

Enclosure: Junction Box with Terminals (Stainless Steel), JBE2 Series

Increased Safety and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



Application

The JBE2 junction boxes are designed for instrument, control and distribution panel. They are suitable for Ex e increased safety equipment or Ex i intrinsic safe terminal blocks for hazardous areas, zone 1, 2 and zone 21, 22.

Specification

Housing material : Stainless steel SUS 304 or SUS 316
1.2, 1.5 or 2.0 mm. thickness

Sealing gasket : Neoprene (CR)

Lid screws : Stainless steel

Electrical Rating

Rated voltage : up to 750V. (non-intrinsic safe circuit)
up to 375V. (intrinsic safe circuit)

Rated current : up to 125A.
(depending on type of terminal used)

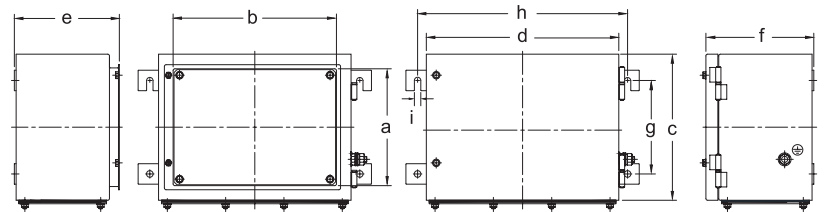
Technical Data

Hazardous Area Zones	Gas	Dust
1 & 2	1 & 2	21 & 22
Equipment Group/Category	Ex e II 2G	Ex i II 2D
Symbol of Protection	Ex e II T6/T5 or Ex e ib IIC T6/T5	Ex tD A21 IP66 T80°C/ T95°C
Certificate	PTB 07 ATEX 1073	
Conformity to Standards	EN 60079-0:2006, EN 60079-7:2007, EN 60079-11:2007, EN 61241-0:2006, EN 61241-1:2004	
Ambient Temperature	-20°C to +55°C	
Index of Protection	IP66	
Entries	Metric threads (recommend for IP66)	
Mounting	Wall mount	

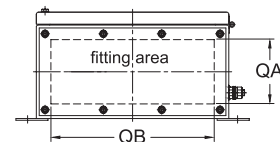
Catalogue Number Logic

JBE2		
Series	Housing material	Size
4	Stainless steel, SUS 304	(see catalogue number table)
6	Stainless steel, SUS 316	

Dimension



Entries	Entries Plate Drill Hole
M20x1.5	Ø21.5mm.
M25x1.5	Ø27.0mm.
M32x1.5	Ø33.5mm.
M40x1.5	Ø42.5mm.
M50x1.5	Ø50.5mm.



Ordering Requirements

Cat. No.	Maximum entries thread size (Metric)					Dimension in mm.											Thk.	Empty Weight (kgs.)
						Internal		External			Mounting			Fitting Area				
	M20x1.5	M25x1.5	M32x1.5	M40x1.5	M50x1.5	a	b	c	d	e	f	g	h	i	QA	QB		
JBE2□-2424	7	7	5	3	2	190	190	240	240	180	185	150	270	10	150	230	1.2	5.15
JBE2□-2533	9	9	8	4	3	200	280	250	330	180	185	160	360	10	150	320	1.2	6.25
JBE2□-2742	20	20	17	8	7	220	370	270	420	235	240	180	450	10	205	410	1.5	6.55
JBE2□-3043	20	20	17	8	7	250	385	300	435	235	240	210	465	10	205	425	1.5	8.58
JBE2□-3243	26	26	22	10	7	270	385	320	435	270	275	230	465	10	240	425	1.5	9.65
JBE2□-3447	30	30	24	12	8	290	420	340	470	270	275	230	640	10	240	460	1.5	11.58
JBE2□-3261	38	38	32	16	10	270	560	320	610	270	275	250	500	10	240	600	2.0	16.55
JBE2□-3465	42	42	36	12	11	290	600	340	650	270	275	250	680	10	240	640	2.0	17.65
JBE2□-3670	46	46	38	14	12	310	650	360	700	270	275	270	730	10	240	690	2.0	20.15
JBE2□-3675	50	50	42	16	13	310	700	360	750	270	275	270	780	10	240	740	2.0	24.15
JBE2□-3880	54	52	44	16	14	330	750	380	800	270	275	290	830	10	240	790	2.0	32.25
JBE2□-4085	56	56	48	18	15	350	800	400	850	270	275	310	880	10	240	840	2.0	35.65

