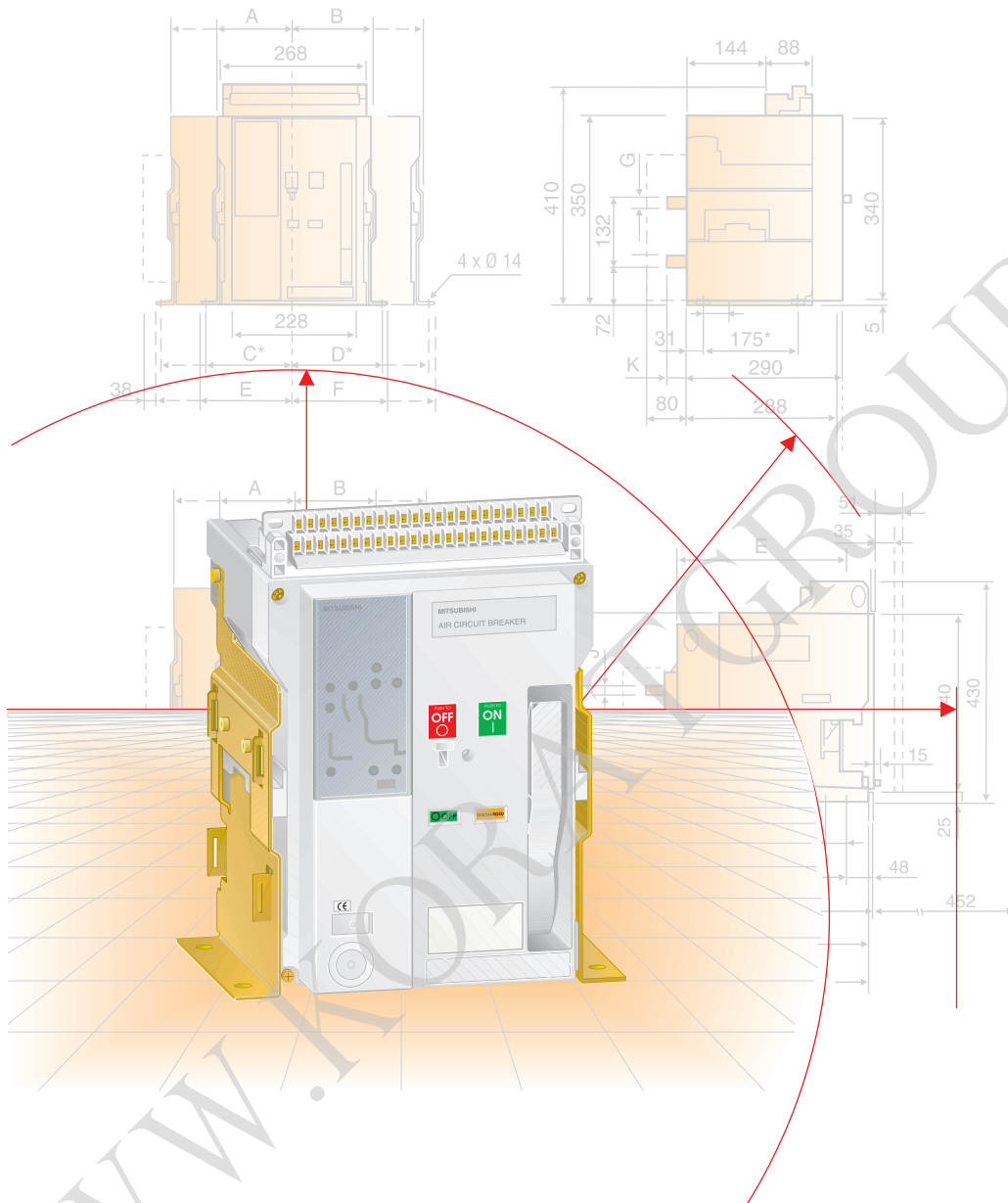


Low Voltage
Switchgears

Air Circuit Breakers

Air Circuit
Disconnectors

SUPER AE
AE 1000 –
AE 6300



Technical Catalogue

2004

New Items in this Catalogue

01/2004

The air circuit breaker program from MITSUBISHI ELECTRIC:

- ▶ **Complete breaker program**
Frame size from 1000 A to 6300 A
- ▶ **Wide performance range**
Standard version "SS" from 65 to 130 kA
High performance version "SH" with 130 kA
- ▶ **High interrupting capacity**
Growing power demands
- ▶ **Optimum overload tripping system**
Safer and more selectivity

Further Publications within the LVS, PLC and inverter range

Technical
Catalogues

WSS, PSS & Super Series Technical Catalogue

Product catalogue for circuit breakers and disconnectors from 3 A to 1600 A rated current (art no. 133207)

MS-N Technical Catalogue

Product catalogue for low voltage contactors and relays from 20 A to 1000 A rated current (art no. 62306)

PLC and Inverter Technical Catalogues

Product catalogues for programmable logic controllers and frequency inverters (more details on request)

Additional Services

Current information on updates, alterations, new items, and technical support you will find on MITSUBISHI ELECTRIC's web pages (www.mitsubishi-automation.com).

