

JBDA and JBDF – ECDA and ECDF Series Customized Enclosures

Flameproof

Zones 1 & 2 – 21 & 22
Gas (G) and Dust (D)

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

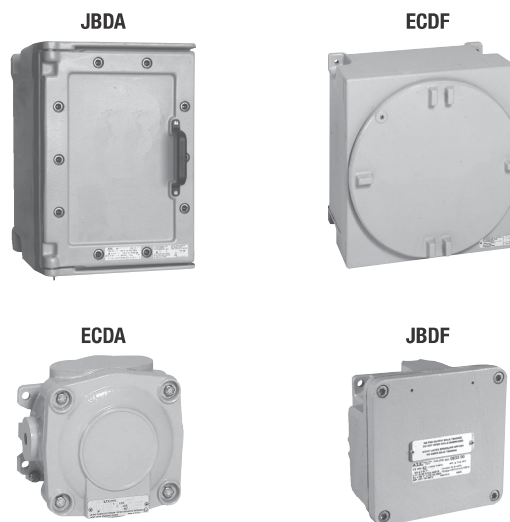
Options

- 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).

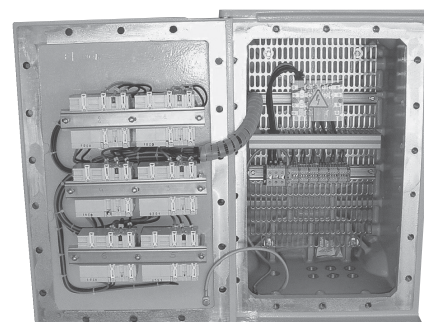
Certifications and Compliances

◆ATEX or ATEX/IECEx Certification

- 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: Ⓔ II2 D
 - Type of Protection: Ex td A21
 - Surface Temperature: T95 °C to T290 °C
 - Ambient Temperature: -40 °C to +55 °C
 - CE Declaration of Conformity: 50254
 - ATEX Certificate: LCIE 03 ATEX 6061X
 - Internal Volume: ≤ 2dm³ (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: Ⓔ II2 D
 - Type of Protection: Ex td A21
 - Surface Temperature: T80 °C to T130 °C
 - Ambient Temperature
 - CF30B, CF70B, CF70C: -20 °C to +55 °C
 - CF10B, CF20B, CF40B, CF50B, CF10C, CF30C, CF50C: -40 °C to +55 °C
 - CF60B: -50 °C to +55 °C
 - CE Declaration of Conformity: 50229
 - ATEX Certificate: LCIE 02 ATEX 6057X
 - IECEx Certificate: IECEx LCI 08.0023X
 - Internal Volume: > 2dm³ (2 liters)
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10

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Zones 1 & 2 – 21 & 22
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Enclosures and Junction Boxes

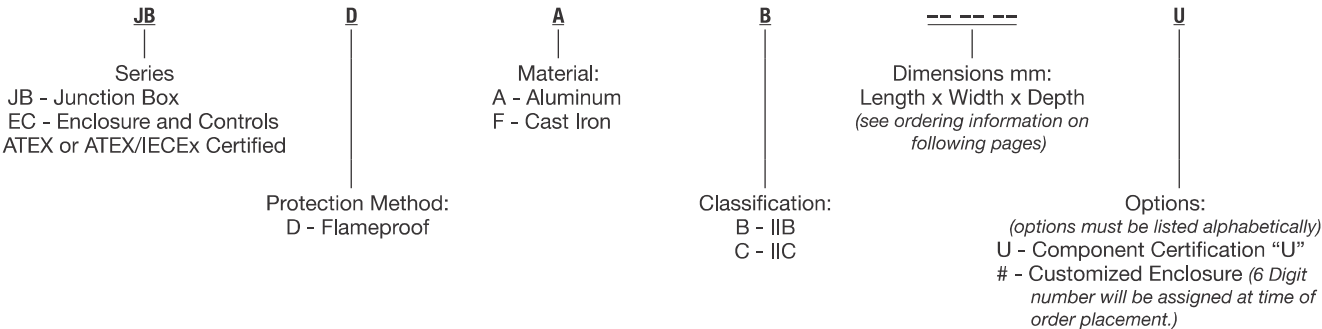
FLAMEPROOF EX D ZONE 1 RATED JUNCTION BOXES

