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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	SNX thermal magnetic circuit breaker
SNS	SNS electronic circuit breaker	SNX	SNX electronic circuit breaker
			Partial performance

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.







Intelligent Energy Management and Components



Power and Energy EPC Services



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Intelligent Operations and Maintenance System

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. TheBeijing 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			
<u> </u>			— —	(optional accessories)

SV SV series indoor high- voltage vacuum circuit breaker

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	5	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		

SVSV series indoor high-voltage vacuum circuit breaker

SV24 SV24 vacuum circuit breaker technical parameters

Init	Unit	Da	ata	

Notes: a. The breaker with rated current 3150A must install fan to cool b. As standard of GB1984-2003 the E2 grade electrical endurance shall have 274 times of breaking short circuit current.

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S V 24 vacuum circuit breaker mechanical characteristic parameters

Init	Unit	Data	

Operating mechanism parameters

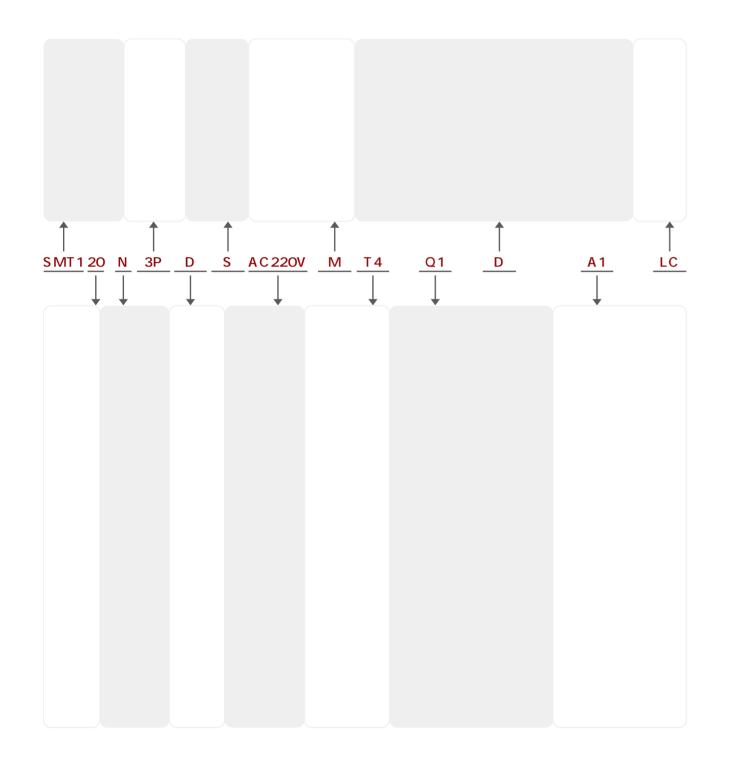
Init	Unit	Data	

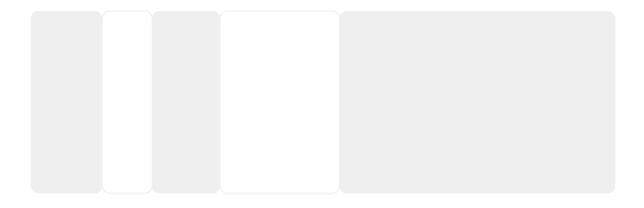






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SMT series universal circuit breaker

	AC400V AC230V DC110V DC220V	
	0.3s	
	0.3s 0.5s 0.7s 1s 3s	0.3-0.75s
	3 3 4 4 5 5 6 6 3 3 4 4 5 5 6 6	
	0 0 4 4 0 0 0	
M		
3M		
2H		
3Н		
		(3M 3H
	1 1 2 1 3 2 5 3	
	2 3	
	2 3 1 3 3	
	N	

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al accessories	Specifications			
ease	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)			
	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			
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)			
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			
	Opening and closing button lock, door interlock, dust cover			
mer	N-phase transformer, leakage transformer and ground current transformer			
	DC module			
	Relay module			
	M 3M 2H 3H Other functions Opening position lock Mechanical interlock			

SMT SMT series universal circuit breaker

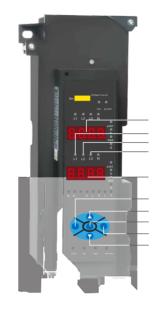


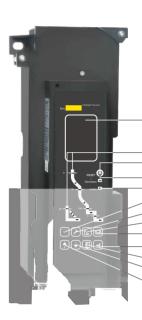
Rated current A	200~800	800~1600	2000	2500	3200	4000	5000	6300
Fixed 3P	46	52	48.3	42	67	150		
Fixed 4P	50.2	57	53.3	41.4	76.7			
Draw out 3P	63	62.5	73.3	67	92	131.3	195	227.2
Draw out 4P	81.5	69.8	88.6	78.7	114	200	223.3	223.3



