

# FLB circuit breakers and enclosures

Cl. I, Div. 1 & 2, Groups C, D  
Cl. II, Div. 1, Groups E, F, G  
Cl. II, Div. 2, Groups F, G  
Cl. III  
NEMA 3, 4, 7CD, 9EFG

Explosionproof  
Dust-ignitionproof  
Raintight  
Wet Locations  
Watertight

3C

## Applications:

FLB circuit breakers and enclosures are used:

- For service entrance, feeder or branch circuit protection for lighting, heating, appliance and motor circuits
- In areas made hazardous due to the presence of flammable vapors, gases or combustible dusts
- In damp, wet or corrosive locations
- Indoors or outdoors at petroleum refineries, chemical and petrochemical plants and other process industry facilities where similar hazards exist
- To provide disconnect means, short circuit protection and thermal time delay overload protection

## Features:

- Semi-cylindrical body shape for maximum strength at lowest practical weight
- Round threaded covers at each end, set at an angle to provide ready access to interior for ease of wiring
- Breaker is operated by an external handle which can be padlocked in either ON or OFF positions; breaker is trip-free of the handle and will open under short circuit or overload even if the handle is locked in the ON position
- Bodies have vertical through feed conduit hubs of sizes given in the listings

## Certifications and compliances:

### NEC/CEC:

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

### UL standard:

- UL698

### CSA standard:

- C22.2 No. 30

### Environmental ratings:

- NEMA/EEMAC 3, 4, 7CD, 9EFG

## Standard materials:

- Bodies, covers and operating handles – copper-free aluminum
- Operating shafts – stainless steel
- Interior parts – sheet steel

## Standard finishes:

- Copper-free aluminum – natural
- Stainless steel – natural
- Sheet steel – zinc electroplate with chromate finish

## Electrical ratings:

- 100 and 225 ampere frame sizes

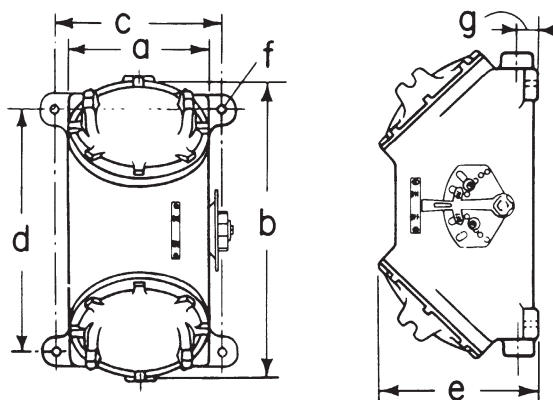
## Options:

| Description                                                                                    | Suffix       |
|------------------------------------------------------------------------------------------------|--------------|
| • Insulated neutral with two connectors.....                                                   | <b>S146</b>  |
| 50, 100, 225A                                                                                  |              |
| • Grounded neutral stud with three connectors.....                                             | <b>S168</b>  |
| 50, 100, 225A                                                                                  |              |
| • Standard breather (Class I, Groups C, D; Class II, Groups E, F, G; Class III).....           | <b>S219</b>  |
| • Standard drain (Class I, Groups C, D; Class II, Groups E, F, G; Class III).....              | <b>S198</b>  |
| • Standard breather and drain (Class I, Groups C, D; Class II, Groups E, F, G; Class III)..... | <b>S198V</b> |
| • Universal breather/drain (Class I, Groups C, D; Class II, Groups F, G).....                  | <b>S454</b>  |
| • Two universal breather/drains (Class I, Groups C, D; Class II, Groups F, G).....             | <b>S454V</b> |

