

# ATX™ JBDA and JBDF – ECDA and ECDF Series Customized Enclosures

## Flameproof

ATEX/IECEX:  
Zone 1 and 2 – 21 and 22  
II 2 GD  
IP66 – IK10

### Applications

- Designed for use in Zones 1, 2, 21 and 22 in the oil and gas industry such as:
  - Petroleum
  - Chemical
  - Refineries
  - Other industrial process facilities
- Junction box applications:
  - JBD series enclosures may be customized to house terminal blocks.
- Enclosure and control applications:
  - ECD series enclosures may be customized to house a large range of components such as:
    - Control units
    - Breakers
    - Starters
    - Relays
    - Meters
    - Etc.

### Features

- Enclosures are available in a wide range of sizes.
- Precision machined flameproof joint between body and cover.
- Wall thickness suitable for all sizes of cable entries.
- External fixing lugs.
- Internal mounting pan.
- Square and round windows available in a wide range of sizes.
- Machining and drilling must be completed in our workshops.
- Power dissipated calculation including cables must be completed according to each size of certified enclosure.

### Standard Materials

- Enclosures: gray painted cast iron or marine grade aluminum alloy
- Hardware: stainless steel

### Options

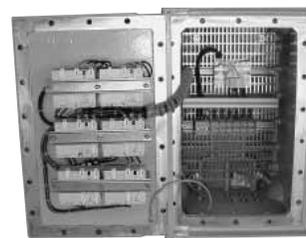
- Indirect cable entries available through Ex e connection enclosure.
- Factory assembled and wired.
- Empty enclosure with Ex “U” component marking for re-certification by notified body (CF10B to CF70B).

### ATEX/IECEX Certifications and Compliances

- Certification Type CF2/A/B/C
  - Gas, Zones 1 and 2
  - Conforming to ATEX 94/9/CE: II 2 G
  - Type of Protection: Ex d IIB
  - Temperature Class: T6 to T2
- Dust, Zones 21 and 22
  - Conforming to ATEX 94/9/CE: II 2 D
  - Type of Protection: Ex tD A21
  - Surface Temperature: T95 °C to T290 °C (T203 °F to 554 °F)
- Ambient Temperature: -40 °C to +55 °C (-40 °F to +131 °F)
- CE Declaration of Conformity: 50254
- ATEX Certificate: LCIE 03 ATEX 6061X
- Internal Volume: ≤ 2dm<sup>3</sup> (122 in<sup>3</sup>) – 2 liters
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10



### Customized Enclosures



- Certification Type CF10B to CF70B, CF10C to CF70C
  - Gas, Zones 1 and 2
    - Conforming to ATEX 94/9/CE: II 2 G
    - Type of Protection CF10B to CF70B: Ex d IIB
    - Type of Protection CF10C to CF70C: Ex d IIC
    - Temperature Class: T6 to T4
  - Dust, Zones 21 and 22
    - Conforming to ATEX 94/9/CE: II 2 D
    - Type of Protection: Ex tD A21
    - Surface Temperature: T80 °C to T130 °C (T176 °F to T 266 °F)
  - Ambient Temperature
    - CF30B, CF70B, CF70C: -20 °C to +55 °C (-4 °F to +131 °F);
    - CF10B, CF20B, CF40B, CF50B, CF10C, CF30C, CF50C: -40 °C to +55 °C (-40 °F to +131 °F);
    - CF60B: -50 °C to +55 °C (-58 °F to +131 °F)
  - CE Declaration of Conformity: 50229
  - ATEX Certificate: LCIE 02 ATEX 6057X
  - IECEx Certificate: IECEx LCI 08.0023X
  - Internal Volume: > 2dm<sup>3</sup> (122 in<sup>3</sup>) – 2 liters
  - Index of Protection according EN/IEC 60529: IP66
  - Impact Resistance (shock): IK10

