

Air Circuit Breakers Series ME10



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Series ME10



The new serie ME10 has been designed as a Modern 'Power Circuit Breaker' without neglecting its AEG's heritage of more than 50 years in building Air Circuit Breakers.

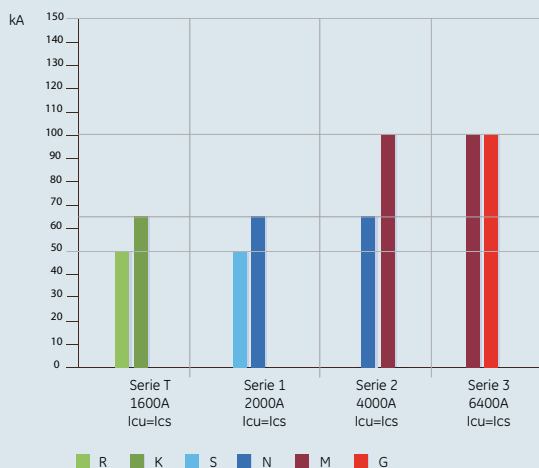
The ME10 range of Power Circuit breakers encompasses a line of 3 and 4 pole Air Circuit Breakers with Nominal Currents ranging from 400 to 6400Amp in four basic envelopes. (see diagram).

One of the most important user parameters is not the nominal rating of an 'Air Circuit Breaker' in free air but its current Rating within a panel or enclosure. Breakers 'enclosed ratings' are determined by the heat dissipation produced by the device and its ability to carry current at the temperature within the enclosure.

ME10 Power Circuit breakers have been designed with low Power dissipation values and allow relatively high currents at high ambient temperatures.

The serie ME10 has been designed to offer an uncompromising combination of a fast interruption at high fault levels attaining values of 40 Milliseconds or less whilst maintaining selectivity. The electronic trip unit, already in its basic model, is equipped with protection channels for overload and short-circuit with delay adjustment intervention, in a wide range of bands of time

Optionally a full network measurement device can be installed on the device. Relays can be included to trip the breaker on Voltage Unbalance, Current Unbalance, Power reversal etc. The device can be equipped with Communication for use with the Modbus or Profibus protocol whilst events as Overload, Short-circuit and Groundfaults can be tracked, the RELT function to protect Service Personnel against the hazards of Short Circuits.

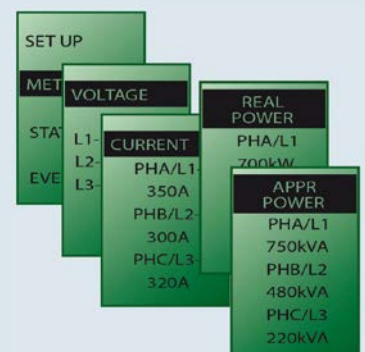


Independent of the number of poles, rated current or interruption rating, each of the two patterns has a common height, depth and cut-out dimension. This strongly simplifying the design of panels and equipment in which these devices are used.

The basic breaker width has been optimized to allow for space to connect in- and outgoing bus bars and cables. Both Fixed and Draw-out Power Circuit Breaker types are supplied with rear

connections suitable for Rear Access Horizontal busbar connection.

A large range of internal accessories as Electrical Operators, up to four Shunt Releases, Closing Coils or Undervoltage releases, Interlock Coils, Auxiliary and Alarm contacts, Carriage switches, Coil indication contacts and Breaker status switches are available.








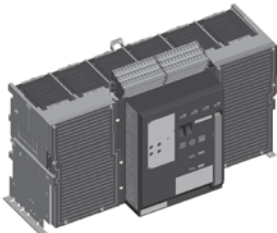
Breakers - EN60947-2 standard													
		AT04... AT16		AG04... AG20			AG25		AG32, AG40			AG50	AG64
		R	K	S	N	M	N	M	N	M	G	M	M
Number of poles		3, 4		3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4
Rated insulation voltage Ui	(V)	1000		1000	1000	1250	1000	1250	1000	1250	1000	1000	1000
Rated impulse withstand voltage Uimp	(kV)	12		12	12	12	12	12	12	12	12	12	12
Rated operational voltage Ue	AC (V)	690		690	690	1000	690	1000	690	1000	690	690	690
	DC (V)					1000		1000		1000			
Envelope		T		1	1	1	2	2	2	2	3	3	3
Category of use		B		B	B	B	B	B	B	B	B	B	B
Suitable for use as an isolator		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rated current In	at 50°C (A)	400, 630, 800, 1000, 1250, 1600		400, 630, 800, 1000, 1250, 1600, 2000			2500			3200, 4000		5000	6400
Ultimate breaking capacity Icu	230/240V - 440V AC (kA)	50	65	50	65	100	65	100	65	100	100	100	100
	500V AC (kA)	50	50	50	65	100	65	100	65	100	100	100	100
	690V AC (kA)	42	42	40	50	85	50	85	50	85	100	100	100
	1000V AC (kA)					50		50		50			
Service breaking capacity Ics	230/240V - 440V AC (kA)	50	50	50	65	100	65	100	65	100	100	100	100
	500V AC (kA)	50	50	50	65	100	65	100	65	100	100	100	100
	690V AC (kA)	42	42	40	50	85	50	85	50	85	100	100	100
	1000V AC (kA)					50		50		50			
Short-circuit withstand Icw	Icw 1 sec. (kA)	42	50	50	65	85	65	85	65	85	100	100	100
	Icw 3 sec. (kA)	30	30	42	50	50	50	50	50	50	85	85	85
Short-circuit Making current Icm	220-500V AC (kA peak)	105	105	105	143	220	143	220	143	220	220	220	220
	690V AC (kA peak)	88,2	88,2	84	105	187	105	187	105	187	220	220	220
Ultimate breaker capacity Icu = Service breaking capacity Ics	250V DC 1P (kA)					65		50		65			
	500V DC 2P (kA)					50		35		50			
DC L/R=15ms (nr. of poles in series)	750V DC 3P (kA)					35		20		35			
(for DC a special RCD is required)	1000V DC 3P (kA)					30		30		30			
Single phase breaking capacity I_n	220-500V AC (kA)		30			50		50		50			
	690V AC (kA)		24			50		50		50			
Mechanical endurance ¹	with maintenance	20000		20000	20000	10000	20000	10000	20000	10000	10000	10000	10000
	without maintenance	12500		12500	12500	5000	10000	5000	10000	5000	5000	5000	5000
Electrical endurance at 440V AC	without maintenance	6000		10000 ²	10000 ²	5000	6000	5000	5000	5000	2500	1500	1500
Electrical endurance at 690V AC	without maintenance			8000 ³	8000 ³	5000	5000	5000	2500	2500	1500	1000	1000
Electrical endurance at 1000V AC	without maintenance			500	500	500		500		500			

