

## DATA SHEET: TEMBREAK 2 S800-RE MCCB

MCCB Electrical Characteristics to IEC 60947-2, EN 60947-2, JIS C 8201-2-1 ANN. 1, AS/NZS 3947-2, NEMA AB-1

Frame reference	Quantity	Unit	Condition	TB2 1000
Max In (A) of Frame				800
Model				S800
Number of Poles				3, 4
Type				RE
Nominal current ratings				
	$I_n$	(A)	50°C	630 800
Electrical characteristics				
Rated operational voltage	$U_e$	(V)	AC 50/60 Hz DC	690 -
Rated insulation voltage	$U_i$	(V)		800
Rated impulse withstand voltage	$U_{imp}$	(kV)		8
Ultimate breaking capacity (IEC, JIS, AS/NZS)	$I_{cu}$	(kA)	690V AC 525V AC 440V AC 400/415V AC 220/240V AC 250V DC	25 <sup>④</sup> 35 65 70 100 -
Service breaking capacity (IEC, JIS, AS/NZS)	$I_{cs}$	(kA)	690V AC 525V AC 440V AC 400/415V AC 220/240V AC 250V DC	20 <sup>④</sup> 30 50 50 75 -
Rated breaking capacity (NEMA)		(kA)	480V AC 240V AC	35 100
Rated short-time withstand current	$I_{cw}$	(kA)	0.3 Seconds	10
Protection				
Adjustable thermal, adjustable magnetic				■
Fixed thermal, fixed magnetic				
Microprocessor				■
Utilisation category				B
Installation				
Front connection (FC)				■
Extension bar (FB)				•
Cable clamp (FW)				• <sup>①</sup>
Rear connection (RC)				•
Plug-in (PM)				•
DIN rail mounting (DA)				-
Dimensions	height	(mm)		273
	width	(mm)	3 pole 4 pole	210 280
	depth	(mm)		103
Weight	weight	(kg)	3 pole 4 pole	<sup>②</sup> <sup>③</sup>
Operation				
Direct Opening Action				■
Toggle operation				■
Door mounted (HS) / Breaker mounted handle (HB)				•
Motor operation (MC)				•
Endurance	Electrical Mechanical		690V AC	4,000 10,000
		cycles cycles		

① 630A only

② 8.7kg 630A, 9.1kg 800A

③ 11.9kg 630A, 12.3kg 800A

④ MCCB cannot be used in IT systems at this voltage

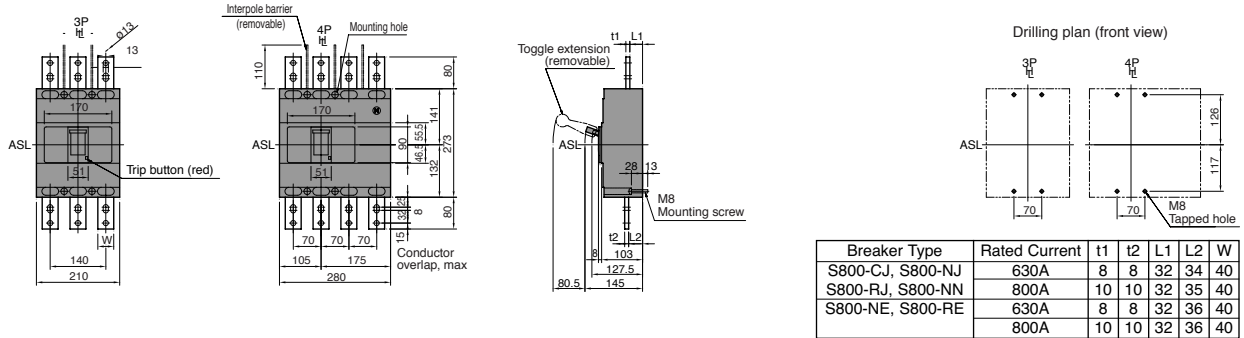
■ Standard    • Optional    - Not Available

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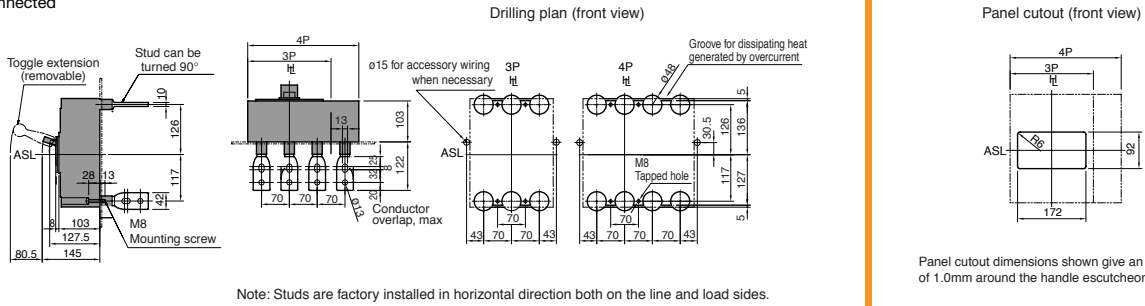
## Outline Dimensions S800-RE