### Auxiliary switches<sup>Ⓐ</sup>:

- 1A/1B (1P2T)..... **S784**
- 2A/2B (2P2T)..... **S785**

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



| Cat. #                                                                                 | a                              | b                              | c                              | d                             | e                              | f                              | g                              |
|----------------------------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------------|--------------------------------|--------------------------------|--------------------------------|
| FLB140, 220, 221 <sup>Ⓓ</sup>                                                          | 5 <sup>1</sup> / <sub>4</sub>  | 10 <sup>1</sup> / <sub>4</sub> | 6 <sup>1</sup> / <sub>4</sub>  | 7 <sup>1</sup> / <sub>4</sub> | 7                              | 7 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>8</sub>  |
| FLB115, 141, 147, 148, 171, 172, 173, 175, 222, 361, 116, 142, 149, 174, 177, 223, 362 | 7 <sup>1</sup> / <sub>2</sub>  | 13 <sup>3</sup> / <sub>8</sub> | 8 <sup>1</sup> / <sub>2</sub>  | 9 <sup>3</sup> / <sub>4</sub> | 9 <sup>1</sup> / <sub>8</sub>  | 7 <sup>1</sup> / <sub>16</sub> | 1 <sup>3</sup> / <sub>4</sub>  |
| FLB224, 225, 264, 265, 267, 346                                                        | 13 <sup>3</sup> / <sub>4</sub> | 22 <sup>1</sup> / <sub>2</sub> | 16 <sup>1</sup> / <sub>4</sub> | 9 <sup>3</sup> / <sub>8</sub> | 15 <sup>1</sup> / <sub>2</sub> | 2 <sup>1</sup> / <sub>32</sub> | 2 <sup>1</sup> / <sub>16</sub> |

<sup>Ⓐ</sup> Not suitable for NEMA 4/EEMAC.

<sup>Ⓑ</sup> Application is limited by circuit breaker design – contact factory.

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

<sup>Ⓓ</sup> With two mounting feet, one at upper right and one at lower left.

# FLB circuit breakers and enclosures

100A frame, thermal magnetic  
120 VAC, 125 VDC; 240 VAC, 250 VDC

Cl. I, Div. 1 & 2, Groups C, D  
Cl. II, Div. 1, Groups E, F, G  
Cl. II, Div. 2, Groups F, G  
Cl. III  
NEMA 3, 4, 7CD, 9EFG

Explosionproof  
Dust-ignitionproof  
Raintight  
Wet Locations  
Watertight

3C

## Ordering information:

To order an enclosure complete with circuit breaker, insert the manufacturer's symbol in the designated position of the catalog number. Symbols are shown in the footnote below.

Enclosures only can be ordered. Select from listings below.

### Non-interchangeable trip

| Circuit breaker |                        | Enclosure |                          |                                |                                                  |
|-----------------|------------------------|-----------|--------------------------|--------------------------------|--------------------------------------------------|
| No. of poles    | Voltage                | Hub size  | Circuit breaker amperage | Cat. # Without circuit breaker | Cat. # With General Electric TEB circuit breaker |
| 1               | 120 VAC or 125 VDC     | 3/4"      | 15                       | FLB220                         | FLB220 TT15 1                                    |
|                 |                        |           | 20                       |                                | FLB220 TT20 1                                    |
|                 |                        |           | 30                       |                                | FLB220 TT30 1                                    |
|                 |                        |           | 40                       |                                | FLB220 TT40 1                                    |
|                 |                        |           | 50                       |                                | FLB220 TT50 1                                    |
| 2               | 240 VAC or 125-250 VDC | 1"        | 15                       | FLB221                         | FLB221 TT15 2                                    |
|                 |                        |           | 20                       |                                | FLB221 TT20 2                                    |
|                 |                        |           | 30                       |                                | FLB221 TT30 2                                    |
|                 |                        |           | 40                       |                                | FLB221 TT40 2                                    |
|                 |                        |           | 50                       |                                | FLB221 TT50 2                                    |
|                 |                        | 1 1/2"    | 70                       | FLB223                         | FLB223 TT70 2                                    |
|                 |                        |           | 90                       |                                | FLB223 TT90 2                                    |
|                 |                        |           | 100                      |                                | FLB223 TT100 2                                   |
|                 |                        | 1 1/4"    | 15                       | FLB222                         | FLB222 TT15 3                                    |
|                 |                        |           | 20                       |                                | FLB222 TT20 3                                    |
|                 |                        |           | 30                       |                                | FLB222 TT30 3                                    |
|                 |                        |           | 40                       |                                | FLB222 TT40 3                                    |
|                 |                        |           | 50                       |                                | FLB222 TT50 3                                    |
| 3               | 240 VAC                | 1 1/2"    | 70                       | FLB223                         | FLB223 TT70 3                                    |
|                 |                        |           | 90                       |                                | FLB223 TT90 3                                    |
|                 |                        |           | 100                      |                                | FLB223 TT100 3                                   |