(1) For endurance in DC IEC 60947
 (2) 2000A type: 8000 operations
 (3) 2000A type: 6000 operations

Isolator - EN60947-3 standard													
		A704... A716		AJ(W)04... AJ(W)20			AJ(W)25		AJ(W)32, AJ(W)40		AJ50	AJ64	
		R	S	N	M	N	M	N	M	L	L		
Number of poles		3, 4		3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	
Rated insulation voltage Ui	(V)	1000		1000	1000	1250	1000	1250	1000	1250	1000	1000	
Rated impulse withstand voltage Uimp	(kV)	12		12	12	12	12	12	12	12	12	12	
Rated operational voltage Ue	AC (V)	690		690	690	1000	690	1000	690	1000	1000	690	
	DC (V)					1000		1000		1000	750	750	
Envelope		T		1	1	2	2	2	2	2	3	3	
Rated current In In	at 50°C (A)	400, 630, 800, 1000, 1250, 1600		400, 630, 800, 1000, 1250, 1600, 2000			2500			3200, 4000		5000	6400
Short-circuit withstand Icw	Icw 1 sec. (kA)	42		50	65	85	65	85	65	85	100	100	
	Icw 3 sec. (kA)	30		42	50	50	50	50	50	50	85	85	
Short-circuit Making current Icm	(kA peak)	75		88,2	143	187	105	187	105	187	220	220	
Mechanical endurance ¹	with maintenance	20000		20000	20000	10000	20000	10000	20000	10000	10000	10000	
	without maintenance	12500		12500	12500	5000	10000	5000	10000	5000	5000	5000	
Electrical endurance at 440V AC	without maintenance	6000		10000 ²	10000 ²	5000	6000	5000	5000	5000	1500	1500	
Electrical endurance at 690V AC	without maintenance			8000 ³	8000 ³	5000	5000	5000	2500	2500	1000	1000	
Electrical endurance at 1000V AC	without maintenance					500		500		500	300	300	

(1) For endurance in DC IEC 60947
 (2) 2000A type: 8000 operations
 (3) 2000A type: 6000 operations

Basic breakers executed in a fixed mounting pattern





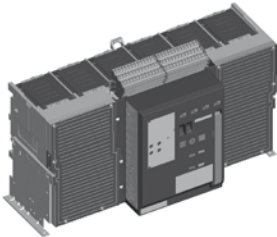
	In (A)	Envelope	3 Poles		4 Poles	
			Cat. number	Ref. number	Cat. number	Ref. number
R type Icu = Ics = 50kA Icw = 42kA 	400	ME10-T	AT04R4	445230	AT04R6	445245
	630	ME10-T	AT07R4	445231	AT07R6	445246
	800	ME10-T	AT08R4	445232	AT08R6	445247
	1000	ME10-T	AT10R4	445233	AT10R6	445248
	1250	ME10-T	AT13R4	445234	AT13R6	445249
	1600	ME10-T	AT16R4	445235	AT16R6	445250
S type Icu = Ics = Icw Icw = 50kA 	400	ME10-1	AG04S4	445292	AG04S6	445293
	630	ME10-1	AG07S4	445296	AG07S6	445297
	800	ME10-1	AG08S4	445300	AG08S6	445301
	1000	ME10-1	AG10S4	445304	AG10S6	445305
	1250	ME10-1	AG13S4	445308	AG13S6	445309
	1600	ME10-1	AG16S4	445312	AG16S6	445313
	2000	ME10-1	AG20S4	445316	AG20S6	445317
	K type Icu = Ics = 65kA Icw = 50kA 	400	ME10-T	AT04K4	445236	AT04K6
630		ME10-T	AT07K4	445237	AT07K6	445252
800		ME10-T	AT08K4	445238	AT08K6	445253
1000		ME10-T	AT10K4	445239	AT10K6	445254
1250		ME10-T	AT13K4	445240	AT13K6	445255
1600		ME10-T	AT16K4	445241	AT16K6	445256
N type Icu = Ics = Icw Icw = 65kA 	400	ME10-1	AG04N4	445322	AG04N6	445323
	630	ME10-1	AG07N4	445326	AG07N6	445327
	800	ME10-1	AG08N4	445330	AG08N6	445331
	1000	ME10-1	AG10N4	445334	AG10N6	445335
	1250	ME10-1	AG13N4	445338	AG13N6	445339
	1600	ME10-1	AG16N4	445342	AG16N6	445343
	2000	ME10-1	AG20N4	445346	AG20N6	445347
	2500	ME10-2	AG25N4	445352	AG25N6	445353
	3200	ME10-2	AG32N4	445356	AG32N6	445357
	4000	ME10-2	AG40N4	445360	AG40N6	445361
M type Icu = Ics = 100kA Icw = 85kA 	400	ME10-2	AG04M4	445367	AG04M6	445368
	630	ME10-2	AG07M4	445371	AG07M6	445372
	800	ME10-2	AG08M4	445375	AG08M6	445376
	1000	ME10-2	AG10M4	445379	AG10M6	445380
	1250	ME10-2	AG13M4	445383	AG13M6	445384
	1600	ME10-2	AG16M4	445387	AG16M6	445388
	2000	ME10-2	AG20M4	445391	AG20M6	445392
	2500	ME10-2	AG25M4	445395	AG25M6	445396
G-M type Icu = Ics = Icw Icw = 100kA 	3200	ME10-3	AG32G4	445402	AG32G6	445403
	4000	ME10-3	AG40G4	445406	AG40G6	445407
	5000	ME10-3	AG50M4	445410	AG50M6	445411
	6400	ME10-3	AG64M4	445414	AG64M6	445415

With Horizontal Rear Connection, Auxiliary contact block equipped with 3NO and 3NC contacts

Basic Breaker must be equipped with a Trip Unit

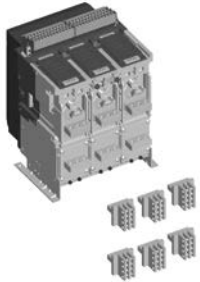
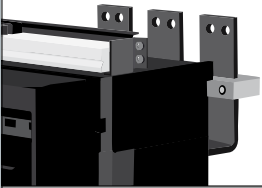

