



## High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

**The following data sheets contain information obtained directly from the manufacturer's installation instruction manuals. Within each application there are specific requirements that detail how the Power Electronic Equipment should be installed and the proper overcurrent protection that has been tested and approved by certified testing agencies.**

**The part numbers shown in this guide were obtained from the latest available published information from the manufacturer. It is recommended that each installation be checked against the manufacturer's installation guides to determine if any additional requirements are needed. Bussmann® is not responsible for mis-application of our products.**

**For the latest, most up-to-date product specifications listed in this guide please visit us at <http://www.bussmann.com> or by calling the Bussmann Information Fax (BIF) at 636-527-1450.**

**This guide is intended to clearly represent product data and provide technical information that will help the end user with design/installation applications. Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Bussmann also reserves the right to change or update, without notice, any information contained in this guide. Once a product has been selected, it should be checked and tested by the end user in all possible applications.**



# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

## Model 1302 AC Drive (575 Volts)

Maximum Short Circuit Rating is 30kA

### AC Input Line Fuse Selection Values

Model Number	Voltage	HP	Input Current	Fuse Part Number
	V		A	
1302-C001-AA	575	1	2	LPJ-4SP
1302-C001-AF	575	1	2	LPJ-4SP
1302-C002-AA	575	2	3.4	LPJ-7SP
1302-C002-AF	575	2	3.4	LPJ-7SP
1302-C003-AA	575	3	5.2	LPJ-10SP
1302-C003-AF	575	3	5.2	LPJ-10SP
1302-C004-AA	575	5	7.5	LPJ-15SP
1302-C005-AA	575	5	7.5	LPJ-15SP
1302-C005-AF	575	7.5	10.9	LPJ-20SP
1302-C007-AF	575	7.5	10.9	LPJ-20SP
1302-C010-AA	575	10	14.5	LPJ-25SP
1302-C010-AF	575	10	14.5	LPJ-25SP

#### Fuse Block

J60030-3CR or JP60030-3CR

#### Disconnect Switch

CFD30J3



# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

**Model 1305 Adjustable Frequency AC Drive (Series C)  
0.37 - 5kW (0.5 - 5 HP)**

Catalog Number	Voltage V	Three Phase Input		Single Phase Input		Bussmann Class CC	Bussmann Class J
		HP	kW	HP	kW		
1305-AA02A	200-230	0.5	0.37	0.25	0.19	KTK-R-6	LPJ-6SP
1305-AA03A	200-230	0.75	0.55	0.5	0.37	KTK-R-6	LPJ-6SP
1305-AA04A	200-230	1	0.75	0.75	0.55	KTK-R-10	LPJ-10SP
1305-AA08A	200-230	2	1.5	1	0.75	KTK-R-15	LPJ-15SP
1305-AA12A	200-230	3	2.2	2	1.5	KTK-R-25	LPJ-25SP
1305-BA01A	380-460	0.5	0.37				LPJ-3SP
1305-BA02A	380-460	0.75	0.55				LPJ-3SP
1305-BA03A	380-460	1	0.75			KTK-R-6	LPJ-6SP
1305-BA04A	380-460	2	1.5			KTK-R-10	LPJ-10SP
1305-BA06A	380-460	3	2.2			KTK-R-15	LPJ-15SP
1305-BA09A	380-460	5	4			KTK-R-20	LPJ-20SP

		Fuse Blocks	Disconnect Switches
KTK-R	(0 to 30)	BC6033B or OPM-NG-SC3	CFD30CC3
LPJ	(0 to 30)	J60030-3CR or JP60030-3CR	CFD30J3



# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

## Model 1329 Intergrated Drive/Motor (Series B)

1,0 to 5.0 HP

Maximum Short Circuit Rating is 10kA

Catalog Number	Single Phase Voltage	Three Phase Voltage	HP	Input Current	Bussmann Class CC	Bussmann Class J
1329I-BJ001	115		1	14	KTK-R-20	LPJ-20SP
1329I-BK001	230		1	5.8	KTK-R-9	LPJ-9SP
1329I-BK002	230		2	14	KTK-R-20	LPJ-20SP
1329I-BL001		230	1	4.5	KTK-R-7	LPJ-7SP
1329I-BL002		230	2	7.6	KTK-R-12	LPJ-12SP
1329I-BM001		460	1	2.3	KTK-R-3.5	LPJ-3.5SP
1329I-BM002		460	2	3.7	KTK-R-6	LPJ-6SP
1329I-BM003		460	3	5.7	KTK-R-9	LPJ-9SP
1329I-BM005		460	5	9	KTK-R-15	LPJ-15SP