# FLB circuit breakers and enclosures

100A frame, thermal magnetic  
120-480 VAC, 125-250 VDC

Cl. I, Div. 1 & 2, Groups C, D  
Cl. II, Div. 1, Groups E, F, G  
Cl. II, Div. 2, Groups F, G  
Cl. III  
NEMA 3, 4, 7CD, 9EFG

Explosionproof  
Dust-ignitionproof  
Raintight  
Wet Locations  
Watertight

3C

## Ordering information (continued):

| Non-interchangeable trip |                    |               |                          |                                |                                               |                                                  |    |        |               |               |
|--------------------------|--------------------|---------------|--------------------------|--------------------------------|-----------------------------------------------|--------------------------------------------------|----|--------|---------------|---------------|
| Circuit breaker          |                    | Enclosure     |                          |                                |                                               |                                                  |    |        |               |               |
| No. of poles             | Voltage            | Hub size      | Circuit breaker amperage | Cat. # Without circuit breaker | Cat. # With Cutler-Hammer EHD circuit breaker | Cat. # With General Electric TED circuit breaker |    |        |               |               |
| 2                        | 480 VAC or 250 VDC | 1"            | 15                       | FLB140                         | FLB140 WT15 2                                 | FLB140 TT15 2                                    |    |        |               |               |
|                          |                    |               | 20                       |                                | FLB140 WT20 2                                 | FLB140 TT20 2                                    |    |        |               |               |
|                          |                    |               | 30                       |                                | FLB140 WT30 2                                 | FLB140 TT30 2                                    |    |        |               |               |
|                          |                    |               | 40                       |                                | FLB140 WT40 2                                 | FLB140 TT40 2                                    |    |        |               |               |
|                          |                    |               | 50                       |                                | FLB140 WT50 2                                 | FLB140 TT50 2                                    |    |        |               |               |
|                          |                    | 1½"           | 70                       | FLB142                         | FLB142 WT70 2                                 | FLB142 TT70 2                                    |    |        |               |               |
|                          |                    |               | 90                       |                                | FLB142 WT90 2                                 | FLB142 TT90 2                                    |    |        |               |               |
|                          |                    |               | 100                      |                                | FLB142 WT100 2                                | FLB142 TT100 2                                   |    |        |               |               |
|                          |                    |               | 3                        |                                | 480 VAC                                       | 1¼"                                              | 15 | FLB141 | FLB141 WT15 3 | FLB141 TT15 3 |
|                          |                    |               |                          |                                |                                               |                                                  | 20 |        | FLB141 WT20 3 | FLB141 TT20 3 |
| 30                       | FLB141 WT30 3      | FLB141 TT30 3 |                          |                                |                                               |                                                  |    |        |               |               |
| 40                       | FLB141 WT40 3      | FLB141 TT40 3 |                          |                                |                                               |                                                  |    |        |               |               |
| 50                       | FLB141 WT50 3      | FLB141 TT50 3 |                          |                                |                                               |                                                  |    |        |               |               |
| 1½"                      | 70                 | FLB142        |                          | FLB142 WT70 3                  |                                               | FLB142 TT70 3                                    |    |        |               |               |
|                          | 90                 |               |                          | FLB142 WT90 3                  |                                               | FLB142 TT90 3                                    |    |        |               |               |
|                          | 100                |               |                          | FLB142 WT100 3                 |                                               | FLB142 TT100 3                                   |    |        |               |               |

