

Typical F-Frame Breaker
F-Frame Breaker with Electronic Trip Unit



F-Frame (10–225 Amperes)

Product Description

- All Eaton's F-Frame circuit breakers are HACR rated
- All circuit breakers 10 through 30 amperes are suitable for HID (high intensity discharge) use
- All F-Frame circuit breakers are suitable for reverse feed use

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2.4

Molded Case Circuit Breakers

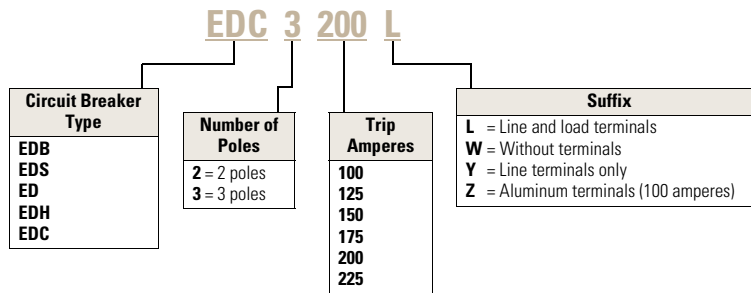
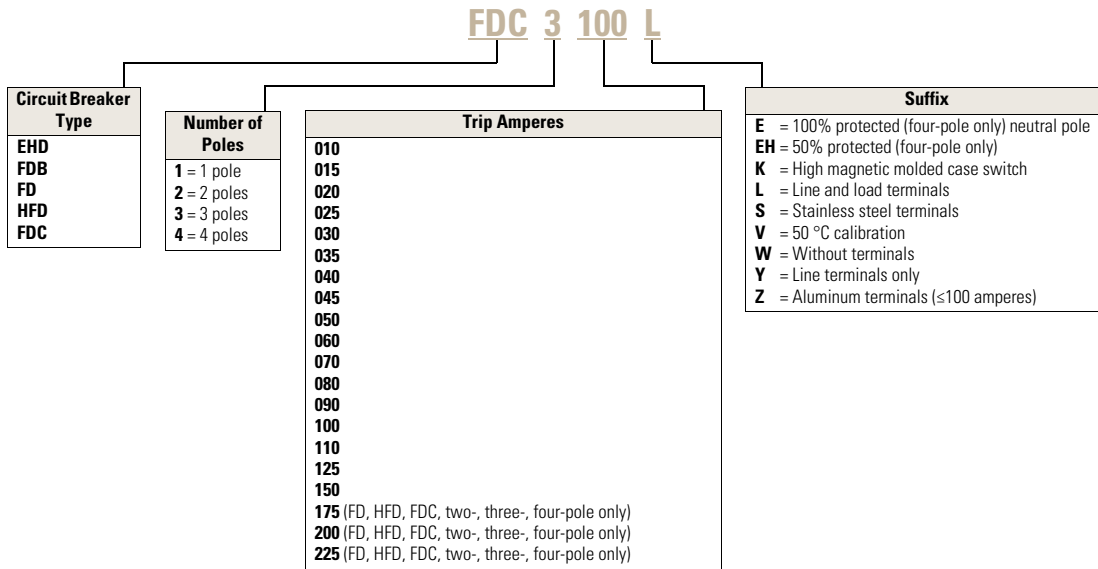
Series C

Catalog Number Selection

This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

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FD-Frame Circuit Breakers with Thermal-Magnetic Trip Unit Technology



**Type HFD Thermal-Magnetic Circuit Breakers with Non-Interchangeable Trip Units
(Includes Terminals on Load End Only)**

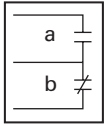
| Maximum Continuous Ampere Rating at 40 °C | 277 Vac Maximum, 125 Vdc 65 kAIC at 277 Vac | 600 Vac Maximum, 250 Vdc 65 kAIC at 480 Vac | | |
|--|--|--|---------------------------------|--------------------------------|
| | Single-Pole Catalog Number | Two-Pole Catalog Number | Three-Pole Catalog Number | Four-Pole Catalog Number |
| 15 | HFD1015 ① | HFD2015 | HFD3015 | HFD4015 |
| 20 | HFD1020 ① | HFD2020 | HFD3020 | HFD4020 |
| 25 | HFD1025 | HFD2025 | HFD3025 | HFD4025 |
| 30 | HFD1030 | HFD2030 | HFD3030 | HFD4030 |
| 35 | HFD1035 | HFD2035 | HFD3035 | HFD4035 |
| 40 | HFD1040 | HFD2040 | HFD3040 | HFD4040 |
| 45 | HFD1045 | HFD2045 | HFD3045 | HFD4045 |
| 50 | HFD1050 | HFD2050 | HFD3050 | HFD4050 |
| 60 | HFD1060 | HFD2060 | HFD3060 | HFD4060 |
| 70 | HFD1070 | HFD2070 | HFD3070 | HFD4070 |
| 80 | HFD1080 | HFD2080 | HFD3080 | HFD4080 |
| 90 | HFD1090 | HFD2090 | HFD3090 | HFD4090 |
| 100 | HFD1100 | HFD2100 | HFD3100 | HFD4100 |
| 110 | HFD1110 | HFD2110 | HFD3110 | HFD4110 |
| 125 | HFD1125 | HFD2125 | HFD3125 | HFD4125 |
| 150 | HFD1150 | HFD2150 | HFD3150 | HFD4150 |
| 175 | — | HFD2175 | HFD3175 | HFD4175 |
| 200 | — | HFD2200 | HFD3200 | HFD4200 |
| 225 | — | HFD2225 | HFD3225 | HFD4225 |

Note

① UL listed for SWD applications, see NEC Article 240.83(d).

