SHENGLONG

Product Selection Manual

SHENGLONG

SV	**SV series indoor high - voltage vacuum circuit breaker**
SMT	**SMT series universal circuit breaker**
SMT HU	**SMT HU series high - voltage intelligent universal circuit breaker**
SNS	**SNS thermal magnetic circuit breaker**
SNS	**SNS electronic circuit breaker**

SNS	**SNS Circuit breaker with residual current protection**
SNS DC	**SNS DC series DC molded case circuit breakers**
SNS HU	**SNS HU series high - voltage AC circuit breakers**
SNX	**SNX thermal magnetic circuit breaker**
SNX	**SNX electronic circuit breaker**

Partial performance

Intelligent Switchboards and Switchgear

Intelligent Energy Management and Components

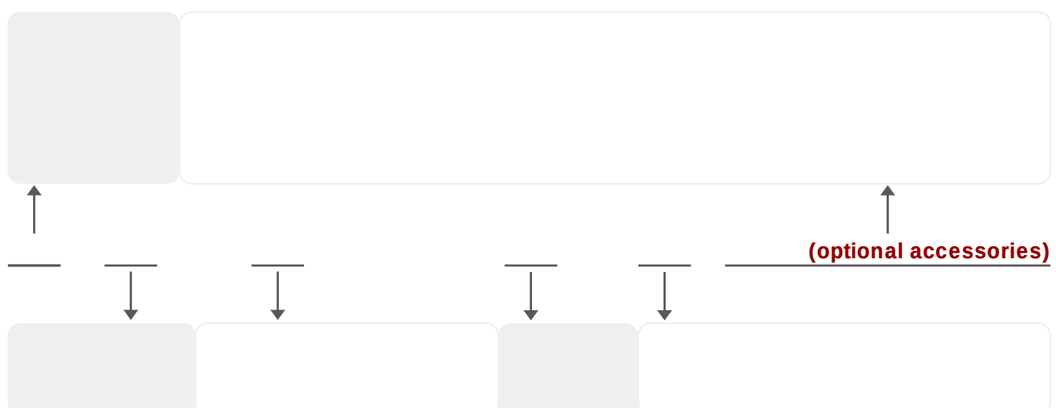
Power and Energy EPC Services

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. 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



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		

SV
SV series indoor high - voltage vacuum circuit breaker

SV24
SV24 vacuum circuit breaker technical parameters

Init			Unit	Data		

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.

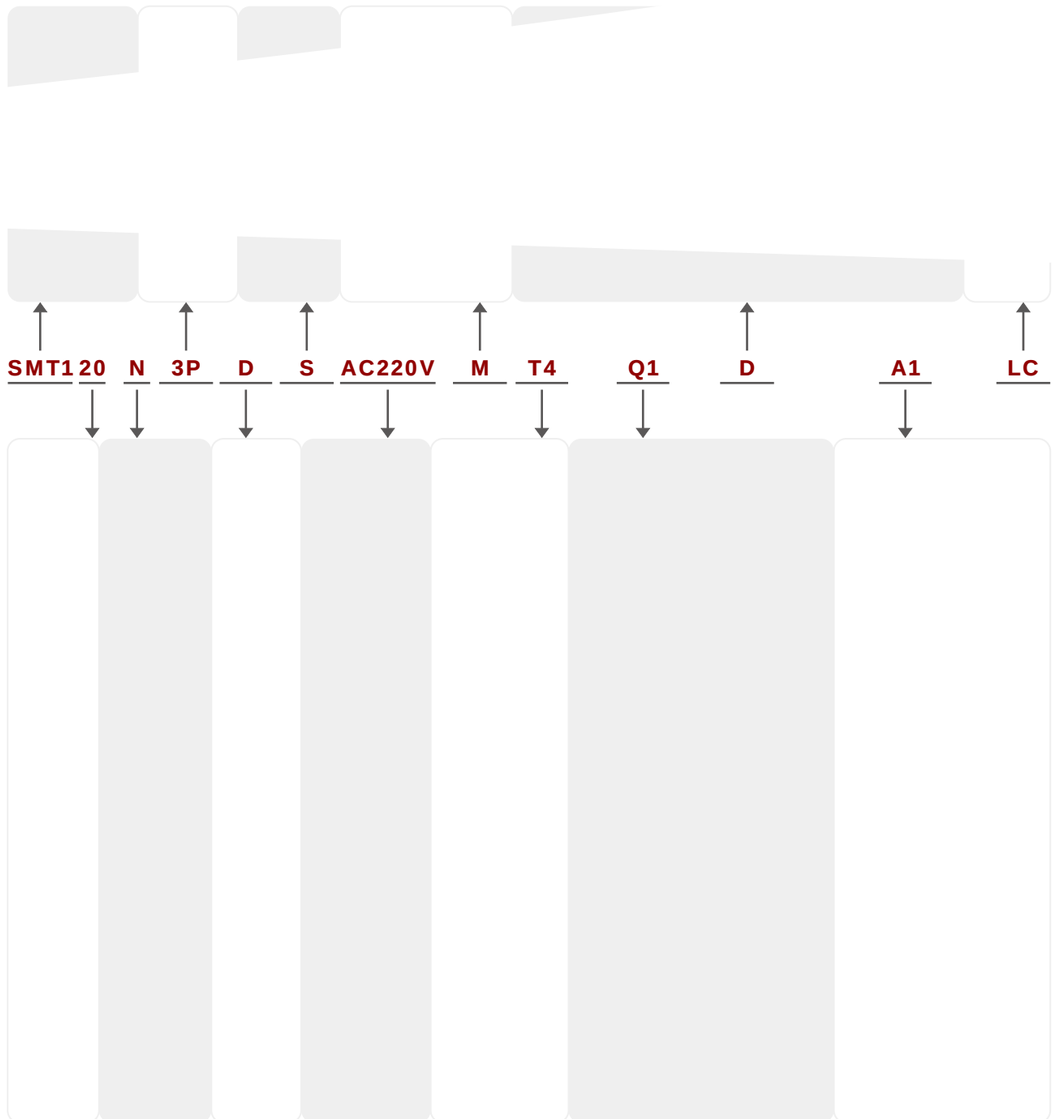
SV24
SV24 vacuum circuit breaker mechanical characteristic parameters

Init		Unit	Data					

Operating mechanism parameters

Init	Unit	Data

SMT



SMT
SMT series universal circuit breaker

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، Ɛ ʜ		Ă AC400V AC230V、DC110V DC220V Ă ʿH ڑ ʿH0.3s 0.5s 0.7s 1s 3s 5s ﻯ å ʿH ḫ 0.3-10.5s å ʿH ږ å ʿH 0.3s 0.5s 0.7s 1s 3s ﻯ å ʿH ḫ 0.3-0.75s
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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

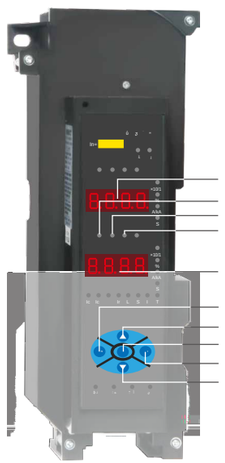
Circuit breaker parameter table

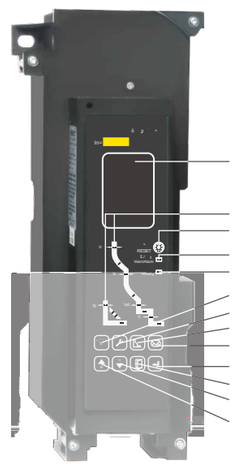
weight kg

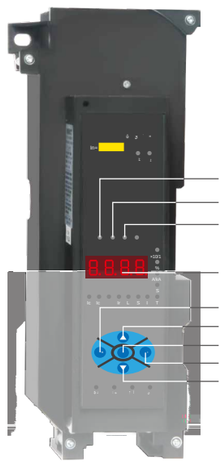
	A	200~800	800~1600	2000	2500	3200	4000	5000	6300
	Fixed 3P	46	52	48.3	42	67	150		
	Fixed 4P	50.2	57	53.3	41.4	76.7			
	Draw out 3P	63	62.5	73.3	67	92	131.3	195	227.2
	Draw out 4P	81.5	69.8	88.6	78.7	114	200	223.3	223.3