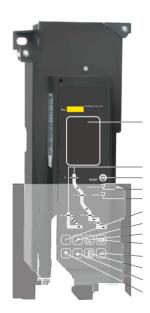
SMT series universal circuit breaker

Intelligent controller

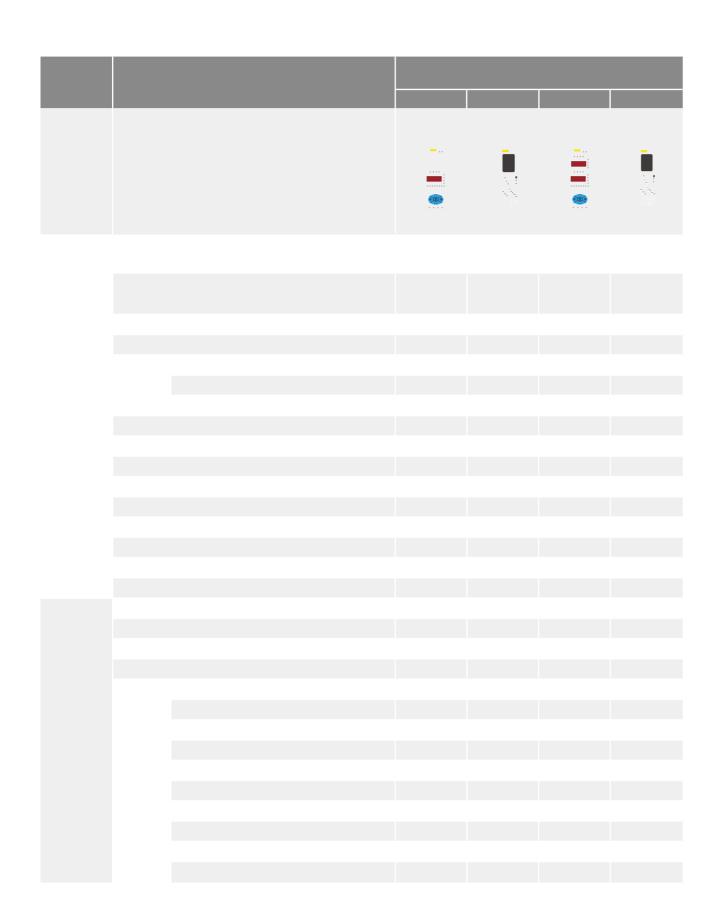








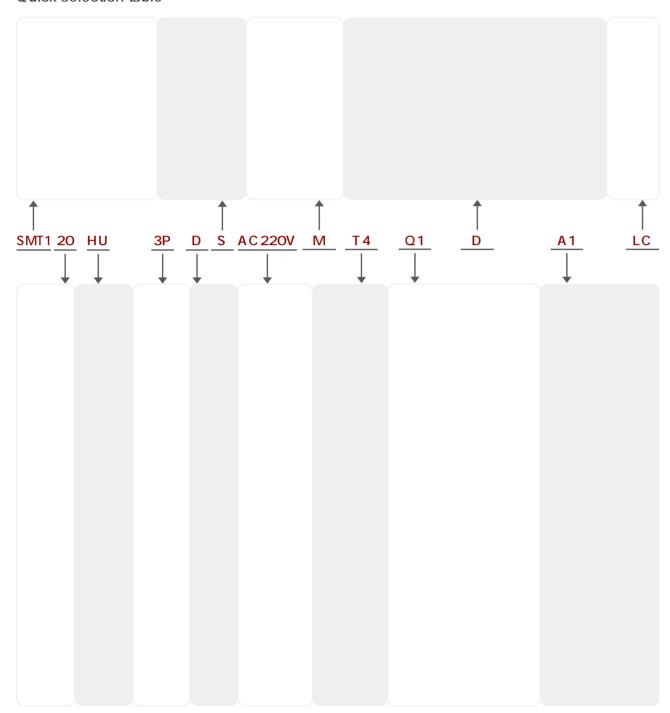
SMT series universal circuit breaker

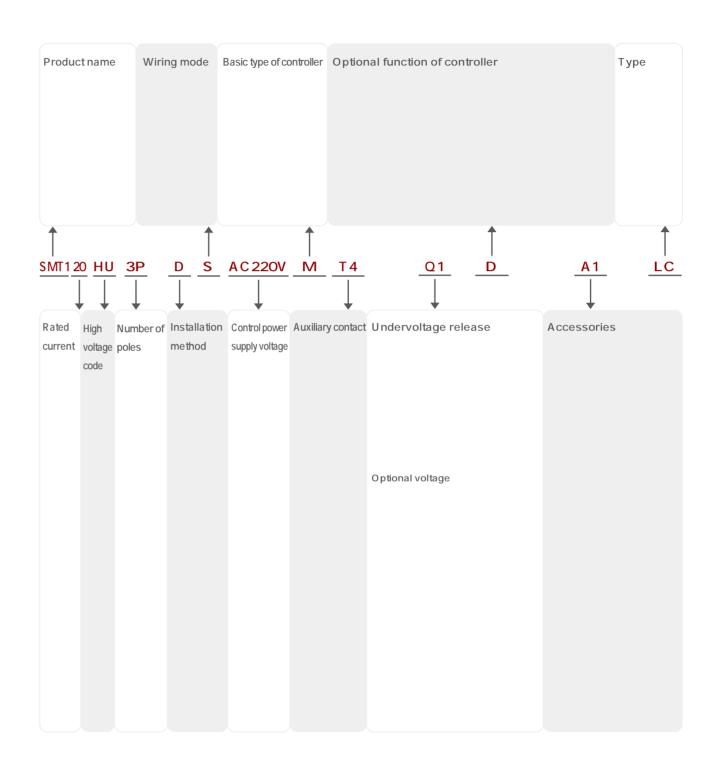


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SMT HU SMT HU series high- voltage intelligent universal circuit breaker

