

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	1 φ 2W (14) 3 φ 3W, 1 φ 3W (15) 3 φ 4W	● ●	● ●	● ●	● ●	● ●
■ RATINGS						
Rated impulse withstand voltage [Uimp] kV	6	6	6	6	8	8
Rated current [A] at 40°C	5 30 10 15 20	5 30 10 40 15 50 20	60	50(4) 60 75 100	125 200 150 225 175	250 300 350 400
Rated voltage [AC V]	100-200-415 commonuse	100-200-415 commonuse	100-200-415 commonuse	100-200-415 commonuse	100-200-415 commonuse	100-200-415 commonuse
Time-delay type	80-484(17)	80-484(17)	80-484(17)	80-484(17) 200-415 commonuse 160-484(19)	80-484(17) 100-200-415 commonuse 80-484(17)	80-484(17) 100-200-415 commonuse 80-484(17)
Rated sensitivity current [mA]	15 30 100	15 30 100/200adj.able	15 30 100/200adj.able	30 100/200/500 adjustable below0.1 100/200/500 adjustable	30 100/200/500 adjustable below0.1 100/200/500 adjustable	30 100/200/500 adjustable below0.1 100/200/500 adjustable
Time-delay type	operating time [sec] below0.1 non-operating time [sec]	operating time [sec] below0.1 non-operating time [sec]	operating time [sec] below0.1 non-operating time [sec]	operating time [sec] below0.1 non-operating time [sec] 0.45 above 0.15	operating time [sec] below0.1 non-operating time [sec] 0.45/1.0/2adj.able above0.1/0.5/1.2	operating time [sec] below0.1 non-operating time [sec] 0.45/1.0/2adj.able above0.1/0.5/1.2
■ A.C. RATED BREAKING CAPACITY kA						
JIS C 8371 (sym)	AC 415V 200V 100V	1.5 2.5 5	2.5 5 5	2.5 5 5	10 25 35	15 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)	-	-	-	-	-	-
TempPlug (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 Extension handle Mechanical interlock Handle holder Handle lock Terminal cover Interpole barrier Accessory lead terminal Door flange	HB HP HA MS ML MW HH HL CF CR BA TF DF	△ △ - ●(5) - - - ● ● ●(2) ●(3) ● -	△ △ - ●(5) - - - ● ● ●(2) ●(3) ● -	△ △ - ●(5) - - - ● ● ●(2) ●(3) ● -	△ △ - ●(5) - - - ● ● ●(2) ●(3) ● -
■ 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)		630	800						
Type		ZS630-NF	ZS800-NF						
Number of poles		3	3						
Phase and wires	1 φ 2W (14)	●	●						
	3 φ 3W, 1 φ 3W (15)	●	●						
	3 φ 4W	-	-						
■ RATINGS									
Rated impulse withstand voltage [Uimp] kV		8	8						
Rated current [A] at 40°C		500 600 630	700 800						
Rated voltage [AC V]	High speed type	100-200-415 commonuse	100-200-415 commonuse						
	Applicable range [V]	80-484(17)	80-484(17)						
	Time-delay type	100-200-415 commonuse	100-200-415 commonuse						
	Applicable range [V]	80-484(17)	80-484(17)						
Rated sensitivity current [mA]	High speed type	30 100/200/500 adjustable	30 100/200/500 adjustable						
	Time-delay type	below0.1 100/200/500 adjustable	below0.1 100/200/500 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 200V 100V	50 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 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)						
	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						

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● : "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

⑬ : When 3-pole type is used for single-phase 2-wire system, use two outermost poles and leave center pole unused.

⑭ : 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.

⑱ : 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	1 φ 2W 3 φ 3W, 1 φ 3W 3 φ 4W	(14) (15)	● - ● - - ●	● - ● - - ●	● - ● - - ●	● - ● - - ●
■ RATINGS						
Rated impulse withstand voltage [U _{imp}] kV	8		8		8	
Rated current [A] at 40°C	15	60	125	250	300	400
	20	75	150	300	350	400
	30	100	175	350	400	
	40		200			
	50		225			
Rated voltage [AC V]	100-200-415 commonuse		100-200-415 commonuse		100-200-415 commonuse	
Time-delay type	80-484(17)		80-484(17)		80-484(17)	
Rated sensitivity current [mA]	30		30		30	
operating time [sec]	100/200/500 adjustable below0.1		100/200/500 adjustable below0.1		100/200/500 adjustable below0.1	
Time-delay type	100/200-415 commonuse		100/200-415 commonuse		100/200-415 commonuse	
operating time [sec]	80-484(17)		80-484(17)		80-484(17)	
non-operating time [sec]	0.45/1.0/2adj.able above0.1/0.5/1.2		0.45/1.0/2adj.able above0.1/0.5/1.2		0.45/1.0/2adj.able 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		○(1)	-	-	-	
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	HB ●	●	●	●	
	Panel mount. Type	HP ●	●	●	●	
	Extension handle	HA -	-	-	-	
	Mechanical interlock	MS ●	●	●	●	
	Slide type	ML -	-	-	-	
	Link type	MW -	-	-	-	
	Wire type	HH ●	●	●	●	
	Handle holder	HL ●	●	●	●	
	Terminal cover	CF ●	●	●	●	
	Front connect type	CR ●	●	●	●	
	Rear / plug-in type	BA ●(3)	●(3)	●(3)	●(3)	
	Interpole barrier	TF ●	●	●	●	
	Accessory lead terminal	DF -	-	-	-	
	Door flange					
■ 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		

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- ⊙ : 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.
 - ⑱ : 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.