





**SGM6-125**



**SGM6-160**



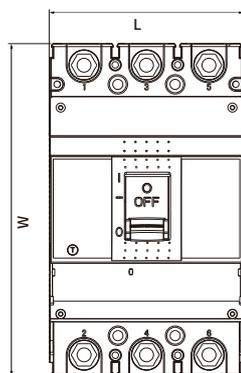
**SGM6-250**

### SGM6 Moulded Case Circuit Breaker

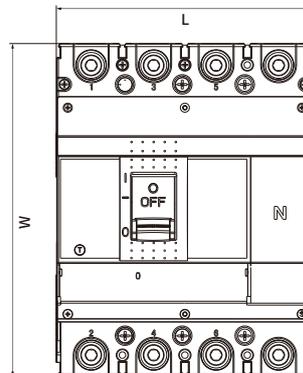
### FIXED TYPE

Frame Size	125	160	250							
Model	SGM6-125	SGM6-160	SGM6-250							
Number of poles	3,4	3,4	3,4							
Rated current(A) In	16,20,25,30,32,40, 50,60,63,70,75,80, 90,100,125	30,32,40,50,60, 63,70,75,80,90, 100,125,140, 150,160	100,125,140, 150,160,175, 180,200,225, 250							
Standard	IEC60947-2									
Reference temperature	40°C/55°C									
Rated operational voltage	380/400/415V AC									
Rated insulation voltage Ui (V)	690	800	1000							
Rated impulse withstand voltage Uimp (kV)	8									
Breaking capacity level	Le	M	H	L	M	H	L	M	H	
Rated ultimate short-circuit breaking capacity Icu(kA)	10	25	36	36	50	65	36	50	65	
Rated service short-circuit breaking capacity Ics(kA)	10	18	25	25	36	50	25	36	50	
Mechanical Endurance	7000			7000			7000			
Electrical Endurance	1000			1000			1000			
Installation										
Auxiliary contact(OF)	■			■			■			
Alarm switch(SD)	■			■			■			
Shunt trip(MX)	■			■			■			
Under-voltage release(MN)	■			■			■			
AC Motor Mechanism	■			■			■			
Extended Rotary Handle	■			■			■			
Dimensions mm(L×W×H)	3P	75x133x82			92x155x93			107x165x99		
	4P	100x133x82			122x155x93			142x165x99		

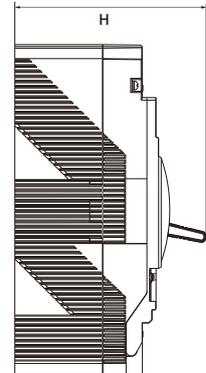
“■” shows it has this option; “-” means it has no this option.



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SGM6-400



SGM6-630



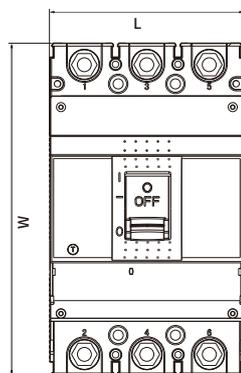
SGM6-800

SGM6 Moulded Case Circuit Breaker

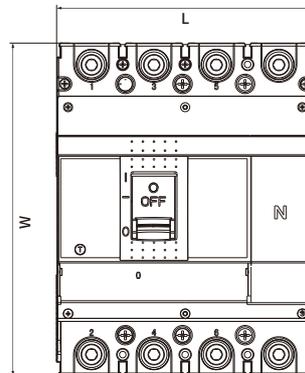
FIXED TYPE

Frame Size	400	630	800			
Model	SGM6-400	SGM6-630	SGM6-800			
Number of poles	3,4	3,4	3,4			
Rated current(A) In	250,280,300, 315,350,400	500,550,630	630,700,770, 800			
Standard	IEC60947-2					
Reference temperature	40°C/55°C					
Rated operational voltage	380/400/415V AC					
Rated insulation voltage Ui (V)	1000					
Rated impulse withstand voltage Uimp (kV)	8					
Breaking capacity level	M	H	M	H	M	H
Rated ultimate short-circuit breaking capacity Icu(kA)	85	100	85	100	85	100
Rated service short-circuit breaking capacity Ics(kA)	60	75	60	75	60	75
Mechanical Endurance	4000	4000	2500			
Electrical Endurance	1000	1000	500			
Installation						
Auxiliary contact(OF)	■	■	■			
Alarm switch(SD)	■	■	■			
Shunt trip(MX)	■	■	■			
Under-voltage release(MN)	■	■	■			
AC Motor Mechanism	■	■	■			
Dimensions mm(L×W×H)	3P	140x257x148	150x257x148	210x280x155		
	4P	184x257x148	198x257x148	280x280x155		

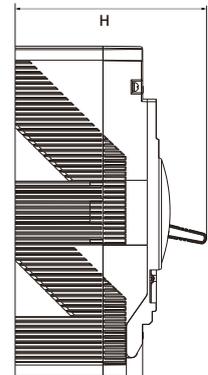
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**SGM6-1250**



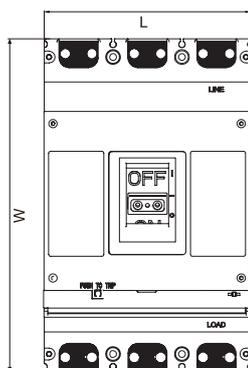
**SGM6-1600**

**SGM6 Moulded Case  
Circuit Breaker**

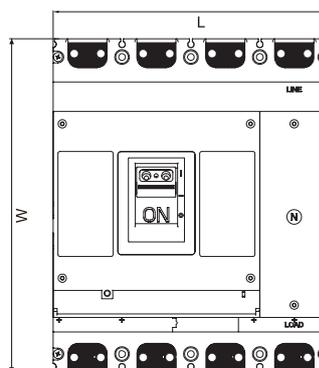
**FIXED TYPE**

Frame Size	1250	1600	
Model	SGM6-1250	SGM6-1600	
Number of poles	3,4	3,4	
Rated current(A) In	800,1000,1250	1000,1250,1600	
Standard	IEC60947-2		
Reference temperature	40°C/55°C		
Rated operational voltage	380/400/415V AC		
Rated insulation voltage Ui (V)	1000		
Rated impulse withstand voltage Uimp (kV)	8		
Breaking capacity level	M	M	
Rated ultimate short-circuit breaking capacity Icu(kA)	70	85	
Rated service short-circuit breaking capacity Ics(kA)	50	65	
Mechanical Endurance Electrical Endurance	3000 500	2500 500	
Installation			
Auxiliary contact(OF)	■	■	
Alarm switch(SD)	■	■	
Shunt trip(MX)	■	■	
Under-voltage release(MN)	■	■	
AC Motor Mechanism	■	■	
Dimensions mm(L×W×H)	3P	210x275.5x155	210x340x244
	4P	280x275.5x155	280x340x244

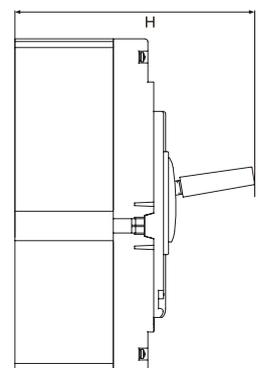
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SGM6s-125



