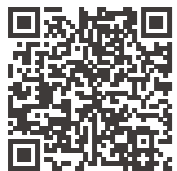


**SHENGLONG**

Product Selection Manual

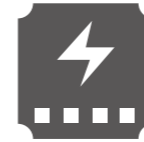




---

SV	SV series indoor high- voltage vacuum circuit breaker	SNS	SNS Circuit breaker with residual current protection
SMT	SMT series universal circuit breaker	SNS DC	SNS DC series DC molded case circuit breakers
SMT HU	SMT HU series high- voltage intelligent universal circuit breaker	SNS HU	SNS HU series high- voltage AC circuit breakers
SNS	SNS thermal magnetic circuit breaker	SNX	<b>SNX thermal magnetic circuit breaker</b>
SNS	SNS electronic circuit breaker	SNX	SNX electronic circuit breaker

Partial performance



Intelligent Switchboards  
and Switchgear



Intelligent Energy Management  
and Components



Power and Energy  
EPC Services



Intelligent Operations  
and Maintenance System

Founded in 1979, Shenglong Electric is a leading company in the field of smart grid and intelligent energy management. We are committed to providing clients with comprehensive industry solutions of Intelligent Energy System Planning and Design, Intelligent Transmission and Distribution Equipment Manufacturing, Internet-based Power and Energy Engineering, Procurement, and Construction (EPC) services, and Operations and Maintenance services, helping clients improve the safety, reliability, and intelligence level of power and energy systems, as well as improving energy efficiency and reducing carbon emissions. We operate more than 50 countries and have built a sales and service network in over 30 countries all over the world. We have over 7000 employees, and were honored as Top 500 Asia Brand in 2013.

Shenglong Electric has 42 subsidiaries and factories, and 2 research institutes in China. We have five core offices in major cities of China including Beijing, Wuhan, Shanghai, Guangzhou, and Chongqing. The Beijing office, the Intelligent Business center at Greenland Center, which is called the tallest building in the country, has a world-leading smart office system, which are developed by Shenglong. Our Beijing plant, located at the Zhongguancun Technology Park, is a leading research and industrial base for intelligent power distribution and Internet-based energy solutions.



Quick selection table



# SV

## SV series indoor high- voltage vacuum circuit breaker

### Circuit breaker parameter table

SV12  
SV12 vacuum circuit breaker technical parameters

Init	Unit	Data
Rated voltage		
Rated frequency		
Rated power frequency withstand voltage(1min)		
Rated lightning impulse withstand voltage(peak)		
Rated current		
Rated short circuit breaking current		
Rated short-time withstand current		
Rated peak withstand current		
Rated short circuit making current (peak)		
Rated dynamic stable current		
Rated single/back to back capacitor bank breaking current		
Rated short circuit current duration		
Rated short-circuit current breaking times	times	50(40kA and above 30)
Switching time/arcingtime		
Rated operating sequence		
Rated operating voltage		
Percentage of DC component of rated short-circuit breaking current		
mechanical life	times	

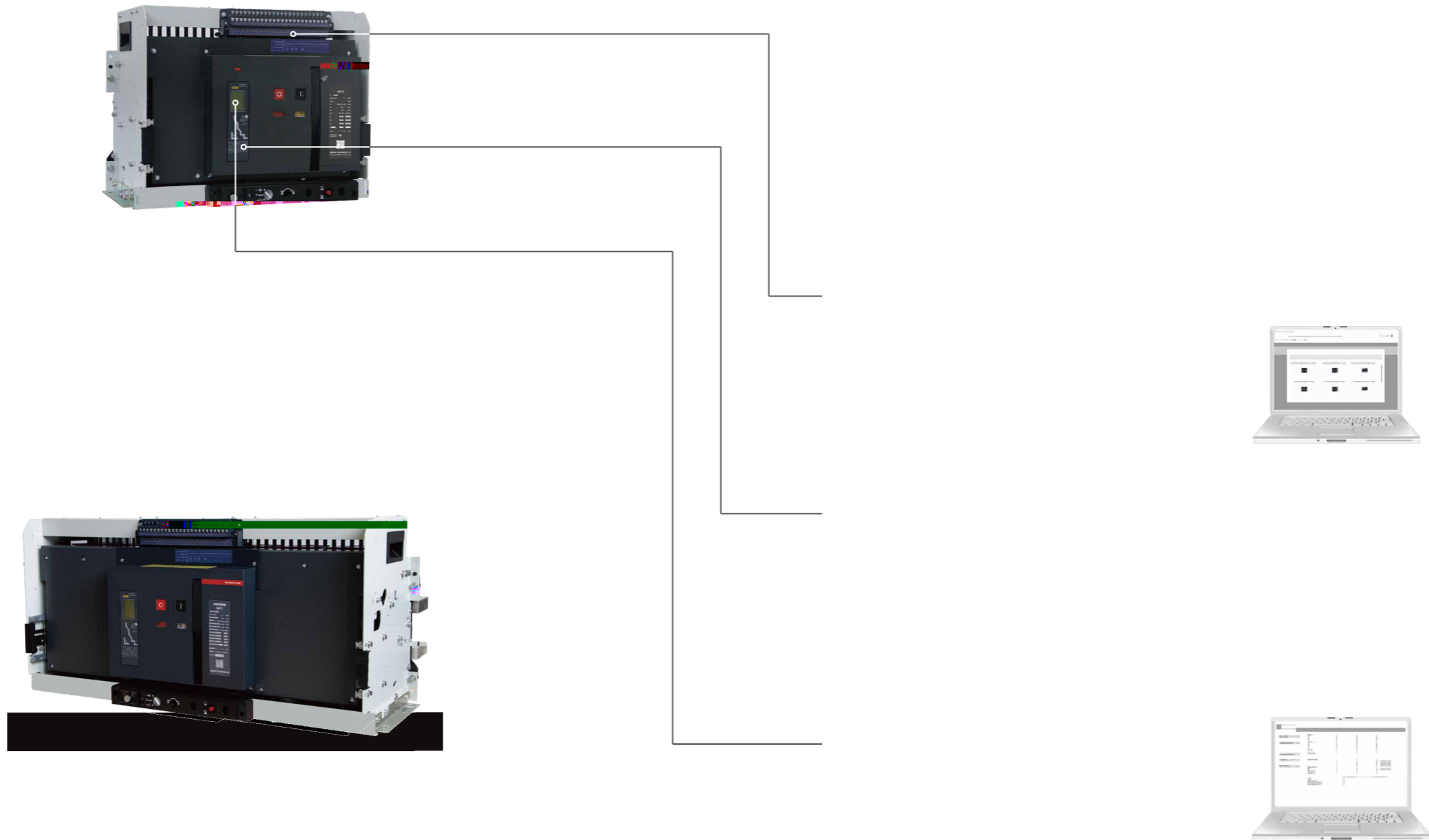
Init	Unit	Data
Contact opening distance		
Contact pressure spring travel		
Interphase center distance		
Opening and closing different periods		
Contact closing bounce time		
Opening rebound amplitude		
Average opening speed (6mm after opening)		
Average closing speed (6mm before closing)		
Opening time (at rated operating voltage)		
Closing time (at rated operating voltage)		
Main loop resistance		
Allowable wear thickness of dynamic and static contacts		

Init	Unit	Data
Rated power of energy storage motor		
Rated voltage of energy storage motor		
Energy storage time		
Closing coil voltage		
Opening coil voltage		
Closing coil current		
Opening coil current		

