

ATX™ JBES and ECES Series 316L Stainless Steel Enclosures

Increased Safety

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

Catalog Numbering Guide — JBES and ECES 316L Stainless Steel Enclosures

JB	E	S	12	12	09	0	M
Series: EC - ATEX/IECEX Certified Enclosure and Controls JB - ATEX/IECEX Certified Junction Box	Protection Method: E - Increased Safety I - Intrinsic Safety	Material: S - Stainless Steel	Length Dimensions mm (in): 12 - 120 (4.72) 18 - 180 (7.09) 22 - 220 (8.66) 26 - 260 (10.24) 37 - 370 (14.57) 56 - 560 (22.05) 75 - 750 (29.53) 11 - 1130 (44.49)	Width Dimensions mm (in): 12 - 120 (4.72) 18 - 180 (7.09) 22 - 220 (8.66) 26 - 260 (10.24) 37 - 370 (14.57) 56 - 560 (22.05) 75 - 750 (29.53)	Depth Dimensions mm (in): 09 - 91 (3.58) 15 - 150 (5.91) 20 - 200 (7.87) 30 - 300 (11.81)	Gland plate: 0 - None 1 - One Bottom 2 - One Top and Bottom 3 - Two Sides and Bottom 4 - All Sides	Options: <i>(options must be listed alphabetically)</i> M - Mounting Pan U - Component Certification "U" # - Customized Enclosure (6 Digit number will be assigned at time of order placement.)

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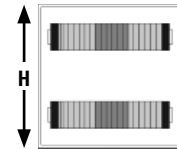
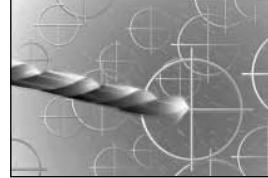
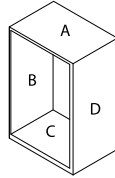
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JBES Series for Terminal Junction Box Application Only.

Use the table shown below to select the proper size junction box based upon your requirements.
Custom drilled and equipped boxes can be configured using our drilling guide available online at www.appletonelec.com.

1. Define maximum cable entries according to number of modules available per side.

Cable Entry Metric Thread	Number of Modules
M20	1
M25	1
M32	1
M40	2
M50	3



Type	Dimensions mm (in)			Number of Modules		Number of Modules ①		Terminal Dim. H — mm (in)
	Height	Width	Depth	A/C	B/D	A'/C'	B'/D'	
JBe10	120 (4.72)	120 (4.72)	95 (3.74)	5	5	—	—	220 (8.66)
JBe20	120 (4.72)	180 (7.09)	95 (3.74)	9	5	—	—	220 (8.66)
JBe30	180 (7.09)	180 (7.09)	95 (3.74)	9	9	—	—	220 (8.66)
JBe36	220 (8.66)	260 (10.24)	150 (5.91)	11	7	9	5	220 (8.66)
JBe36	260 (10.24)	220 (8.66)	150 (5.91)	7	11	5	9	260 (10.24)
JBe46	220 (8.66)	370 (14.57)	200 (7.87)	31	16	19	7	260 (10.24)
JBe46	370 (14.57)	220 (8.66)	200 (7.87)	16	31	7	9	370 (14.57)
JBe47	370 (14.57)	260 (10.24)	200 (7.87)	20	31	14	20	370 (14.57)
JBe47	260 (10.24)	370 (14.57)	200 (7.87)	31	20	19	10	260 (10.24)
JBe55	370 (14.57)	370 (14.57)	200 (7.87)	31	31	19	18	370 (14.57)
JBe65	560 (22.05)	370 (14.57)	200 (7.87)	31	49	19	31	560 (22.05)
JBe65	370 (14.57)	560 (22.05)	200 (7.87)	49	31	34	18	370 (14.57)
JBe75	750 (29.53)	370 (14.57)	200 (7.87)	31	66	19	47	750 (29.53)
JBe75	370 (14.57)	750 (29.53)	200 (7.87)	66	31	49	18	370 (14.57)
JBe77	560 (22.05)	560 (22.05)	200 (7.87)	49	49	34	31	560 (22.05)
JBe79	750 (29.53)	560 (22.05)	200 (7.87)	49	66	34	45	750 (29.53)
JBe79	560 (22.05)	750 (29.53)	200 (7.87)	66	49	49	31	560 (22.05)
JBe86	1130 (44.49)	750 (29.53)	300 (11.81)	102	—	82	—	1130 (44.49)

2. Maximum rail arrangement according to physical dimensions.

Terminal Capacity mm ² (in ²)	Maximum Quantity of Horizontal Rails Per Quantity							
	2.5 (0.004)	4 (0.006)	6 (0.009)	10 (0.016)	16 (0.025)	35 (0.054)	50 (0.078)	70 (0.109)
JBe10/20/30/36	1	1	1	1	1	1	0	0
JBe36/46/47	2	2	2	1	1	1	0	0
JBe46/47/55/65/75	3	3	2	2	2	2	1	1
JBe65/77/79	5	5	4	4	4	3	2	2
JBe75/79	7	7	6	6	5	4	3	2
JBe86	10	10	9	9	8	6	4	4

① Enclosure with gland plate.

