

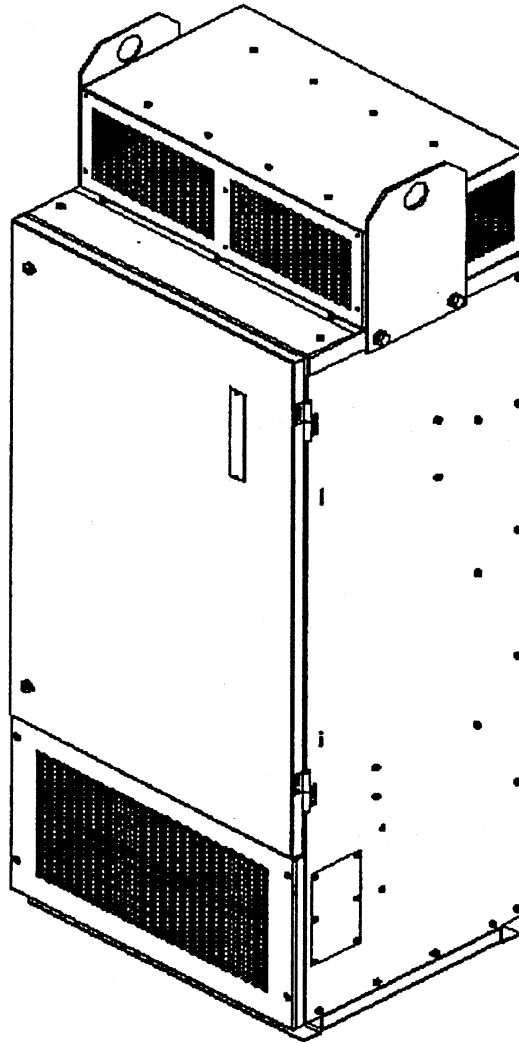
# OVF428x (DBSS)

**Spare Parts Leaflet**

**09-JAA25402AAM**

**April 8, 2002 / Page 1 of 32**

**Supersedes SPL 09-JAA25402AAM Dated February 20, 2002**



Unpublished Work—© Otis Elevator Co.; 2002

**OTIS**

**Safety First!**

**SERVICE ENGINEERING**

**Otis Elevator Company**

**Bloomfield, Connecticut USA**

**Leaflet Description**

This leaflet provides spare parts information for OVF428x (DBSS).

**Leaflet Revisions**

<b>Date Revised</b>	<b>Subject Matter Expert</b>	<b>Reason for Revision</b>
December 1, 2000	Hirayama Hiroyuki	New SPL
August 1, 2001	Hirayama Hiroyuki	Writing error correction on p.16
February 20, 2002	Yamaoka Takayuki	Update parts & art work
April 8, 2002	Hirayama Hiroyuki	Update parts & art work

**Related Drawings**

<b>Drawing No.</b>	<b>Title</b>	<b>Drawing No.</b>	<b>Title</b>
JCA25402AAM	Car Prewiring (HSVF 428X)	JAA21350AAJ	Relay Assembly
JBA21350AAA	Power Module Assembly	JAA21350AAK	Brake Power Module Assembly
JAA21350AAB	Capacitor Module Assembly	JAA21350AAM	Main Contactor Assembly
JAA21350AAG	EMI Filter	JBA21350AAL	Breaker Assembly
JAA21350AAH	Fan Assembly		

**Related Documents**

<b>Document ID</b>	<b>Title</b>
---	---

**Subject Matter Expert**

<b>Name</b>	<b>Department</b>
Hirayama Hiroyuki	Nippon Otis Modernization Center

**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.

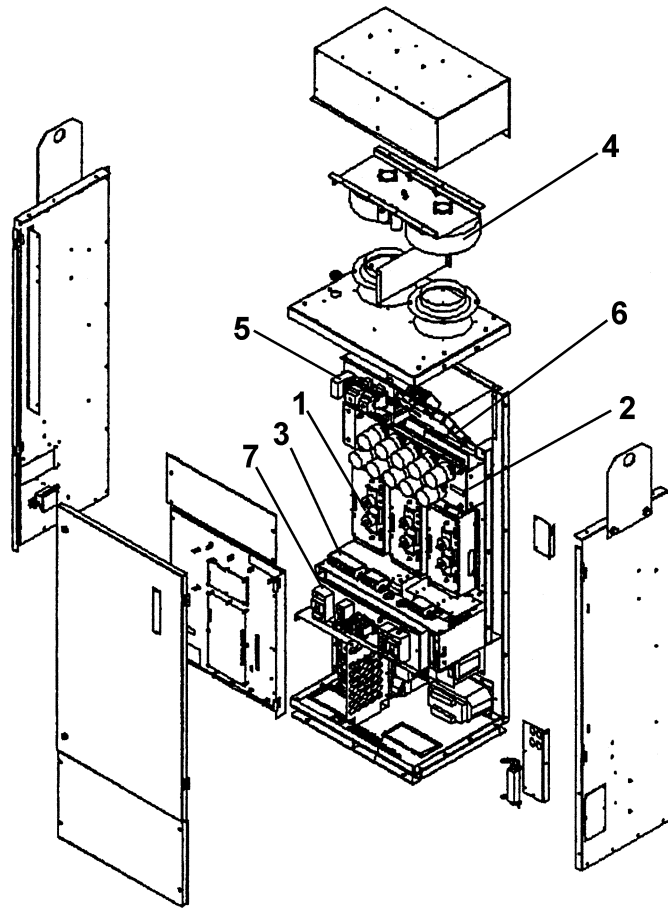
While goal of this document is to make parts identification as easy as possible, the document cannot be all-inclusive. Elevator and escalator contracts classified as "special" or "custom" are not addressed here. For such contracts, please refer to specified information, the contract folder, TIPs, Field 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.

# OVF428x (DBSS) Arrangement

**09-JAA25402AAM**

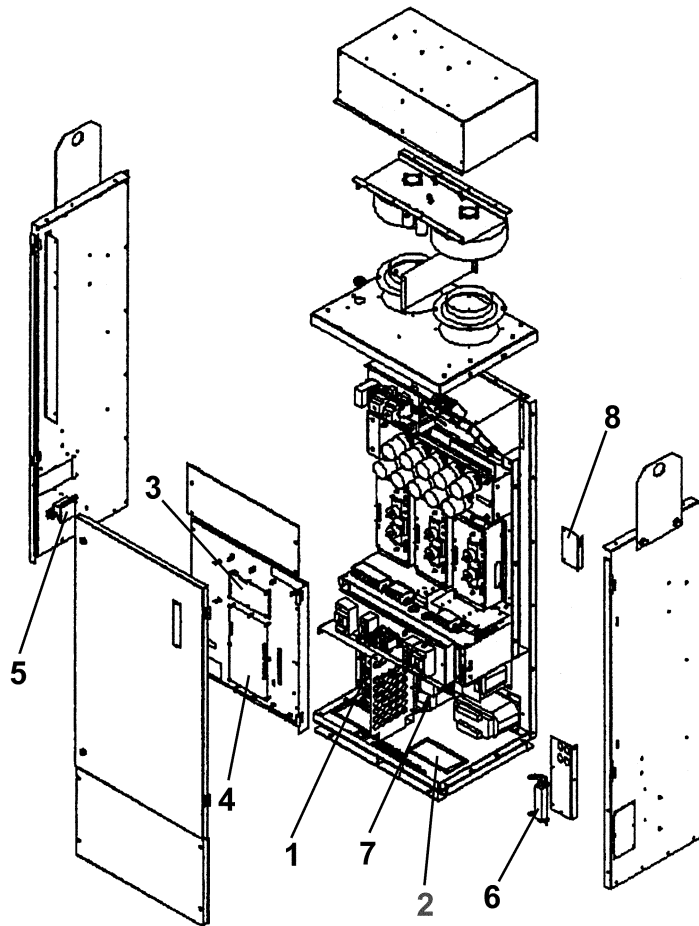
ASSEMBLY NO.	DESCRIPTION	REFERENCE	
JCA25402AAM1	JPA Version	(346 V–380 V)	For 40T Machine
JCA25402AAM2		(400 V–440 V)	
JCA25402AAM3		(460 V–480 V)	
JCA25402AAM4		(346 V–380 V) w/Battery	
JCA25402AAM5		(400 V–440 V) w/Battery	
JCA25402AAM6		(460 V–480 V) w/Battery	
JCA25402AAM7	APA Version	(346 V–380 V)	
JCA25402AAM8		(400 V–440 V)	
JCA25402AAM9		(460 V–480 V)	
JCA25402AAM10		(346 V–380 V) w/Battery	
JCA25402AAM11		(400 V–440 V) w/Battery	
JCA25402AAM12		(460 V–480 V) w/Battery	
JCA25402AAM13	CEN Version	(346 V–380 V) Capri Blue w/Leather Touch	
JCA25402AAM14		(400 V–440 V) Capri Blue w/Leather Touch	
JCA25402AAM15		(460 V–480 V) Capri Blue w/Leather Touch	
JCA25402AAM16		(346 V–380 V) UT Blue	
JCA25402AAM17		(400 V–440 V) UT Blue	
JCA25402AAm18		(460 V–480 V) UT Blue	
JCA25402AAM19	CSA Version	(460 V–480 V)	
JCA25402AAM20		(460 V–480 V) w/Blower	
JCA25402AAM21	JPA Version	(346 V–380 V)	
JCA25402AAM22		(400 V–440 V)	
JCA25402AAM23		(460 V–480 V)	
JCA25402AAM24		(346 V–380 V) w/Battery	
JCA25402AAM25		(400 V–440 V) w/Battery	
JCA25402AAM26		(460 V–480 V) w/Battery	
JCA25402AAM27	APA Version	(346 V–380 V)	
JCA25402AAM28		(400 V–440 V)	
JCA25402AAM29		(460 V–480 V)	
JCA25402AAM30		(346 V–380 V) w/Battery	
JCA25402AAM31		(400 V–440 V) w/Battery	
JCA25402AAM32		(460 V–480 V) w/Battery	
JCA25402AAM33	CEN Version	(346 V–380 V) Capri Blue w/Leather Touch	
JCA25402AAM34		(400 V–440 V) Capri Blue w/Leather Touch	
JCA25402AAM35		(460 V–480 V) Capri Blue w/Leather Touch	
JCA25402AAM36		(346 V–380 V) UT Blue	
JCA25402AAM37		(400 V–440 V) UT Blue	
JCA25402AAM38		(460 V–480 V) UT Blue	
JCA25402AAM39	CSA Version	(460 V–480 V)	



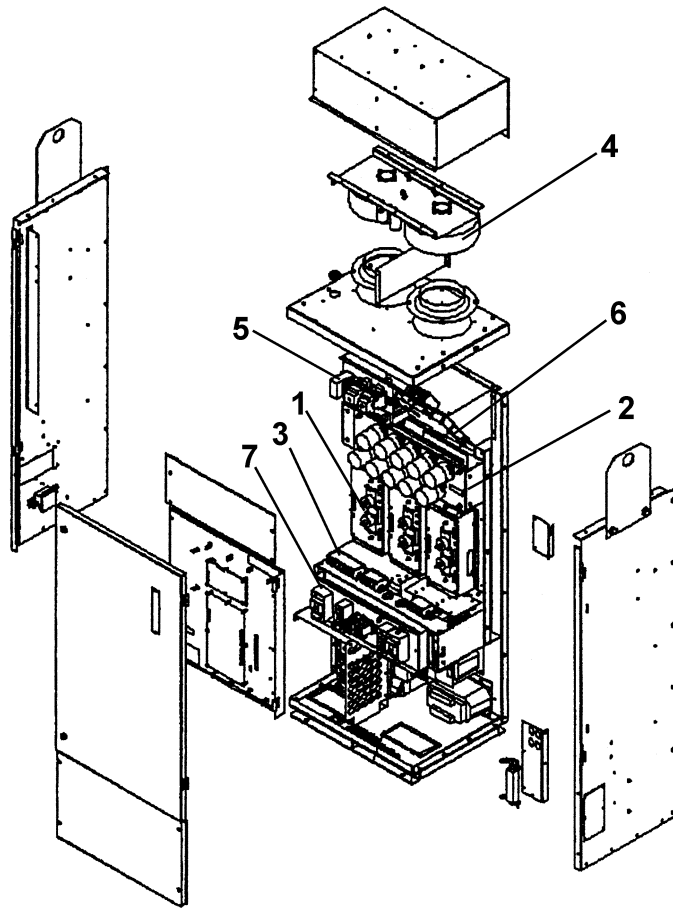
	<b>JAA25402AAM JBA25402AAM</b>		<b>JCA25402AAM</b>		
	<b>1-3</b>	<b>4-6</b>	<b>1-3</b>	<b>4-6</b>	
<b>REF. No.</b>	<b>PART No.</b>				<b>DESCRIPTION</b>
1	JBA21350AAA004				Power Module,  Page 20
2	JAA21350AAB002				Capacitor Bank,  Page 21
3	JAA21350AAG11				EMI Filter,  Page 22
4	JAA21350AAH1				Fan Assembly,  Page 23
5	JAA21350AAJ1				Relay Assembly,  Page 24
6	JAA21350AAK1				BPM Assembly,  Page 25
7	JBA21350 AAL1	JBA21350 AAL4	JBA21350 AAL1	JBA21350 AAL4	Breaker Assembly,  Page 26