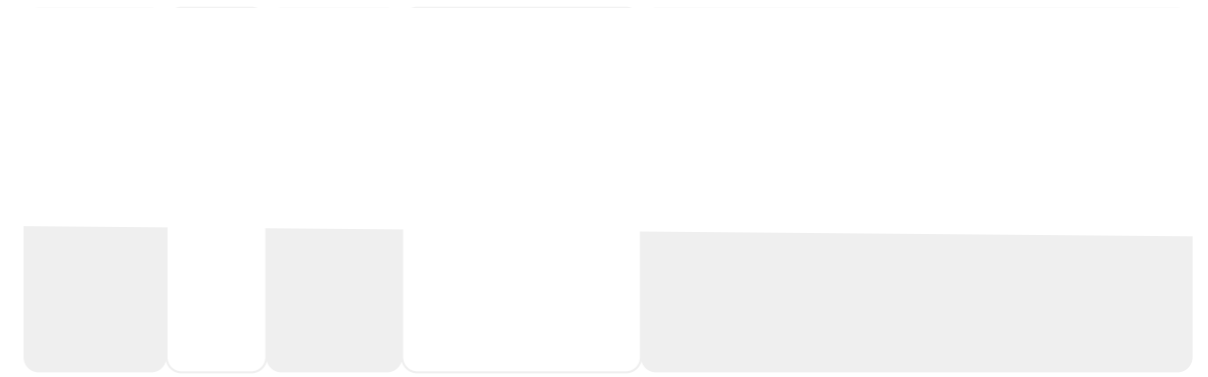
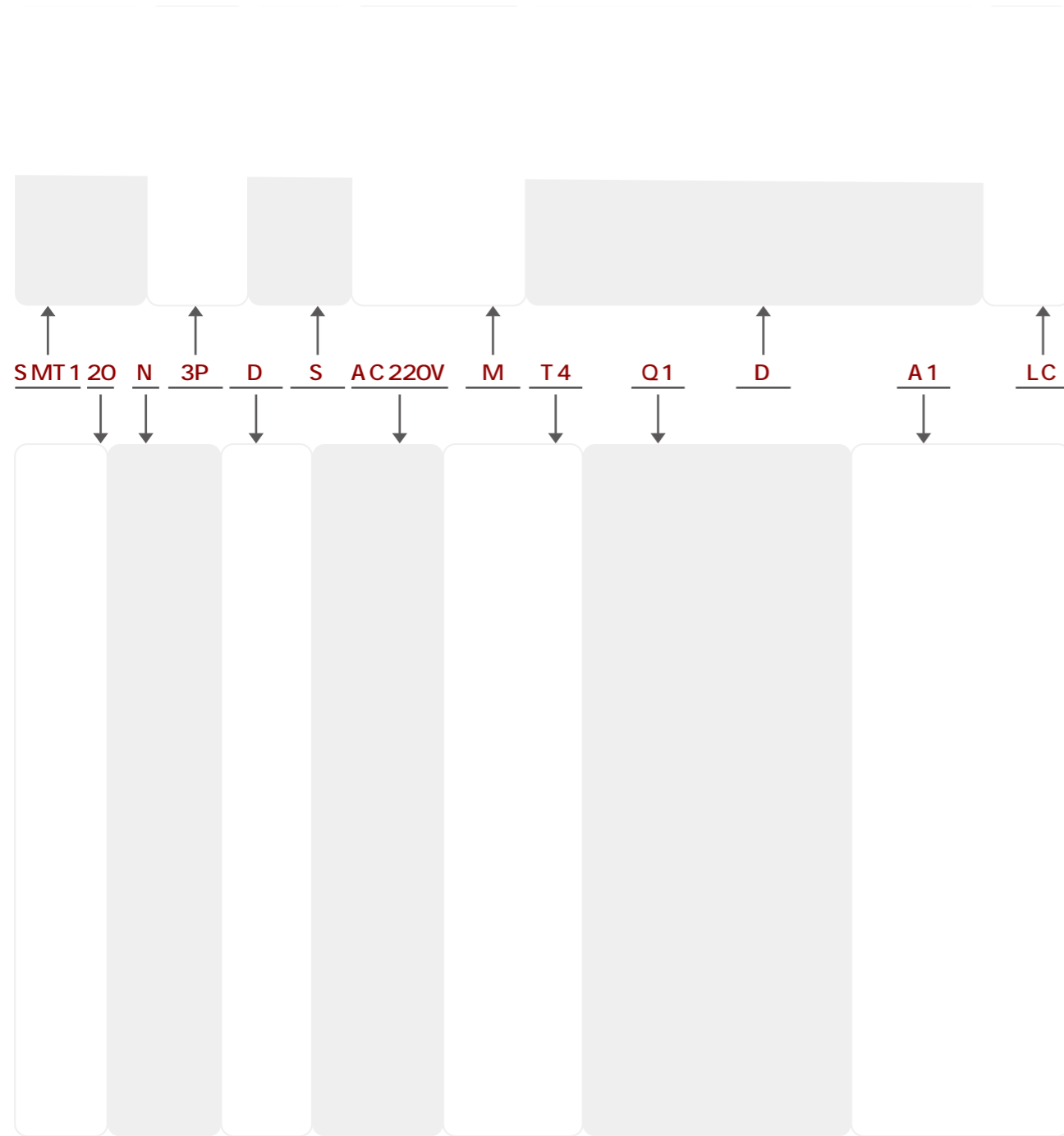








# SMT



# SMT

## SMT series universal circuit breaker

		AC400V	AC230V、DC110V	DC220V	
		0.3s	0.5s	0.7s	1s 3s 5s
		0.3s	0.5s	0.7s	1s 3s
		3 3	4 4	5 5	6 6
		3 3	4 4	5 5	6 6
	M				
	3M				
	2H				
	3H				
					( 3M 3H
		1 1	2 1	3 2	5 3
			2	3	
			2	3 1	3 3
	N				

Optional accessories	Specifications
Undervoltage release	Working voltage: AC400V, AC230V, DC110V, DC220V Action time: instantaneous 0.3s, 0.5s, 0.7s, 1s, 3s, 5s combined delay range (0.3-10.5s); Delay and zero voltage delay: 0.3s, 0.5s, 0.7s, 1s, 3s combined delay range (0.3-0.75s)
Auxiliary switch	Switching type: 3 open and 3 closed, 4 open and 4 closed, 5 open and 5 closed, 6 open and 6 closed Independent type: 3 open and 3 closed, 4 open and 4 closed, 5 open and 5 closed, 6 open and 6 closed
Intelligent controller	M Current type, electric energy type, harmonic type
	3M Current type, voltage type, electric energy type, harmonic type
	2H Voltage type, electric energy type, generator electric energy type, communication
	3H Voltage type, electric energy type, harmonic type, generator electric energy type, generator harmonic type, communication
Other functions	Signal unit, required value function, contact wear, fault memory, closing times, clock (only available for 3M and 3H)
Interlocking mechanism	Opening position lock 1 lock 1 key, 2 lock 1 key, 3 lock 2 key, 5 lock 3 key
	Mechanical interlock Hard interlock: lever 2 interlock, lever 3 interlock Soft interlocking: wireline 2 interlocking, wireline 3 interlocking 1, wireline 3 interlocking 3
Other	Opening and closing button lock, door interlock, dust cover
External transformer	N-phase transformer, leakage transformer and ground current transformer
Power module	DC module
Relay module	Relay module

**SMT**  
**SMT series universal circuit breaker**

Circuit breaker parameter table

Circuit breaker parameter table									
Type	A	200-800		800-1600		2000		2500	
		46	52	53.3	57	62.5	67	73.3	78.7
Fixed 3P		46	52	53.3	57	62.5	67	73.3	78.7
Fixed 4P		50.2	57	53.3	41.4	76.7			
Draw out 3P		63	62.5	73.3	67	92	131.3	195	227.2
Draw out 4P		81.5	69.8	88.6	78.7	114	200	223.3	223.3

weight kg

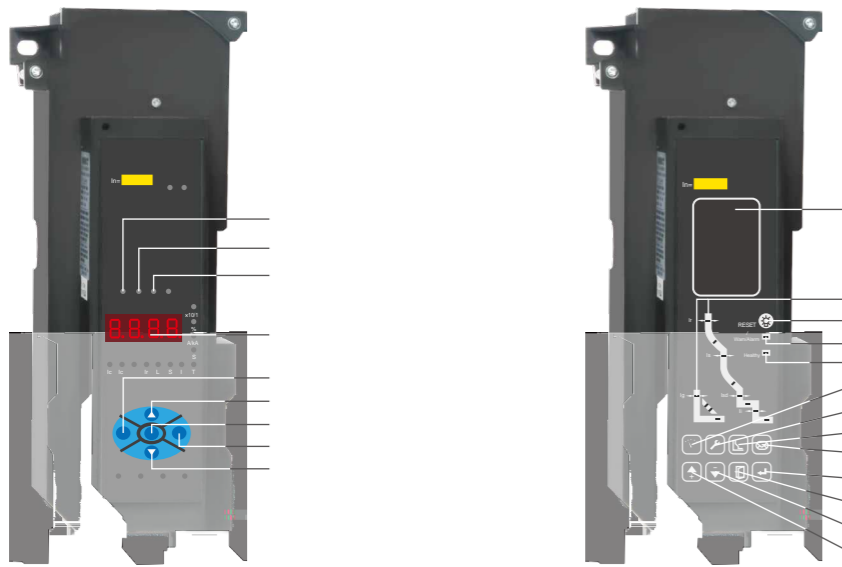
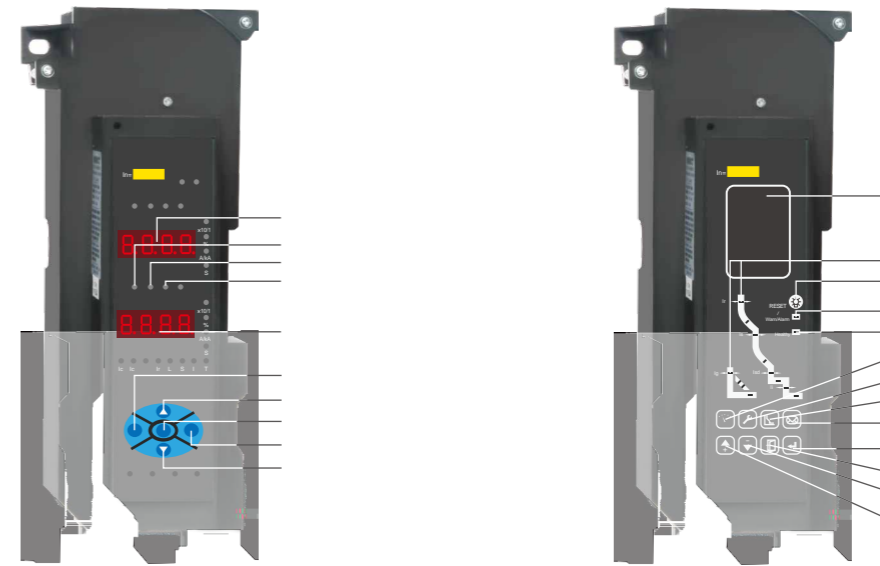
	A	200-800	800-1600	2000	2500	3200	4000	5000	6300
Fixed 3P		46	52	48.3	42	67	150		
Fixed 4P		50.2	57	53.3	41.4	76.7			
Draw out 3P		63	62.5	73.3	67	92	131.3	195	227.2
Draw out 4P		81.5	69.8	88.6	78.7	114	200	223.3	223.3

Circuit breaker parameter table									
Type	A	200-800		800-1600		2000		2500	
		46	52	53.3	57	62.5	67	73.3	78.7
Fixed 3P		46	52	53.3	57	62.5	67	73.3	78.7
Fixed 4P		50.2	57	53.3	41.4	76.7			
Draw out 3P		63	62.5	73.3	67	92	131.3	195	227.2
Draw out 4P		81.5	69.8	88.6	78.7	114	200	223.3	223.3