SGM6s-160



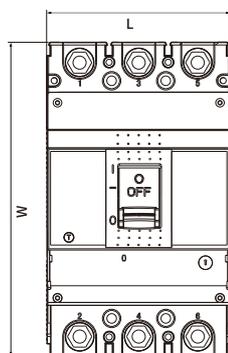
SGM6s-250

SGM6s Moulded Case Circuit Breaker

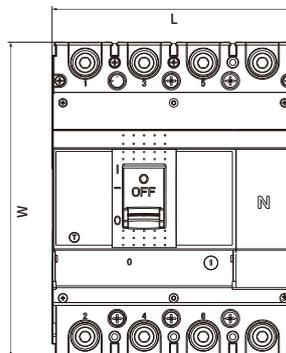
THERMAL ADJUSTABLE TYPE

Frame Size	125	160	250					
Model	SGM6s-125	SGM6s-160	SGM6s-250					
Number of poles	3,4	3,4	3,4					
Rated current(A) In	16,20,25,30, 32,40,50,60,63, 70,75,80,90,100, 125	30,32,40,50,60, 63,70,75,80,90, 100,125,140, 150,160	100,125,140, 150,160,175, 180,200,225, 250					
Thermo-adjustable setting Ir(xIn)	0.8/0.9/1.0 or 0.7/0.85/1.0							
Standard	IEC60947-2							
Reference temperature	40°C/55°C							
Rated operational voltage	380/400/415V AC							
Rated insulation voltage Ui (V)	800	1000						
Rated impluse withstand voltage Uimp (kV)	8							
Breaking capacity level	M	H	L	M	H	L	M	H
Rated ultimate short-circuit breaking capacity Icu(kA)	25	36	36	50	65	36	50	65
Rated service short-circuit breaking capacity Ics(kA)	18	25	25	36	50	25	36	50
Mechanical Endurance	7000	7000	7000	7000	7000	7000	7000	7000
Electrical Endurance	1000	1000	1000	1000	1000	1000	1000	1000
Fixed magnetic trip	■	■	■	■	■	■	■	■
Installation								
Auxiliary contact(OF)	■	■	■	■	■	■	■	■
Alarm switch(SD)	■	■	■	■	■	■	■	■
Shunt tirp(MX)	■	■	■	■	■	■	■	■
Under-voltage release(MN)	■	■	■	■	■	■	■	■
AC Motor Mechanism	■	■	■	■	■	■	■	■
Extended Rotary Handle	■	■	■	■	■	■	■	■
Dimensions mm(L×W×H)	3P	75x133x82	92x155x93	107x165x99	4P	100x133x82	122x155x93	142x165x99

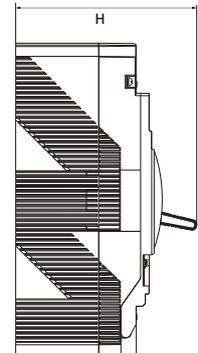
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**SGM6s-400**



**SGM6s-630**



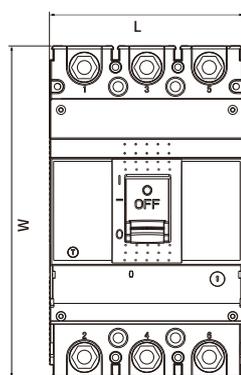
**SGM6s-800**

### SGM6s Moulded Case Circuit Breaker

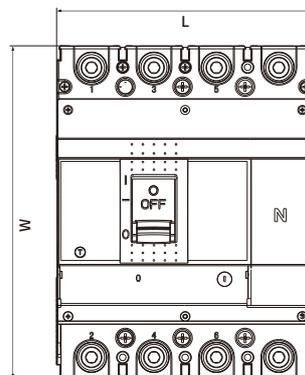
### THERMAL ADJUSTABLE TYPE

Frame Size	400		630		800	
Model	SGM6s-400		SGM6s-630		SGM6s-800	
Number of poles	3,4		3,4		3,4	
Rated current(A) In	250,280,300, 315,350,400		400,500,550, 630		630,700,770, 800	
Thermo-adjustable setting Ir(xIn)	0.8/0.9/1.0 or 0.7/0.85/1.0					
Standard	IEC60947-2					
Reference temperature	40°C/55°C					
Rated operational voltage	380/400/415V AC					
Rated insulation voltage Ui (V)	1000					
Rated impulse withstand voltage Uimp (kV)	8					
Breaking capacity level	M	H	M	H	M	H
Rated ultimate short-circuit breaking capacity Icu(kA)	85	100	85	100	85	100
Rated service short-circuit breaking capacity Ics(kA)	60	75	60	75	60	75
Mechanical Endurance	4000		4000		2500	
Electrical Endurance	1000		1000		500	
Fixed magnetic trip	■		■		■	
Installation						
Auxiliary contact(OF)	■		■		■	
Alarm switch(SD)	■		■		■	
Shunt trip(MX)	■		■		■	
Under-voltage release(MN)	■		■		■	
AC Motor Mechanism	■		■		■	
Dimensions mm(L×W×H)	3P	140x257x148		150x257x148		210x280x155
	4P	184x257x148		198x257x148		280x280x155

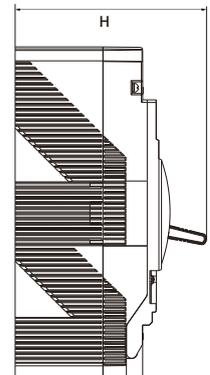
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SGM6sm-125



SGM6sm-160

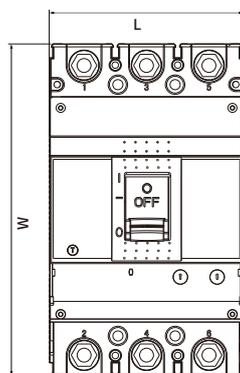


SGM6sm-250

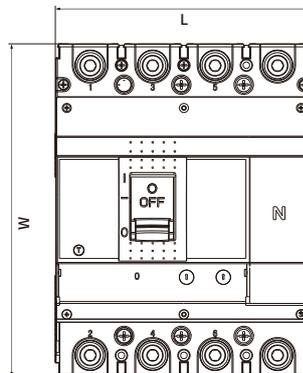
SGM6sm Moulded Case Circuit Breaker **THERMAL & MAGNETIC ADJUSTABLE TYPE**

Frame Size	125	160	250					
Model	SGM6sm-125	SGM6sm-160	SGM6sm-250					
Number of poles	3,4	3,4	3,4					
Rated current(A) In	32,40,50,60,63, 70,75,80,90,100, 125	63,70,75,80,90, 100,125,140, 150,160	100,125,140, 150,160,175, 180,200,225, 250					
Magnetic-adjustable setting li(xIn)	5/8/10							
Thermo-adjustable setting Ir(xIn)	0.8/0.9/1.0							
Standard	IEC60947-2							
Reference temperature	40°C/55°C							
Rated operational voltage	380/400/415V AC							
Rated insulation voltage Ui (V)	800	1000						
Rated impluse withstand voltage Uimp (kV)	8							
Breaking capacity level	M	H	L	M	H	L	M	H
Rated ultimate short-circuit breaking capacity Icu(kA)	25	36	36	50	65	36	50	65
Rated service short-circuit breaking capacity Ics(kA)	18	25	25	36	50	25	36	50
Mechanical Endurance	7000	7000	7000					
Electrical Endurance	1000	1000	1000					
Fixed magnetic trip	■	■	■					
Installation								
Auxiliary contact(OF)	■	■	■					
Alarm switch(SD)	■	■	■					
Shunt tirp(MX)	■	■	■					
Under-voltage release(MN)	■	■	■					
AC Motor Mechanism	■	■	■					
Extended Rotary Handle	■	■	■					
Dimensions mm(L×W×H)	3P	75x133x82	92x155x93	107x165x99				
	4P	100x133x82	122x155x93	142x165x99				

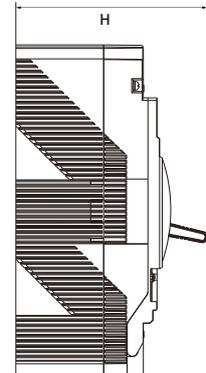
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### SGM6sm Moulded Case Circuit Breaker THERMAL & MAGNETIC ADJUSTABLE TYPE



