

# EBM disconnect switches and enclosures

600 VAC heavy duty

Cl. I, Div. 1 & 2, Groups B, C, D  
Cl. II, Div. 1, Groups E, F, G  
Cl. II, Div. 2, Groups F, G  
Cl. III  
NEMA 3, 3R, 4<sup>A</sup>, 4X<sup>B</sup>, 7BCD, 9EFG, 12

Explosionproof  
Dust-ignitionproof  
Watertight  
Wet locations

2A

2A

## Applications:

EBM hinged cover disconnect switches are used:

- To disconnect motors, lighting and other circuits
- In locations made hazardous by the presence of flammable gases or vapors or ignitable dusts
- Indoors or outdoors in damp, wet and dirty locations, or in areas where frequent wash downs, heavy rain or water spray is prevalent
- To provide disconnect means and short circuit protection (fusible version)
- On switch racks or other assemblies where it is desired that motor control be centrally located

## Features:

- Rugged, corrosion-resistant cast copper-free aluminum construction (less than 0.4 of 1%)
- Switch operating handle, located through the right side wall of the body, permits visual confirmation of correct alignment and operation
- Total compliance to the wiring end room requirements of the National Electrical Code
- Semi-clamshell enclosure design, with an external flanged ground joint between body and cover, makes interior components more accessible
- Minimum enclosure-to-enclosure spacing with little interference between the opened cover and an adjacent enclosure
- Stainless steel hinges allow the cover to swing well out of the way
- Stainless steel quick release captive hex head cover bolts; stainless steel springs provide clear indication that cover bolts are fully retracted from the body
- Switch operating handle can be padlocked in either the "ON" or "OFF" position
- Neoprene cover gasket permanently attached to the cover seals out moisture
- Bodies have top and bottom drilled and tapped conduit entrances for power and conduits; removable reducers are supplied as standard, to accommodate smaller size conduit; all conduit entrances are plugged
- Tap on mounting feet

## Certifications and compliances:

### NEC/CEC:

- Class I, Divisions 1 & 2, Groups B, C, D
- Class II, Division 1, Groups E, F, G
- Class II, Division 2, Groups F, G
- Class III

### UL standards:

- UL1203
- High AIC rating (interrupting capacity) for Class I, Division 1, Groups C, D only

| Voltage (AC) | RMS symmetrical amperes |
|--------------|-------------------------|
| 240          | 65,000                  |
| 480          | 50,000                  |
| 600          | 25,000                  |

### CSA standard:

- C22.2 No. 30

### Environmental ratings:

- NEMA 3, 3R, 4<sup>A</sup>, 4X<sup>B</sup>, 7BCD, 9EFG, 12

## Standard materials:

- Body and cover – copper-free aluminum
- Operating handle – copper-free aluminum
- Operating shaft and bushing – stainless steel
- Interior parts – sheet steel, electrogalvanized
- Cover bolts, washers and retractile springs – stainless steel
- Hinges – stainless steel

## Electrical ratings:

- 600 VAC
- 30, 60 and 100 amperes



## Options:

The following options are available from the factory by adding suffix to catalog number – suffixes are added alphanumerically.

| Description                                                                                           | Suffix                              |
|-------------------------------------------------------------------------------------------------------|-------------------------------------|
| • Ambient compensated circuit breaker trip setting .....                                              | <b>AC</b>                           |
| • Pilot light, 120 VAC, red jewel, with blank indicating plate .....                                  | <b>J1<sup>C</sup></b>               |
| • Pilot light, 120 VAC, green jewel, with blank indicating plate .....                                | <b>J3<sup>C</sup></b>               |
| • LED pilot lights (in place of standard incandescent lamps) .....                                    | <b>LED</b>                          |
| • START-STOP pushbuttons (requires two spaces).....                                                   | <b>PB23<sup>C</sup><sup>A</sup></b> |
| • Space heater, 120V, 25 watts .....                                                                  | <b>R11</b>                          |
| • Space heater, 240V, 25 watts .....                                                                  | <b>R22</b>                          |
| • Space heater, 480V, 25 watts .....                                                                  | <b>R44</b>                          |
| • Insulated neutral with two connectors .....                                                         | <b>S146</b>                         |
| • Standard drain (Class I, Groups B, C, D; Class II, Groups E, F, G; Class III) ..                    | <b>S756<sup>A</sup></b>             |
| • Standard breather and drain (Class I, Groups B, C, D; Class II, Groups E, F, G; Class III) ..       | <b>S756V<sup>A</sup></b>            |
| • External epoxy finish .....                                                                         | <b>S752</b>                         |
| • Internal and external epoxy finish.....                                                             | <b>S753</b>                         |
| • 12-point terminal block – 30 amp, 300V.....                                                         | <b>S786</b>                         |
| • General purpose control relay, 4-pole N.O., contacts rated 10A at 600V, coil 120 VAC, 50/60 Hz..... | <b>S787</b>                         |
| <b>Auxiliary switch on circuit breaker:</b>                                                           |                                     |
| • 1A and 1B contacts .....                                                                            | <b>S784</b>                         |
| • 2A and 2B contacts .....                                                                            | <b>S785</b>                         |

<sup>A</sup>Enclosure not suitable for NEMA 4 or 4X with cover mounted operators.

<sup>B</sup>With S752 or S753 suffix.

<sup>C</sup>If desired, markings on indicating plates may be added to catalog number. Select from the list of standard markings and DSL legend plate listings in Section 3C.

