

RATINGS AND SPECIFICATIONS

TEMBREAK 2 MOULDED CASE CIRCUIT BREAKERS

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 S/H/L 250				TB2 H/L 400		TB2 E/S 630													
Max In (A) of Frame				250				400		630													
Model				S250	H250	H250	L250	H400	L400	E400	S400	S400	S400	S400	S400	S400	S400	E630	S630	S630			
Number of Poles Type				3, 4 PE	3, 4 NJ	3, 4 NE	3, 4 NJ	3, 4 NE	3, 4 NE	3, 4 NJ	CJ	NJ	NE	GJ	GE	PJ	PE	NE	CE	GE			
Nominal current ratings																							
	I_n	(A)	50°C	40, 125 160 250	160, 250	40, 125 160 250	160 250		250 400	250 400	250 400	250 400	250 400	250 400	250 400	250 400	250, 400	630	630	630			
Electrical characteristics																							
Rated operational voltage	U_c	(V)	AC 50/60 Hz DC	690 -	690 250	690 -	690 250		690 -	690 -	525 250	690 250	690 250	690 -	690 250	690 -	690 250	690 -	690 ^① -	690 ^① -	690 ^① -		
Rated insulation voltage	U_i	(V)		800	800	800	800		800	800	800	800	800	800	800	800	800	800	800	800			
Rated impulse withstand voltage	U_{imp}	(kV)		8	8	8	8		8	8	8	8	8	8	8	8	8	8	8	8			
Ultimate breaking capacity (IEC, JIS, AS/NZS)	I_{cu}	(kA)	690V AC	20	20	20	25	I_{cu}	35	50	-	15	20	20	20	20	20	20	10 ^①	20 ^①	20 ^①		
			525V AC	35	45	45	65		45	65	15	22	30	30	30	30	30	30	15	30	30		
			440V AC	50	120	120	180		120	180	22	30	45	45	65	65	80	80	25	45	65		
			400/415V AC	70	125	125	200		125	200	25	36	50	50	70	70	85	85	36	50	70		
			220/240V AC	125	150	150	200		150	200	35	50	85	85	100	100	100	100	50	85	100		
			250V DC	-	40	-	40		-	-	25	40	40	-	40	-	40	-	-	-	-		
Service breaking capacity (IEC, JIS, AS/NZS)	I_{cs}	(kA)	690V AC	15	15	15	20	I_{cs}	35	50	-	15	15	15	15	15	15	15	10 ^①	15 ^①	15 ^①		
			525V AC	35	45	45	65		45	65	15	22	30	30	30	30	30	15	30	30			
			440V AC	50	80	80	135		80	135	22	30	45	45	50	50	80	80	25	45	50		
			400/415V AC	70	85	85	150		85	150	25	36	50	50	50	50	85	85	36	50	50		
			220/240V AC	125	150	150	150		150	150	35	50	85	85	85	85	85	85	50	85	85		
250V DC	-	40	-	40	-	-	19	40	40	-	40	-	40	-	-	-	-	-					
Rated breaking capacity (NEMA)		(kA)	480V AC 240V AC	35 125	45 150	45 150	65 200		45 150	65 200	15 35	22 50	25 85	25 85	30 100	30 100	30 100	30 100	15 50	25 85	30 100		
Rated short-time withstand current	I_{cw}	(kA)	0.3 Seconds	-	-	-	-	I_{cw}	5	5	-	-	-	5	-	5	-	5	-	-	-		
Protection																							
Adjustable thermal, adjustable magnetic					■		■				■	■	■		■		■						
Fixed thermal, fixed magnetic				■		■		■	■					■		■	■	■	■	■			
Microprocessor				A	A	A	A	B	B	A	A	A	B	A	B	A	B	A	A	A			
Utilisation category																							
Installation																							
Front connection (FC)				■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■			
Extension bar (FB)				●②	●	●②	●		●	●	●	●	●	●	●	●	●	●	●	●			
Cable clamp (FW)				●②	●	●②	●		●	●	●	●	●	●	●	●	●	-	-	-			
Rear connection (RC)				●②	●	●②	●		●	●	●	●	●	●	●	●	●	●	●	●			
Plug-in (PM)				-	●②	-	●②		●	●	●	●	●	●	●	●	●	②	②	②			
DIN rail mounting (DA)				-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-			
Dimensions	height	(mm)	3 pole	165	165	165	165		260	260	260	260	260	260	260	260	260	260	260	260			
				width	(mm)	4 pole	105	105	105	105	140	140	140	140	140	140	140	140	140	140	140		
Weight	depth	(mm)	3 pole	140	140	140	140		185	185	185	185	185	185	185	185	185	185	185	185			
				weight	(kg)	4 pole	103	103	103	103	140	140	103	103	103	103	103	103	103	103	103		
				2.5	2.4	2.5	2.4		7.1	7.1	4.2	4.3	4.2	4.3	4.2	4.3	4.3	5.0	5.0	5.0			
				3.3	3.2	3.3	3.2		9.4	9.4	5.6	5.6	5.6	5.7	5.6	5.7	5.6	5.7	6.5	6.5	6.5		
Operation																							
Direct Opening Action	Electrical Mechanical	cycles cycles	415V AC	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■			
Toggle operation				■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■			
Door mounted (HS) / Breaker mounted handle (HB)				●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●		
Motor operation (MC)				●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●		
Endurance																							
				10,000				4,500															
				30,000				15,000															