# Assembly (JPA)

**09-JAA25402AAM**



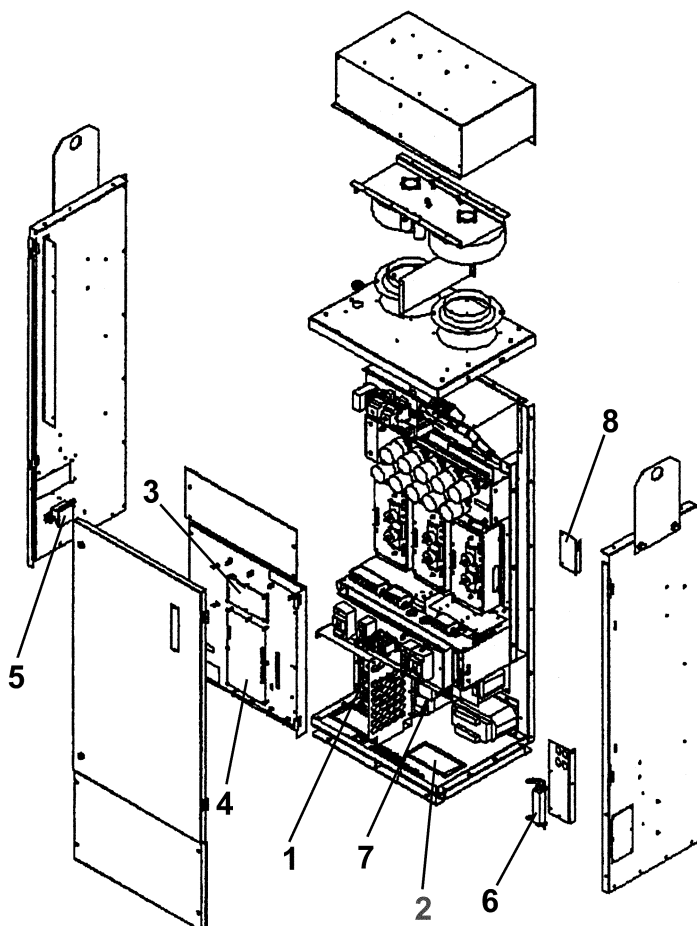
	JAA	JBA	JCA	
	<b>25402AAM1-6</b>			
REF. No.	PART No.			DESCRIPTION
1	JAA21350AAM1			MC Assembly,  Page 29
2	---			Bottom (JPA, APA),  Page 30
3	ABA26800VA1 ACA26800VA1			PROC. Board
4	ACA26800RN1	ACA26800RN2		LVIB
5	JAA00303ABE002			Terminal
6	JAA00303ABE012			Terminal
7	JBA00303AEJ001	JBA00303AEJ002		Terminal
8	JAA00424AAW001			Pilot Lamp



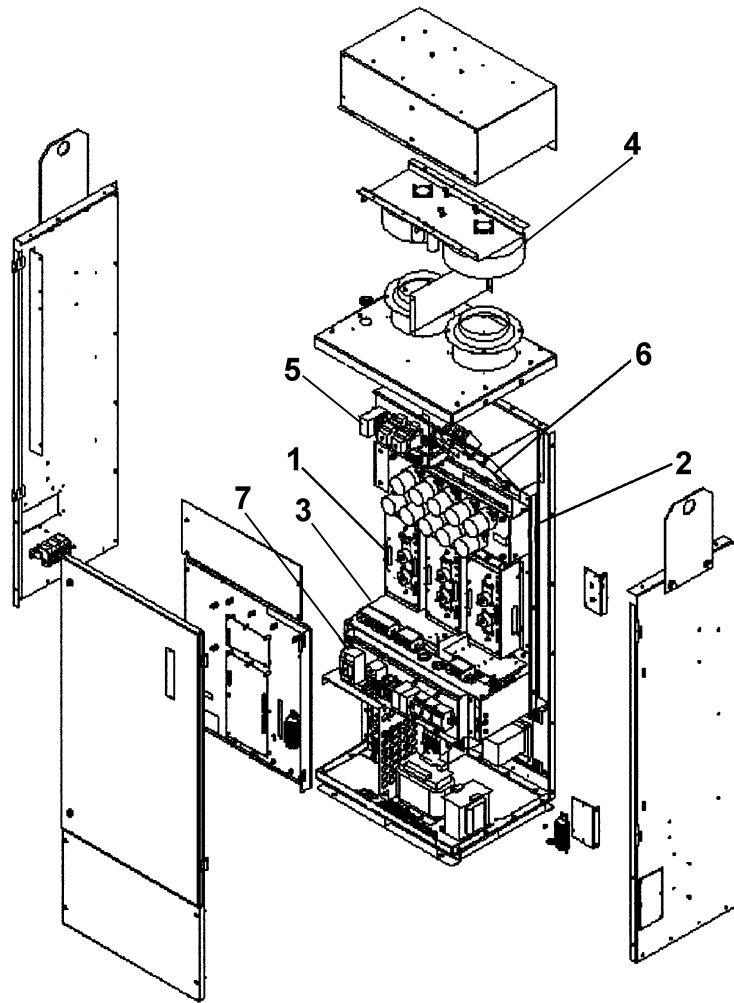
REF. No.	JAA25402AAM JBA25402AAM		JCA25402AAM		DESCRIPTION
	7-9	10-12	7-9	10-12	
1	PART No. JBA21350AAA004				Power Module  Page 20
2	PART No. JAA21350AAB002				Capacitor Bank  Page 21
3	PART No. JAA21350AAG11				EMI Filter  Page 22
4	PART No. JAA21350AAH1				Fan Assembly  Page 23
5	PART No. JAA21350AAJ1				Relay Assembly  Page 24
6	PART No. JAA21350AAK1				BPM Assembly  Page 25
7	JAA21350 AAL1	JAA21350 AAL4	JBA21350 AAL1	JBA21350 AAL4	Breaker Assembly  Page 26

# Assembly (APA)

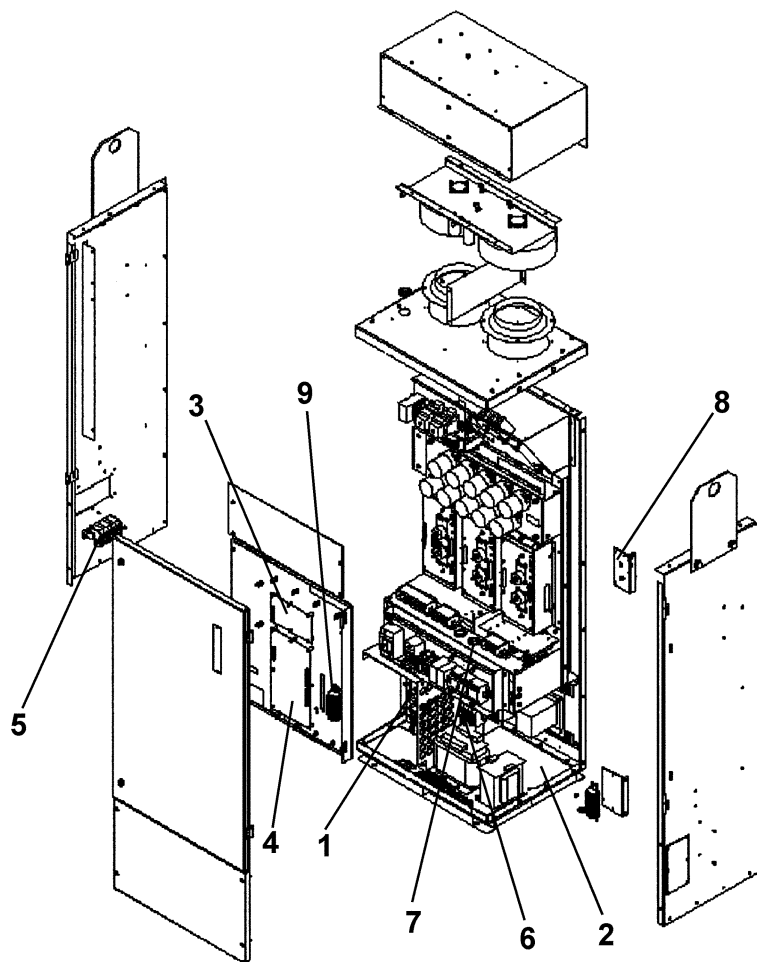
**09-JAA25402AAM**



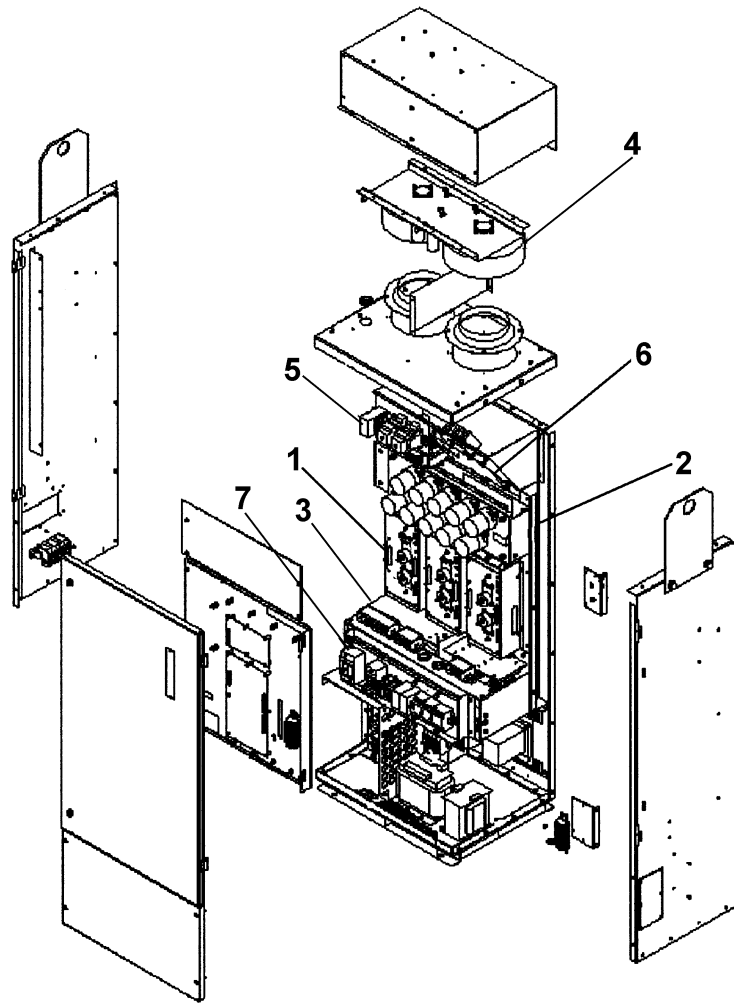
	JAA	JBA	JCA	
	<b>25402AAM7-12</b>			
<b>REF. No.</b>	<b>PART No.</b>			<b>DESCRIPTION</b>
1	JAA21350AAM1			MC Assembly,  Page 29
2	---			Bottom (JPA, APA),  Page 30
3	ABA26800VA1 ACA26800VA1			PROC. Board
4	ACA26800RN1	ACA26800RN2		LVIB
5	JAA00303ABE002			Terminal
6	JAA00303ABE012			Terminal
7	JBA00303AEJ001	JBA00303AEJ002		Terminal
8	JAA00424AAW001			Pilot Lamp



