2 Earth-leakage Circuit Breakers
Economical Series

Frame Size (A)				30		50		60	100	225		400
Type				ZE30-NF		ZE50-NF		ZE60-NF	ZE100-NF	ZE225-NF		ZE400-NF
Number of poles				3		3		3	3	3		3
Phase and wires	1φ2W	⑭		●		●		●	●	●		●
	3φ3W, 1φ3W	⑮		●		●		●	●	●		●
	3φ4W									–		–
■RATINGS												
Rated impulse withstand voltage [Uimp] kV				6		6		6	6	8		8
Rated current [A] at 40℃				5	30	5	30	60	50④	125	200	250
				10		10	40		60	150	225	300
				15		15	50		75	175		350
				20		20			100			400
Rated voltage [AC V]	High speed type			100-200-415 commonuse		100-200-415 commonuse		100-200-415 commonuse	100-200-415 commonuse	100-200-415 commonuse		100-200-415 commonuse
		Applicable range [V]		80-484⑰		80-484⑰		80-484⑰	80-484⑰	80-484⑰		80-484⑰
	Time-delay type			–		–		–	200-415 commonuse	100-200-415 commonuse		100-200-415 commonuse
		Applicable range [V]		–		–		–	160-484⑲	80-484⑰		80-484⑰
Rated sensitivity current [mA]	High speed type			15		15		15	30	30		30
				30		30		30	100/200/500	100/200/500		100/200/500
				100		100/200adj.able		100/200adj.able	adjustable	adjustable		adjustable
		operating time [sec]		below0.1		below0.1		below0.1	below0.1	below0.1		below0.1
	Time-delay type			–		–		–	100/200/500 adjustable	100/200/500 adjustable		100/200/500 adjustable
		operating time [sec]		–		–		–	0.45	0.45/1.0/2adj.able		0.45/1.0/2adj.able
		non-operating time [sec]		–		–		–	above 0.15	above0.1/0.5/1.2		above0.1/0.5/1.2
■A.C. RATED BREAKING CAPACITY kA												
JIS C 8371 (sym)	AC	415V		1.5		2.5		2.5	10	15		25
		200V		2.5		5		5	25	35		35
		100V		5		5		5	25	35		35
■DIMENSIONS (mm)												
		a (W)		75		75		75	75	105		140
		b (H)		100		100		100	100	165		260
		c (D 1)		60		60		60	60	68		103
		d (D 2)		84		84		84	84	92		145
Weight (kg) [standard type]				0.5		0.5		0.5	0.5	1.7		5.2
■CONNECTIONS AND MOUNTINGS												
Front connect (FC)	Terminal screw			◎		◎		◎	◎	◎		◎
	Attached flat bar			○		○		○	○	○		○
Rear connect (RC)	Flat bar stud			○		○		○	○	○		○
Plug-in (PM)	For switchboard			–		–		–	–	–		–
	For distribution board			–		–		–	–	–		–
Flush plate (FP)	Attached flat bar stud			○		○		○	○	○		○
	Without flat bar stud			○		○		○	○	–		–
Draw-out (DR)				–		–		–	–	–		–
TemPlug (PG)				–		–		–	–	○		○
DIN rail				◎		◎		◎	◎	–		–
Clip in chassis				◎		◎		◎	–	–		–
■accessories (option)												
Internally mounted	Auxiliary switch		AX	●		●		●	●	●		●
	Alarm switch		AL	●		●		●	●	●		●
	Shunt trip		SH	●		●		●	●	–		–
	Undervoltage trip		UV	●		●		●	●	–		–
	Test lead wire		TL	●		●		●	●	●		●
	Meggering switch		MG	●		●		●	●	●		●
Externally mounted	Motor operator		MC	–		–		–	–	●		●
	External operation handle	Breaker mount. Type	HB	△		△		△	△	●		●
		Panel mount. Type	HP	△		△		△	△	●		●
	Extension handle		HA	–		–		–	–	–		–
	Mechanical interlock	Slide type	MS	●⑤		●⑤		●⑤	●	●		●
		Link type	ML	–		–		–	–	–		–
		Wire type	MW	–		–		–	–	–		–
	Handle holder		HH	–		–		–	–	●		●
	Handle lock		HL	●		●		●	●	●		●
	Terminal cover	Front connect type	CF	●		●		●	●	●		●
		Rear / plug-in type	CR	●②		●②		●②	●②	●		●
	Interpole barrier		BA	●		●③		●③	●③	●③		●③
	Accessory lead terminal		TF	●		●		●	●	●		●
	Door flange		DF	–		–		–	–	–		–
■Standard specification												
Earth-leakage tripping				Electronic		Electronic		Electronic	Electronic	Electronic		Electronic
Over-current tripping				Magnetic		Magnetic		Magnetic	Magnetic	Thermal-magnetic		Thermal-magnetic
Trip button				INCL		INCL		INCL	INCL	INCL		INCL
Earth-leakage indication				Mechanical button		Mechanical button		Mechanical button	Mechanical button	Mechanical button		Mechanical button
Handle color (ON : red, OFF : green)				INCL		INCL		INCL	INCL	INCL		INCL