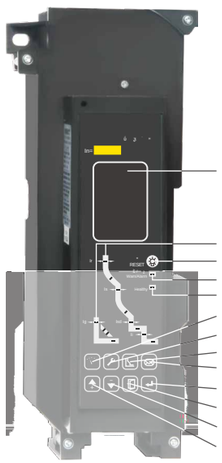
SMT
SMT series universal circuit breaker

Intelligent controller









SMT
SMT series universal circuit breaker

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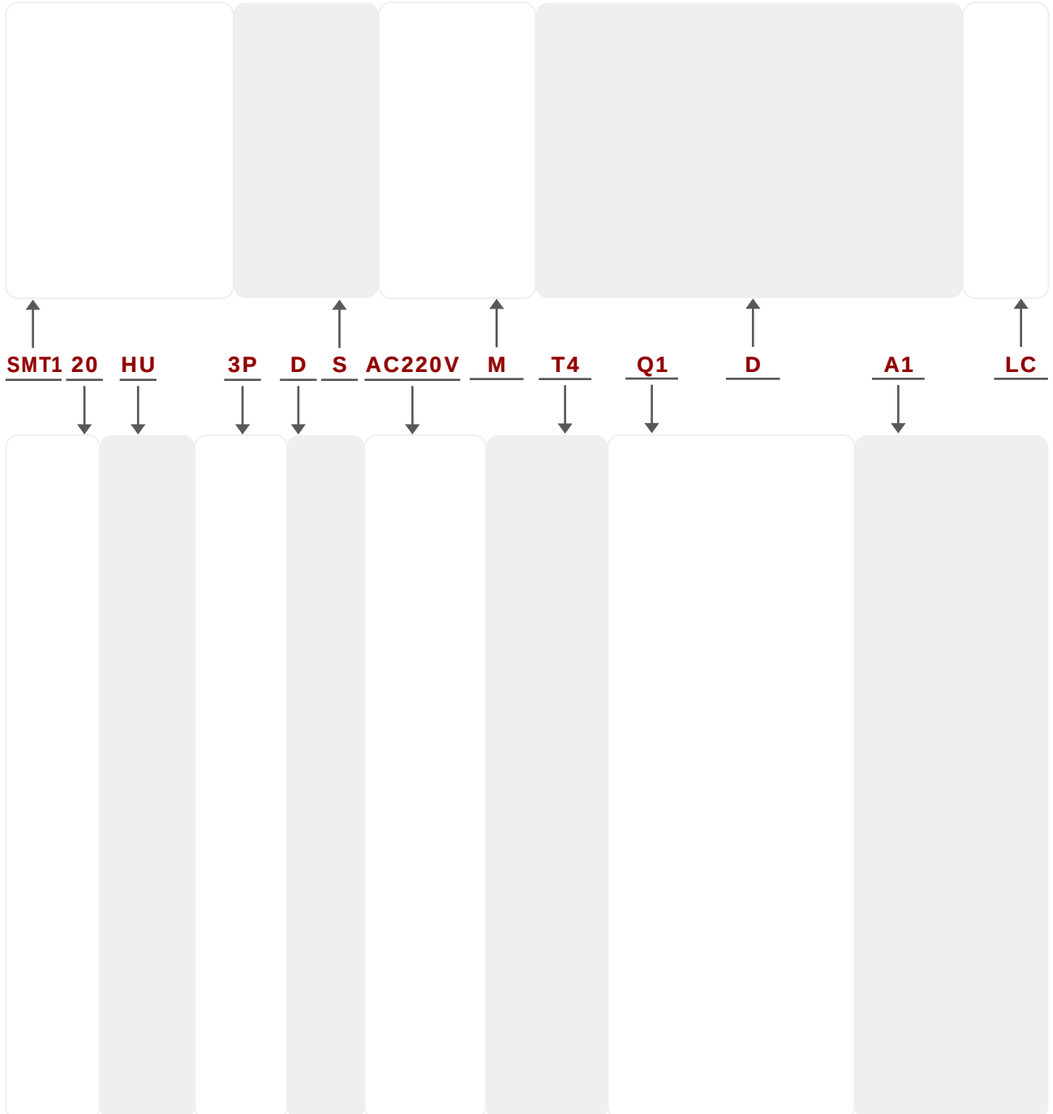
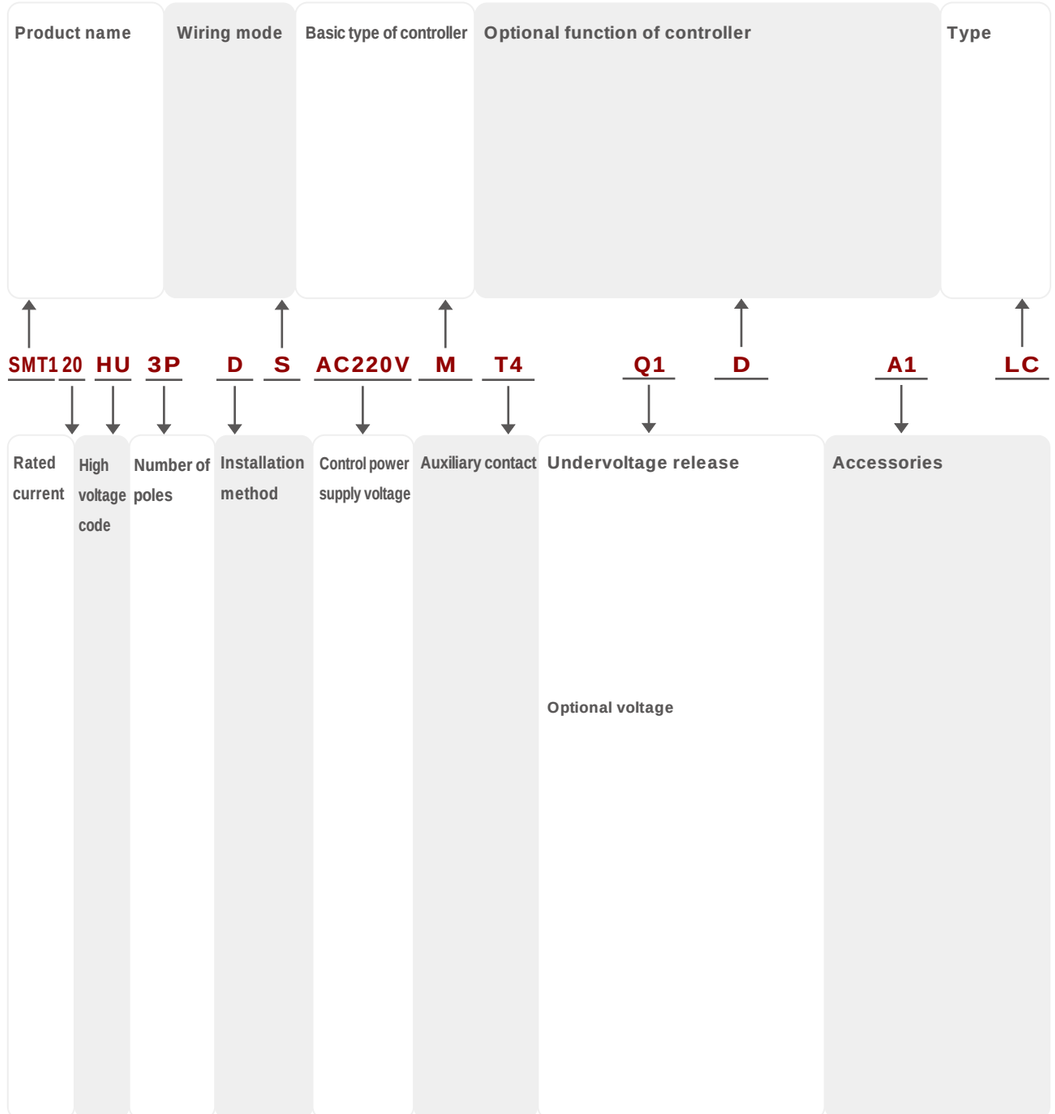
SMT HU
SMT HU series high-voltage intelligent universal circuit breaker