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Terminal Selection Chart

TB Model	Rated Current	Rated Voltage	Wire Size	Maximum Numbers of Terminals (Respective to the Temperature Class)					
				JBE2 □ -2424	JBE2 □ -2533	JBE2 □ -2742	JBE2 □ -3043	JBE2 □ -3243	JBE2 □ -3447

Brand: Entelec

ZS4	32A.	630V.	0.5-4.0mm. ²	12	26	40	48	56	64
ZS6	41A.	630V.	0.5-6.0mm. ²	8	18	28	36	40	48
ZS10	57A.	630V.	1.5-10.0mm. ²	6	14	24	28	32	36
ZS16	76A.	630V.	1.5-16.0mm. ²	4	12	18	18	18	24
ZS35	125A.	630V.	4.0-35.0mm. ²	-	4	4	12	12	14

Brand: Weidmuller

WDU2.5	21A.	550V.	0.5-2.5mm. ²	14	30	48	60	68	76
WDU4	28A.	550V.	0.5-4.0mm. ²	12	26	40	48	56	64
WDU6	36A.	550V.	0.5-6.0mm. ²	8	18	28	36	40	48
WDU10	50A.	550V.	1.5-10.0mm. ²	6	14	24	28	32	36
WDU16	66A.	690V.	1.5-16.0mm. ²	4	12	18	18	18	24
WDU35	109A.	690V.	2.5-35.0mm. ²	-	4	4	12	12	14

JBE2 □ -3261	JBE2 □ -3465	JBE2 □ -3670	JBE2 □ -3675	JBE2 □ -3880	JBE2 □ -4085
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Brand: Entelec

ZS4	32A.	630V.	0.5-4.0mm. ²	84	90	102	112	132	140
ZS6	41A.	630V.	0.5-6.0mm. ²	60	66	72	84	100	104
ZS10	57A.	630V.	1.5-10.0mm. ²	42	48	60	68	76	84
ZS16	76A.	630V.	1.5-16.0mm. ²	20	24	28	42	76	84
ZS35	125A.	630V.	4.0-35.0mm. ²	16	20	20	20	30	36

Brand: Weidmüller

WDU2.5	21A.	550V.	0.5-2.5mm. ²	96	108	126	136	156	168
WDU4	28A.	550V.	0.5-4.0mm. ²	84	90	102	112	132	140
WDU6	36A.	550V.	0.5-6.0mm. ²	60	66	72	84	100	104
WDU10	50A.	550V.	1.5-10.0mm. ²	42	48	60	68	76	84
WDU16	66A.	690V.	1.5-16.0mm. ²	20	24	28	42	76	84
WDU35	109A.	690V.	2.5-35.0mm. ²	16	20	20	20	30	36



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Maximum number of terminals permitted for load current

Current (A)	Cross-section in mm. ² JBE2 □-2424					
	1.5	2.5	4	6	10	16
10	87	In this area any number of terminals can be added to maximum physical content.				
16	30					
20	12					
25	16					
35	17					
50	37					
63	71					
80	28					
	69					
	4					
	22					
	57					
	7					
	26					
	10					
	Fitting in this area is not allowed.					

Current (A)	Cross-section in mm. ² JBE2 □-2533							
	1.5	2.5	4	6	10	16	25	35
10	92	In this area any number of terminals can be added to maximum physical content.						
16	31							
20	13							
25	17							
35	11							
50	29							
63	73							
80	4							
100	24							
125	60							
	8							
	28							
	100							
	10							
	31							
	112							
	13							
	29							
	12							
	Fitting in this area is not allowed.							

Current (A)	Cross-section in mm. ² JBE2 □-2742						
	1.5	2.5	4	6	10	16	25
10	112	In this area any number of terminals can be added to maximum physical content.					
16	38						
20	16						
25	20						
35	14						
50	36						
63	89						
80	5						
100	29						
125	74						
	10						
	34						
	122						
	13						
	38						
	136						
	16						
	36						
	14						
	Fitting in this area is not allowed.						