For 1000V applications phase separators are required

Isolators or Non Automatic breakers executed in a fixed mounting pattern


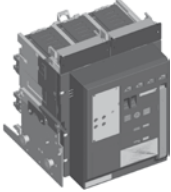

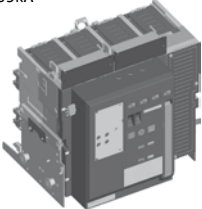
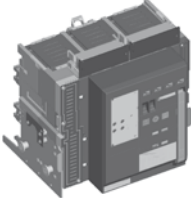
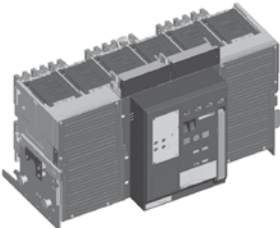
	In (A)	Envelope	3 Poles		4 Poles	
			Cat. number	Ref. number	Cat. number	Ref. number
R type I _{cw} = 42kA 	400	ME10-T	A704R4	445275	A704R6	445281
	630	ME10-T	A707R4	445276	A707R6	445282
	800	ME10-T	A708R4	445277	A708R6	445283
	1000	ME10-T	A710R4	445278	A710R6	445284
	1250	ME10-T	A713R4	445279	A713R6	445285
	1600	ME10-T	A716R4	445280	A716R6	445286
S type I _{cw} = 65kA 	400	ME10-1	AJ04S4	445422	AJ04S6	445423
	630	ME10-1	AJ07S4	445426	AJ07S6	445427
	800	ME10-1	AJ08S4	445430	AJ08S6	445431
	1000	ME10-1	AJ10S4	445434	AJ10S6	445435
	1250	ME10-1	AJ13S4	445438	AJ13S6	445439
	1600	ME10-1	AJ16S4	445442	AJ16S6	445443
	2000	ME10-1	AJ20S4	445446	AJ20S6	445447
	N type I _{cw} = 65kA 	400	ME10-1	AW04N4	445452	AW04N6
630		ME10-1	AW07N4	445456	AW07N6	445457
800		ME10-1	AW08N4	445460	AW08N6	445461
1000		ME10-1	AW10N4	445464	AW10N6	445465
1250		ME10-1	AW13N4	445468	AW13N6	445469
1600		ME10-1	AW16N4	445472	AW16N6	445473
2000		ME10-1	AW20N4	445476	AW20N6	445477
2500		ME10-2	AJ25N4	445482	AJ25N6	445483
3200		ME10-2	AJ32N4	445486	AJ32N6	445487
4000		ME10-2	AJ40N4	445490	AJ40N6	445491
M type I _{cw} = 85kA 	400	ME10-2	AW04M4	445528	AW04M6	445529
	630	ME10-2	AW07M4	445532	AW07M6	445533
	800	ME10-2	AW08M4	445536	AW08M6	445537
	1000	ME10-2	AW10M4	445540	AW10M6	445541
	1250	ME10-2	AW13M4	445544	AW13M6	445545
	1600	ME10-2	AW16M4	445548	AW16M6	445549
	2000	ME10-2	AW20M4	445552	AW20M6	445553
	2500	ME10-2	AW25M4	445497	AW25M6	445498
	3200	ME10-2	AW32M4	445501	AW32M6	445502
	4000	ME10-2	AW40M4	445505	AW40M6	445506
L type I _{cw} = 100kA 	3200	ME10-3	AJ32L4	445512	AJ32L6	445513
	4000	ME10-3	AJ40L4	445516	AJ40L6	445517
	5000	ME10-3	AJ50L4	445520	AJ50L6	445521
	6400	ME10-3	AJ64L4	445524	AJ64L6	445525

With Horizontal Rear Connection, Auxiliary contact block equipped with 3NO and 3NC contacts

For 1000V applications phase separators are required

Accessories for Breakers & Isolators in Fixed pattern							
	In (A)	Envelope	3 Poles			4 Poles	
			Cat. number	Ref. number		Cat. number	Ref. number
Vertical Rear Connection							
	400-1600	ME10-T	GT16H4RVI	444626		GT16H6RVI	444628
	400-1600	ME10-1	G16H4RVI	408058		G16H6RVI	408082
	2000	ME10-1	G20H4RVIN	408059		G20H6RVIN	408083
	400-3200	ME10-2	G32M4RVI	408070		G32M6RVI	408071
	4000	ME10-2	G40M4RVI	408072		G40M6RVI	408074
	3200-6400	ME10-3	G64L4RVI	408073		G64L6RVI	408075
Front AccessConnections							
	400-1600	ME10-T	GT16H4FFI	444625		GT16H6FFI	444627
	400-1600	ME10-1	G16H4FFI	408060		G16H6FFI	408062
	2000	ME10-1	G20H4FFI	408061		G20H6FFI	408063
	400-3200	ME10-2	G32M4FFI	408066		G32M6FFI	408068
	4000	ME10-2	G40M4FFI	408067		G40M6FFI	408069
	Wall Mounting Brackets						
		ME10-1/2	GFMTG	408085		GFMTG	408085