- **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: Ⓢ II2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T95 °C to T290 °C
 - Ambient Temperature: -40 °C to +55 °C
 - CE Declaration of Conformity: 50257
 - ATEX Certificate: LCIE 03 ATEX 6044X
 - IEC Certificate: LCIE Ex 03.003X
 - Internal Volume CF1A/B/D/E: > 2dm³ (2 liters)
 - Internal Volume CF1E: ≤ 2dm³ (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: Ⓢ II2 D
 - Type of Protection: Ex tD A21
 - Ambient Temperature
 - CF30BU, CF60BU, CF70BU:
 - 20 °C to +55 °C,
 - CF10BU, CF20BU, CF40BU, CF50BU:
 - 40 °C to +55 °C
 - CE Declaration of Conformity: 5C238
 - ATEX Certificate: LCIE 07 ATEX 0005U
 - Internal Volume: > 2dm³ (2 liters)
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10
- **Certification Type JBEW**
 - Gas: Zones 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ 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: Ⓢ II2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T80 °C to T130 °C
 - Ambient Temperature: -40 °C to +55 °C
 - CE Declaration of Conformity: 50279
 - ATEX Certificate: LCIE 07 ATEX 6069X
 - Internal Volume: > 2dm³ (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



JBDA and JBDF – ECDA and ECDF Series Customized Enclosures

Flameproof

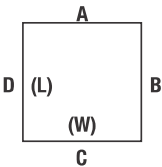
Zones 1 & 2 – 21 & 22
Gas (G) and Dust (D)

Catalog Number ①							
Type	Dimensions mm L x W x D	Hinged Door	Weight kg	Volume dm³	JBD Series	ECD Series	
Ex d IIB Enclosure in Cast Iron with Flanged Flameproof Joint							
	CF2C	130 x 130 x 90	–	4	3	JBDFB131309	ECDFB131309
	CF2A	205 x 145 x 127	–	9.4	3	JBDFB201413	ECDFB201413
	CF2B	270 x 190 x 120	–	12.6	7	JBDFB271912	ECDFB271912
Ex d IIB Enclosure in Cast Aluminum with Flanged Flameproof Joint							
	CF10B	260 x 270 x 208	–	9	17	JBDAB262720	ECDAB262720
	CF20B	370 x 270 x 208	–	13	24	JBDAB372720	ECDAB372720
	CF30B	340 x 320 x 230	Yes	29	68	JBDAB343223	ECDAB343223
	CF40B	455 x 320 x 347	Yes	50	126	JBDAB453234	ECDAB453234
	CF50B	455 x 440 x 347	Yes	65	240	JBDAB454434	ECDAB454434
	CF60B	680 x 440 x 413	Yes	106	378	JBDAB684441	ECDAB684441
	CF70B	680 x 640 x 413	Yes	130	382	JBDAB686441	ECDAB686441
Ex d IIC Enclosure in Cast Aluminum with Spigot Flameproof Joint							
	CF1E	140 x 162 x 100	–	1.5	2.2	JBDAC141610	ECDAC141610
	CF1B	210 x 230 x 125	–	4.8	5.5	JBDAC212312	ECDAC212312
	CF1A	295 x 265 x 195	–	10	9.6	JBDAC292619	ECDAC292619
	CF1D	360 x 335 x 200	–	10	14.6	JBDAC363320	ECDAC363320
Ex d IIC Enclosure in Cast Aluminum with Screwed Flameproof Joint							
	CF10C	230 x 215 x 238	–	12	16	JBDAC232124	ECDAC232124
	CF30C	320 x 340 x 234	–	28	68	JBDAC323423	ECDAC323423
	CF50C	440 x 455 x 345	–	64	245	JBDAC444534	ECDAC444534
Ex d IIC Enclosure in Cast Iron with Screwed Flameproof Joint							
	CF70C	680 x 640 x 450	Yes	310	382	JBDFC686445	ECDFC686445

① Options: Component Certification "U" and/or Customized Enclosure # add digits as per examples: JBDA B2627203 #, JBDA B2627203U #.