Quick selection table

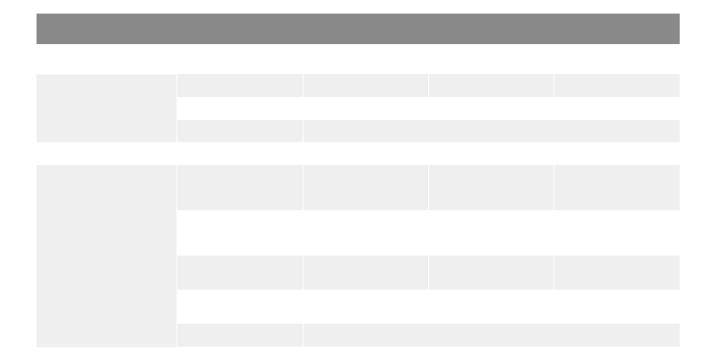




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SMT HU SMT HU series high- voltage intelligent universal circuit breaker

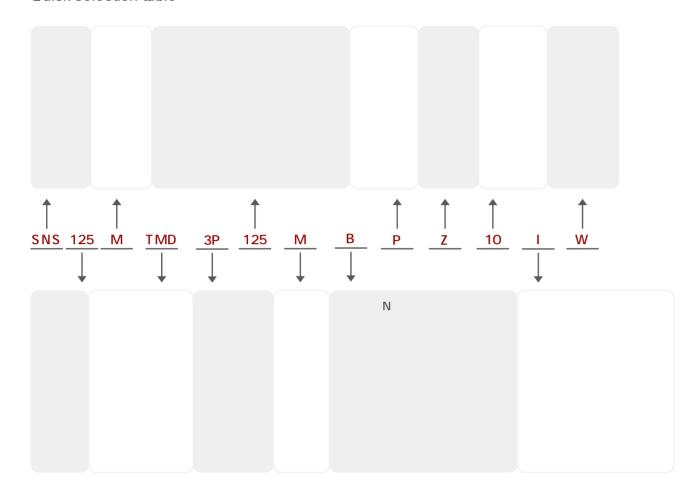
SMT HU SMT HU series high- voltage intelligent universal circuit breaker

