

TECHNICAL NEWS

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[Title] Addition of a note for Rated short time withstand current (Icw)

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[Relevant Models] Air Circuit Breakers World Super series
 <AE4000-SW, AE5000-SW, AE6300-SW>

We add a note of caution about Rated short time withstand current (Icw) in the Mitsubishi low voltage air circuit breaker catalog "Y-0622" and the low voltage circuit breaker general catalog "Y-0720" as follows.

We are terribly sorry to cause you inconvenience by this.

1.Relevant models

AE4000-SW, AE5000-SW, AE6300-SW (3P,4P)

2.Detail of the note added

Add the note in specification tabale as "For 600 ~ 690V AC, Icw at 1s is 85kA".

3.Place of the note (In the case of Y-0622K, page 11-12).

Product Specification		world Super AE													
● Specification		AE30-SW	AE1000-SW	AE1250-SW	AE1600-SW	AE2000-SWA	AE2000-SW	AE2500-SW	AE3200-SW	AE4000-SWA	AE4000-SW	AE5000-SW	AE6300-SW		
Frame size	(A)	630	1000	1250	1600	2000	2000	2500	3200	4000	4000	5000	6300		
Rated insulation voltage (U _i)	(50/60Hz)(AC-V)	690	1000	1250	1600	2000	2000	2500	3200	4000	4000	5000	6300		
Rated operational voltage (U _e)	(50/60Hz)(AC-V)	690	1000	1250	1600	2000	2000	2500	3200	4000	4000	5000	6300		
Rated impulse withstand voltage (U _{imp})	(kV)	12	12	12	12	12	12	12	12	12	12	12	12		
Utilization category		B	B	B	B	B	B	B	B	B	B	B	B		
Pollution degree		3	3	3	3	3	3	3	3	3	3	3	3		
EMC environment condition (environment A or B) (Note 15)		A	A	A	A	A	A	A	A	A	A	A	A		
Number of poles		3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4		
Rated current In (CT rating)	(A)	630 (Notes 2)	1000	1250	1600	2000	2000 (Notes 3)	2500	3200	4000	4000	5000	6300		
Current setting Ir (A) (40°C)	(UIS) (UIS)	General use (Current rating adjustable 0.5 to 1.0 x In 0.05 step)	315-565-875-1409-5 441-472.5-504-535.5 567-598.5-630 (Notes 5)	500-650-800-950 700-750-800-850 900-950-1000	625-687.5-750-812.5 875-937.5-1000-1062.5 1125-1187.5-1250	800-880-960-1040 1100-1200-1280-1380 1440-1520-1600	1600-1700-2000-2300 1400-1500-1800-1700 1800-1900-2000 (Notes 5)	1250-1375-1500-1625 1400-1500-1600-1700 1750-1875-2000-2125 2250-2375-2500	1600-1700-1825-2080 2040-2400-2560-2720 2880-3040-3200	2000-2200-2400-2600 2800-3000-3200-3400 3600-3800-4000	2000-2200-2400-2600 2800-3000-3200-3400 3600-3800-4000	2500-2750-3000-3250 3500-3750-4000-4250 4500-4750-5000	3150-3450-3750-4050 4410-4725-5040-5355 5670-5985-6300		
	(WM)	Generator protection use (Current rating fixed)	160 x Ir x 630	400 x Ir x 1000	800 x Ir x 1250	1000 x Ir x 1600	1250 x Ir x 2000	800 x Ir x 2000	1600 x Ir x 2500	2000 x Ir x 3200	2500 x Ir x 4000	2500 x Ir x 4000	3150 x Ir x 5000	4000 x Ir x 6300	
Rated current of neutral pole	(A)	630	1000	1250	1600	2000	2000	2500	3200	4000	4000	5000	6300 (Notes 8)		
IEC60947-2 EN60947-2 JIS C 5201-2-1	Ultimate breaking capacity Icu (kA rms)	690V AC		65	65	75		75		85		85			
		240-500V AC		65	65	65		65		65		130 (Notes 9)			
		690V AC		65	65	65		65		65		65			
		240-500V AC		65	65	65		65		65		100			
		Bar + External relay		25 (Notes 1)	25 (Notes 1)	45 (Notes 1)		45 (Notes 1)		65 (Notes 1)		65 (Notes 1)			
		Rated service breaking capacity Ics (kA rms) %Icu			100%	100%		100%		100%		100%			
		690V AC		143	143	143		143		143		143			
		240-500V AC		143	143	143		143		143		143			
		690V AC		143	143	143		143		143		143			
		240-500V AC		143	143	143		143		143		143			
Rated short time withstand current Icw (kA rms)	1s	65	65	65	65	65	65	65	65	65	65	65	100 (Notes 14)		
	2s	60	60	60	60	60	60	60	60	60	60	60	85		
	3s	50	50	50	50	50	50	50	50	50	50	50	85		
Maximum total breaking time	(ms)		40 (Notes 6)					40 (Notes 6)				50 (Notes 6)			
Maximum closing time	(ms)		80					80				80			
Number of operating cycles	With rated current	500V AC In	5,000			1,500	1,500	1,500	1,000	500	1,000	1,000			
	690V AC In		5,000			1,500	1,500	1,500	1,000	500	1,000	1,000			
Connecting terminal	Without rated current			25,000 (Notes 4)				20,000 (Notes 4)				10,000 (3P) / 5,000 (4P)			
	Horizontal terminal			○				○				○			
	Vertical terminal			○				○ (Notes 3)		○ (Notes 3)		○ (Notes 3)			
Outline dimension (mm)	H×W×D	Fixed type	3-pole	410×440×290			410×475×290			414×474×290					
			4-pole	410×425×290			410×405×290			414×404×1134×290 (Notes 8)					
		Drawout type	3-pole	430×300×375			430×300×375			480×389×375					
			4-pole	430×385×375			430×385×375			480×389×375					
Weight (kg) (without Accessory)	Including cradle	Fixed type	3-pole	35	43	43	44	51	52	54	73	141	141	148	
			4-pole	42	42	43	43	64	64	67	92	159 (179)	159 (179)	166 (188)	
		Drawout type	3-pole	56	56	56	62	81	81	81	85	104	104	104	208
			4-pole	70	70	70	75	101	101	106	127	223 (247)	223 (247)	238 (269)	
		Cradle only	3-pole	24	24	24	27	33	33	34	46	58	58	58	107
			4-pole	28	28	28	32	40	40	42	58	113 (127)	113 (127)	121 (138)	
Marine approval (Notes 12)	3-pole		○ (LR, BV, DNV GL, ABS, NK, CCS)					○ (LR, BV, DNV GL, ABS, NK, CCS)				○ (NK, LR, DNV GL, BV, ABS)			

(Note 11) As for selectable connection, please refer to page 13.
 (Note 12) AE4000-SW - AE6300-SW don't apply to CCS marine approval.
 (Note 13) These weights include an electronic relay, but don't include other accessories.
 (Note 14) For 600 ~ 690V AC, Icw at 1s is 85kA.