

# AJBEW Cast Junction Boxes

## Explosionproof, Dust-Ignitionproof

### NEC/CEC:

Class I, Division 1 and 2, Groups B $\diamond$ , C $\diamond$ , D $\diamond$   
 Class I, Zone 1 and 2, Groups IIA, IIB $\diamond$ +H $\diamond$ <sub>2</sub> $\diamond$   
 Class II, Division 1 and 2, Groups E, F, G  
 Class III  
 NEMA 4, 7B $\diamond$ C $\diamond$ D, 9EFG

### Application

- Explosionproof junction boxes are used where hazardous materials are handled or stored. These enclosures may be used for:
  - Terminals
  - Splicing wires
  - Pull boxes
  - Bus boxes

### Features

- Precision machined flame path between box and cover.
- Bolt on stainless steel slotted mounting feet for horizontal or vertical mounting.
- Flexible hinge mounting either left or right side is standard on all boxes 12 x 12 x 06 and larger.
- External flange maximizes internal space.
- Wall thickness suitable for minimum of five full threads.
- Provision for mounting pan.
- Wide range of drilled and tapped outlets.
- Ground lug package and installation instructions for termination of ground wires enclosed.
- O-ring gasket insures watertight integrity.

### Standard Materials

- Bodies and covers: sand cast copperfree (4/10 of 1% max.) aluminum
- Cover bolts: stainless steel
- O-ring: neoprene
- Hinges: stainless steel
- Mounting pan: galvanized steel

### Standard Finishes

- Bodies and covers: shot blast finish standard

### Options

- Custom drilling and tapping.
- Set of 4 standoffs 12.7 mm (0.50") high. For factory-installed option add suffix **-AB**.
- Breather, NEMA 4X (includes outlets and installation). For factory-installed option add suffix **-BR**, for field-installed option order catalog number **BRTB4X**.
- Drain, NEMA 4X (includes outlets and installation). For factory-installed option add suffix **-DN** for field-installed option order catalog number **ECD50B4X**.
- Desiccate package. For factory-installed option add suffix **-DP1**, for field-installed option order catalog number **AWG13/1CT**.
- External grounding stud 3/8"-16. For fac



tory-installed option add suffix **-EGS**.

- Gray epoxy powder coat (outside). For factory-installed option add suffix **-G1**.
- Gray epoxy powder coat available to provide NEMA 4X rating (inside and outside). For factory-installed option add suffix **-G2**.
- Internal Ground Stud, #14 - #2. For factory-installed option add suffix **-GNDKIT**.
- Hinges: stainless steel hinge available for boxes up to 11 x 30 x 03. For factory-installed option add suffix **-H**.
- Hinge Kit, 2 light duty SS hinges. For field-installed option order catalog number **AH0F12SS**.
- Hinge Kit, 2 heavy duty SS hinges. For field-installed option order catalog number **AH0F22SS**.
- Hinge Kit, 3 heavy duty SS hinges. For field-installed option order catalog number **AH0F23SS**.
- Terminal blocks 600 Volt, 30 Amp Indicate number of points: example: 5 points = 5K. For factory-installed option add suffix **-K**.
- Plastic nameplate, 50.8 x 101.6 mm (2.00 x 4.00"), 3.3 mm (13") black letters on white surface, 3 lines max, specify legend. For factory-installed option add suffix **-NP**.
- SS captive Quad-Lead bolts. For factory-installed option add suffix **-Q**.
- Mounting pan. For factory-installed option add suffix **-Z**.

### NEC/CEC Certifications and Compliances

- UL Standard: UL 1203
- cULus Listed: E85310
- CSA Standard: C22.2 No. 25, C22.2 No.30
- CSA Certified: 042129

$\diamond$  For Groups B and C, all conduits must be sealed within 50.8 mm (2") of the enclosure.

