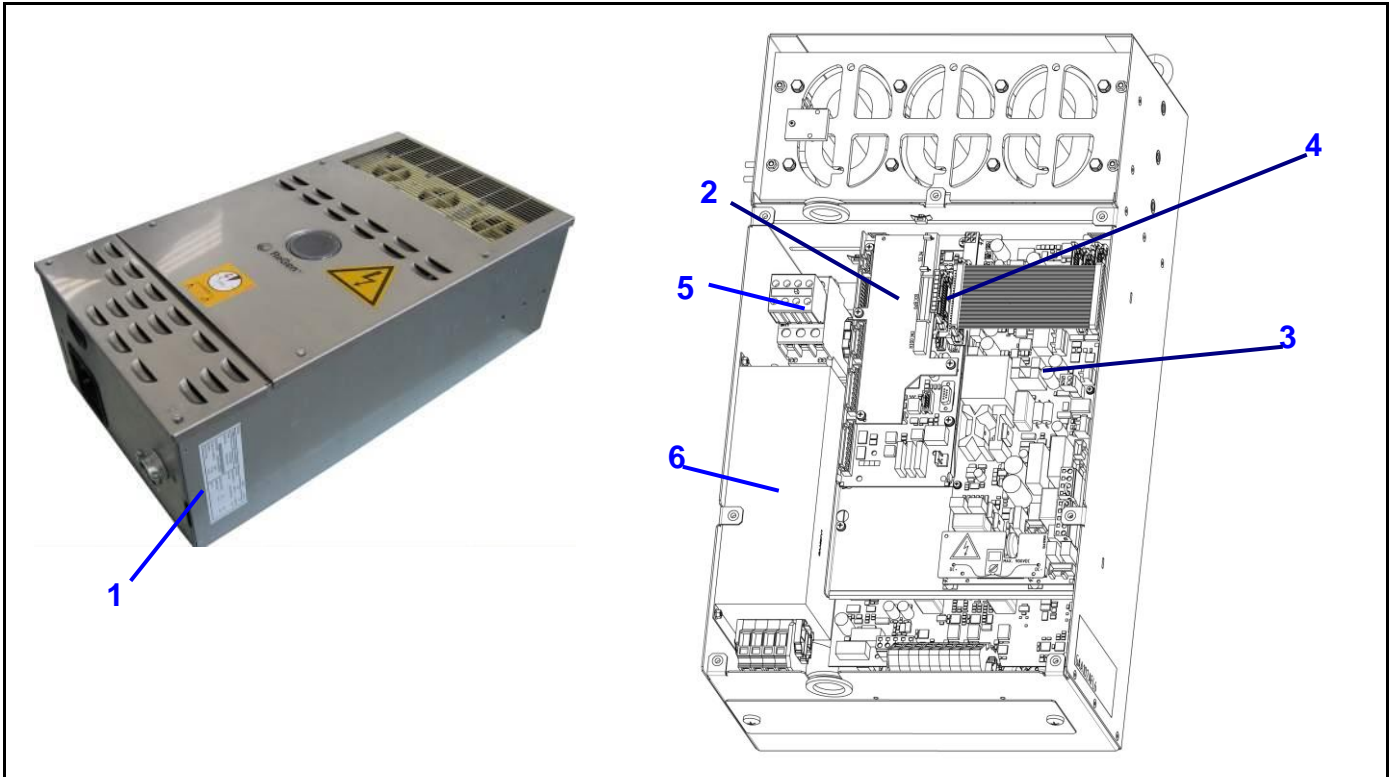
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VINTAGE				
REF. No.	PART No.	DESCRIPTION		
4	KAA301AAD1	FOR LCRD KBA21310AAL1	COOLING FAN	
	KAA301AAD2	FOR LCRD KBA21310AAT1		
7	KAA225AAK1	FOR LCRD KBA21310AAN1		1-PHASE TRANSFORMER
		FOR LCRD KBA21310AAV1		
		FOR LCRD KBA21310AAL1		
		FOR LCRD KBA21310AAT1		
		FOR LCRD KBA21310AAN1		
		FOR LCRD KBA21310AAV1		

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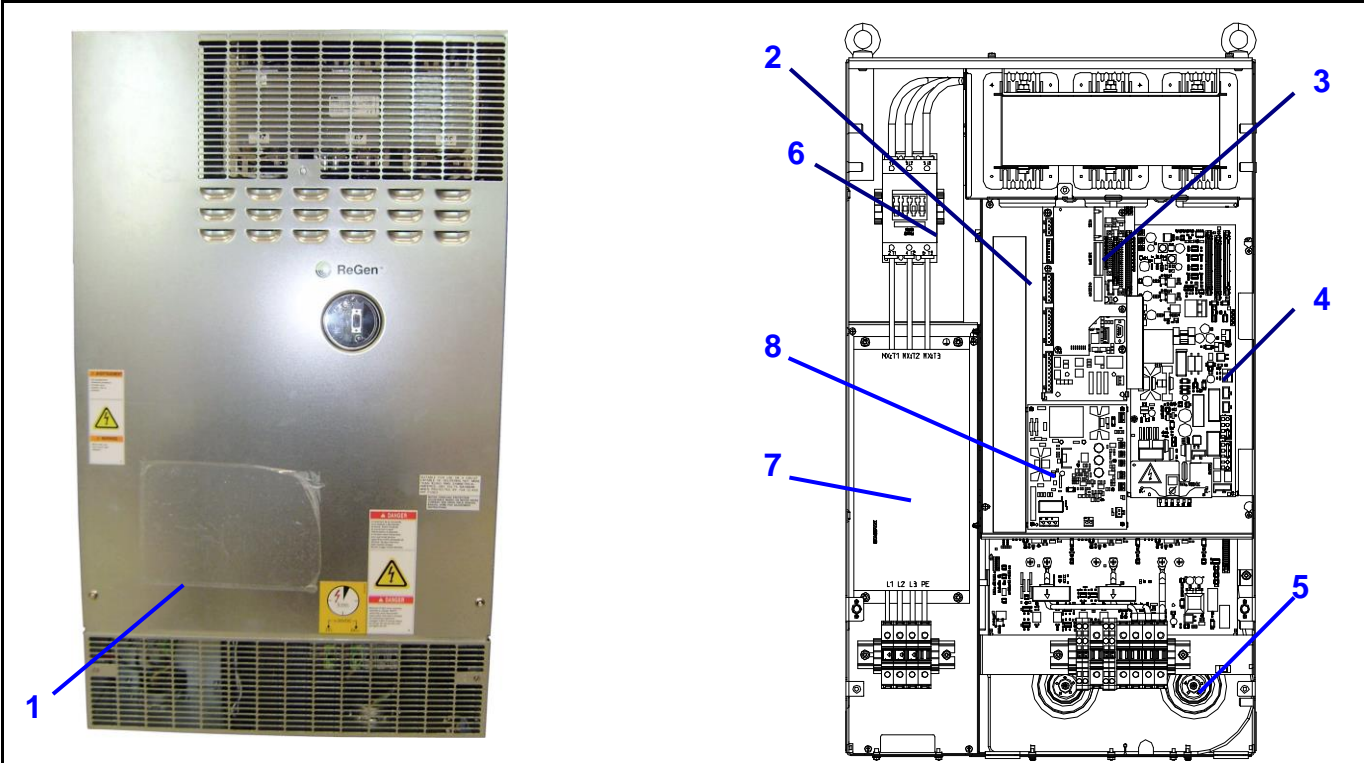
REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD




VINTAGE			
REF. No.	PART No.	DESCRIPTION	
1	GAA21310A1 GBA21310A1 GCA21310A1 GDA21310A1 GAA21310GN1	FOR EN81	REGENERATIVE DRIVE PACKAGE OVFR02A-406