	JAA	JBA	JCA
	<b>25402AAM13-18.</b>		
REF. No.	PART No.		DESCRIPTION
1	JBA21350AAA004		Power Module,  Page 20
2	JAA21350AAB002		Capacitor Bank,  Page 21
3	JAA21350AAG11		EMI Filter,  Page 22
4	JAA21350AAH1		Fan Assembly,  Page 23
5	JAA21350AAJ1		Relay Assembly,  Page 24
6	JAA21350AAK1		BPM Assembly,  Page 25
7	JAA21350AAL2	JBA21350AAL2	Breaker Assembly,  Page 27

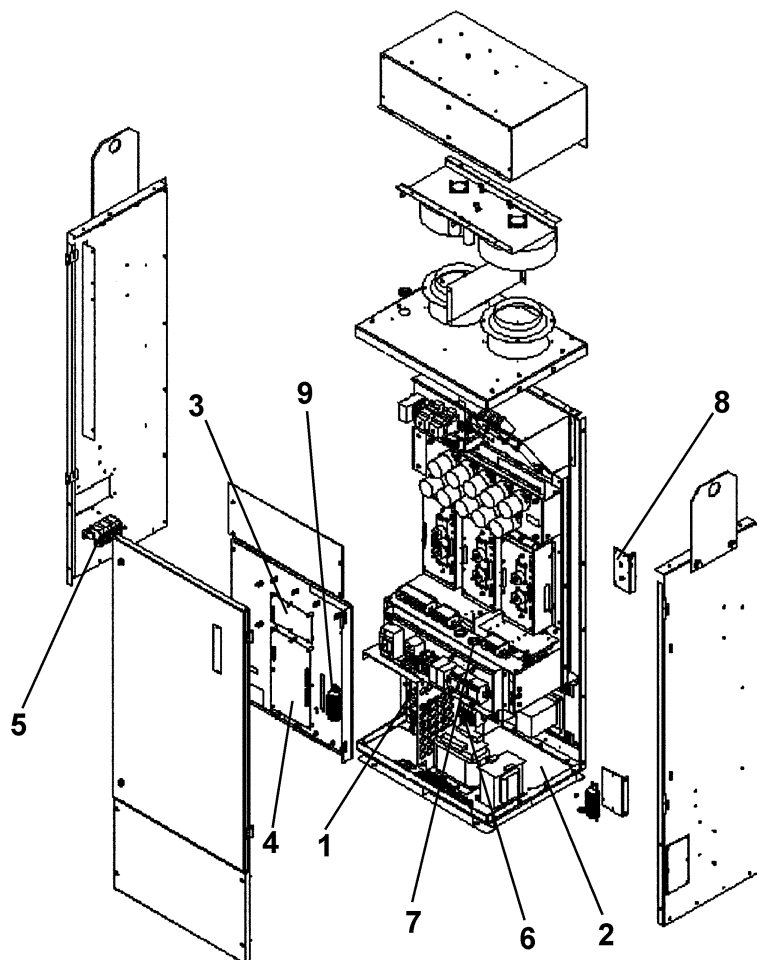


	JAA	JBA	JCA	
	<b>25402AAM13-18</b>			
REF. No.	PART No.			DESCRIPTION
1	JAA21350AAM2			MC Assembly,  Page 29
2	---			Bottom (CEN),  Page 31
3	<del>ABA26800VA1</del> ACA26800VA1			PROC. Board
4	ACA26800RN1	ACA26800RN2		LVIB
5	JAA00303ADK001			Terminal
6	JAA00303ADK003			Terminal
7	JAA00303AEG002		JAA00303AEG003	Terminal
8	JAA00424AAW001			Pilot Lamp
9	JAA00303AEH002	JAA00303AEH003		Terminal

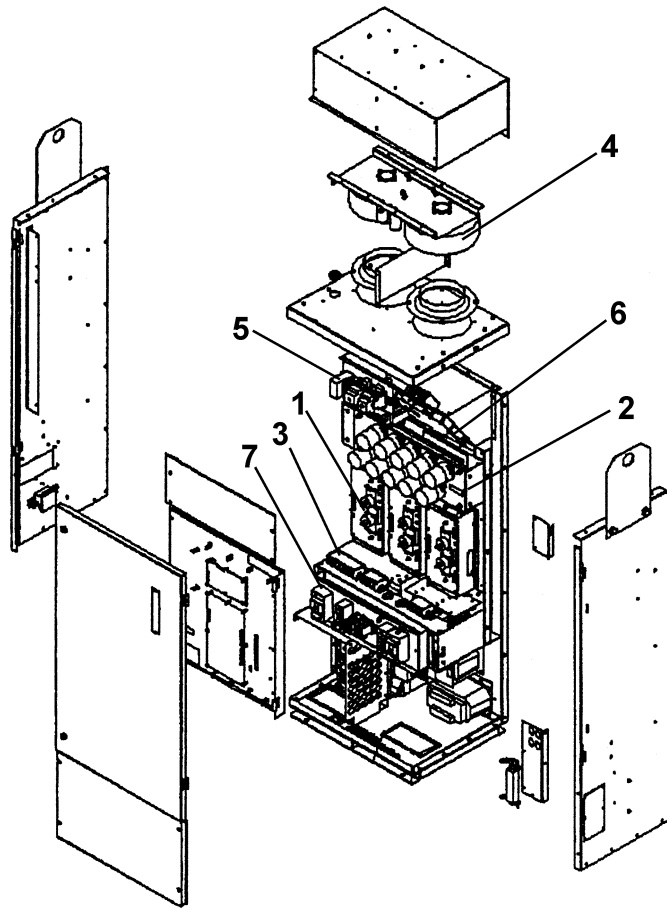


<b>JAA25402AAM</b>		<b>JCA25402AAM</b>	
<b>JBA25402AAM</b>			
<b>19</b>	<b>20</b>	<b>19</b>	<b>20</b>

<b>REF. No.</b>	<b>PART No.</b>				<b>DESCRIPTION</b>
1	JBA21350AAA004				Power Module,  Page 20
2	JAA21350AAB002				Capacitor Bank,  Page 21
3	JAA21350AAG12				EMI Filter,  Page 22
4	JAA21350AAH1				Fan Assembly,  Page 23
5	JAA21350AAJ1				Relay Assembly,  Page 24
6	JAA21350AAK1				BPM Assembly,  Page 25
7	JAA21350 AAL3	JAA21350 AAL5	JBA21350 AAL3	JBA21350 AAL5	Breaker Assembly,  Page 28



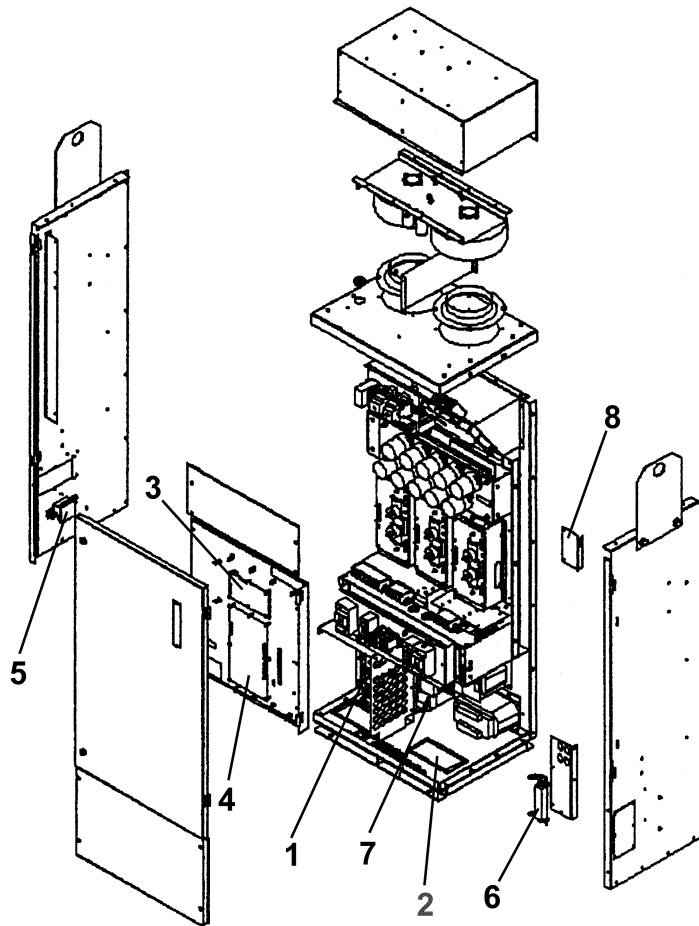
	JAA	JBA	JCA	
	<b>25402AAM19-20</b>			
REF. No.	PART No.			DESCRIPTION
1	JAA21350AAM3			MC Assembly,  Page 29
2	---			Bottom (CSA),  Page 32
3	ABA26800VA1 ACA26800VA1			PROC. Board
4	ACA26800RN1	ACA26800RN2		LVIB
5	JAA00303ADK002			Terminal
6	JAA00303ADK004			Terminal
7	JAA00303AEG002	JAA00303AEG003		Terminal
8	JAA00424AAW001			Pilot Lamp
9	JAA00303AEH002	JAA00303AEH003		Terminal



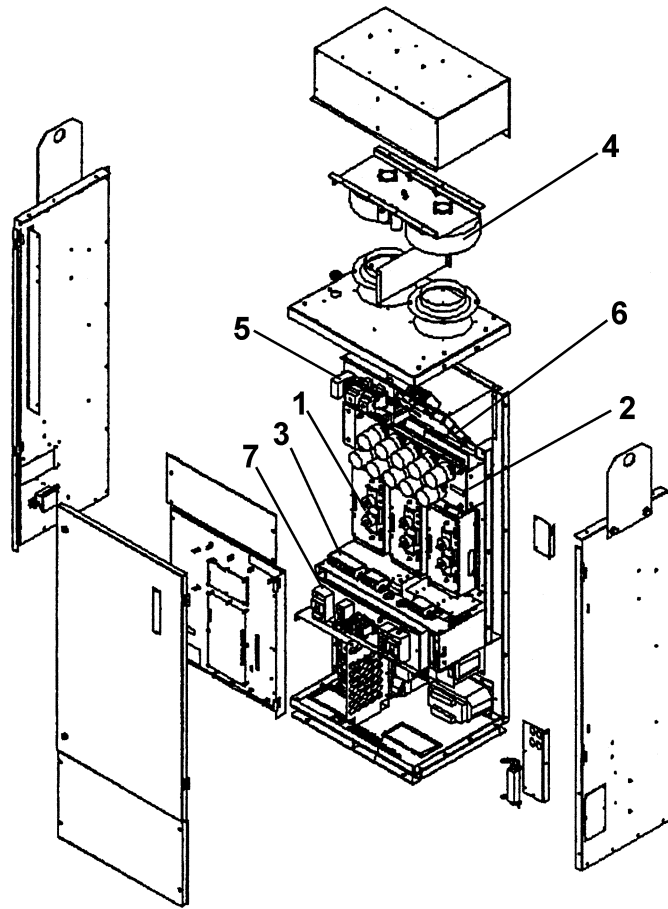
<b>JCA25402AAM</b>			
	<b>21-23</b>	<b>24-26</b>	
<b>REF. No.</b>	<b>PART No.</b>		<b>DESCRIPTION</b>
1	JBA21350AAA004		Power Module,  Page 20
2	JAA21350AAB002		Capacitor Bank,  Page 21
3	JAA21350AAG11		EMI Filter,  Page 22
4	JAA21350AAH1		Fan Assembly,  Page 23
5	JAA21350AAJ1		Relay Assembly,  Page 24
6	JAA21350AAK1		BPM Assembly,  Page 25
7	JBA21350AAL6	JBA21350AAL9	Breaker Assembly,  Page 26