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## Flameproof

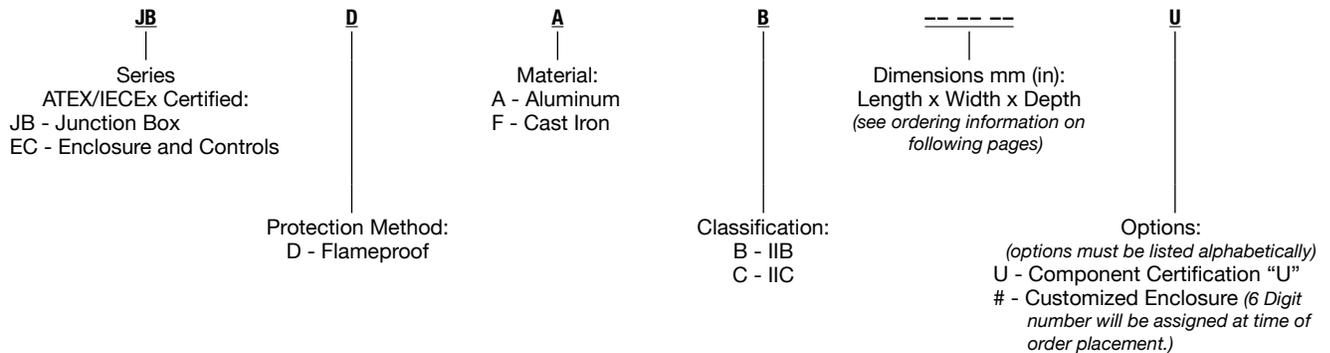
ATEX/IECEX:  
 Zone 1 and 2 – 21 and 22  
 II 2 GD  
 IP66 – IK10

- Certification Type CF1A/B/D/E
  - Gas: Zones 1 and 2
    - Conforming to ATEX 94/9/CE: II 2 G
    - Type of Protection: Ex d IIC
    - Temperature Class: T6 to T2
  - Dust: Zones 21 and 22
    - Conforming to ATEX 94/9/CE: II 2 D
    - Type of Protection: Ex tD A21
    - Surface Temperature: T95 °C to T290 °C (T203 °F to 554 °F)
  - Ambient Temperature: -40 °C to +55 °C (-40 °F to +131 °F)
  - CE Declaration of Conformity: 50257
  - ATEX Certificate: LCIE 03 ATEX 6044X
  - IEC Certificate: LCIE Ex 03.003X
  - Internal Volume CF1A/B/D/E: > 2dm<sup>3</sup> (122 in<sup>3</sup>) – 2 liters
  - Internal Volume CF1E: ≤ 2dm<sup>3</sup> (122 in<sup>3</sup>) – 2 liters
  - Index of Protection according EN/IEC 60529: IP66
  - Impact Resistance (shock): IK10
- Certification Type CF10BU to CF70BU
  - Gas: Zones 1 and 2
    - Conforming to ATEX 94/9/CE: II 2 G
    - Type of Protection: Ex d IIB
  - Dust: Zones 21 and 22
    - Conforming to ATEX 94/9/CE: II 2 D
    - Type of Protection: Ex tD A21
  - Ambient Temperature
    - CF30BU, CF60BU, CF70BU: -20 °C to +55 °C (-4 °F to +131 °F),
    - CF10BU, CF20BU, CF40BU, CF50BU: -40 °C to +55 °C (-40 °F to +131 °F)
  - CE Declaration of Conformity: 5C238
  - ATEX Certificate: LCIE 07 ATEX 0005U
- Certification Type JBEW
  - Gas: Zones 1 and 2
    - Conforming to ATEX 94/9/CE: II 2 G
    - Type of Protection: Ex d IIB + H<sub>2</sub>
    - Temperature Class: T6 to T4
  - Dust: Zones 21 and 22
    - Conforming to ATEX 94/9/CE: II 2 D
    - Type of Protection: Ex tD A21
    - Surface Temperature: T80 °C to T130 °C (T176 °F to T 266 °F)
  - Ambient Temperature: -40 °C to +55 °C (-40 °F to +131 °F)
  - CE Declaration of Conformity: 50279
  - ATEX Certificate: LCIE 07 ATEX 6069X
  - Internal Volume: > 2dm<sup>3</sup> (122 in<sup>3</sup>) – 2 liters
  - Index of Protection according EN/IEC 60529: IP66
  - Impact Resistance (shock): IK10

### EURASEC Certification

- Certification Type CF2/A/B/C
  - EURASEC N° TC RU C-FR.Г505.В.00911
- Certification Type CF10B to CF70B, CF10C to CF70C
  - EURASEC N° TC RU C-FR.Г505.В.00911
- Certification Type CF1A/B/D/E
  - EURASEC N° TC RU C-FR.Г505.В.00911