# SMT

## SMT series universal circuit breaker

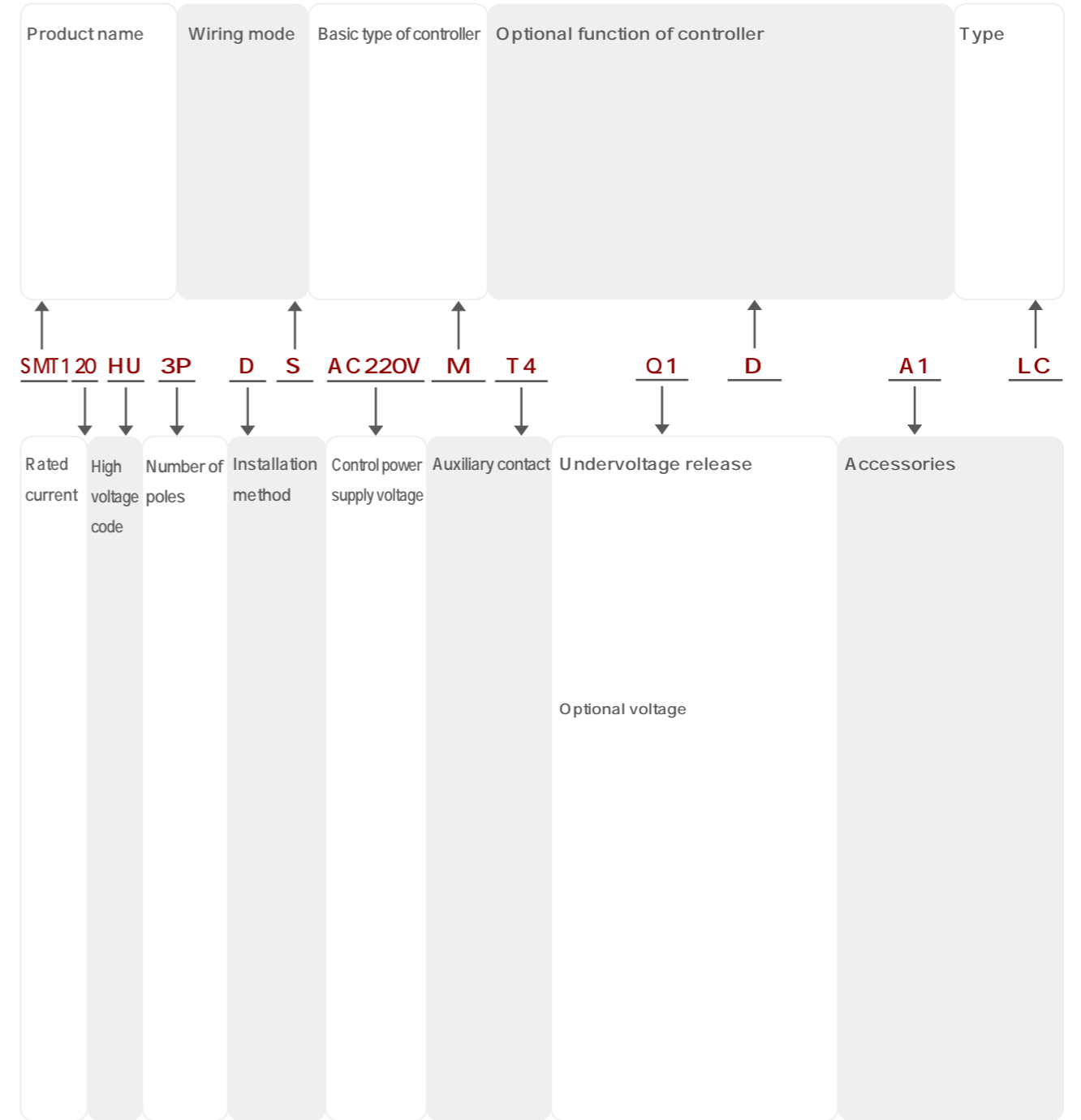
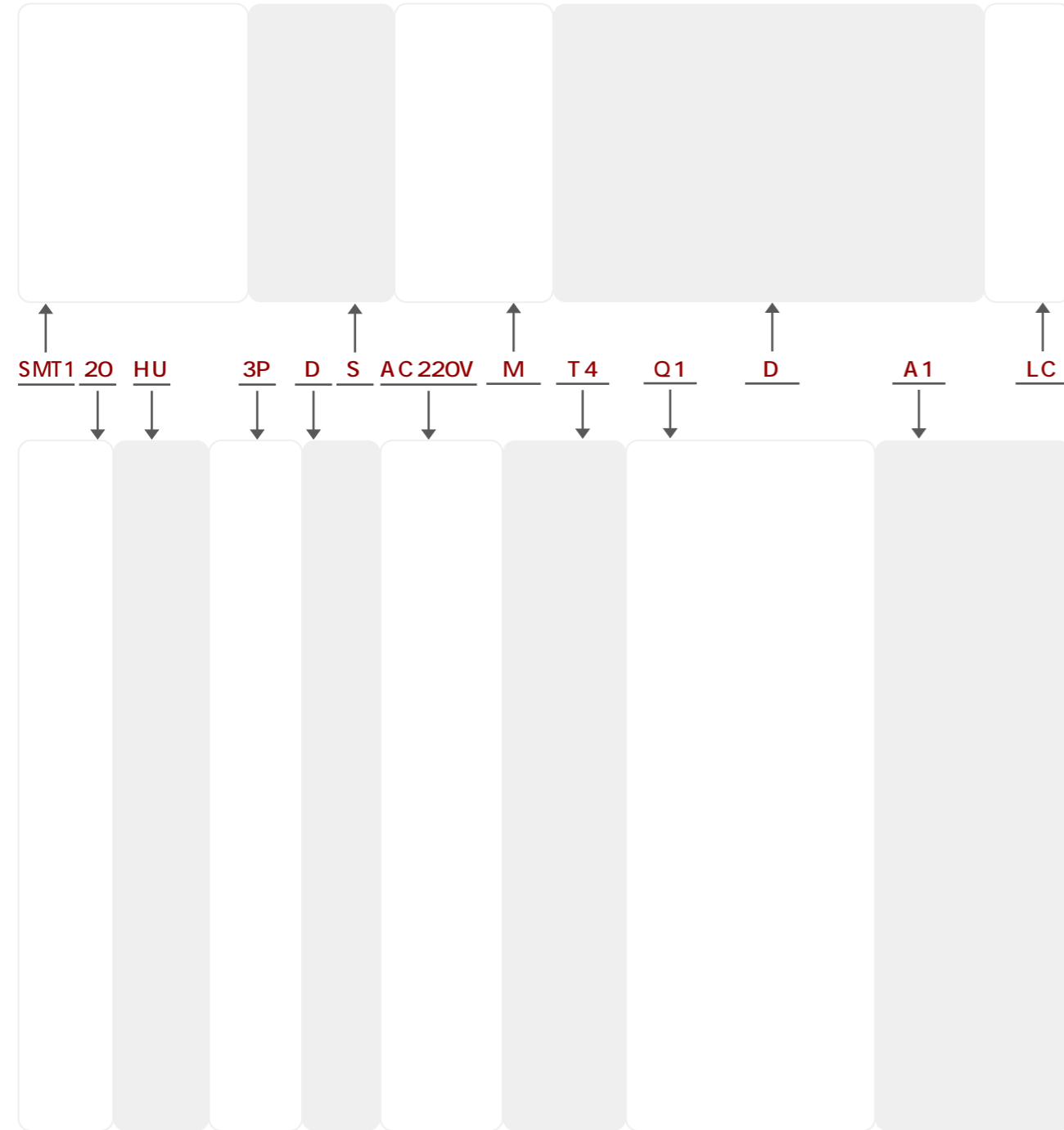
Intelligent controller