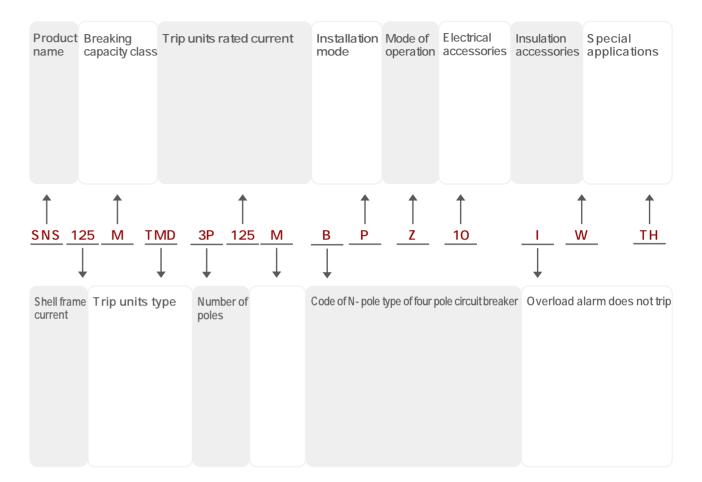




SNS SNS thermal magnetic circuit breaker

Quick selection table

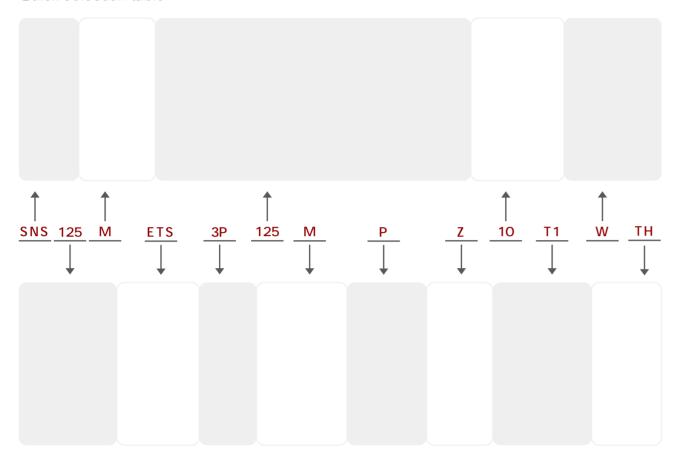


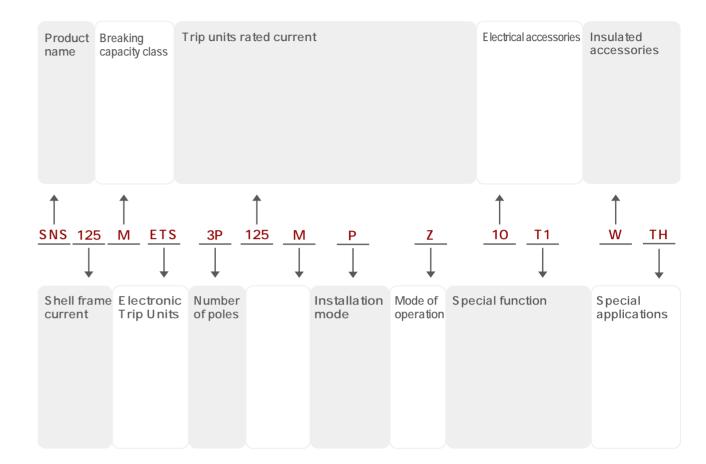


SNS SNS thermal magnetic circuit breaker

SNS SNS electronic circuit breaker

Quick selection table

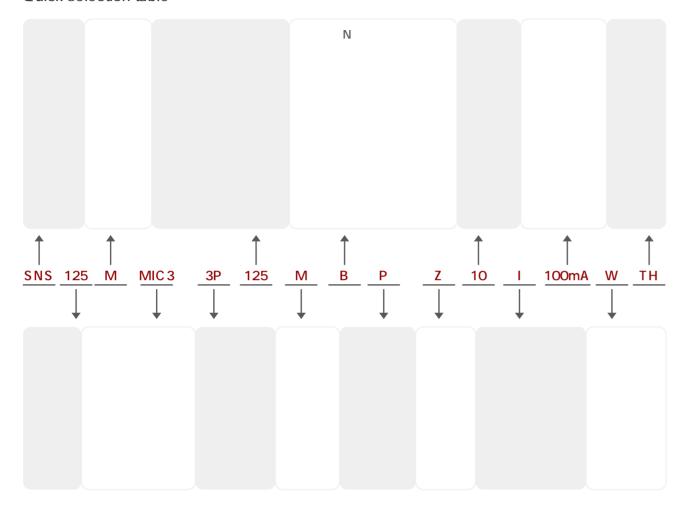




SNS SNS electronic circuit breaker

SNS SNS Circuit breaker with residual current protection

Quick selection table



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product name	Breaking capacity class M: Relatively higher type H: Higher performance type	SNS125 sh 32,40,50,60 SNS250 SI 140,160,18 SNS400 SI 315,350,40	es rated current nell frame: 16,20,25, 3,80,100,125 nell frame: 100,125, 30,200,225,250 nell frame: 225,250, 30 nell frame: 400,500, and frame: 400,500,	A:N-pole is r release, and three poles; release, and three poles; release, and three poles; release, and