

# Molded Case 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	Breaker	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	EA30AC SA30C	R2-5	R5.5-5	R8-5	R14-5								
50	SA50C, SA50RC EA50AC, EA50C LA50B	R2-5	R5.5-5	R8-5	R14-5								
	H50BA	R2-8	R5.5-8	R8-8	R14-8	JST22-S8							
60	SA60C, SA60RC EA60C	R2-8	R5.5-8	R8-8	R14-8	JST22-S8							
100	SA100C, SA100RC H100BA, H100R	R2-8	R5.5-8	R8-8	R14-8	R22-8	JST38-S8	CB60-8					
	EA100AC EA100C	R2-8	R5.5-8	R8-8	R14-8	JST22-S8	JST38-S8	F60-8					
225	EA225C SA225C, SA225RC H225BA, H225R				R14-8	R22-8	R38-8	R60-8	CB100-8	CB150			
400	SA400C, SA400RC EA400C H400B, H400R						R38-12	R60-12	R100-12	R150-12	R200-12	JST325-12 *1	
600	SA600RC EA600C H600B, H600R								R100-12	R150-12	R200-12	JST325-12	
800	SA800RC EA800C H800B, H800R								R100-12	R150-12	R200-12	JST325-12	
1000 1200	SA1000E SA1200E								R100-12	R150-12	R200-12	JST325-12	
1600	SA1600E								R100-12	R150-12	R200-12	JST325-12	

Note: For solid-state trip types, same as the standard types.

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

### Block terminal connection (For UL Listed)

MCCB type	Rated current (A)	Connectable wire size	Tightening torque (N·m)	Type of screw head and size (mm)
SA100CUL SA100RCUL	15	14AWG	5.8 (5.8 to 6.4)	Slotted head screw
	20	12AWG		
	30	10AWG		
	40	8AWG		
	45	8AWG		
	50	8AWG		
	60	6AWG		
	75	4AWG		
SA225CUL SA225RCUL	100	3AWG	23 (23 to 25.3)	Hexagonal socket head bolt 6.35mm (1/4 inch)
	125	1AWG		
	150	1/0AWG		
	175	2/0AWG		
	200	3/0AWG		
SA400CUL SA400RCUL	225	4/0AWG	43.5 (43.5 to 48)	Hexagonal socket head bolt 9.53mm (3/8 inch)
	250	250kcmil		
	300	350kcmil		
	350	500kcmil		
SA600RCUL	400	3/0AWG x2	31.9 (31.9 to 35.1)	Hexagonal socket head bolt 8mm (5/16 inch)
	500	250-500kcmil x2		
SA800RCUL	600	250-500kcmil x2	31.07 (31.07 to 34.2)	
	700	250-500kcmil x2		
	800	3/0AWG-300kcmil x3		

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

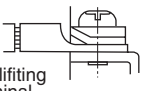
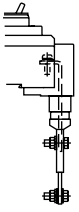
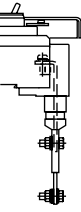
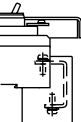
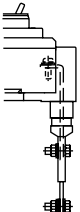
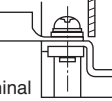


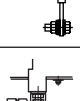
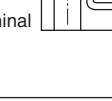
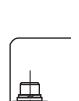
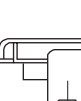
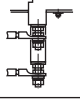

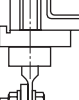
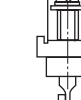
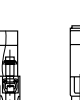
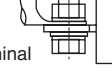



• The allowable temperature of wire is 75°C. (UL CSA approved)

## Crimp terminal connection (For UL Listed)

MCCB 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		
SA50RCUL	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		
EA100CUL	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		38-8S						3AWG		
SA100CUL	30	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
SA100RCUL	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		22-8S		22-8S		4AWG			
	70		22-S8		22-8		22-8S		22-8S		4AWG		
	75							38-8S		3AWG			
	80												
	90	38-S8	38-S8	38-8S	38-8S	38-8S	38-8S		38-8S	2AWG	3AWG		
100									1AWG				
SA225CUL	125		38-S8		38-8S		R38-8S		38-8S		1AWG	10.5 (8-13)	Hexagonal socket head bolt M8 x 16
SA225RCUL	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-S8		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)

## ■ Breaker termination

MCCB type	Front connection	Rear connection X	Flush mounting E	Y	Plug-in mounting P
SA30AC, SA50C, SA50RC EA30AC, EA50C, EA50AC	 Self-lifting terminal				
SA60C, SA60RC EA60C, EA100C, EA100AC					
SA100C, SA100RC					
SA225C, SA225RC EA225C					
SA400C, SA400RC SA600RC, SA800RC EA400C, EA600C, EA800C					 90° rotational stud