

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: ≤ 2dm³ (122 in³) – 2 liters
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10

JBDA



ECDF



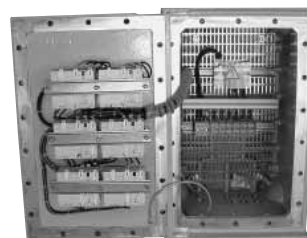
ECDA



JBDF



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 T266 °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: > 2dm³ (122 in³) – 2 liters
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10

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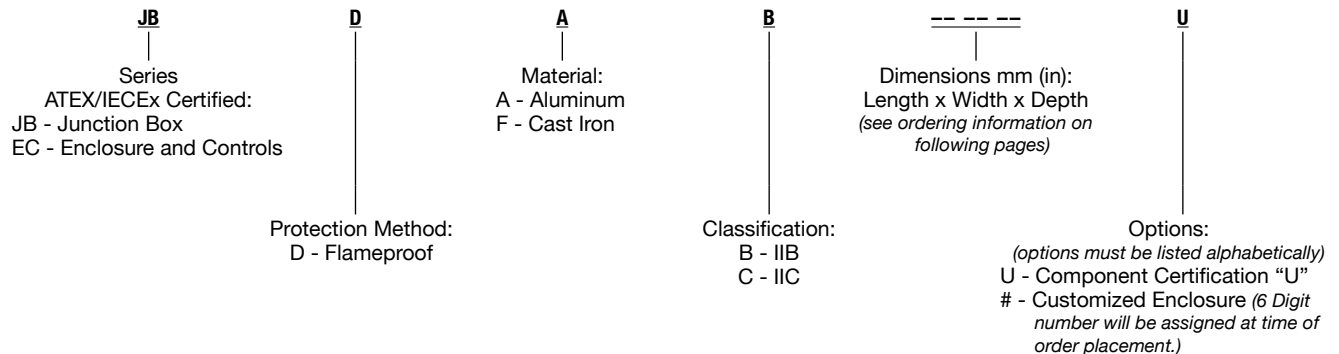
- Certification Type CF1A/B/D/E
 - Gas: Zones 1 and 2
 - Conforming to ATEX 94/9/CE: Ex II 2 G
 - Type of Protection: Ex d IIC
 - Temperature Class: T6 to T2
 - Dust: Zones 21 and 22
 - Conforming to ATEX 94/9/CE: Ex II 2 D
 - Type of Protection: Ex td A21
 - Surface Temperature: T95 °C to T290 °C (T203 °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: > 2dm³ (122 in³) – 2 liters
 - Internal Volume CF1E: ≤ 2dm³ (122 in³) – 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: Ex II 2 G
 - Type of Protection: Ex d IIB
 - Dust: Zones 21 and 22
 - Conforming to ATEX 94/9/CE: Ex 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: Ex II 2 G
 - Type of Protection: Ex d IIB + H₂
 - Temperature Class: T6 to T4
 - Dust: Zones 21 and 22
 - Conforming to ATEX 94/9/CE: Ex 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: > 2dm³ (122 in³) – 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.1505.B.00911
- Certification Type CF10B to CF70B, CF10C to CF70C
 - EURASEC N° TC RU C-FR.1505.B.00911
- Certification Type CF1A/B/D/E
 - EURASEC N° TC RU C-FR.1505.B.00911

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



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

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II 2 GD
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Appleton®

