

NBSM1-125 INDUSTRIALMINI CIRCUIT BREAKER

1. APPLICATION

NBSM1-125 series miniature circuit breaker is a current limiting high-breaking miniature circuit breaker with double protection of overload and short circuit. Suitable for AC 50/60 Hz, rated voltage 230/400V, rated current up to 125A and below. It is mainly used for lighting, distribution lines and equipment overload and short circuit protection of residential buildings, office buildings and similar buildings. It can also be used as an infrequent operation conversion of lines under normal conditions.



2. TECHNICAL PARAMETER

	Technical Parameter					
Spec Parameter						
Rated Voltage (V)	230/400					
Rated Current (A)	6,10,16,20,25,32,40,50,63,80,100,125					
Poles	1P,1P+N,2P,3P,4P					
Current Limiting Level	3					
Breaking Capacity	6kA					
Rated Impulse withstand voltage	6kV					
Release charactistic	10In±20%					
Release type	Thermal Magnetic type					
Mechanical life(times)	8000					
Electrical life(times)	2000					
Standard Certificate						
	IEC 60947-2					
Comply with Standard	GB 14048.2					
Certificate	CCC, CE, CB					
Working Envirnment						
Humidity	40℃ humidity not exceed 50%					
	20℃ humidity not exceed 90%					
	(Condensation on the product due to changes in humidity has been considered)					
Working Temperature	-5~+55℃ (lower than-5℃,or upper than +55℃) are customer made)					
Magnetic field	No more than 5 times the geomagnetic field					
Pollution level	2					
Altitude (m)	2000					



Mounting and Wiring					
Shock and vibration	Should be installed in the case of no obvious impact vibration				
Installation category	III				
Screw specification	7x14mm				
Installation method	TH 35mm Din-rail/U/Pin Busbar				
Wiring ability	25mm ²				

Note: When the conditions of use of the product are harsher than the above conditions, it should be derated, and the specific matters should be negotiated with the manufacturer.

3. MODEL NUMBER



4. Dimension Diagrams



5. Circuit Diagrams

2P

1P



3P



6. Charactistic Curve of Release



7. The Over-Current Protection Property

Item No.	Rated current of release	Initial status	Test current	Expected result	Expected result	Remark
1	1-63	Cold position	1.13In	t≥1h	Non-release	-
2	1-63	Carried out immediately after previous test	1.45 In	t < 1h	Release	Current smoothly rises to specified value within 5s
3	$In \leqslant 32$	Cold position	2.55 In	1s < t < 60s	Release	-
	In > 32	Cold position	2.55 In	1s < t < 120s	Release	-
4	1-63	Cold position	3 In	t ≥ 0.1s	Non-release	Type B
	1-63	Cold position	5 In	t < 0.1s	Release	Type B
	1-63	Cold position	5 In	t≥0.1s	Non-release	Type C
	1-63	Cold position	10 In	t < 0.1s	Release	Туре С
	1-63	Cold position	10 In	t ≥ 0.1s	Non-release	Type D
	1-63	Cold position	14 In	$t \le 0.1s$	Release	Type D