**SMT HU**  
**SMT HU series high- voltage intelligent universal circuit breaker**

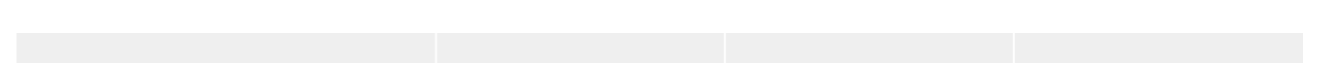
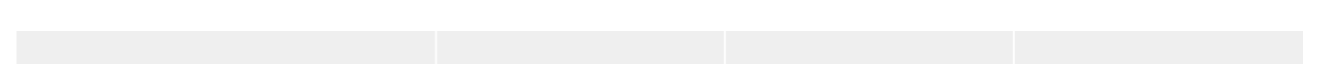
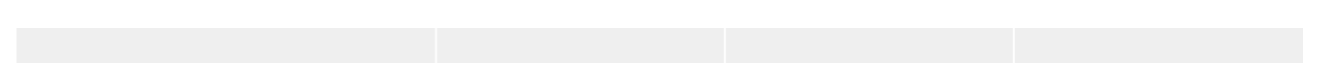
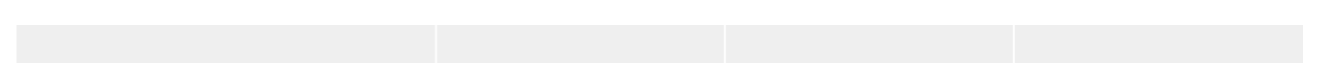
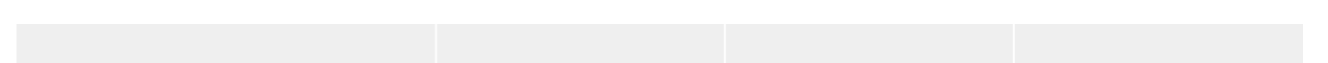
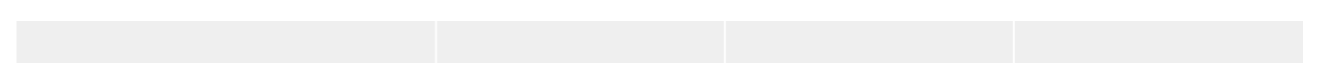
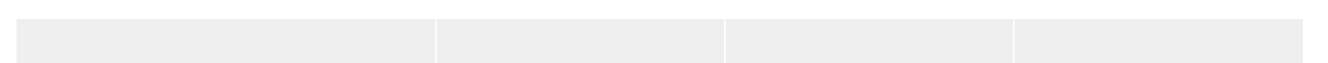
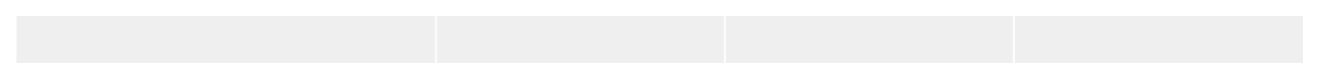
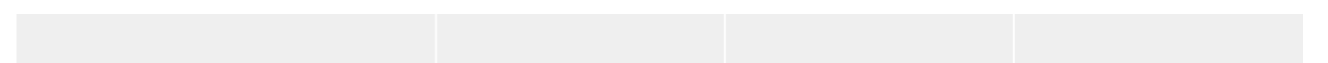
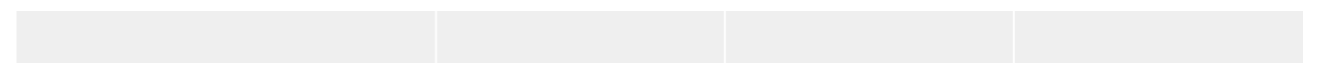
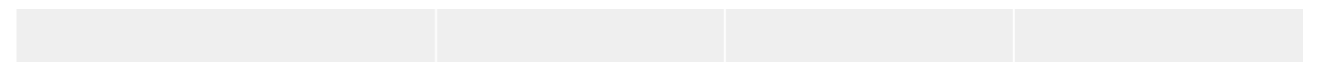
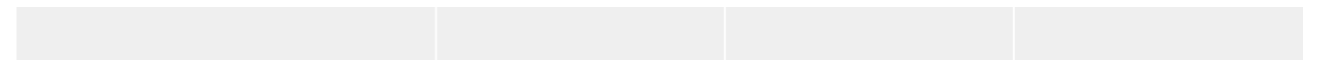
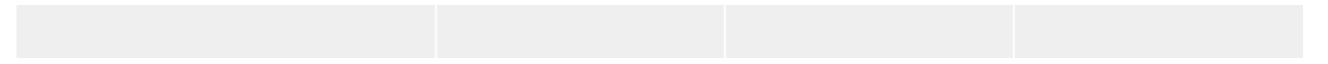
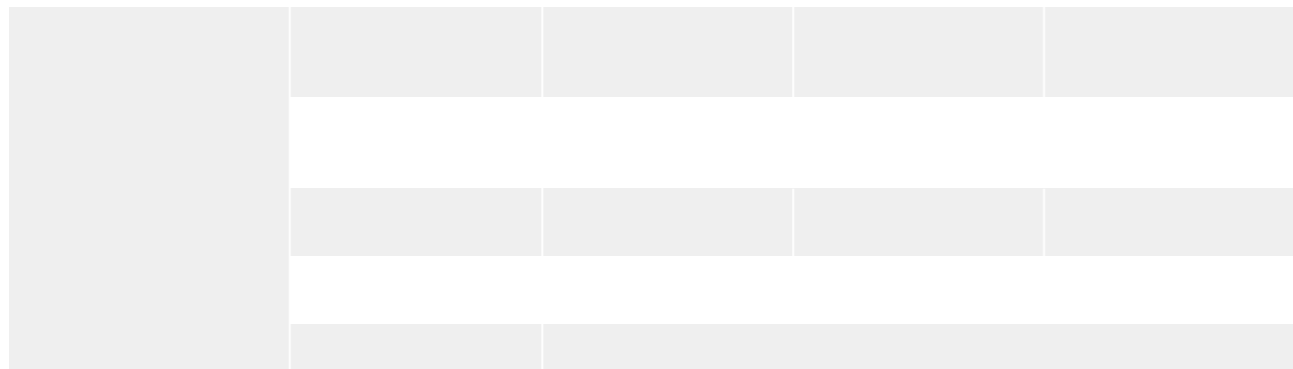
Quick selection table







SMT HU  
SMT HU series high- voltage intelligent universal circuit breaker

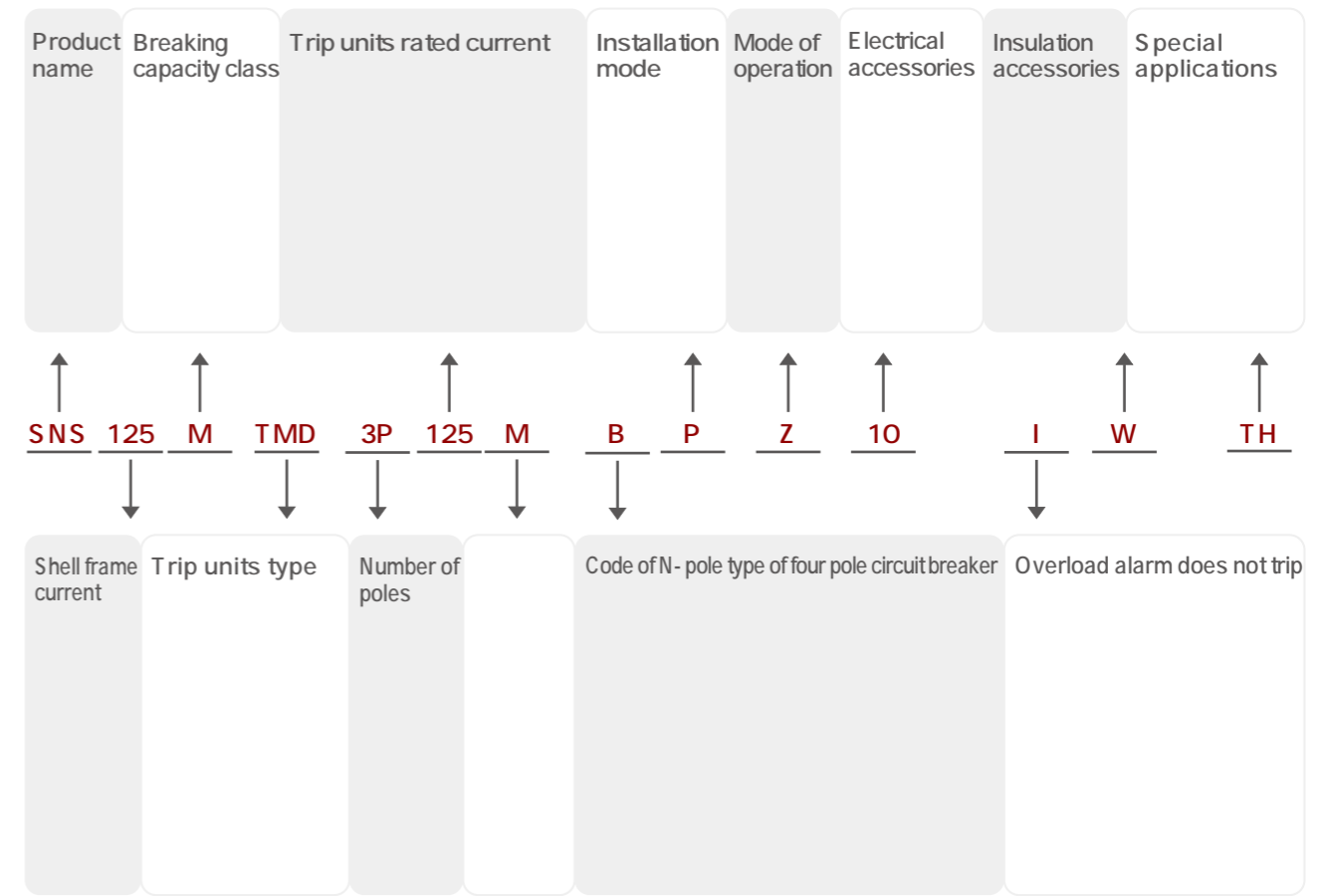
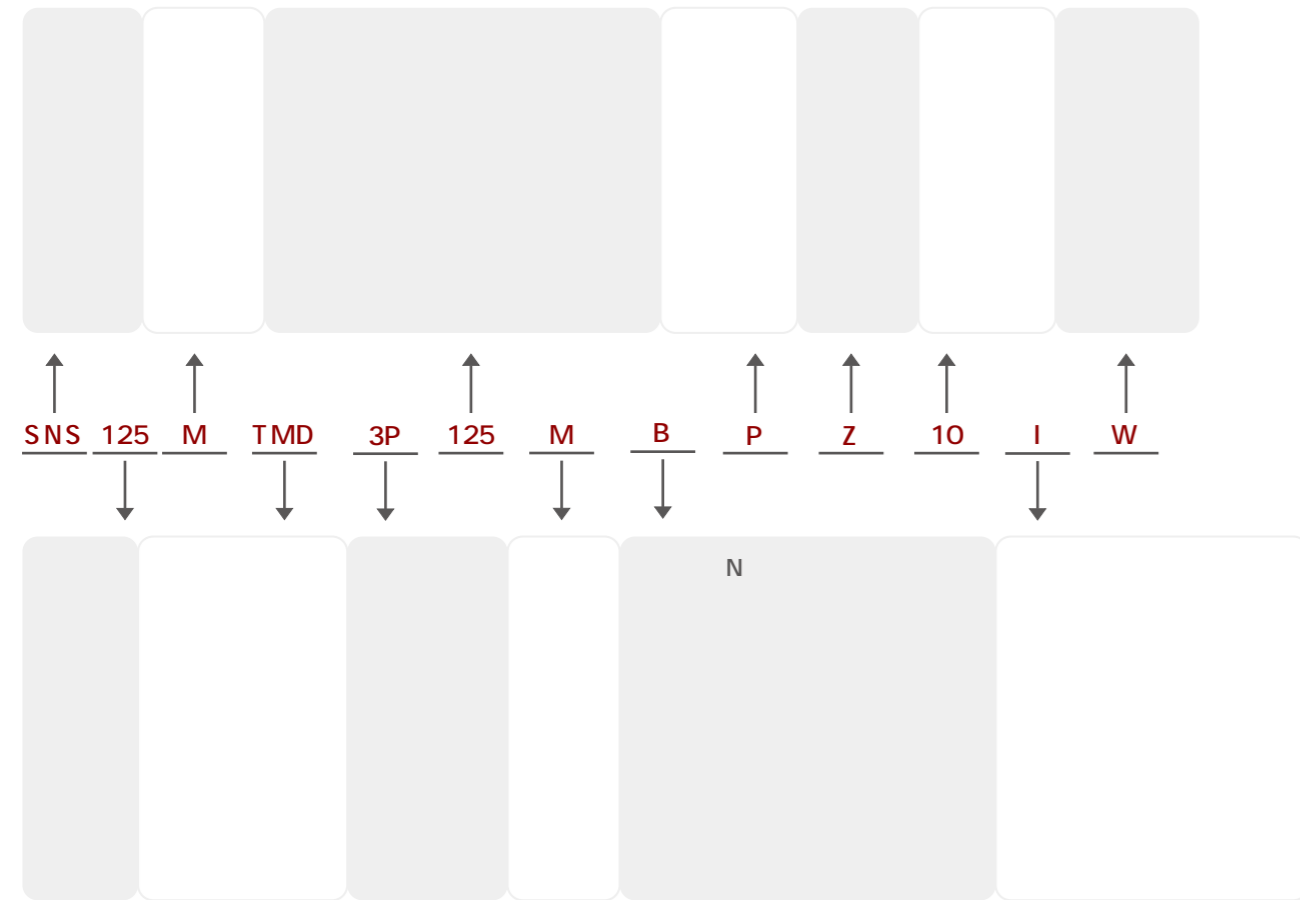