Quick selection table





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

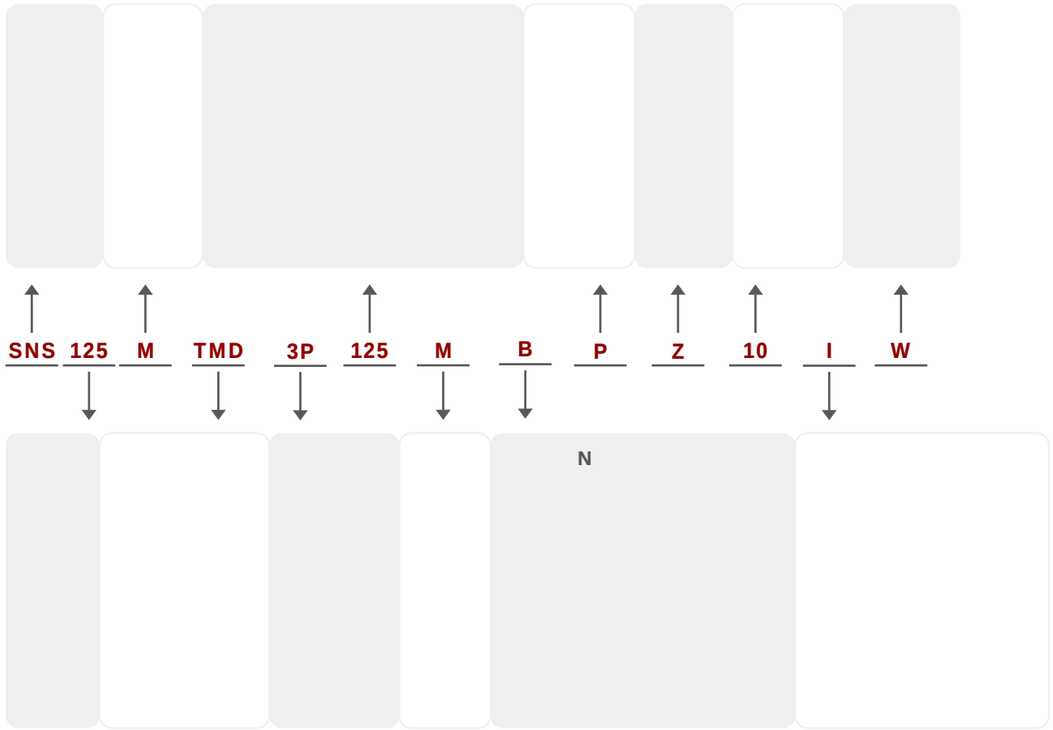
Circuit breaker parameter table

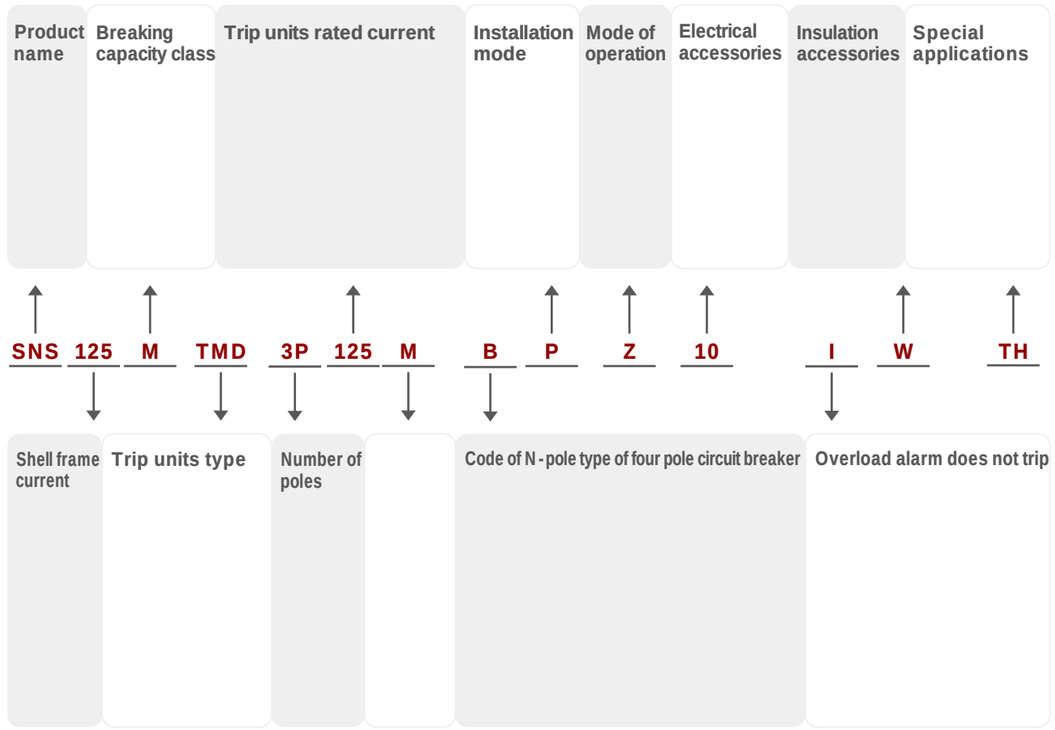
SHENGLONG

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

SNS
SNS thermal magnetic circuit breaker

Quick selection table



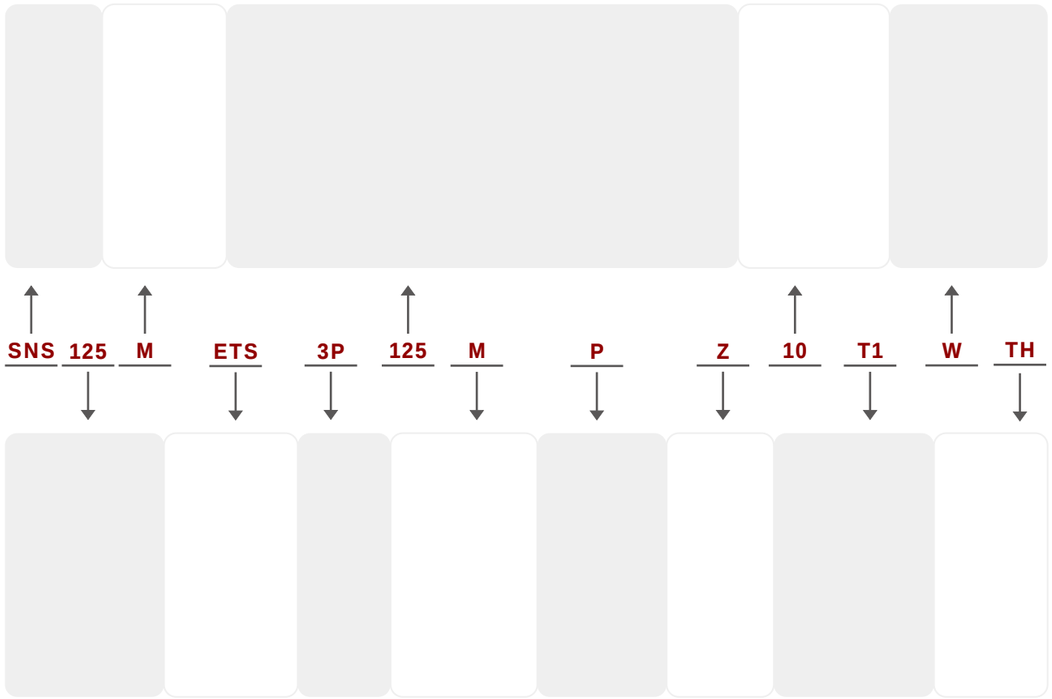


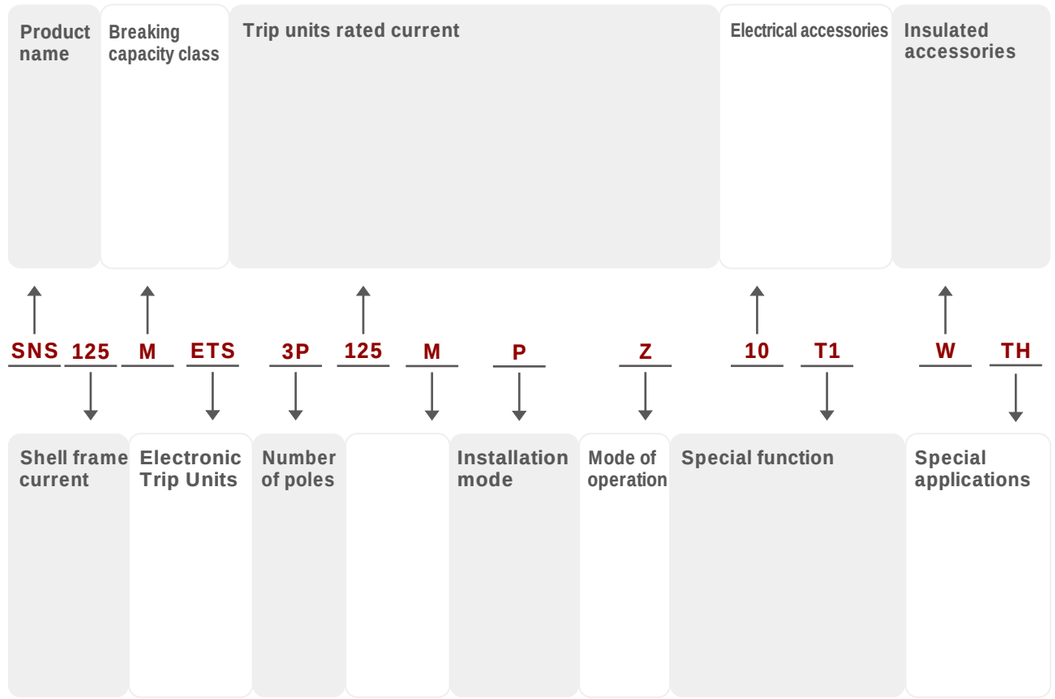
SNS
SNS thermal magnetic circuit breaker

Circuit breaker parameter table

SNS
SNS electronic circuit breaker

Quick selection table



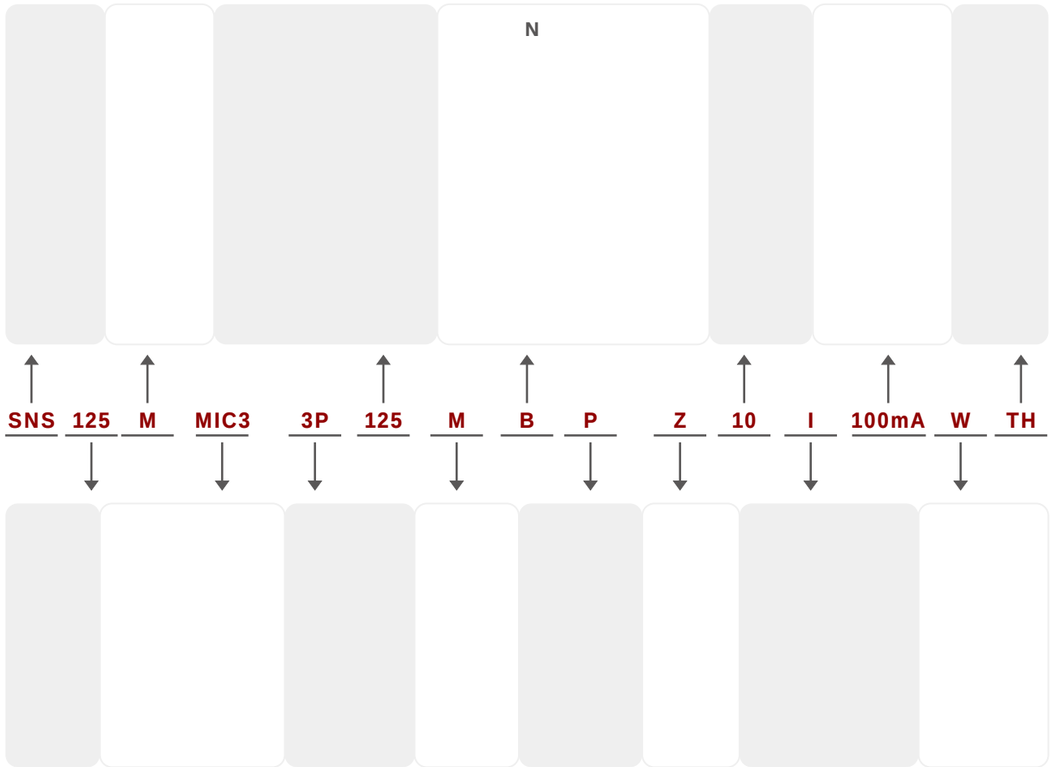


SNS
SNS electronic circuit breaker

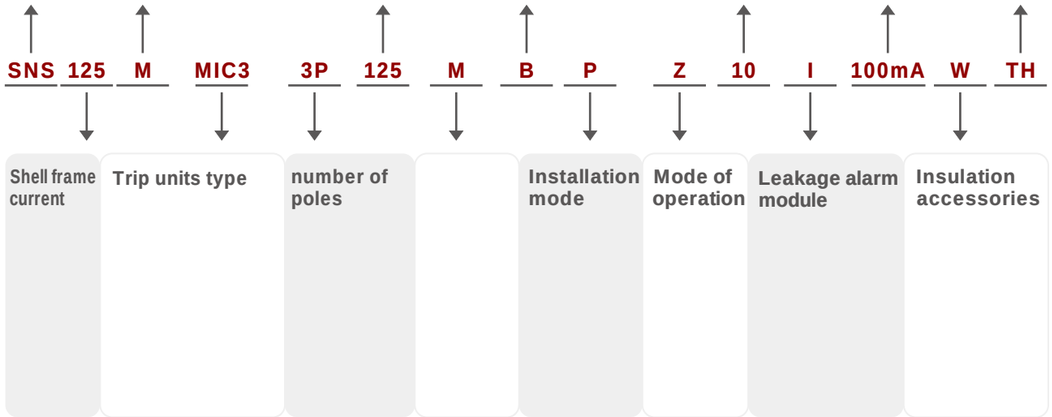
Circuit breaker parameter table

SNS
SNS Circuit breaker with residual current protection

Quick selection table



product name	Breaking capacity class	Trip units rated current	Code of N-pole type of four pole circuit breaker	Electrical accessories	Leakage action current	Special applications
	M: Relatively higher type H: Higher performance type	SNS125 shell frame: 16,20,25, 32,40,50,63,80,100,125 SNS250 Shell frame: 100,125, 140,160,180,200,225,250 SNS400 Shell frame: 225,250, 315,350,400 SNS630 Shell frame: 400,500, 630	A:N-pole is not equipped with over-current release, and N-pole is always on; B:N-pole is not equipped with over-current release, and N-pole is combined with other three poles; C：N-pole is installed with over-current release, and N-pole is combined with other three poles; D:N-pole is installed with over-current release, and N-pole is always on.	Shunt release Under voltage release Alarm contact Auxiliary contact (See sample for electrical accessories code)	30mA (non-delay nature) 100mA 300mA 500mA 1000mA	None: the conventional type TH: humid tropical type LC: low temperature type



Shell frame current	Trip units type	number of poles		Installation mode	Mode of operation	Leakage alarm module	Insulation accessories