# Assembly for 40T (JPA)

**09-JAA25402AAM**



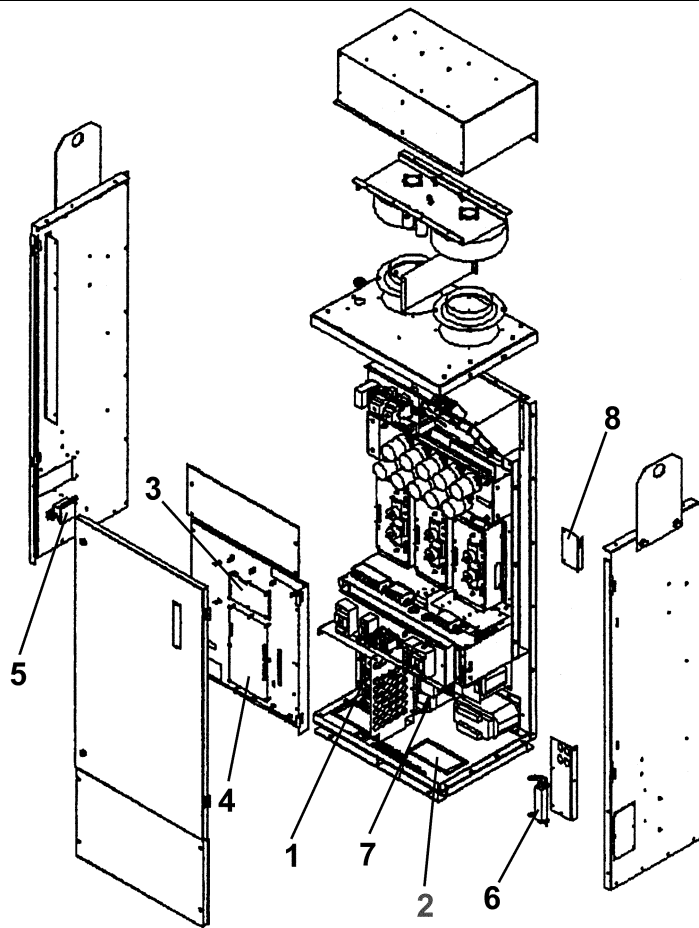
<b>JCA25402AAM21-26</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	JAA21350AAM1	MC Assembly,  Page 29
2	---	Bottom (JPA, APA),  Page 30
3	ABA26800VA1 ACA26800VA1	PROC. Board
4	ACA26800RN2	LVIB
5	JAA00303ABE002	Terminal
6	JAA00303ABE012	Terminal
7	JBA00303AEJ002	Terminal
8	JAA00424AAW001	Pilot Lamp



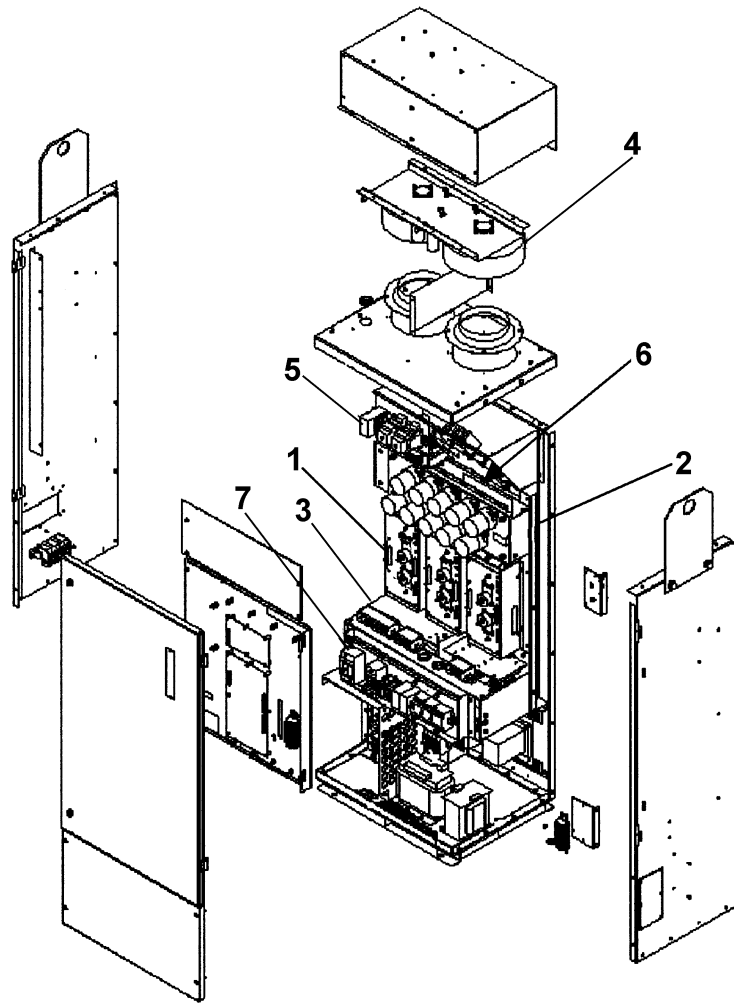
<b>JCA25402AAM</b>			
	<b>27-29</b>	<b>30-32</b>	
<b>REF. No.</b>	<b>PART No.</b>		<b>DESCRIPTION</b>
1	JBA21350AAA004		Power Module,  Page 20
2	JAA21350AAB002		Capacitor Bank,  Page 21
3	JAA21350AAG11		EMI Filter,  Page 22
4	JAA21350AAH1		Fan Assembly,  Page 23
5	JAA21350AAJ1		Relay Assembly,  Page 24
6	JAA21350AAK1		BPM Assembly,  Page 25
7	JBA21350AAL6	JBA21350AAL9	Breaker Assembly,  Page 26

# Assembly for 40T (APA)








**09-JAA25402AAM**

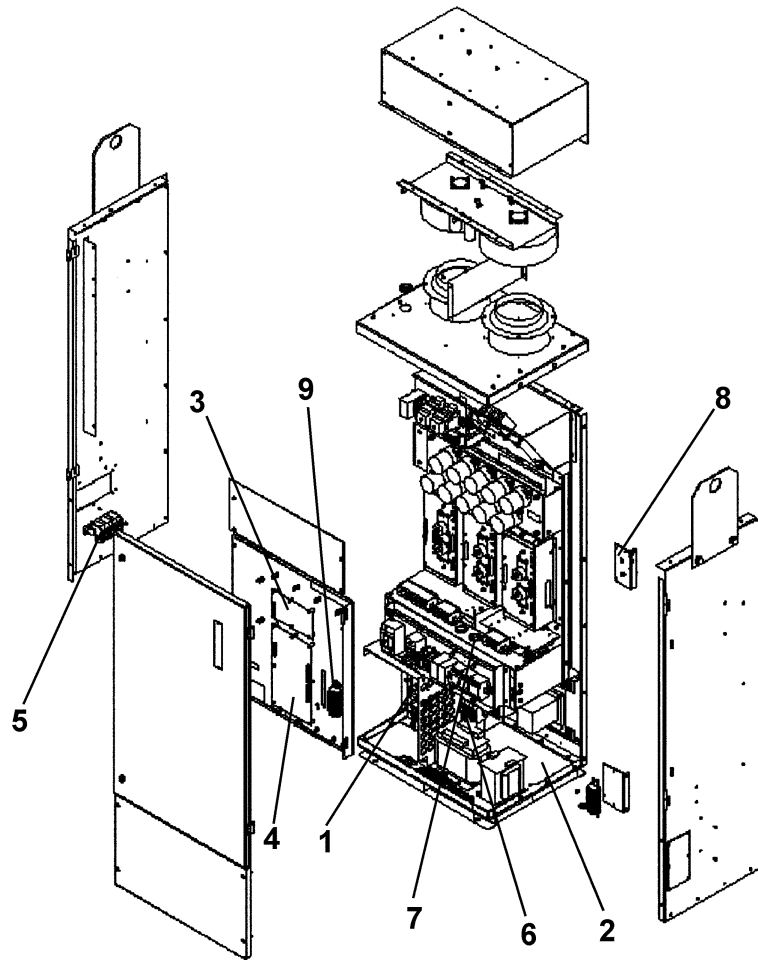


<b>JCA25402AAM27-32</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	JAA21350AAM1	MC Assembly,  Page 29
2	---	Bottom (JPA, APA),  Page 30
3	ABA26800VA1 ACA26800VA1	PROC. Board
4	ACA26800RN2	LVIB
5	JAA00303ABE002	Terminal
6	JAA00303ABE012	Terminal
7	JBA00303AEJ002	Terminal
8	JAA00424AAW001	Pilot Lamp



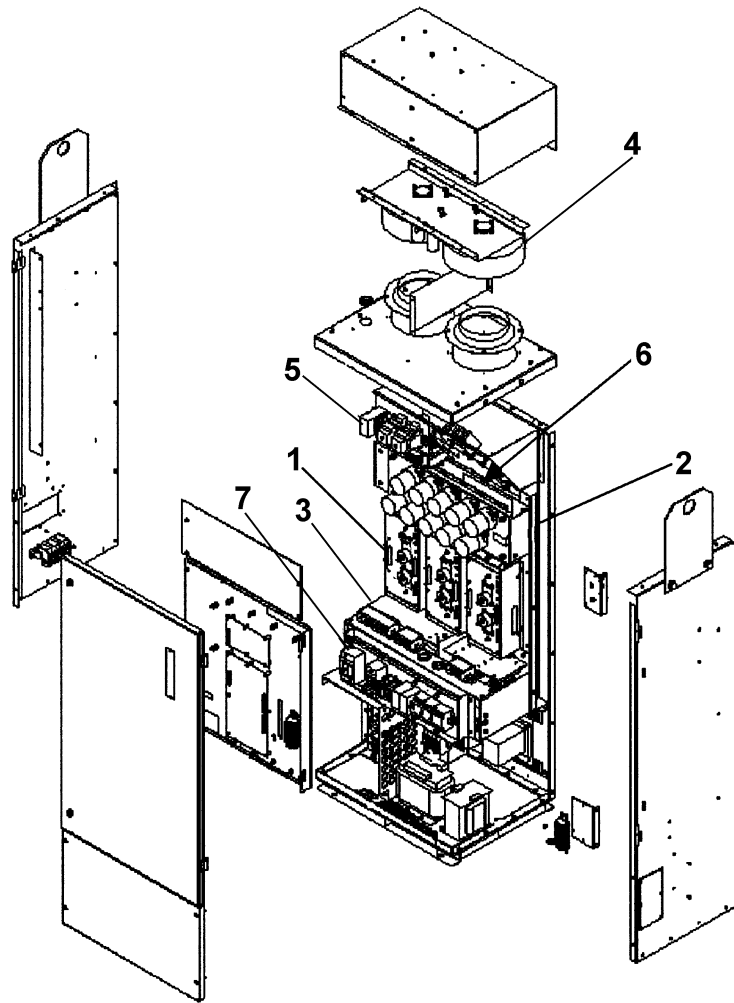
**JCA25402AAM33-38**

<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	JBA21350AAA004	Power Module,  Page 20
2	JAA21350AAB002	Capacitor Bank,  Page 21
3	JAA21350AAG11	EMI Filter,  Page 22
4	JAA21350AAH1	Fan Assembly,  Page 23
5	JAA21350AAJ1	Relay Assembly,  Page 24
6	JAA21350AAK1	BPM Assembly,  Page 25
7	JBA21350AAL7	Breaker Assembly,  Page 27