Current (A)	Cross-section in mm. ² JBE2 □-3043							
	1.5	2.5	4	6	10	16	25	35
10	117	In this area any number of terminals can be added to maximum physical content.						
16	40							
20	16							
25	21							
35	14							
50	37							
63	93							
80	5							
100	30							
125	77							
	10							
	36							
	127							
	13							
	39							
	142							
	17							
	37							
	15							
	Fitting in this area is not allowed.							

Current (A)	Cross-section in mm. ² JBE2 □-3243						
	1.5	2.5	4	6	10	16	25
10	129	In this area any number of terminals can be added to maximum physical content.					
16	44						
20	18						
25	24						
35	16						
50	41						
63	103						
80	6						
100	33						
125	85						
	11						
	39						
	140						
	15						
	44						
	157						
	19						
	41						
	2						
	16						
	Fitting in this area is not allowed.						

Current (A)	Cross-section in mm. ² JBE2 □-3447							
	1.5	2.5	4	6	10	16	25	35
10	132	In this area any number of terminals can be added to maximum physical content.						
16	45							
20	18							
25	24							
35	16							
50	42							
63	105							
80	6							
100	34							
125	87							
	11							
	40							
	143							
	15							
	45							
	160							
	19							
	42							
	2							
	17							
	Fitting in this area is not allowed.							

Current (A)	Cross-section in mm. ² JBE2 □-3261						
	1.5	2.5	4	6	10	16	25
10	133	In this area any number of terminals can be added to maximum physical content.					
16	45						
20	19						
25	24						
35	16						
50	42						
63	105						
80	6						
100	34						
125	87						
	11						
	40						
	144						
	15						
	45						
	161						
	19						
	42						
	2						
	17						
	Fitting in this area is not allowed.						

Current (A)	Cross-section in mm. ² JBE2 □-3465							
	1.5	2.5	4	6	10	16	25	35
10	135	In this area any number of terminals can be added to maximum physical content.						
16	46							
20	19							
25	25							
35	17							
50	43							
63	108							
80	6							
100	35							
125	89							
	12							
	41							
	147							
	16							
	46							
	164							
	19							
	43							
	2							
	17							
	Fitting in this area is not allowed.							

Current (A)	Cross-section in mm. ² JBE2 □-3670						
	1.5	2.5	4	6	10	16	25
10	139	In this area any number of terminals can be added to maximum physical content.					
16	48						
20	20						
25	25						
35	17						
50	44						
63	110						
80	6						
100	36						
125	91						
	12						
	42						
	151						
	16						
	47						
	169						
	20						
	44						
	2						
	18						
	Fitting in this area is not allowed.						

Current (A)	Cross-section in mm. ² JBE2 □-3675							
	1.5	2.5	4	6	10	16	25	35
10	139	In this area any number of terminals can be added to maximum physical content.						
16	48							
20	20							
25	25							
35	17							
50	44							
63	111							
80	6							
100	36							
125	91							
	12							
	42							
	151							
	16							
	47							
	169							
	20							
	44							
	2							
	18							
	Fitting in this area is not allowed.							

Current (A)	Cross-section in mm. ² JBE2 □-3880						
	1.5	2.5	4	6	10	16	25
10	143	In this area any number of terminals can be added to maximum physical content.					
16	49						
20	20						
25	26						
35	18						
50	46						
63	113						
80	6						
100	37						
125	94						
	12						
	44						
	155						
	16						
	48						
	173						
	21						
	46						
	2						
	18						
	Fitting in this area is not allowed.						

Current (A)	Cross-section in mm. ² JBE2 □-4085							
	1.5	2.5	4	6	10	16	25	35
10	147	In this area any number of terminals can be added to maximum physical content.						
16	50							
20	21							
25	27							
35	18							
50	47							
63	116							
80	7							
100	38							
125	96							
	13							
	45							
	159							
	17							
	50							
	178							
	21							
	47							
	2							
	19							
	Fitting in this area is not allowed.							