JBDA and JBDF – ECDA and ECDF Series Customized Enclosure Dimensions

Flameproof



Type	Dimensions mm L x W x D	Maximum Quantity of Threaded Entries Per Side				Max. Size ①	Rail Length Capacity for Terminal Block mm	
		A M20	B M20	C M20	D M20		(L)	(W)
Ex d IIB Enclosure in Cast Iron								
CF2C	130 x 130 x 90	1	2	1	2	M25	–	64
CF2A	205 x 145 x 127	1	3	1	1	M32	–	120
CF2B	270 x 190 x 120	2	4	2	4	M50	–	162
Ex d IIB Enclosure in Cast Aluminum								
CF10B	260 x 270 x 208	8	6	8	6	M75	155	148
CF20B	370 x 270 x 208	6	12	6	12	M75	260	148
CF30B	340 x 320 x 230	8	8	8	8	M75	260	218
CF40B	455 x 320 x 347	16	28	16	28	M75	330	200
CF50B	455 x 440 x 347	26	26	26	26	M75	295	330
CF60B	680 x 440 x 413	26	51	26	51	M100	540	300
CF70B	680 x 640 x 413	38	42	38	42	M100	530	530
Ex d IIC Enclosure in Cast Iron								
CF1E	140 x 162 x 100	1	2	1	2	M32	–	99
CF1B	210 x 230 x 125	1	3	2	3	M32	–	155
CF1A	295 x 265 x 195	6	6	5	6	M63	190	190
CF1D	360 x 335 x 200	16	17	15	17	M63	180	250
Ex d IIC Enclosure in Cast Aluminum								
CF10C	230 x 215 x 238	5	5	5	5	M75	120	105
CF30C	320 x 340 x 234	8	8	8	8	M75	260	215
CF50C	440 x 455 x 345	26	26	26	26	M75	295	330

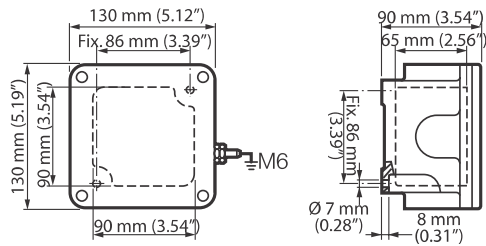
① Consult your local sales representative for quantity.