	GAA21310A2 GBA21310A2 GCA21310A2	FOR CSA	
	GAA21310A3 GBA21310A3 GCA21310A3	For applications with sin/cos encoder interface	
2	ABA26800AQN1 ACA26800AQN1	Communication and encoder interface board CEIB (SIN/COS)	
	ABA26800AQN2 ACA26800AQN2	Communication and encoder interface board CEIB (MCSS)	
3	GCA26800KP3	POWER DRIVER BOARD II (PDB_II)	
4	GAA26800MW1	FILTER BOARD	
5	GAA661T1	SWITCH SPECIAL PURPOSE	
6	GCA657V1	APD-FILTER	

REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD

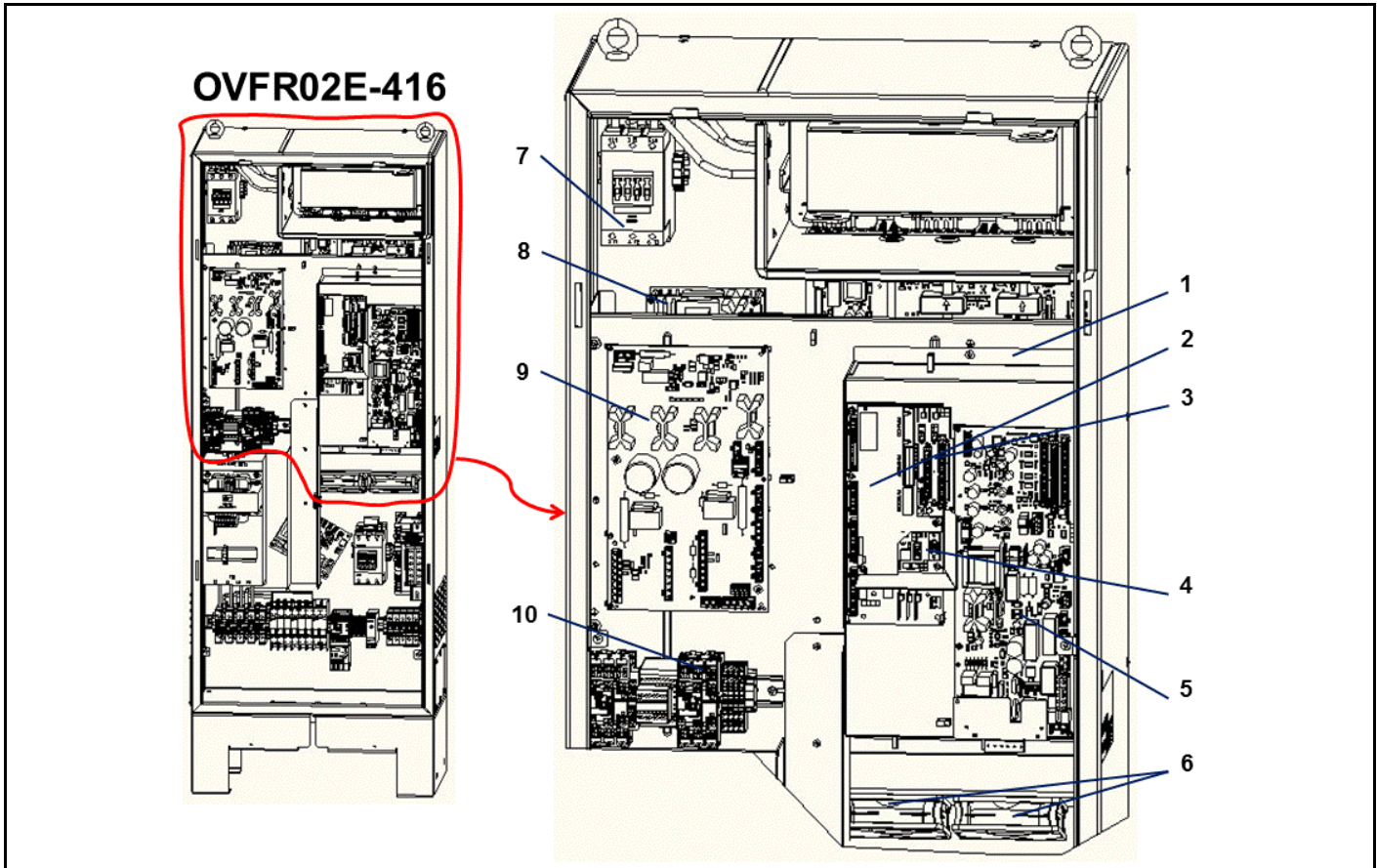
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REF. No.	VINTAGE PART No.	DESCRIPTION	
1	GAA21310EC1 GBA21310EC1 GCA21310EC1 GAA21310HH1	FOR EN81	REGENERATIVE DRIVE PACKAGE OVFR02A-412