In the products section of the MITSUBISHI home site various documentations of the whole product range by MITSUBISHI ELECTRIC as well as the current version of this catalogue on hand are available as download. The content is updated daily and to date is provided in German and English.

About this product catalogue

Due to the constantly growing product range, technical alteration, and new or changed characteristic features, this catalogue is updated frequently.

Texts, figures and diagrams shown in this product catalogue are intended exclusively for explanation and assistance in planning and ordering the electronic air circuit breakers of the SUPER AE series and the associated accessories. Only the manuals supplied with the breakers are relevant for installation, commissioning and handling of the air circuit breakers and the accessories. The information given in this documentation must be read before installation and commissioning of the modules.

Should questions arise with regard to the planning of modules described in this product catalogue, do not hesitate to contact the german branch of the MITSUBISHI ELECTRIC EUROPE B.V. in Ratingen or one of its distributors (see cover page).

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Program Overview – Specifications

SUPER AE		Series		Standard series "SS"															
		Breaker type		AE 1000 - SS		AE 1250 - SS		AE 1600 - SS		AE 2000 - SS		AE 2500 - SS		AE 3200 - SS					
Rated current (A) at 40 °C ^①		I_{Nmax}		1000		1250		1600		2000		2500		3200					
Rated insulation voltage (V) 50/60 Hz		U_i		1000		1000		1000		1000		1000		1000					
Rated operating voltage (V) 50/60 Hz		U_e		690		690		690		690		690		690					
Number of poles				3 4		3 4		3 4		3 4		3 4		3 4					
Adjustment range Rated current (A)		General protection (current rating adjustable)		500-600-700- 800-900-1000		625-750-875- 1000-1125-1250		800-960-1120- 1280-1440-1600		1000-1200-1400- 1600-1800-2000		1250-1500-1750- 2000-2250-2500		1600-1920-2240- 2560-2880-3200					
				315-378-441- 504-567-630						625-750-875- 1000-1125-1250									
		Generator protection (current rating fixed)		$500 \leq I_n \leq 1000$ $200 \leq I_n \leq 630$ ⑤		$625 \leq I_n \leq 1250$		$800 \leq I_n \leq 1600$		$1000 \leq I_n \leq 2000$ $625 \leq I_n \leq 1000$		$1250 \leq I_n \leq 2500$		$1600 \leq I_n \leq 3200$					
Rated current for neutral pole N		(A)		1000		1250		1600		2000		2500		3200					
Rated service short-circuit breaking capacity I_{cs} (kA, eff, sym.) Breaking duty: 0-t-CO-t-CO $I_{cs} = I_{cu}$		With instantaneous trip		AC690V		50		50		50		50		50					
				AC600V		50		50		50		65		65		65			
				AC500V		65		65		65		85		85		85			
				Without instantaneous trip (with MCR)		AC690V		42		42		42		50		50		50	
						AC600V		50		50		50		65		65		65	
						AC500V		65		65		65		85		85		85	
		Without inst. trip ^②		AC690V		25		25		25		45		45		45			
				AC600V		105		105		105		105		105		105			
				AC500V		143		143		143		187		187		187			
				With instantaneous trip		AC690V		88.2		88.2		88.2		105		105		105	
						AC600V		105		105		105		143		143		143	
						AC500V		143		143		143		187		187		187	
Rated short-circuit making capacity I_{cm} (kA, peak value)		Without instantaneous trip (with MCR)		AC690V		52.5		52.5		52.5		94.5		94.5					
				AC600V		105		105		105		143		143		143			
				AC500V		143		143		143		187		187		187			
		Without inst. trip ^②		AC690V		65		65		65		65		65		65			
				AC600V		40		40		40		65		65		65			
				AC500V		30		30		30		65		65		65			
Maximum total breaking time		(sec)		0.04		0.04		0.04		0.04		0.04		0.04					
Closing time		(sec)		0.08		0.08		0.08		0.08		0.08		0.08					
Number of operating cycles ^③ (ON/OFF)		With rated current		5000		5000		5000		1500		1500		1000					
		Without rated current		10000		10000		10000		10000		10000		10000					
Dimensions (mm) ^④		Fixed type		a		340 425		340 425		340 425		475 605		475 605					
				b		410 410		410 410		410 410		410 410		410 410		410 410			
				c		290 290		290 290		290 290		290 290		290 290		290 290			
				d		40 40		40 40		40 40		40 40		40 40		40 40			
		Drawout type		a		298 385		298 385		298 385		433 565		433 565		433 565			
				b		430 430		430 430		430 430		430 430		430 430		430 430			
				c		368 368		368 368		368 368		368 368		368 368		368 368			
				d		61 61		61 61		61 61		61 61		61 61		61 61			
Weight (kg) ^④		Fixed type		Manual charging		41 51		41 51		42 52		60 72		61 73		63 75			
				Motor charging		44 54		44 54		45 55		63 75		64 76		66 78			
		Drawout type (with cradle)		Manual charging		64 78		64 78		65 79		92 113		93 114		95 116			
				Motor charging		67 81		67 81		68 82		95 116		96 117		98 119			
Cradle only				26 30		26 30		26 30		35 43		35 43		36 44					