Basic breakers in a Draw-out pattern

	In (A)	Envelope	3 Poles		4 Poles	
			Cat. number	Ref. number	Cat. number	Ref. number
R type Icu = Ics = 50kA Icw = 50kA 	400	ME10-T	AT04R1	445200	AT04R3	445215
	630	ME10-T	AT07R1	445201	AT07R3	445216
	800	ME10-T	AT08R1	445202	AT08R3	445217
	1000	ME10-T	AT10R1	445203	AT10R3	445218
	1250	ME10-T	AT13R1	445204	AT13R3	445219
	1600	ME10-T	AT16R1	445205	AT16R3	445220
S type Icu = Ics = Icw Icw = 50kA 	400	ME10-1	AG04S1	445290	AG04S3	445291
	630	ME10-1	AG07S1	445294	AG07S3	445295
	800	ME10-1	AG08S1	445298	AG08S3	445299
	1000	ME10-1	AG10S1	445302	AG10S3	445303
	1250	ME10-1	AG13S1	445306	AG13S3	445307
	1600	ME10-1	AG16S1	445310	AG16S3	445311
	2000	ME10-1	AG20S1	445314	AG20S3	445315
	K type Icu = Ics = 65kA Icw = 50kA 	400	ME10-T	AT04K1	445206	AT04K3
630		ME10-T	AT07K1	445207	AT07K3	445222
800		ME10-T	AT08K1	445208	AT08K3	445223
1000		ME10-T	AT10K1	445209	AT10K3	445224
1250		ME10-T	AT13K1	445210	AT13K3	445225
1600		ME10-T	AT16K1	445211	AT16K3	445226
N type Icu = Ics = Icw Icw = 65kA 	400	ME10-1	AG04N1	445320	AG04N3	445321
	630	ME10-1	AG07N1	445324	AG07N3	445325
	800	ME10-1	AG08N1	445328	AG08N3	445329
	1000	ME10-1	AG10N1	445332	AG10N3	445333
	1250	ME10-1	AG13N1	445336	AG13N3	445337
	1600	ME10-1	AG16N1	445340	AG16N3	445341
	2000	ME10-1	AG20N1	445344	AG20N3	445345
	2500	ME10-2	AG25N1	445350	AG25N3	445351
	3200	ME10-2	AG32N1	445354	AG32N3	445355
	4000	ME10-2	AG40N1	445358	AG40N3	445359
M type Icu = Ics = 100kA Icw = 85kA 	400	ME10-2	AG04M1	445365	AG04M3	445366
	630	ME10-2	AG07M1	445369	AG07M3	445370
	800	ME10-2	AG08M1	445373	AG08M3	445374
	1000	ME10-2	AG10M1	445377	AG10M3	445378
	1250	ME10-2	AG13M1	445381	AG13M3	445382
	1600	ME10-2	AG16M1	445385	AG16M3	445386
	2000	ME10-2	AG20M1	445389	AG20M3	445390
	2500	ME10-2	AG25M1	445393	AG25M3	445394
G-M type Icu = Ics = Icw Icw = 100kA 	3200	ME10-3	AG32G1	445400	AG32G3	445401
	4000	ME10-3	AG40G1	445404	AG40G3	445405
	5000	ME10-3	AG50M1	445408	AG50M3	445409
	6400	ME10-3	AG64M1	445412	AG64M3	445413


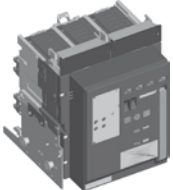
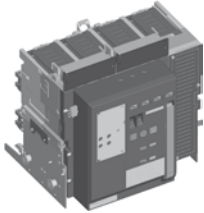
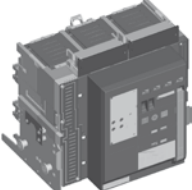
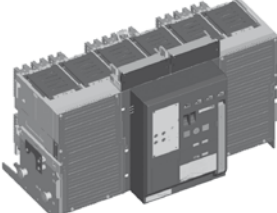
With Horizontal Rear Connection, Auxiliary contact block equipped with 3NO and 3NC contacts

Basic Breaker must be equipped with a Trip Unit

A cassette is needed

For 1000V applications phase separators are required

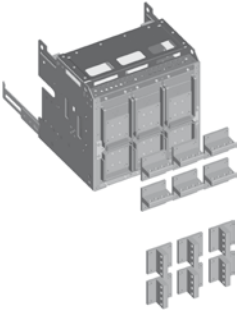
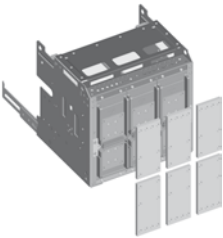
Isolators or Non Automatic Breakers in a Draw-out pattern

	In (A)	Envelope	3 Poles		4 Poles	
			Cat. number	Ref. number	Cat. number	Ref. number
R type I _{cw} = 42kA 	400	ME10-T	A704R1	445260	A704R3	445266
	630	ME10-T	A707R1	445261	A707R3	445267
	800	ME10-T	A708R1	445262	A708R3	445268
	1000	ME10-T	A710R1	445263	A710R3	445269
	1250	ME10-T	A713R1	445264	A713R3	445270
	1600	ME10-T	A716R1	445265	A716R3	445271
S type I _{cw} = 50kA 	400	ME10-1	AJ04S1	445420	AJ04S3	445421
	630	ME10-1	AJ07S1	445424	AJ07S3	445425
	800	ME10-1	AJ08S1	445428	AJ08S3	445429
	1000	ME10-1	AJ10S1	445432	AJ10S3	445433
	1250	ME10-1	AJ13S1	445436	AJ13S3	445437
	1600	ME10-1	AJ16S1	445440	AJ16S3	445441
	2000	ME10-1	AJ20S1	445444	AJ20S3	445445
N type I _{cw} = 65kA 	400	ME10-1	AW04N1	445450	AW04N3	445451
	630	ME10-1	AW07N1	445454	AW07N3	445455
	800	ME10-1	AW08N1	445458	AW08N3	445459
	1000	ME10-1	AW10N1	445462	AW10N3	445463
	1250	ME10-1	AW13N1	445466	AW13N3	445467
	1600	ME10-1	AW16N1	445470	AW16N3	445471
	2000	ME10-1	AW20N1	445474	AW20N3	445475
	2500	ME10-2	AJ25N1	445480	AJ25N3	445481
	3200	ME10-2	AJ32N1	445484	AJ32N3	445485
	4000	ME10-2	AJ40N1	445488	AJ40N3	445489
M type I _{cw} = 85kA 	400	ME10-2	AW04M1	445526	AW04M3	445527
	630	ME10-2	AW07M1	445530	AW07M3	445531
	800	ME10-2	AW08M1	445534	AW08M3	445535
	1000	ME10-2	AW10M1	445538	AW10M3	445539
	1250	ME10-2	AW13M1	445542	AW13M3	445543
	1600	ME10-2	AW16M1	445546	AW16M3	445547
	2000	ME10-2	AW20M1	445550	AW20M3	445551
	2500	ME10-2	AW25M1	445495	AW25M3	445496
	3200	ME10-2	AW32M1	445499	AW32M3	445500
	4000	ME10-2	AW40M1	445503	AW40M3	445504
L type I _{cw} = 100kA 	3200	ME10-3	AJ32L1	445510	AJ32L3	445511
	4000	ME10-3	AJ40L1	445514	AJ40L3	445515
	5000	ME10-3	AJ50L1	445518	AJ50L3	445519
	6400	ME10-3	AJ64L1	445522	AJ64L3	445523


With Horizontal Rear Connection, Auxiliary contact block equipped with 3NO and 3NC contacts