ASL: Arrangement Standard Line  $\text{Ht}$ : Handle Frame Centre Line

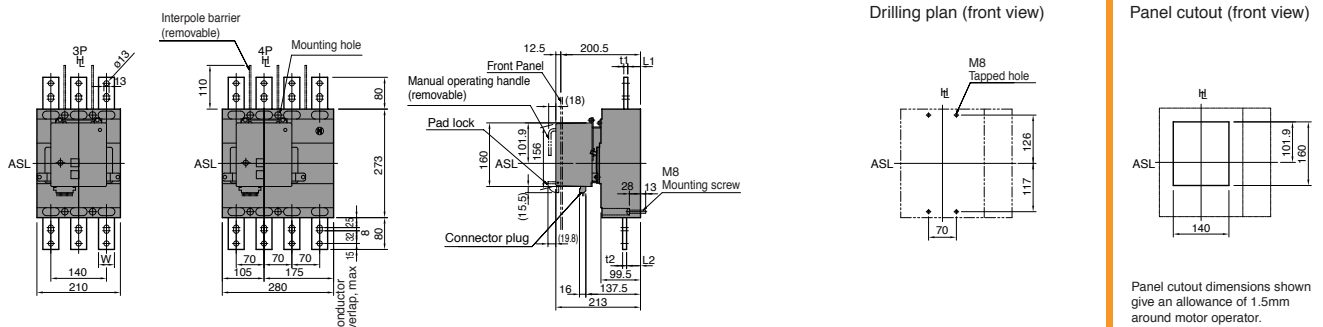
Front connected with extension bars (optional)



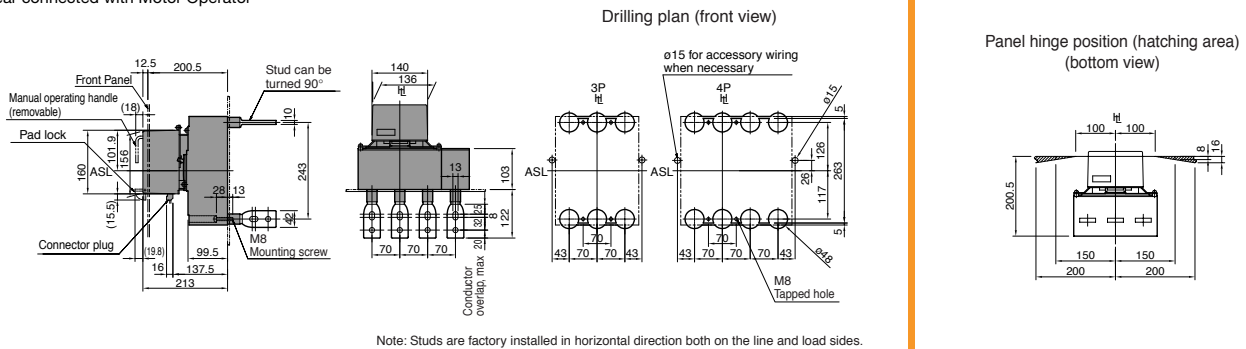
Rear connected



Front connected with Motor Operator



Rear connected with Motor Operator

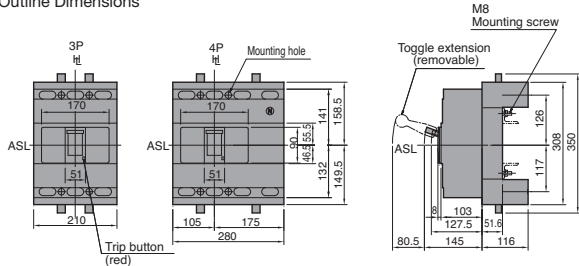


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## Outline Dimensions S800-RE Plug in Version

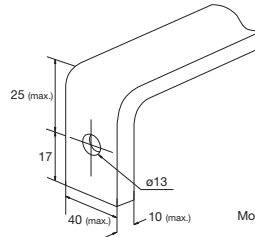
ASL: Arrangement Standard Line H<sub>L</sub>: Handle Frame Centre Line