		Fuse Blocks	Disconnect Switches
KTK-R	(0 to 30)	BC6033B or OPM-NG-SC3	CFD30CC3
LPJ	(0 to 30)	J60030-3CR or JP60030-3CR	CFD30J3



# High Speed Fuses

**Bussmann® Fuses in Allen-Bradley Drives****TECHNICAL LITERATURE****Model 1333 3/4 to 20HP (.55-15kW) Adjustable Frequency AC Drive  
Series D**

Catalog Number			Single Phase	Three Phase	Single Phase	Three Phase	Bussmann Class RK5
	HP	kW	Voltage	Voltage	Current	Current	
1333-ZAA	0.75	0.55	230	230	6.2	4.1	FRS-R-15
1333-AAA	1	0.75	230	230	8.6	6.5	FRS-R-15
1333-YAA	2	1.5	230	230	9.5	9	FRS-R-15
1333-BAA	3	2.2	230	230	13	14	FRS-R-30
1333-CAA	5	4	230	230	18.8	22	FRS-R-40
1333-DAA	7.5	5.5	230	230	23.4	27	FRS-R-70
1333-EAA	10	7.5	230	230	31.1	37	FRS-R-80
1333-FAA	15	11	230	230	41.6	47	FRS-R-100
1333-GAA	20	15	230	230	54.6	62	FRS-R-125
1333-AAB	1	0.75		460		3.3	FRS-R-15
1333-YAB	2	1.5		460		4.5	FRS-R-15
1333-BAB	3	2.2		460		8	FRS-R-15
1333-CAB	5	4		460		13	FRS-R-20

**Amperage**

0 to 30

35 to 60

65 to 100

110 to 200

**Fuse Blocks**

R60030-3CR

R60060-3CR

R60100-3CR

R60200-3CR



# High Speed Fuses

## Bussmann® Fuses in Allen-Bradley Drives

## TECHNICAL LITERATURE

### Model 1336 FORCE Adjustable Frequency AC Drive

0.75 - 485 kW (1 - 650 HP)

Maximum Short Circuit Rating is 200kA

Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

Drive Catalog Number	Rating kW	HP	Use Bussmann LPJ, KTK-R or JJS Fuses		
			200-240V	380-480V	500-600V
1336T-__ F10	0.75	1	10	6	-
1336T-__ F30	2.2	3	25	15	-
1336T-__ F50	3.7	5	40	20	-
1336T-__ 001	0.75	1	10	6	6
1336T-__ 003	2.2	3	15	10	10
1336T-__ 007	5.5	7.5	40	20	15
1336T-__ 010	7.5	10	50	30	20
1336T-__ 015	11	15	70	35	25
1336T-__ 020	15	20	100	45	35
1336T-__ 025	18.5	25	100	60	40
1336T-__ 030	22	30	125	70	50
1336T-__ 040	30	40	150	80	60
1336T-__ 050	37	50	200	100	80
1336T-__ X060	45	60	-	100	-
1336T-__ 060	45	60	250	125	90
1336T-__ 075	56	75	-	150	110
1336T-__ 100	75	100	-	200	150
1336T-__ 125	93	125	-	250	175
1336T-__ X150	112	150	-	250	-
1336T-__ 150	112	150	-	300	225
1336T-__ 200	149	200	-	400	350
1336T-__ 250	187	250	-	450	400
1336T-__ X300	224	300	-	-	400

	Amps	Fuse Blocks	Disconnect Switches
KTK-R	0 to 30	BC6033B or OPM-NG-SC3	CFD30CC3
LPJ	0 to 30	J60030-3CR or JP60030-3CR	CFD30J3
	35 to 60	J60060-3CR	CDF60J3
	65 to 100	J60100-3CR	CFD100J3
	110 to 200	J60200-3CR	FD200J3
	225 to 400	J60400-3CR	FD400J3
	450 to 600	J60600-3CR	FD600J3
JJS	0 to 30	T60030-3CR	
	35 to 60	T60060-3CR	
	65 to 100	T60100-3C	CFD100J3/BDTA1
	110 to 200	T60200-1C (Single pole blocks)	FD200J3/BDTA2
	225 to 400	T60400-1C (Single pole blocks)	FD400J3/BDTA4
	450 to 600	T60600-1C (Single pole blocks)	FD600J3/BDTA6



# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

(cont.)