	GAA21310EC2 GBA21310EC2 GAA21310HH2	FOR CSA	
	GAA21310EC3 GBA21310EC3 GAA21310HH30	For applications with sin/cos encoder interface	
2		Communication and encoder interface board CEIB (SIN/COS)	
3	PAGE 12	Communication and encoder interface board CEIB (MCSS)	
4	GCA26800KP4	FILTER BOARD	
5	GAA713AA1	POWER DRIVER BOARD II (PDB_II)	
	GAA713AG1	FAN	
6	GAA661T1	FAN	
7	GAA657X1	SWITCH SPECIAL PURPOSE	
8	AAA26800ATR1	APD-FILTER	
		FAN CONTROL BOARD	

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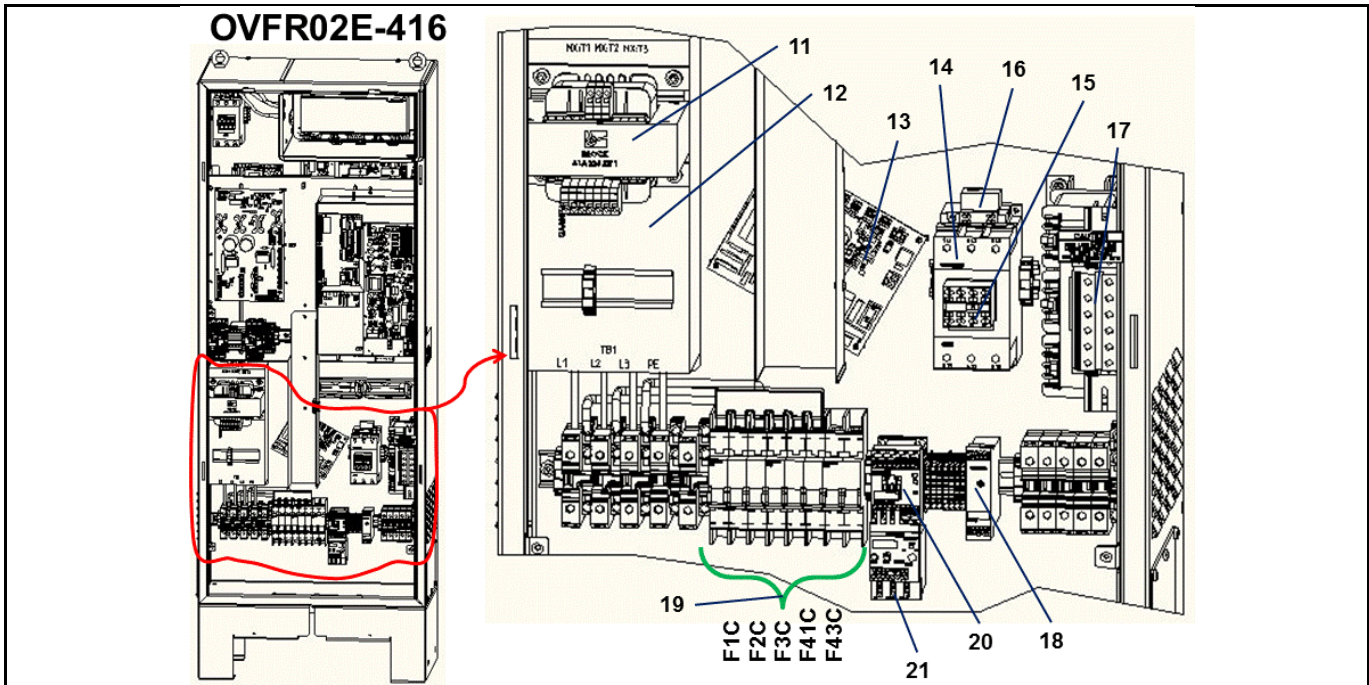
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VINTAGE		
REF. No.	PART No.	DESCRIPTION
1	GAA21310GY500 GAA21310GY_RIS	Power section of OVFR02E-416 Repair Instructions Service (RIS)