three poles;	F N-pole type o cuit breaker not equipped with over I N-pole is always on; not equipped with over I N-pole is combined with over-cuit I N-pole is combined with over-cuit I N-pole is combined with sinstalled with over-curres always on.	-current -current vith other	Electrical accessories Shunt release Under voltage release Alarm contact Auxiliary contact (See sample for electrical accessories code)	Leakage action current 30mA (non-delay nature) 100mA 300mA 500mA	Special applications None: the conventional type TH: humid tropical type LC: low temperature type
\$NS 128	5 M N	MIC 3	3P 125	<u>M</u>	<u>B</u> <u>P</u>	<u>z</u>	10 <u>I</u> 1	OOmA _	W TH
Shell frame current	Trip units	type	number of poles		Installation mode	Mode of operation			ulation essories

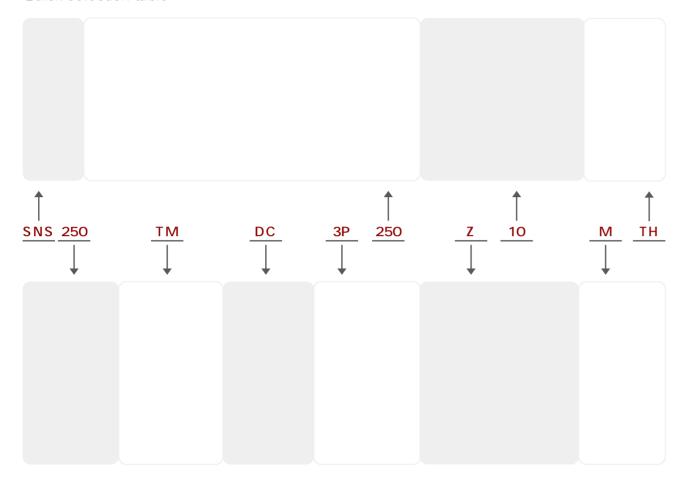
SNS

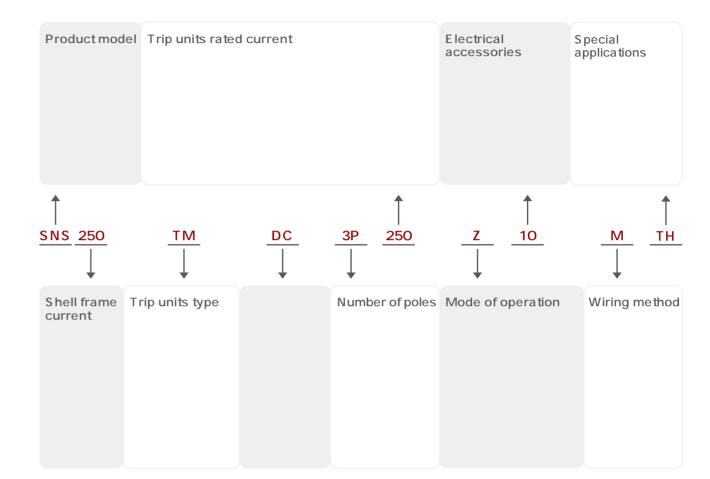
SNS Circuit breaker with residual current protection