**SGM6sm-400**



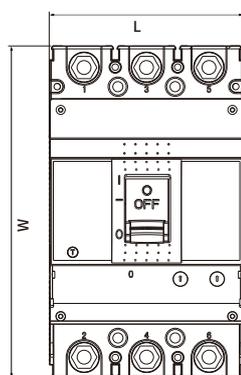
**SGM6sm-630**



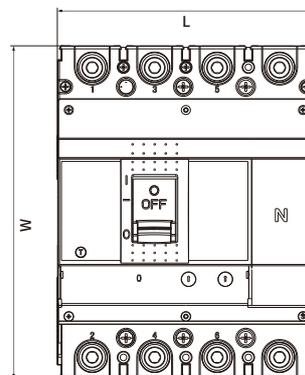
**SGM6sm-800**

Frame Size	400	630	800			
Model	SGM6sm-400	SGM6sm-630	SGM6sm-800			
Number of poles	3,4	3,4	3,4			
Rated current(A) In	250,280,300, 315,350,400	400,500,550, 630	630,700,770, 800			
Magnetic-adjustable setting li(xIn)	5/8/10					
Thermo-adjustable setting Ir(xIn)	0.8/0.9/1.0					
Standard	IEC60947-2					
Reference temperature	40°C/55°C					
Rated operational voltage	380/400/415V AC					
Rated insulation voltage Ui (V)	1000					
Rated impulse withstand voltage Uimp (kV)	8					
Breaking capacity level	M	H	M	H	M	H
Rated ultimate short-circuit breaking capacity Icu(kA)	85	100	85	100	85	100
Rated service short-circuit breaking capacity Ics(kA)	60	75	60	75	60	75
Mechanical Endurance	4000	4000	2500			
Electrical Endurance	1000	1000	500			
Fixed magnetic trip	■	■	■			
Installation						
Auxiliary contact(OF)	■	■	■			
Alarm switch(SD)	■	■	■			
Shunt trip(MX)	■	■	■			
Under-voltage release(MN)	■	■	■			
AC Motor Mechanism	■	■	■			
Dimensions mm(L×W×H)	3P	140x257x148	150x257x148	210x280x155		
	4P	184x257x148	198x257x148	280x280x155		

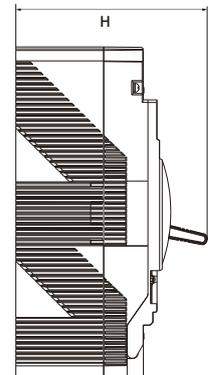
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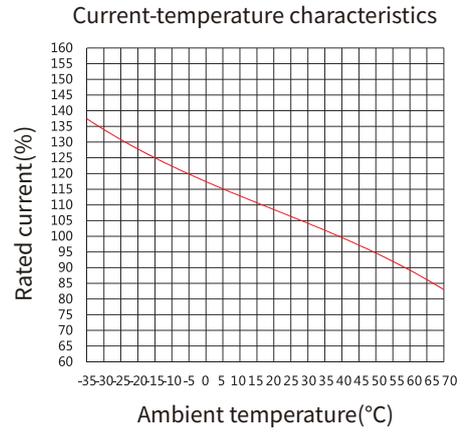
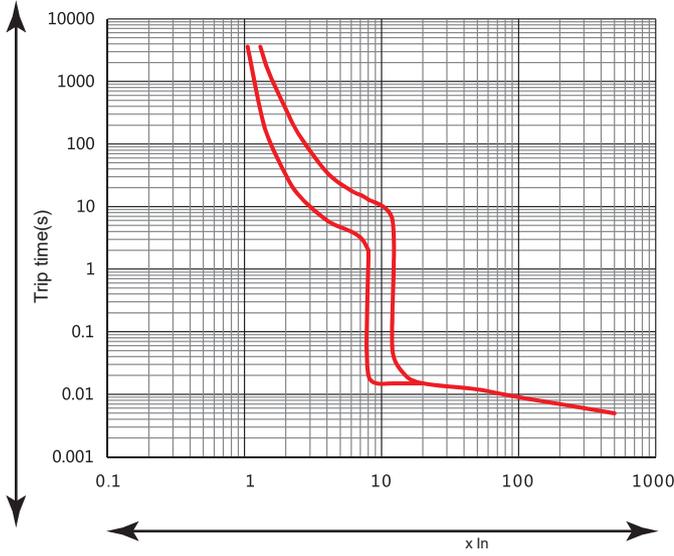
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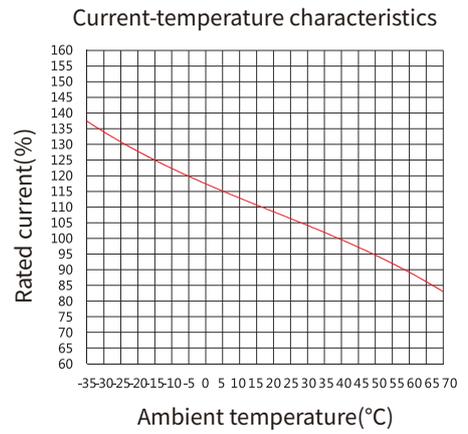
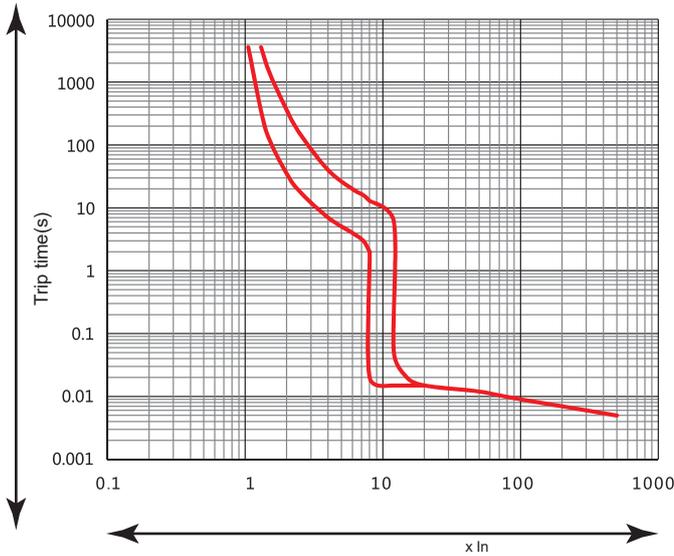
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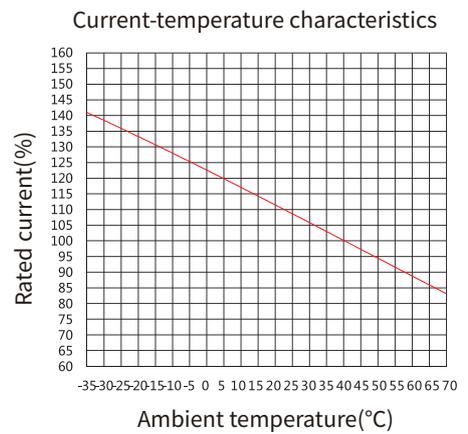
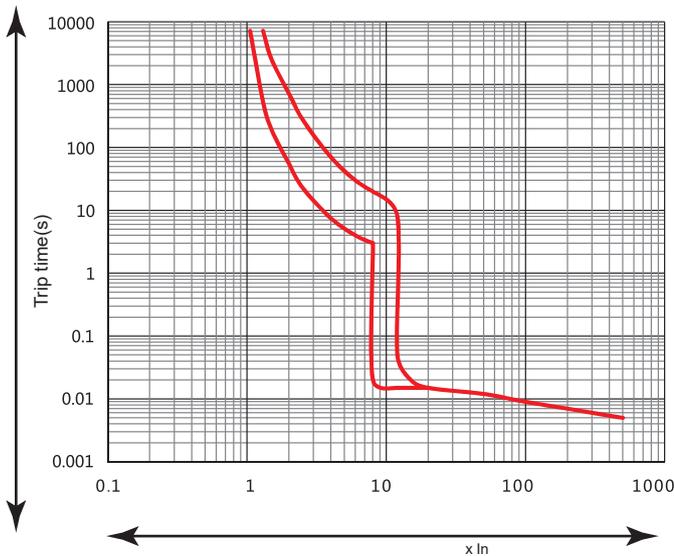
SGM6-125 Time current characteristic curve