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3. Defining maximum terminal block quantity according to power dissipation:

- Junction boxes used for instrumentation applications carry very low current levels. Therefore there is no risk of overheating whatever the number of terminals inside the box.
- For applications other than instrumentation, the following tables allow you to define your junction box depending on the number of terminals and the maximum authorized current being carried with feed-through terminals.
- For single feed terminals using cross connection, consult factory for calculation.

For other terminal block configurations, please consult our drilling guide available online at www.appletonelec.com.

T Rating: T6 @ Ta +55° C (+131 °F)		JBe10 120 x 120 x 95 mm (5 x 5 x 4")	Type JBe20 120 x 180 x 95 mm (5 x 7 x 4")	JBe30 180 x 180 x 95 mm (7 x 7 x 4")
2.5 mm ² (0.004 in ²)	Quantity	10	21	21
	I Maximum	16 A	16 A	16 A
4 mm ² (0.006 in ²)	Quantity	8	17	16
	I Maximum	25 A	25 A	25 A
6 mm ² (0.009 in ²)	Quantity	6	13	13
	I Maximum	32 A	32 A	32 A
10 mm ² (0.016 in ²)	Quantity	5	10	9
	I Maximum	50 A	50 A	50 A

T Rating: T6 @ Ta +55° C (+131 °F)		JBe36 220 x 260 x 150 mm (9 x 10 x 6")	Type JBe46 220 x 370 x 200 mm (9 x 15 x 8")	JBe47 260 x 370 x 200 mm (10 x 15 x 8")	JBe55 370 x 370 x 200 mm (15 x 15 x 8")
2.5 mm ² (0.004 in ²)	Quantity	33	50	70	110
	I Maximum	16 A	14 A	12 A	10 A
4 mm ² (0.006 in ²)	Quantity	21	38	62	80
	I Maximum	25 A	20 A	16 A	15 A
6 mm ² (0.009 in ²)	Quantity	19	22	23	26
	I Maximum	32 A	32 A	32 A	32 A
10 mm ² (0.016 in ²)	Quantity	12	14	15	20
	I Maximum	50 A	50 A	50 A	45 A
16 mm ² (0.024 in ²)	Quantity	8	10	17	20
	I Maximum	63 A	63 A	50 A	50 A
25 mm ² (0.039 in ²)	Quantity	12	14	16	20
	I Maximum	80 A	80 A	76 A	76 A
35 mm ² (0.054 in ²)	Quantity	9	11	12	16
	I Maximum	100 A	100 A	100 A	93 A

T Rating: T6 @ Ta +40 °C (+104 °F) T6 @ Ta +55° C (+131 °F)		JBe65 560 x 370 x 200 mm (22 x 15 x 8")	Type JBe75 750 x 370 x 200 mm (30 x 15 x 8")	JBe77 560 x 560 x 200 mm (22 x 22 x 8")	JBe79 560 x 750 x 200 mm (22 x 30 x 8")
35 mm ² (0.054 in ²)	Quantity	15	16	18	—
	I Maximum	100 A	99 A	100 A	—
50 mm ² (0.078 in ²)	Quantity	12	16	—	—
	I Maximum	125 A	108 A	—	—
70 mm ² (0.109 in ²)	Quantity	12	16	16	16
	I Maximum	150 A	135 A	144 A	150 A
95 mm ² (0.147 in ²)	Quantity	9	12	12	16
	I Maximum	200 A	178 A	190 A	173 A
120 mm ² (0.186 in ²)	Quantity	—	6	—	12
	I Maximum	—	250 A	—	225 A
150 mm ² (0.233 in ²)	Quantity	—	9	—	12
	I Maximum	—	250 A	—	250 A

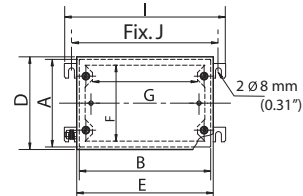
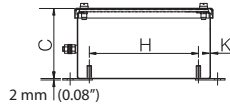
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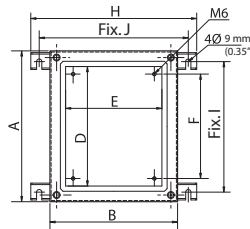
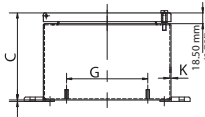
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Dimensions in Millimeters (Inches)

