

EJB UL

Enclosures



Reference standards

Terminal board / Power units control and signalling units (US)	
Enclosure for use in hazardous locations (FTRV)	
Installation	Class I - Groups B, C, e D Class II - Groups E, F, e G Class III
Environmental ratings	Type 1, 4 and 4X
Ambient temperature	-25 °C ÷ +60 °C
Certification and compliances	UL 1203 - 4° Ed. (15 Sett. 2006) UL 50 - 12° Ed. (27 April 2012) UL 50E - 1° Ed. (27 April 2012) Explosion-Proof / Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
Certificate of compliance	CCN: FTRV REF: E344596-20090531 CCN: QBCR REF: E353501-20210715

On Request Accessories

- External epoxy painting (any colours)
- Internal anticondensate painting orange RAL-2004
- O-Ring gaskets on cover
- Drain and breather valves
- Stainless steel AISI-316L hinges

Installation

hazardous areas (EU) - hazardous locations (US-CNC)

Classification

Group II (EU) - Groups B, C, D, E, F, G (US - CNC)

Reference standards

Terminal board / Power units control and signalling units (EU)	
Directive 2014/34/EU	
Execution	(Ex II 2 G) Ex db IIA or IIB or IIB+H2 T6...T3 (Ex II 2 G) Ex db [ia/ib IIA or IIB or IIC Ga] IIA or IIB or IIB+H2 T6 (Ex II 2 D) Ex tb IIIC T85°C...T200°C (Ex II 2 D) Ex tb [ia Da/ib] IIIC T85°C
Rules of compliance	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-11; EN/IEC 60079-31
EU type-examination certificate	INERIS 13 ATEX 0022X
Protection degree	IP66
Ambient temperature	-60 °C ÷ +80 °C
Other available certificates	IECEx: IECEx INE 13_0070X ECASEx: 23-06-22481/Q23-06-048569/NB0002 CCOOE-PESO: P531827 INMETRO: CEPEL 12.2139X

Reference standards

Terminal board / Power units control and signalling units (US, Canada)	
Enclosure for use in zone classified hazardous locations (FTQH, FTQH7)	
Installation	USC: Class I - Zone 1 - AEx d IIB + H2 Gb Zone 21 - AEx tb IIIC Db IP66 CNC: Class I - Zone 1 - AEx d IIB+H2 Gb Class II - Division 1 - Groups E, F, e G Class III - Division 1
Environmental ratings	IP66, Type 1, 4 and 4X
Ambient temperature	-55 °C ÷ +60 °C
Certification and compliances	USC: UL 60079-0 - 6° Ed. - Part 0 UL 60079-1 - 6° Ed. - Part 1 ANSI/ISA 60079-31:2013 - Part 31 UL 50 - 12° Ed. (27 April 2012) UL 50E - 1° Ed. (27 April 2012) CNC: CAN/CSA-C22.1 60079-0:2011 Part 0 CAN/CSA-C22.1 60079-1:2011 Part 1 CAN/CSA-C22.1 60079-31:2011 Part 31
Certificate of compliance	CCN: FTQH REF: E344596-20141122 CCN: FTQH7 REF: E344596-20141122

Mechanical characteristics

Body/cover	marine grade copper free aluminium light alloy
Screws	stainless steel - internal / external
Internal plate	hot dip galvanized steel / aluminium
Fixing	galvanized steel stirrups th.10mm
Gaskets	O-RING silicon rubber on cover