SNS
SNS Circuit breaker with residual current protection

Circuit breaker parameter table

				SNS125		SNS250		SNS400		SNS630	
ǁ ̋Ω Number of poles				3 4		3 4		3 4		3 4	
Connect	ɖ Ă Fixed		Front connection								
			Rear connection								
	϶ Ă Plug-in		Rear connection								
ɨ In(A) 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	
ɨ ʎ ɻ (V) Rated insulation voltage (V)	Ui			800		800		800		800	
ɨ ˙ ` ǎ (kV) Rated impulse withstand voltage (kV)	Uimp			8		8		8		8	
ɨ Ă (V) Rated operational voltage (V)	Ue	AC50Hz	400V	400V		400V		400V		400V	
ɨ ǁ ں ت Ă Rated limit short-circuit breaking capacity				M	H	M	H	M	H	M	H
	Icu(kA)	AC50Hz	400V	50	70	50	70	65	70	65	70
ɨ ت Ă Rated operational short-circuit breaking capacity				M	H	M	H	M	H	M	H
	Ics(kA)	AC50Hz	400V	35	50	35	50	50	70	50	70
ɨ ɾ ɱ Ă Rated residual action current	I n(A)	AC ʒ ɾ ɱ ʒ		0.03 ω ˚ å ˙H ʒ /0.1/0.3/0.5		0.03 ω ˚ å ˙H ʒ /0.1/0.3/0.5		0.1/0.3/0.5		0.3/0.5/1	
		AC type residual current protection		0.03 (non-delay type only) /0.1/0.3/0.5		0.03 (non-delay type only) /0.1/0.3/0.5					
		A ʒ ɾ ɱ ʒ		0.03 ω ˚ å ˙H ʒ /0.1/0.3/0.5		0.03 ω ˚ å ˙H ʒ /0.1/0.3/0.5		0.1/0.3/0.5		0.3/0.5/1	
		Type Aresidual current protection		0.03 (non-delay type only) /0.1/0.3/0.5		0.03 (non-delay type only) /0.1/0.3/0.5					
ɨ ɾ ɱ Ă Rated residual non-action current	I no(A)			1/2I n		1/2I n		1/2I n		1/2I n	
ɨ ɾ ɱ ت (Ă) Rated residual short circuit making (breaking) capacity	I m(kA)			1/4Icu		1/4Icu		1/4Icu		1/4Icu(pv)0.7(1)TjETq57.566 29.7226 30.59Tj0.5	
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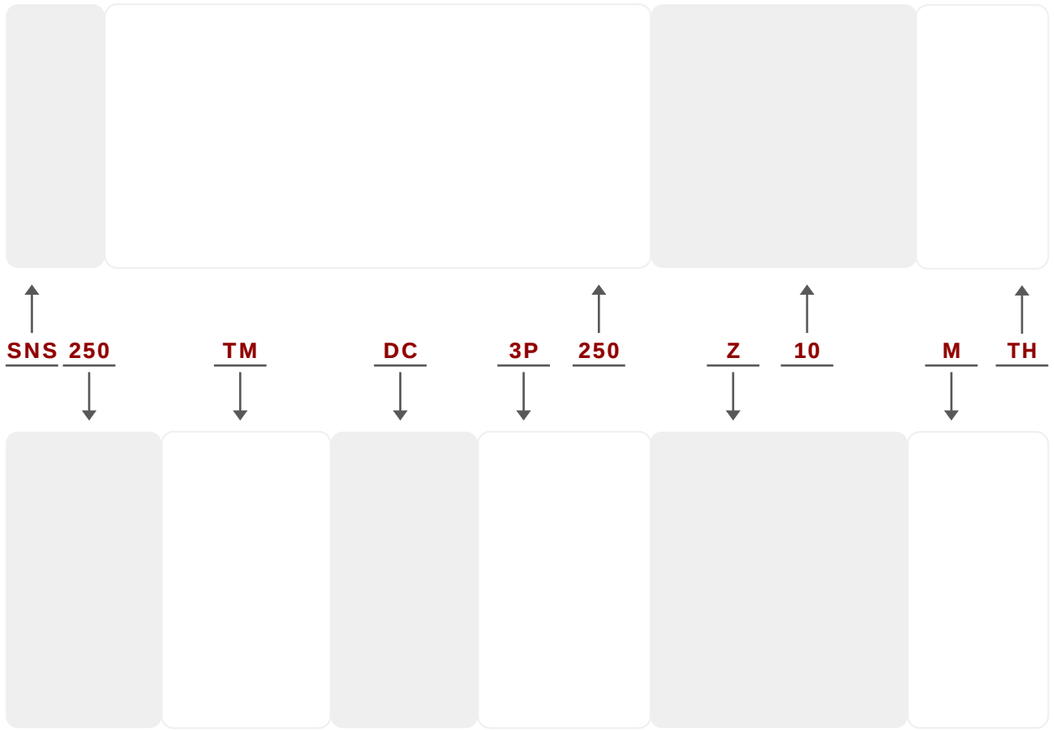
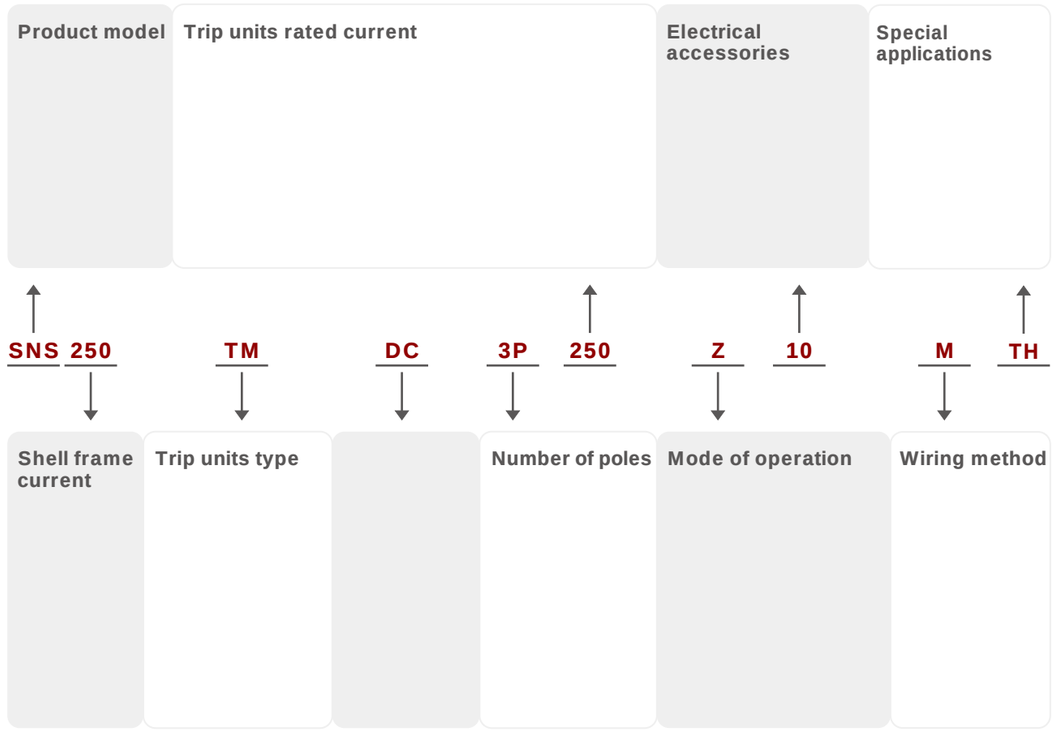
SNS DC
SNS DC series DC molded case circuit breakers