## Model 1336 FORCE Adjustable Frequency AC Drive

0.75 - 485 kW (1 - 650 HP)

Maximum Short Circuit Rating is 200kA

Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

Drive Catalog Number	Rating kW	HP	Use Bussmann Semiconductor Fuses		
			200–240V	380–480V	500–600V
1336T- __ X250	187	250	–	FWP-450A	–
1336E- __ P250	187	250	–	FWP-450A	–
1336T- __ 300T	224	300	–	FWP-450A	FWP-400A
1336E- __ 300	224	300	–	FWP-500A	FWP-450A
1336T- __ 350	261	350	–	FWP-500A	FWP-450A
1336E- __ 350	261	350	–	FWP-600A	
1336T- __ 400	298	400	–	FWP-600A	FWP-500A
1336E- __ 400	298	400	–	FWP-600A	
1336T- __ 450	336	450	–	FWP-800A	FWP-600A
1336E- __ 450	336	450	–	FWP-700A	FWP-600A
1336T- __ 500	373	500	–	FWP-800A	FWP-800A
1336T- __ 600	448	600	–	FWP-900A	FWP-800A
1336T- __ 650	485	650	–	–	FWP-800A
1336T- __ 700C	522	700	–	FWP-600A <sup>{1}</sup>	FWP-700A <sup>{1}</sup>
1336T- __ 800C	597	800	–	FWP-700A <sup>{1}</sup>	FWP-700A <sup>{1}</sup>

{1} Two Fuses in parallel are required.

	Amps	Fuse Blocks
FWP	450 - 600	1BS104
	700	BH-3145



# High Speed Fuses

## Bussmann® Fuses in Allen-Bradley Drives

## TECHNICAL LITERATURE

**Model 1336 IMPACT Adjustable Frequency AC Drive**

**0.37 - 597 kW (0.5 - 800 HP)**

Maximum Short Circuit Rating is 200kA

Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

Drive Catalog Number	Rating kW	HP	Use Bussmann LPJ, KTK-R or JJS Fuses		
			200–240V	380–480V	500–600V
1336E-__ F05	0.37	0.5	6	3	
1336E-__ F07	0.56	0.75	6	3	
1336E-__ F10	0.75	1	10	6	3
1336E-__ F15	1.2	1.5	15	6	
1336E-__ F20	1.5	2	15	10	6
1336E-__ F30	2.2	3	25	15	10
1336E-__ F50	3.7	5	40	20	0.1
1336E-__ F75	5.5	7.5		20	15
1336E-__ F100	7.5	10		30	20
1336E-__ 007	5.5	7.5	40	20	15
1336E-__ 010	7.5	10	50	30	20
1336E-__ 015	11	15	70	35	25
1336E-__ 020	15	20	100	45	35
1336E-__ 025	18.5	25	100	60	40
1336E-__ 030	22	30	125	70	50
1336E-__ X040	30	40	150	80	60
1336E-__ 040	30	40	150	80	60
1336E-__ 050	37	50	200	100	80
1336E-__ X060	45	60		100	
1336E-__ 060	45	60	250	125	90
1336E-__ 075	56	75	300	150	110
1336E-__ 100	75	100	400	200	150
1336E-__ 125	93	125	450	250	175
1336E-__ X150	112	150		250	
1336E-__ 150	112	150		300	225
1336E-__ 200	149	200		400	350
1336E-__ 250	187	250		450	400
1336E-__ X300	224	300			400

