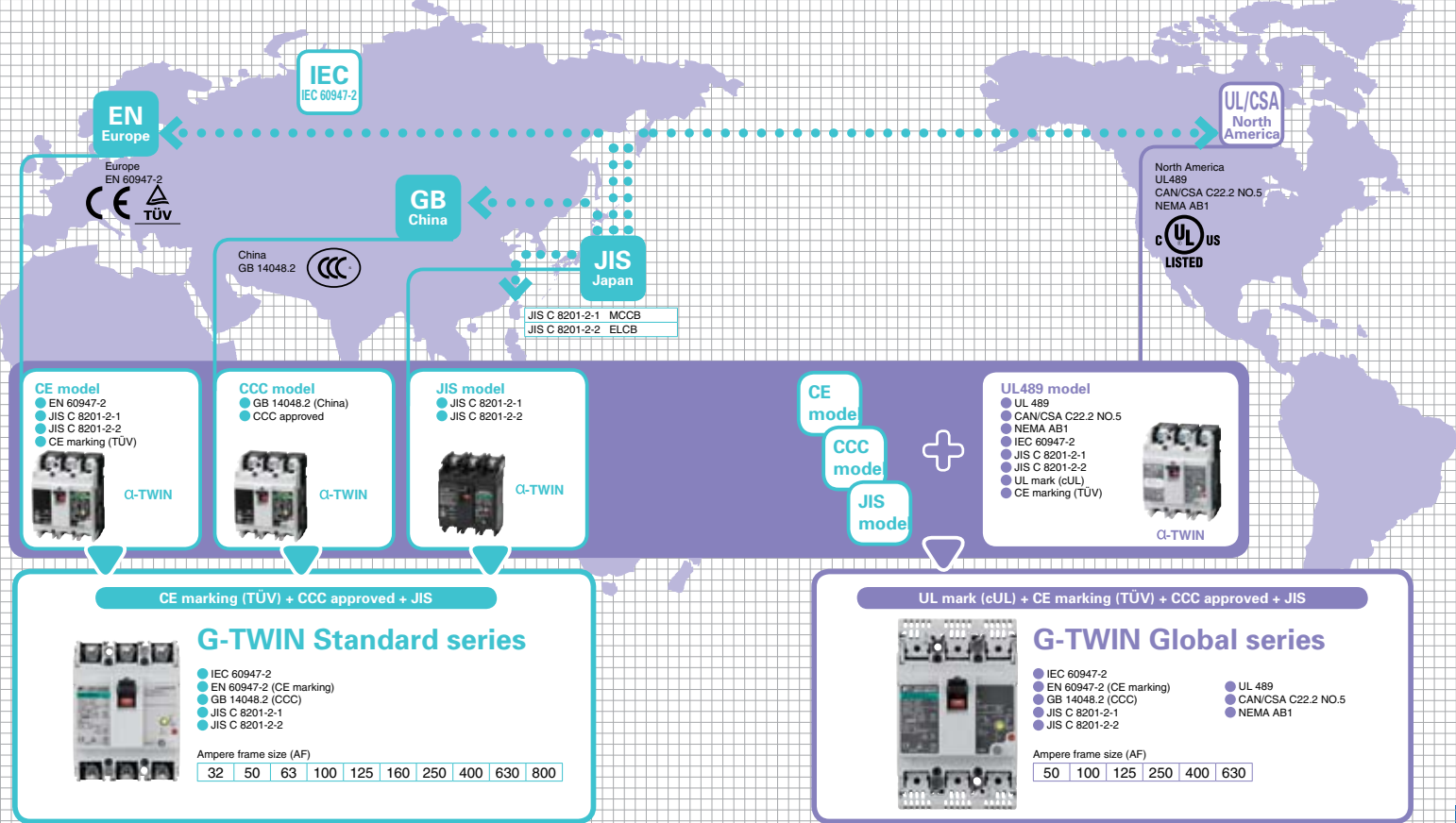


GLOBAL-TWIN
Conforming to IEC & local Standards

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



FUJI Earth Leakage Circuit Breakers



ETH132

Fuji Electric FA Components & Systems Co., Ltd.

Compact & High performance

Compact size meeting UL489 480V requirements & same dimensions as MCCB

ELCB Rated voltage 480V (W105xH181xD68mm)

Same dimintions

MCCB Rated voltage 480V (W105xH181xD68mm)

Technical innovation

Arc and gas flow control technology

Effect of "ablation breaking technology"

Decrease by 30%!

Narrow slit resin

Moving contact cover

Magnetic yoke arrangement

Ecology

Advanced environmental technology

Conforming to the RoHS Directive

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

Recycling

Conforming to the RoHS Directive

Lead-free (Pb-free) solder is used.