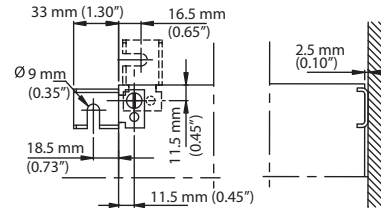
Box 95 (3.74) Depth



Box 200 (7.87) or 300 (11.81) Depth



Mounting Bracket



L x W x D mm (in)	A	B	C	D	E	F	G	H	I	J	K
Box Depth 95 (3.74)											
120 x 120 x 95 (4.72 x 4.72 x 3.74)	120 (4.72)	120 (4.72)	95 (3.74)	127 (5.00)	127 (5.00)	104 (4.09)	84 (3.31)	88 (3.46)	160 (6.30)	140 (5.51)	1.5 (0.06)
120 x 180 x 95 (4.72 x 7.09 x 3.74)	120 (4.72)	180 (7.09)	95 (3.74)	127 (5.00)	187 (7.36)	104 (4.09)	144 (5.67)	148 (5.83)	220 (8.66)	200 (7.87)	1.5 (0.06)
180 x 180 x 95 (7.06 x 7.09 x 3.74)	180 (7.09)	180 (7.09)	95 (3.74)	187 (7.36)	187 (7.36)	164 (6.47)	144 (5.67)	148 (5.83)	220 (8.66)	200 (7.87)	1.5 (0.06)
Box Depth 200 (7.87)											
220 x 370 x 200 (8.66 x 14.57 x 7.87)	220 (8.66)	370 (14.57)	200 (7.87)	166 (6.54)	316 (12.44)	140 (5.51)	290 (11.42)	436 (17.17)	185 (7.28)	407 (16.02)	1.5 (0.06)
370 x 260 x 200 (14.57 x 10.24 x 7.87)	370 (14.57)	260 (10.24)	200 (7.87)	316 (12.44)	206 (8.11)	290 (11.42)	180 (7.09)	326 (12.83)	335 (13.19)	297 (11.69)	1.5 (0.06)
370 x 370 x 200 (14.57 x 14.57 x 7.87)	370 (14.57)	370 (14.57)	200 (7.87)	316 (12.44)	316 (12.44)	290 (11.42)	290 (11.42)	436 (17.17)	335 (13.19)	407 (16.02)	2 (0.08)
560 x 370 x 200 (22.05 x 14.57 x 7.87)	560 (22.05)	370 (14.57)	200 (7.87)	506 (19.92)	316 (12.44)	480 (18.90)	290 (11.42)	436 (17.17)	525 (20.67)	407 (16.02)	2 (0.08)
750 x 370 x 200 (29.53 x 14.57 x 7.87)	750 (29.53)	370 (14.57)	200 (7.87)	695 (27.36)	316 (12.44)	670 (26.38)	290 (11.42)	436 (17.17)	715 (28.15)	407 (16.02)	2 (0.08)
560 x 560 x 200 (22.05 x 22.05 x 7.87)	560 (22.05)	560 (22.05)	200 (7.87)	506 (19.92)	506 (19.92)	480 (18.90)	480 (18.90)	626 (24.65)	525 (20.67)	597 (23.50)	2 (0.08)
750 x 560 x 200 (29.53 x 22.05 x 7.87)	750 (29.53)	560 (22.05)	200 (7.87)	696 (27.40)	506 (19.92)	670 (26.38)	480 (18.90)	626 (24.65)	715 (28.15)	597 (23.50)	2 (0.08)
Box Depth 300 (11.81)											
370 x 370 x 300 (14.57 x 14.57 x 11.81)	370 (14.57)	370 (14.57)	300 (11.81)	316 (12.44)	316 (12.44)	290 (11.42)	290 (11.42)	436 (17.17)	335 (13.19)	407 (16.02)	2 (0.08)
560 x 370 x 300 (22.05 x 14.57 x 11.81)	560 (22.05)	370 (14.57)	300 (11.81)	506 (19.92)	316 (12.44)	480 (18.90)	290 (11.42)	436 (17.17)	525 (20.67)	407 (16.02)	2 (0.08)
750 x 370 x 300 (29.53 x 14.57 x 11.81)	750 (29.53)	370 (14.57)	300 (11.81)	695 (27.36)	316 (12.44)	670 (26.38)	290 (11.42)	436 (17.17)	715 (28.15)	407 (16.02)	2 (0.08)
560 x 560 x 300 (22.05 x 22.05 x 11.81)	560 (22.05)	560 (22.05)	300 (11.81)	506 (19.92)	506 (19.92)	480 (18.90)	480 (18.90)	626 (24.65)	525 (20.67)	597 (23.50)	2 (0.08)
750 x 560 x 300 (29.53 x 22.05 x 11.81)	750 (29.53)	560 (22.05)	300 (11.81)	696 (27.40)	506 (19.92)	670 (26.38)	480 (18.90)	626 (24.65)	715 (28.15)	597 (23.50)	2 (0.08)
1130 x 750 x 300 (44.49 x 29.53 x 11.81)	1130 (44.49)	750 (29.53)	300 (11.81)	1076 (42.36)	506 (19.92)	1050 (41.34)	670 (26.38)	816 (32.13)	1095 (43.11)	787 (30.98)	2 (0.08)