# EBM disconnect switches and enclosures

600 VAC heavy duty

Cl. I, Div. 1 & 2, Groups B, C, D

Cl. II, Div. 1, Groups E, F, G

Cl. II, Div. 2, Groups F, G

Cl. III

NEMA 3, 3R, 4<sup>D</sup>, 4X<sup>E</sup>, 7BCD, 9EFG, 12

Explosionproof  
Dust-ignitionproof  
Watertight  
Wet locations

2A

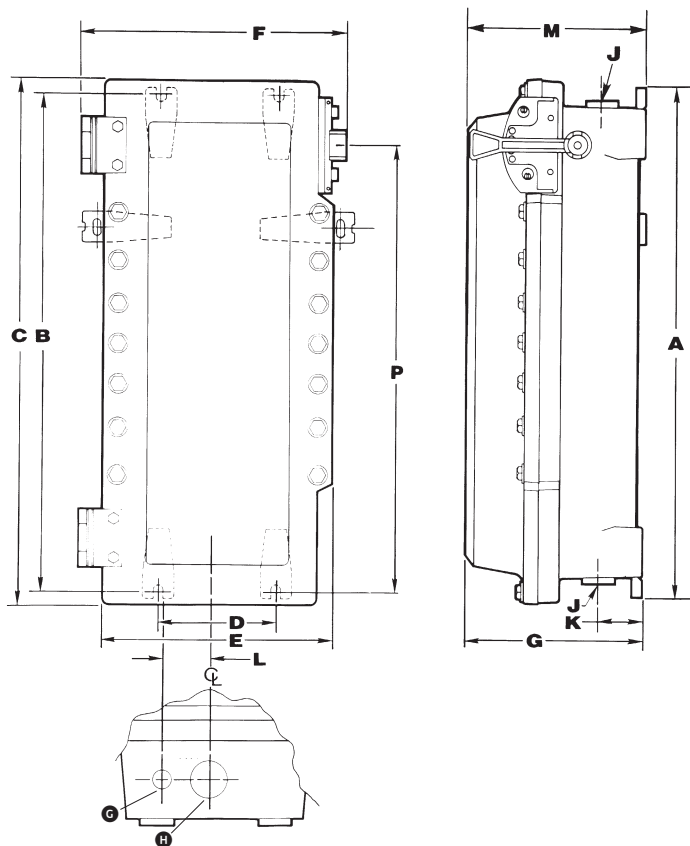
## Ordering information:

To order an enclosure complete with disconnect switch, select the catalog number (based on the necessary rating of the switch) from the listing below.

Enclosures only can be ordered. Select from listings below.

| Amperage           | Maximum horsepower rating |            |            |                       | Enclosure                  |                       |
|--------------------|---------------------------|------------|------------|-----------------------|----------------------------|-----------------------|
|                    | AC polyphase              |            |            | DC using 2 poles only | Cat. # With switch 600 VAC | Cat. # Without switch |
|                    | 200 / 240V                | 440 / 480V | 550 / 600V | 250V max.             |                            |                       |
| <b>Non-fusible</b> |                           |            |            |                       |                            |                       |
| 30                 | 10                        | 20         | 25         | 7.5                   | EBMBB FD W30360            | EBMBB FD              |
| 60                 | 20                        | 40         | 60         | 15                    | EBMBB FD W60360            | EBMBB FD              |
| 100                | 30                        | 75         | 75         | 25                    | EBMBD FD W10360            | EBMBD FD              |
| <b>Fusible</b>     |                           |            |            |                       |                            |                       |
| 30                 | —                         | 5          | 7.5        | 5                     | EBMBB FD W30361            | EBMBB FD              |
| 60                 | —                         | 15         | 15         | 10                    | EBMBB FD W60361            | EBMBB FD              |
| 100                | 15                        | 25         | 30         | 20                    | EBMBD FD W10361            | EBMBD FD              |

## Dimensions<sup>Ⓓ</sup> (in inches):



**J<sup>H</sup>**  
(conduit entry  
trade size)

| Frame size | Cat. # Enclosure only | Enclosure size symbol | A     | B     | C     | D    | E     | F     | G     | J <sup>H</sup><br>Drilled and tapped | With RE | K    | L    | M     | P     |
|------------|-----------------------|-----------------------|-------|-------|-------|------|-------|-------|-------|--------------------------------------|---------|------|------|-------|-------|
| 30A, 60A   | EBMBB                 | B                     | 25.75 | 24.75 | 26.90 | 6.00 | 13.03 | 14.46 | 10.25 | 2"                                   | 1.5"    | 3.25 | 3.13 | 10.25 | 22.00 |
| 100A       | EBMBD                 | D                     | 28.25 | 27.25 | 29.40 | 6.00 | 13.03 | 14.46 | 10.25 | 3"                                   | 2.5"    | 3.25 | 3.13 | 10.25 | 24.50 |

<sup>D</sup> Enclosure not suitable for NEMA 4 or 4X with cover mounted operators.

<sup>E</sup> With S752 or S753 suffix.

<sup>F</sup> Dimensions are approximate, not for construction purposes.

<sup>G</sup> 1" drilled and tapped conduit entry for control conductors supplied with PLG plug (top and bottom).

<sup>H</sup> Conduit entrance(s) for power conductors (top and bottom). All conduit entrance(s) supplied with RE reducer and PLG plug.