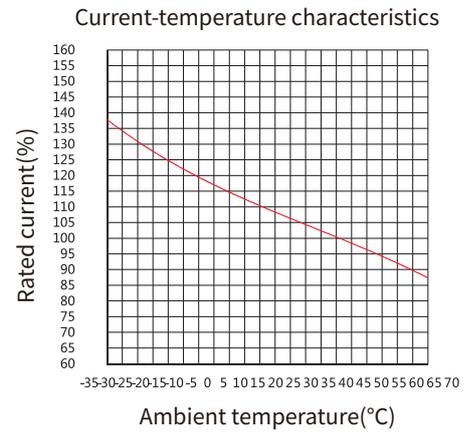
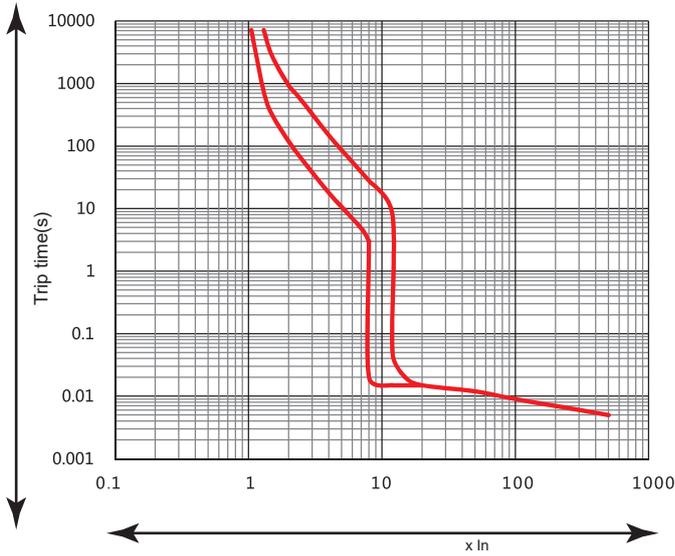
SGM6-160 Time current characteristic curve



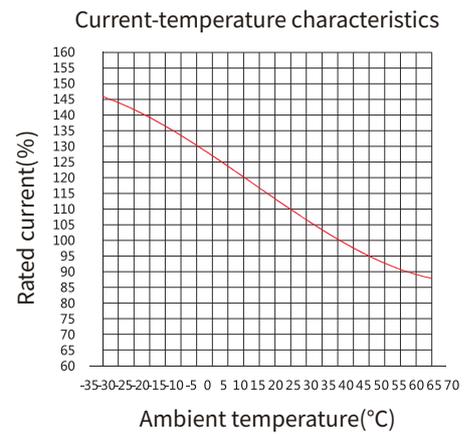
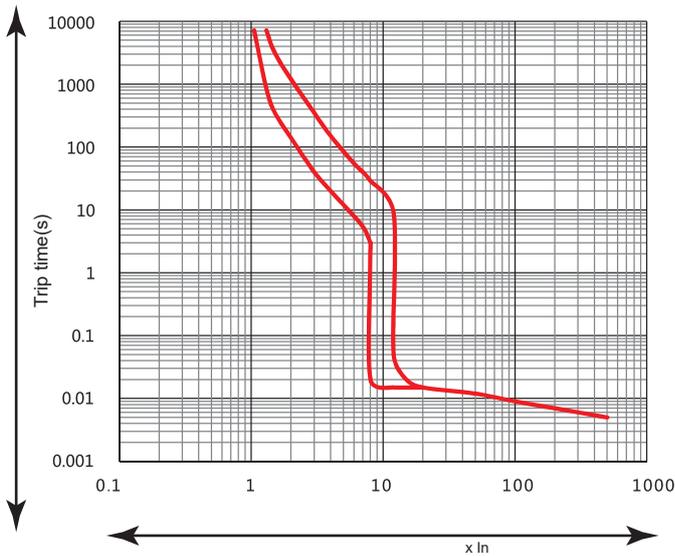
SGM6-250 Time current characteristic curve



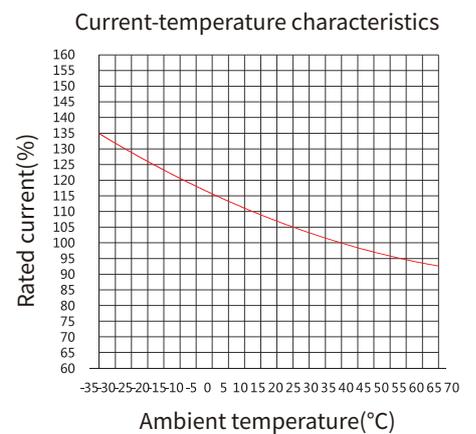
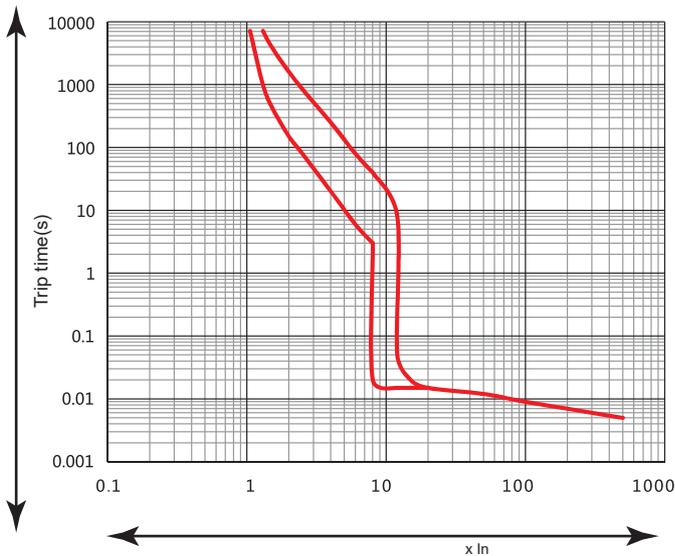
### SGM6-400/630 Time current characteristic curve



### SGM6-800 Time current characteristic curve



### SGM6-1250/1600 Time current characteristic curve





SGM6E-250



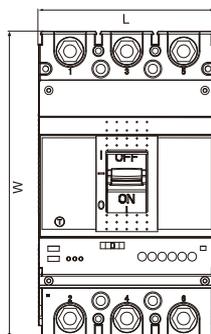
SGM6E-400

SGM6E Moulded Case Circuit Breaker

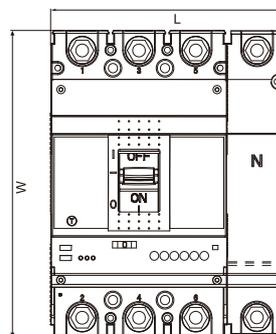
ELECTRONIC TYPE WITH BUTTON

Frame Size	250		400		
Model	SGM6E-250		SGM6E-400		
Number of poles	3,4		3,4		
Rated current(A) In	125,160,250		250,400		
Standard	IEC60947-2				
Rated operational voltage	380/400/415V AC				
Rated insulation voltage Ui (V AC)	1000				
Rated impulse withstand voltage Uimp (kV)	8				
Breaking capacity level	L	M	H	M	H
Rated ultimate short-circuit breaking capacity Icu(kA)	36	50	65	85	100
Rated service short-circuit breaking capacity Ics(kA)	25	36	50	60	75
Mechanical Endurance	7000		4000		
Electrical Endurance	1000		1000		
Installation					
Auxiliary contact(OF)	■		■		
Alarm switch(SD)	■		■		
Shunt trip(MX)	■		■		
Under-voltage release(MN)	■		■		
AC Motor Mechanism	■		■		
Dimensions mm(L×W×H)	3P	107x165x96.55		150x257x148	
	4P	142x165x96.55		198x257x148	

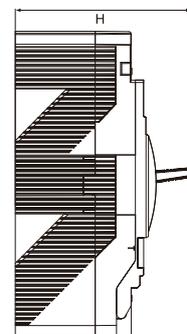
“■” shows it has this option; “-” means it has no this option.