### Outline Dimensions



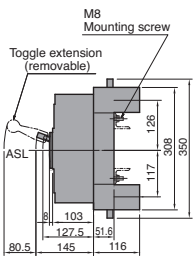
### Termination of Busbar

#### Preparation of conductor

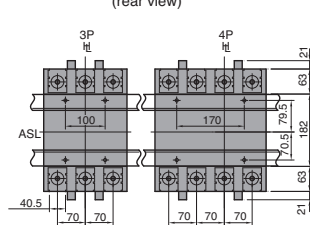


Mounting screw M12x25 max. Hex. sec. head bolt.

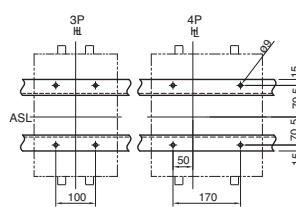
### Mounting on a support or rails



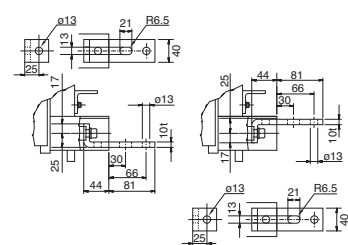
#### Mounting base (rear view)



#### Drilling plan (front view)

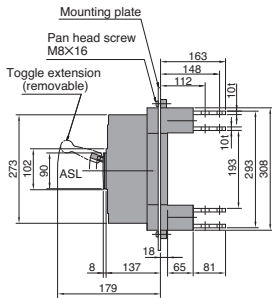


#### Detail of connecting part Oriented for rear access

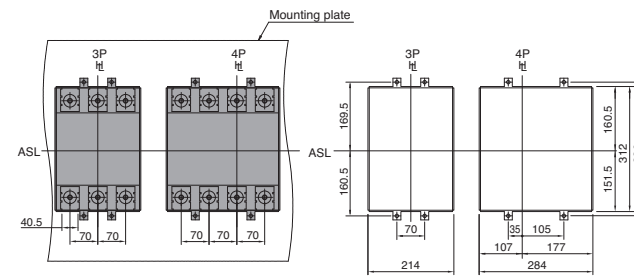


Terminal bars should be connected alternately on adjacent poles.

### Mounting through the backplate (shown with optional connection bars oriented for rear access)

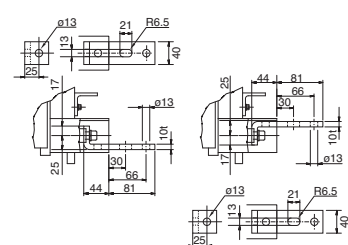


#### (rear view)



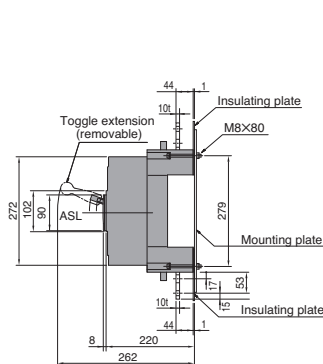
#### Drilling plan (front view)

#### Detail of connecting part Oriented for rear access

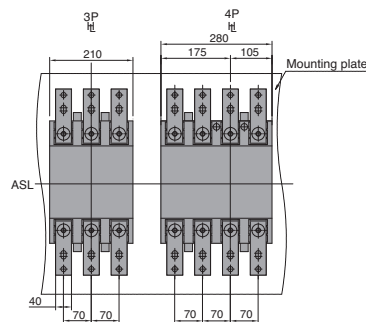


Terminal bars should be connected alternately on adjacent poles.

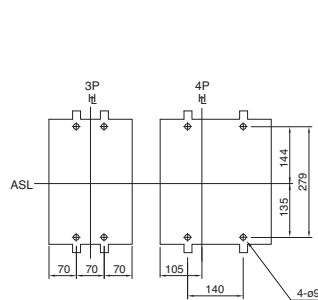
### Mounting on the backplate (optional connection bars must be oriented for front access)



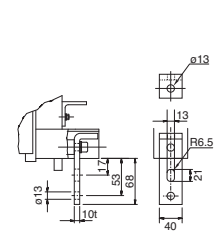
#### (rear view)