# FLB circuit breakers and enclosures

100A frame, thermal magnetic  
600 VAC, 250 VDC

Cl. I, Div. 1 & 2, Groups C, D  
Cl. II, Div. 1, Groups E, F, G  
Cl. II, Div. 2, Groups F, G  
Cl. III  
NEMA 3, 4, 7CD, 9EFG

Explosionproof  
Dust-ignitionproof  
Raintight  
Wet Locations  
Watertight

3C

## Ordering information (continued):

### Non-interchangeable trip

| Circuit breaker |                    | Enclosure |                          |                                |                                               |     |    |        |               |
|-----------------|--------------------|-----------|--------------------------|--------------------------------|-----------------------------------------------|-----|----|--------|---------------|
| No. of poles    | Voltage            | Hub size  | Circuit breaker amperage | Cat. # Without circuit breaker | Cat. # With Cutler-Hammer FDB circuit breaker |     |    |        |               |
| 2               | 600 VAC or 250 VDC | 1¼"       | 15                       | FLB115                         | FLB115 WT15 2                                 |     |    |        |               |
|                 |                    |           | 20                       |                                | FLB115 WT20 2                                 |     |    |        |               |
|                 |                    |           | 30                       |                                | FLB115 WT30 2                                 |     |    |        |               |
|                 |                    |           | 40                       |                                | FLB115 WT40 2                                 |     |    |        |               |
|                 |                    |           | 50                       |                                | FLB115 WT50 2                                 |     |    |        |               |
|                 |                    | 1½"       | 70                       | FLB116                         | FLB116 WT70 2                                 |     |    |        |               |
|                 |                    |           | 90                       |                                | FLB116 WT90 2                                 |     |    |        |               |
|                 |                    |           | 100                      |                                | FLB116 WT100 2                                |     |    |        |               |
|                 |                    |           | 3                        |                                | 600 VAC                                       | 1¼" | 15 | FLB115 | FLB115 WT15 3 |
|                 |                    |           |                          |                                |                                               |     | 20 |        | FLB115 WT20 3 |
| 30              | FLB115 WT30 3      |           |                          |                                |                                               |     |    |        |               |
| 40              | FLB115 WT40 3      |           |                          |                                |                                               |     |    |        |               |
| 50              | FLB115 WT50 3      |           |                          |                                |                                               |     |    |        |               |
| 1½"             | 70                 | FLB116    |                          | FLB116 WT70 3                  |                                               |     |    |        |               |
|                 | 90                 |           |                          | FLB116 WT90 3                  |                                               |     |    |        |               |
|                 | 100                |           |                          | FLB116 WT100 3                 |                                               |     |    |        |               |

### Non-interchangeable trip

| Circuit breaker |         | Enclosure |                          |                                |                                                  |
|-----------------|---------|-----------|--------------------------|--------------------------------|--------------------------------------------------|
| No. of poles    | Voltage | Hub size  | Circuit breaker amperage | Cat. # Without circuit breaker | Cat. # With General Electric TED circuit breaker |
| 3               | 600 VAC | 1¼"       | 15                       | FLB361                         | FLB361 TT15 3                                    |
|                 |         |           | 20                       |                                | FLB361 TT20 3                                    |
|                 |         |           | 30                       |                                | FLB361 TT30 3                                    |
|                 |         |           | 40                       |                                | FLB361 TT40 3                                    |
|                 |         |           | 50                       |                                | FLB361 TT50 3                                    |
|                 |         | 1½"       | 70                       | FLB362                         | FLB362 TT70 3                                    |
|                 |         |           | 90                       |                                | FLB362 TT90 3                                    |
|                 |         |           | 100                      |                                | FLB362 TT100 3                                   |

# FLB circuit breakers and enclosures

225A frame, thermal magnetic  
600 VAC, 250 VDC

Cl. I, Div. 1 & 2, Groups C, D  
Cl. II, Div. 1, Groups E, F, G  
Cl. II, Div. 2, Groups F, G  
Cl. III  
NEMA 3, 4, 7CD, 9EFG