	Amps	Fuse Blocks	Disconnect Switches
KTK-R	0 to 30	BC6033B or OPM-NG-SC3	CFD30CC3
LPJ	0 to 30	J60030-3CR or JP60030-3CR	CFD30J3
	35 to 60	J60060-3CR	CDF60J3
	65 to 100	J60100-3CR	CFD100J3
	110 to 200	J60200-3CR	FD200J3
	225 to 400	J60400-3CR	FD400J3
	450 to 600	J60600-3CR	FD600J3
JJS	0 to 30	T60030-3CR	
	35 to 60	T60060-3CR	
	65 to 100	T60100-3C	CFD100J3/BDTA1
	110 to 200	T60200-1C (Single pole blocks)	FD200J3/BDTA2
	225 to 400	T60400-1C (Single pole blocks)	FD400J3/BDTA4
	450 to 600	T60600-1C (Single pole blocks)	FD600J3/BDTA6





# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

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### Model 1336 IMPACT Adjustable Frequency AC Drive

0.37 - 597 kW (0.5 - 800 HP)

Maximum Short Circuit Rating is 200kA

Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

Drive Catalog Number	Rating kW	HP	Use Bussmann Semiconductor Fuses		
			200-240V	380-480V	500-600V
1336E-__ 300	224	300		FWP-500A	FWP-400A
1336E-__ P300	224	300		FWP-500A	
1336E-__ 350	224	300		FWP-600A	FWP-450A
1336E-__ P350	261	350		FWP-600A	
1336E-__ 400	298	400		FWP-600A	FWP-500A
1336E-__ P400	298	400		FWP-600A	
1336E-__ 450	336	450		FWP-800A	FWP-600A
1336E-__ P450	336	450		FWP-700A	
1336E-__ 500	373	500		FWP-800A	FWP-800A
1336E-__ 600	448	600		FWP-900A	FWP-800A
1336E-__ 650	485	650			FWP-800A
1336E-__ 700C	522	700		FWP-600A <sup>{1}</sup>	FWP-700A <sup>{1}</sup>
1336E-__ 800C	597	800		FWP-700A <sup>{1}</sup>	FWP-700A <sup>{1}</sup>

{1} Two Fuses in parallel are required.

	Amps	Fuse Blocks
FWP	450 - 600	1BS104
	700	BH-3145



# High Speed Fuses

## Bussmann® Fuses in Allen-Bradley Drives

## TECHNICAL LITERATURE

### Model 1336 PLUS Adjustable Frequency AC Drive

0.37 - 448 kW (0.5 - 600 HP)

Maximum Short Circuit Rating is 200kA

Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

Drive Catalog Number	Rating kW	HP	Use Bussmann LPJ, KTK-R or JJS Fuses		
			200–240V	380–480V	500–600V
1336S-__ F05	0.37	0.5	6	3	
1336S-__ F07	0.56	0.75	6	3	
1336S-__ F10	0.75	1	10	6	6
1336S-__ F15	1.2	1.5	15	6	
1336S-__ F20	1.5	2	15	10	10
1336S-__ F30	2.2	3	25	15	15
1336S-__ F50	3.7	5	40	20	20
1336S-__ F75	5.5	7.5		20	
1336S-__ F100	7.5	10		30	
1336S-__ 007	5.5	7.5	40	20	15
1336S-__ 010	7.5	10	50	30	20
1336S-__ 015	11	15	70	35	25
1336S-__ 020	15	20	100	45	35
1336S-__ 025	18.5	25	100	60	40
1336S-__ 030	22	30	125	70	50
1336S-__ 040	30	40	150	80	60
1336S-__ 050	37	50	200	100	80
1336S-__ X060	45	60		100	
1336S-__ 060	45	60	250	125	90
1336S-__ 075	56	75	300	150	110
1336S-__ 100	75	100	400	200	150
1336S-__ 125	93	125	450	250	175
1336S-__ X150	112	150		250	
1336S-__ 150	112	150		300	225
1336S-__ 200	149	200		400	350
1336S-__ 250	187	250		450	400
1336S-__ X300	224	300			400

	Amps	Fuse Blocks	Disconnect Switches
KTK-R	0 to 30	BC6033B or OPM-NG-SC3	CFD30CC3
LPJ	0 to 30	J60030-3CR or JP60030-3CR	CFD30J3
	35 to 60	J60060-3CR	CDF60J3
	65 to 100	J60100-3CR	CFD100J3
	110 to 200	J60200-3CR	FD200J3
	225 to 400	J60400-3CR	FD400J3
	450 to 600	J60600-3CR	FD600J3
JJS	0 to 30	T60030-3CR	
	35 to 60	T60060-3CR	
	65 to 100	T60100-3C	CFD100J3/BDTA1
	110 to 200	T60200-1C (Single pole blocks)	FD200J3/BDTA2
	225 to 400	T60400-1C (Single pole blocks)	FD400J3/BDTA4
	450 to 600	T60600-1C (Single pole blocks)	FD600J3/BDTA6



# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

(cont.)