# SNS

## SNS thermal magnetic circuit breaker

Quick selection table

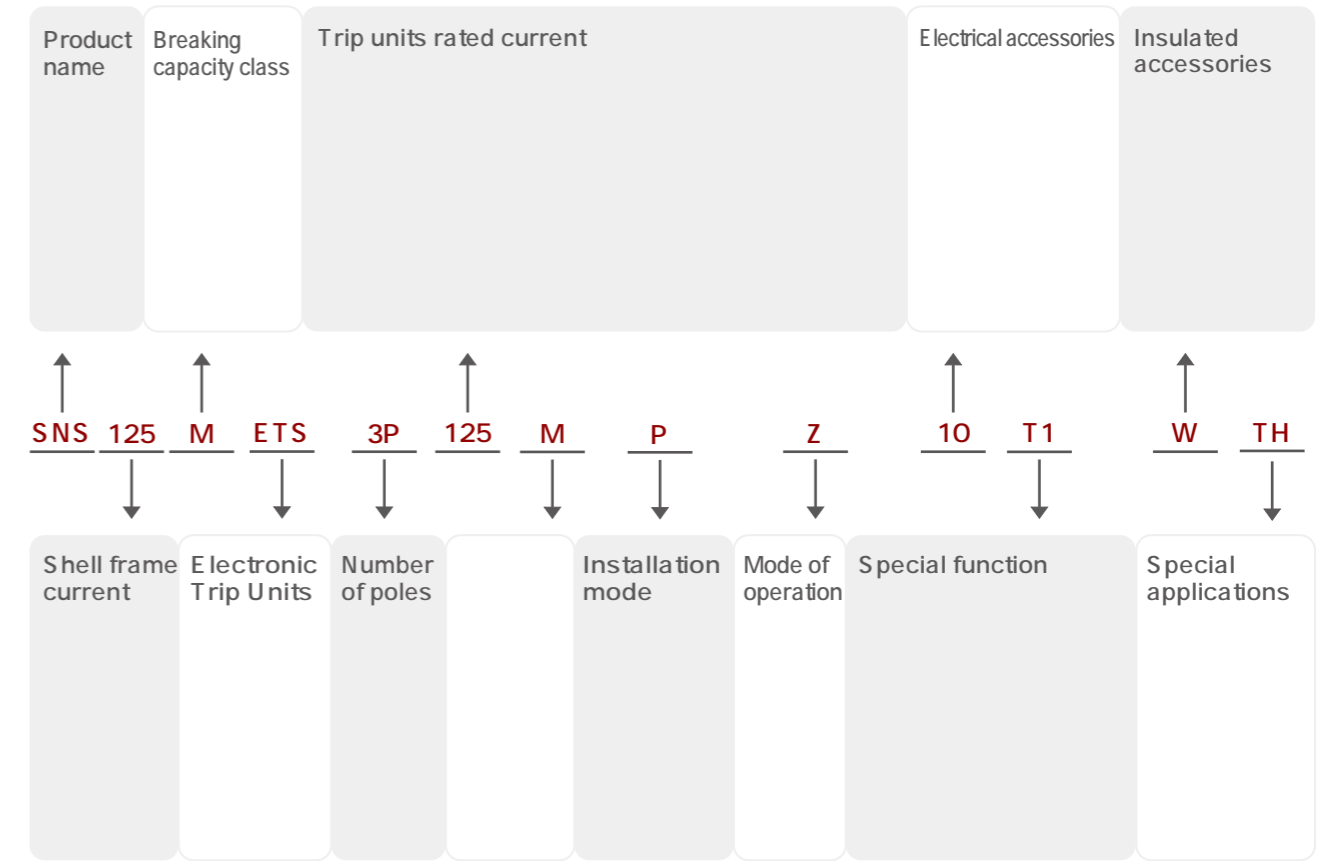
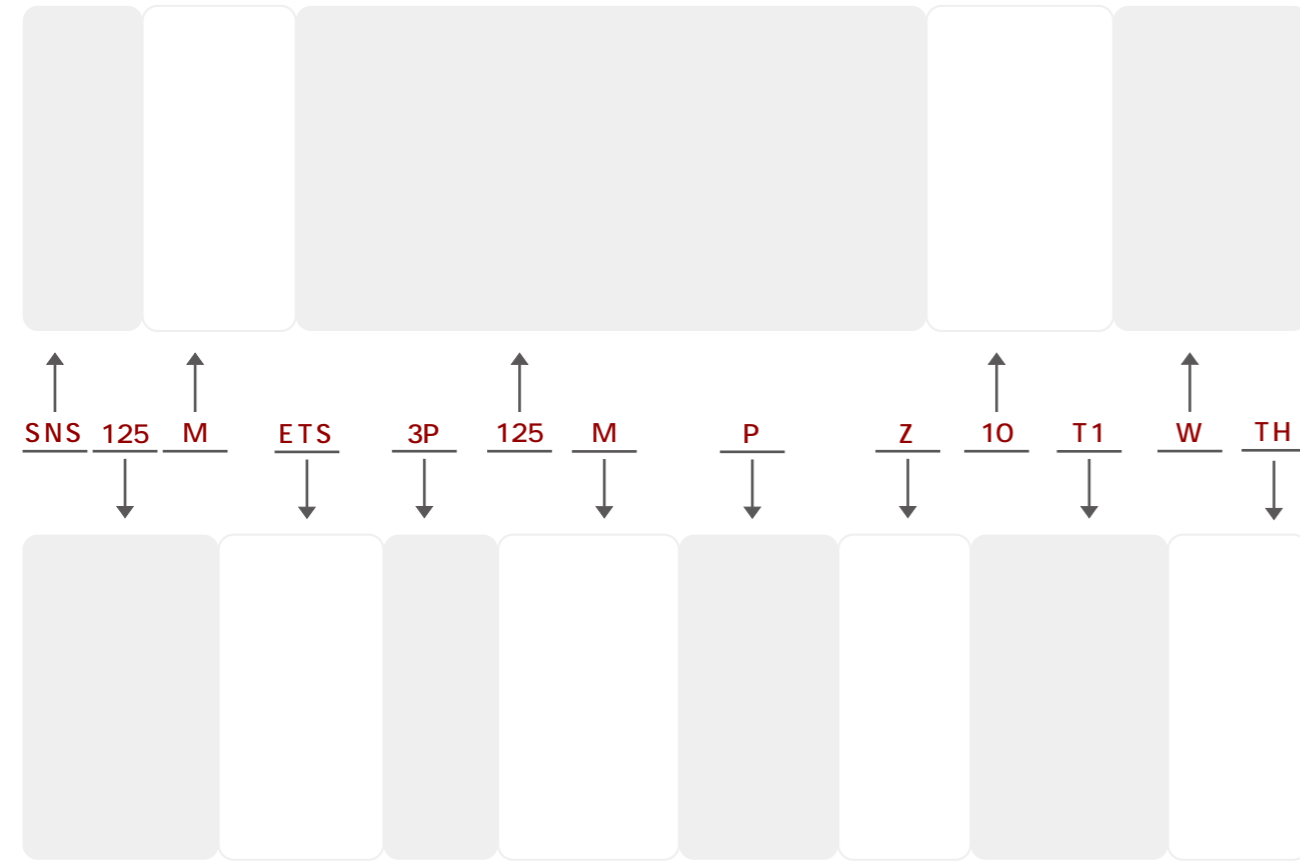