A cassette is needed

For 1000V applications phase separators are required



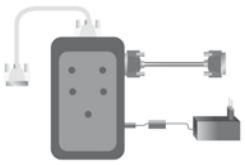
Cassettes for Draw-out pattern				(for use with Breakers & Isolators)						
	In (A)	Type	Envelope	3 Poles		4 Poles				
				Cat. number	Ref. number	Cat. Number	Ref. number			
Vertical Rear Connection (can be rotated and used for Vertical or Horizontal connections)										
	400-1600	R, K	ME10-T	AT16K2UM	445601		AT16K5UM	445604		
	400-1600 2000	S	ME10-1	AG16S2UM	445611		AG16S5UM	445613		
		S, N	ME10-1	AG20H2UM	445615		AG20H5UM	445617		
	400-2000 2500 3200 4000 ¹	N, M	ME10-2	AG20M2UM	445619		AG20M5UM	445621		
		N, M	ME10-2	AG25M2UM	445623		AG25M5UM	445625		
		N, M	ME10-2	AG32M2UM	445627		AG32M5UM	445629		
		N, M	ME10-2	AG40M2UM	445631		AG40M5UM	445633		
	3200-6400 ²	G-M	ME10-3	AG64L2UM	445634		AG64L5UM	445635		
	Front Access Connections									
		400-1600	R, K	ME10-T	AT16K2FM	445600		AT16K5FM	445603	
400-1600 2000		S	ME10-1	AG16S2FM	445610		AG16S5FM	445612		
		S, N	ME10-1	AG20H2FM	445614		AG20H5FM	445616		
400-2000 2500 3200 4000		N, M	ME10-2	AG20M2FM	445618		AG20M5FM	445620		
		N, M	ME10-2	AG25M2FM	445622		AG25M5FM	445624		
		N, M	ME10-2	AG32M2FM	445626		AG32M5FM	445628		
		N, M	ME10-2	AG40M2FM	445630		AG40M5FM	445632		

1) Cassettes for envelope 2 are limited to a current of 3200A when connected in horizontal mode
 2) The Cassette for envelope 3 is limited to a current of 5000A when connected in horizontal mode



Electronic Trip Units								
		Description	Catalogue number	Reference number				
GT-E								
	LT protection	Overload current setting $I_r=0,2... 1I_n$ Class C 0,5... 40 Neutral protection (50%-63%-100%) Thermal memory	GTG00K1-SF¹	408800				
	ST protection	Short-circuit setting 1,5... 12Ir Time delay adjustable 30... 940ms I^2t protection time bands available						
	Measurement	Current L1, L2, L3						
	Diagnostic	Trip reason indication Trip counter Event logger Watchdog						
	GF protection	Ground fault setting 0,1... 1In Time delay adjustable 30... 840ms I^2t protection time bands available				GTG00K2-SR	408802	
	GT-Rating Plug	(required for all types)	GTPUNI	408860				
GT-S								
	LT protection	Overload current setting $I_r=0,2... 1I_n$ Class C 0,5... 40 Neutral protection (50%-63%-100%) Thermal memory	GTG00K9-SF¹	408803				
	ST protection	Short-circuit setting 1,5... 12Ir Time delay adjustable 30... 940ms I^2t protection time bands available						
	Canale I	Istantaneous short circuit setting 2... 15Ie Selective execution Fixed istantaneous or HSOC protection						
	Measurement	Current L1, L2, L3						
	Diagnostic	Trip reason indication Trip counter Event logger Watchdog						
	GF protection	Ground fault setting 0,1... 1In Time delay adjustable 30... 840ms I^2t protection time bands available				GTG00K4-2SR	408809	
	I extended protection Modbus	Istantaneous short circuit setting 2... 30Ie Modbus communication						
	GT-Rating Plug	(required for all types)	GTPUNI	408860				
GT-N								
	LT protection	Class C 0,5... 40 Neutral protection (50%-63%-100%) Thermal memory	GTG00K9-4SF¹	408813				
	ST protection	Short-circuit setting 1,5... 12Ir Time delay adjustable 30... 940ms I^2t protection time bands available						
	I protection	Istantaneous short circuit setting 2... 15Ie Selective execution Fixed istantaneous or HSOC protection						
	RELT	Istantaneous 40ms						
	Measurement ²	Current L1, L2, L3 Voltage L1, L2, L3 Energy (kWh) Real, apparent, reactive, total power Peak and demand power Frequency						
	Diagnostic	Trip reason indication Trip counter Event logger Watchdog						
	Input/Output	2 electronic inputs 2 general relay outputs						
	GF protection	Ground fault setting 0,1... 1In Time delay adjustable 30... 840ms I^2t protection time bands available				GTG00K4T6SR	408819	
	I extended protection ZSI	Istantaneous short circuit setting 2... 30Ie Zone selective interlock						
	Modbus	Modbus communication						
	GT-Rating Plug	(required for all types)	GTPUNI	408860				

1) Only factory mounted

2) For the measurement package is obligatory an auxiliary power conditioner


Accessories for Trip Unit				
	Description	Catalogue number	Reference number	
Power Supply ¹				
	Conditioning Power Supply 1 Phase 220-230V	GMPU1	408790	
	Conditioning Power Supply 1 Phase 380-400V	GMPU2	408791	
	Conditioning Power Supply 1 Phase 240-250 / 277-290 / 415V	GMPU3	408792	
	Power supply - Input 100-240V AC or 100-353V DC - Output 24V DC 0,6A	GAPU	408789	
Sealable transparent front cover				
	Trip Unit, sealable transparent front cover	GTUS	408046	
Batter Tester and Set up unit				
	Trip Unit Battery Tester and Set up unit	GTUTK20	407999	

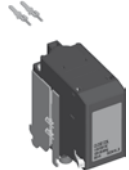
1) Obligatory when a fully functioning measurement unit is required