### Model 1336 PLUS Adjustable Frequency AC Drive

0.37 - 448 kW (0.5 - 600 HP)

Maximum Short Circuit Rating is 200kA

Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

Drive Catalog Number	Rating kW	HP	Use Bussmann Semiconductor Fuses		
			200-240V	380-480V	500-600V
1336S-__ P250	187	250		FWP-450A	
1336S-__ X250	187	250		FWP-450A	
1336S-__ 300	224	300		FWP-450A	FWP-400A
1336S-__ P300	224	300		FWP-500A	
1336S-__ 350	261	350		FWP-500A	FWP-450A
1336S-__ P350	261	350		FWP-600A	
1336S-__ 400	298	400		FWP-600A	FWP-500A
1336S-__ P400	298	400		FWP-600A	
1336S-__ 450	336	450		FWP-800A	FWP-600A
1336S-__ P450	336	450		FWP-700A	
1336S-__ 500	373	500		FWP-800A	FWP-800A
1336S-__ 600	448	600		FWP-900A	FWP-800A

	Amps	Fuse Blocks
FWP	450 - 600	1BS104
	700	BH-3145



# High Speed Fuses

## Bussmann® Fuses in Allen-Bradley Drives

## TECHNICAL LITERATURE

### Model 1336 PLUS II Adjustable Frequency AC Drive

0.37 - 448 kW (0.5 - 600 HP)

Maximum Short Circuit Rating is 200kA

Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

Drive Catalog Number	Rating kW	HP	Use Bussmann LPJ, KTK-R or JJS Fuses		
			200-240V	380-480V	500-600V
1336F-__ F05	0.37	0.5	4	3	
1336F-__ F05 Series A	0.37	0.5	6	3	
1336F-__ F07	0.56	0.75	4	3	
1336F-__ F07 Series A	0.56	0.75	6	3	
1336F-__ F10	0.75	1	6	3	3
1336F-__ F10 Series A	0.75	1	10	6	6
1336F-__ F15	1.2	1.5	8	4	
1336F-__ F15 Series A	1.2	1.5	15	6	
1336F-__ F20	1.5	2	10	5	6
1336F-__ F20 Series A	1.5	2	15	10	10
1336F-__ F30	2.2	3	15	8	10
1336F-__ F30 Series A	2.2	3	25	15	15
1336F-__ F50	3.7	5	25	12	15
1336F-__ F50 Series A	3.7	5	40	20	20
1336F-__ F75	5.5	7.5	30	20	15
1336F-__ F100	7.5	10		30	20
1336F-__ F150	11	15		35	25
1336F-__ F200	15	20		35	30
1336F-__ 007	5.5	7.5	40	20	15
1336F-__ 010	7.5	10	50	30	20
1336F-__ 015	11	15	70	35	25
1336F-__ 020	15	20	100	45	35
1336F-__ 025	18.5	25	100	60	40
1336F-__ 030	22	30	125	70	50
1336F-__ 040/X040	30	40	150	80	60
1336F-__ 050	37	50	200	100	80
1336F-__ X060	45	60		100	
1336F-__ 060	45	60	250	125	90
1336F-__ 075	56	75	300	150	110
1336F-__ 100	75	100	400	200	150
1336F-__ 125	93	125	450	250	175
1336F-__ X150	112	150		250	
1336F-__ 150	112	150		300	225
1336F-__ 200	149	200		400	350
1336F-__ 250	187	250		450	400
1336F-__ X300	224	300			400

	Amps	Fuse Blocks	Disconnect Switches
KTK-R	0 to 30	BC6033B or OPM-NG-SC3	CFD30CC3
LPJ	0 to 30	J60030-3CR or JP60030-3CR	CFD30J3
	35 to 60	J60060-3CR	CFD60J3
	65 to 100	J60100-3CR	CFD100J3
	110 to 200	J60200-3CR	FD200J3
	225 to 400	J60400-3CR	FD400J3
	450 to 600	J60600-3CR	FD600J3
	JJS	0 to 30	T60030-3CR
35 to 60		T60060-3CR	
65 to 100		T60100-3C	CFD100J3/BDTA1
110 to 200		T60200-1C (Single pole blocks)	FD200J3/BDTA2
225 to 400		T60400-1C (Single pole blocks)	FD400J3/BDTA4
450 to 600		T60600-1C (Single pole blocks)	FD600J3/BDTA6



# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

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(cont.)