Explosionproof  
Dust-ignitionproof  
Raintight  
Wet Locations  
Watertight

3C

## Ordering information (continued):

### Non-interchangeable trip

| Circuit breaker |                    |          | Enclosure                |                                |                                                            |
|-----------------|--------------------|----------|--------------------------|--------------------------------|------------------------------------------------------------|
| No. of poles    | Voltage            | Hub size | Circuit breaker amperage | Cat. # Without circuit breaker | Cat. # With Cutler-Hammer JDB <sup>®</sup> circuit breaker |
| 2               | 600 VAC or 250 VDC | 2½"      | 125                      | FLB264                         | FLB264 WT125 2                                             |
|                 |                    |          | 150                      |                                | FLB264 WT150 2                                             |
|                 |                    |          | 175                      |                                | FLB264 WT175 2                                             |
|                 |                    |          | 200                      |                                | FLB264 WT200 2                                             |
|                 |                    |          | 225                      |                                | FLB264 WT225 2                                             |
| 3               | 600 VAC            | 2½"      | 125                      | FLB264                         | FLB264 WT125 3                                             |
|                 |                    |          | 150                      |                                | FLB264 WT150 3                                             |
|                 |                    |          | 175                      |                                | FLB264 WT175 3                                             |
|                 |                    |          | 200                      |                                | FLB264 WT200 3                                             |
|                 |                    |          | 225                      |                                | FLB264 WT225 3                                             |

### Non-interchangeable trip

| Circuit breaker |         |          | Enclosure                |                                |                                                  |
|-----------------|---------|----------|--------------------------|--------------------------------|--------------------------------------------------|
| No. of poles    | Voltage | Hub size | Circuit breaker amperage | Cat. # Without circuit breaker | Cat. # With General Electric TFJ circuit breaker |
| 3               | 600 VAC | 2½"      | 125                      | FLB224 or FLB346               | FLB224 TT125 3                                   |
|                 |         |          | 150                      |                                | FLB224 TT150 3                                   |
|                 |         |          | 175                      |                                | FLB224 TT175 3                                   |
|                 |         |          | 200                      |                                | FLB224 TT200 3                                   |
|                 |         |          | 225                      |                                | FLB224 TT225 3                                   |

### Interchangeable trip

| Circuit breaker |                    |          | Enclosure                |                                |                                                           |                                                  |
|-----------------|--------------------|----------|--------------------------|--------------------------------|-----------------------------------------------------------|--------------------------------------------------|
| No. of poles    | Voltage            | Hub size | Circuit breaker amperage | Cat. # Without circuit breaker | Cat. # With Cutler-Hammer JD <sup>®</sup> circuit breaker | Cat. # With General Electric TFK circuit breaker |
| 2               | 600 VAC or 250 VDC | 3"       | 125                      | FLB267                         | FLB267 WT125 2                                            |                                                  |
|                 |                    |          | 150                      |                                | FLB267 WT150 2                                            |                                                  |
|                 |                    |          | 175                      |                                | FLB267 WT175 2                                            |                                                  |
|                 |                    |          | 200                      |                                | FLB267 WT200 2                                            |                                                  |
|                 |                    |          | 225                      |                                | FLB267 WT225 2                                            |                                                  |
| 3               | 600 VAC            | 3"       | 125                      | FLB267 or FLB225               | FLB267 WT125 3                                            | FLB225 TT125 3                                   |
|                 |                    |          | 150                      |                                | FLB267 WT150 3                                            | FLB225 TT150 3                                   |
|                 |                    |          | 175                      |                                | FLB267 WT175 3                                            | FLB225 TT175 3                                   |
|                 |                    |          | 200                      |                                | FLB267 WT200 3                                            | FLB225 TT200 3                                   |
|                 |                    |          | 225                      |                                | FLB267 WT225 3                                            | FLB225 TT225 3                                   |

<sup>®</sup>Formerly JB.

<sup>®</sup>Formerly KB.