Sensors for Trip Units								
	For ME10-T and ME10-1			For ME10-2		For ME10-3		
	Cat. number	Ref. number		Cat. number	Ref. number	Cat. number	Ref. number	
Rogowski Coils ¹								
	400A	G04HNRC	408000	G04HNRC	408000			
	630A	G07HNRC	408001	G07HNRC	408001			
	800A	G08HNRC	408002	G08HNRC	408002			
	1000A	G10HNRC	408003	G10HNRC	408003			
	1250A	G13HNRC	408004	G13HNRC	408004			
	1600A	G16HNRC	408005	G16HNRC	408005			
	2000A	G20HNRC	408006	G20HNRC	408006			
	2500A			G25MNRC	408162			
	3200A			G32LNRC	408186	G32LNRC	408186	
	4000A			G40LNRC	408187			G40LNRC 408187
	5000A					G50LNRC	408188	
6400A					G64LNRC	408189		
Earth leg Current Transformers ²								
	400A	G04HNCT	408300	G04HNCT	408300			
	630A	G07HNCT	408301	G07HNCT	408301			
	800A	G08HNCT	408302	G08HNCT	408302			
	1000A	G10HNCT	408303	G10HNCT	408303			
	1250A	G13HNCT	408304	G13HNCT	408304			
	1600A	G16HNCT	408305	G16HNCT	408305			
	2000A	G20HNCT	408306	G20HNCT	408306			
	2500A			G25MNCT	408322			
	3200A			G32LNCT	408331	G32LNCT	408331	
	4000A			G40LNCT	408332			G40LNCT 408332
	5000A					G50LNCT	408333	
6400A					G64LNCT	408334		


1) For use with Ground fault Residual (sum) protection

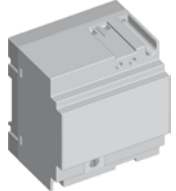
2) For use with Ground fault protection, Source Ground Return method


Motor operator									
	Rated voltage	For ME10-T			For ME10-1			For ME10-2 and ME10-3	
		Cat. number	Ref. number		Cat. number	Ref. number		Cat. number	Ref. number
	24-30V DC	GMT0024DR	444641		GMO1024DR	407701		GMO2024DR	407726
	48V DC	GMT0048DR	444642		GMO1048DR	407703		GMO2048DR	407728
	60V DC	GMT0060DR	444643		GMO1060DR	407705		GMO2060DR	407730
	110-130V DC	GMT0110DR	444644		GMO1110DR	407707		GMO2110DR	407732
	250V DC	GMT0250DR	444646		GMO1250DR	407709		GMO2250DR	407734
	48V AC	GMT0048AR	444647		GMO1048AR	407711		GMO2048AR	407736
	110-130V AC	GMT0120AR	444648		GMO1120AR	407713		GMO2120AR	407738
	220-240V AC	GMT0240AR	444649		GMO1240AR	407715		GMO2240AR	407740
	380-415V AC	GMT0400AR	444650		GMO1400AR	407717		GMO2400AR	407742
	440V AC	GMT0440AR	444651		GMO1440AR	407719		GMO2440AR	407744

Closing Coils								
	Rated voltage	Closing Coil			Command Closing Coil ¹			
		Cat. number	Ref. number		Cat. number	Ref. number		
	24V DC	GCCN024DR	407860		GCCO24DR	407835		
	48V AC-DC	GCCN048R	407862		GCCO48R	407837		
	60V DC	GCCN060DR	407864		GCCO60DR	407839		
	110-130V AC-DC	GCCN120R	407866		GCC120R	407841		
	220-240V AC-DC	GCCN240R	407868		GCC240R	407843		
	277V AC; 250V DC	GCCN277R	407871		GCC277R	407850		
	380-415V AC	GCCN400AR	407876		GCC400AR	407851		
	440V AC	GCCN440AR	407879		GCC440AR	407854		


1) Designed to be accessed through the Trip Unit communication option (Modbus or Profibus)

Undervoltage Releases and Shunt Trips								
	Rated voltage	Undervoltage			Shunt			
		Cat. number	Ref. number		Cat. number	Ref. number		
	24V DC	GUVT024DR	407796		GSTRO24DR	407771		
	48V AC-DC	GUVT048R	407798		GSTRO48R	407773		
	60V DC	GUVT060DR	407800		GSTRO60DR	407775		
	110-130V AC-DC	GUVT120R	407802		GSTR120R	407777		
	220-240V AC-DC	GUVT240R	407804		GSTR240R	407779		
	277V AC; 250V DC	GUVT277R	407806		GSTR277R	407781		
	380-415V AC	GUVT400AR	407808		GSTR400AR	407783		
	440V AC	GUVT440AR	407810		GSTR440AR	407785		


Time delay module for undervoltage release					
	Rated voltage	Description	Cat. number	Ref. number	
	60V DC	Adjustable time delay 0... 3 sec.	GTDM060D	407817	
	110-130V DC		GTDM120D	407819	
	220-240V DC		GTDM240D	407821	
	250V DC		GTDM250D	407823	
	48V AC		GTDM048A	407816	
	110-130V AC		GTDM120A	407818	
	220-240V AC		GTDM240A	407820	
	250-277V AC		GTDM277A	407822	
	380-415V AC		GTDM400A	407824	
	440V AC		GTDM440A	407825	


Positive security fail safe electrical interblock ¹ (as alternative to mechanical interlock)					
	Rated voltage	Description	Per ME10-1, ME10-2 e ME10-3		
			Cat. number	Ref. number	
	110-130V AC-DC	Double interlock coil system with positive security fail safe control	GNTK120	407753	
	220-240V AC-DC	Double interlock coil system with positive security fail safe control	GNTK240	407754	

1) Only factory mounted

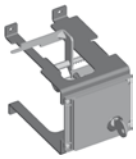
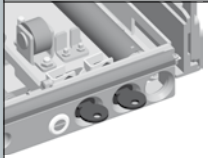

Pre-assembled interlocks for ME10-T¹									
	Type	Interlock Scheme			Fixed Pattern			Draw-out	
		Brk. 1	Brk. 2	Brk. 3	Cat. number	Ref. number	Cat. number	Ref. number	
	A	OFF	OFF		GI2FAD for each breaker	444675		GI2WAD for each breaker	444676
		ON	OFF						
		OFF	ON						
	B	OFF	OFF	OFF	GI3FB for each breaker	444677		GI3WB for each breaker	444678
		ON	OFF	OFF					
		OFF	ON	OFF					
		OFF	OFF	ON					
	C	OFF	OFF	OFF	GI3FC for each breaker	444679		GI3WC for each breaker	444680
		ON	OFF	OFF					
		OFF	OFF	ON					
		OFF	ON	OFF					
		ON	ON	OFF					
		OFF	ON	ON					
	D	OFF	OFF	OFF	GI2FAD for breaker 1 and 3	444675		GI2WAD for breaker 1 and 3	444676
		ON	OFF	OFF					
		OFF	OFF	ON					
ON		OFF	ON	GI3FDT for breaker 2	444681		GI3WDT for breaker 2	444682	
OFF		ON	OFF						
ON		OFF	ON						