# SNS

## SNS electronic circuit breaker

Quick selection table



**SNS**  
**SNS electronic circuit breaker**

Circuit breaker parameter table







# SNS

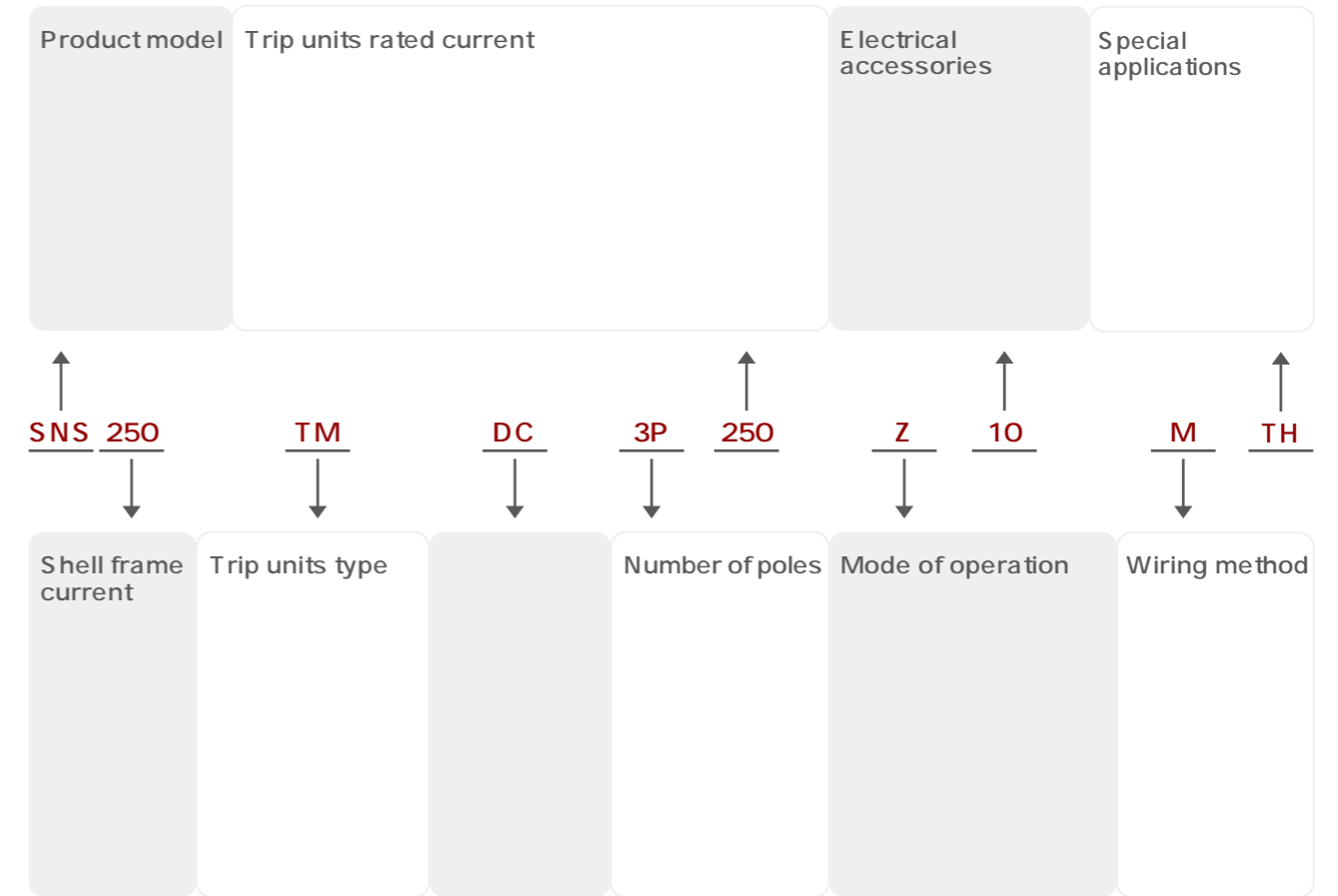
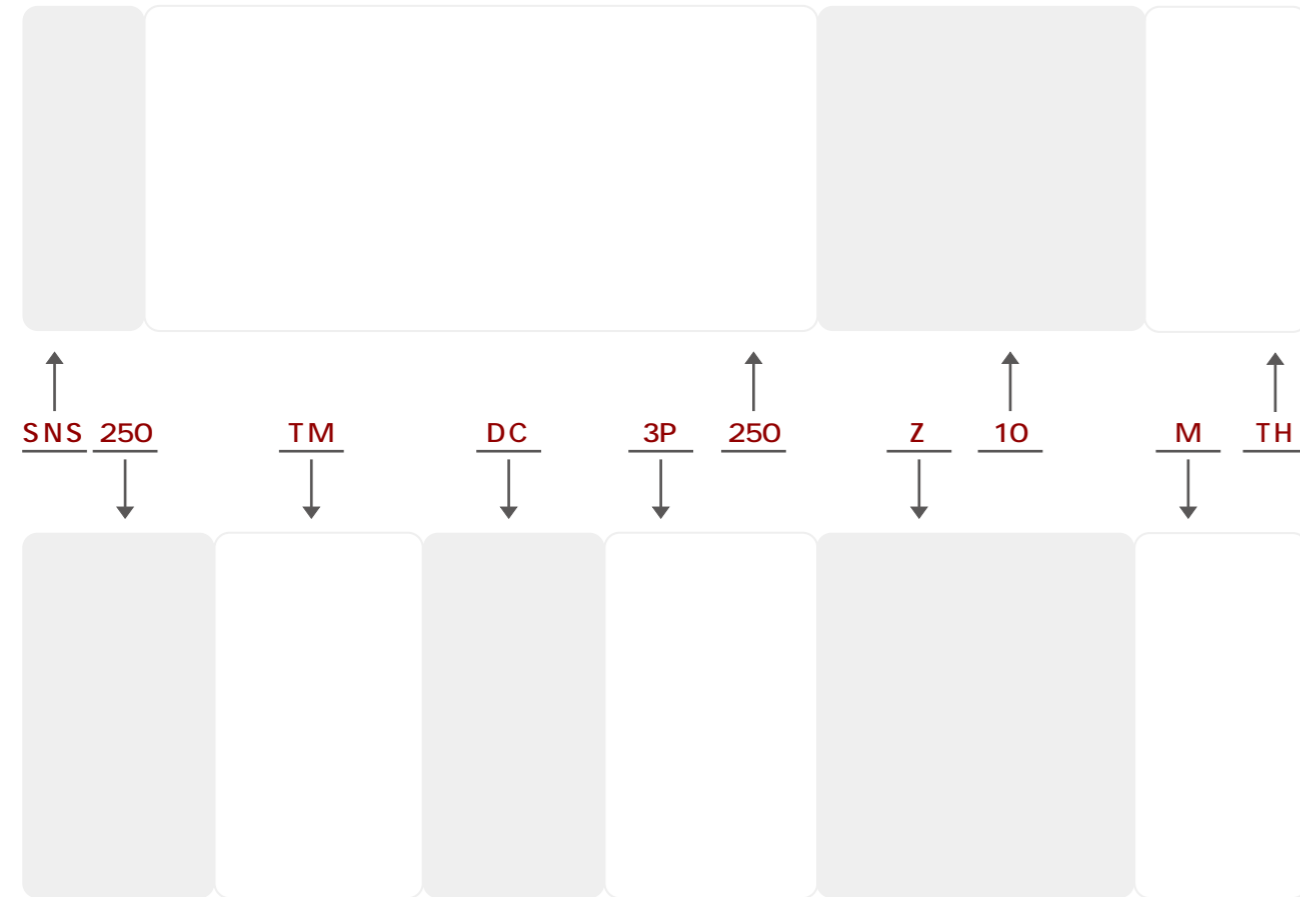
## SNS Circuit breaker with residual current protection

Circuit breaker parameter table

		SNS125		SNS250		SNS400		SNS630			
Number of poles		3 4		3 4		3 4		3 4			
Connect	Fixed	Front connection									
		Rear connection									
	Plug-in	Rear connection									
Rated current (A)		40		16/20/25/32/40/50/63/80/100/125		100/125/140/160/180/200/225/250		225/250/315/350/400		400/500/630	
Rated insulation voltage (V)		Ui		800		800		800		800	
Rated impulse withstand voltage (kV)		Uimp		8		8		8		8	
Rated operational voltage (V)		Ue		AC50Hz 400V		400V		400V		400V	
Rated limit short-circuit breaking capacity				M H		M H		M H		M H	
		Icu(kA)		AC50Hz 400V		50 70		50 70		65 70	
Rated operational short-circuit breaking capacity		Ics(kA)		AC50Hz 400V		35 50		35 50		50 70	
Rated residual action current		I n(A)		AC AC type residual current protection		0.03 /0.1/0.3/0.5 0.03 (non-delay type only) /0.1/0.3/0.5		0.03 /0.1/0.3/0.5 0.03 (non-delay type only) /0.1/0.3/0.5		0.1/0.3/0.5 0.3/0.5/1	
				A Type A residual current protection		0.03 /0.1/0.3/0.5 0.03 (non-delay type only) /0.1/0.3/0.5		0.03 /0.1/0.3/0.5 0.03 (non-delay type only) /0.1/0.3/0.5		0.1/0.3/0.5 0.3/0.5/1	
Rated residual non-action current		I no(A)		1/2I n		1/2I n		1/2I n		1/2I n	
Rated residual short circuit making (breaking) capacity		I m(kA)		1/4Icu		1/4Icu		1/4Icu		1/4Icuu	

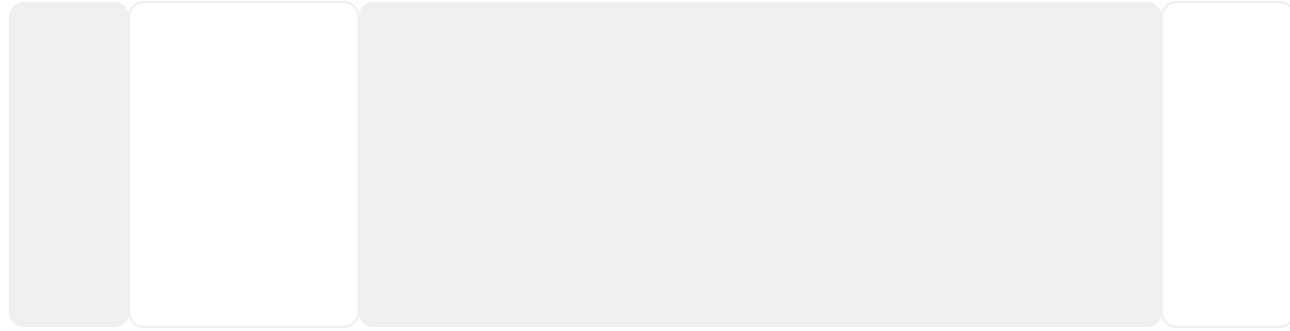
**SNS DC**  
**SNS DC series DC molded case circuit breakers**