### JCA25402AAM33-38

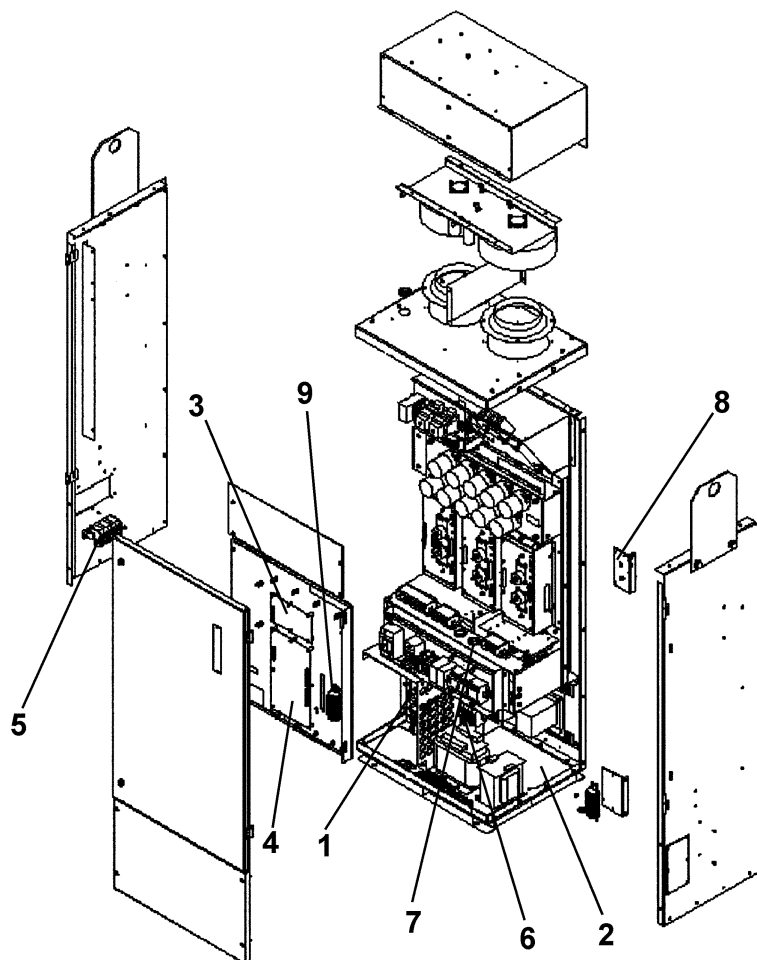
REF. No.	PART No.	DESCRIPTION
1	JAA21350AAM2	MC Assembly,  Page 29
2	---	Bottom (CEN),  Page 31
3	ABA26800VA4 ACA26800VA1	PROC. Board
4	ACA26800RN2	LVIB
5	JAA00303ADK001	Terminal
6	JAA00303ADK003	Terminal
7	JAA00303AEG003	Terminal
8	JAA00424AAW001	Pilot Lamp
9	JAA00303AEH003	Terminal





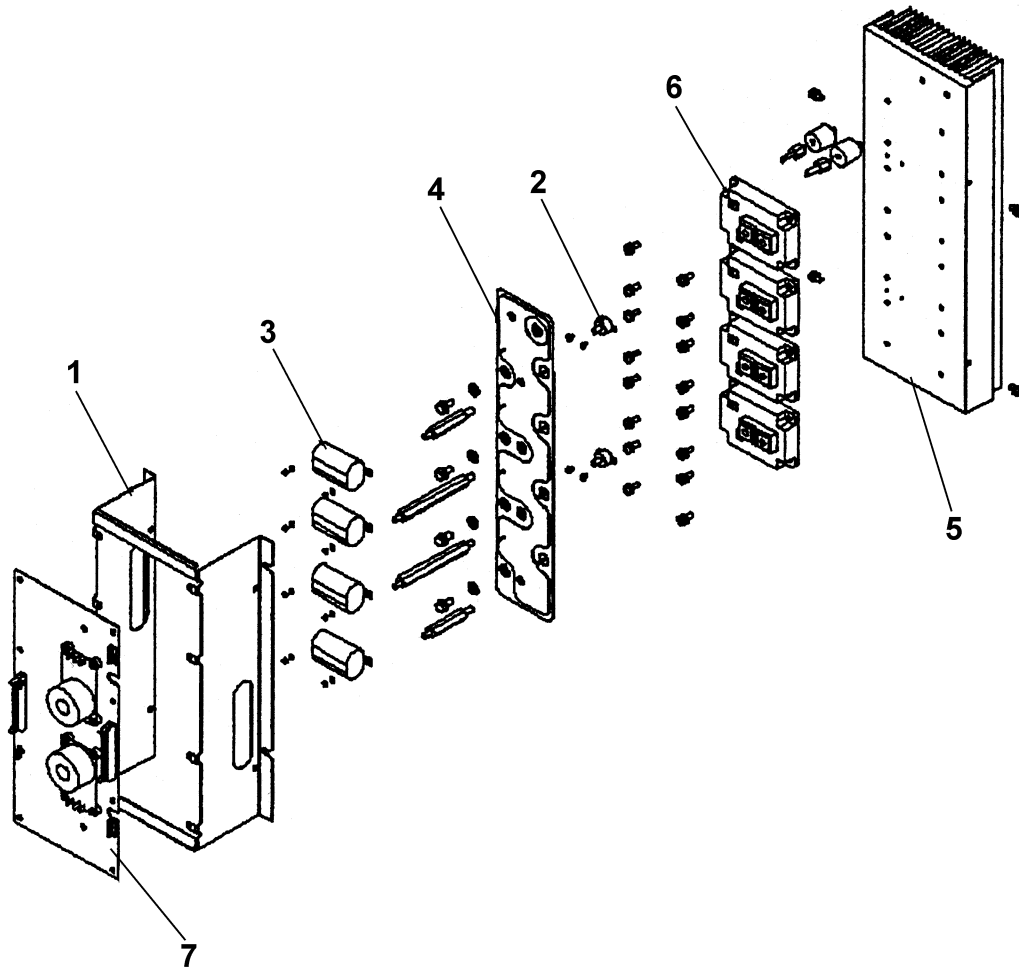
<b>JCA25402AAM39</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	JBA21350AAA004	Power Module,  Page 20
2	JAA21350AAB002	Capacitor Bank,  Page 21
3	JAA21350AAG12	EMI Filter,  Page 22
4	JAA21350AAH1	Fan Assembly,  Page 23
5	JAA21350AAJ1	Relay Assembly,  Page 24
6	JAA21350AAK1	BPM Assembly,  Page 25
7	JBA21350AAL8	Breaker Assembly,  Page 28

# Assembly for 40T (CSA)

**09-JAA25402AAM**



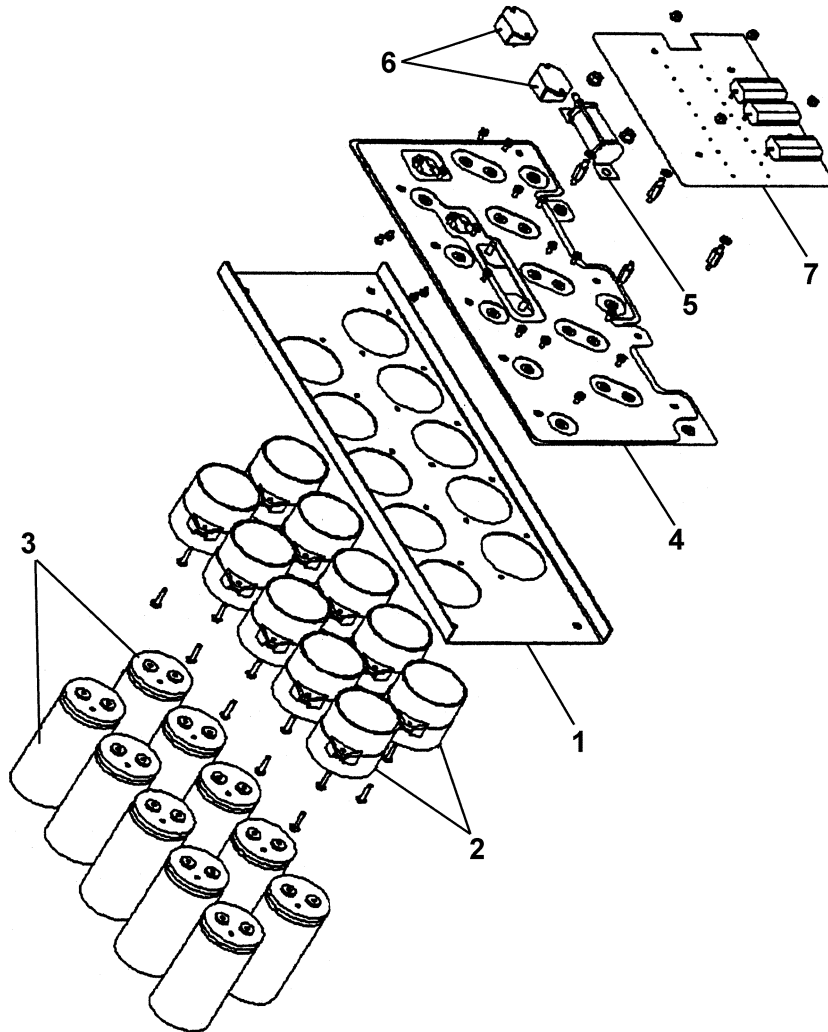
<b>JCA25402AAM39</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	JAA21350AAM3	MC Assembly,  Page 29
2	---	Bottom (CSA),  Page 32
3	<del>ABA26800VA1</del> ACA26800VA1	PROC. Board
4	ACA26800RN2	LVIB
5	JAA00303ADK002	Terminal
6	JAA00303ADK004	Terminal
7	JAA00303AEG003	Terminal
8	JAA00424AAW001	Pilot Lamp
9	JAA00303AEH003	Terminal



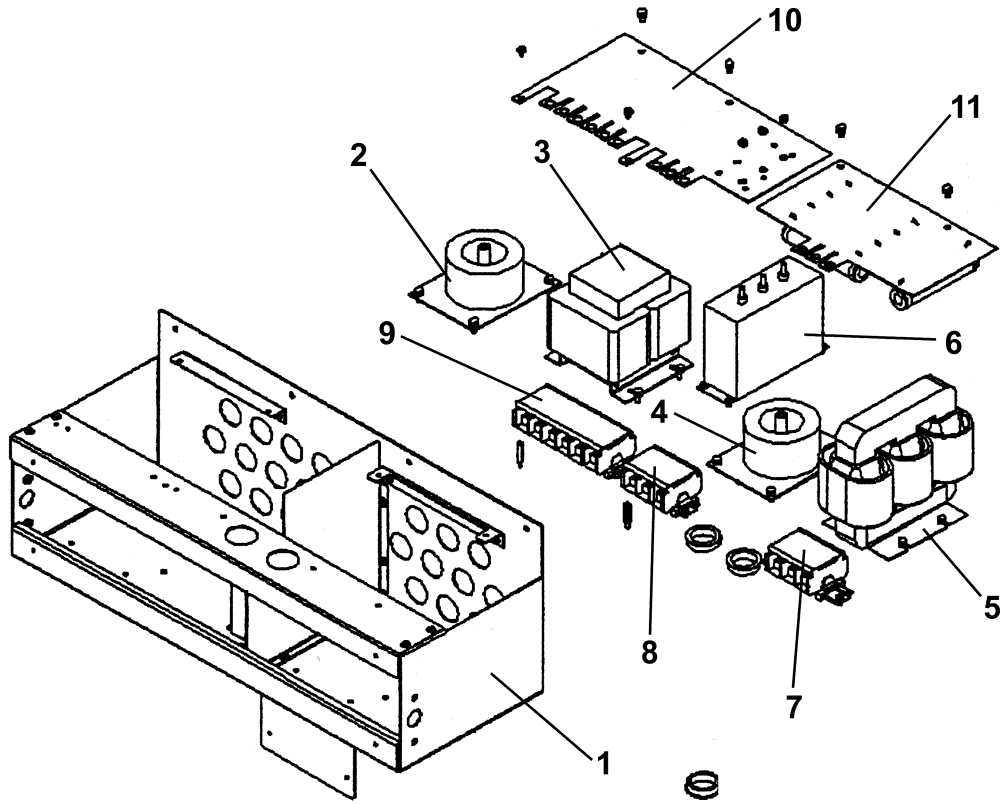
<b>JBA21350AAA004</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	JAA00285AFV001	Cover
2	JO177CM3	Thermo Switch
3	JAA00226AEP001	Capacitor, DC1200 V, 2.0 $\mu$ F
4	JAA00252ACE003	Sandwich
5	JAA00600ABR003	Heat Sink
6	JAA601ADG1	IGBT
7	JBA26807BEM003	HVIB