Free of hexavalent chromium (Cr^{VI}-free) (125 to 800AF)

Cadmium-free contact material

Usefulness Leading the way in user-friendliness

Unifying and reducing the types of internal accessories

32 to 100AF

Internal and external accessories

A wider range of customer-mountable accessories

ELCB

Undervoltage trip device

Shunt trip device

Auxiliary switch

Alarm switch

125 to 250AF

Sharing internal accessories of 125/160/250AF breakers.

Number of types of internal accessories

AF	G-TWIN	G-TWIN
125	8	8
160/250	8	8

ELCB

Shunt trip device

Undervoltage trip device

Auxiliary switch

Alarm switch

Earth Alarm switch

400 to 800AF

The number of types of internal accessories of 400/630/800AF has been significantly reduced.

Number of types of internal accessories

AF	G-TWIN	G-TWIN
400	26	6
630	26	6
800	26	6

ELCB

Shunt trip device

Undervoltage trip device

Auxiliary switch

Alarm switch

The Twin Breakers have advanced to an entirely new stage.

Conforming to IEC & local Standards

Conforming to certifications and standards in major world markets Expanded frame sizes in G-TWIN Global Series

Compact & High performance

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

GLOBAL TWIN History

1990 TWIN Breaker 1992 Super TWIN 1995 Super 60 2001 G-TWIN 2006 G-TWIN

FUJI MCCB and ELCB GLOBAL TWIN

Ecology

Lower environmental impact

Advanced green engineering and energy-saving support

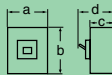
Conforming to the RoHS Directive

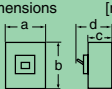
Usefulness

Leading the way in user-friendliness

Fuji Electric launched the Twin Breaker Series to world markets in 1990, in which molded case circuit breaker (MCCB) and earth leakage circuit breaker (ELCB) types were unified in external dimensions for the first time in the world. The Twin Breaker Series was highly evaluated and gained strong support, and the concept of Twin Breakers was established as Japan's de facto standards for MCCBs and ELCBs. In 1992, Fuji Electric released the Super Twin Breaker Series, which enabled user installation of internal accessories for the first time in Japan. In 1995, Fuji Electric released the Super 60 Series and advanced modularization via uniform external dimensions. In 2001, Fuji Electric launched the G-TWIN Series to further advance the miniaturization and modularization of economic types with 100A frame or less as Japan's first multi-standard circuit breakers satisfying domestic and international standards. Since then, Fuji Electric has been making further product improvements by predicting market trends. In recent years, market globalization has increasingly accelerated. At the end of 2004, the Japanese Industrial Standards (JIS) were aligned with the IEC standards, and the globalization in this field has been further accelerated. Based on the Twin Breaker Series, Fuji Electric has expanded the range of its products conforming to and approved by international standards for global markets, always advanced the innovative development of fundamental technologies in response to the market demand, and developed the G-TWIN Series of MCCBs and ELCBs.

*1 4-pole, 250A Breakers cannot be made. *2 Contact FUJI.

HG series			50AF	100AF	225AF	
CNS5422(JISC8201-2-2 Ann 2)						
Type			HG53B	HG103B	HG203B	
Pole			3	3	3	
Rated current			In [A] 15, 20, 30, 40, 50	15, 20, 30, 40, 50, 60, 75, 100	125, 150, 175, 200, 225	
Rated impulse withstand voltage			Uimp [kV] –			
Isolation compliant			–			
Rated voltage			Ue [V AC] 100-230-440			
Instantaneous trip type		Rated sensitive current [mA]	30, 100/200/500 changeover			
		Tripping time [s]	0.1			
Rated frequency			[Hz] 50-60			
Rated breaking capacity Icu/Ics [kA]	CNS5422 IEC60947-2 EN60947-2 JIS8201-2-2	AC	440V	65	65	65
			415V			
			400V			
			380V			
			240V	–	–	–
			230V	100	100	100
			100V			
Dimensions [mm]		a	90	90	105	
		b	155	155	165	
		c	82	82	99	
		d	104	104	127	
Mass [kg]			2.3	2.3	3.3	
Tripping device			Thermal-magnetic			

DV series JISC8221 Ann 2		30AF 	
Type		DV32	DV33
Pole		2	3
Rated current	In [A]	30	
Rated voltage	Ue [V AC]	100-200	
Rated sensitive current	[mA]	15, 30	
Tripping time	[s]	0.1	
Rated frequency	[Hz]	50-60	
Rated short-time withstand current Icw [kA]	AC200V	1.5	1.5
	AC100V		
Dimensions [mm] 	a	68	90
	b	70	80
	c	40	40
	d	63	63
Mass	[kg]	0.17	0.24
Tripping device		Ground fault protection only	