- ① For further temperatures refer to technical information on page 48.
 - ② The figures for "without instantaneous tripping" are the values when the bare main body and the external relay are combined.
 - ③ The number of operating cycles with rated current also include the number of operating cycles without rated current.
 - ④ All specifications without peripheral accessories (e.g. UVT control unit).
 - ⑤ Further current ratings on request.
- More details on request.

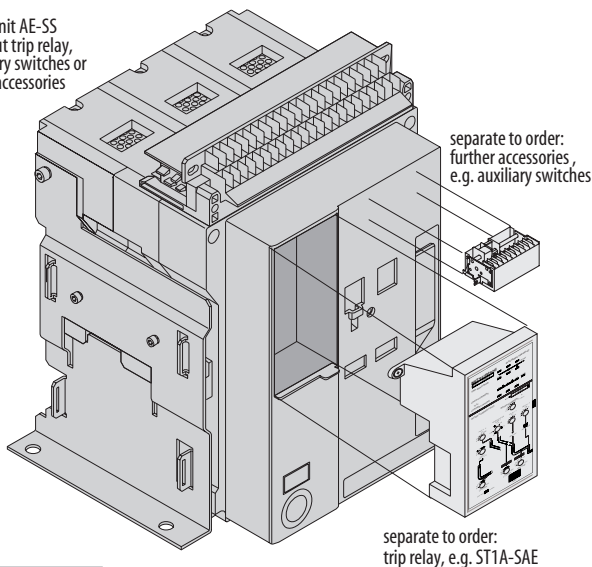
Standard series "SS"										High performance series "SH"											
AE 4000 - SSA		AE 4000 - SSC		AE 4000 - SS		AE 5000 - SS		AE 6300 - SS		AE 1000 - SH		AE 1250 - SH		AE 1600 - SH		AE 2000 - SH		AE 2500 - SH		AE 3200 - SH	
4000		4000		4000		5000		6300		1000		1250		1600		2000		2500		3200	
1000		1000		1000		1000		1000		1000		1000		1000		1000		1000		1000	
690		690		690		690		690		690		690		690		690		690		690	
3	4	3	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	
3200-3600-4000		3200-3600-4000		2000-2400-2800-3200-3600-4000		2500-3000-3500-4000-4500-5000		3150-3780-4410-5040-5670-6300		500-600-700-800-900-1000 315-378-441-504-567-630 —		625-750-875-1000-1125-1250		800-960-1120-1280-1440-1600		1000-1200-1400-1600-1800-2000		1250-1500-1750-2000-2250-2500		1600-1920-2240-2560-2880-3200	
3200≤In≤4000		3200≤In≤4000		2000≤In≤4000		2500≤In≤5000		3150≤In≤6300		500≤In≤1000		625≤In≤1250		800≤In≤1600		1000≤In≤2000		1250≤In≤2500		1600≤In≤3200	
4000		—		3200		3200		3200		1000		1250		1600		2000		2500		3200	
50		50		50		50		50		65		65		65		65		65		65	
65		65		85		85		85		85		85		85		85		85		85	
85		85		130		130		130		130		130		130		130		130		130	
50		50		50		50		50		—		—		—		—		—		—	
65		65		85		85		85		—		—		—		—		—		—	
75		75		85		85		85		—		—		—		—		—		—	
45		45		50		50		50		—		—		—		—		—		—	
105		105		105		105		105		65		65		65		65		65		65	
143		143		187		187		187		85		85		85		85		85		85	
187		187		286		286		286		130		130		130		130		130		130	
105		105		105		105		105		—		—		—		—		—		—	
143		143		187		187		187		—		—		—		—		—		—	
165		165		187		187		187		—		—		—		—		—		—	
94.5		94.5		105		105		105		—		—		—		—		—		—	
75		75		85		85		85		—		—		—		—		—		—	
65		65		70		70		70		—		—		—		—		—		—	
65		65		70		70		70		—		—		—		—		—		—	
0.04		0.04		0.05		0.05		0.05		0.04		0.04		0.04		0.04		0.04		0.04	
0.08		0.08		0.08		0.08		0.08		0.08		0.08		0.08		0.08		0.08		0.08	
500		500		500		500		500		3000		3000		2000		1500		1500		1000	
5000	4000	5000	2000		2000		2000		10000		10000		10000		10000		10000		10000		
475	605	605	—	—	—	—	—	—	475	605	475	605	475	605	475	605	475	605	475	605	
410	410	414	—	—	—	—	—	—	410	410	410	410	410	410	410	410	410	410	410	410	
290	290	290	—	—	—	—	—	—	290	290	290	290	290	290	290	290	290	290	290	290	
117	117	136	—	—	—	—	—	—	70	70	70	70	70	70	70	70	70	70	70	70	
439	569	565	875	1005	875	1005	875	1005	485	615	485	615	485	615	485	615	485	615	485	615	
430	430	430	480	480	480	480	480	480	430	430	430	430	430	430	430	430	430	430	430	430	
368	368	368	368	368	368	368	368	368	398	398	398	398	398	398	398	398	398	398	398	398	
109	109	151	123	123	123	123	123	123	61	61	61	61	61	61	61	61	61	61	61	61	
81	99	109	—	—	—	—	—	—	66	79	66	79	66	79	66	79	66	79	66	79	
85	103	112	—	—	—	—	—	—	69	82	69	82	69	82	69	82	69	82	69	82	
107	136	145	240	263	240	263	240	263	105	127	105	127	105	127	105	127	105	127	105	127	
111	140	148	244	267	244	267	244	267	108	130	108	130	108	130	108	130	108	130	108	130	
49	61	75	125	140	125	140	125	140	42	50	42	50	42	50	42	50	42	50	42	50	

