



# 7 Characteristics and Outline Dimensions *TemBreak2*

## Molded Case Circuit Breakers (100A Frame)

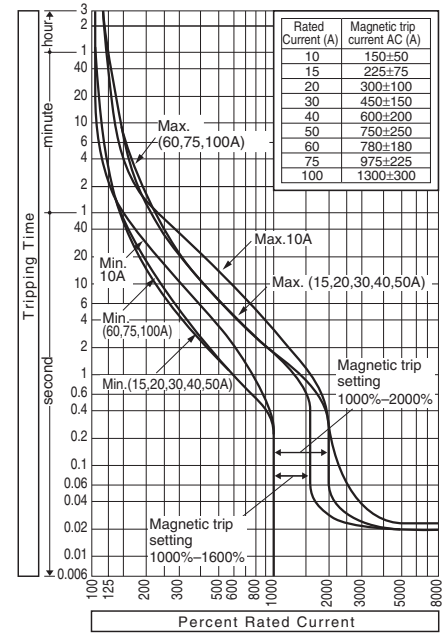
### E100-SF

#### Ratings and Specifications

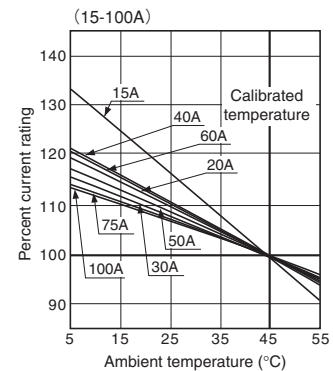
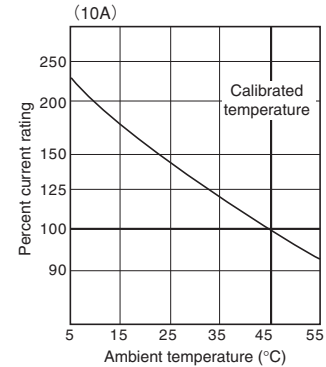
Type		E100-SF		
Number of poles		2	3	
<b>■ Ratings</b>				
Rated current, A		10	40 100	
Calibrated at 45°C		15	50	
		20	60	
		30	75	
<b>Rated insulation voltage [U<sub>i</sub>] V AC</b>				
		690		
<b>Rated impulse withstand voltage [U<sub>imp</sub>] kV</b>				
		6		
<b>■ Rated breaking capacity, kA</b>				
NK	AC	690V	—	
		450V	10/— (13)	
I <sub>cu</sub> /I <sub>cs</sub> (sym)		240V	25/— (14)	
	① DC	250V	7.5/—	
<b>IEC60947-2</b>				
I <sub>cu</sub> /I <sub>cs</sub> (sym)	AC	690V	—	
		500V	7.5/3.8	
		440V	10/5	
		415V	10/5	
		380V	16/8	
		240V	25/13	
① DC		250V	7.5/3.8	
		125V	15/7.5	
<b>■ Rated short time withstand current, kA</b>				
Weight (● marked standard type) kg		0.48	0.74	
<b>■ Connections and Mountings</b>				
Front-connected (FC)	Terminal screws	●		
	With extension bars	—		
Rear-connected (RC)	Bolt studs	○		
	Flat bar studs	—		
Plug-in (PM)	For switchboards Standard (PMC)	○		
	High-performance (PMB)	○		
	For distribution boards (PMC)	○		
Flush-mounted (FP)		○ Bolt studs		
Draw-out type (DR)		—		
TemPlug70 (PG)		—		
TemPlug45B (PG4)		—		
DIN rail mount		—		
Clip-in chassis mount		—		
<b>■ Accessories (optional)</b>		<b>Symbol</b>		
Externally mounted	Motor operator	M C	●	
	External operating handle	Breaker-mounted H B	●	
		Door-mounted (variable depth) H P	●	
	Toggle extension	H A	—	
	Mechanical interlock	Slide type M S	●	
	Toggle holder	H H	●	
	Toggle lock	H L	●	
	Terminal cover	For front-connected	C F	●
		For rear-connected and plug-in	C R	●
	Interpole barrier	B A	●	
Terminal block for lead	T F	●		
Door flange	D F	●		
<b>■ Standard specifications</b>				
Overcurrent trip mechanism		Thermal-magnetic ⑦		
Trip button (color)		Yes (Red)		
Handle position indication (ON: Red, OFF: Green)		Yes		
Suitability for isolation		Non		
CE marking		Non		

**Notes:**  
 ● : Standard. This configuration used unless otherwise specified. ○ : Optional standard. Specify when ordering.  
 ● : "yes" or "available". — : "no" or "not available". ① : DC rating available on request.  
 ⑦ : Hydraulic-magnetic type for below 10A rating. ⑬ : at 500V AC. ⑭ : at 250V AC.

#### Time/Current characteristic curves



#### Ambient Compensating Curves



#### Combinations of Internally Mounted Accessories (Optional)

Poles	AX	AL	SH	UV	AX	AX	AX	AL	AL	AX	AX
	Auxiliary switch	Alarm switch	Shunt trip #1	Under voltage trip #2	AL	SH	UV	SH	UV	SH	UV
3											