				SN	S125	SNS2	250	SNS4	00	SI	NS 630
Number of poles				3	4	3	4	3	4	;	3 4
		Front connection									
Connect	Fixed	Rear connection									
	Plug-in	Rear connection									
In(A) Rated current (A)		40		16/20/25/32/40/	/50/63/80/100/125	100/125/140/160/1	80/200/225/250	225/250/315	5/350/400	400/	500/630
(V) Rated insulation voltage (V)	Ui			8	300	800)	800)		800
(kV) Rated impulse withstand voltage (kV)	Uimp				8	8		8			8
(V) Rated operational voltage (V)	Ue	AC50Hz	400V	4	00V	400	V	400	V	2	100V
Rated limit short-circuit breaking				М	Н	М	Н	М	Н	М	Н
capacity	lcu(kA)	AC50Hz	400V	50	70	50	70	65	70	65	70
B				M	Н	M	Н	M	Н	M	Н
Rated operational short-circuit breaking capacity	lcs(kA)	AC50Hz	400V	35	50	35	50	50	70	50	70
	I n(A)	AC AC type residual o	current protection	0.03 0.03 (non-delay ty	/0.1/0.3/0.5 pe only) /0.1/0.3/0.5	0.03 0.03 (non-delay type	/0.1/0.3/0.5 e only) /0.1/0.3/0.5	0.1/0.3	/0.5	0.0	3/0.5/1
Rated residual action current	(, .,	A Type Aresidual cu	rrent protection	0.03 0.03 (non-delay ty	/0.1/0.3/0.5 pe only) /0.1/0.3/0.5	0.03 0.03 (non-delay type	/0.1/0.3/0.5 e only) /0.1/0.3/0.5	0.1/0.3	V/0.5	0.0	3/0.5/1
Rated residual non-action current	I no(A)			1/.	2l n	1/21	n	1/21	n	1.	/2I n
ĕ	I m(kA)			1/	4lcu	1/4lc	cu	1/4k	eu	1	/4lcu4
Rated residual short circuit making (breaking) capacity	I M(KA)			1/	4ICU	1/4/c	cu	1/410	cu	1	/4ICU4

SNS DC SNS DC molded case circuit breakers

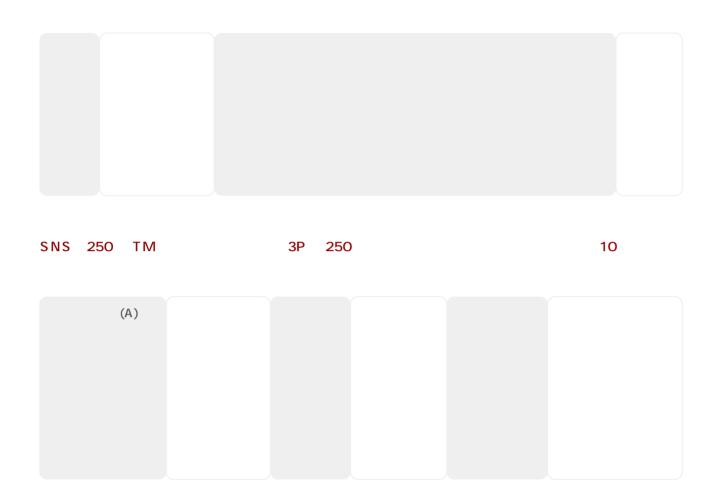
Quick selection table





SNS DC SNS DC molded case circuit breakers

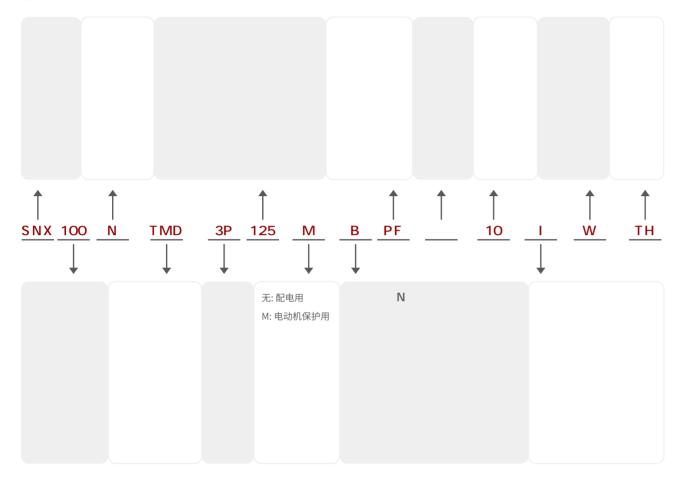
SNS HU series high- voltage AC circuit breakers