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**SGM6E-630**



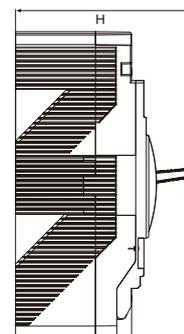
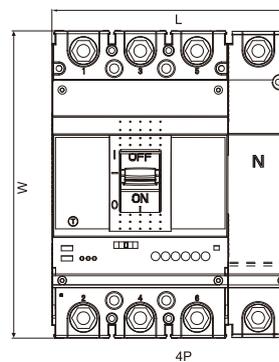
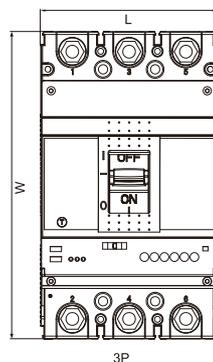
**SGM6E-800**

**SGM6E Moulded Case  
Circuit Breaker**

**ELECTRONIC TYPE WITH BUTTON**

Frame Size	630		800	
Model	SGM6E-630		SGM6E-800	
Number of poles	3,4		3,4	
Rated current(A) In	250,400,630		630,800	
Standard	IEC60947-2			
Reference temperature	40°C/55°C			
Rated operational voltage	380/400/415V AC			
Rated insulation voltage Ui (V)	1000			
Rated impulse withstand voltage Uimp (kV)	8			
Breaking capacity level	M	H	M	H
Rated ultimate short-circuit breaking capacity Icu(kA)	85	100	85	100
Rated service short-circuit breaking capacity Ics(kA)	60	75	60	75
Mechanical Endurance	4000		2500	
Electrical Endurance	1000		500	
Installation				
Auxiliary contact(OF)	■		■	
Alarm switch(SD)	■		■	
Shunt trip(MX)	■		■	
Under-voltage release(MN)	■		■	
AC Motor Mechanism	■		■	
Dimensions mm(L×W×H)	3P	150x257x148		210x280x155
	4P	198x257x148		280x280x155

“■” shows it has this option; “-” means it has no this option.



KEMA CE CB  
EUR



SGM6E-1250



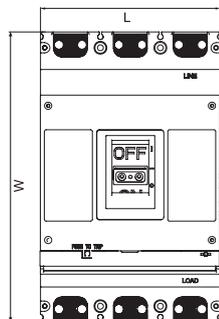
SGM6E-1600

SGM6E Moulded Case Circuit Breaker

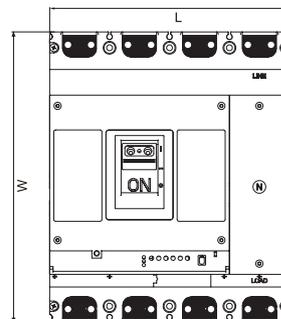
ELECTRONIC TYPE WITH BUTTON

Frame Size	1250	1600	
Model	SGM6E-1250	SGM6E-1600	
Number of poles	3,4	3,4	
Rated current(A) In	1000,1250	1000,1250, 1600	
Standard	IEC60947-2		
Reference temperature	40°C/55°C		
Rated operational voltage	380/400/415V AC		
Rated insulation voltage Ui (V)	1000		
Rated impulse withstand voltage Uimp (kV)	8		
Breaking capacity level	M	M	
Rated ultimate short-circuit breaking capacity Icu(kA)	70	85	
Rated service short-circuit breaking capacity Ics(kA)	50	65	
Mechanical Endurance	2500	2500	
Electrical Endurance	500	500	
Installation			
Auxiliary contact(OF)	■	■	
Alarm switch(SD)	■	■	
Shunt trip(MX)	■	■	
Under-voltage release(MN)	■	■	
AC Motor Mechanism	■	■	
Dimensions mm(L×W×H)			
	3P	210x275.5x155	210x340x190
	4P	280x275.5x155	280x340x190

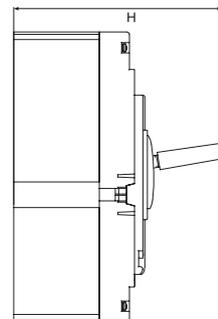
“■” shows it has this option; “-” means it has no this option.



3P



4P



### SETTING PARAMETERS FOR MCCB WITH BUTTONS

Frame size	250A			400A	
Rated current In(A)	125	160	250	250	400
I <sub>r</sub> (A)=Long delay current setting	50-63-70-75-80-85-90-95-100-125A	63-70-75-80-90-100-125-140-150-160A	100-112-125-140-150-160-180-200-225-250A	100-112-125-140-150-160-180-200-225-250A	160-190-225-250-275-300-325-350-375-400A
t <sub>r</sub> (S)=Long delay time	12-60-100-150 sec + OFF				
I <sub>sd</sub> (A)=Short circuit protection of low level faults.	2-2.5-3-4-5-6-7-8-10-12 x I <sub>r</sub> (A)				
t <sub>sd</sub> (S)=short circuit protection time at low level faults	0.06-0.1-0.2-0.3 sec + OFF	0.06-0.1-0.2-0.3 sec + OFF	0.06-0.1-0.2-0.3 sec + OFF	0.06-0.1-0.2-0.3-0.4-0.5-1.0 sec + OFF	0.06-0.1-0.2-0.3-0.4-0.5-1.0 sec + OFF
I <sub>i</sub> (A)=Short circuit protection of high level faults	4-6-7-8-9-10-11-12-14 x I <sub>r</sub> (A) + OFF	4-6-7-8-9-10-11-12-14 x I <sub>r</sub> (A) + OFF	4-6-7-8-9-10-11-12-14 x I <sub>r</sub> (A) + OFF	4-5-6-7-8-9-10-11-12-14 x I <sub>r</sub> (A) + OFF	4-5-6-7-8-9-10-11-12-14 x I <sub>r</sub> (A) + OFF
I <sub>p</sub> (A)=Pre trip alarm setting multiple	0.7-0.75-0.8-0.85-0.9-0.95-1.0 x I <sub>r</sub> (A)				
For 4P I <sub>g</sub> (A)=Ground fault pickup current	0.2-0.3-0.4-0.5-0.6-0.7-0.8-0.9-1.0 x I <sub>n</sub> + OFF				
For 4P t <sub>g</sub> (S)=Ground fault pickup time	Fixed for 0.4sec				

**SETTING PARAMETERS FOR MCCB WITH BUTTONS**

Frame size	630A			800A	
Rated current In(A)	250	400	630	630	800
I <sub>r</sub> (A)=Long delay current setting	100-112-125 140-150-160 180-200-225 250A	160-190-225 250-275-300 325-350-375 400A	252-300-350 400-435-475 515-550-595 630A	252-300-350 400-435-475 515-550-595 630A	320-435-550 630-660-690 715-745-770 800A
t <sub>r</sub> (S)=Long delay time	12-60-100-150 sec + OFF				
I <sub>sd</sub> (A)=Short circuit protection of low level faults.	2-2.5-3-4-5 6-7-8-10-12 x I <sub>r1</sub> (A)				
t <sub>sd</sub> (S) = short time	0.06-0.1-0.2 0.3-0.4-0.5- 1.0 sec + OFF	0.06-0.1-0.2 0.3-0.4-0.5-1.0 sec + OFF	0.06-0.1-0.2 0.3-0.4-0.5-1.0 sec + OFF	0.06-0.1-0.2 0.3- 0.4-0.5-1.0 sec + OFF	0.06-0.1-0.2 0.3- 0.4-0.5-1.0 sec + OFF
I <sub>i</sub> (A) = Short circuit protection of high level faults (analogous to the instantaneous magnetic trip of a thermal/magnetic breaker)	4-6-7-8-9 10-11-12-14 x I <sub>r</sub> (A) + OFF	4-5-6-7-8-9 10-11- 12 x I <sub>r</sub> (A) + OFF			
I <sub>p</sub> (A)=Pre trip alarm setting multiple	0.7-0.75-0.8- 0.85-0.9-0.95- 1.0 x I <sub>r</sub> (A)				
For 4P I <sub>g</sub> (A)=Ground fault pickup current	0.2-0.3-0.4-0.5 -0.6-0.7-0.8-0.9 -1.0 x I <sub>n</sub> + OFF				
For 4P t <sub>g</sub> (S)=Ground fault pickup time	Fixed for 0.4sec				



