

2

Ratings and Specifications

Earth Leakage Circuit Breakers

19 Earth Leakage Circuit Breakers for distribution boards and control boards (Harmonics/surge with countermeasure)

Frame size (A)	30	50	50	50	100		
Type	TZ30EC	TZ50EE	TZ-51C	TZ-52C	TZ100EC		
Number of poles	2 3	2 3	2 4 ^{③④}	2	3		
Phase and wires	1φ2W (14) 3φ3W, 1φ3W (15)	● (1φ3W) ●	● (1φ3W) ●	—	● (1φ3W)		
■ Ratings							
Rated current, A	5 30	5 30	15	15	60		
Calibrated at 40°C	10 15 20	10 40 15 50 20	20 30	20 30	75 100		
Rated operational voltage AC V	100-240 common	100-240 common	100	100-200 common	100-240 common		
Operable voltage fluctuation range V	80~264	80~264	80~121	80~242	80~264		
Rated sensitivity current mA	Instantaneous tripping type 15, 30	Instantaneous tripping type 15, 30, 100	15, 30	15, 30	30, 100		
Max. operating time sec	0.1	0.1	0.1	0.1	0.1		
■ Rated breaking capacity, kA							
JIS C 8201-2-2 Ann.2	AC 240V	2.5	5	—	5		
I _{cu} (sym)	200V	2.5	5	—	2.5		
	100/200V	2.5	5	—	5		
	100V	2.5	5	5	—	5	
■ External dimensions, mm							
	a	50 75	50 75	25	25	75	
	b	96	96	95	95	96	
	c	60	60	60	60	60	
	d	75	75	77	77	75	
Weight (● marked standard type) kg	0.4 0.5	0.4 0.5	0.15	0.16	0.5		
■ Connections and Mountings							
Front-connected (FC)	Terminal screws	● 45	● 45	● 48	● 48	●	
DIN rail mount		○ 52	○ 52	—	—	○ 52	
Clip-in chassis mount		●	●	●	●	●	
■ Accessories (optional) Symbol							
Internally mounted	Auxiliary switch	A X	●	● 88	● 88	●	
	Alarm switch	A L	●	●	● 88	●	
	Test lead	T L	●	—	—	—	
	Leakage alarm switch	L A	—	—	—	—	
	Megger test switch	MG	● 37	● 37	—	—	● 37
Externally mounted	Toggle holder	H H	●	●	●	●	
	Toggle lock	H L	—	—	—	—	
	Toggle cap	H C	—	—	●	●	
	Terminal cover For front-connected	C F	●	●	—	—	●
Terminal block for lead	T F	●	●	—	—	●	
CE marking	Non	Non	Non	Non	Non		
Earth leakage trip mechanism	Electronic	Electronic	Electronic	Electronic	Electronic		
Overcurrent trip mechanism	Hydraulic-magnetic type	Hydraulic-magnetic type	Thermal-magnetic	Thermal-magnetic	Hydraulic-magnetic type		
Earth leakage indication	Mechanical button	Mechanical button	Mechanical button	Mechanical button	Mechanical button		
Colour of cover	Grey	Grey	Black	Black	Grey		
Trip button (Colour)	Yes (Red)	Yes (Red)	Non	Non	Yes (Red)		
Reverse connection	Yes	Yes	Non	Non	Yes		
Page of characteristics and outline dimensions	7-220	7-220	7-224	7-224	7-222		

Notes:

● : Standard. This configuration used unless otherwise specified. ○ : Optional standard. Specify when ordering.

● : "yes" or "available". — : "no" or "not available".

14 : When applying 3-pole type to a 1φ2W circuit, use both ends and do not use the central pole.

15 : When applying 3-pole type to a 1φ3W circuit, apply voltage to both ends and connect the neutral wire to the central pole.

37 : If the megger test switch is mounted, the auxiliary switch cannot be mounted. 43 : This is 2-pole 1-element. 45 : A wire clamping terminal is provided.

48 : Distribution board branch conductors and busbar conductor supports are available. (Optional)

52 : Please order the DIN rail mounting bracket separately. (Order type: 50EE-RAIL, 1 set per unit)

84 : TZ-51C does not support harmonics or surges. Please use TZ-52C if necessary. 88 : The auxiliary switch and alarm switch cannot be applied at the same time.

Remarks: TZ-51C and TZ-52C types are compatible with TB-51C and TB-52C.