Auxiliary Switch

Auxiliary Switch



G-Frame Auxiliary Switch (RH Only)

| Electrical Ratings | | | Contact Arrangement | Factory Suffix | Catalog Number ^{①②} |
|--------------------|-----------|---------|---------------------|----------------|------------------------------|
| Volts | Frequency | Amperes | | | |
| 240 | 50/60 Hz | 6 | 1a/1b | A3 | 1288C74G03 |
| 240 | 50/60 Hz | 6 | 2a/2b | A6 | 1288C73G03 |

F-Frame and HMCP (F) Auxiliary Switch

| Number of Contacts A and B | Mounting Location (Pole) | Factory Mounted Connection Type and Location 18-Inch (457.2 mm) Pigtail Leads | | | | Factory Installation Kit ^④ | |
|----------------------------|-------------------------------|---|---------------------------------|-----------------------------|--|---------------------------------------|-------------------------------|
| | | Same Side Suffix Number | Rear ^③ Suffix Number | Opposite Side Suffix Number | Terminal Block Same Side Suffix Number | Pigtail Leads Catalog Number | Terminal Block Catalog Number |
| | | 1 | Left ^⑤ | A01 | A02 | A03 | A04 |
| | Left ^⑤ | A15 ^⑦ | A16 ^⑦ | A17 ^⑦ | — | E1X1PK | — |
| | Right or Neutral ^⑥ | A05 | A06 | A07 | A08 | A1X1PK | A1X1RTK ^⑧ |
| | Right or Neutral ^⑥ | A18 ^⑦ | A19 ^⑦ | A20 ^⑦ | — | — | — |
| 2 | Left ^⑤ | A09 | A10 | — | A11 | A2X1LPK | A2X1LTK |
| | Left ^⑤ | A21 ^⑦ | A22 ^⑦ | — | — | E2X1LPK | — |
| | Right or Neutral ^⑥ | A12 | A13 | — | A14 | A2X1RPK | A2X1RTK ^⑧ |
| | Right or Neutral ^⑥ | A23 ^⑦ | A24 ^⑦ | — | — | E2X1RPK | — |

F-Frame with Electronic Trip Unit Auxiliary Switch ^⑨

| Number of Contacts A and B | Mounting Location (Pole) | Factory Mounted Connection Type and Location 18-Inch (457.2 mm) Pigtail Leads | | | | Factory Installation Kit ^④ | |
|----------------------------|--------------------------|---|---------------------------------|-----------------------------|--|---------------------------------------|-------------------------------|
| | | Same Side Suffix Number | Rear ^③ Suffix Number | Opposite Side Suffix Number | Terminal Block Same Side Suffix Number | Pigtail Leads Catalog Number | Terminal Block Catalog Number |
| | | Trip Unit Type 310+ | | | | | |
| 1 | Right | A30 | A31 | A32 | — | — | — |
| Trip Unit Type 210+ | | | | | | | |
| 1 | Right | A33 | A34 | A35 | — | — | — |

J-Frame and HMCP (J) Auxiliary Switch

| Number of Contacts A and B | Mounting Location (Pole) | Factory Mounted Connection Type and Location 18-Inch (457.2 mm) Pigtail Leads | | | | Field Mounted Factory Installation Kit ^⑩ | |
|----------------------------|--------------------------|---|---------------------------------|-----------------------------|--|---|-------------------------------|
| | | Same Side Suffix Number | Rear ^③ Suffix Number | Opposite Side Suffix Number | Terminal Block Same Side Suffix Number | Pigtail Leads Catalog Number | Terminal Block Catalog Number |
| | | 1 | Left | A01 | A02 | A03 | A04 |
| | Right ^⑩ | A05 | A06 | A07 | A08 | A1X2PK | A1X2RTK ^⑩ |
| 2 | Left | A09 | A10 | — | A11 | A2X2PK | A2X2LTK |
| | Right ^⑩ | A12 | A13 | — | A14 | A2X2PK | A2X2RTK ^⑩ |

Notes

- ① Includes 24-inch external pigtail leads, 18 AWG (16–0.010).
- ② A maximum of two internal accessories may be mounted in a three-pole circuit breaker. Suitable for mounting in right pole only of two- or three-pole breaker.
- ③ Standard pigtail lead exit location.
- ④ Not listed with Underwriters Laboratories; for field installation.
- ⑤ Pigtail wire size: 18 AWG (0.82 mm²).
- ⑥ Not for use on F-Frame with electronic trip unit.
- ⑦ 125 volts (max.), 50/60 Hz switch for use in electronic circuit of 100 micro amperes and 15 Vdc minimum.
- ⑧ Not for use on four-pole circuit breakers.
- ⑨ Only for use on three-pole F-Frame breakers with electronic trip unit. Installation auxiliary switch for FD electronic breakers on right pole must be performed at breaker factory.
- ⑩ Listed with Underwriters Laboratories for field installation or interchangeable trip unit breakers under E64983.
- ⑪ Standard mounting location—leads exit rear of breaker.