DATA SHEET: TEMBREAK 2 S1000-SE MCCB

MCCB Electrical Characteristics to IEC 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				1000
Model				S1000
Number of Poles				3, 4
Type				SE
Nominal current ratings				
	I_n	(A)	50°C	1000 ②
Electrical characteristics				
Rated operational voltage	U_e	(V)	AC 50/60 Hz	690
			DC	-
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	20 ①
			525V AC	30 ①
			440V AC	45
			400/415V AC	50
			220/240V AC	85
			250V DC	-
Service breaking capacity (IEC, JIS, AS/NZS)	I_{cs}	(kA)	690V AC	15 ①
			525V AC	23
			440V AC	34
			400/415V AC	38
			220/240V AC	65
			250V DC	-
Rated breaking capacity (NEMA)		(kA)	480V AC	30
			240V AC	85
Rated short-time withstand current	I_{cw}	(kA)	0.3 Seconds	-
Protection				
Adjustable thermal, adjustable magnetic				
Fixed thermal, fixed magnetic				
Microprocessor				■
Utilisation category				A
Installation				
Front connection (FC)				-
Extension bar (FB)				■
Cable clamp (FW				-
Rear connection (RC)				•
Plug-in (PM)				-
DIN rail mounting (DA)				-
Dimensions	height	(mm)		273
	width	(mm)	3 pole	210
			4 pole	280
	depth	(mm)		103
Weight	weight	(kg)	3 pole	11.0
			4 pole	14.8
Operation				
Direct Opening Action				■
Toggle operation				■
Door mounted (HS) / Breaker mounted handle (HB)				•
Motor operation (MC)				•
Endurance	Electrical		690V AC	
	Mechanical	cycles		4,000
		cycles		10,000

① MCCB cannot be used in IT systems at this voltage

② Not fully rated at 50°C, refer to temperature ratings

■ Standard • Optional - Not Available

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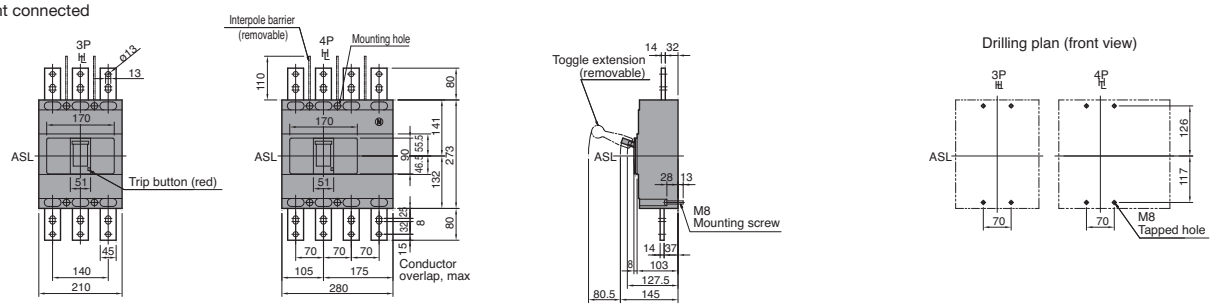
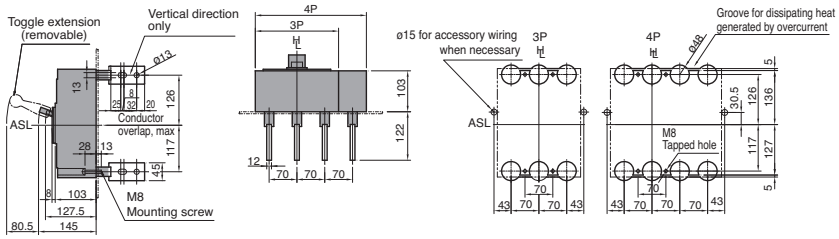
Outline Dimensions S1000-SE

ASL: Arrangement Standard Line ℍ: Handle Frame Centre Line

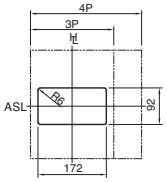
Front connected



Rear connected

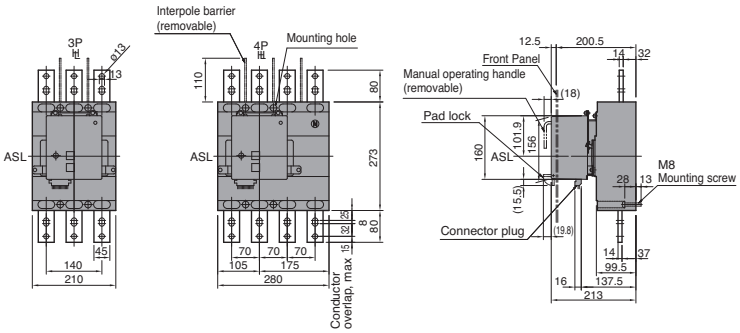


Panel cutout (front view)

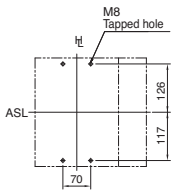


Panel cutout dimensions shown give an allowance of 1.0mm around the handle escutcheon.