Quick selection table





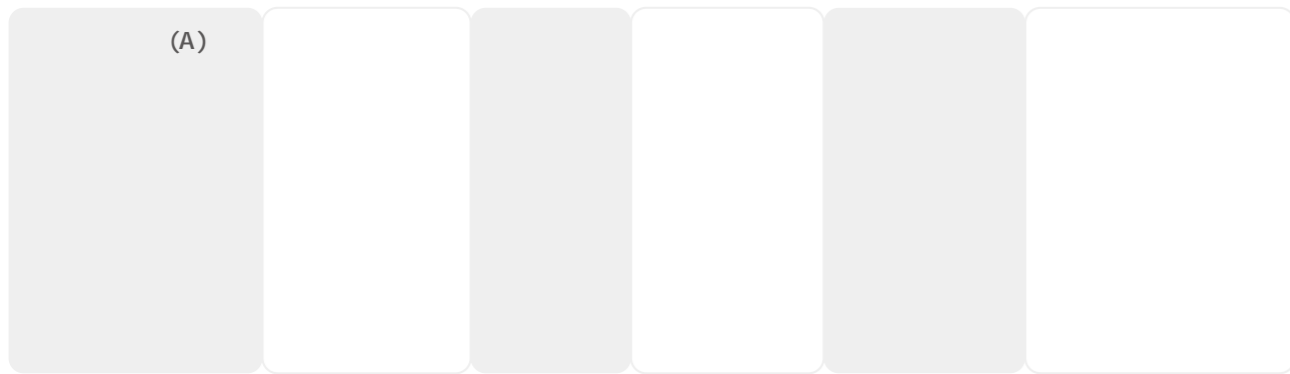
SNS HU  
SNS HU series high- voltage AC circuit breakers



SNS 250 TM

3P 250

10





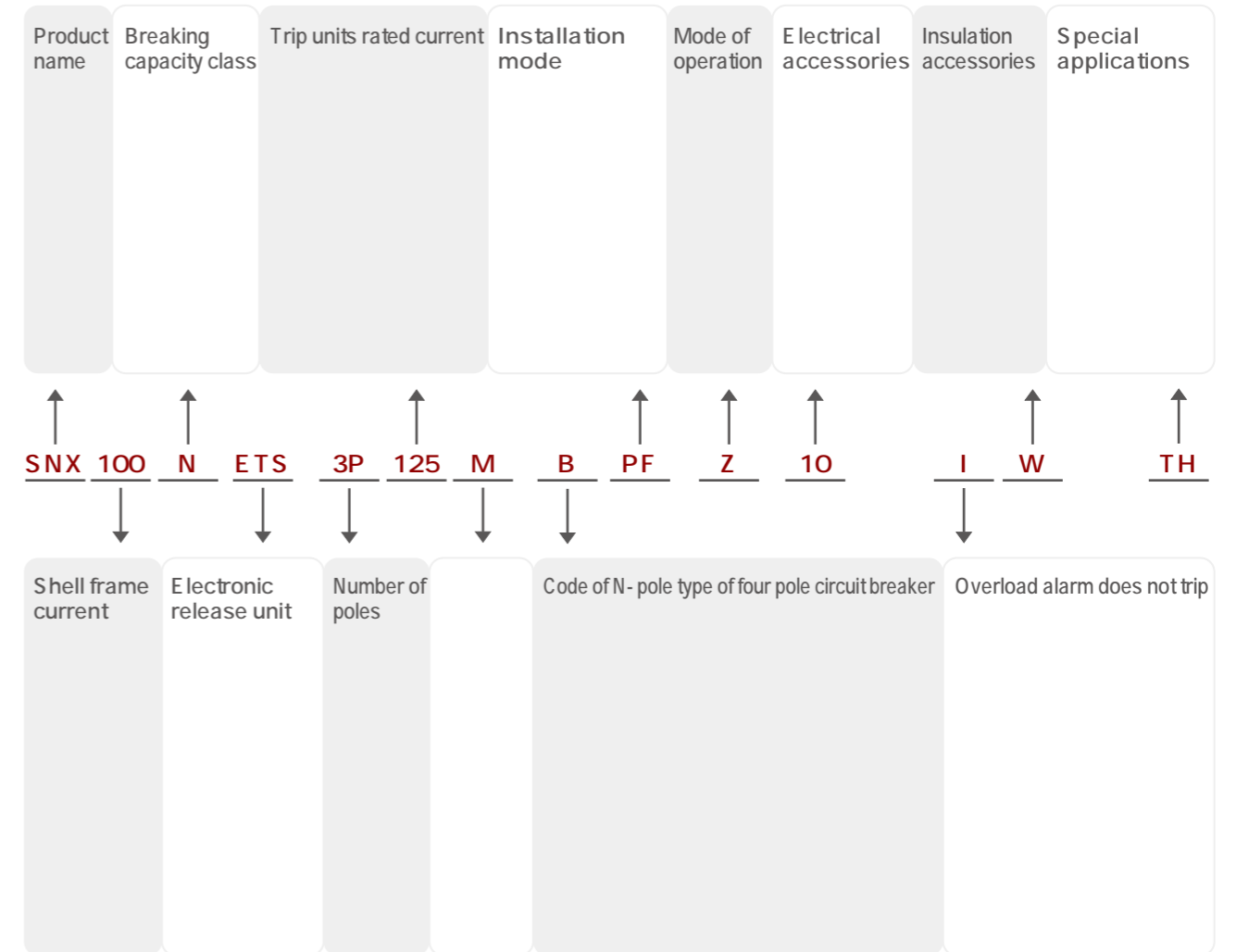
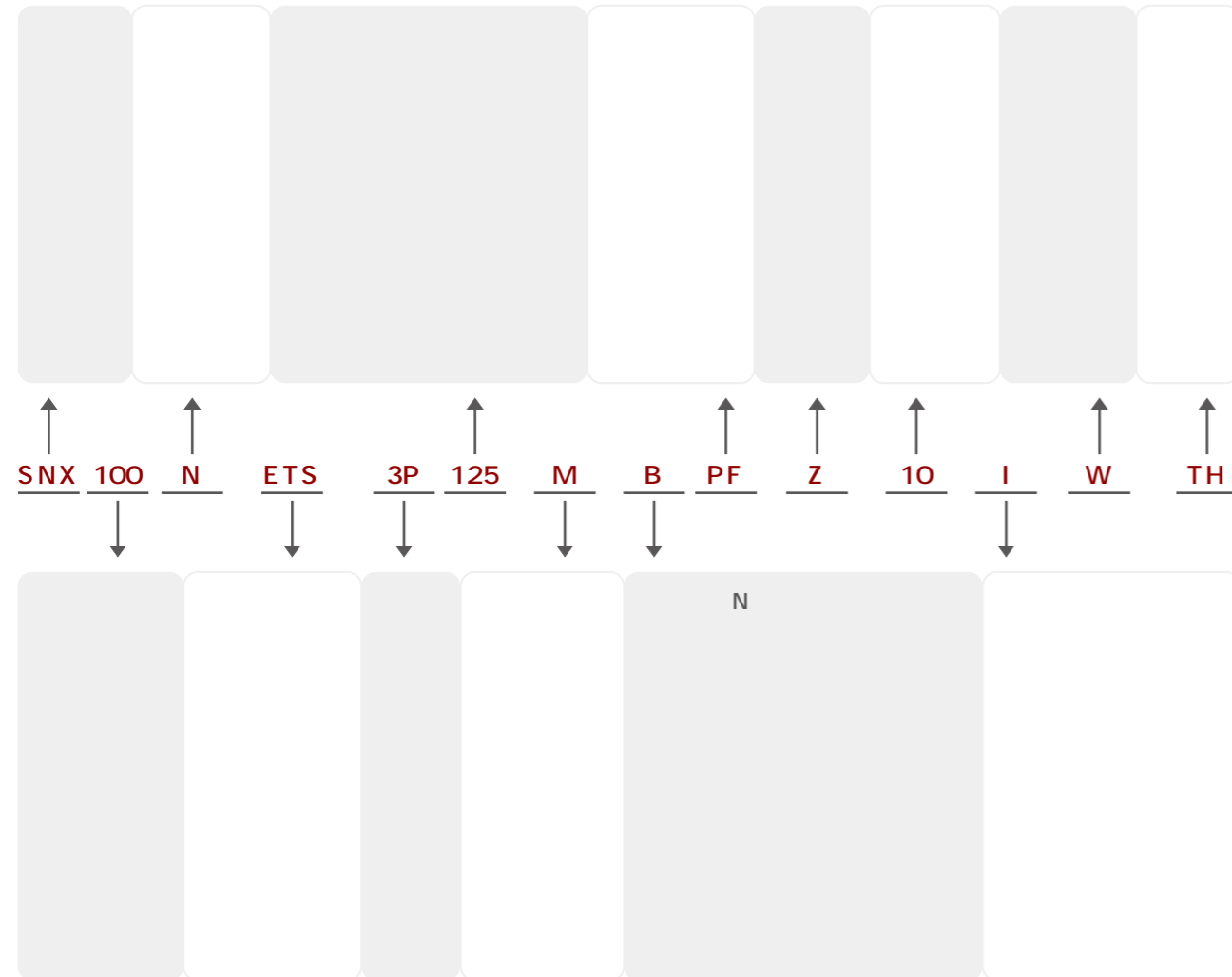