NOTE
◎ : Standard. This configuration used unless otherwise specified.
○ : Optional standard. Specify when ordering.
● : "yes" or "available".
– : "no" or "not available".
△ : Contact Terasaki for detail.
② : Standard.
③ : 2pcs on 3P, 3pcs on 4P of interpole barrier is standard (only FC).
④ : Terminal screw for 50A is M5.
⑤ : Not available with clip in chassis
⑭ : When 3-pole type is used for single-phase 2-wire system, use two outermost poles and leave center pole unused.
⑮ : For single-phase 3-wire applications, connect live lines to two outermost poles and neutral line to center pole.
⑰ : Applied circuit voltage is from 100V to 440V. Contact Terasaki for above AC440V.
⑲ : Applied circuit voltage is from 200V to 440V. Contact Terasaki for above AC440V.
When not specified, adjustment of rated sensitivity current is set as 100mA, operating time of time-delay type is set as 0.3sec.

2 Earth-leakage Circuit Breakers
Standard Series

Frame Size (A)			30		50		100			225			400							
Type			ZS30-NF		ZS50-NF		ZS100-NF			ZS225-NF			ZS400-NF							
Number of poles			3		3		3	4		3	4		3	4						
Phase and wires	1φ2W	⑭	●		●		●	–		●	–		●	–						
	3φ3W, 1φ3W	⑮	●		●		●	–		●	–		●	–						
	3φ4W						–	●		–	●		–	●						
■RATINGS																				
Rated impulse withstand voltage [Uimp] kV			6		6		8			8			8							
Rated current [A] at 40℃			3	20	10	40	15	50		125	225		250							
			5	30	15	50	20	60		150			300							
			10		20		30	75		175			350							
			15		30		40	100					400							
Rated voltage [AC V]	High speed type		100-200-415 commonuse		100-200-415 commonuse		100-200-415 commonuse			100-200-415 commonuse			100-200-415 commonuse							
	Applicable range [V]		80-484⑰		80-484⑰		80-484⑰			80-484⑰			80-484⑰							
	Time-delay type		–		–		100-200-415 commonuse			100-200-415 commonuse			100-200-415 commonuse							
	Applicable range [V]		–		–		80-484⑰			80-484⑰			80-484⑰							
Rated sensitivity current [mA]	High speed type		30		30		30			30			30							
			100/200/500 adjustable		100/200/500 adjustable		100/200/500 adjustable			100/200/500 adjustable			100/200/500 adjustable							
	operating time [sec]		below0.1		below0.1		below0.1			below0.1			below0.1							
	Time-delay type		–		–		100/200/500 adjustable			100/200/500 adjustable			100/200/500 adjustable							
	operating time [sec]		–		–		0.45/1.0/2adj.able			0.45/1.0/2adj.able			0.45/1.0/2adj.able							
	non-operating time [sec]				–		above0.1/0.5/1.2			above0.1/0.5/1.2			above0.1/0.5/1.2							
■A.C. RATED BREAKING CAPACITY kA																				
JIS C 8371 (sym)	AC	415V	2.5		10		30			35			50							
		200V	5		25		50			65			85							
		100V	5		25		50			65			85							
■DIMENSIONS (mm)																				
		a (W)	75		75		90	120		105	140		140	185						
		b (H)	100		100		155			165			260							
		c (D 1)	60		60		68			68			103							
		d (D 2)	84		84		92			92			145							
