

## MCCBs for power distribution

Susol

### Electrical characteristics

			TD100			TD160			TS100		
Frame size	[AF]		100			160			100		
Rated current, I <sub>n</sub> *	[A]		16-100			100, 125, 160			40, 50, 63, 80, 100		
No. of poles			2*, 3, 4			2*, 3, 4			2*, 3, 4		
Rated operational voltage, U <sub>e</sub>	AC	[V]	690			690			690		
	DC	[V]	500			500			500		
Rated impulse withstand voltage, U <sub>imp</sub>	[kV]		8			8			8		
Rated insulation voltage, U <sub>i</sub>	[V]		750			750			750		
Rated ultimate short-circuit breaking capacity, I <sub>cu</sub>			N	H	L	N	H	L	N	H	L
AC 50/60Hz	220/240V	[kA]	85	100	200	85	100	200	100	120	200
	380/415V	[kA]	50	85	150	50	85	150	50	85	150
	440/460V	[kA]	50	70	130	50	70	130	50	70	130
	480/500V	[kA]	30	50	65	30	50	65	42	65	85
	660/690V	[kA]	5	8	10	5	8	10	10	15	20
DC	250V	[kA]	42	65	100	42	65	100	50	85	100
DC(2poles in series)	500V	[kA]	42	65	100	42	65	100	50	85	100
Rated service breaking capacity, I <sub>cs</sub>	[%I <sub>cu</sub> ]		100%	100%	100%	100%	100%	100%	100%	100%	100%
Rated short-circuit making capacity I <sub>cm</sub>											
AC 50-60Hz	220/240V	[kA]	187	220	440	187	220	440	220	264	440
	380/415V	[kA]	105	187	330	105	187	330	105	187	330
	440/460V	[kA]	105	154	286	105	154	286	105	154	286
	480/500V	[kA]	63	105	143	63	105	143	88	143	187
	660/690V	[kA]	8	14	17	8	14	17	17	30	40
Category of utilization			A			A			A		
Isolation behavior			●			●			●		
Trip unit (release)											
Thermal-Magnetic											
● fixed-thermal, fixed-magnetic	FTU		●			●			●		
● adjustable-thermal, fixed-magnetic	FMU		●			●			●		
● adjustable-thermal, adjustable-magnetic	ATU		-			-			-		
● magnetic only	MTU ***		-			-			●		
Electronic											
● LSI	ETS ***		-			-			●		
● LSI	ETM ***		-			-			-		
Option	Earth-fault protection, I <sub>g</sub>		-			-			-		
	Zone selective interlocking, ZSI		-			-			-		
	Ammeter		-			-			-		
	Communication		-			-			-		
	Earth-leakage protection module ****		-			-			-		
Connection	fixed	front-connection	●			●			●		
		rear-connection	●			●			●		
	plug-in	front-connection	●			●			●		
		rear-connection	●			●			●		
Mechanical life	[operations]		25000			25000			25000		
Electrical life @ 415 V AC	[operations]		10000			10000			10000		
Basic dimensions, W × H × D (front connection)	3-pole	[mm]	90 × 140 × 86			90 × 140 × 86			105 × 160 × 86		
	4-pole	[mm]	120 × 140 × 86			120 × 140 × 86			140 × 160 × 86		
Weight (front connection)	3-pole	[kg]	1.5			1.5			2		
	4-pole	[kg]	1.8			1.8			2.6		
Reference standard			IEC60947-2			IEC60947-2			IEC60947-2		

\* Applicable to MCCBs equipped with FTU, FMU, ATU

\* 2 pole MCCB in 3pole frame size

\*\* 700A only available for TS800FTU

\*\*\* Available for 3pole circuit breakers

\*\*\*\* Under development

TS160			TS250			TS400			TS630			TS800		
160			250			400			630			800		
(100)*, 125, 160			125, 160, 200, 250			300, 400			500, 630			700**, 800		
2*, 3, 4			2*, 3, 4			2*, 3, 4			2*, 3, 4			2*, 3, 4		
690			690			690			690			690		
500			500			500			500			500		
8			8			8			8			8		
750			750			750			750			750		
N	H	L	N	H	L	N	H	L	N	H	L	N	H	L
100	120	200	100	120	200	100	120	200	100	120	200	100	120	200
50	85	150	50	85	150	65	85	150	65	85	150	65	100	150
50	70	130	50	70	130	65	85	130	65	85	130	65	100	130
42	65	85	42	65	85	42	65	85	42	65	85	42	85	100
10	15	20	10	15	20	10	20	35	10	20	35	10	20	35
50	85	100	50	85	100	50	85	100	50	85	100	50	85	100
50	85	100	50	85	100	50	85	100	50	85	100	50	85	100
100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
220	264	440	220	264	440	220	264	440	220	264	440	220	264	440
105	187	330	105	187	330	143	187	330	143	187	330	143	220	330
105	154	286	105	154	286	143	187	286	143	187	286	143	220	286
88	143	187	88	143	187	88	143	187	88	143	187	88	187	220
17	30	40	17	30	40	17	40	74	17	40	74	17	40	74
A			A			A			A			A		
●			●			●			●			●		
●			●			●			●			●		
●			●			●			●			●		
●			●			●			●			●		
●			●			●			●			●		
●			●			●			●			●		
-			-			●			●			●		
-			-			▲(Option)			▲(Option)			▲(Option)		
-			-			▲(Option)			▲(Option)			▲(Option)		
-			-			▲(Option)			▲(Option)			▲(Option)		
-			-			▲(Option)			▲(Option)			▲(Option)		
-			-			▲(Option)			▲(Option)			▲(Option)		
●			●			●			●			●		
●			●			●			●			●		
●			●			●			●			●		
●			●			●			●			●		
25000			25000			20000			20000			10000		
10000			10000			6000			6000			3000		
105 × 160 × 86			105 × 160 × 86			140 × 260 × 110			140 × 260 × 110			210 × 320 × 135		
140 × 160 × 86			140 × 160 × 86			186.5 × 260 × 110			186.5 × 260 × 110			280 × 320 × 135		
2			2			5.4			5.4			15.1		
2.6			2.6			7.2			7.2			19.6		
IEC60947-2			IEC60947-2			IEC60947-2			IEC60947-2			IEC60947-2		

1. The breakers with electronic trip units are available only at 3-pole version.

※ The trip unit ATU is available from 125A