# SNX

## SNX electronic circuit breaker

Quick selection table









**SNX**  
**SNX series molded case circuit breaker**

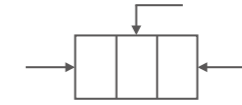
Vigi  
Leakage protection Vigi module



**SNX**  
SNX series molded case circuit breaker

**SNS**  
SNS thermal magnetic circuit breaker

Code and installation method of electrical accessories



## SNS SNS electronic circuit breaker

Code and installation method of electrical accessories



		-	-	-	-
		←□□	←□□	←□□	←□□
		←●□	←●□	←●□	←●□
		←■□	←■□	-	-
		-	-	←■□	←■□
		←○□	←○□	←○□	←○□
		←●■	←●■	-	-
		-	-	←●■	←●■
		←■●	←■●	-	-
		←■□	←■□	-	-
		-	-	←■□	←■□
		←■□	←■□	-	-
		←○■	←○■	-	-
		-	-	←○■	←○■
		←○■	←○■	-	-
		←●□	←●□	←●□	←●□
		←■□	←■□	-	-
		-	-	←■□	←■□
		←○□	←○□	←○□	←○□
		←●□	←●□	-	-
		-	-	←●□	←●□
		←■□	←■□	-	-
		←○□	←○□	-	-
		-	-	←○□	←○□
		←○□	←○□	-	-
		←●□	←●□	←●□	←●□
		←■□	←■□	-	-
		-	-	←■□	←■□
		←○□	←○□	-	-
		-	-	←○□	←○□
		←○□	←○□	-	-
		←●□	←●□	←●□	←●□
		←■□	←■□	-	-
		-	-	←■□	←■□
		←○□	←○□	-	-
		-	-	←○□	←○□
		←○□	←○□	-	-

## SNS SNS Circuit breaker with residual current protection

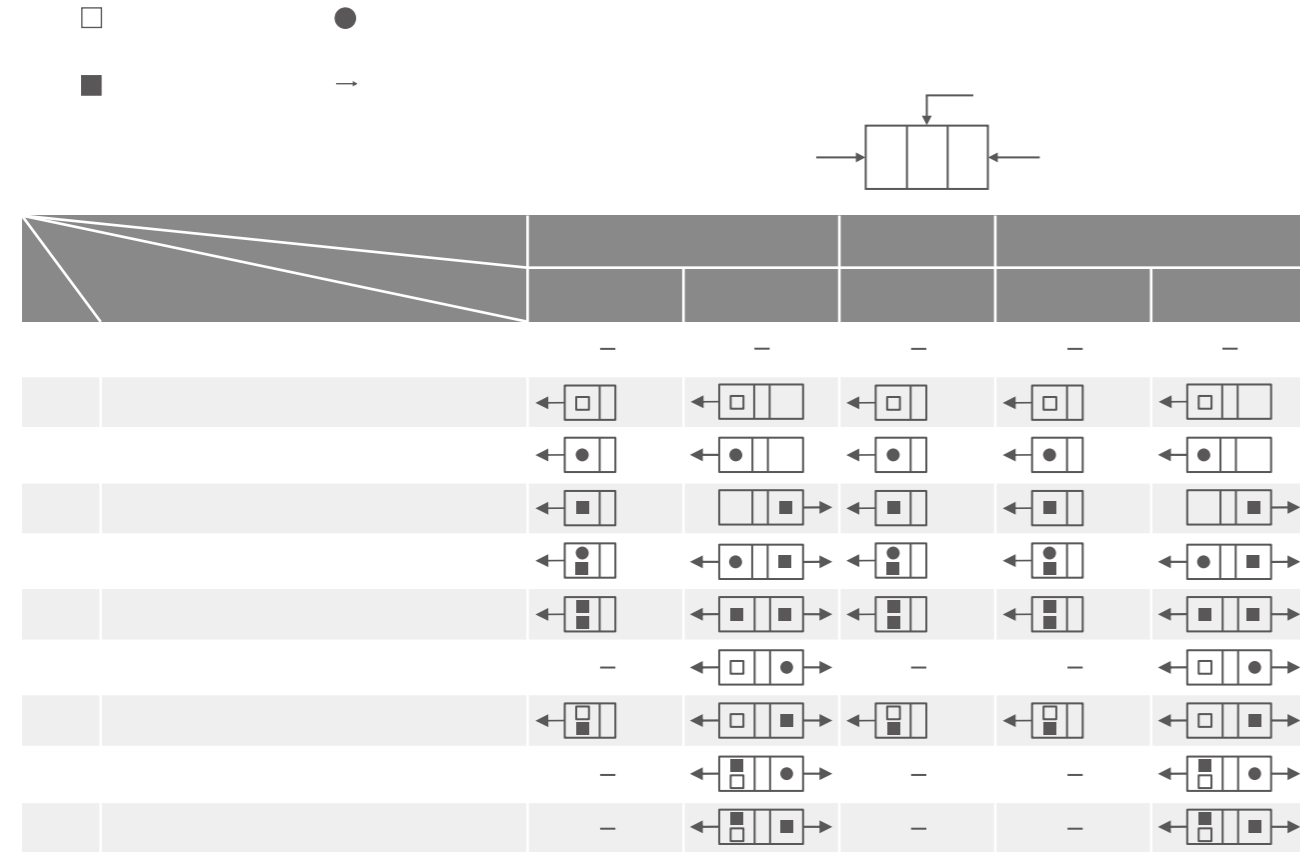
Code and installation method of electrical accessories



		-	-	-	-
		←□□	←□□	←□□	←□□
		←●□	←●□	←□□	←□□
		←■□	←■□	-	-
		-	-	←■□	←■□
		←○□	←○□	←○□	←○□
		←●■	←●■	-	-
		-	-	←●■	←●■
		←■●	←■●	-	-
		←■□	←■□	-	-
		-	-	←■□	←■□
		←○■	←○■	-	-
		-	-	←○■	←○■
		←○■	←○■	-	-
		←●□	←●□	-	-
		-	-	←●□	←●□
		←■□	←■□	-	-
		←○■	←○■	-	-
		-	-	←○■	←○■
		←○■	←○■	-	-
		←●□	←●□	←●□	←●□
		←■□	←■□	-	-
		-	-	←■□	←■□
		←○□	←○□	-	-
		-	-	←○□	←○□
		←○□	←○□	-	-
		←●□	←●□	←●□	←●□
		←■□	←■□	-	-
		-	-	←■□	←■□
		←○□	←○□	-	-
		-	-	←○□	←○□
		←○□	←○□	-	-
		←●□	←●□	←●□	←●□
		←■□	←■□	-	-
		-	-	←■□	←■□
		←○□	←○□	-	-
		-	-	←○□	←○□
		←○□	←○□	-	-

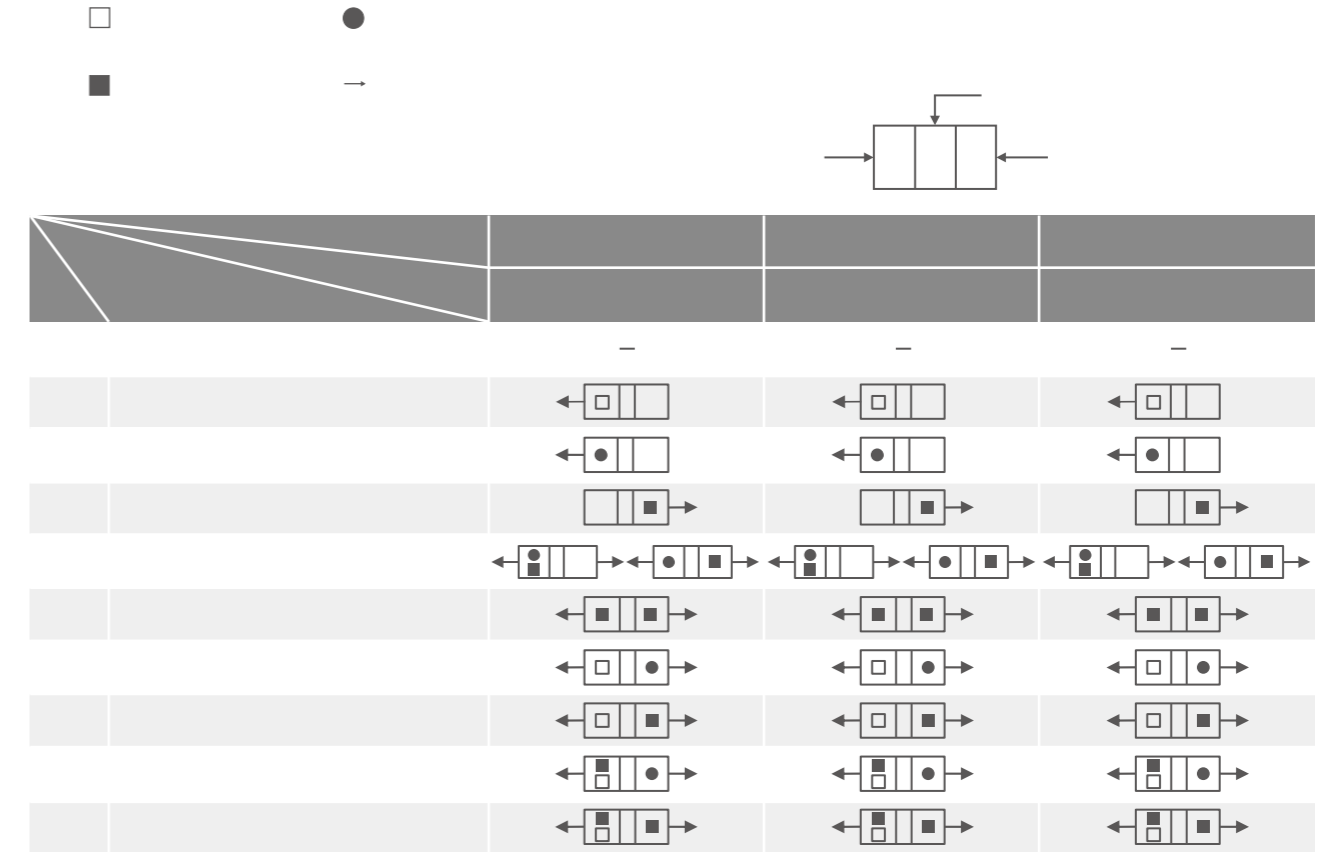
## SNS DC SNS DC series DC molded case circuit breakers

Code and installation method of electrical accessories



## SNS HU SNS HU series high-voltage AC circuit breakers

Code and installation method of electrical accessories



# SNX

## SNX series molded case circuit breaker

Code and installation method of electrical accessories

