



EJB UL Enclosures

Installation: hazardous areas - Zone 1 / 2 (Gases) - Zone 21 / 22 (Dusts)

Classification: Group II - Category 2G 2D



Certificate
NEMA Type 4X



REFERENCE STANDARDS

TERMINAL BOARD / POWER UNITS CONTROL AND SIGNALLING UNITS

| | |
|-------------------------------|---|
| | NEC - NEMA 4, 7, 9 |
| INSTALLATION | Class I - Groups B, C, e D Class II - Groups E, F, e G Class III |
| PROTECTION | 4, 7 BCD, 9 EFG |
| PROTECTION DEGREE | IP66 |
| AMBIENT TEMPERATURE | -20°C ÷ +40°C |
| CERTIFICATION AND COMPLIANCES | UL Standard 1203 - 4 th Ed. (15 Sett. 2006) Explosion-Proof / Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations |

Directive 94/9/EC (until April 19th, 2016) and Directive 2014/34/EU (from April 20th, 2016)

| | |
|---------------------------------|--|
| EXECUTION | (⊕ II 2 G) Ex db IIB+H ₂ T6...T3 (⊕ II 2 G) Ex db [ia/ib] IIB+H ₂ T6...T3 (⊕ II 2 D) Ex tb IIIC T85°C...T150°C |
| RULES OF COMPLIANCE | EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-11; EN/IEC 60079-31 |
| EC Type-Examination Certificate | INERIS 13 ATEX 0022X |
| PROTECTION DEGREE | IP66 |
| AMBIENT TEMPERATURE | -60°C ÷ +60°C |
| OTHER AVAILABLE CERTIFICATES | IECEx: IECEx INE 13_0070X NEC 505: UL 20141204-E302348 - Type rating NEMA 1, 12, 4 and 4X |

Mechanical characteristics

| | |
|----------------|--|
| Body and 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 |

On Request Accessories:

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

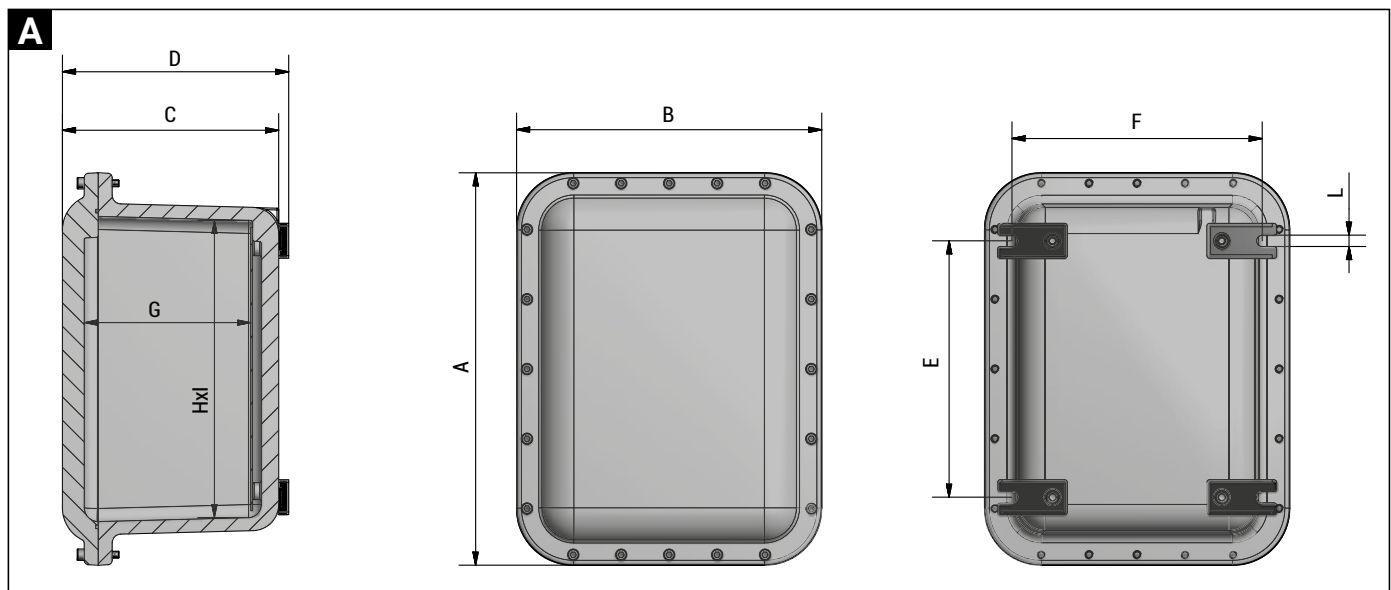


EJB UL Technical features

| 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 |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------|-------------|--------|
| EJB-21UL | 320 | 280 | 177 | 189 | 180 | 233 | 121 | 214 | 174 | 13 | 180 - 140 | 13,50 | A |
| EJB-31UL | 450 | 350 | 248 | 260 | 294 | 287 | 191 | 341 | 241 | 13 | 325 - 225 | 27,00 | A |
| EJB-51UL | 600 | 400 | 266 | 278 | 360 | 333 | 195 | 481 | 281 | 13 | 460 - 260 | 52,50 | A |
| EJB-61UL | 710 | 500 | 389 | 397 | 500 | 460 | 277 | 566 | 356 | 12 | 560 - 360 | 114,00 | A |
| EJB-63UL | 710 | 500 | 259 | 267 | 500 | 460 | 147 | 571 | 362 | 12 | 560 - 360 | 92,00 | A |