2	page 7	Global Drive Control Board X (GDCB_X)
3	page 12	Filter Board
4		Communication and encoder interface board CEIB (SIN/COS)
		Communication and encoder interface board CEIB (MCSS)
	ACA26800AQN3	Communication and encoder interface board CEIB (MCSS+8V Encoder)
	ACA26800AQN4	Communication and encoder interface board CEIB (9V Encoder)
5	GCA26800KP5	Power Driver Board II
6	GAA713AJ2	Fan
7	GAA638HD1	MX Relay
8	ABA26800ATR3	Fan Control Board FCB (Power supply 24V)
	ABA26800ATR4	Fan Control Board FCB (Power supply 9V)
9	AAA26800AXB1	Brake Power & Control Board (BPCB)
10	GAA638HV1	Relay 100-110V AC COIL

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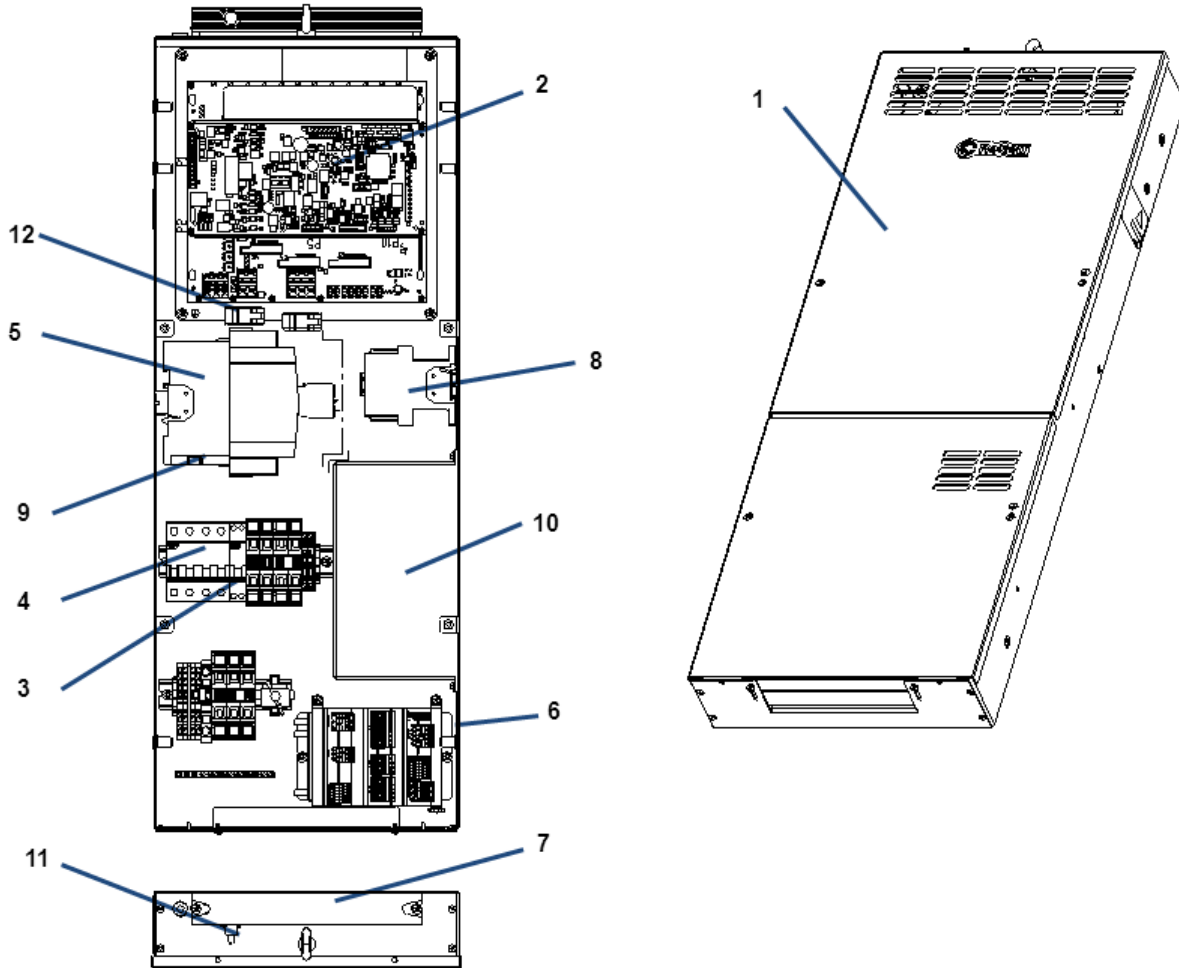
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VINTAGE			