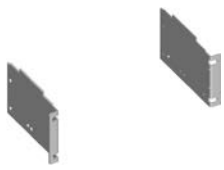
1) Interlock is not possible between ME10-T and ME10-1/2/3

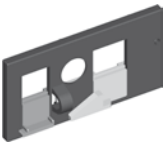
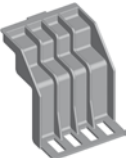

Pre-assembled interlocks for ME10-1, ME10-2 and ME10-3									
	Tipo	Interlock Scheme			Fixed pattern			Draw-out	
		Int. 1	Int. 2	Int. 3	Cat. number	Ref. number	Cat. number	Ref. number	
	A	OFF	OFF		GI2FAD for each breaker	407900		GI2WAD for each breaker	407901
		ON	OFF						
		OFF	ON						
	B	OFF	OFF	OFF	GI3FB for each breaker	407902		GI3WB for each breaker	407903
		ON	OFF	OFF					
		OFF	ON	OFF					
		OFF	OFF	ON					
	C	OFF	OFF	OFF	GI3FC for each breaker	407904		GI3WC for each breaker	407905
		ON	OFF	OFF					
		OFF	OFF	ON					
		OFF	ON	OFF					
		ON	ON	OFF					
		OFF	ON	ON					
	D	OFF	OFF	OFF	GI2FAD for breaker 1 and 3	407900		GI2WAD for breaker 1 and 3	407901
		ON	OFF	OFF					
		OFF	OFF	ON					
ON		OFF	ON	GI3FDT for breaker 2	407906		GI3WDT for breaker 2	407907	
OFF		ON	OFF						
ON		OFF	ON						



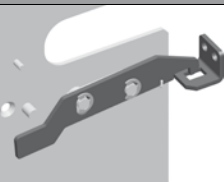
Field mountable cables for interlocking of breakers¹							
Type	Interlock scheme		Length	Catalogue number	Reference number		
	A	1 cable for breaker	1 m	GCB1	407990		
	B	2 cables for breaker	1,5 m	GCB2	407991		
	C	2 cables for breaker	2 m	GCB3	407992		
	D	Breakers 1 and 3: 1 cable for breaker Breakers 2: 2 cables for breaker	2,5 m	GCB4	407993		
			3 m	GCB5	407994		
			3,5 m	GCB6	407995		
			4 m	GCB7	407996		

1) Breakers 1 and 2 choose 1 cable, breaker 2 choose 2 cables


Locking Systems							
	Description	For ME10-T			For ME10-1, ME10-2 and ME10-3		
		Cat. number	Ref. number		Cat. number	Ref. number	
Locking Mechanism mounted on breaker							
	Ronis device allow 1 to 4 locks to be placed	GTBRON	444666		GBRONR	407968	
	Castell device 1				GBCASR	407967	
	Profalux device allow 1 to 4 locks to be placed	GTBPRO	444665		GBPROR	407979	
1) The locks must be purchased as separate items (see below)							
Locking Mechanism mounted on cassette							
	Ronis 2 devices for 2 locks are possible	GTCRON	444669		GCRONR	407974	
	Profalux 2 devices for 2 locks are possible	GTCPRO	444668		GCPRO	407981	
1) The locks must be purchased as separate items (see below)							
Associated Locks							
	Ronis 1104 Lock	GRON	407985		GRON	407985	
	Castell FS1 Lock	GCAS	407986		GCAS	407986	
	Profalux B204Y Lock	GPRO	407987		GPRO	407987	

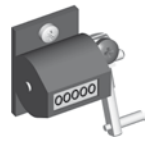
Wall Mounting Brackets			
		For ME10-1 and ME10-2	
		Cat. number	Ref. number
		GFMTG	408085


Operation							
	Description	For ME10-T			For ME10-1, ME10-2 and ME10-3		
		Cat. number	Ref. number		Cat. number	Ref. number	
Front Facia of Breaker							
		GTPBD	444667		GPBD	408040	
Operation Indicators							
					GCNTW	408036	
Cassette							
	Mis insertion device	GREPM	408041		GREPM	408041	

Door Flanges and Interlocks							
	Description	For ME10-T			For ME10-1, ME10-2 And ME10-3		
		Cat. number	Ref. number		Cat. number	Ref. number	
Door Flange ¹							
	Fixed	GTPRF	444805		GDPRF	408025	
	Draw-out	GTPRW	444806		GDPRW	408026	
Door Escutcheon IP54							
		G54DR	408038		G54DR	408038	
Door Interlock							
	Left	GTLHD	444256		GLHD	408039	
	Right	GTRHD	444257		GRHD	408042	


1) Is a spare, these devices are always supplied with the standard devices


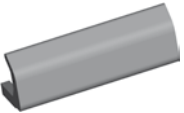
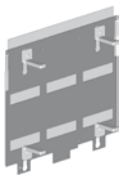





Lifting Breakers							
		For ME10-1 and ME10-2			For ME10-3		
		Cat. number	Ref. number		Cat. number	Ref. number	
		GLTK	408045		GLTA	408049	

Counters				
	Description	Catalogue number	Reference number	
	Number of operations	GMCNR	408033	