Declaration of conformity:

Standards	IEC947-2, EN60947-2, VDE0660
Certificates	ASTA, SEV (types on request)
Marine approvals	LRS, GL, BV, ABS, DNK, NK (other approvals on request)

Program Overview – Order Information

Base unit AE-SS without trip relay, auxiliary switches or other accessories



SUPER AE Air Circuit Breaker – Order Information

The circuit breakers of the frame sizes AE1000-SS to AE3200-SS are offered without trip relay and auxiliary switch included as standard equipment. The circuit breakers of the frame sizes AE4000-SSA/SSC/SS to AE6300-SS are available including the trip relay ST1A and auxiliary relay. The circuit breakers of the frame sizes AE4000-SS, AE5000-SS, and AE6300-SS for handling and weight reasons are available as drawout types. The circuit breakers of the high-performance series AE-SH as well are available including the trip relay ST1A and auxiliary relay. They are available as fixed and drawout types.

To purchase a fully functional 3-pole or 4-pole **fixed type** circuit breaker please select the following:

- base unit: fixed type, 3 or 4 pole with 3 current sensors (CT),
- electronic trip relay,
- auxiliary switches,
- and the required accessory.

Please refer to order example 1.

To purchase a fully functional 3-pole or 4-pole **drawout type** circuit breaker please select the following:

- the corresponding circuit breaker – fixed type,
- the corresponding cradle
- and the drawout mechanism.

Please refer to order example 2.

To purchase a fully functional 3-pole or 4-pole **drawout type** disconnecter please select the following:

- the corresponding disconnecter – fixed type,
- the corresponding cradle
- and the drawout mechanism.

Please refer to order example 3.

Order example 1:

- Base unit – fixed type, 3 pole with 3 current sensors: AE1000-SS 3P Fix, Bare, CT, TC (art. no. 129215)
- Electronic trip relay (for general use - S type): ST1A-SAE (art. no. 135976)
- Auxiliary switches: AX-SAE2A2BA (art. no. 28786)

Order example 2:

- Base unit – fixed type, 3 pole with 3 current sensors: AE1000-SS 3P Fix, Bare, CT, TC (art. no. 129215)
- Electronic trip relay (for general use - S type): ST1A-SAE (art. no. 135976)
- Auxiliary switches: AX-SAE2A2BA (art. no. 28786)
- Cradle with horizontal terminals: CRADLE-02SEA3 (art. no. 25897)
- Drawout mechanism: REC-SAEFD (art. no. 34666)