Quick selection table



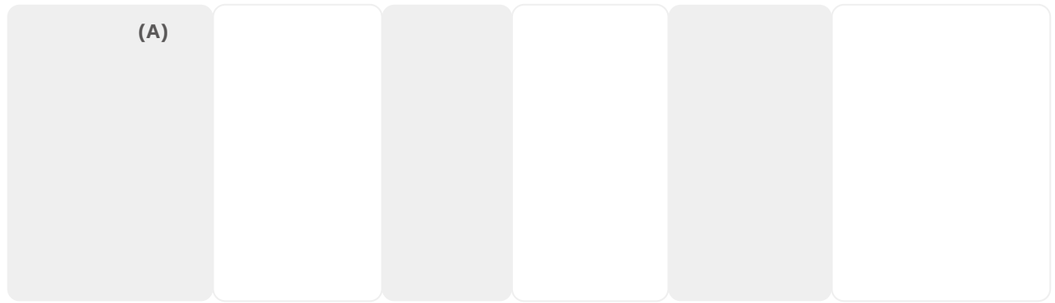


SNS DC
SNS DC series DC molded case circuit breakers

Circuit breaker parameter table

SNS HU
SNS HU series high-voltage AC circuit breakers

SNS 250 TM 3P 250 10

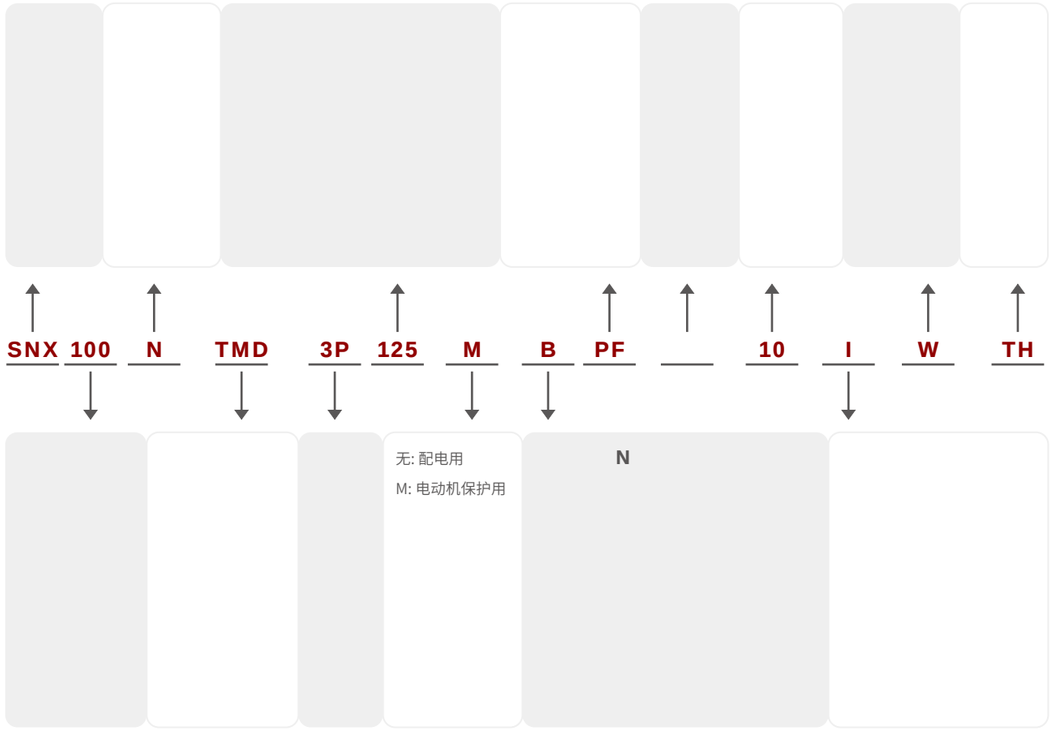


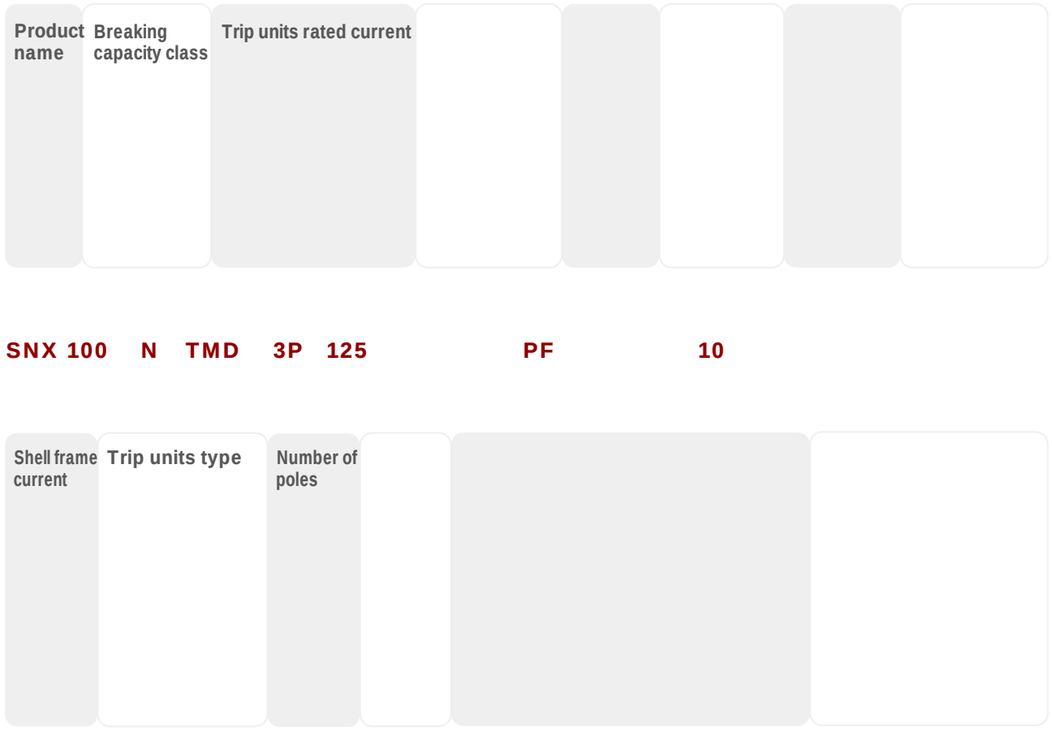
SNS HU
SNS HU series high-voltage AC circuit breakers