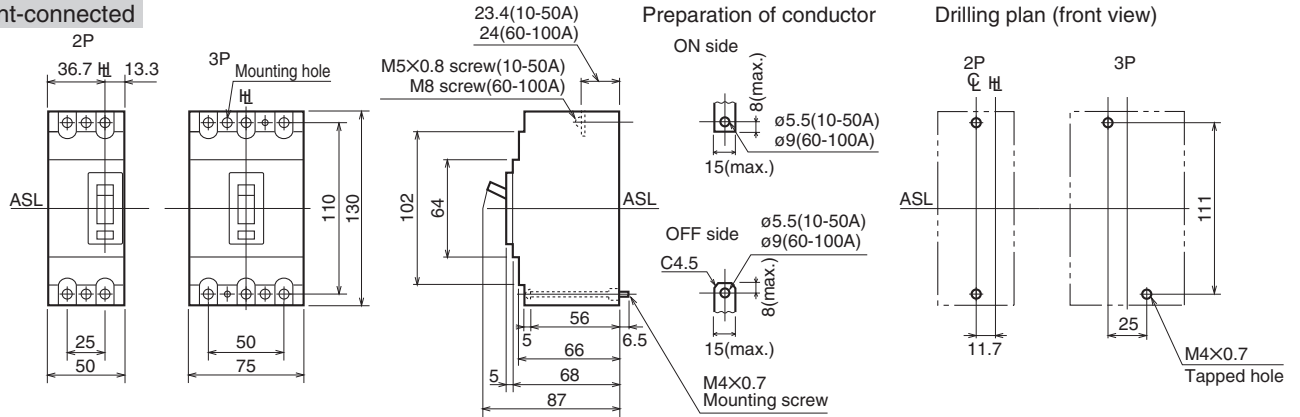
Left pole  
 Right pole  
 Toggle

**NOTE:** 2-pole type breaker may incorporate only one combination of [AX (max.2C)], [AL], [SH], [UV], [AX]-[AL] into the left pole.  
**NOTE:** #1 Shunt trip is provided with anti-burnout switch.  
**NOTE:** #2 The UV Controller is installed externally when provided with AC UV.

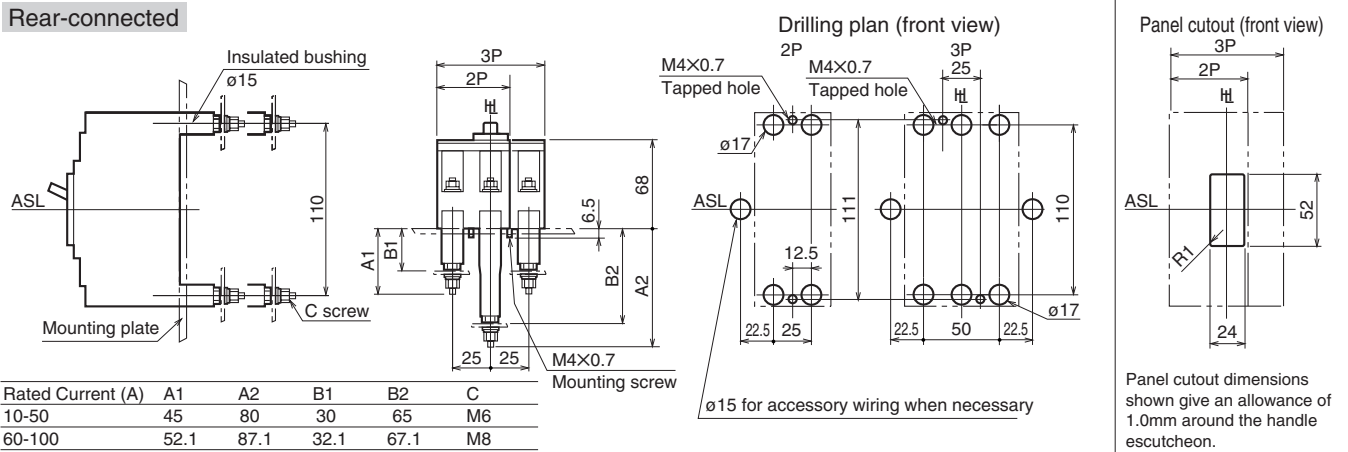
Outline dimensions (mm)

E100-SF

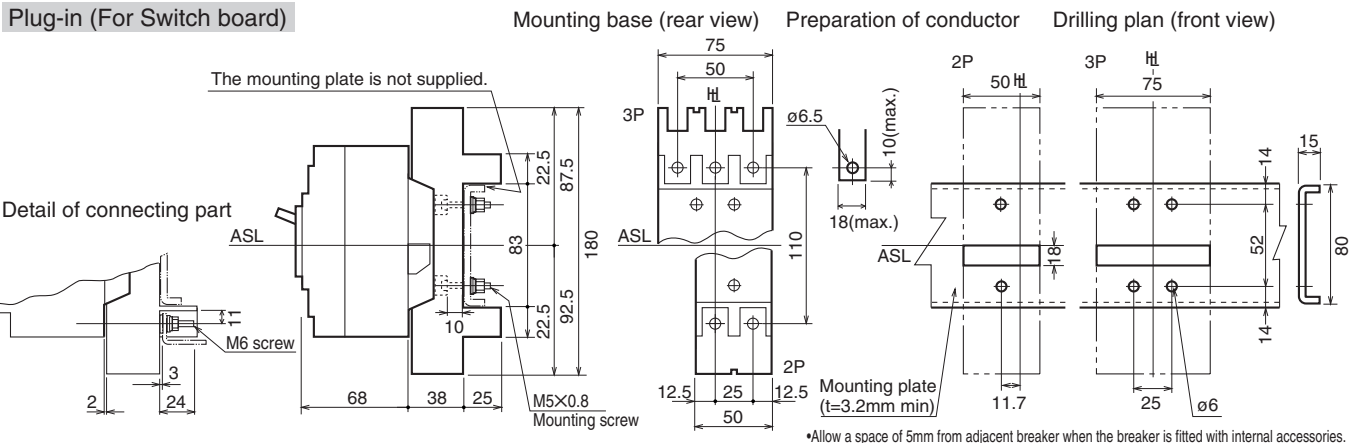
Front-connected



Rear-connected



Plug-in (For Switch board)



Flush-mounted