# AJBEW Cast Junction Box Options and Accessories

## Explosionproof, Dust-Ignitionproof

### NEC/CEC:

Class I, Division 1 and 2, Groups B $\diamond$ , C $\diamond$ , D

Class I, Zone 1 and 2, Groups IIA, IIB $\diamond$ +H $\diamond$

Class II, Division 1 and 2, Groups E, F, G

Class III

NEMA 4, 7B $\diamond$ C $\diamond$ D, 9EFG

### Options

| Factory-Installed Suffix | Field-Installed Catalog Number | Description  |
|--------------------------|--------------------------------|--|
| AB                       | Not Available                  | Set of 4 standoffs 12.7 mm (0.50") high  |
| BR                       | BRTB4X                         | Breather, NEMA 4X (includes outlets and installation)  |
| DN                       | ECD50B4X                       | Drain, NEMA 4X (includes outlets and installation)   |
| DP1                      | AWG13/1CT                      | Desiccate package  |
| EGS                      | EGSKIT                         | External grounding stud 3/8"-16  |
| G1                       | Not Available                  | Gray powder coat epoxy (outside)   |
| G2                       | Not Available                  | Gray Powder Coat Epoxy to provide NEMA 4X rating (inside and outside)  |
| GNDKIT                   |                                | Internal Ground Stud, #14 - #2   |
| H                        |                                | Hinges stainless steel   |
|                          | AH0F12SS                       | Hinge Kit, 2 light duty SS hinges  |
|                          | AH0F22SS                       | Hinge Kit, 2 heavy duty SS hinges  |
|                          | AH0F23SS                       | Hinge Kit, 3 heavy duty SS hinges  |
| K                        | Not Available                  | Terminal blocks 600 Volt, 30 Amp <i>Indicate number of points: example: 5 points = 5K</i>                                    |
| NP                       | Not Available                  | Plastic nameplate, 50.8 x 101.6 mm (2.00 x 4.00"), 3.3 mm (13") black letters on white surface, 3 lines max, specify legend. |
| Q                        | Not Available                  | SS captive Quad-Lead bolts   |
| Z                        | See table on following page    | Mounting pan   |

### Drill and Tap Options

(For drill and tap schedule, Drilling and Tapping Guidelines)

| Symbol | Conduit Size (NPT)<br>Inches | Symbol | Conduit Size (NPT)<br>Inches |
|--------|------------------------------|--------|------------------------------|
| A      | 1/2                          | F      | 2                            |
| B      | 3/4                          | G      | 2-1/2                        |
| C      | 1                            | H      | 3                            |
| D      | 1-1/4                        | J      | 3-1/2                        |
| E      | 1-1/2                        | K      | 4                            |

| Blind Tapped Holes |              |
|--------------------|--------------|
| Suffix             | Screw Size   |
| BT1                | #6 - 1/4"    |
| BT2                | 5/16" - 1/2" |

### Mounting Hardware

Refer to ordering information for Enclosure-Mounting Hardware Correlation.

| Factory-Installed Suffix | Field-Installed Catalog Number | Description  |
|--------------------------|--------------------------------|--|
| MH1                      | AMH1                           | 1/4" - 20 x 1-1/4" Bolt,<br>1/4" - 20 Hex Nut, 1/4" Washers    |
| MH2                      | AMH2                           | 3/8" - 16 x 1-1/4" Bolt,<br>3/8" - 16 Hex Nut, 3/8" Washers    |
| MH3                      | AMH3                           | 7/16" - 14 x 1-3/4" Bolt,<br>7/16" - 14 Hex Nut, 7/16" Washers |
| MH4                      | AMH4                           | 1/2" - 13 x 1-3/4" Bolt,<br>1/2" - 13 Hex Nut, 1/2" Washers    |
| MH5                      | AMH5                           | 1/2" - 13 x 2" Bolt,<br>1/2" - 13 Hex Nut, 1/2" Washers        |
| MH6                      | AMH6                           | 5/8" - 11 x 2" Bolt,<br>5/8" - 11 Hex Nut, 5/8" Washers        |
| MH7                      | AMH7                           | 1/2" - 13 x 1-1/4" Bolt,<br>1/2" - 13 Hex Nut, 1/2" Washers    |
| MH8                      | AMH8                           | 5/8" - 11 x 1-1/4" Bolt,<br>5/8" - 11 Hex Nut, 5/8" Washers    |

$\diamond$  For Groups B and C, all conduits must be sealed within 50.8 mm (2") of the enclosure.