# Capacitor Bank

09-JAA25402AAM



JAA21350AAB002		
REF. No.	PART No.	DESCRIPTION
1	JAA00382AFE001	Upright
2	JAA00180ACT001	Capacitor Holder
3	JAA00226AEM001	Capacitor, 450V, 6800 $\mu$ F
4	JAA00252ACF001	Sandwich Bus
5	JAA00375AAB044	Fuse, 175A
6	JAA00612ACM001	Diode
7	JAA26807BEP001	DCIB



**JAA21350AAG**

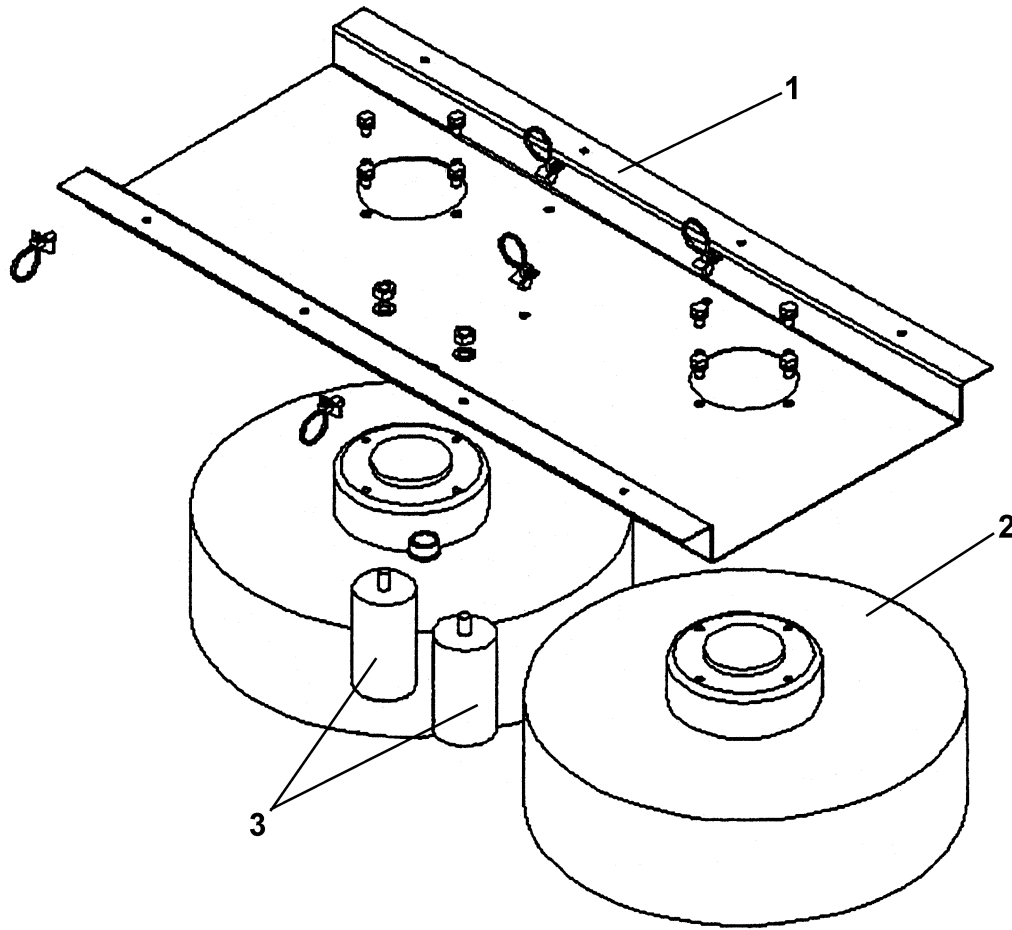
**11**

**12**

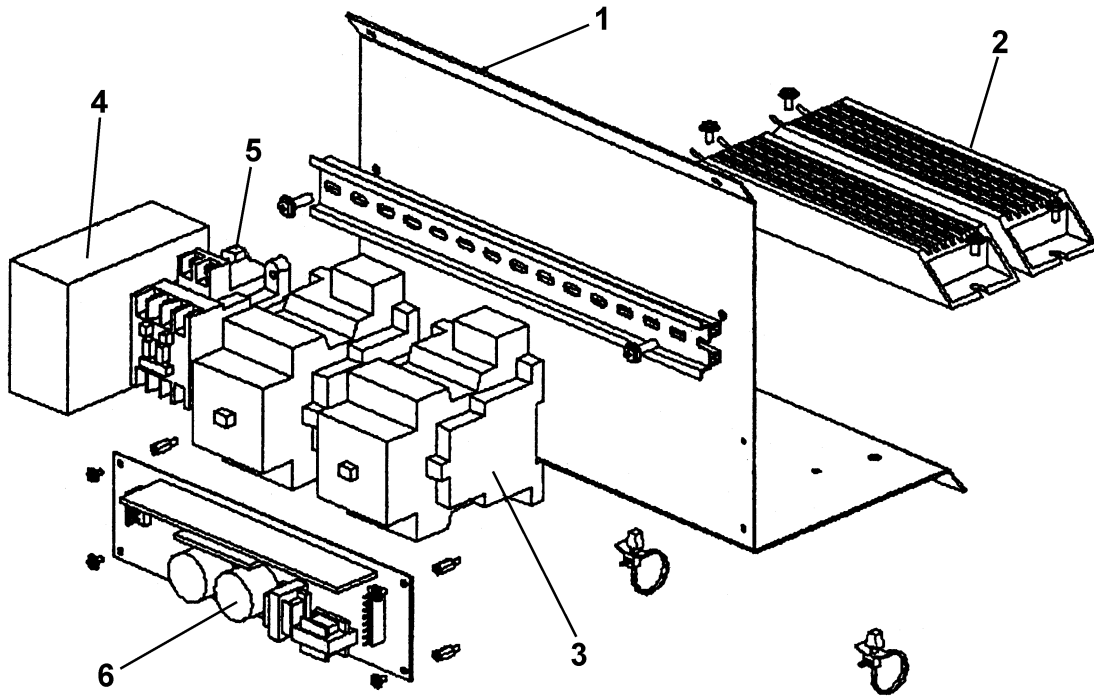
<b>REF. No.</b>	<b>PART No.</b>		<b>DESCRIPTION</b>
1	JAA308ALW1		Box Assembly
2	JAA234ACV1		Coil, 0.22 mH, 95 A
3	JAA00234ABY003		Inductor, 6 mH, 95 A
4	JAA234ACV2		Coil, 0.22 mH, 150 A
5	JAA00234ABD003	JAA00234ABD013	Inductor, 0.1 mH, 150 A
6	JAA00226AHJ001		Capacitor, 10 $\mu$ F, AC500 V
7	JAA00303ACW001		Terminal
8	JAA00303ACW003		Terminal
9	JAA00303ACW004		Terminal
10	JAA26807BNX1		EMIB-A
11	JAA26807BJT001		EMIB-B

# Fan Assembly

09-JAA25402AAM



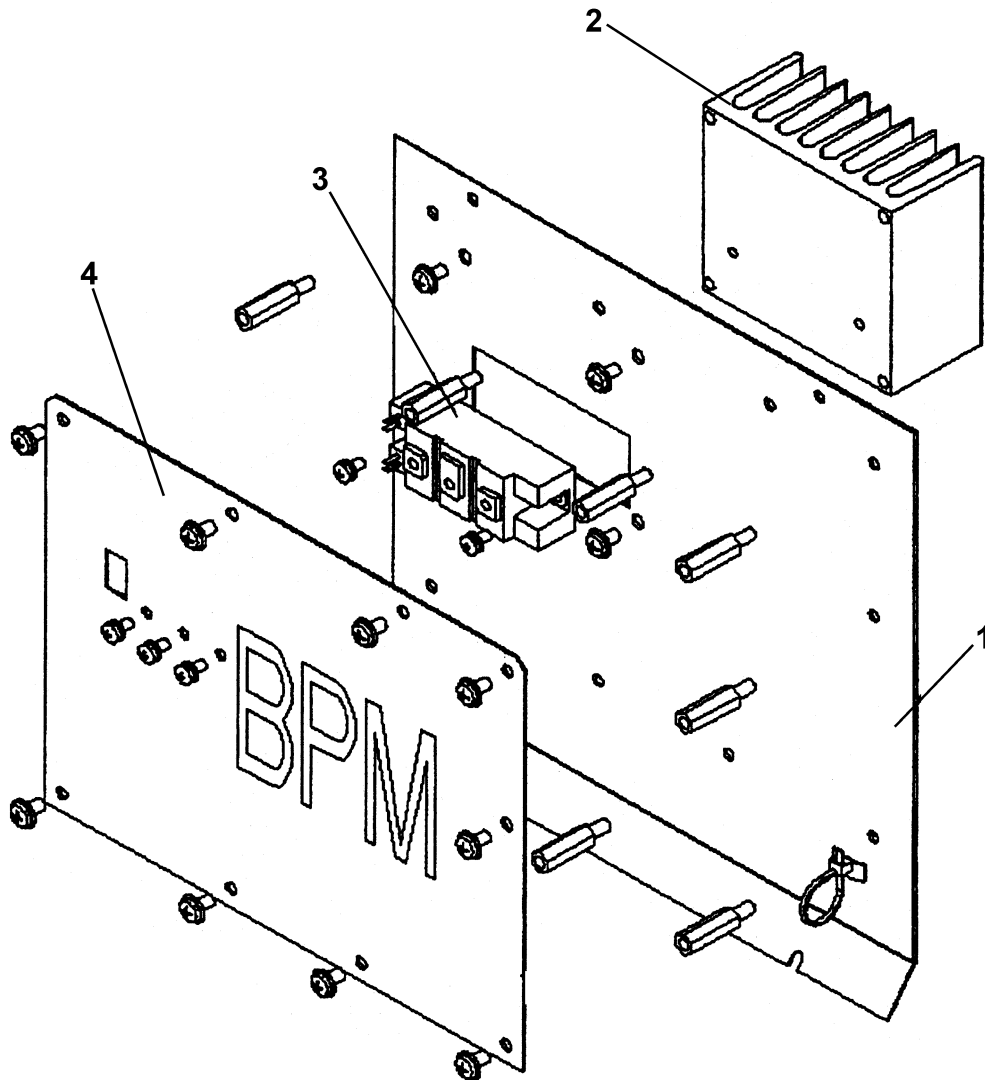
<b>JAA21350AAH1</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	JAA316GEW1	Bracket
2	JAA00301AAJ001	Fan
3	JAA00226AFR001	Capacitor