Weight (kg) [standard type]			0.5		0.5		1.3	1.7		1.7	2.1		5.2	6.6						
■CONNECTIONS AND MOUNTINGS																				
Front connect (FC)	Terminal screw		◎		◎		◎			◎			◎							
	Attached flat bar		○		○		○			○			○							
Rear connect (RC)	Flat bar stud		○		○		○			○			○							
Plug-in (PM)	For switchboard		–		–		–			–			–							
	For distribution board		–		–		–			–			–							
Flush plate (FP)	Attached flat bar stud		○		○		○			○			○							
	Without flat bar stud		○		○		–			–			–							
Draw-out (DR)			–		–		–			–			–							
TemPlug (PG)			–		–		○	–		○	–		○	–						
DIN rail			◎		◎		○⑪			–			–							
Clip in chassis			◎		–		–			–			–							
■accessories (option)			SYMBOL																	
Internally mounted	Auxiliary switch		AX	●		●		●			●			●							
	Alarm switch		AL	●		●		●			●			●							
	Shunt trip		SH	●		●		–			–			–							
	Undervoltage trip		UV	●		●		–			–			–							
	Test lead wire		TL	●		●		●			●			●							
	Meggering switch		MG	●		●		●			●			●							
Externally mounted	Motor operator		MC	–		–		●			●			●							
	External operation handle	Breaker mount. Type	HB	△		△		●			●			●							
		Panel mount. Type	HP	△		△		●			●			●							
	Extension handle		HA	–		–		–			–			–							
	Mechanical interlock	Slide type	MS	●⑤		●		●			●			●							
		Link type	ML	–		–		–			–			–							
		Wire type	MW	–		–		–			–			–							
	Handle holder		HH	–		–		●			●			●							
	Handle lock		HL	●		●		●			●			●							
	Terminal cover	Front connect type	CF	●		●		●			●			●							
		Rear / plug-in type	CR	●②		●②		●			●			●							
	Interpole barrier		BA	●		●③		●③			●③			●③							
	Accessory lead terminal		TF	●		●		●			●			●							
	Door flange		DF	–		–		–			–			–							
■Standard specification																				
Earth-leakage tripping				Electronic		Electronic		Electronic			Electronic			Electronic							
Over-current tripping				Magnetic		Magnetic		Thermal-magnetic			Thermal-magnetic			Thermal-magnetic							
Trip button				INCL		INCL		INCL			INCL			INCL							
Earth-leakage indication				Mechanical button		Mechanical button		Mechanical button			Mechanical button			Mechanical button							
Handle color (ON : red, OFF : green)				INCL		INCL		INCL			INCL			INCL							

NOTE
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– : "no" or "not available".
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④ : Terminal screw for 50A is M5.
⑤ : Not available with clip in chassis
⑭ : When 3-pole type is used for single-phase 2-wire system, use two outermost poles and leave center pole unused.
⑮ : For single-phase 3-wire applications, connect live lines to two outermost poles and neutral line to center pole.
⑰ : Applied circuit voltage is from 100V to 440V. Contact Terasaki for above AC440V.
⑲ : Applied circuit voltage is from 200V to 440V. Contact Terasaki for above AC440V.
When not specified, adjustment of rated sensitivity current is set as 100mA, operating time of time-delay type is set as 0.3sec.