Order example 3:

- Base unit (Disconnecter *) – fixed type, 3 pole: AE1000-SS 3P Fix, Bare (art. no. 129228)
- Cradle with horizontal terminals: CRADLE-02SEA3 (art. no. 25897)
- Drawout mechanism: REC-SAEFD (art. no. 34666)

* Air circuit breaker without overcurrent short-circuit release and without current transformer

Standard series AE-SS – Fixed type

Base unit equipment	Breaker ^③	3-pole type	Art. no.	4-pole type	Art. no.
Shipping contents:	AE 1000 - SS	AE1000-SS 3P Fix, Bare, CT, TC	129215	AE1000-SS 4P Fix, Bare, CT, TC	129216
● Base unit	AE 1250 - SS	AE1250-SS 3P Fix, Bare, CT, TC	129217	AE1250-SS 4P Fix, Bare, CT, TC	129218
● Charging handle (for manual operation)	AE 1600 - SS	AE1600-SS 3P Fix, Bare, CT, TC	129220	AE1600-SS 4P Fix, Bare, CT, TC	129222
● without electronic trip relay	AE 2000 - SS	AE2000-SS 3P Fix, Bare, CT, TC	129224	AE2000-SS 4P Fix, Bare, CT, TC	129225
● 4 auxiliary contacts (2 NO, 2 NC contacts)	AE 2500 - SS	AE2500-SS 3P Fix, Bare, CT, TC	129226	AE2500-SS 4P Fix, Bare, CT, TC	129227
Further elements that must be ordered:	AE 3200 - SS	AE3200-SS 3P Fix, Bare, CT, TC	129246	AE3200-SS 4P Fix, Bare, CT, TC	129247
○ Electronic trip relay e.g. ST1A ^①					
○ Accessories as required ^②					

Standard series AE-SS – Drawout type

Please refer to order information above.

^① For specification and order information about electronic trip relays refer to page 20 ff. ^② For breaker accessories refer to page 8 ff.
^③ Further breaker types with other rated current on request.

Air circuit breaker series AE-SSA/SSC 4000 A

Base unit equipment	Breaker ^②	Fixed type	Art. no.	Draw-out type	Art. no.
Shipping contents:	AE 4000 - SSA	AE4000-SSA 3P Fix, ST1A, AX2A2B	142593	AE4000-SSA 3P D/O, ST1A, AX2A2B, SST	142596
● Base unit	AE 4000 - SSA	AE4000-SSA 4P Fix, ST1A, AX2A2B	142594	AE4000-SSA 4P D/O, ST1A, AX2A2B, SST	142599
● Charging handle (for manual operation)	AE 4000 - SSC	AE4000-SSC 3P Fix, ST1A, AX2A2B	69984	AE4000-SSC 3P D/O, ST1A, AX2A2B, SST	69985
● Electronic trip relay ST1A					
● 4 auxiliary contacts (2 NO, 2 NC contacts)					
● Safety shutters					

Further elements that must be ordered:
 Different trip relay if you do not want ST1A^①
 Accessories as required^②

Air circuit breaker series AE-SS 4000-6300 A – Draw-out type

Base unit equipment	Breaker	3-pole type	Art. no.	4-pole type	Art. no.
Shipping contents:	AE 4000 - SS	AE4000-SS 3P D/O, ST1A, AX2A2B, SST	56977	AE4000-SS 4P D/O, ST1A, AX2A2B, SST	56978
● Base unit	AE 5000 - SS	AE5000-SS 3P D/O, ST1A, AX2A2B, SST	56976	AE5000-SS 4P D/O, ST1A, AX2A2B, SST	56975
● Charging handle (for manual operation)	AE 6300 - SS	AE6300-SS 3P D/O, ST1A, AX2A2B, SST	56974	AE6300-SS 4P D/O, ST1A, AX2A2B, SST	56973
● Electronic trip relay ST1A					
● 4 auxiliary contacts (2 NO, 2 NC contacts)					
● Safety shutters					

Further elements that must be ordered:
 Different trip relay if you do not want ST1A^①
 Accessories as required^②