**iSGM6E-400**



**iSGM6E-630**



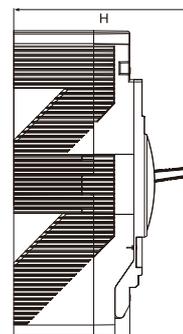
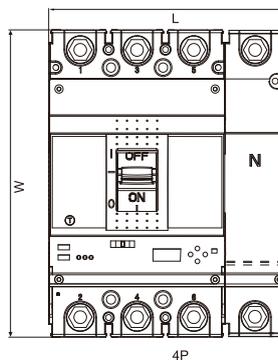
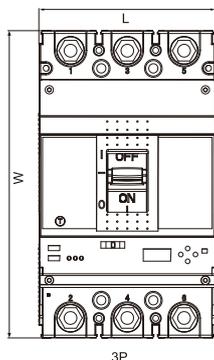
**iSGM6E-800**

**iSGM6E Moulded Case  
Circuit Breaker**

**ELECTRONIC TYPE WITH LCD**

Frame Size	400		630		800	
Model	iSGM6E-400		iSGM6E-630		iSGM6E-800	
Number of poles	3,4		3,4		3,4	
Rated current(A) In	250,400		250,400,630		630,800	
Standard	IEC60947-2					
Reference temperature	40°C/55°C					
Rated operational voltage	380/400/415V AC					
Rated insulation voltage Ui (V)	1000					
Rated impulse withstand voltage Uimp (kV)	8					
Breaking capacity level	M	H	M	H	M	H
Rated ultimate short-circuit breaking capacity Icu(kA)	85	100	85	100	85	100
Rated service short-circuit breaking capacity Ics(kA)	60	75	60	75	60	75
Mechanical Endurance	4000		4000		2500	
Electrical Endurance	1000		1000		500	
Installation						
Auxiliary contact(OF)	■		■		■	
Alarm switch(SD)	■		■		■	
Shunt trip(MX)	■		■		■	
Under-voltage release(MN)	■		■		■	
AC Motor Mechanism	■		■		■	
Dimensions mm(L×W×H)	3P	150x257x148		150x257x148		210x280x155
	4P	198x257x148		198x257x148		280x280x155

“■” shows it has this option; “-” means it has no this option.



**SETTING PARAMETERS FOR MCCB WITH LCD**

Frame size	400A		630A		
Rated current In(A)	250	400	250	400	630
Ir (A) = Long delay current setting	100-250A with increment by 1A	160-400A in steps of 1A	100-250A with increment by 1A	160-400A in steps of 1A	252-630A in steps of 1A
tr (S) = Long delay time	12-150sec with increment by 1 sec+OFF				
Isd (A) = Short circuit protection of low level faults.	200-3000A with increment by 1A	320-4800A in steps of 1A	200-3000A with increment by 1A	320-4800A in steps of 1A	504-7560A in steps of 1A
tsd (S) = short time	0.06-1sec with increment by 0.02 sec+OFF				
Ii(A) = Short circuit protection of high level faults (analogous to the instantaneous magnetic trip of a thermal /magnetic breaker)	400-3500A with increment by 1A + OFF	640-5600A with increment by 1A + OFF	400-3500A with increment by 1A + OFF	640-5600A with increment by 1A + OFF	1008- 8820A with increment by 1A + OFF
Ip(A) = Pre trip alarm setting multiple	70-250A with increment by 1A	112-400A in steps of 1A	70-250A with increment by 1A	112-400A in steps of 1A	176.4-630A in steps of 1A
For 4P I <sub>g</sub> (A)=Ground fault pickup current	50-250A with increment by 1A+OFF	80-400A with increment by 1A+OFF	50-250A with increment by 1A+OFF	80-400A with increment by 1A+OFF	126-630A with increment by 1A+OFF
For 4P t <sub>g</sub> (S)=Ground fault pickup time	Fixed for 0.4 sec				

### SETTING PARAMETERS FOR MCCB WITH LCD

Frame size	800A	
Rated current $I_n$ (A)	630	800
$I_r$ (A) = Long delay current setting	252-630A in steps of 1A	320-800A in steps of 1A
$t_r$ (S) = Long delay time	12-150sec with increment by 1 sec+OFF	12-150sec with increment by 1 sec+OFF
$I_{sd}$ (A) = Short circuit protection of low level faults.	504-7560A in steps of 1A	640-9600A in steps of 1A
$t_{sd}$ (S) = short time	0.06-1sec with increment by 0.02 sec+OFF	0.06-1sec with increment by 0.02 sec+OFF
$I_{li}$ (A) = Short circuit protection of high level faults (analogous to the instantaneous magnetic trip of a thermal/magnetic breaker)	1008- 8820A with increment by 1A + OFF	1280- 11200A with increment by 1A + OFF
$I_p$ (A) = Pre trip alarm setting multiple	176-630A in steps of 1A	224-800A in steps of 1A
For 4P $I_g$ (A)=Ground fault pickup current	126-630A with increment by 1A+OFF	160-800A with increment by 1A+OFF
For 4P $t_g$ (S)=Ground fault pickup time	Fixed for 0.4 sec	Fixed for 0.4 sec



SGM1L-100



SGM6L-250

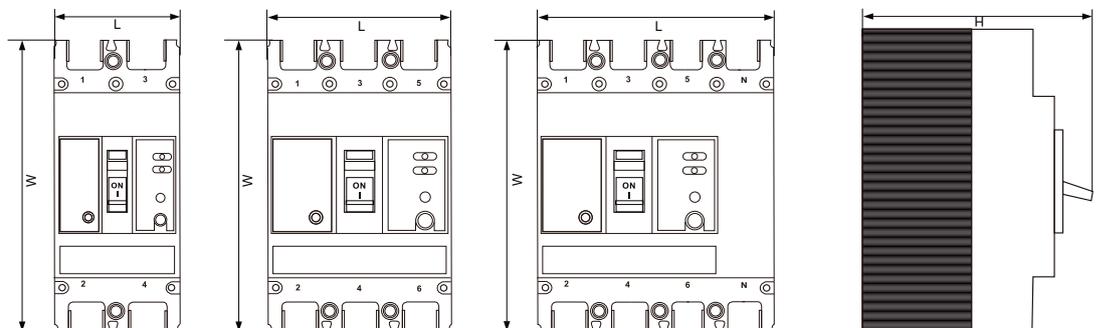
### SGM1L Moulded Case Circuit Breaker

### MCCB WITH ELCB TYPE

Frame Size	100		250	
Model	SGM1L-100		SGM6L-250	
Number of poles	3,4		4	
Rated current(A) I <sub>n</sub>	10,16,20,25, 32,40,50,63, 80,100		100,125,140, 160,180,200, 225	
Standard	IEC60947-2			
Rated insulation voltage U <sub>i</sub> (V)	800			
Rated impluse withstand voltage U <sub>imp</sub> (kV)	8			
Breaking capacity level	L	M	L	M
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> (kA)	35	50	35	50
Rated service short-circuit breaking capacity I <sub>cs</sub> (kA)	22	35	22	35
Mechanical Endurance	8500		7000	
Electrical Endurance	1500		1000	
Rated residual operating current I <sub>Δn</sub> (mA)				
Without time delay	30/100/500 100/300/500		30/100/500 100/300/500	
With time delay	100/300/500		100/300/500	
Rated residual non-operating current	1/2 I <sub>Δn</sub>		1/2 I <sub>Δn</sub>	
Breaking time at a residual current	I <sub>Δn</sub>		2I <sub>Δn</sub>	
Max.breaking times				
Without time delay	0.3		0.15	
With time delay	0.4/1		0.4/1	
Installation				
Straight extension bars(FB)	■		■	
Spread extension bars(FB)	■		■	
Rear connection(RC)	■		■	
Phase barrier	■		■	
Dimensions mm(LxWxH)	3P	L:92x150x90		142x165x100
		M/H:92x150x110		
	4P	L:122x150x90		
		M/H:122x150x110		



■ shows it has this option; “-” means it has no this option.