### Model 1336 PLUS II Adjustable Frequency AC Drive

0.37 - 448 kW (0.5 - 600 HP)

Maximum Short Circuit Rating is 200kA

Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

Drive Catalog Number	Rating kW	HP	Use Bussmann Semiconductor Fuses		
			200-240V	380-480V	500-600V
1336F-__BP/BPR250	187	250		FWP-450A	
1336F-__X250	187	250		FWP-450A	
1336F-__300	224	300		FWP-450A	FWP-400A
1336F-__BP/BPR300	224	300		FWP-500A	
1336F-__350	261	350		FWP-500A	FWP-450A
1336F-__BP/BPR350	261	350		FWP-600A	
1336F-__400	298	400		FWP-600A	FWP-500A
1336F-__BP/BPR400	298	400		FWP-600A	
1336F-__450	336	450		FWP-800A	FWP-600A
1336F-__BP/BPR450	336	450		FWP-700A	
1336F-__500	373	500		FWP-800A	FWP-800A
1336F-__600	448	600		FWP-900A	FWP-800A

FWP	<b>Amps</b>	<b>Fuse Blocks</b>
	450 - 600	1BS104
	700	BH-3145



# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives      TECHNICAL LITERATURE

## Model 1336 SPIDER Adjustable Frequency Drive for the Fibers Industry

9.9A - 60A

Maximum Short Circuit Rating is 200kA

Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

Drive Catalog Number	Rating kW	Input Current	Use Bussmann LPJ, KTK-R or JJS Fuses	
			200–240V	380–480V
1336Z- __ A022	1.8	7.6	30	
1336Z- __ A036	3	12.5	30	
1336Z- __ A060	5	24.6	50	
1336Z- __ B010	1.6	8.7		20
1336Z- __ B017	2.7	11.4		20
1336Z- __ B033	5.5	19.8		40

	Amps	Fuse Blocks	Disconnect Switches
KTK-R	0 to 30	BC6033B or OPM-NG-SC3	CFD30CC3
LPJ	0 to 30	J60030-3CR or JP60030-3CR	CFD30J3
	35 to 60	J60060-3CR	CDF60J3
JJS	0 to 30	T60030-3CR	
	35 to 60	T60060-3CR	



# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

## 1336/1336VT/1336 PLUS/1336 PLUS II/FORCE/IMPACT Series A Brake Chopper

Dynamic Brake Fuse

All brake modules are internally fused to protect brake components.

Dynamic Brake	Fuse	Rating	Recommended Fuse
1336-WA018	F1 & F2	30A, 600V	FWC-30A10F
1336-WB009	F1 & F2	15A, 600V	FWC-15A10F
1336-WC009	F1 & F2	15A, 600V	FWC-15A10F
1336-WA070	F1 & F2	125A, 700V	FWP-125A
1336-WB035	F1 & F2	60A, 700V	FWP-60A
1336-WC035	F1 & F2	60A, 700V	FWP-60A
1336-WA115	F1 & F2	200A, 700V	FWP-200A
1336-WB110	F1 & F2	200A, 700V	FWP-200A
1336-WC085	F1 & F2	200A, 700V	FWP-200A