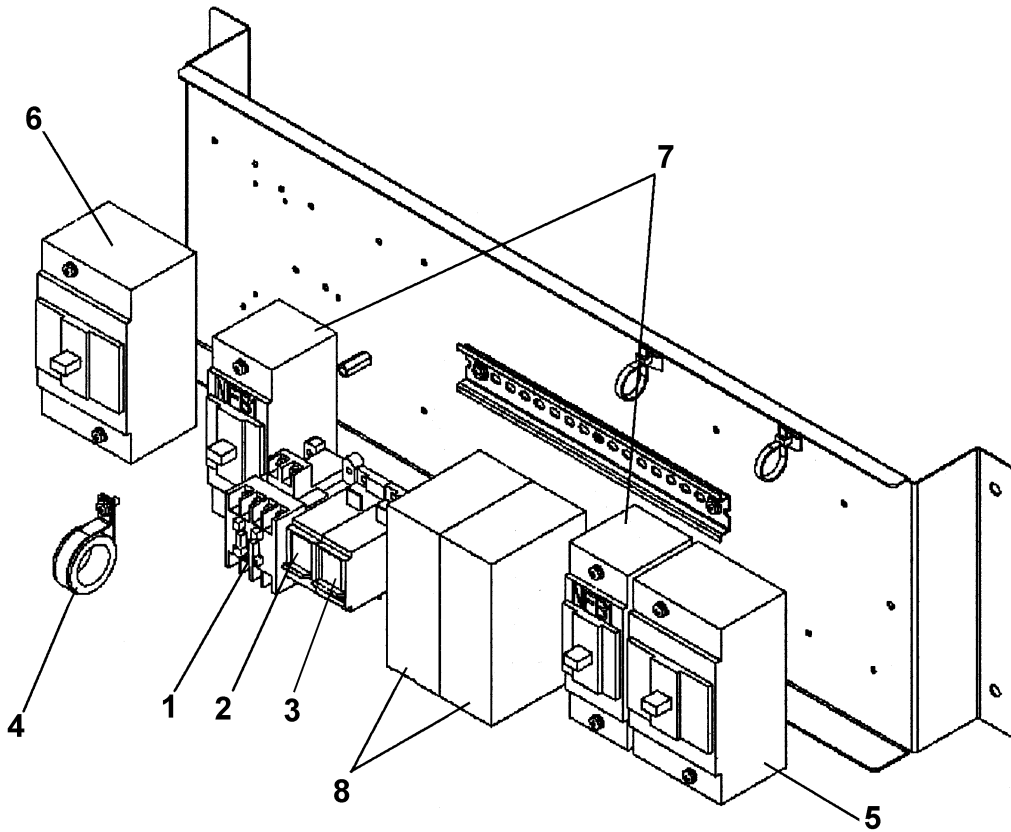
<b>JAA21350AAJ1</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	JAA433AHT1	Panel
2	JAA00232ADX002	Resistor, 200 W, 200 $\Omega$
3	JO613DS71	Magnet Switch, 65 A
4	JAA00613ABC019	Relay, DC24 V
5	JAA00613ABP002	Relay, AC100 V, 20 A
6	JAA00621ACD001	Power Supply, 12 V, 0.9 A

# Break Power Module Assembly

09-JAA25402AAM



JAA21350AAK1		
REF. No.	PART No.	DESCRIPTION
1	JAA433AHS1	Panel
2	JAA00600ABS002	Heat Sink
3	JAA00601ACD001	IGBT
4	JBA26800BEN003	BPM



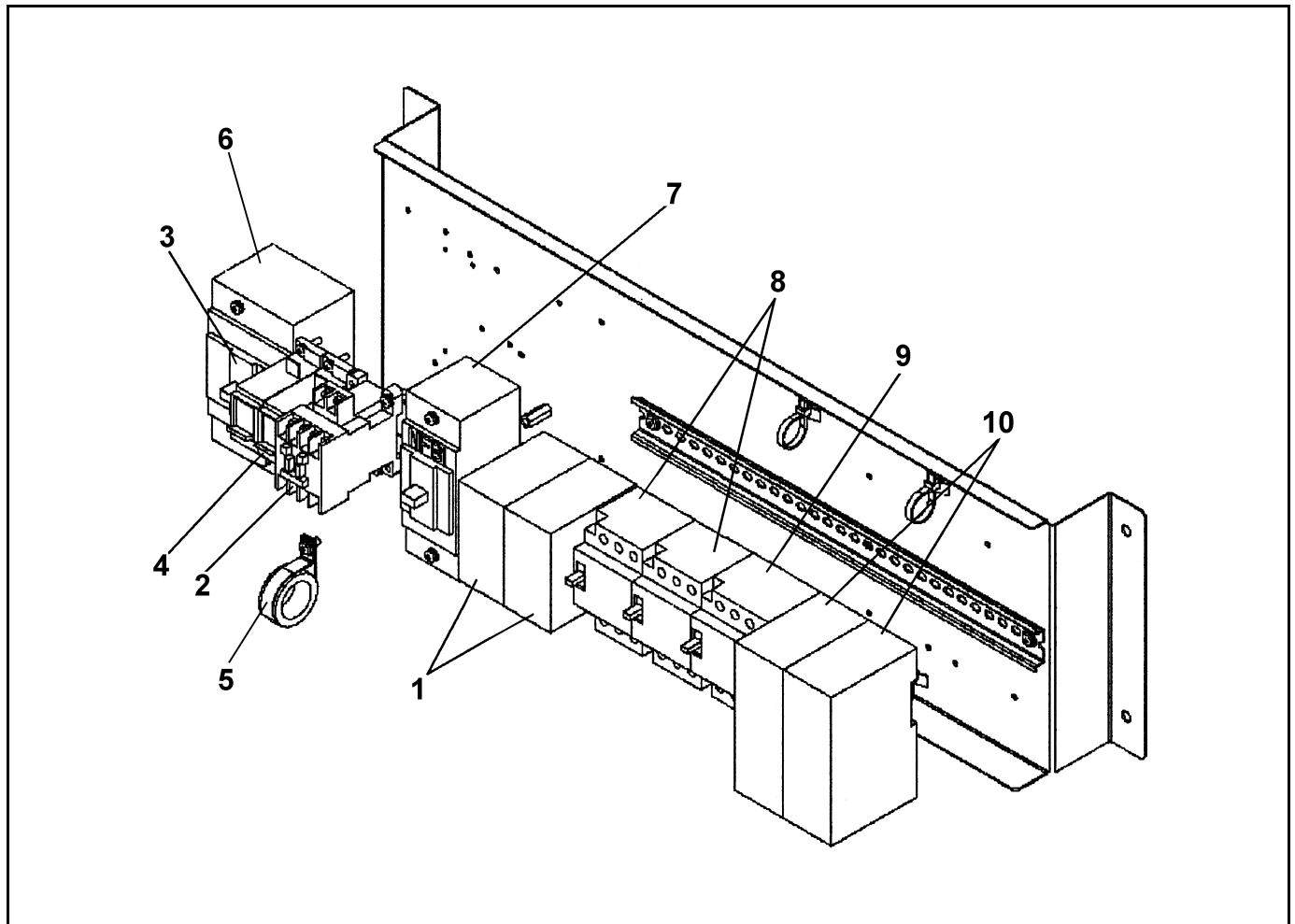
<b>JAA</b>	<b>JBA</b>	
<b>21350AAL</b>		
<b>1, 4</b>	<b>1, 4</b>	<b>6, 9</b>

<b>REF. No.</b>	<b>PART No.</b>		<b>DESCRIPTION</b>
1	JAA00613ABP002		Relay
2	JAA00630AAB126		Circuit Protector, 5 A
3	JAA00630AAB127		Circuit Protector, 7 A
4	JAA00657AAF007		Ferrite Core
5	JAA21398AAM001		Breaker, 3 A
6	JAA21398AAM004		Breaker, 15 A
7	JAA21398AAN001		Breaker, 3 A
8	---	JAA00613ADB001	Thermal Relay

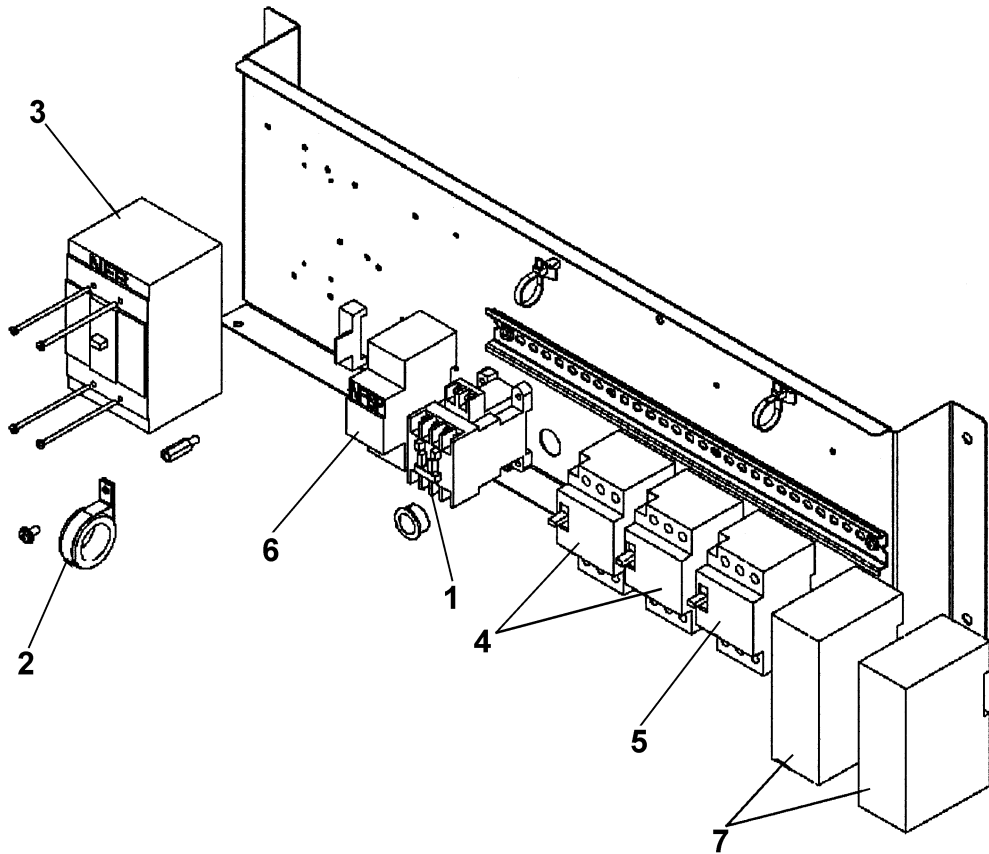
**Remarks:** JBA21350AAL1, 6 (w/o Battery); JBA21350AAL4, 9 (w/Battery)

# Breaker Assembly (CEN)

**09-JAA25402AAM**



	JAA		JBA		
	21350AAL				
	2	2	7		
REF. No.	PART No.			DESCRIPTION	
1	JAA00613AAB105			Relay	
2	JAA00613ABP002			Relay	
3	JAA00630AAB126			Circuit Protector, 5 A	
4	JAA00630AAB127			Circuit Protector, 7 A	
5	JAA00657AAF007			Ferrite Core	
6	JAA21398AAM006			Breaker, 15 A	
7	JAA21398AAN001			Breaker, 3 A	
8	JAA21398AAY006			Breaker, 1.8 A (Current Rating: 1.6 A – 2.4 A)	
9	JAA21398ABE12			Breaker, 20 A	
10	---	JAA00613ADB001		Thermal Relay	