SGM1L-400



SGM1L-630



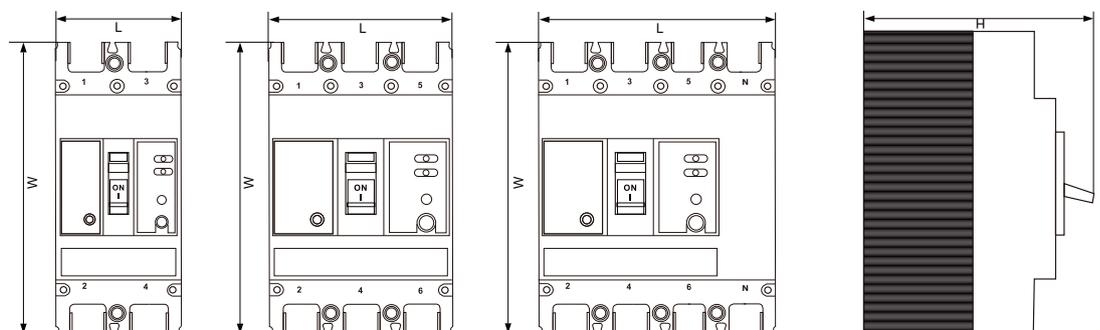
SGM1L-800

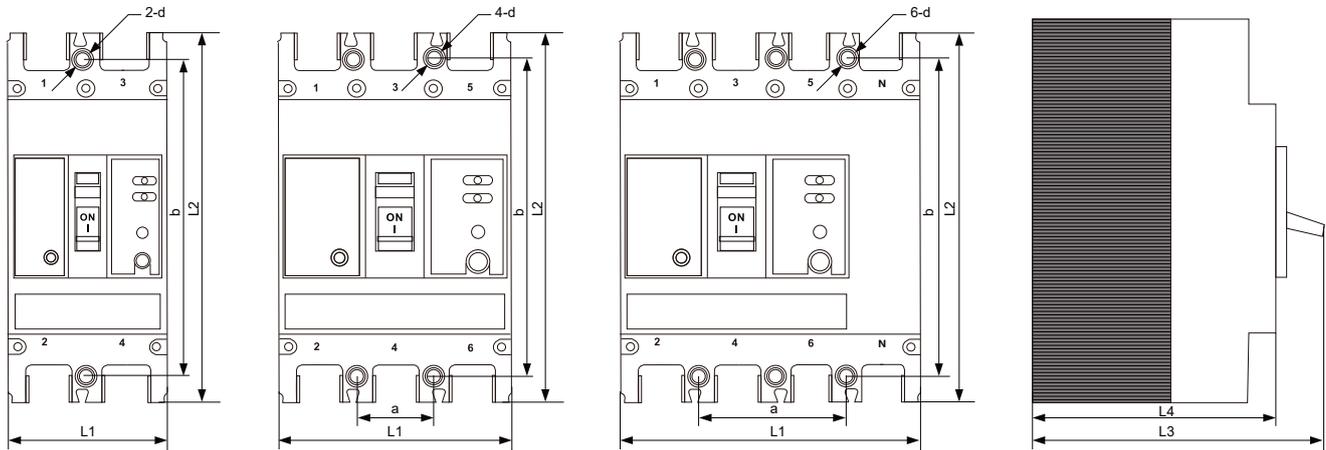
SGM1L Moulded Case  
Circuit Breaker

MCCB WITH ELCB TYPE

Frame Size	400			630			800			
Model	SGM1L-400			SGM1L-630			SGM1L-800			
Number of poles	3,4			3,4			3,4			
Rated Current(A) In	225,250,315, 350,400			400,500,630,			630,700,800			
Standard	IEC60947-2									
Rated insulation voltage Ui(V)	800									
Rated impulse withstand voltage Uimp (kV)	8									
Breaking capacity level	L	M	H	L	M	H	L	M	H	
Rated ultimate short-circuit breaking capacity Icu(kA)	50	65	100	50	65	100	50	65	100	
Rated service short-circuit breaking capacity Ics(kA)	35	42	65	35	42	65	35	42	65	
Mechanical Endurance	7000			4000			4000			
Electrical Endurance	1000			1000			1000			
Rated residual operating current I <sub>Δn</sub> (mA)										
Without time delay	100/300/500			300/500/1000			300/500/1000			
With time delay										
Rated residual non-operating current	1/2 I <sub>Δn</sub>			1/2 I <sub>Δn</sub>			1/2 I <sub>Δn</sub>			
Breaking time at a residual current	5 I <sub>Δn</sub>			10 I <sub>Δn</sub>			10 I <sub>Δn</sub>			
Max.breaking times										
Without time delay	0.04			0.04			0.04			
With time delay	0.4/1			0.4/1			0.4/1			
Installation										
Straight extension bars(FB)	■			■			■			
Spread extension bars(FB)	■			■			■			
Rear connection(RC)	■			■			■			
Phase barrier	■			■			■			
Dimensions mm(LxWxH)	2P	-			-			-		
	3P	150x257x148			210x280x155			210x280x155		
	4P	198x257x148			280x280x155			280x280x155		

“■” shows it has this option; “-” means it has no this option.





Applicable frame size	Poles	Outline Dimension				Installation Dimension		
		L1	L2	L3	L4	a	b	d
SGM1L-100L	2	62max	150max	110max	75max	-	129	4.5
	3	92max	150max	90max	75max	30	129	4.5
	4	122max	150max	90max	75max	60	129	4.5
SGM1L-100M/H	2	62max	150max	110max	92max	-	129	4.5
	3	92max	150max	110max	92max	30	129	4.5
	4	122max	150max	110max	92max	60	129	4.5
SGM6L-250L	4	141max	165max	109max	72max	70	126	4.5
SGM6L-250M/H	4	141max	165max	127max	90max	70	126	4.5
SGM1L-400L/M/H	3	150max	257max	148max	106max	44	194	7.0
	4	198max	257max	148max	106max	44	194	7.0
SGM1L-630L/M/H	3	210max	280max	155max	116max	70	243	7.0
SGM1L-800L/M/H	4	280max	280max	155max	116max	70	243	7.0



OF (Auxiliary contact)



SD (Alarm switch)



MX (Shunt trip)



MN (Under-voltage release)



Item	Accessories	125A	160A	250A	400A	630A	800A	
		3P	3P	3P	3P	3P	3P	
SGM6 (125-800A Frame)	SD							
	MX							
	OF							
	MN							
	SD+OF							
	TWO OF							
	MX,OF							
	MX,SD							
	MX,SD+OF							
	MX,TWO OF							
	MX,MN							
	SGM6s (125-800A Frame)	MN,MX						
		MN,OF						
		MN,SD						
	SGM6sm (125,400-800A frame)	MN,SD+OF						
MN,TWO OF								
SGM6E (160-800A Frame)	OF,SD							
	OF,MX							
	OF,SD+OF							
	OF,TWO OF							
	OF,MN							
iSGM6E (400-800A Frame)	SD,OF							
	SD,MX							
	SD,SD+OF							
	SD,TWO OF							
	SD,MN							
	SD+OF,OF							
	SD+OF,SD							
	SD+OF,MX							
	SD+OF,TWO OF							
	SD+OF,MN							
	TWO OF,OF							
	TWO OF,SD							
	TWO OF,MX							
	TWO OF,SD+OF							
TWO OF,MN								







OF (Auxiliary contact)



SD (Alarm switch)



MX (Shunt trip)



MN (Under-voltage release)