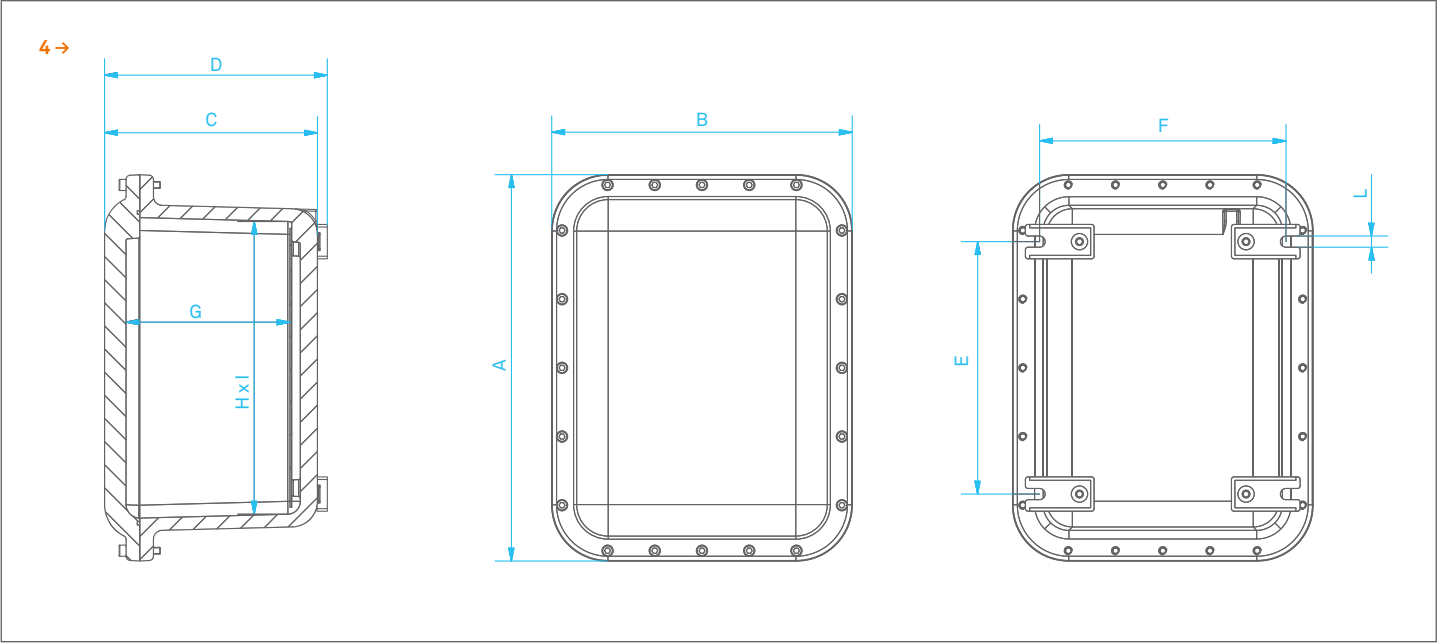


Technical Features

Code	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	L [mm]	Int. plate X - Y [mm]	Weight [kg]	Detail
EJB21-UL	320	280	177	189	180	233	121	214	174	13	180 - 140	13,50	A
EJB31-UL	450	350	248	260	294	287	191	341	241	13	325 - 225	27,00	A
EJB51-UL	600	400	266	278	360	333	195	481	281	13	460 - 260	52,50	A
EJB61-UL	710	500	389	397	500	460	277	566	356	12	560 - 360	114,00	A
EJB63-UL	710	500	259	267	500	460	147	571	362	12	560 - 360	92,00	A

Code	A [Inch]	B [Inch]	C [Inch]	D [Inch]	E [Inch]	F [Inch]	G [Inch]	H [Inch]	I [Inch]	L [Inch]	Int. plate X - Y [Inch]	Weight [lbs]	Detail
EJB21-UL	12,60	11,10	7,00	7,50	7,10	9,20	4,80	8,50	6,90	0,60	7.10 - 5.60	31,00	A
EJB31-UL	17,80	13,80	9,80	10,30	11,60	11,30	7,60	13,50	9,50	0,60	12.80 - 8.90	62,00	A
EJB51-UL	23,70	15,80	10,50	11,00	14,20	13,20	7,70	19,00	11,10	0,60	18.20 - 10.30	121,00	A
EJB61-UL	28,00	19,70	15,40	15,70	19,70	18,20	11,00	22,30	14,10	0,50	22.10 - 14.20	262,00	A
EJB63-UL	28,00	19,70	10,20	10,60	19,70	18,20	5,80	22,30	14,30	0,50	22.10 - 14.20	212,00	A

