

# Earth Leakage Circuit Breakers

## Wire size and terminal

### ■ Wire size and crimp terminal

The following is the size recommendations for crimp terminals.

Crimp terminal R: JIS C2805  
 CB: JEM-1399  
 JST: Product of Japan Crimp Terminal Co., Ltd.  
 F: FUJI special crimp terminal

Ampere frame	ELCB type	Wire size (mm <sup>2</sup> )											
		1.04   2.63	2.63   6.64	6.64   10.52	10.52   16.78	16.78   26.66	26.66   42.42	42.42   60.57	60.57   96.3	96.3   117.2	117.2   152.05	152.05   192.6	192.6   242.27
30	SG30C EG30AC, EG30C	R2-5	R5.5-5	R8-5	R14-5								
50	SG50C, SG50RC EG50AC, EG50C	R2-5	R5.5-5	R8-5	R14-5								
	HG50B	R2-8	R5.5-8	R8-8	R14-8	JST22-S8							
60	SG60C, SG60RC EG60C	R2-8	R5.5-8	R8-8	R14-8	JST22-S8							
100	SG100C, SG100RC HG100B	R2-8	R5.5-8	R8-8	R14-8	R22-8	JST38-S8	CB60-8					
	EG100AC EG100C	R2-8	R5.5-8	R8-8	R14-8	JST22-S8	JST38-S8	F60-8					
225	SG225C, SG225RC EG225C HG225B				R14-8	R22-8	R38-8	R60-8	CB100-8	CB150-8			
400	SG400C, SG400RC EG400C, HG400B						R38-12	R60-12	R100-12	R150-12	R200-12	JST325-12 *1	
600	SG600RC, EG600C HG600B								R100-12	R150-12	R200-12	JST325-12	
800	SG800RC, EG800C HG800B								R100-12	R150-12	R200-12	JST325-12	

\*1 When this crimp terminal is used, the terminal cover cannot be mounted.

### Block terminal connection (For UL Listed)

ELCB type	Rated current (A)	Connectable wire size (AWG)	Tightening torque (N·m)	Type of screw head and size (mm)
SG100CUL	32	10AWG	5.8 (5.8 to 6.4)	Slotted screw head
	40	8AWG		
	45	8AWG		
	50	8AWG		
	60	6AWG		
	75	4AWG		
	100	3AWG		
SG225CUL	125	1AWG	23 (23 to 25.3)	Hexagonal socket head bolt 6.35mm (1/4 inch)
	150	1/0AWG		
	175	2/0AWG		
	200	3/0AWG		
	225	4/0AWG		

Notes: • AWG is abbreviation of "American Wire Gauge" and the UL approved wire unit.  
 • The allowable temperature of wire is 75°C. (UL CSA approved)

### Crimp terminal connection (For UL Listed)

ELCB type	Rated current (A)	Applicable crimp terminal								Connectable wire size (AWG)		Tightening torque (N·m)	Type of screw head and size (mm)
		J.S.T. Mfg. Co., Ltd		Aikoku Kogyo K.K.		Nichifu Co., Ltd.		Daido Solderless Terminal Mfg. Co., Ltd.		60°C wire	75°C wire		
		60°C wire	75°C wire	60°C wire	75°C wire	60°C wire	75°C wire	60°C wire	75°C wire				
SG50RCUL	3		R2-5		R2-5						14AWG	2.3-2.8	Cross-recessed pan-head screw M5 x 14
	5												
	10												
	15												
	20		R5.5-5		R5.5-5						12AWG		
	30										10AWG		
	40		R8-5		R8-5						8AWG		
EG100CUL	60		R14-8		R14-8						6AWG	5.5-7.5	Cross-recessed pan-head screw M8 x 14
	75		22-S8		22-8						4AWG		
	100		38-S8		38-S8						3AWG		
SG100CUL	32	R5.5-8	R5.5-8	R5.5-8	R5.5-8	R5.5-8	R5.5-8	R5.5-8	R5.5-8	10AWG	10AWG	5.8 (5.3-6.4)	Cross-recessed pan-head screw M8 x 14
	40	R8-8	R8-8	R8-8	R8-8	R8-8	R8-8	R8-8	R8-8	8AWG	8AWG		
	45	R14-8	R14-8	R14-8	R14-8	R14-8	R14-8	R14-8	R14-8	6AWG	6AWG		
	50												
	60	22-S8		22-8		22-S8		22-S8		4AWG	4AWG		
	70		22-S8		22-8		22-S8		22-S8		4AWG		
	75							38-S8		3AWG			
	80												
	90	38-S8	38-S8	38-S8	38-S8	38-S8	38-S8		38-S8	2AWG	3AWG		
	100									1AWG			
SG225CUL	125		38-S8		38-S8		R38-S8		38-S8		1AWG	10.5 (8-13)	Hexagonal socket head bolt M8 x 16
	150		R60-8		R60-8		R60-8		60-8		1/0AWG		
	175		70-8				R70-8		70-8		2/0AWG		
	200		CB80-S8						CB80-S8		3/0AWG		
	225		CB100-S8						CB100-8		4/0AWG		

Notes: • AWG is abbreviation of "American Wire Gauge" and the UL approved wire unit.  
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### ■ Breaker termination

ELCB type	Front connection	Rear connection X	Flush mounting E	Y	Plug-in mounting P
SG30C, SG50C, SG50RC EG50C EG30AC, EG30C, EG50AC (Front connection type only)	Self-lifting terminal 				
SG60C, SG60RC EG60C, EG100C EG100AC (Front connection type only)					
SG100C, SG100RC	Flat terminal 				
SG225C, SG225RC EG225C	Flat terminal 				
SG400C, SG400RC SG600RC, SG800RC EG400C, EG600C, EG800C	Flat terminal 				 90° rotational stud