| 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 |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------|-------------|--------|
| EJB-21UL | 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 |
| EJB-31UL | 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 |
| EJB-51UL | 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 |
| EJB-61UL | 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 |
| EJB-63UL | 28,00 | 19,70 | 10,20 | 10,60 | 19,70 | 18,20 | 5,80 | 22,50 | 14,30 | 0,50 | 22.10 - 14.20 | 212,00 | A |

Reference details



EJB UL 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.] |
| EJB-21 UL | 190 | 80 | 7,50 | 3,20 | 150 | 80 | 6,00 | 3,20 |
| EJB-31 UL | 320 | 140 | 12,60 | 5,60 | 230 | 140 | 9,10 | 5,60 |
| EJB-51 UL | 450 | 120 | 17,80 | 4,80 | 250 | 120 | 9,90 | 4,80 |
| EJB-61 UL | 550 | 260 | 21,70 | 10,30 | 350 | 260 | 13,80 | 10,30 |
| EJB-63 UL | 550 | 150 | 21,70 | 6,00 | 350 | 150 | 13,80 | 6,00 |

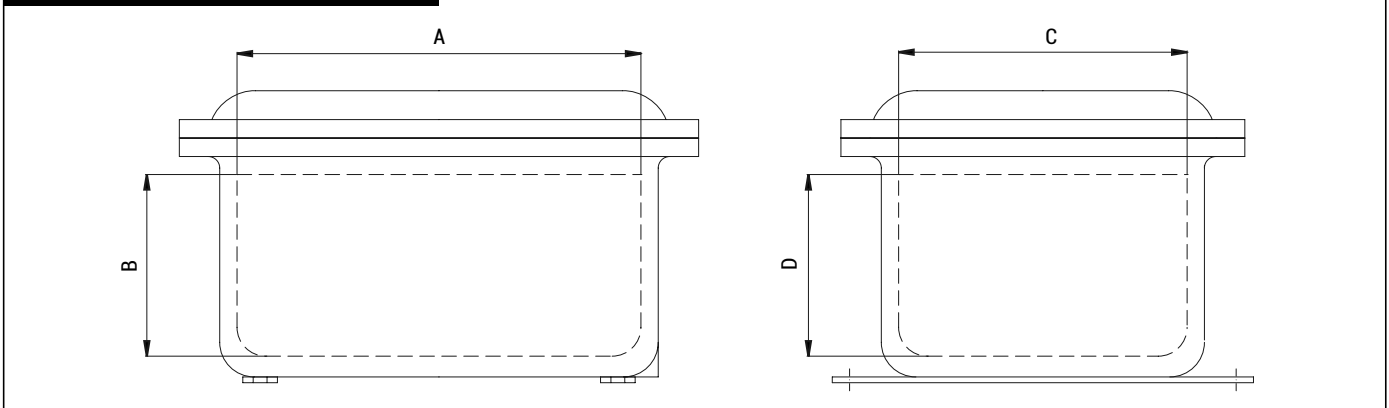


EJB UL Body enclosures drilling layout

| MINIMUM DISTANCE BETWEEN WALL ENTRIES (CENTER TO CENTER) | | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1st ROW [mm] - 2nd ROW [inch.] | | | | | | | | | | |
| 4" | - | - | - | - | - | - | - | - | 139 | 139 |
| - | - | - | - | - | - | - | - | - | (5.47) | (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 | 112 |
| M63 | - | - | - | - | - | (3.46) | (3.70) | (4.02) | (4.41) | (4.41) |
| 1 1/2" | - | - | - | - | 75 | 82 | 88 | 95 | 106 | 106 |
| M50 | - | - | - | - | (2.95) | (3.23) | (3.46) | (3.74) | (4.17) | (4.17) |
| 1 1/4" | - | - | - | 67 | 70 | 77 | 84 | 91 | 103 | 103 |
| M40 | - | - | - | (2.64) | (2.76) | (3.03) | (3.31) | (3.58) | (4.06) | (4.06) |
| 1" | - | - | 58 | 63 | 66 | 73 | 80 | 86 | 99 | 99 |
| M32 | - | - | (2.28) | (2.48) | (2.60) | (2.87) | (3.15) | (3.39) | (3.90) | (3.90) |
| 3/4" | - | 52 | 55 | 59 | 63 | 69 | 79 | 83 | 95 | 95 |
| M25 | - | (2.05) | (2.17) | (2.32) | (2.48) | (2.72) | (2.99) | (3.27) | (3.74) | (3.74) |
| 1/2" | 46 | 49 | 52 | 57 | 60 | 67 | 73 | 80 | 93 | 93 |
| M20 | (1.81) | (1.93) | (2.05) | (2.24) | (2.36) | (2.64) | (2.87) | (3.15) | (3.66) | (3.66) |
| NPT | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 4" |
| Metric | M20 | M25 | M32 | M40 | M50 | M63 | M75 | M90 | - | - |