#### Drilling plan (front view)



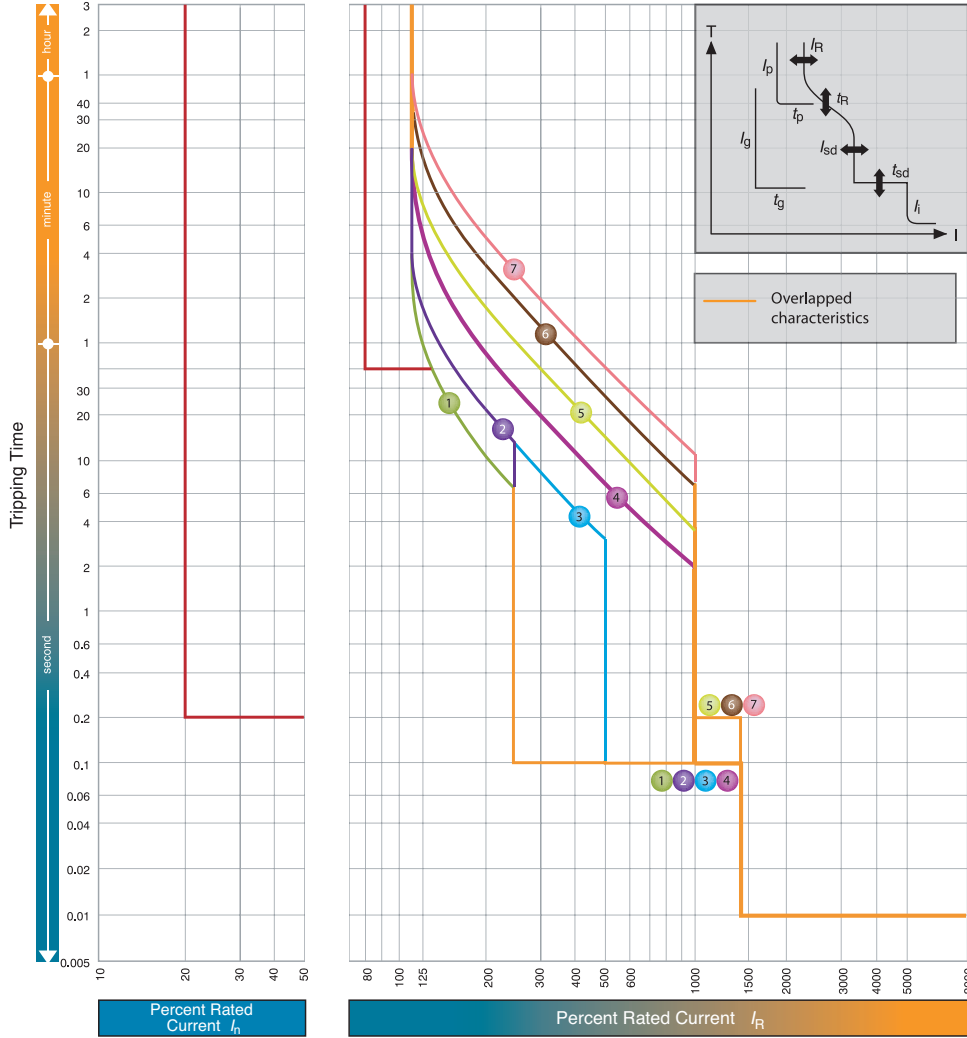
#### Detail of connecting part Oriented for front access



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## Time/Current Characteristic Curves

### S800-RE



$I_n = 800A; 630A$

		$I_R$ (A)									
		LTD Pick-up current	$I_R$	$x/I_n$	0.4	0.5	0.63	0.8	0.9	0.95	1.0
Standard	LT	$t_R$	(s)		11	21	21	5	10	19	29
	ST	$I_{sd}$	$x/I_R$	2.5			5			10	
		$t_{sd}$	(s)	0.1				0.2			
	INST	$I_i$	$x/I_n$	14(Max: 12 x $I_n$ ) Note (1)							
Option	PTA	$I_p$	$x/I_R$	0.8							
		$t_p$	(s)	40							
	GF Note(3)	$I_g$	$x/I_n$	0.2							
		$t_g$	(s)	0.2							
NP	$I_N$	$x/I_R$	1.0/0.5 Note(2)								
	$t_N$	(s)	$t_N = t_R$								

**Note**

(1)  $I_i$  max. = 12 x  $I_n$ . (2) 1.0 x  $I_R$  or 0.5 x  $I_R$  can be selected. Characteristic of neutral protection ( $t_N$  vs.  $I_N$ ) is identical to characteristic of phase protection ( $t_R$  vs.  $I_R$ ). (3) When you specify GF on MCCBs with 3 poles the terminal block is automatically fitted to connect with the external neutral CT for 3 phases 4 wires system.