# High Speed Fuses

**Bussmann® Fuses in Allen-Bradley Drives**

**TECHNICAL LITERATURE**

## Model 1336 Adjustable Frequency AC Drive

Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

Catalog Number	Input Current	Input Voltage	Recommended Bussmann Fuse		
			KTK-R	JJS	JKS
1336-B003	5.7	460	KTK-R-10	JJS-10	
1336-B005	9.2	460	KTK-R-15	JJS-15	
1336-B007	13.3	460	KTK-R-20	JJS-20	
1336-B010	17	460	KTK-R-25	JJS-25	
1336-B015	25	460		JJS-35	JKS-35
1336-B020	34	460		JJS-45	JKS-45
1336-B025	42	460		JJS-60	JKS-60
1336-B030	49	460		JJS-70	JKS-70
1336-B040	61	460		JJS-80	JKS-80
1336-B050	76	460		JJS-100	JKS-100
1336-B075	122	460		JJS-150	JKS-150
1336-B100	153	460		JJS-200	JKS-200
1336-B125	184	460		JJS-250	JKS-250
1336-B150	222	460		JJS-300	JKS-300
1336-B200	296	460		JJS-400	JKS-400
1336-C003	3.2	575	KTK-R-6	JJS-6	
1336-C005	4.1	575	KTK-R-6	JJS-6	
1336-C007	7.7	575	KTK-R-10	JJS-10	
1336-C010	10.2	575	KTK-R-15	JJS-15	
1336-C015	15	575		JJS-20	JKS-20
1336-C020	19	575		JJS-25	JKS-25
1336-C025	24	575		JJS-30	JKS-30
1336-C030	29	575		JJS-35	JKS-35
1336-C040	39	575		JJS-45	JKS-45
1336-C050	48	575		JJS-60	JKS-60
1336-C075	73	575		JJS-90	JKS-90
1336-C100	97	575		JJS-125	JKS-125
1336-C125	121	575		JJS-150	JKS-150
1336-C150	146	575		JJS-175	JKS-175
1336-C200	193	575		JJS-250	JKS-250

	Amps	Fuse Blocks	Disconnect Switches
KTK-R	0 to 30	BC6033B or OPM-NG-SC3	CFD30CC3
LPJ	0 to 30	J60030-3CR or JP60030-3CR	CFD30J3
	35 to 60	J60060-3CR	CDF60J3
	65 to 100	J60100-3CR	CFD100J3
	110 to 200	J60200-3CR	FD200J3
	225 to 400	J60400-3CR	FD400J3
JJS	0 to 30	T60030-3CR	
	35 to 60	T60060-3CR	
	65 to 100	T60100-3C	CFD100J3/BDTA1
	110 to 200	T60200-1C (Single pole blocks)	FD200J3/BDTA2
	225 to 400	T60400-1C (Single pole blocks)	FD400J3/BDTA4





## High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

### Heavy Duty Dynamic Braking

for use with 1336/1336VT/1336 PLUS/1336 FORCE Drives

All brake modules are internally fused to protect brake components.

Dynamic Brake	Fuse	Rating	Recommended Fuse
1336-MOD-KA005	F1	10A, 500V	FWH-10A14F
1336-MOD-KB005	F1	5A, 600V	FWC-5A10F
1336-MOD-KC005	F1	5A, 700V	FWP-5A14F
1336-MOD-KA010	F1	20A, 500V	FWH-20A14F
1336-MOD-KB010	F1	10A, 600V	FWC-10A10F
1336-MOD-KC010	F1	10A, 700V	FWP-10A14F
1336-MOD-KA050	F1 & F2	50A, 500V	FWH-50A
1336-MOD-KB050	F1 & F2	35A, 700V	FWP-35A
1336-MOD-KC050	F1 & F2	35A, 700V	FWP-35A



# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

## Model 1336VT Adjustable Frequency AC Drive

Catalog Number	Input Current	Input Voltage	Recommended Bussmann Fuse		
1336VT-B003	5.6	460	KTK-R-10		
1336VT-B005	7.5	460	KTK-R-15		
1336VT-B007	11.4	460	KTK-R-20		
1336VT-B010	14.6	460	KTK-R-25		
1336VT-B015	22	460		JJS-35	JKS-30
1336VT-B020	28	460		JJS-45	JKS-45
1336VT-B025	35	460		JJS-60	JKS-60
1336VT-B030	44	460		JJS-70	JKS-60
1336VT-B040	54	460		JJS-80	JKS-80
1336VT-B050	67	460		JJS-100	JKS-100
1336VT-B060	78	460		JJS-110	JKS-110
1336VT-B075	97	460		JJS-150	JKS-150
1336VT-B100	124	460		JJS-200	JKS-200
1336VT-B125	154	460		JJS-250	JKS-250
1336VT-B150	178	460		JJS-300	JKS-300
1336VT-B200	235	460		JJS-400	JKS-400
1336VT-B250	296	460		JJS-500	JKS-500