### Catalog Numbering Guide – JBDA and JBDF – ECDA and ECDF Series Customized Enclosures



# ATX™ JBDA and JBDF – ECDA and ECDF Series Customized Enclosures

## Flameproof

ATEX/IECEX:  
Zone 1 and 2 – 21 and 22  
II 2 GD  
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Appleton®

ENCLOSURES AND JUNCTION BOXES: ATEX/IECEX FLAMEPROOF JUNCTION BOXES

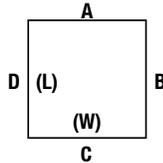
Type	Dimensions mm (in) L x W x D	Hinged Door	Weight kg (lb)	Volume dm <sup>3</sup> (in <sup>3</sup> )	Catalog Number ①	
					JBD Series	ECD Series
<b>Ex d IIB Enclosure in Cast Iron with Flanged Flameproof Joint</b>						
 CF2C	130 x 130 x 90 (5.12 x 5.12 x 3.54)	—	4 (8.82)	3 (183.07)	<b>JBDFB131309</b>	<b>ECDFB131309</b>
CF2A	205 x 145 x 127 (8.07 x 5.71 x 5.00)	—	9.4 (20.72)	3 (183.07)	<b>JBDFB201413</b>	<b>ECDFB201413</b>
CF2B	270 x 190 x 120 (10.63 x 7.48 x 4.72)	—	12.6 (27.78)	7 (427.17)	<b>JBDFB271912</b>	<b>ECDFB271912</b>
<b>Ex d IIB Enclosure in Cast Aluminum with Flanged Flameproof Joint</b>						
 CF10B	260 x 270 x 208 (10.24 x 10.63 x 8.19)	—	9 (19.84)	17 (1037.40)	<b>JBDAB262720</b>	<b>ECDAB262720</b>
CF20B	370 x 270 x 208 (15.57 x 10.63 x 8.19)	—	13 (28.66)	24 (1464.57)	<b>JBDAB372720</b>	<b>ECDAB372720</b>
CF30B	340 x 320 x 230 (13.39 x 12.60 x 9.06)	Yes	29 (63.93)	68 (4149.61)	<b>JBDAB343223</b>	<b>ECDAB343223</b>
CF40B	455 x 320 x 347 (17.91 x 12.60 x 13.66)	Yes	50 (110.23)	126 (7688.99)	<b>JBDAB453234</b>	<b>ECDAB453234</b>
CF50B	455 x 440 x 347 (17.97 x 17.32 x 13.66)	Yes	65 (143.30)	240 (14645.70)	<b>JBDAB454434</b>	<b>ECDAB454434</b>
CF60B	680 x 440 x 413 (26.77 x 17.32 x 16.26)	Yes	106 (233.69)	378 (23066.98)	<b>JBDAB684441</b>	<b>ECDAB684441</b>
CF70B	680 x 640 x 413 (26.77 x 25.20 x 16.26)	Yes	130 (286.60)	382 (23311.07)	<b>JBDAB686441</b>	<b>ECDAB686441</b>
<b>Ex d IIC Enclosure in Cast Aluminum with Spigot Flameproof Joint</b>						
 CF1E	140 x 162 x 100 (5.51 x 6.38 x 3.94)	—	1.5 (3.31)	2.2 (134.25)	<b>JBDAC141610</b>	<b>ECDAC141610</b>
CF1B	210 x 230 x 125 (8.27 x 9.06 x 4.92)	—	4.8 (10.58)	5.5 (335.63)	<b>JBDAC212312</b>	<b>ECDAC212312</b>
CF1A	295 x 265 x 195 (11.61 x 10.43 x 7.68)	—	10 (22.05)	9.6 (585.83)	<b>JBDAC292619</b>	<b>ECDAC292619</b>
CF1D	360 x 335 x 200 (14.17 x 13.19 x 7.87)	—	10 (22.05)	14.6 (890.95)	<b>JBDAC363320</b>	<b>ECDAC363320</b>
<b>Ex d IIC Enclosure in Cast Aluminum with Screwed Flameproof Joint</b>						
 CF10C	230 x 215 x 238 (9.05 x 8.46 x 9.37)	—	12 (26.46)	16 (976.38)	<b>JBDAC232124</b>	<b>ECDAC232124</b>
CF30C	320 x 340 x 234 (12.60 x 13.39 x 9.21)	—	28 (61.73)	68 (4149.61)	<b>JBDAC323423</b>	<b>ECDAC323423</b>
CF50C	440 x 455 x 345 (17.32 x 17.91 x 13.58)	—	64 (141.10)	245 (14950.82)	<b>JBDAC444534</b>	<b>ECDAC444534</b>
<b>Ex d IIC Enclosure in Cast Iron with Screwed Flameproof Joint</b>						
CF70C	680 x 640 x 450 (26.77 x 25.20 x 17.72)	Yes	310 (683.43)	382 (23311.07)	<b>JBDFC686445</b>	<b>ECDFC686445</b>

