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Reverse Fed Breakers

A breaker is typically powered by the feed that is connected to the terminals which is nearest the handle when it is in the “ON” position. The term “to reserve feed a circuit breaker” means the incoming power supply conductors for a circuit breaker are connected to the terminals on the “OFF” side of the breaker. Due to physical equipment arrangements in panelboards and switchboards, it may be desired to connect conductors in this manner. However, circuit breakers must be UL tested and Listed accordingly for this application. Therefore, it is imperative that the proper circuit breaker is selected and applied.

The main reason for the proper circuit breaker selection is safety. Although electrical equipment should not be worked on while any voltage is present, a reverse feed circuit breaker would have the bottom end of the circuit breaker live even when the circuit breaker is in the “OFF” or “TRIPPED” position. This would mean that a voltage potential would exist at the trip unit, the load terminals and the circuit breaker’s mechanism. Due to this fact, all frames intended for field installable trip units and internal accessories are marked “LINE” and “LOAD” and not permitted to be used in reverse feed applications.

A circuit breaker that IS acceptable to be reverse feed will have the following characteristics:

1. The circuit breaker will not have “”LINE” and “”LOAD” marked on the top and bottom ends of the circuit breaker.
2. Factory Sealed:
 - The circuit breaker’s cover will be sealed to the circuit breaker’s base. For a circuit breaker that has a primary and a secondary cover; the primary cover will be sealed to the base of the circuit breaker.
 - For a circuit breaker with a seal between the trip unit and the frame, the trip unit may not be changed in the field

Note: If any circuit breaker seal is broken, the warranty will be voided.

Attached is a list of circuit breakers, including versions with integral ground fault protection, that are UL Listed for reverse feed applications.

Reverse Feed Applications Eaton's Circuit Breakers

(A) The following circuit breaker types ARE suitable for reverse feed:

Thermal Magnetic Quicklag & Residential Breakers

BW, BWH, BWHH, CSR, CSH

CA, CAH, CC, CCH, CHH

EB, EHB

FB, HFB, FB TRI-PAC

JA

JB

LBB, DA

LAB

LC, HLC etc.

MC, HMC etc.; MDS

NC, HNC etc.

PC, PCC, PCCG, PCF, PCCF etc.

SPB

FCL, LCL

SPCB

GB, GHB, GC, GHC, GD, GD-K

EDB, EDS, ED, EDH, EDC

EHD, EHD-K, FDB, FD, HFD, FDC, FD-K

FDE, HFDE, FDCE

JDB, HJDB, JDCB, JDB-K, HJDB-K

DK, DK-K

KDB, HKDB, KDCB, CKDB, CHKDB

KDB-K, HKDB-K

LDB, HLDB, LDCB, CLDB, CHLDB, CLDCB

LDB-K, HLDB-K

MDLB, HMDLB, CMDLB, CHMDLB

MDLB-K, HMDLB-K

ND, HND, NDC, NDU, CND, CHND, CNDC

ND-K, HND-K, NGS, NGH, NGC, NGU, NGK

RD, RDC, CRD, CRDC, RD-K, RD-N, RGH, RGC,

RGK

E125, EGB, EGE, EGS, EGH, EGC

E125K, EGK switches

J250, JGE, JGS, JGH, JGC, JGU, JGX sealed
breakers

J250K, JGK switches

L630, LGE, LGS, LGH, LGC, LGU, LGX sealed
breakers

L630K, LGK switches

Magnum DS, Magnum SB

Series NRX

(B) The following circuit breaker types ARE NOT suitable for reverse feed:

GFCI, GFEP

AFCI

BABRP, BABSP, BRRP, CLRP

GHBS, GBHS, GHQRSP

KA, HKA

KB, HKB

LA, HLA

LB, HLB

MA, HMA, MD

NB, HNB

PB

LA, NB, PB TRI-PAC's

JD, HJD, JDC,

KD, HKD, KDC, CKD, CHKD

LD, HLD, LDC

MDL, HMDL

JGE, JGS, JGH, JGC, JGU, JGX frames with

interchangeable trip unit

LGE, LGS, LGH, LGC, LGU with interchangeable trip
unit

GMCP

HMCP, HMCPE

ELFD, ELHFD, ELFDC

ELKD, ELHKD, ELKDC

ELJD, ELHJD, ELJDC

GHBGFEP, GHCGFEP