ENCLOSURES AND JUNCTION BOXES: ATEX/IECEX FLAMEPROOF JUNCTION BOXES

Catalog Number ①							
Type	Dimensions mm (in) L x W x D	Hinged Door	Weight kg (lb)	Volume dm³ (in³)	JBD Series	ECD Series	
Ex d IIB Enclosure in Cast Iron with Flanged Flameproof Joint							
	CF2C	130 x 130 x 90 (5.12 x 5.12 x 3.54)	—	4 (8.82)	3 (183.07)	JBDFB131309	ECDFB131309
	CF2A	205 x 145 x 127 (8.07 x 5.71 x 5.00)	—	9.4 (20.72)	3 (183.07)	JBDFB201413	ECDFB201413
	CF2B	270 x 190 x 120 (10.63 x 7.48 x 4.72)	—	12.6 (27.78)	7 (427.17)	JBDFB271912	ECDFB271912
Ex d IIB Enclosure in Cast Aluminum with Flanged Flameproof Joint							
	CF10B	260 x 270 x 208 (10.24 x 10.63 x 8.19)	—	9 (19.84)	17 (1037.40)	JBDAB262720	ECDAB262720
	CF20B	370 x 270 x 208 (15.57 x 10.63 x 8.19)	—	13 (28.66)	24 (1464.57)	JBDAB372720	ECDAB372720
	CF30B	340 x 320 x 230 (13.39 x 12.60 x 9.06)	Yes	29 (63.93)	68 (4149.61)	JBDAB343223	ECDAB343223
	CF40B	455 x 320 x 347 (17.91 x 12.60 x 13.66)	Yes	50 (110.23)	126 (7688.99)	JBDAB453234	ECDAB453234
	CF50B	455 x 440 x 347 (17.97 x 17.32 x 13.66)	Yes	65 (143.30)	240 (14645.70)	JBDAB454434	ECDAB454434
	CF60B	680 x 440 x 413 (26.77 x 17.32 x 16.26)	Yes	106 (233.69)	378 (23066.98)	JBDAB684441	ECDAB684441
	CF70B	680 x 640 x 413 (26.77 x 25.20 x 16.26)	Yes	130 (286.60)	382 (23311.07)	JBDAB686441	ECDAB686441
Ex d IIC Enclosure in Cast Aluminum with Spigot Flameproof Joint							
	CF1E	140 x 162 x 100 (5.51 x 6.38 x 3.94)	—	1.5 (3.31)	2.2 (134.25)	JBDAC141610	ECDAC141610
	CF1B	210 x 230 x 125 (8.27 x 9.06 x 4.92)	—	4.8 (10.58)	5.5 (335.63)	JBDAC212312	ECDAC212312
	CF1A	295 x 265 x 195 (11.61 x 10.43 x 7.68)	—	10 (22.05)	9.6 (585.83)	JBDAC292619	ECDAC292619
	CF1D	360 x 335 x 200 (14.17 x 13.19 x 7.87)	—	10 (22.05)	14.6 (890.95)	JBDAC363320	ECDAC363320
Ex d IIC Enclosure in Cast Aluminum with Screwed Flameproof Joint							
	CF10C	230 x 215 x 238 (9.05 x 8.46 x 9.37)	—	12 (26.46)	16 (976.38)	JBDAC232124	ECDAC232124
	CF30C	320 x 340 x 234 (12.60 x 13.39 x 9.21)	—	28 (61.73)	68 (4149.61)	JBDAC323423	ECDAC323423
	CF50C	440 x 455 x 345 (17.32 x 17.91 x 13.58)	—	64 (141.10)	245 (14950.82)	JBDAC444534	ECDAC444534
Ex d IIC Enclosure in Cast Iron with Screwed Flameproof Joint							
	CF70C	680 x 640 x 450 (26.77 x 25.20 x 17.72)	Yes	310 (683.43)	382 (23311.07)	JBDFC686445	ECDFC686445

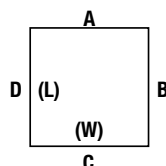
① Options: Component Certification "U" and/or Customized Enclosure # add digits as per examples: JBDAB2627203 #, JBDAB2627203U #.

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)
Ex d IIB Enclosure in Cast Iron								
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)
Ex d IIB Enclosure in Cast Aluminum								
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)
Ex d IIC Enclosure in Cast Iron								
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)
Ex d IIC Enclosure in Cast Aluminum								
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)

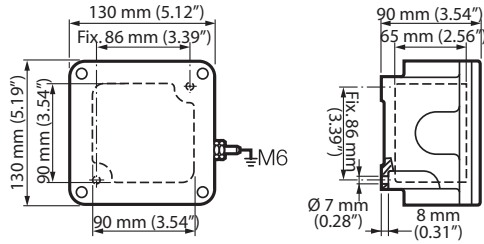
① Consult your local sales representative for quantity.

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

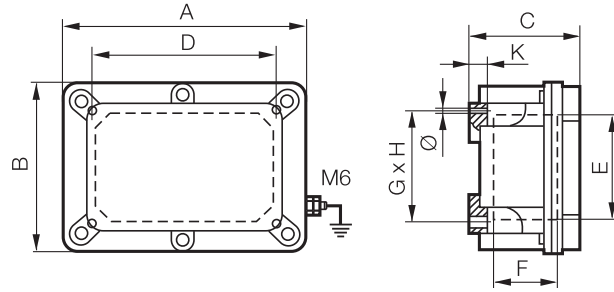
ATEX/IECEX:
Zone 1 and 2 – 21 and 22
II 2 GD
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Dimensions in Millimeters (Inches)