Item	Accessories	SGM1L-100		SGM6L-250		SGM1L-400		SGM1L-630		SGM1L-800	
		3P	4P								
SGM1L / SGM6L	SD	◀ □ □ □	◀ □ □ □ □	◀ □ □ □	◀ □ □ □ □	◀ □ □ □	◀ □ □ □ □	◀ □ □ □	◀ □ □ □ □	◀ □ □ □	◀ □ □ □ □
	MX	◀ ● □ □ □	◀ ● □ □ □ □	◀ ● □ □ □	◀ ● □ □ □ □	◀ ● □ □ □	◀ ● □ □ □ □	◀ ● □ □ □	◀ ● □ □ □ □	◀ ● □ □ □	◀ ● □ □ □ □
	MN	◀ ○ □ □ □	◀ ○ □ □ □ □	◀ ○ □ □ □	◀ ○ □ □ □ □	◀ ○ □ □ □	◀ ○ □ □ □ □	◀ ○ □ □ □	◀ ○ □ □ □ □	◀ ○ □ □ □	◀ ○ □ □ □ □
	OF	◀ ■ □ □ □	◀ ■ □ □ □ □	◀ ■ □ □ □	◀ ■ □ □ □ □	◀ ■ □ □ □	◀ ■ □ □ □ □	◀ ■ □ □ □	◀ ■ □ □ □ □	◀ ■ □ □ □	◀ ■ □ □ □ □
	SD+OF	◀ ▲ □ □ □	◀ ▲ □ □ □ □	◀ ▲ □ □ □	◀ ▲ □ □ □ □	◀ ▲ □ □ □	◀ ▲ □ □ □ □	◀ ▲ □ □ □	◀ ▲ □ □ □ □	◀ ▲ □ □ □	◀ ▲ □ □ □ □





**SGM6**



**SGM6s**



**SGM6L**



**SGM6E**



AC Motor Mechanism



Round Extended Rotary Handle



Square Extended Rotary Handle



Plug-in Front Connection



Draw-out Rear Connection



Terminal cover



Extended Handle

	SGM6		SGM6s		SGM6sm		SGM6L		SGM6E		iSGM6E	
	3P 125-800A	4P 125-800A	3P 125-800A	4P 125-800A	3P 125, 400-800A	4P 125, 400-800A	3P 100-800A	4P 100-800A	3P 160-800A	4P 160-800A	3P 400-800A	4P 400-800A
AC Motor Mechanism	■	■	■	■	■	■	■	■	■	■	■	■
Round Extended Rotary Handle	■	■	■	■	■	■	■	■	■	■	■	■
Square Extended Rotary Handle	■	■	■	■	■	■	■	■	■	■	■	■
Plug-in Front Connection	■	■	■	■	■	■	■	■	■	■	■	■
Drawer-out rear Connection	—	—	—	—	—	■	■	■	■	■	■	■
Terminal cover	160,250A	—	160,250A	—	—	—	—	—	—	—	—	—
Extended Handle	400-800A available											

**DC MOULDED CASE CIRCUIT BREAKER**

Frame Size	250		500		630	
Model	SGM6 DC-250		SGM6 DC-500		SGM6 DC-630	
Rated current(A) In	63,80,100,125,140, 160,180,200, 225,250		250,315,350, 400,500		250, 320, 400, 450, 500, 630	
Standard	IEC60947-2					
Reference temperature	40°C/50°C					
Rated operational voltage	DC1000	DC1500	DC1500		DC1500	
Rated insulation voltage Ui (V)	1600		1500		1600	
Rated impulse withstand voltage Uimp (kV)	12					
Breaking capacity level	2	4	4		4	
Rated ultimate short-circuit breaking capacity Icu(kA)	35	20	20		20	
Rated service short-circuit breaking capacity Ics(kA)	20	20	20		16	
Mechanical Endurance	10000		5000		5000	
Electrical Endurance	1500		1000		1000	
Arcing distance	≤50	≤100			≤100	
Dimensions mm(L×W×H)	2P	200X90X98.5		/		98X310X130
	4P	200X180X98.5				270X240X110



### HIGH VOLTAGE AC MOULDED CASE CIRCUIT BREAKER

Frame Size	250			400			630		
Model	SGM6 HU-250			SGM6 HU-400			SGM6 HU-630		
Rated current(A) In	63,75,80,100,125,140, 160,180,200,225,250			225,250,315,350,400			400,500,630		
Standard	IEC60947-2								
Reference temperature	40°C/50°C								
Rated operational voltage	800	1000	1140	800	1000	1140	800	1000	1140
Rated insulation voltage Ui (V)	1140								
Rated impulse withstand voltage Uimp (kV)	8								
Breaking capacity level	3								
Rated ultimate short-circuit breaking capacity Icu(kA)	36.5	12		30	12		30	12	
Rated service short-circuit breaking capacity Ics(kA)	23	12		23	12		23	12	
Mechanical Endurance	10000			8500					
Electrical Endurance	5000			3000					
Arcing distance	≤20			≤50					
Dimensions mm(L×W×H)	165X113X98.5			257X150X87			270X182X83		



Smart Moulded Case Circuit Breaker



SGM3EL-250CY

SGM3EL-400CY

**Product Type and Function**

	Function Types	Intelligent	Network
Protection Function	Over load	■	■
	Short Circuit	■	■
	Residual Current	■	■
	Auto Reclose	■	■
	Phase Loss	■	■
	Over Voltage	■	■
	Under Voltage	■	■
Measurement and Display	Residual Current Auto Test	■	■
	Three phase voltage	■	■
	Three phase current	■	■
Characteristics Setup	Rated Residual Current	■	■
	Overload Time Delay	■	■
	Short Circuit Time Delay	■	■
	Instantaneous Short Circuit	■	■
	Over voltage Value	■	■
	Under voltage Value	■	■
	Time,Date	■	■
Info Restore , Check and Display	Protection In & Out	■	■
	Residual Current Trip	■	■
Communication	RS - 485	■	■
	DLT 645	■	■

### Smart Moulded Case Circuit Breaker

Specification & Type	SGM3EL-125CY	SGM3EL-250CY	SGM3EL-400/630CY	SGM3EL-800CY
Set up value	40A, 50A, 63A, 80A, 100A, 125A	100A, 125A, 140A, 160A, 180A, 200A, 225A, 250A	200A, 225A, 250A, 315A, 350A, 400A, 500A, 630A,	400A, 500A, 630A, 700A, 800A
Poles	3P+N	3P+N, 2P	3P+N	3P+N
Case Current Ue ( V )	AC400/50HZ		AC400/50HZ	
Rated Insulation Voltage Ui ( V )	AC 800V		AC 800V	
Rated Withstand Voltage Uimp ( V )	8000		8000	
Arc Distance	≥50		≥100	
Rated short circuit breaking capacity (Icu)	50		65	
Operation short circuit breaking capacity (Ics)	35		42	
Rated Residual Short Circuit Breaking Capacity ( kA )	12.5		20	
Time delay se tup value TI	3s, 4s, 6s, 8s, 10s, 12s, 16s, 18s, OFF			

Residual Current Trip Characteristics		AC type		AC type	
Rated Residual Trip Current I $\Delta$ n(mA)		50/100/200/400/600/800 Auto trace or manual setup		100/200/300/500/800/1000 Auto trace or manual setup	
Residual Trip Time Characteristics		Time Delay / Non Time Delay			
Time Delay Limit Un- Drive Time(S)		0.06/0.1/0.2 Select: 2 I $\Delta$ n			
Auto Reclose Time ( s )		20-60			
Operation Characterises ( times )	Power On	1500	1000	1000	1000
	Power Off	8500	7000	4000	4000
	Total Trips	10000	8000	5000	5000
Overload , Short circuit Characteristics		Three steps protection , electronic adjust, see more on “ Protection Characteristics Instruction”			
Over Voltage Value (V)		Setup Value ( 250 - 300 ) $\pm$ 5 %			
Under Voltage Value (V)		Setup Value ( 150 ~ 200 ) $\pm$ 5 %			
Connect Control Time (ms)		$\leq$ 40 ms			
Communication Delay Time (ms)		$\leq$ 200 ms			