REF. No.	PART No.	DESCRIPTION	
11	AAA225MT1	Single phase transformer 60V/100V/150V	
12	GAA657AA1	EMI filter	
13	ABA26800ATR1	Fan Control Board FCB	
14	GAA638JB1	Relay	
15	GAA661J1	Switch, special purpose	
16	GAA605H14	Suppressor	
17	GAA234CG2	Drive Output Voltage Filter (DVDT)	
18	GAA630AP1	Relay, special purpose	
19	AAA637E40	Circuit breaker	F1C
	AAA637E58	Circuit breaker	F1C
	AAA637E51	Circuit breaker to feed transformers, 2A, Type D, UL489	F2C
	AAA637E59	Circuit breaker to feed transformers, 1,6A, Type D, UL489	F2C
	AAA637E52	Circuit breaker to feed transformers, 1A, Type D, UL489	F2C
	GAA637BH1	Circuit breaker for L1, 1Pole, 6A	F3C
	GAA637BH2	Circuit breaker for L1, 1Pole, 8A	F3C
	GAA637BH4	Circuit breaker for L1, 1Pole, 16A	F3C
	GAA637CW4	Circuit breaker 1 pole, 1,6A, Type C, UL489	F41C
	AAA637E42	3 phase circuit breaker, 3A	F43C
20	GAA638JA2	Relay, 24V, 1.4W Coil	
21	GAA630BN2	Relay, special purpose	
-	GAA638HF1	Relay 24 V COIL	
	GAA661AR1	Auxiliary contact, 1NC, 1NO	

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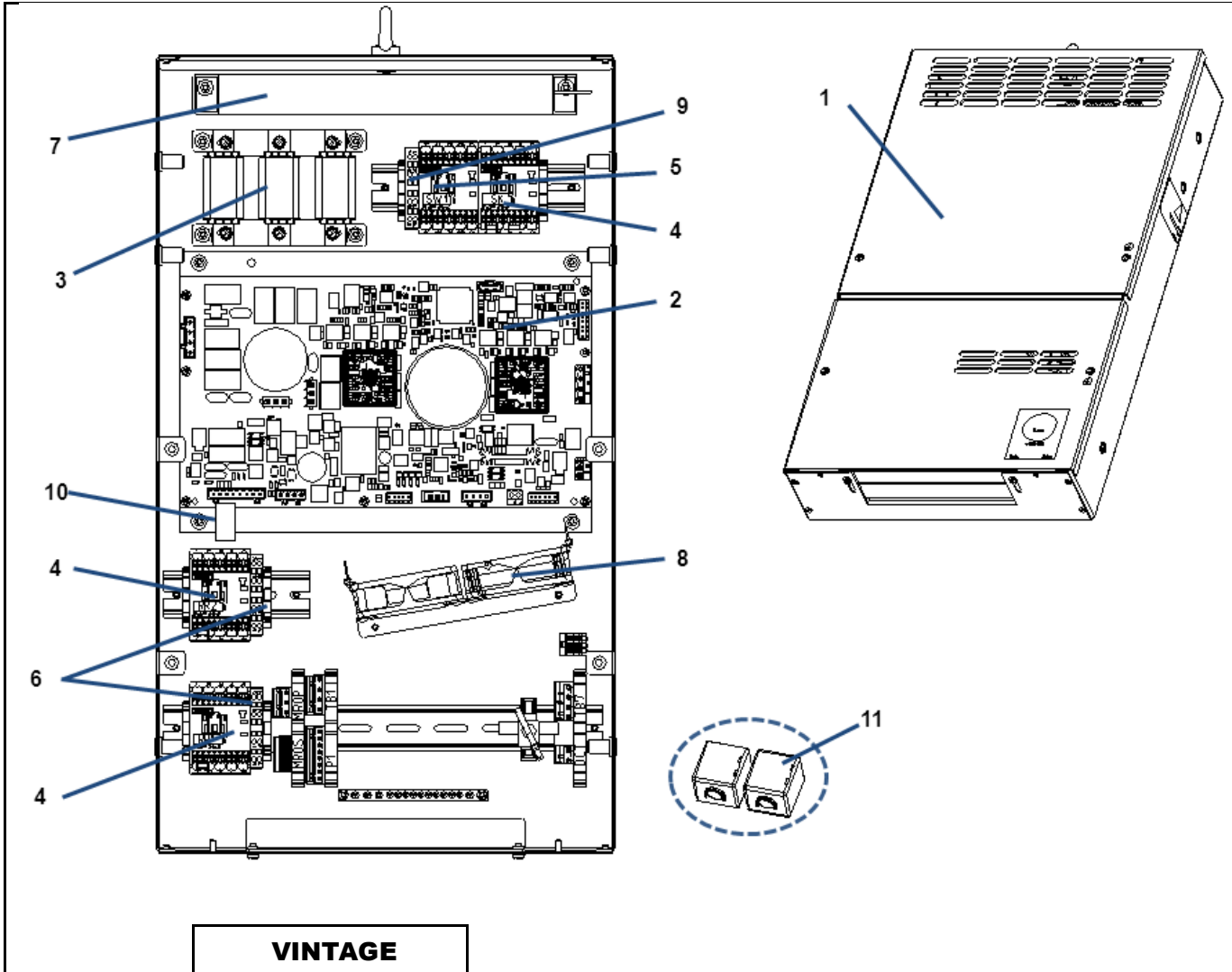
REGENERATIVE DRIVES, GLOBAL DRIVE CONTROL BOARD




VINTAGE		
REF. No.	PART No.	DESCRIPTION
1	GAA21305VY1	LVD Box
2	GAA21310GV1	Low Voltage Switch Drive
3	GAA637BQ1	Circuit Breaker 2 POL
4	GAA637CP7	OCB 4POL, 63A
5	MAA638A1	Relay, contactor
6	MAA232B1	Resistor (3x 0,1ohm ; 500W)
7	MAA232A1	Resistor (1,5ohm ; 500W)
8	GAA638CV1	Relay, contactor