	Amps	Fuse Blocks	Disconnect Switches
KTK-R	0 to 30	BC6033B or OPM-NG-SC3	CFD30CC3
LPJ	0 to 30	J60030-3CR or JP60030-3CR	CFD30J3
	35 to 60	J60060-3CR	CDF60J3
	65 to 100	J60100-3CR	CFD100J3
	110 to 200	J60200-3CR	FD200J3
	225 to 400	J60400-3CR	FD400J3
	450 to 600	J60600-3CR	FD600J3
JJS	0 to 30	T60030-3CR	
	35 to 60	T60060-3CR	
	65 to 100	T60100-3C	CFD100J3/BDTA1
	110 to 200	T60200-1C (Single pole blocks)	FD200J3/BDTA2
	225 to 400	T60400-1C (Single pole blocks)	FD400J3/BDTA4
	450 to 600	T60600-1C (Single pole blocks)	FD600J3/BDTA6



# High Speed Fuses

Bussmann® Fuses in Allen-Bradley Drives

TECHNICAL LITERATURE

## Model 1391-DES Digital AC Servo Drive

Recommended fuse for transformer primary protection

Catalog Number	XFMR KVA Rating	Voltage					
		208	240	380	415	480	575
1391-T015	1.5	FRS-R-8	FRS-R-7	FRS-R-4-1/2	FRS-R-4	FRS-R-3-1/2	FRS-R-3
1391-T035	3.5	FRS-R-17-1/2	FRS-R-15	FRS-R-9	FRS-R-8	FRS-R-7	FRS-R-6
1391-T050	5	FRS-R-20	FRS-R-20	FRS-R-12	FRS-R-12	FRS-R-10	FRS-R-8
1391-T100	10	FRS-R-40	FRS-R-35	FRS-R-25	FRS-R-20	FRS-R-17-1/2	FRS-R-15
1391-T125	12.5	FRS-R-50	FRS-R-45	FRS-R-30	FRS-R-25	FRS-R-25	FRS-R-20
1391-T150	15	FRS-R-60	FRS-R-50	FRS-R-35	FRS-R-30	FRS-R-30	FRS-R-25

Recommended fusing for shunt regulator.

Drive Rating	Fuse Location	Bussmann
15 Amps	Top Panel	KLM-10
22.5 Amps	Top Panel	FNM-6-1/4
22.5 Amps	External	KTK-15
45 Amps	External	KLM-20



# High Speed Fuses

**Bussmann® Fuses in Allen-Bradley Drives****TECHNICAL LITERATURE****Model 1394 Digital AC Multi-Axis Motion Control System**

Maximum Short Circuit Rating of 100kA

## Line Input Fusing

<b>Catalog Number</b>	<b>Series</b>	<b>Recommended Bussmann Fuses</b>		
1394-SJT05 Systems	Series A and B	FRS-R-20		
1394C-SJT05 Systems	Series C	KTK-R-20	LPJ-20SP	
1394-SJT10 Systems	Series A and B	FRS-R-30		
1394C-SJT10 Systems	Series C	KTK-R-30	LPJ-30SP	
1394x-SJT22 Systems		FRS-R-35	LPS-RK-40SP	LPJ-45SP

## Shunt Module

<b>Catalog Number</b>	<b>Shunt has UL</b>	<b>Shunt has no UL</b>	
1394-SR9A	FWP-50A14F	170N2013	FWP-50A22F
1394-SR9AF	FWP-50A14F	170N2013	FWP-50A22F
1394-SR10A	FWP-40A14F		
1394-SR36A	FWP-50A14F	170N2013	FWP-50A22F
1394-SR36AF	FWP-50A14F	170N2013	FWP-50A22F

## 24 Volt Logic Input Power

<b>24V logic input voltage</b>	<b>Axis</b>	<b>Current</b>	<b>Recommended Fuse</b>
19-28V AC	1	3.5	MDA-15
19-28V AC	2	4.4	MDA-15
18.75-31.25 DC	3	5.2	MDA-15
18.75-31.25 DC	4	6	MDA-15