Technical Features



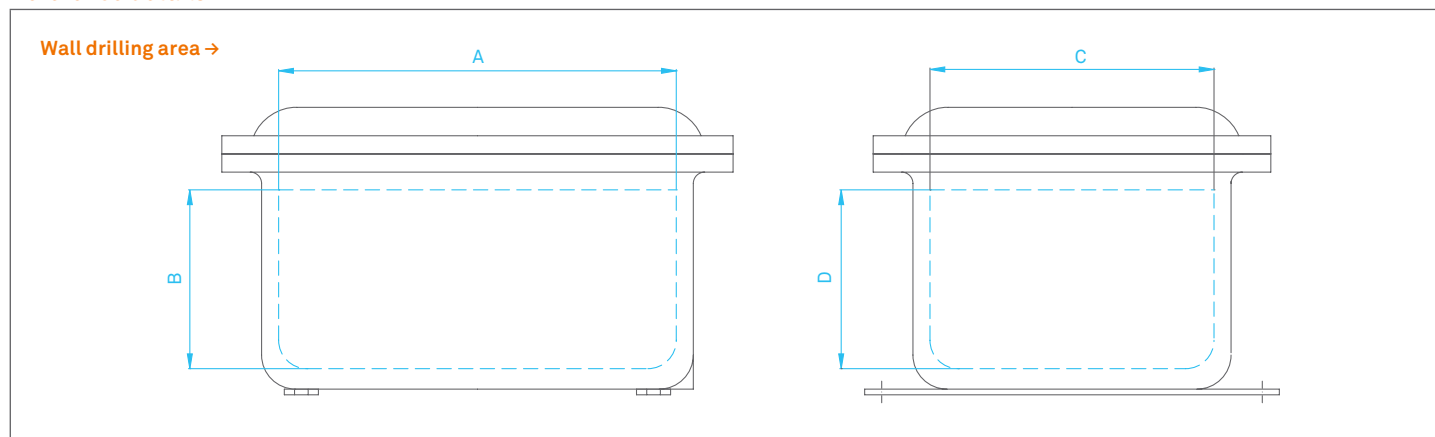
Body enclosures minimum distance between wall entries

Minimum distance between wall entries (center to center)						1 st row [mm] – 2 nd row [inch.]			
4"	-	-	-	-	-	-	-	-	139
-	-	-	-	-	-	-	-	-	(5.47)
3"	-	-	-	-	-	-	-	115	126
M90	-	-	-	-	-	-	-	(4.53)	(4.96)
2 1/2"	-	-	-	-	-	-	101	108	120
M75	-	-	-	-	-	-	(3.98)	(4.25)	(4.72)
2"	-	-	-	-	-	88	94	102	112
M63	-	-	-	-	-	(3.46)	(3.70)	(4.02)	(4.41)
1 1/2"	-	-	-	-	75	82	88	95	106
M50	-	-	-	-	(2.95)	(3.23)	(3.46)	(3.74)	(4.17)
1 1/4"	-	-	-	67	70	77	84	91	103
M40	-	-	-	(2.64)	(2.76)	(3.03)	(3.31)	(3.58)	(4.06)
1"	-	-	58	63	66	73	80	86	99
M32	-	-	(2.28)	(2.48)	(2.60)	(2.87)	(3.15)	(3.39)	(3.90)
3/4"	-	52	55	59	63	69	79	83	95
M25	-	(2.05)	(2.17)	(2.32)	(2.48)	(2.72)	(2.99)	(3.27)	(3.74)
1/2"	46	49	52	57	60	67	73	80	93
M20	(1.81)	(1.93)	(2.05)	(2.24)	(2.36)	(2.64)	(2.87)	(3.15)	(3.66)
NPT	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Metric	M20	M25	M32	M40	M50	M63	M75	M90	-

Body enclosures drilling layout

Enclosure code	Area for entry installation (long wall sides)				Area for entry installation (short wall sides)			
	A [mm]	B [mm]	A [inch]	B [inch]	C [mm]	D [mm]	C [inch]	D [inch]
EJB21-UL	190	80	7,50	3,20	150	80	6,00	3,20
EJB31-UL	320	140	12,60	5,60	230	140	9,10	5,60
EJB51-UL	450	120	17,80	4,80	250	120	9,90	4,80
EJB61-UL	550	260	21,70	10,30	350	260	13,80	10,30
EJB63-UL	550	150	21,70	6,00	350	150	13,80	6,00

