

Compact & High performance

Compact models with unified dimensions meeting UL489 480V and IEC 440V requirements

Arc and gas flow control technology

Effect of G-TWIN technical innovation (250AF example)

Compact size meeting UL489 480V requirements

Current model
Rated voltage 240V
SG203CUL
(W105 x H165 x D60 mm)

Current model
Rated voltage 480V
BU3JLC
(W105 x H256 x D103 mm)

Rated voltage 480V
BW250PAGU
(W105 x H161 x D68 mm)

Miniaturization rate (Volume ratio) -53%

Effect of ablation breaking technology

Graph: Arc energy vs Short-circuit current. G-TWIN shows a decrease in arc energy by 30% compared to the current model.

Magnetic yoke arrangement
 • An increase in the repulsion force of the moving contact at initiation of contact opening

Narrow slit resin
 • Increased arc voltage due to narrow slit effect
 • Increased arc voltage and high-speed moving contact opening by ablation effect
 • Suppression of internal pressure rise by adjusting the narrow slit width

Moving contact cover
 • Mixing prevention at the bottom of moving contact

Safety & easy maintenance

Satisfying the latest IEC 60947-2 requirements with improved maintenance

Newly developed earth leakage detection circuit

New three-phase power supply circuit functions in phase-loss state

Adoption of changeover switch for dielectric test

The revised IEC stipulates that the ELCB should trip when earth-leakage occurs even in phase loss state in three-phase system. The G-TWIN Series meets this requirement.

High operation rate can be obtained since the removal of ELCB wiring is not required at dielectric test during inspection (available for 125AF or larger).

1st one in the world

α-TWIN (Current model) G-TWIN

ELCB internal wiring diagram

Protection device for overload and short-circuit ZCT

LINE 5 3 1 LOAD 6 4 2

Tip coil ELR unit Changeover switch for megger test



FUJI MCCB and ELCB GLOBAL TWIN



Fuji Electric Corp. of America

USEH132

Easy to use

Pursuing user-friendly products

Unifying and reducing the types of internal accessories

- Sharing internal accessories of 125/250AF breakers.
- The shunt trip (F) and undervoltage trip (R) devices can be installed inside the G-TWIN Series ELCB.
- The number of types of internal accessories of 400/630/800AF has been significantly reduced.

ELCB with shunt trip device

MCCB with ELR unit

G-TWIN 125/250 AF

Streamlined appearance and internal accessories incorporated G-TWIN

Number of types of internal accessories [No. of types]

| AF | α-TWIN | G-TWIN |
|---------|--------|--------|
| 100/125 | 8 | 16 |
| 225/250 | 8 | 8 |
| 400 | | |
| 600/630 | | 26 |
| 800 | | 6 |

Ecology

Advanced environmental technology Conforming to the RoHS Directive

The G-TWIN series is designed to lower environmental impact.

- Recycling**
• For easier recycling, all major parts are marked with the names of the materials used.
- Conforming to the RoHS Directive**
• Lead-free (Pb-free) solder is used.
• Free of hexavalent chromium (Cr⁶⁺-free)
- Cadmium-free (Cd-free)**
• Cd-free contacts are used.

Moving contact

Stationary contact

Cadmium-free contact material

Global standard

IEC IEC 60947-2

EN Europe

China GB

Japan JIS

UL/CSA North America

Year 1992: JIS C 8370 MCCB, JIS C 8371 ELCB

Year 1999: JIS C 8201-2

Year 2004: JIS C 8201-2-1 MCCB, JIS C 8201-2-2 ELCB

UL/CSA North America: UL489, CAN/CSA C22.2 NO.5, UL LISTED

CE model: EN 60947-2, JIS C 8201-2, CE marking (TUV)

CCC model: GB 14048.2 (China), CCC approved

JIS model: JIS C 8201-2, JIS C 8370, JIS C 8371

The G-TWIN series is a global breaker series that satisfies all major standards.

G-TWIN Global series: UL mark (cUL) + CE marking (TUV) + CCC marking + JIS

UL489 model: UL 489, CAN/CSA C22.2 NO.5, IEC 60947-2, JIS C 8201-2, UL mark (cUL) + CE marking (TUV)

G-TWIN Standard series: CE marking (TUV) + CCC approved + JIS

IEC 60947-2, JIS C 8201-2-1, 2 (Ann. 1, 2), EN 60947-2 (CE marking), GB 14048.2 (CCC)

Addition of ampere frame sizes in G-TWIN Global series: 125, 250, 400, 630, 800

Fuji Electric Corp. of America URL: <http://www.fujielectric.com>

Information in this catalog is subject to change without notice.

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MCCB

G-TWIN global series

Available soon

Available soon

Table with columns for Ampere frame (50A, 100A, 125A, 250A, 400A, 630A, 800A), Type (SA52RCUL, SA53RCUL, EA102CUL, EA103CUL, BW125JAGU, BW125RAGU, BW250EAGU, BW250JAGU, BW250RAGU, BW400EAGU, BW400SAGU, BW400RAGU, BW400HAGU, BW630RAGU, BW630HAGU, BW800RAGU, BW800HAGU), Pole, Rated current, Phase and wire, Isolation compliant, Rated insulation voltage, Rated breaking capacity, Standard certified, and Dimensions.

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ELCB

G-TWIN global series

Table with columns for Ampere frame (50A, 100A, 125A, 250A, 400A), Type (EG53RCUL, EG102CUL, EG103CUL, EW125JAGU, EW125RAGU, EW250JAGU, EW250RAGU, EW400SAGU, EW400RAGU, EW400HAGU), Pole, Rated current, Phase and wire, Isolation compliant, Rated voltage, Type of earth leakage trip action, Instantaneous trip type, Instantaneous/trip type, Rated breaking capacity, Standard certified, and Dimensions.

●: Approved -: Not approved Note: * Electrical Appliance and Material Safety Law of Japan