2 Earth-leakage Circuit Breakers
Standard Series

Frame Size (A)			630	800					
Type			ZS630-NF	ZS800-NF					
Number of poles			3	3					
Phase and wires	1φ2W	⑭	●	●					
	3φ3W, 1φ3W	⑮	●	●					
	3φ4W		–	–					
■RATINGS									
Rated impulse withstand voltage [Uimp] kV			8	8					
Rated current [A] at 40℃			500	700					
			600	800					
			630						
Rated voltage [AC V]	High speed type		100-200-415 commonuse	100-200-415 commonuse					
	Applicable range [V]		80-484⑰	80-484⑰					
	Time-delay type		100-200-415 commonuse	100-200-415 commonuse					
	Applicable range [V]		80-484⑰	80-484⑰					
Rated sensitivity current [mA]	High speed type		30	30					
			100/200/500 adjustable	100/200/500 adjustable					
	operating time [sec]		below0.1	below0.1					
	Time-delay type		100/200/500 adjustable	100/200/500 adjustable					
	operating time [sec]		0.45/1.0/2adj.able	0.45/1.0/2adj.able					
	non-operating time [sec]		above0.1/0.5/1.2	above0.1/0.5/1.2					
■A.C. RATED BREAKING CAPACITY kA									
JIS C 8371 (sym)	AC	415V	50	50					
		200V	85	85					
		100V	85	85					
■DIMENSIONS (mm)									
		a (W)	210	210					
		b (H)	273	273					
		c (D 1)	103	103					
		d (D 2)	145	145					
Weight (kg) [standard type]			10.0	10.0					
■CONNECTIONS AND MOUNTINGS									
Front connect (FC)	Terminal screw		–	–					
	Attached flat bar		◎	◎					
Rear connect (RC)	Flat bar stud		○	○					
Plug-in (PM)	For switchboard		–	–					
	For distribution board		–	–					
Flush plate (FP)	Attached flat bar stud		○	○					
	Without flat bar stud		–	–					
Draw-out (DR)			–	–					
TemPlug (PG)			○ | –	○ | –					
DIN rail			–	–					
Clip in chassis			–	–					
■accessories (option)		SYMBOL							
Internally mounted	Auxiliary switch	AX	●	●					
	Alarm switch	AL	●	●					
	Shunt trip	SH	–	–					
	Undervoltage trip	UV	–	–					
	Test lead wire	TL	●	●					
	Meggering switch	MG	●	●					
Externally mounted	Motor operator	MC	●	●					
	External operation handle — Breaker mount. Type	HB	●	●					
	External operation handle — Panel mount. Type	HP	●	●					
	Extension handle	HA	●	●					
	Mechanical interlock — Slide type	MS	●	●					
	Mechanical interlock — Link type	ML	–	–					
	Mechanical interlock — Wire type	MW	–	–					
	Handle holder	HH	●	●					
	Handle lock	HL	●	●					
	Terminal cover — Front connect type	CF	●	●					
	Terminal cover — Rear / plug-in type	CR	●	●					
	Interpole barrier	BA	●③	●③					
	Accessory lead terminal	TF	●	●					
	Door flange	DF	–	–					
■Standard specification									
Earth-leakage tripping			Electronic	Electronic					
Over-current tripping			Thermal-magnetic	Thermal-magnetic					
Trip button			INCL	INCL					
Earth-leakage indication			Mechanical button	Mechanical button					
Handle color (ON : red, OFF : green)			INCL	INCL					

NOTE
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– : "no" or "not available".
△ : Contact Terasaki for detail.
② : Standard.
③ : 2pcs on 3P, 3pcs on 4P of interpole barrier is standard (only FC).
④ : Terminal screw for 50A is M5.
⑤ : Not available with clip in chassis
⑭ : When 3-pole type is used for single-phase 2-wire system, use two outermost poles and leave center pole unused.
⑮ : For single-phase 3-wire applications, connect live lines to two outermost poles and neutral line to center pole.
⑰ : Applied circuit voltage is from 100V to 440V. Contact Terasaki for above AC440V.
⑲ : Applied circuit voltage is from 200V to 440V. Contact Terasaki for above AC440V.
When not specified, adjustment of rated sensitivity current is set as 100mA, operating time of time-delay type is set as 0.3sec.