9	GAA605AJ1	Suppressor
10	MAA628A1	Battery charger
11	GAA177KK2	Switch, Thermo contact
12	GAA465CS4	Ferrite

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VINTAGE		
REF. No.	PART No.	DESCRIPTION
1	GAA21305VX1	UD401: MBR w/o Brake Resistor
	GAA21305VX2	UD401: No MBR
	GAA21305VX3	UD402: MBR w/o Brake Resistor
	GAA21305VX4	UD402: No MBR
	GAA21305VX5	UD402: MBR with Brake Resistor
2	GAA21305WC7	LVA Basic Drive 401 – 48V
	GAA21305WC8	LVA Basic Drive 402 – 48V
3	 page 10	Line reactor
4	GAA638HK1	Relay, contactor RR1/RR2

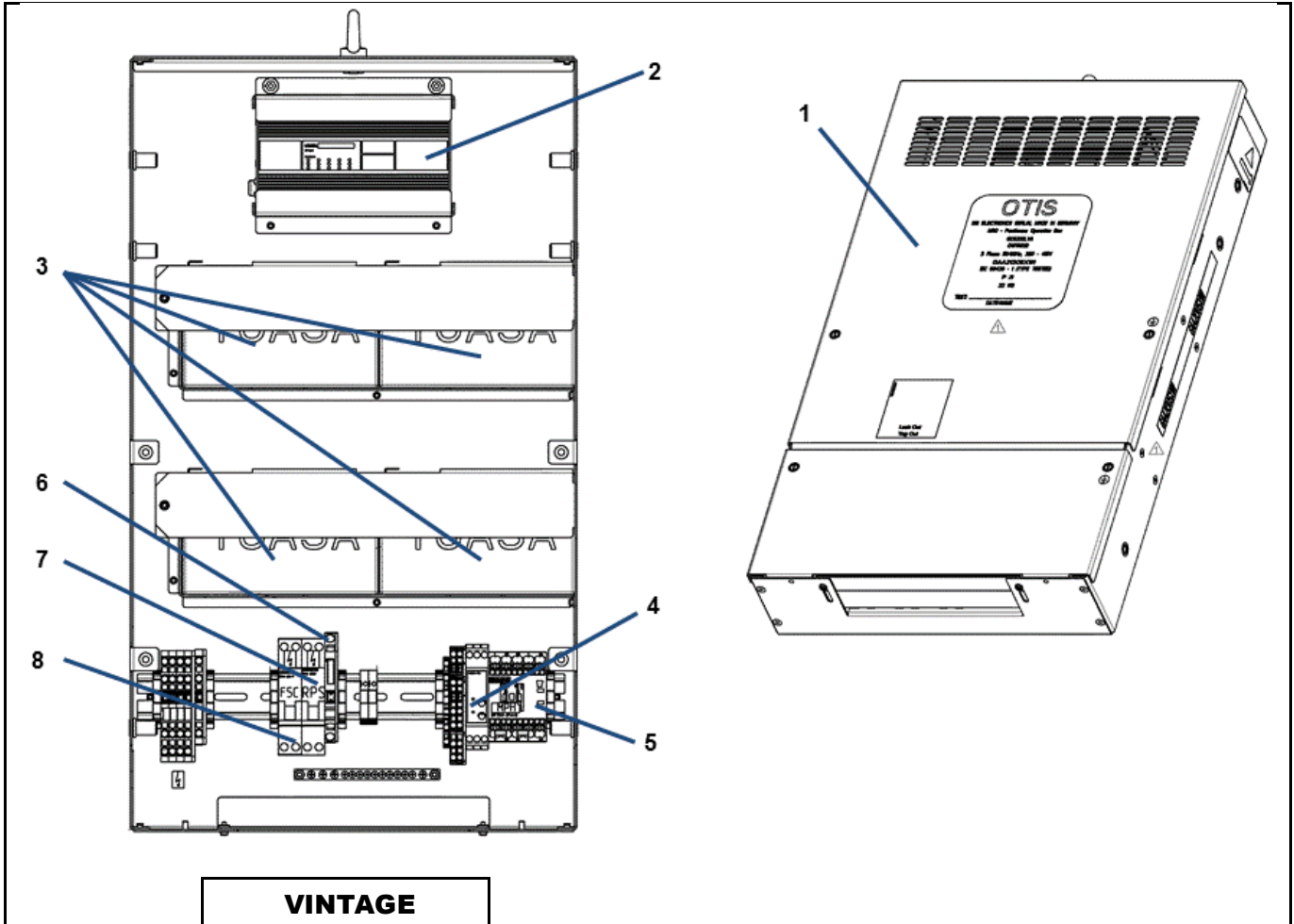
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VINTAGE		
REF. No.	PART No.	DESCRIPTION
5	 SPL 10-GAA21310G	Contactator, DC 48V, 3-pole, 3 NO contacts GAA638HC1
6	GAA661AP2	Switch, special purpose
7	 SPL 10-GAA21150-3	Resistor GAA232ACR3
8	GAA713AC1	Fan
9	GAA661AR1	Switch, special purpose
10	GAA605M3	Suppressor
11	GAA465CS3	Ferrite
-	GAA21305WC3	Ultra Drive 401 (110-48V) for LVA
-	GAA21305WC4	Ultra Drive 402 (110-48V) for LVA
-	AP331400DAA	Software (Otis Memory Unit - OMU) for Ultra Drive LVA

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VINTAGE		
REF. No.	PART No.	DESCRIPTION
1	GAA21305XW1	LVA MROPH-Box for UD401
	GAA21305XW2	LVA MROPH-Box for UD402
2	GAA621EH1	Charger
3	TAA718C1	Battery
4	GAA630BW1	Relay, special purpose
5	GAA638HK1	Relay, contactor
6	GAA375CJ6	Fuse, 30 A
7	GAA637BQ5	Circuit breaker, 2 poles
8	GAA637BQ1	Circuit breaker, 2 poles