Reference details

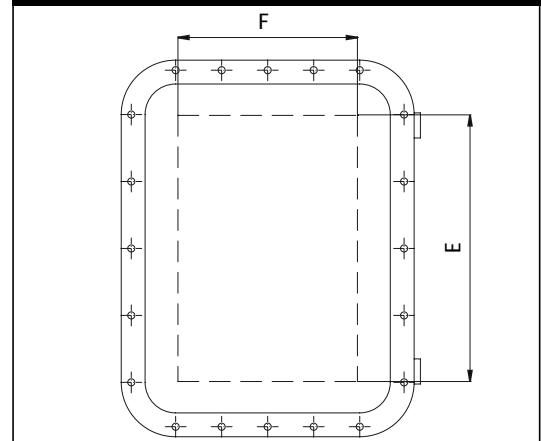
WALL DRILLING AREA



EJB UL Cover enclosures 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.] |
| EJB-21 UL | 200 | 150 | 7,90 | 6,00 | 50 | 2,00 |
| EJB-31 UL | 300 | 200 | 11,90 | 7,90 | 50 | 2,00 |
| EJB-51 UL | 460 | 260 | 18,20 | 10,30 | 50 | 2,00 |
| EJB-61 UL | 570 | 370 | 22,50 | 14,60 | 50 | 2,00 |
| EJB-63 UL | 570 | 370 | 22,50 | 14,60 | 50 | 2,00 |

COVER DRILLING AREA



EJB UL 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.] |
| EJB-21 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 |
| EJB-31UL | 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 |
| EJB-51 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 |
| EJB-61 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 |
| EJB-63 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 |

EJB UL 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° 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

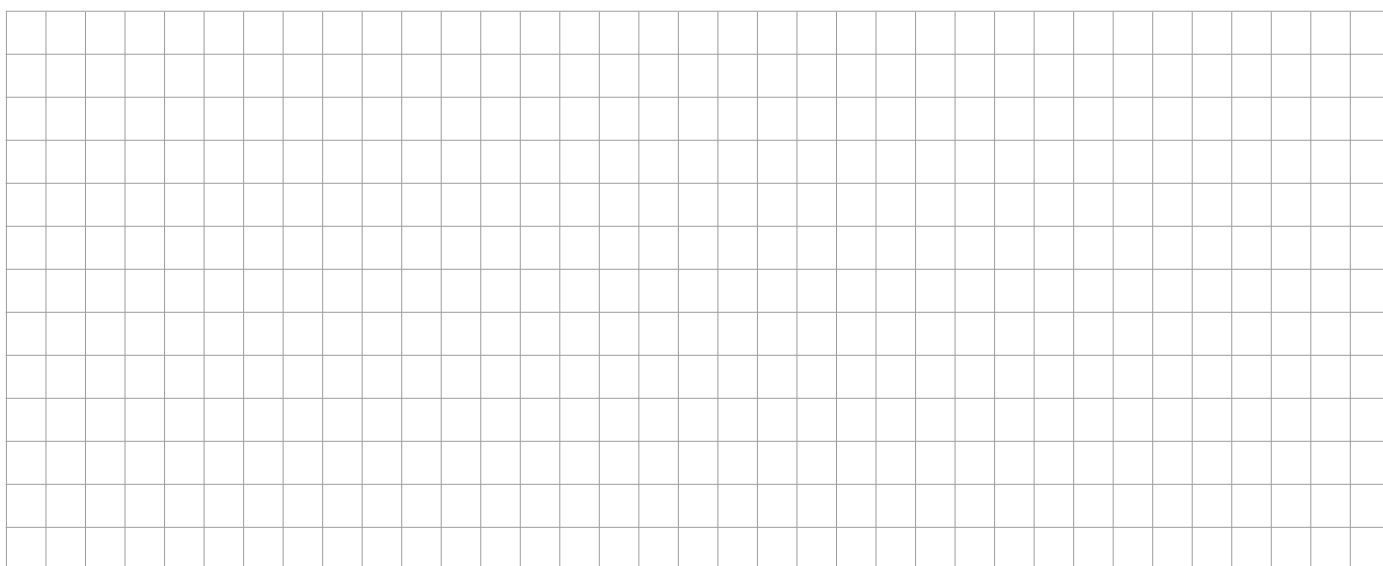
Internal Ground Screw – Hexagon head screw M6 x 10 with a stainless steel flat and lock washer provided on the base of the enclosure body. External Ground – Terminal colored green, marked with the letter or word "G", "GROUND", or marked with a grounding symbol.

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.