① Options: Component Certification "U" and/or Customized Enclosure # add digits as per examples: JBDAB2627203 #, JBDAB2627203U #.

# ATX™ JBDA and JBDF – ECDA and ECDF Series Customized Enclosure Flameproof

ATEX/IECEX:  
Zone 1 and 2 – 21 and 22  
Ex II 2 GD  
IP66 – IK10

## Dimensions in Millimeters (Inches)



Type	Dimensions mm (in) L x W x D	Maximum Quantity of Threaded Entries Per Side				Max. Size ①	Rail Length Capacity for Terminal Block mm (in)	
		A M20	B M20	C M20	D M20		(L)	(W)
<b>Ex d IIB Enclosure in Cast Iron</b>								
CF2C	130 x 130 x 90 (5.12 x 5.12 x 3.54)	1	2	1	2	M25	–	64 (2.52)
CF2A	205 x 145 x 127 (8.07 x 5.71 x 5.00)	1	3	1	1	M32	–	120 (4.72)
CF2B	270 x 190 x 120 (10.63 x 7.48 x 4.72)	2	4	2	4	M50	–	162 (6.38)
<b>Ex d IIB Enclosure in Cast Aluminum</b>								
CF10B	260 x 270 x 208 (10.24 x 10.63 x 8.19)	8	6	8	6	M75	155 (6.10)	148 (5.83)
CF20B	370 x 270 x 208 (15.57 x 10.63 x 8.19)	6	12	6	12	M75	260 (10.24)	148 (5.83)
CF30B	340 x 320 x 230 (13.39 x 12.60 x 9.06)	8	8	8	8	M75	260 (10.24)	218 (8.58)
CF40B	455 x 320 x 347 (17.91 x 12.60 x 13.66)	16	28	16	28	M75	330 (12.99)	200 (7.87)
CF50B	455 x 440 x 347 (17.97 x 17.32 x 13.66)	26	26	26	26	M75	295 (11.61)	330 (12.99)
CF60B	680 x 440 x 413 (26.77 x 17.32 x 16.26)	26	51	26	51	M100	540 (21.26)	300 (11.81)
CF70B	680 x 640 x 413 (26.77 x 25.20 x 16.26)	38	42	38	42	M100	530 (20.87)	530 (20.87)
<b>Ex d IIC Enclosure in Cast Iron</b>								
CF1E	140 x 162 x 100 (5.51 x 6.38 x 3.94)	1	2	1	2	M32	–	99 (3.90)
CF1B	210 x 230 x 125 (8.27 x 9.06 x 4.92)	1	3	2	3	M32	–	155 (6.10)
CF1A	295 x 265 x 195 (11.61 x 10.43 x 7.68)	6	6	5	6	M63	190 (7.48)	190 (7.48)
CF1D	360 x 335 x 200 (14.17 x 13.19 x 7.87)	16	17	15	17	M63	180 (7.09)	250 (9.84)
<b>Ex d IIC Enclosure in Cast Aluminum</b>								
CF10C	230 x 215 x 238 (9.05 x 8.46 x 9.37)	5	5	5	5	M75	120 (4.72)	105 (4.13)
CF30C	320 x 340 x 234 (12.60 x 13.39 x 9.21)	8	8	8	8	M75	260 (10.24)	215 (8.46)
CF50C	440 x 455 x 345 (17.32 x 17.91 x 13.58)	26	26	26	26	M75	295 (11.61)	330 (12.99)

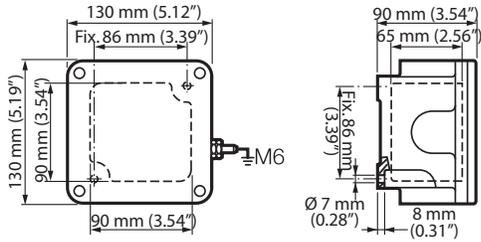
① Consult your local sales representative for quantity.