SNS HU series high- voltage AC circuit breakers

SNX SNX thermal magnetic circuit breaker

Quick selection table

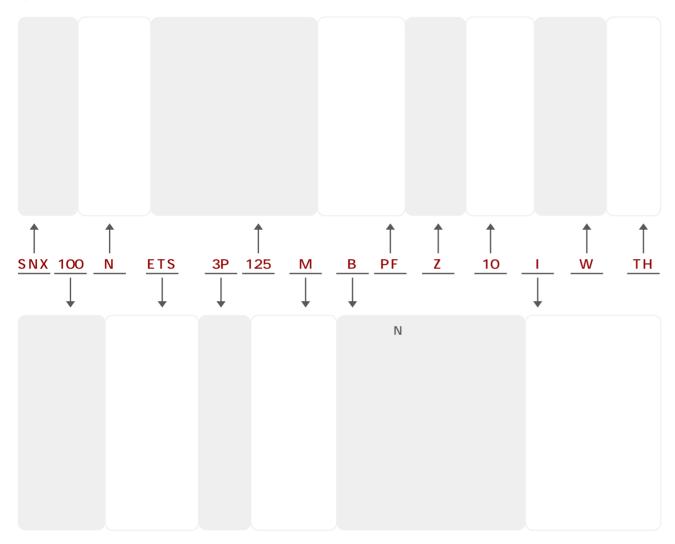


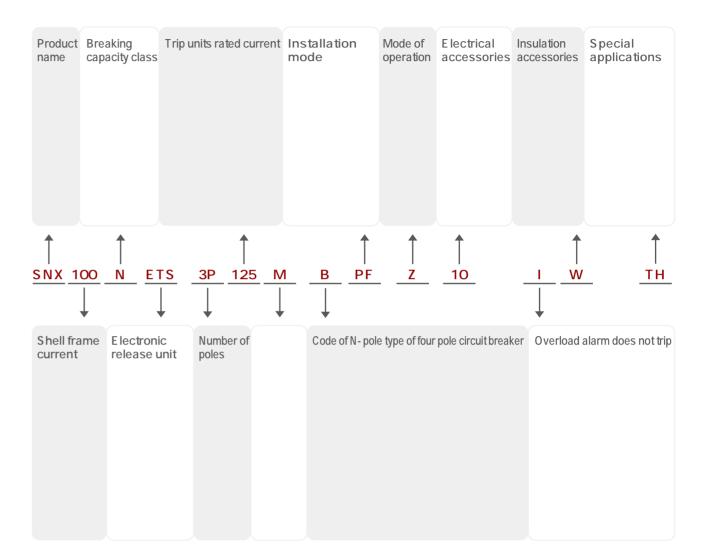
Product Breaking capacity class	units rated current			
SNX 100 N TMD	3P 125	PF	10	
Shell frame current Trip units type	Number of poles			

SNX SNX thermal magnetic circuit breaker

SNX SNX electronic circuit breaker

Quick selection table





SNX SNX electronic circuit breaker

Circuit breaker parameter table	Circuit breaker parameter table								

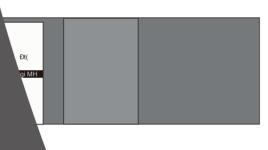
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SNX slectronic liquid crystal circuit breaker

Circuit breaker r	parame	ter table
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case circuit breaker

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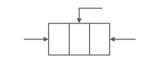


SNX SNX series molded case circuit breaker

SNS

SNS thermal magnetic circuit breaker

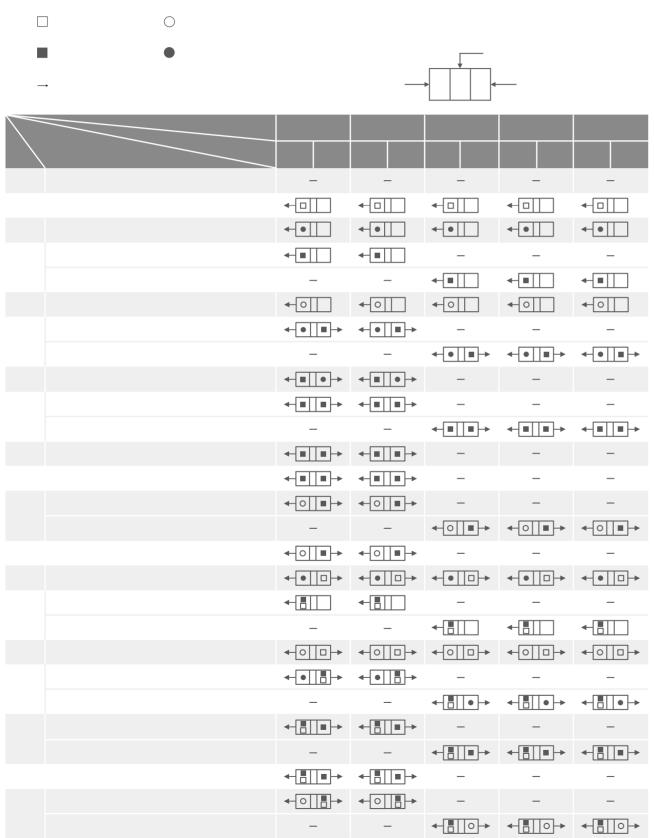
Code and installation method of electrical accessories