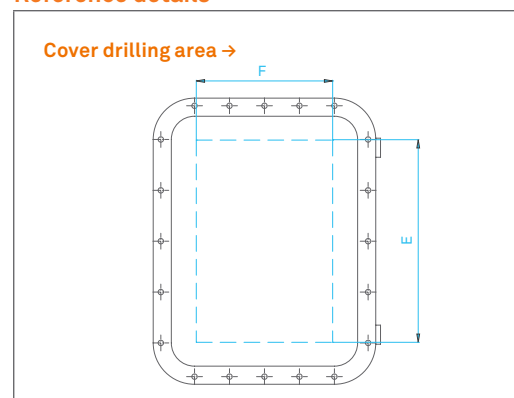
Reference details



Cover enclosure drilling layout

Enclosure code	Area for operators installation enclosure cover				Minimum distance between openings (center to center)	
	E [mm]	F [mm]	E [inch]	F [inch]	[mm]	[inch]
EJB21-UL	200	150	7,90	6,00	50	2,00
EJB31-UL	300	200	11,90	7,90	50	2,00
EJB51-UL	460	260	18,20	10,30	50	2,00
EJB61-UL	570	370	22,50	14,60	50	2,00
EJB63-UL	570	370	22,50	14,60	50	2,00

Reference details



Indicative quantity of terminals and relevant section

Code	SEZ. 2,5 [sq/mm]	SEZ. 6,0 [sq/mm]	SEZ. 10,0 [sq/mm]	SEZ. 16,0 [sq/mm]	SEZ. 35,0 [sq/mm]	SEZ. 50,0 [sq/mm]	SEZ. 70,0 [sq/mm]	SEZ. 240,0 [sq/mm]	Int. plate X - Y	
									[mm]	[inch]
EJB21-UL	30 x 1	20 x 1	14 x 1	12 x 1	8 x 1	6 x 1	2 x 1	1 x 1	180 - 140	7.10 - 5.60
EJB31-UL	52 x 2	32 x 2	24 x 2	20 x 2	14 x 2	12 x 1	8 x 1	4 x 1	325 - 225	12.80 - 8.90
EJB51-UL	80 x 2	46 x 2	36 x 2	30 x 2	22 x 2	18 x 2	16 x 1	6 x 1	460 - 260	18.20 - 10.30
EJB61-UL	92 x 3	58 x 3	46 x 3	38 x 3	28 x 3	26 x 2	22 x 2	12 x 1	560 - 350	22.10 - 14.20
EJB63-UL	92 x 3	58 x 3	46 x 3	38 x 3	28 x 3	26 x 2	22 x 2	12 x 1	560 - 350	22.10 - 14.20

Additional Technical features for NEC 500 only

Product covered

Explosion-proof enclosures for use in Hazardous Locations, Class I, Groups B, C, and D; Class II, Groups E, F, and G; Class III.

These enclosures are Classified as to explosion and fire hazards only in according to Standard UL1203 4^o ed. The explosion-proof enclosures are suitable for Class I, Group B Hazardous Locations only when provided with from M20 to M90, 1/2 in. to 3 in., supply connection openings. If other supply connection openings are provided, then the enclosures are suitable for Class I, Groups C & D Hazardous Locations only.

The 1/2 in. NPSM operator openings are only suitable for enclosures marked for Class I, Groups B, C & D Hazardous Locations.

The enclosures covered by this Certification may have electrical components installed inside. The installation of electrical components shall not reduce the mechanical integrity of the enclosures.

The enclosures may or may not be provided with hinges for service of the enclosures only.

Protection against corrosion

All ferrous-metal other than stainless steel shall be protected against corrosion, except at joint surfaces and conduit threads There shall be no materials applied to joint surfaces.

Grounding

Internal Ground Screw – Hexagon head screw M6 x 10 with a stainless steel flat and lock washer provided on the base of the enclosure body. External Ground – Terminal colored green, marked with the letter or word “G”, “GROUND”, or marked with a grounding symbol.

Supply connections

NPT and Metric Supply Connections - The side walls of the enclosure are provided with conduit openings or none may be supplied, in which case field drilling and tapping instructions are provided with each enclosure. The entry is drilled and tapped completely through the enclosure wall, and the inside edge is smoothed and well-rounded such that the conductor insulation will not be damaged when installed. All unused openings are closed with plated steel, plated cast iron or aluminum close-up plugs which are threaded to match the opening. Closer-up Plugs have to be Listed for the same Class, Group and Division as marked on Enclosure nameplate.

Operator openings

The cover of the enclosure may be provided with operator openings in the cover only and located only as given in drilling and tapping instructions provided with each Classified enclosure. All unused openings are closed with plated steel, plated cast iron or aluminum close-up plugs which are threaded to match the opening. Closer-up Plugs have to be Listed for the same Class, Group and Division as marked on Enclosure nameplate.

REMARK:

Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.