High performance series AE-SH – Fixed type

Base unit equipment	Breaker ^②	3-pole type	Art. no.	4-pole type	Art. no.
Shipping contents:	AE 1000 - SH	AE1000-SH 3P FIX, ST1A, AX2A2B	43713	AE1000-SH 4P FIX, ST1A, AX2A2B	139891
● Base unit	AE 1250 - SH	AE1250-SH 3P FIX, ST1A, AX2A2B	139887	AE1250-SH 4P FIX, ST1A, AX2A2B	139902
● Charging handle (for manual operation)	AE 1600 - SH	AE1600-SH 3P FIX, ST1A, AX2A2B	43711	AE1600-SH 4P FIX, ST1A, AX2A2B	139903
● Electronic trip relay ST1A	AE 2000 - SH	AE2000-SH 3P FIX, ST1A, AX2A2B	139888	AE2000-SH 4P FIX, ST1A, AX2A2B	139904
● 4 auxiliary contacts (2 NO, 2 NC contacts)	AE 2500 - SH	AE2500-SH 3P FIX, ST1A, AX2A2B	139889	AE2500-SH 4P FIX, ST1A, AX2A2B	43703
Further elements that must be ordered:	AE 3200 - SH	AE3200-SH 3P FIX, ST1A, AX2A2B	139890	AE3200-SH 4P FIX, ST1A, AX2A2B	43702
<input type="radio"/> Different trip relay if you do not want ST1A ^①					
<input type="radio"/> Accessories as required ^②					

High performance series AE-SH – Draw-out type

Base unit equipment	Breaker ^②	3-pole type	Art. no.	4-pole type	Art. no.
Shipping contents:	AE 1000 - SH	AE1000-SH 3P D/O, ST1A, AX2A2B	43701	AE1000-SH 4P D/O, ST1A, AX2A2B	43695
● Base unit	AE 1250 - SH	AE1250-SH 3P D/O, ST1A, AX2A2B	139905	AE1250-SH 4P D/O, ST1A, AX2A2B	139908
● Drawout mechanism	AE 1600 - SH	AE1600-SH 3P D/O, ST1A, AX2A2B	139906	AE1600-SH 4P D/O, ST1A, AX2A2B	139909
● Cradle	AE 2000 - SH	AE2000-SH 3P D/O, ST1A, AX2A2B	43698	AE2000-SH 4P D/O, ST1A, AX2A2B	139910
● Charging handle (for manual operation)	AE 2500 - SH	AE2500-SH 3P D/O, ST1A, AX2A2B	139907	AE2500-SH 4P D/O, ST1A, AX2A2B	139911
● Electronic trip relay ST1A	AE 3200 - SH	AE3200-SH 3P D/O, ST1A, AX2A2B	43696	AE3200-SH 4P D/O, ST1A, AX2A2B	43690
● 4 auxiliary contacts (2 NO, 2 NC contactors)					
Further elements that must be ordered:					
<input type="radio"/> Different trip relay if you do not want ST1A ^①					
<input type="radio"/> Accessories as required ^②					

Switch-disconnector* AE-SS – Fixed type

Base unit equipment	Breaker	3-pole type	Art. no.	4-pole type	Art. no.
Shipping contents:	AE 1000 - SS	AE1000-SS 3P SS Fix, Bare	129228	AE1000-SS 4P SS Fix, Bare	129229
● Base unit	AE 1250 - SS	AE1250-SS 3P SS Fix, Bare	129232	AE1250-SS 4P SS Fix, Bare	129234
● Charging handle (for manual operation)	AE 1600 - SS	AE1600-SS 3P SS Fix, Bare	129236	AE1600-SS 4P SS Fix, Bare	129238
● without auxiliary contacts	AE 2000 - SS	AE2000-SS 3P SS Fix, Bare	129240	AE2000-SS 4P SS Fix, Bare	129241
Further elements that must be ordered:	AE 2500 - SS	AE2500-SS 3P SS Fix, Bare	129242	AE2500-SS 4P SS Fix, Bare	129244
<input type="radio"/> Electronic trip relay type B if you do not want without trip relay	AE 3200 - SS	AE3200-SS 3P SS Fix, Bare	129248	AE3200-SS 4P SS Fix, Bare	129249
<input type="radio"/> Accessories as required ^②					

Switch-disconnector* AE-SS – Draw-out type

Please refer to order information on the top left side.

^① For specification and order information about electronic trip relays refer to page 20 ff. ^② For breaker accessories refer to page 8 ff.
^③ Further breaker types with other rated current on request. * Air circuit breaker without overcurrent short-circuit release and without current transformer

SPECIFICATIONS

Internal resistance, reactance and power consumption (per pole)