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SNS electronic circuit breaker

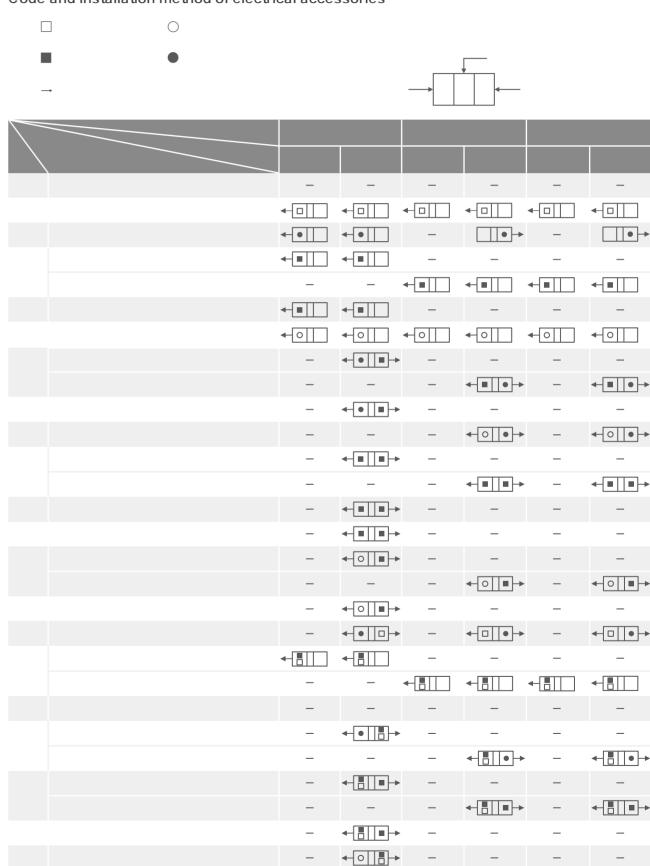
Code and installation method of electrical accessories



SNS

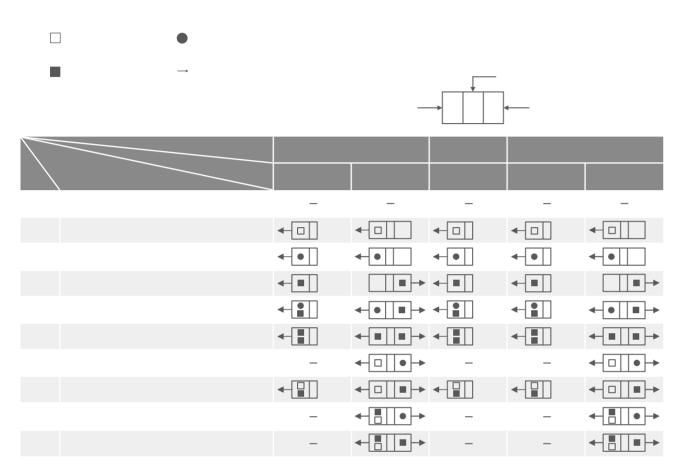
SNS Circuit breaker with residual current protection

Code and installation method of electrical accessories



SNS DC SNS DC molded case circuit breakers

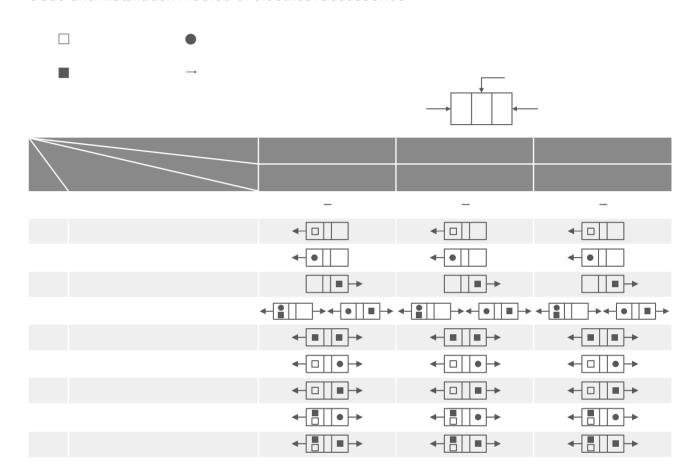
Code and installation method of electrical accessories



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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