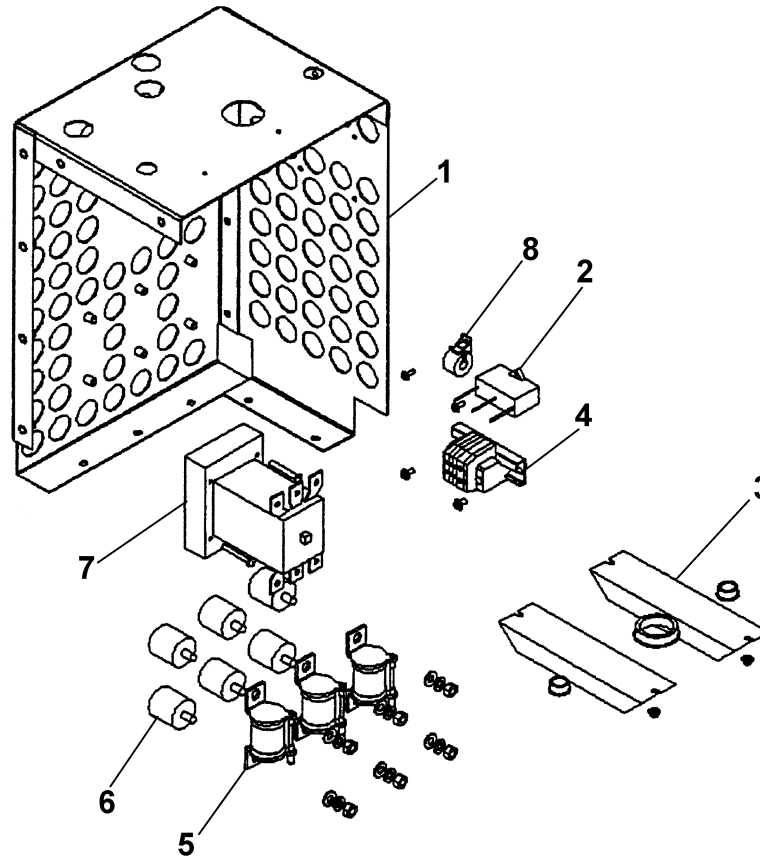


	JAA		JBA			
	<b>21350AAL</b>					
	<b>3</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>8</b>	
REF. No.	PART No.					DESCRIPTION
1	JAA00613ABP002					Relay
2	JAA00657AAF007					Ferrite Core
3	AAA637K1					Breaker, 15 A
4	JAA21398AAY006					Breaker, 1.8 A Current Rating: 1.6 A – 2.4 A
5	JAA21398AAY007	<del>JAA21398AAY007</del>				Breaker, 3.75 A
6	JAA21398AAZ007					Breaker, 2.5 A
7	---	JAA00613ADB001	---	JAA00613ADB001		Thermal Relay, 10 A

Remarks: JBA21350AAL3 (w/o Blower Conductor); JBA21350AAL5 (w/Blower Conductor)

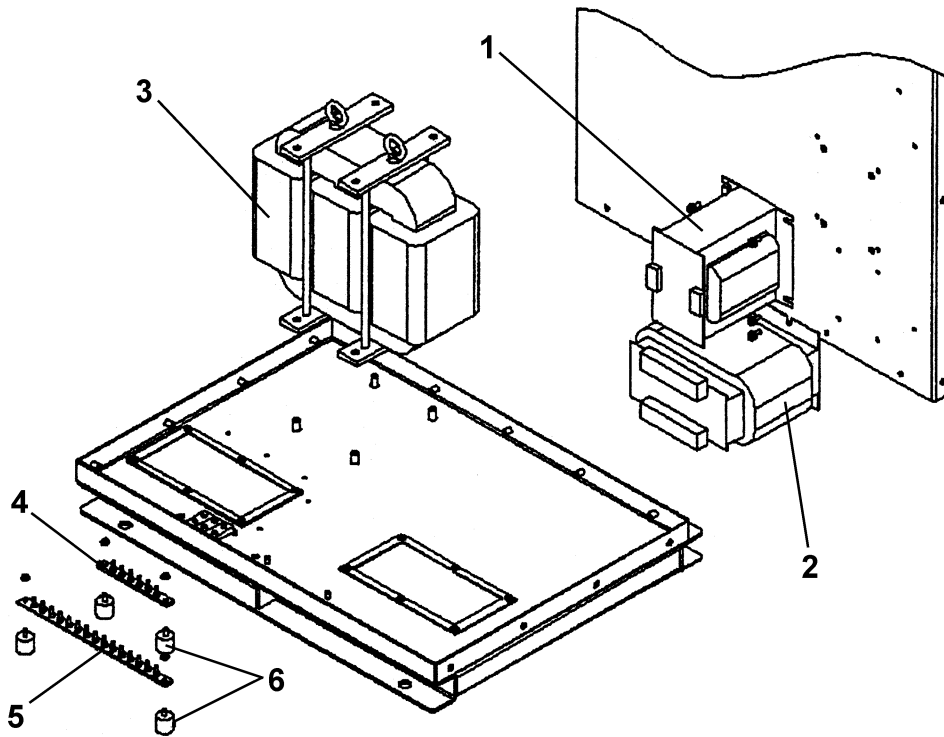
# Main Contractor Assembly

**09-JAA25402AAM**



JAA21350AAM				
	1	2	3	
REF. No.	PART No.			DESCRIPTION
1	JAA438BEV1			Panel Assembly
2	---	JAA00226AGN001		Capacitor, AC1500 V, 4700 pF
3	JAA00232ADX001			Resistor, 24 Ω
4	---	JAA00303AEA001	JAA00303AEA002	Terminal, 600 V
5	JO375P32			Fuse, 200 A
6	JO462CM2			Insulator
7	JO613DS66			Magnet Switch, 135 A
8	---	JAA00657AAG004		Ferrite Core

**Remarks:** JAA21350AAM1: JPA, APA Version  
 JAA21350AAM2: CEN Version  
 JAA21350AAM3: CSA Version

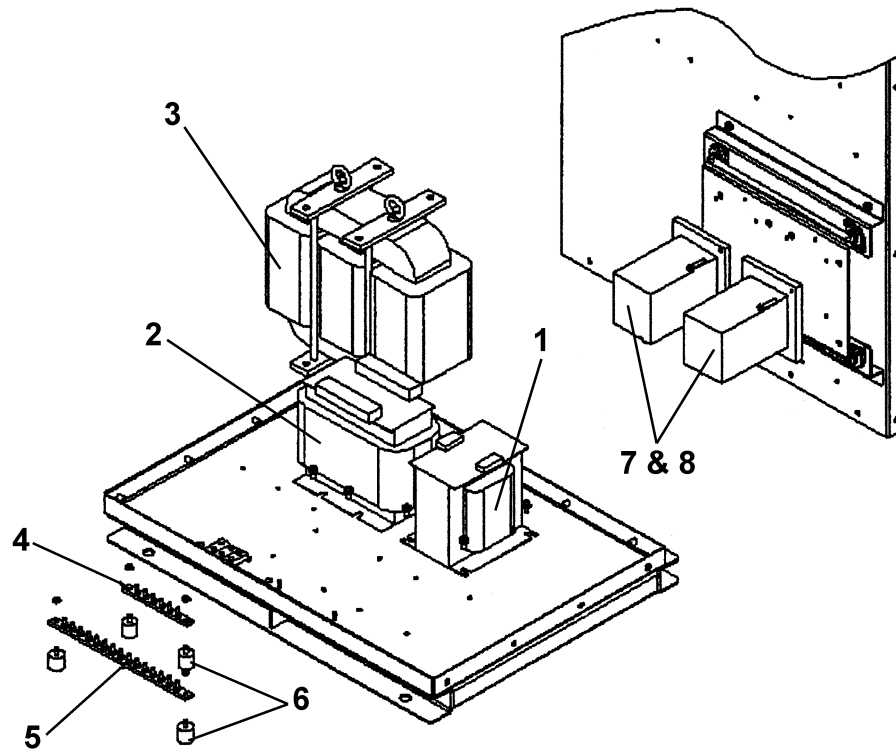


	JAA	JBA	JCA
	<b>25402AAM1-12, 21-32</b>		
REF. No.	PART No.		DESCRIPTION
1	JAA00225ABM001		Transformer, 346 V–380 V
	JAA00225ABM002		Transformer, 400 V–440 V
	JAA00225ABM003		Transformer, 460 V–480 V
2	JAA00225ACZ001		Transformer, 346 V–380 V
	JAA00225ACZ002		Transformer, 400 V–440 V
	JAA00225ACZ003		Transformer, 460 V–480 V
3	JAA00234AAV001		Reactor
4	JO316CHS2		Bus Bar
5	JO316CHS8		Bus Bar
6	JO462CM1		Insulator

**NOTE:** Transformers are chosen by the power supply.

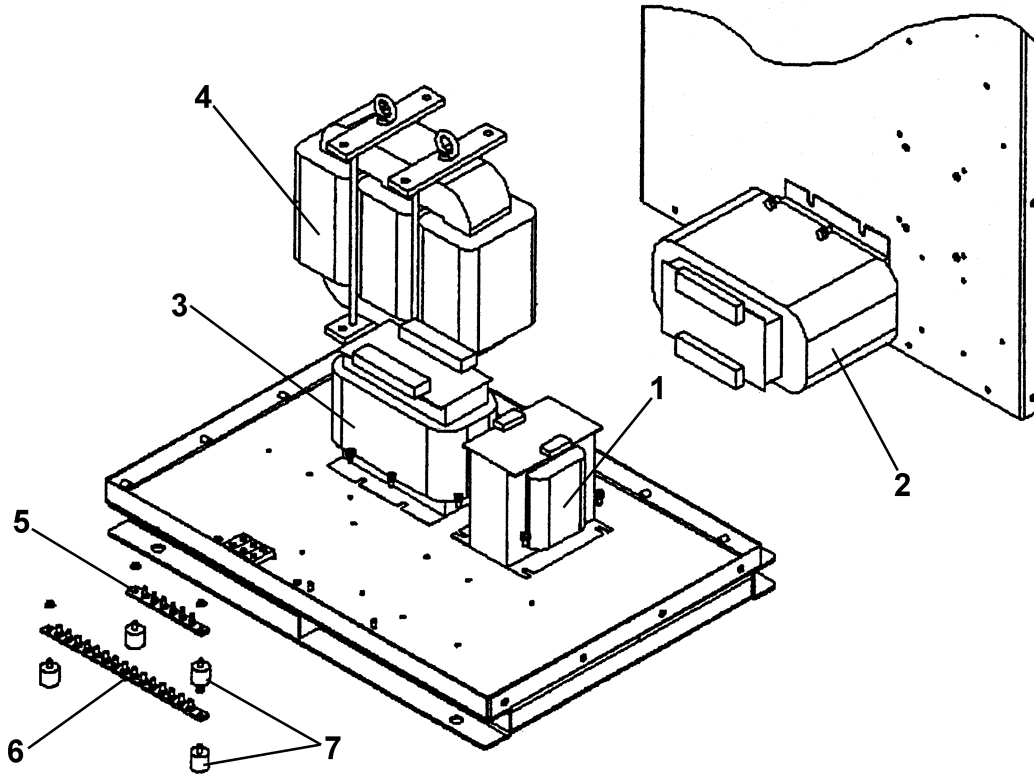
# Bottom (CEN)

**09-JAA25402AAM**



	JAA	JBA	JCA
	<b>25402AAM13-18, 33-38</b>		
REF. No.	PART No.		DESCRIPTION
1	JAA00225ABM001		Transformer, 346 V–380 V
	JAA00225ABM002		Transformer, 400 V–440 V
	JAA00225ABM003		Transformer, 460 V–480 V
2	JAA00225ACZ001		Transformer, 346 V–380 V
	JAA00225ACZ002		Transformer, 400 V–440 V
	JAA00225ACZ003		Transformer, 460 V–480 V
3	JAA00234AAV001		Reactor
4	JO316CHS2		Bus Bar
5	JO316CHS8		Bus Bar
6	JO462CM1		Insulator
7	JAA00605ABM001		RC Network, AC48 V-127 V
8	JAA00613AEA002		Relay, 127 A

**NOTE:** Transformers are chosen by the power supply.



	JAA	JBA	JCA	
	<b>25402AAM19-20, 39</b>			
REF. No.	PART No.			DESCRIPTION
1	JAA00225ABM003			Transformer, 460 V–480 V
2	JAA00225ABP001	JAA00225ABP004		Transformer, 460 V–480 V
3	JAA00225ACZ003			Transformer, 460 V–480V
4	JAA00234AAV011			Reactor
5	JO316CHS2			Bus Bar
6	JO316CHS8			Bus Bar
7	JO462CM1			Insulator