Standard series "SS"				
Breaker type		Resistance (mΩ)	Reactance (mΩ)	Power consumption(W)
AE1000-SS	Fixed	0.026	0.060	26
	Drawout	0.040	0.091	40
AE1250-SS	Fixed	0.024	0.060	38
	Drawout	0.038	0.091	60
AE1600-SS	Fixed	0.016	0.063	41
	Drawout	0.030	0.095	77
AE2000-SS	Fixed	0.010	0.047	40
	Drawout	0.020	0.071	80
AE2500-SS	Fixed	0.008	0.047	50
	Drawout	0.018	0.071	113
AE3200-SS	Fixed	0.007	0.048	72
	Drawout	0.014	0.072	143
AE4000-SSA	Fixed	0.009	0.048	144
	Drawout	0.015	0.072	240
AE4000-SSC	Fixed	0.008	0.048	128
	Drawout	0.014	0.072	224
AE4000-SS	Drawout	0.013	0.062	210
AE5000-SS	Drawout	0.011	0.062	275
AE6300-SS	Drawout	0.0085	0.062	340

High performance series "SH"				
Breaker type		Resistance (mΩ)	Reactance (mΩ)	Power consumption (W)
AE1000-SH	Fixed	0.018	0.047	18
	Drawout	0.028	0.071	28
AE1250-SH	Fixed	0.016	0.047	25
	Drawout	0.026	0.071	41
AE1600-SH	Fixed	0.014	0.047	36
	Drawout	0.024	0.071	61
AE2000-SH	Fixed	0.012	0.047	48
	Drawout	0.022	0.071	88
AE2500-SH	Fixed	0.010	0.047	63
	Drawout	0.020	0.071	125
AE3200-SH	Fixed	0.009	0.048	92
	Drawout	0.016	0.072	164

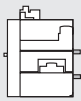
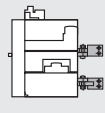
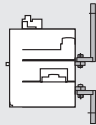
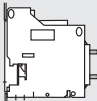
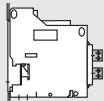

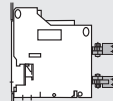
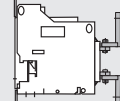
Deratings (A) by ambient temperature

Standard	Ambient temperature	AE1000-SS AE1000-SH	AE1250-SS AE1250-SH	AE1600-SS AE1600-SH	AE2000-SS AE2000-SH	AE2500-SS AE2500-SH	AE3200-SS AE3200-SH	AE4000-SSA	AE4000-SSC	AE4000-SS	AE5000-SS	AE6300-SS
IEC 947-2, EN 60947-2, VDE 0660, BS 4752	40 °C	1000	1250	1600	2000	2500	3200	4000	4000	4000	5000	6300
	45 °C	1000	1250	1600	2000	2500	3200	—	3800	4000	5000	6000
	50 °C	1000	1250	1600	2000	2500	3200	3650	3650	4000	5000	5750
	55 °C	1000	1250	1550 (1600)	2000	2450	3000	3300	3500	3900	5000	5500
	60 °C	1000	1200 (1250)	1500 (1600)	2000	2350	2900	—	3300	3750	4750	5200
LR, AB, GL DNV, BV	45 °C	1000	1250	1600	2000	2500	3200	—	—	4000	5000	6000
	50 °C	1000	1250	1600	2000	2500	3200	—	—	4000	5000	5750
	55 °C	1000	1250	1550 (1600)	2000	2450	3050	—	—	3900	5000	5500
	60 °C	1000	1200	1500 (1600)	2000	2350	2900	—	—	3750	4750	5200

All data in the above table are based on test conditions, connecting methods and size of the mounting rails conforming to IEC947-2, EN60947-2, VDE0660 etc. The figures in brackets () in the table above indicate the reduced current values exclusive to AE-SH series.

Connection arrangements

The following connecting methods are available for the AE type air circuit breaker.

Connection	Horizontal connection	Vertical connection	Front connection	Vertical terminal adapter	Front terminal adapter
	Standard	Optional	Optional	Accessory	Optional
Fixed type	 (Standard)	—	—	 (FIX-VTA)	 (FIX-FTA)
Drawout type	 (Standard)	 (DR-VT)	 (DR-FT)	 (DR-VTA)	 (DR-FTA)
Remark	Standard equipment (shipping version)	Special equipment (on request)	Special equipment (on request)	Available as accessory (refer to page 15)	Optional accessory (on request)

