

DATA SHEET: TEMBREAK 2 S1600-NE 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 1600
Max In (A) of Frame				1600
Model				S1600
Number of Poles				3, 4
Type				NE
Nominal current ratings				
	I_n	(A)	50°C	1600
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	45 ^③
			525V AC	65
			440V AC	85
			400/415V AC	100/85 ^①
			220/240V AC 250V DC	125 -
Service breaking capacity (IEC, JIS, AS/NZS)	I_{cs}	(kA)	690V AC	34 ^③
			525V AC	50
			440V AC	65
			400/415V AC	75/65 ^②
			220/240V AC 250V DC	94 -
Rated breaking capacity (NEMA)		(kA)	480V AC 240V AC	65 125
Rated short-time withstand current	I_{cw}	(kA)	0.3 Seconds	20
Protection				
Adjustable thermal, adjustable magnetic				
Fixed thermal, fixed magnetic				
Microprocessor				■
Utilisation category				B
Installation				
Front connection (FC)				-
Extension bar (FB)				•
Cable clamp (FW)				-
Rear connection (RC)				■
Plug-in (PM)				-
DIN rail mounting (DA)				-
Dimensions	height	(mm)		370
	width	(mm)	3 pole 4 pole	210 280
Weight	depth	(mm)		140
	weight	(kg)	3 pole 4 pole	27.0 35.0
Operation				
Direct Opening Action				■
Toggle operation				■
Door mounted (HS) / Breaker mounted handle (HB)				•
Motor operation (MC)				•
Endurance	Electrical Mechanical	cycles cycles	690V AC	2,000 5,000

① 100KA at 400V

② 75KA at 400V

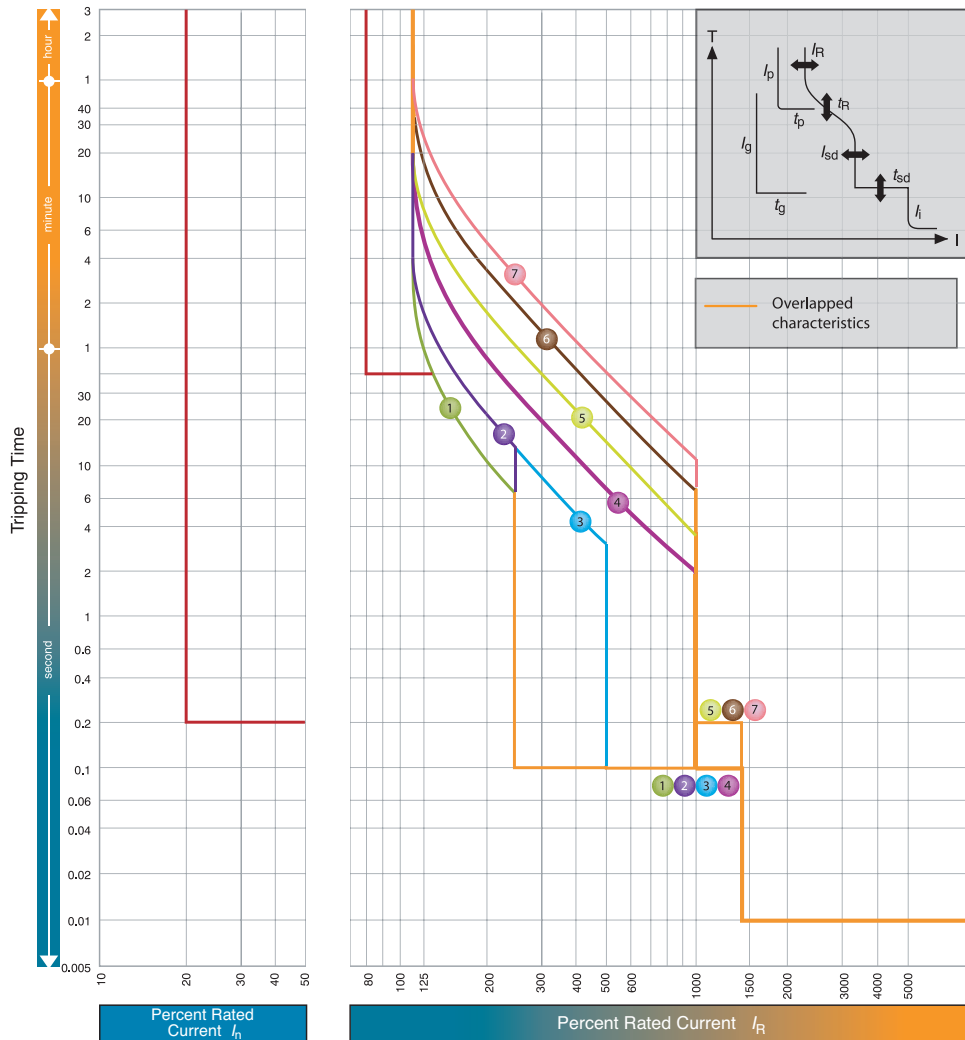
③ MCCB cannot be used in IT systems at this voltage

■ Standard • Optional - Not Available

DATA SHEET: TEMBREAK 2 S1600-NE MCCB

Time/Current Characteristic Curves

S1600-NE



$I_n = 1600A$

		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.