2 Earth-leakage Circuit Breakers
High-fault Series

Frame Size (A)				100		225		400					
Type				ZS100-GF		ZS225-GF		ZS400-GF					
Number of poles				3	4	3	4	3	4				
Phase and wires	1φ2W	⑭		●	–	●	–	●	–				
	3φ3W, 1φ3W	⑮		●	–	●	–	●	–				
	3φ4W			–	●	–	●	–	●				
■RATINGS													
Rated impulse withstand voltage [Uimp] kV				8		8		8					
Rated current [A] at 40℃				15	60	125		250					
				20	75	150		300					
				30	100	175		350					
				40		200		400					
				50		225							
Rated voltage [AC V]	High speed type			100-200-415 commonuse		100-200-415 commonuse		100-200-415 commonuse					
	Applicable range [V]			80-484⑰		80-484⑰		80-484⑰					
	Time-delay type			100-200-415 commonuse		100-200-415 commonuse		100-200-415 commonuse					
	Applicable range [V]			80-484⑰		80-484⑰		80-484⑰					
Rated sensitivity current [mA]	High speed type			30		30		30					
				100/200/500 adjustable		100/200/500 adjustable		100/200/500 adjustable					
	operating time [sec]			below0.1		below0.1		below0.1					
	Time-delay type			100/200/500 adjustable		100/200/500 adjustable		100/200/500 adjustable					
	operating time [sec]			0.45/1.0/2adj.able		0.45/1.0/2adj.able		0.45/1.0/2adj.able					
	non-operating time [sec]			above0.1/0.5/1.2		above0.1/0.5/1.2		above0.1/0.5/1.2					
■A.C. RATED BREAKING CAPACITY kA													
JIS C 8371 (sym)	AC	415V		65		65		65					
		200V		85		85		100					
		100V		85		85		100					
■DIMENSIONS (mm)													
		a (W)		90	120	105	140	140	185				
		b (H)		155		165		260					
		c (D 1)		68		68		103					
		d (D 2)		92		92		145					
Weight (kg) [standard type]				1.3	1.7	1.7	2.1	5.2	6.6				
■CONNECTIONS AND MOUNTINGS													
Front connect (FC)	Terminal screw			◎		◎		◎					
	Attached flat bar			○		○		○					
Rear connect (RC)	Flat bar stud			○		○		○					
Plug-in (PM)	For switchboard			–		–		–					
	For distribution board			–		–		–					
Flush plate (FP)	Attached flat bar stud			○		○		○					
	Without flat bar stud			–		–		–					
Draw-out (DR)				–		–		–					
TemPlug (PG)				○	–	○	–	○	–				
DIN rail				○⑪		–		–					
Clip in chassis				–		–		–					
■accessories (option)			SYMBOL										
Internally mounted	Auxiliary switch		AX	●		●		●					
	Alarm switch		AL	●		●		●					
	Shunt trip		SH	–		–		–					
	Undervoltage trip		UV	–		–		–					
	Test lead wire		TL	●		●		●					
	Meggering switch		MG	●		●		●					
Externally mounted	Motor operator		MC	●		●		●					
	External operation handle	Breaker mount. Type	HB	●		●		●					
		Panel mount. Type	HP	●		●		●					
	Extension handle		HA	–		–		–					
	Mechanical interlock	Slide type	MS	●		●		●					
		Link type	ML	–		–		–					
		Wire type	MW	–		–		–					
	Handle holder		HH	●		●		●					
	Handle lock		HL	●		●		●					
	Terminal cover	Front connect type	CF	●		●		●					
		Rear / plug-in type	CR	●		●		●					
	Interpole barrier		BA	●③		●③		●③					
	Accessory lead terminal		TF	●		●		●					
	Door flange		DF	–		–		–					
■Standard specification													
Earth-leakage tripping				Electronic		Electronic		Electronic					
Over-current tripping				Thermal-magnetic		Thermal-magnetic		Thermal-magnetic					
Trip button				INCL		INCL		INCL					
Earth-leakage indication				Mechanical button		Mechanical button		Mechanical button					
Handle color (ON : red, OFF : green)				INCL		INCL		INCL					

NOTE
◎ : Standard. This configuration used unless otherwise specified.
○ : Optional standard. Specify when ordering.
● : "yes" or "available".
– : "no" or "not available".
△ : Contact Terasaki for detail.
② : Standard.
③ : 2pcs on 3P, 3pcs on 4P of interpole barrier is standard (only FC).
④ : Terminal screw for 50A is M5.
⑤ : Not available with clip in chassis
⑭ : When 3-pole type is used for single-phase 2-wire system, use two outermost poles and leave center pole unused.
⑮ : For single-phase 3-wire applications, connect live lines to two outermost poles and neutral line to center pole.
⑰ : Applied circuit voltage is from 100V to 440V. Contact Terasaki for above AC440V.
⑲ : Applied circuit voltage is from 200V to 440V. Contact Terasaki for above AC440V.
When not specified, adjustment of rated sensitivity current is set as 100mA, operating time of time-delay type is set as 0.3sec.