Circuit breaker parameter table

SNX
SNX thermal magnetic circuit breaker

Quick selection table



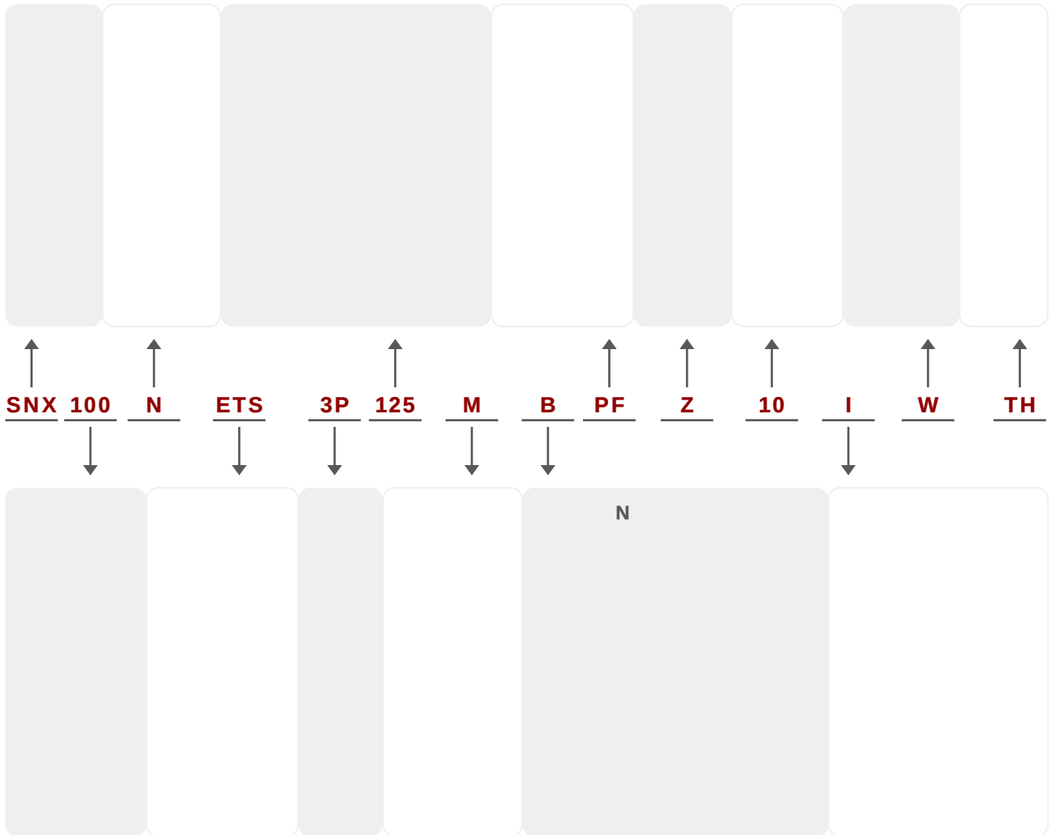


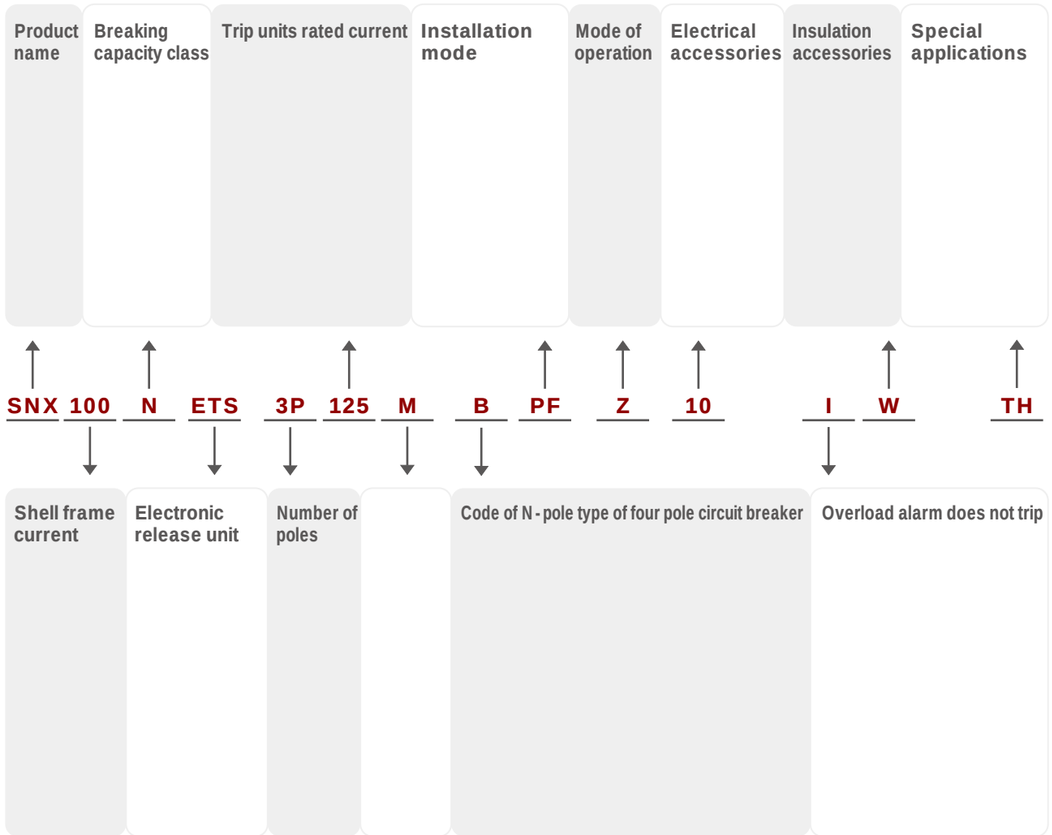
SNX
SNX thermal magnetic circuit breaker

Circuit breaker parameter table

SNX
SNX electronic circuit breaker

Quick selection table





SNX
SNX electronic circuit breaker

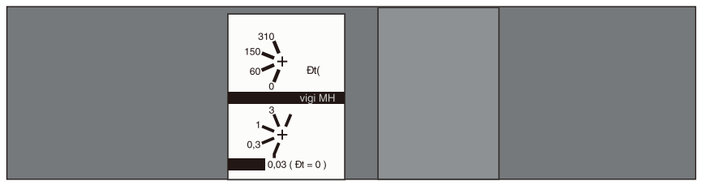
Circuit breaker parameter table

SNX
SNX electronic liquid crystal circuit breaker

Circuit breaker parameter 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

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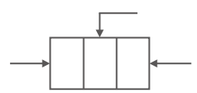

SNS
SNS electronic circuit breaker

Code and installation method of electrical accessories

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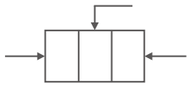