# ATX™ JBDA and JBDF – ECDA and ECDF Series Customized Flameproof

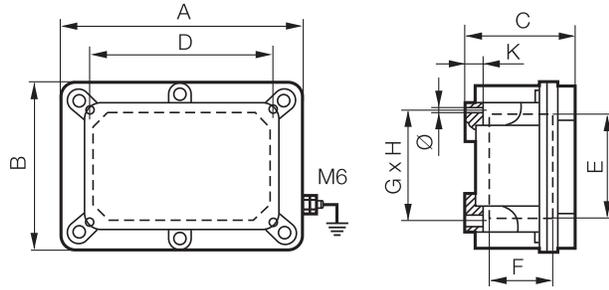
ATEX/IECEX:  
Zone 1 and 2 – 21 and 22  
II 2 GD  
IP66 – IK10

## Dimensions in Millimeters (Inches)

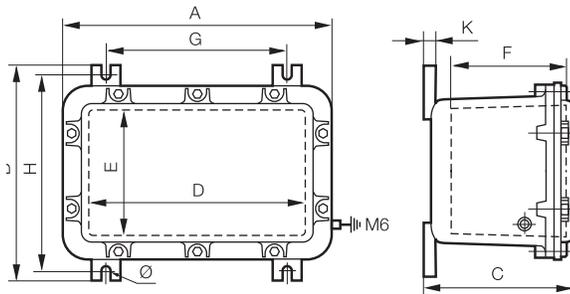
**JBDF and ECDF: CF2C**



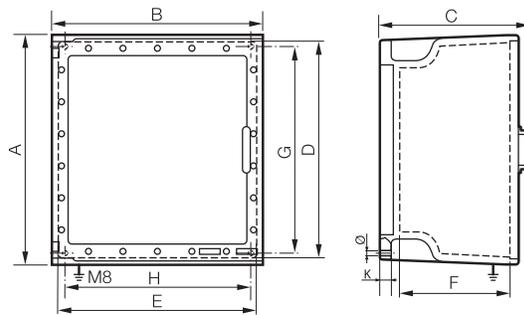
**JBDF and ECDF: CF2A and CF2B**



**JBDA and ECDA: CF10B and CF20B**



**JBDA and ECDA: CF30B and CF70B**



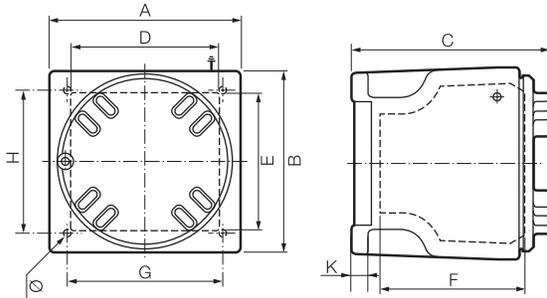
Type	A	B	C	D	E	F	G	H	K	Ø
<b>JBDF and ECDF: CF2A and CF2B</b>										
CF2A	202 (7.95)	144 (5.67)	96 (3.78)	156 (6.14)	154 (6.06)	65.5 (2.58)	98 (3.86)	156 (6.14)	10 (0.39)	7 (0.27)
CF2B	267 (10.51)	187 (7.36)	115 (4.53)	202 (7.95)	200 (7.78)	81 (3.19)	122 (4.80)	202 (7.95)	12 (0.47)	7 (0.27)
<b>JBDA and ECDA: CF10B and CF20B</b>										
CF10B	259 (10.20)	270 (10.63)	207 (8.15)	190 (7.48)	175 (6.89)	161 (6.34)	140 (5.51)	245 (9.65)	15 (0.59)	11 (0.43)
CF20B	369 (14.53)	270 (10.63)	207 (8.15)	300 (11.81)	175 (6.89)	161 (6.34)	250 (9.84)	245 (9.65)	15 (0.59)	11 (0.43)
<b>JBDA and ECDA: CF30B and CF70B</b>										
CF30B	340 (13.39)	320 (12.60)	238 (9.37)	285 (11.22)	265 (10.43)	161 (6.34)	298 (11.73)	278 (10.94)	20 (0.79)	9 (0.35)
CF40B	455 (17.91)	320 (12.60)	377 (14.84)	395 (15.55)	265 (10.43)	253 (9.96)	391 (15.39)	256 (10.08)	25 (0.98)	11 (0.43)
CF50B	455 (17.91)	440 (17.32)	380 (14.96)	400 (15.75)	376 (14.80)	253 (9.96)	391 (15.39)	376 (14.80)	25 (0.98)	11 (0.43)
CF60B	680 (26.77)	440 (17.32)	445 (17.52)	610 (24.02)	376 (14.80)	292 (11.50)	616 (24.25)	376 (14.80)	25 (0.98)	14 (0.55)
CF70B	680 (26.77)	640 (25.20)	445 (17.52)	610 (24.02)	576 (22.68)	292 (11.50)	616 (24.25)	576 (22.68)	25 (0.98)	14 (0.55)

