

Power Monitoring Equipment

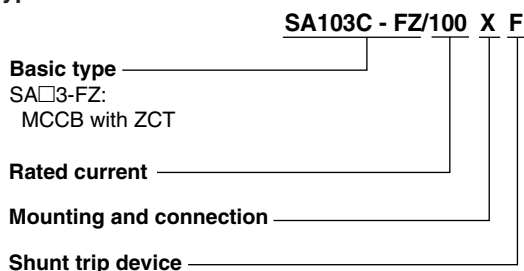
MCCB with ZCT and zero-phase CT

Molded case circuit breakers with ZCT, SA□-FZ

■ Description

By combining one of the following models with the F-MPC04 series (UM01 and UM03-ARA3G), a leakage current monitor and breaking system can be easily constructed.

■ Type number nomenclature



■ Ordering information

Specify the following:

1. Type number

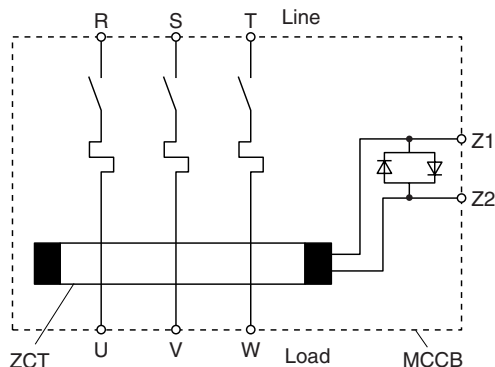
■ Specifications, MCCB with ZCT for line protection

Frame		100A		225A	
Type (Instantaneous trip)		SA103C-FZ	SA103RC-FZ	SA203C-FZ	SA203RC-FZ
Pole		3	3	3	3
Rated current (A) Ambient temp.: 40°C for general use		15, 20, 30, 40, 50 60, 75, 100	15, 20, 30, 40, 50 60, 75, 100	125, 150, 175 200, 225	125, 150, 175 200, 225
Rated insulation voltage Ui (V) AC		690	690	690	690
Rated breaking capacity (kA)	JIS C 8201-2-1 AC 500V IEC60947-2 440V (Icu/Ics) 230V	15/4 25/7 50/25	30/8 50/13 100/50	15/4 25/7 50/25	30/8 50/13 100/50
Dimensions (mm)	a b c d	90 155 60 82	90 155 60 82	105 165 60 84	105 165 60 84
Front mounting, front connection	No-mark	●	●	●	●
Front mounting, rear connection	X	● Bar stud	● Bar stud	● Bar stud	● Bar stud
Flush mounting, rear connection	E	● Bar stud	● Bar stud	● Bar stud	● Bar stud
Supplied accessory		Mounting screw, interphase barrier			

Frame		400A		600A		800A	
Type (Instantaneous trip)		SA403C-FZ	SA403RC-FZ	SA603RC-FZ	SA803RC-FZ		
Pole		3	3	3	3		
Rated current (A) Ambient temp.: 40°C for general use		250, 300, 350 400	250, 300, 350 400	500, 600	700, 800		
Rated insulation voltage Ui (V) AC		690	690	690	690		
Rated breaking capacity (kA)	JIS C 8201-2-1 AC 500V IEC60947-2 440V (Icu/Ics) 230V	22/11 35/18 50/25	35/18 50/25 85/43	35/18 50/25 85/43	35/18 50/25 85/43		
Dimensions (mm)	a b c d	140 257 103 146	140 257 103 146	210 275 103 146	210 275 103 146		
Front mounting, front connection	No-mark	●	●	●	●		
Front mounting, rear connection	X	● Bar stud	● Bar stud	● Bar stud	● Bar stud		
Flush mounting, rear connection	E	● Bar stud	● Bar stud	● Bar stud	● Bar stud		
Supplied accessory		Mounting screw, interphase barrier					

●: Available

■ Internal wiring



*S1, S2 : Shunt trip coil input terminal
*Z1, Z2 : ZCT output terminal
*T1, T2 : ZCT trip test current input terminal

■ EW series zero-phase current transformers (low-voltage circuit use)

Description	Type	Rated current (A)	Sensor hole diameter (mm)	Hole-through cable			Mass (kg)
				1φ2W	1φ3W, 3φ3W	3φ4W	
Round hole through-type	EW-ZB-30M05	50	30	IV 14mm ²	IV 8mm ²	IV 8mm ²	0.22
	EW-ZB-30M1	100	30	IV 60mm ²	IV 50mm ²	IV 38mm ²	0.32
	EW-ZB-58M2	200	58	IV 125mm ²	IV 100mm ²	IV 80mm ²	0.6
	EW-Z70A4	400	70	IV 400mm ²	IV 325mm ²	IV 250mm ²	1.1
	EW-Z70A6	600	70	IV 400mm ²	IV 325mm ²	IV 250mm ²	1.1
	EW-Z90	800	90	IV 500mm ²	IV 500mm ²	IV 500mm ²	3.1
	EW-Z115	1200	115	—	—	—	4.8
	EW-Z160	2000	160	—	—	—	10
	EW-Z250	3000	250	—	—	—	28.5
Split through-type	EW-ZD30	100	30	IV 60mm ²	V 50mm ²	IV 38mm ²	0.55
	EW-ZD45	200	45	IV 125mm ²	V 100mm ²	IV 80mm ²	0.89
	EW-ZD65	400	65	IV 325mm ²	V 250mm ²	IV 200mm ²	1.15

Description	Type	Rated current (A)	Sensor hole diameter (mm)	Hole-through conductor		Mass (kg)
				3φ3W	3φ4W	
With conductors, 3-pole	EW-Z3B40	400	70	5×40mm	—	2.8
	EW-Z3B50	500	70	6×40mm	—	3.1
	EW-Z3B60	600	90	6×50mm	—	7.6
	EW-Z3B80	800	90	8×50mm	—	8.8
	EW-Z3B100	1000	90	12×50mm	—	11.5
	EW-Z3B120	1200	115	10×75mm	—	15.2
	EW-Z3B160	1600	160	12×100mm	—	30.5
	EW-Z3B200	2000	160	6×100mm×2	—	30.5
	EW-Z3B300	3000	250	8×150mm×2	—	68.6
With conductors, 4-pole	EW-Z4B40	400	90	—	5×40mm	6.4
	EW-Z4B50	500	90	—	6×40mm	6.9
	EW-Z4B60	600	90	—	6×50mm	11.5
	EW-Z4B80	800	90	—	8×50mm	14.1
	EW-Z4B100	1000	115	—	12×50mm	15.5
	EW-Z4B120	1200	115	—	10×75mm	24.9
	EW-Z4B160	1600	160	—	12×100mm	36.4
	EW-Z4B200	2000	160	—	6×100mm×2	36.4
EW-Z4B300	3000	250	—	8×150mm×2	80.3	

Note : Twist the ZCT secondary wires (normally once every 50mm) and separate the wires from power line.