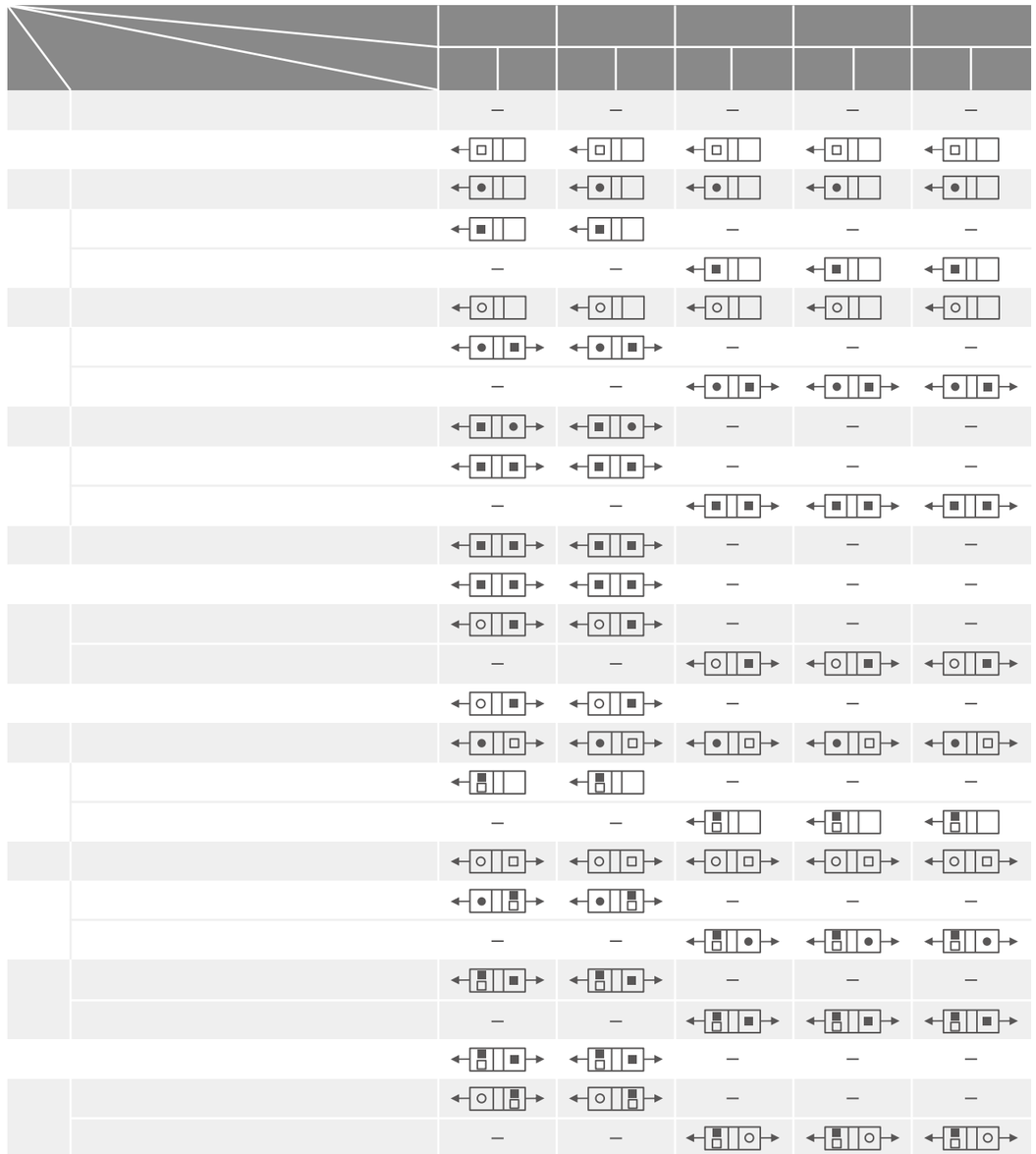

SNS
SNS Circuit breaker with residual current protection

Code and installation method of electrical accessories

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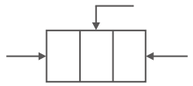
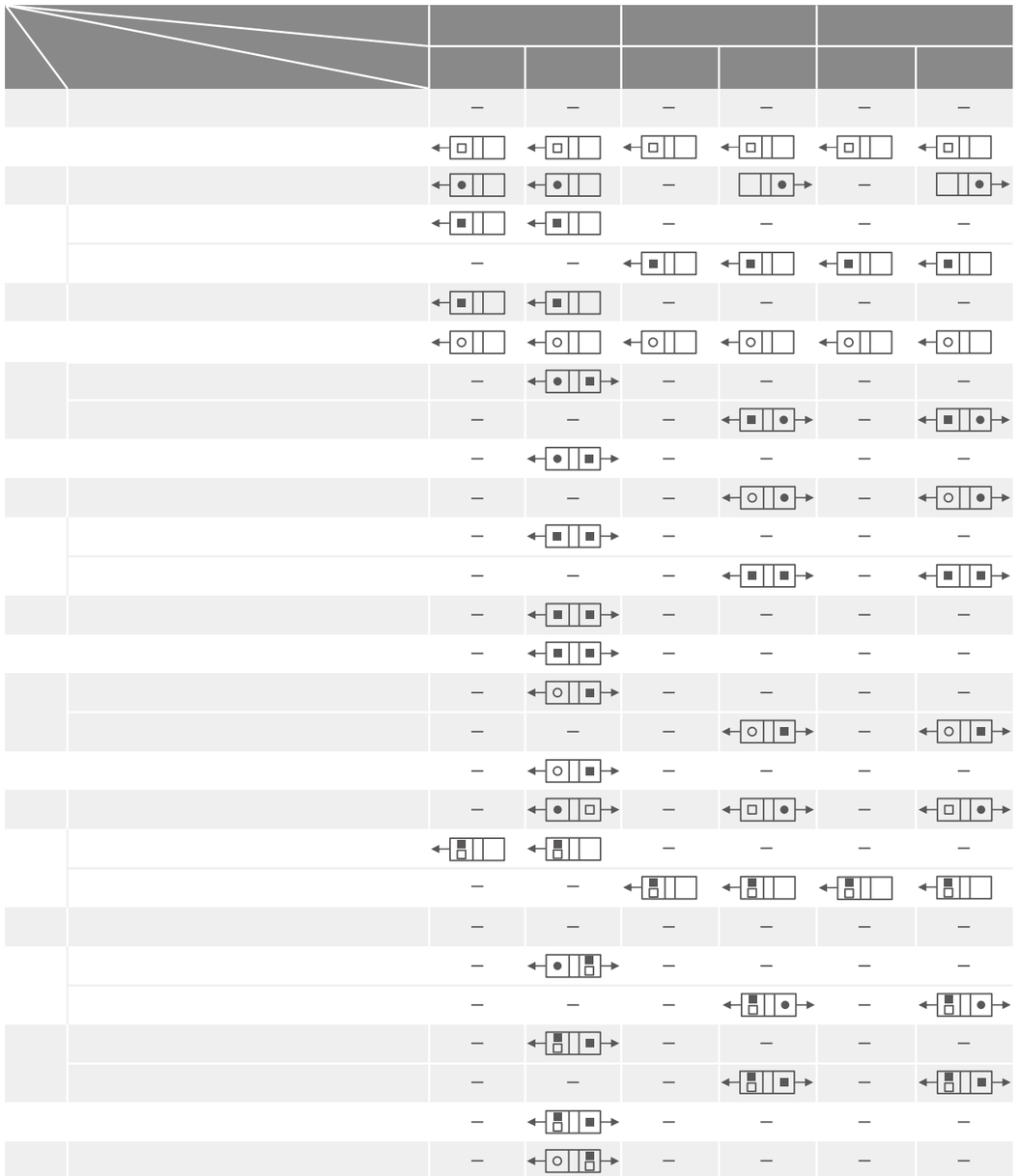
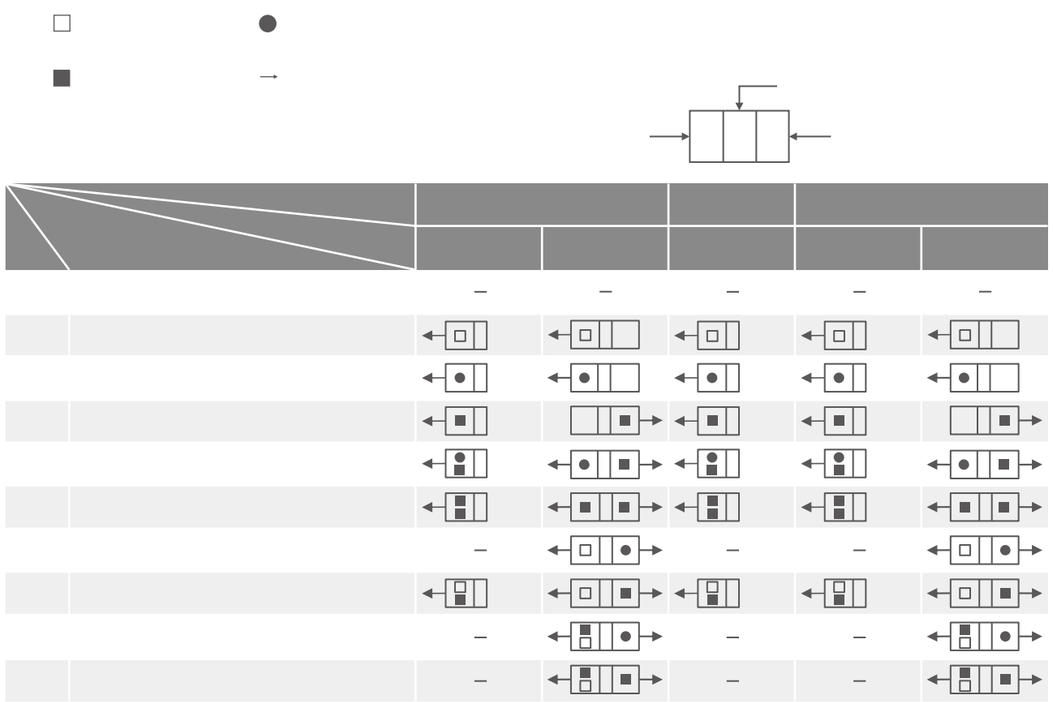




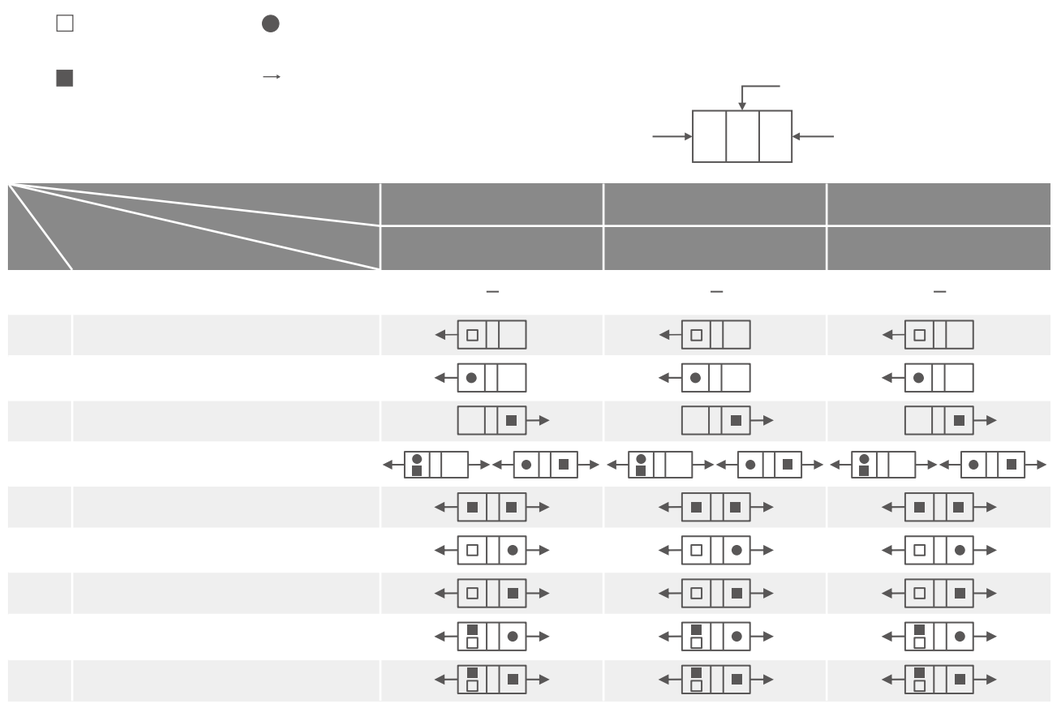
SNS DC
SNS DC series DC molded case circuit breakers

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 molde

Code and installa