JBDA and JBDF – ECDA and ECDF Series Customized Enclosure Dimensions

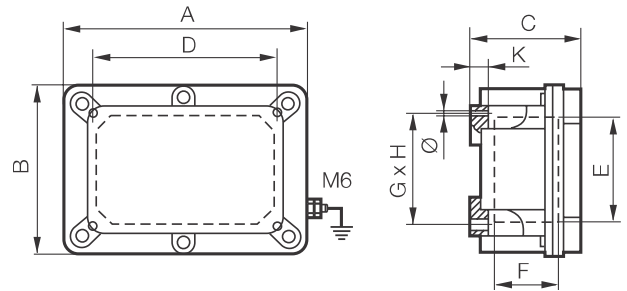
Flameproof

Dimension in Millimeters

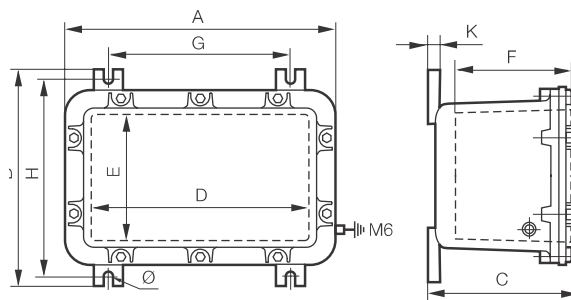
JBDF and ECDF: CF2C Type



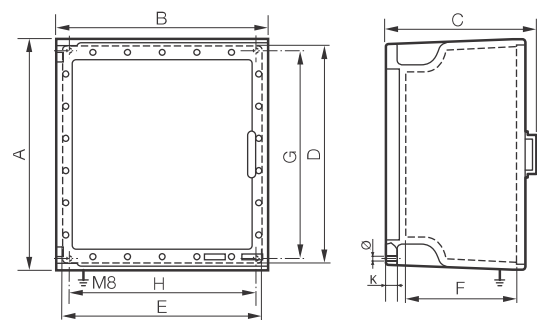
JBDF and ECDF: CF2A and CF2B Type



JBDA and ECDA: CF10B and CF20B Type



JBDA and ECDA: CF30B and CF70B Type



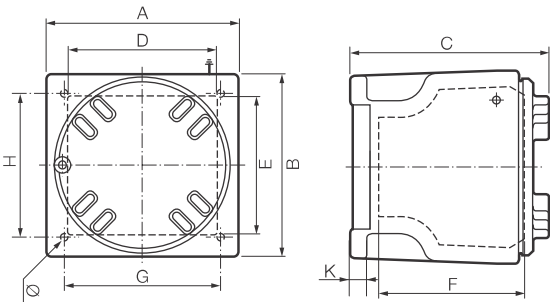
Type	A	B	C	D	E	F	G	H	K	Ø
JBDF and ECDF: CF2A and CF2B Type										
CF2A	202	144	96	156	154	65.5	98	156	10	7
CF2B	267	187	115	202	200	81	122	202	12	7
JBDA and ECDA: CF10B and CF20B Type										
CF10B	259	270	207	190	175	161	140	245	15	11
CF20B	369	270	207	300	175	161	250	245	15	11
JBDA and ECDA: CF30B and CF70B Type										
CF30B	340	320	238	285	265	161	298	278	20	9
CF40B	455	320	377	395	265	253	391	256	25	11
CF50B	455	440	380	400	376	253	391	376	25	11
CF60B	680	440	445	610	376	292	616	376	25	14
CF70B	680	640	445	610	576	292	616	576	25	14

JBDA and JBDF – ECDA and ECDF Series Customized Enclosure Dimensions

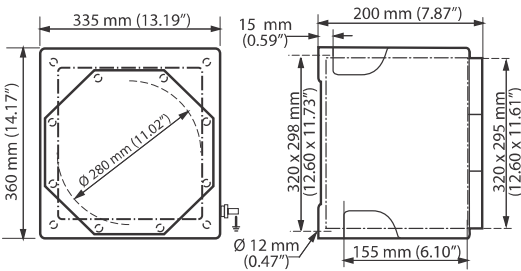
Flameproof

Dimension in Millimeters

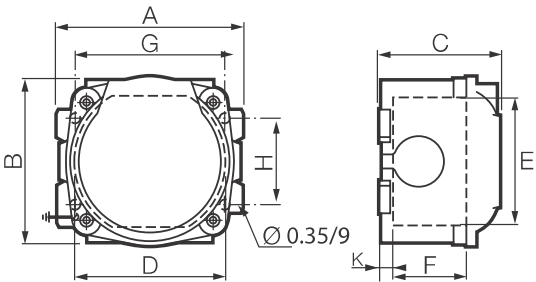
JBDA and ECDA CF10C to CF50C
JBDF and ECDF: CF70C Type



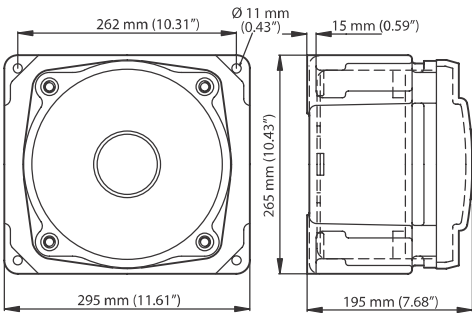
JBDA and ECDA: CF1D Type



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: CF70C Type										
CF10C	230	215	238	180	165	175	188	173	20	9
CF30C	320	340	234	271	290	154	278	298	20	9
CF50C	440	455	345	386	401	241	376	391	25	11
CF70C	680	640	450	616	576	290	616	576	25	14
JBDA and ECDA: CF1B and CF1E Type										
CF1B	230	210	125	175	175	90	210	100	15	9
CF1E	140	162	121	120	120	80	120	120	12	9