Specifications for marinal standards

SUPER AE		Series		Standard series "SS"									
		Breaker type	AE1000-SS	AE1250-SS	AE1600-SS	AE2000-SS	AE2500-SS	AE3200-SS	AE4000-SSC	AE4000-SS	AE5000-SS	AE6300-SS	
Rated current (A)	I_{Nmax}		1000	1250	1600	2000	2500	3200	4000	4000	5000	6300	
Rated insulation voltage (V) 50/60 Hz	U_i		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Rated operating voltage (V) 50/60 Hz	U_e		690	690	690	690	690	690		690	690	690	
Number of poles			3	3	3	3	3	3	3	3	3	3	
Adjustment range (A)	General protection I_r (current rating adjustable)		$500 \leq I_n \leq 1000$ $315 \leq I_n \leq 630$	$625 \leq I_n \leq 1250$	$800 \leq I_n \leq 1600$	$1000 \leq I_n \leq 2000$ $625 \leq I_n \leq 1000$	$1250 \leq I_n \leq 2500$	$1600 \leq I_n \leq 3200$	$3200 \leq I_n \leq 3800$ $3200 \leq I_n \leq 3500$ $2000 \leq I_n \leq 4000$ $2500 \leq I_n \leq 5000$ $3150 \leq I_n \leq 6300$ (für LR)				
Rated service short-circuit breaking capacity I_{cs} (kA, eff, sym.) Breaking duty: 0-t-CO-t-CO $k_u = I_{cs}$	LR with instantaneous trip	AC690V	50	50	50	50	50	50	51,1	—	—	—	
		AC600V	—	—	—	65	65	65	67	87	87	87	
		AC500V	65	65	65	85	85	85	86,6	133	133	133	
		DNV with instantaneous trip	AC690V	50	50	50	50	50	50	—	—	—	—
			AC600V	—	—	—	65	65	65	—	—	—	—
			AC500V	65	65	65	85	85	85	—	—	—	—
		GL with instantaneous trip	AC690V	50	50	50	50	50	50	—	—	—	—
			AC600V	—	—	—	65	65	65	—	—	—	—
			AC500V	65	65	65	85	85	85	—	—	—	—
	BV with instantaneous trip	AC690V	50	50	50	50	50	50	—	—	—	—	
		AC600V	—	—	—	65	65	65	—	—	—	—	
		AC500V	65	65	65	85	85	85	—	—	—	—	
	NK with instantaneous trip	AC600V	50	50	50	65	65	65	65	87	87	87	
		AC500V	65	65	65	85	85	85	85	133	133	133	
	Rated service short-circuit making capacity I_{cm} (kA, peak value)	LR with instantaneous trip	AC690V	106	106	106	106	106	106	113	—	—	—
			AC600V	—	—	—	143	143	143	147	211	211	211
			AC500V	151	151	151	196	196	196	199	330	330	330
		DNV with instantaneous trip	AC690V	106	106	106	106	106	106	—	—	—	—
			AC600V	—	—	—	143	143	143	—	—	—	—
			AC500V	151	151	151	196	196	196	—	—	—	—
		GL with instantaneous trip	AC690V	106	106	106	106	106	106	—	—	—	—
			AC600V	—	—	—	143	143	143	—	—	—	—
			AC500V	151	151	151	196	196	196	—	—	—	—
		BV with instantaneous trip	AC690V	105	105	105	105	105	105	—	—	—	—
AC600V			—	—	—	143	143	143	—	—	—	—	
AC500V			143	143	143	187	187	187	—	—	—	—	
NK with instantaneous trip		AC600V	112	112	112	143	143	143	143	211	211	211	
		AC500V	147	147	147	196	196	196	196	330	330	330	

* Further current ratings on request.

SUPER AE		Series		High performance series "SH"				
		Breaker type	AE1000-SH	AE1250-SH	AE1600-SH	AE2000-SH	AE2500-SH	AE3200-SH
Rated current (A)	I_{Nmax}		1000	1250	1600	2000	2500	3200
Rated insulation voltage (V) 50/60 Hz	U_i		1000	1000	1000	1000	1000	1000
Rated operating voltage (V) 50/60 Hz	U_e		690	690	690	690	690	690
Number of poles			3	3	3	3	3	3
Adjustment range (A)	General protection I_r (current rating adjustable)		$500 \leq I_n \leq 1000$ $315 \leq I_n \leq 630$	$625 \leq I_n \leq 1250$	$800 \leq I_n \leq 1600$	$1000 \leq I_n \leq 2000$	$1250 \leq I_n \leq 2500$	$1600 \leq I_n \leq 3200$
Rated service short-circuit breaking capacity I_{cs} (kA, eff, sym.) Br. duty: 0-t-CO-t-CO $k_u = I_{cs}$	LR with instantaneous trip	AC690V	68	68	68	68	68	68
		AC600V	87	87	87	87	87	87
		AC500V	133	133	133	133	133	133
	NK with instantaneous trip	AC600V	—	—	—	—	—	—
		AC500V	130	130	130	130	130	130
	Rated service short-circuit making capacity I_{cm} (kA, peak value)	LR with instantaneous trip	AC690V	173	173	173	173	173
AC600V			211	211	211	211	211	211
AC500V			330	330	330	330	330	330
NK with instantaneous trip		AC600V	—	—	—	—	—	—
		AC500V	317	317	317	317	317	317