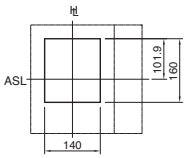
Front connected with Motor Operator



Drilling plan (front view)

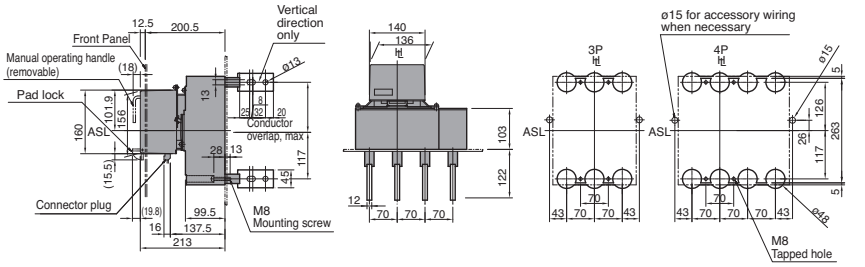


Panel cutout (front view)



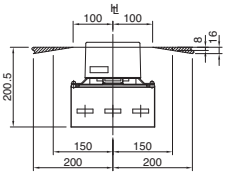
Panel cutout dimensions shown give an allowance of 1.5mm around motor operator.

Rear connected with Motor Operator



Note: Studs are factory installed in horizontal direction both on the line and load sides.

Panel hinge position (hatching area) (bottom view)



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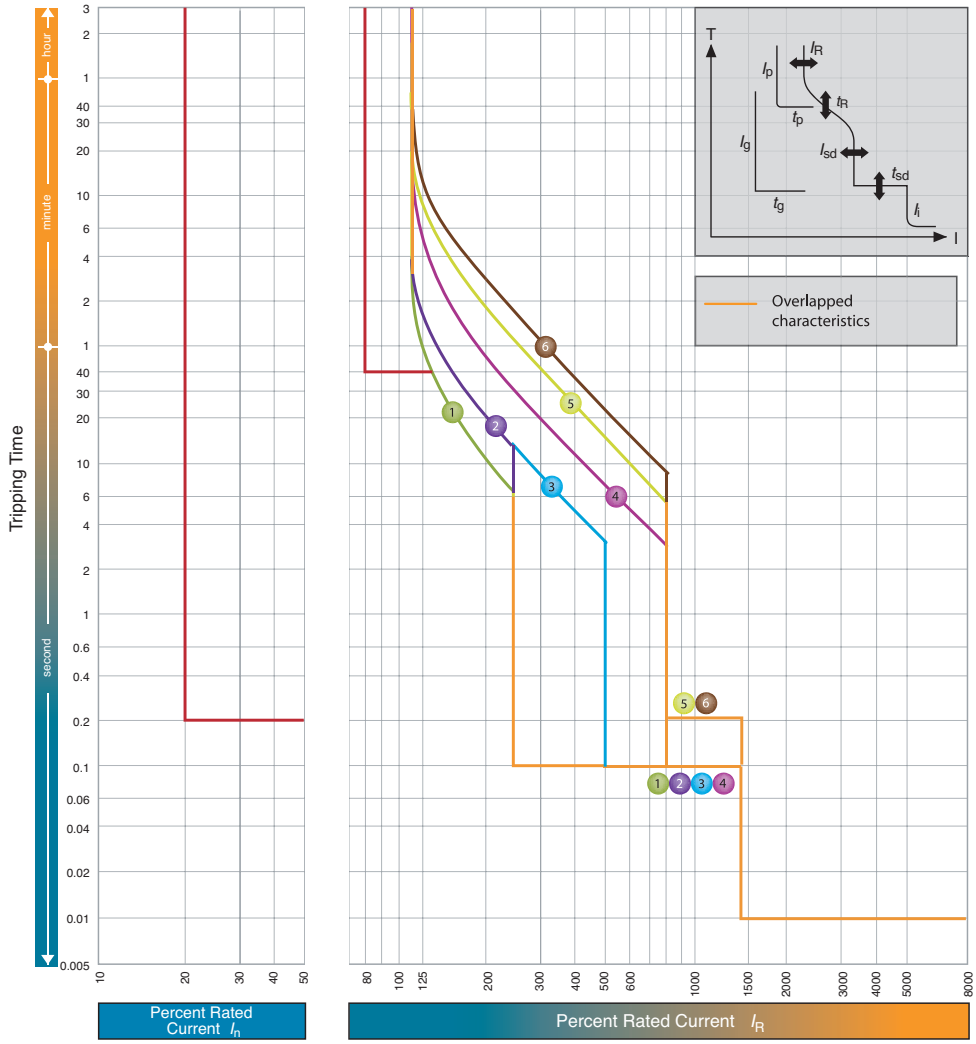
Time/Current Characteristic Curves

S1000-SE



I_n = 1000A

I_R (A)									
LTD Pick-up current	I_R	xI_n	0.4	0.5	0.63	0.8	0.9	0.95	1.0

	Characteristics		No.	1	2	3	4	5	6
Standard	LT	t_R	(s)	11	21	21	5	10	16
				at 200% x I_R			at 600% x I_R		
	ST	I_{sd}	xI_R	2.5		5	8		
		t_{sd}	(s)	0.1				0.2	
	INST	I_i	xI_R	14(Max: 10 x I_n) Note (1)					
Option	PTA	I_p	xI_R	0.8					
		t_p	(s)	40					
	gF Note(3)	I_g	xI_n	0.2					
		t_g	(s)	0.2					
	NP	I_N	xI_R	1.0/0.5 Note(2)					
		t_N	(s)	t_N=t_R					

Note

(1) I_i max. = 10 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.