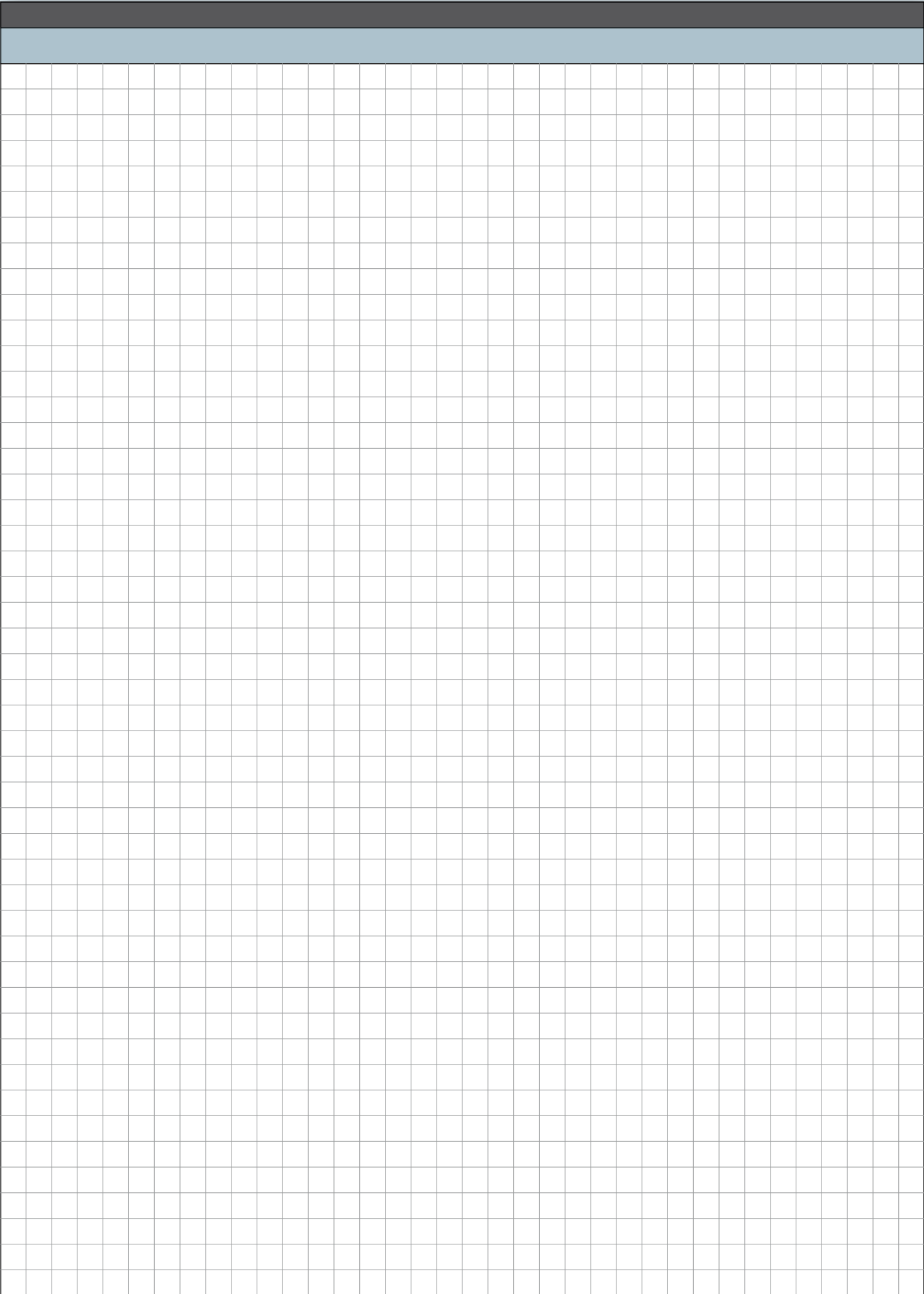
Phase separators							
	Description	For ME10-T			For ME10-1, ME10-2 and ME10-3		
		Cat. number	Ref. number		Cat. number	Ref. number	
	Set of 9 phase separators for 1000V ¹	GTJP	444255		GJP	408057	

1) Universal set including 3 pcs for ME10-1 and ME10-2 fixed, 3 pcs for ME10-1 and ME10-2 draw-out and 3 pcs for ME10-3

Breaking Earthing Device for service							
	For Breaker	Description	3 Poles		4 Poles		
			Cat. number	Ref. number	Cat. number	Ref. number	
	ME10-1	Maximum 1600A	G16H4ED	407930	G16H6ED	407931	
		Maximum 2000A	G20H4ED	407932	G20H6ED	407933	
	ME10-2	Maximum 4000A	G40M4ED	407934	G40M6ED	407935	
	ME10-3	Maximum 6400A	G64M4ED	407936	G64M6ED	407937	

Spare Parts											
	Description	For ME10-T		For ME10-1		For ME10-2		For ME10-3			
		Cat. num.	Ref.num.	Cat. num.	Ref.num.	Cat. num.	Ref.num.	Cat. num.	Ref.num.		
Breaker Arc Chutes											
		GT16KCHT	444801		G20HCHT	408102		G40MCHT	408131	G64LCHT	408144
Breaker Fixed Arcing Contacts											
	Kit 1P - R, K types	GT16KARC	444802		G20NARC	408104					
	Kit 1P - S, N types				G20HARC	408098					
	Kit 1P - H type							G40NARC	408172		
	Kit 1P - E, N types							G40MARC	408169		
	Kit 1P - H, M types									G64LARC	408193
	Kit 1P - L type										
Cassettes Shutters											
	System with interlock 3P	GT16N2SSL	444253		G20H2SSL	407606		G40M2SSL	407636	G64L2SSL	407679
	System with interlock 4P	GT16N5SSL	444254		G20H5SSL	407607		G40M5SSL	407637	G64L5SSL	407680
Cassette Racking Handle											
		GHRN	408043		GRHN	408043		GRHN	408043	GRHN	408043
Breaker Front Facia Part (the original breaker serial number must be indicated on ordering)											
	Front Facia	GTFAL	444804		GFA4	408028		GFA4	408028	GFA4	408028
	Set of 4 spare lock, RONIS				GRONCS	407984		GRONCS	407984	GRONCS	407984
Cassette Cluster Contacts											
	In 400-1600A	GT16KCLS	444800		G13HCLS	408097					
	In 400-1250A				G16HCLS	408100					
	In 1600A				G20HCLS	408103					
	In 2000A							G20MCLS	408106		
	In ≥2000A							G25MCLS	408109		
	In 2500A							G32MCLS	408117		
	In 3200A							G40MCLS	408120		
	In 4000A									G50LCLS	408145
	In 5000A									G64LCLS	408148
	In 6400A										
	Universal Pliers	GUNI	408047		GUNI	408047		GUNI	408047	GUNI	408047
Breakers and Cassette Spare Auxiliary Disconnect plugs											
	For Fixed Breaker 1 39 pole set	GSDFTR1	408052		GSDFTR1	408052		GSDFTR1	408052	GSDFTR1	408052
	For Fixed Breaker 1 78 pole set				GSDFT2	408029		GSDFT2	408029	GSDFT2	408029
	For Draw-out Breaker 1 39 pole set	GSDWTR	408054		GSDWTR	408054		GSDWTR	408054	GSDWTR	408054

Note



Note

The grid area is designed for taking notes. It features a dark grey header bar at the top, followed by a light blue horizontal bar. The main body of the grid is a large white area with a fine grid of small squares, providing space for handwritten or typed notes.

AEG

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