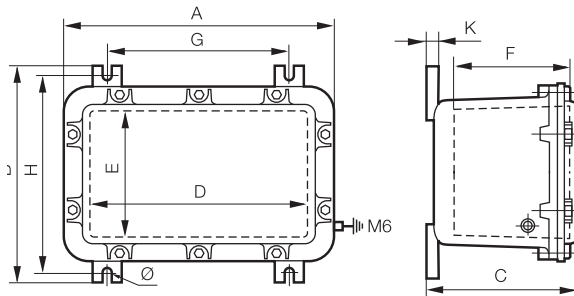
JBDF and ECDF: CF2C



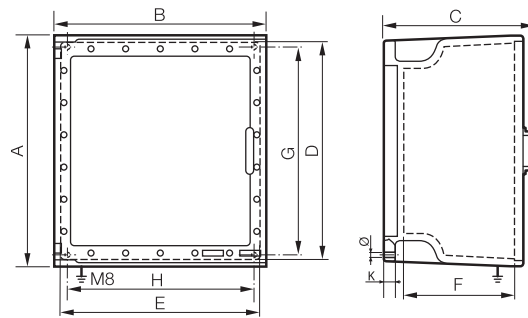
JBDF and ECDF: CF2A and CF2B



JBDA and ECDA: CF10B and CF20B



JBDA and ECDA: CF30B and CF70B



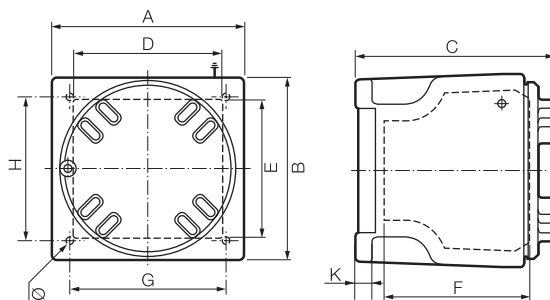
Type	A	B	C	D	E	F	G	H	K	Ø
JBDF and ECDF: CF2A and CF2B										
CF2A	202 (7.95)	144 (5.67)	96 (3.78)	156 (6.14)	154 (6.06)	65.5 (2.58)	98 (3.86)	156 (6.14)	10 (0.39)	7 (0.27)
CF2B	267 (10.51)	187 (7.36)	115 (4.53)	202 (7.95)	200 (7.78)	81 (3.19)	122 (4.80)	202 (7.95)	12 (0.47)	7 (0.27)
JBDA and ECDA: CF10B and CF20B										
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)
JBDA and ECDA: CF30B and CF70B										
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

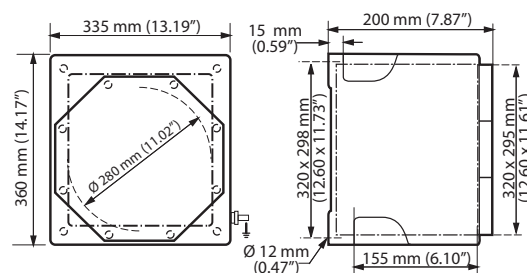
ATEX/IECEX:
Zone 1 and 2 – 21 and 22
II 2 GD
IP66 – IK10

Dimensions in Millimeters (Inches)

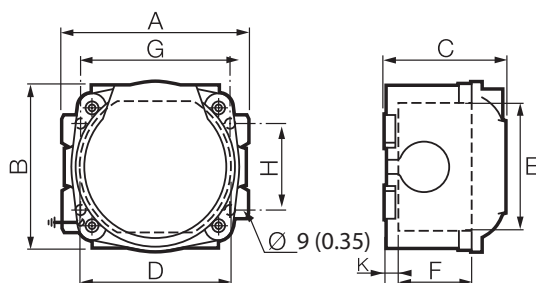
**JBDA and ECDA CF10C to CF50C
JBDF and ECDF CF10C to CF70C**



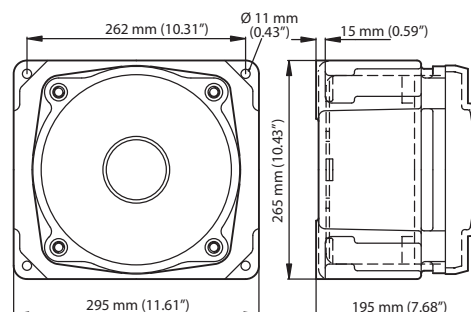
JBDA and ECDA: CF1D



JBDA and ECDA: CF1B and CF1E Type



JBDA and ECDA: CF1A Type



Type	A	B	C	D	E	F	G	H	K	Ø
JBDA and ECDA: CF10C to CF50C JBDF and ECDF: CF10C to CF70C										
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)
JBDA and ECDA: CF1B and CF1E										
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)