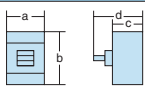


2

Ratings and Specifications

Moulded Case Circuit Breakers

10 Circuit Breaker with earth leakage alarm for distribution boards and control boards

Frame size (A)	50	50	100					
Type	TB50KSL	TB50KSZ	TB100KSZ					
Number of poles ¹⁴ ¹⁵	2	3	3					
■ Ratings								
Rated current, A	15 50	15 50	60					
Calibrated at 40°C	20 30 40	20 30 40	75 100					
Rated operational voltage AC V	100-240 common	200-415 common	200-415 common					
Applicable range V	80~264	160~484	160~484					
■ Rated breaking capacity, kA								
JIS C 8201-2-1 Ann.2 AC 415V	—	2.5	2.5					
<i>I_{cu}</i> (sym) 200V	5 (240V)	5	5					
100/200V	—	5	5					
100V	5	—	—					
■ Earth leakage alarm specifications								
Earth leakage detection (Current operation type)	Electronic	Electronic	Electronic					
Rated sensitivity current mA	30/100 selectable	30/100/500 selectable	30/100/500 selectable					
Max. operating time sec	0.1	0.1	0.1					
Earth leakage alarm output contact configuration ³⁰	— ³⁶	1c	1c					
Alarm reset function (manual reset) ³⁹	Push button	Push button ³⁴	Push button ³⁴					
■ External dimensions, mm								
	a	50	75	75				
b	96	96	96					
c	60	60	60					
d	75	75	75					
Weight (● marked standard type) kg	0.3	0.5	0.6					
■ Connections and Mountings								
Front-connected (FC) Terminal screws	● ⁴⁵	● ⁴⁵	●					
Rear-connected (RC)	—	—	—					
Flush-mounted (FP)	—	—	—					
DIN rail mount	○ ⁵²	○ ⁵²	○ ⁵²					
Clip-in chassis mount	●	●	●					
■ Accessories (optional) Symbol								
Internally mounted	Auxiliary switch A X	●	●	●				
	Alarm switch A L	●	●	●				
	Shunt trips S H	—	●	●				
	Undervoltage trips U V	—	—	—				
	Test lead T L	—	—	—				
Externally mounted	Megger test switch MG	● ³⁷	● ³⁷	● ³⁷				
	Toggle holder H H	●	●	●				
	Toggle lock H L	—	—	—				
	Terminal cover For front-connected C F	●	●	●				
	Terminal block for lead T F	●	●	●				
CE marking	Non	Non	Non					
Overcurrent trip mechanism	Hydraulic-magnetic type	Hydraulic-magnetic type	Hydraulic-magnetic type					
Earth leakage indication	LED (Red)	LED (Red)	LED (Red)					
Colour of cover	Grey	Grey	Grey					
Trip button (Colour)	Yes (Red)	Yes (Red)	Yes (Red)					
Reverse connection	Non	Non	Non					
Page of characteristics and outline dimensions	7-144	7-146	7-146					

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 1ø2W circuit, use both ends and do not use the central pole.

¹⁵ : When applying 3-pole type to a 1ø3W circuit, apply voltage to both ends and connect the neutral wire to the central pole. ³⁰ : See page 6-22 for the contact rating.

³⁴ : Optional lead wire draw-in for remote reset available on request. Please specify "with MRA" when ordering. The external switch should be a self-resetting a-contact (NO) switch (for 24V DC 10mA microload circuit), and do not apply voltage.

³⁶ : The earth leakage alarm of TB50KSL type is LED indication only. ³⁷ : If the megger test switch is mounted, the auxiliary switch cannot be mounted.

³⁹ : An earth leakage alarm maintains the operating state until pressing the reset button or turning the main circuit power OFF. If the electric leakage continues, it will be reset while you hold down the reset button, but when you release the reset button, it will return to the operating state.

⁴⁵ : A wire clamping terminal is provided. ⁵² : Please order the DIN rail mounting bracket separately. (Order type: 50EE-RAIL, 1 set per unit)