# ATX™ JBDA and JBDF – ECDA and ECDF Series Customized Enclosure Flameproof

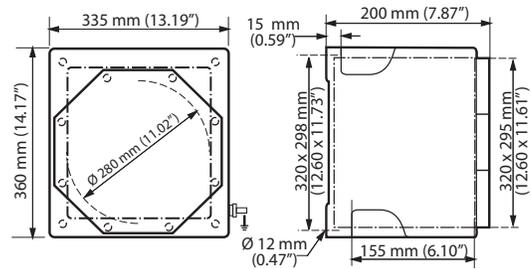
ATEX/IECEX:  
Zone 1 and 2 – 21 and 22  
II 2 GD  
IP66 – IK10

## Dimensions in Millimeters (Inches)

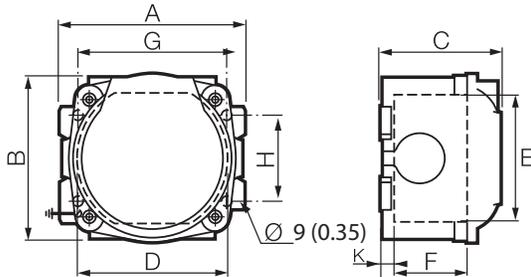
**JBDA and ECDA CF10C to CF50C  
JBDF and ECDF CF10C to CF70C**



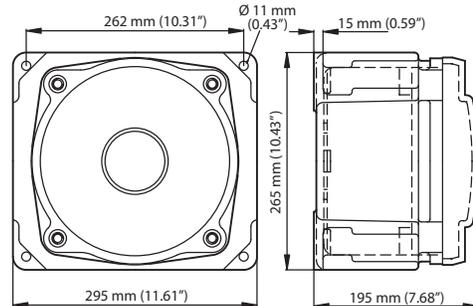
**JBDA and ECDA: CF1D**



**JBDA and ECDA: CF1B and CF1E Type**



**JBDA and ECDA: CF1A Type**



Type	A	B	C	D	E	F	G	H	K	Ø
<b>JBDA and ECDA: CF10C to CF50C JBDF and ECDF: CF10C to CF70C</b>										
CF10C	230 (9.06)	215 (8.46)	238 (9.37)	180 (7.09)	165 (6.50)	175 (6.89)	188 (7.40)	173 (6.81)	20 (0.79)	9 (0.35)
CF30C	320 (12.60)	340 (13.39)	234 (9.21)	271 (10.67)	290 (11.42)	154 (6.06)	278 (10.94)	298 (11.73)	20 (0.79)	9 (0.35)
CF50C	440 (17.32)	455 (17.91)	345 (13.58)	386 (15.20)	401 (15.79)	241 (9.49)	376 (14.80)	391 (15.39)	25 (0.98)	11 (0.43)
CF70C	680 (26.77)	640 (25.20)	450 (17.72)	616 (24.25)	576 (22.68)	290 (11.42)	616 (24.25)	576 (22.68)	25 (0.98)	14 (0.55)
<b>JBDA and ECDA: CF1B and CF1E</b>										
CF1B	230 (9.06)	210 (8.27)	125 (4.92)	175 (6.89)	175 (6.89)	90 (3.54)	210 (8.27)	100 (3.94)	15 (0.59)	9 (0.35)
CF1E	140 (5.51)	162 (6.38)	121 (4.76)	120 (4.72)	120 (4.72)	80 (3.15)	120 (4.72)	120 (4.72)	12 (0.47)	9 (0.35)