

Standard

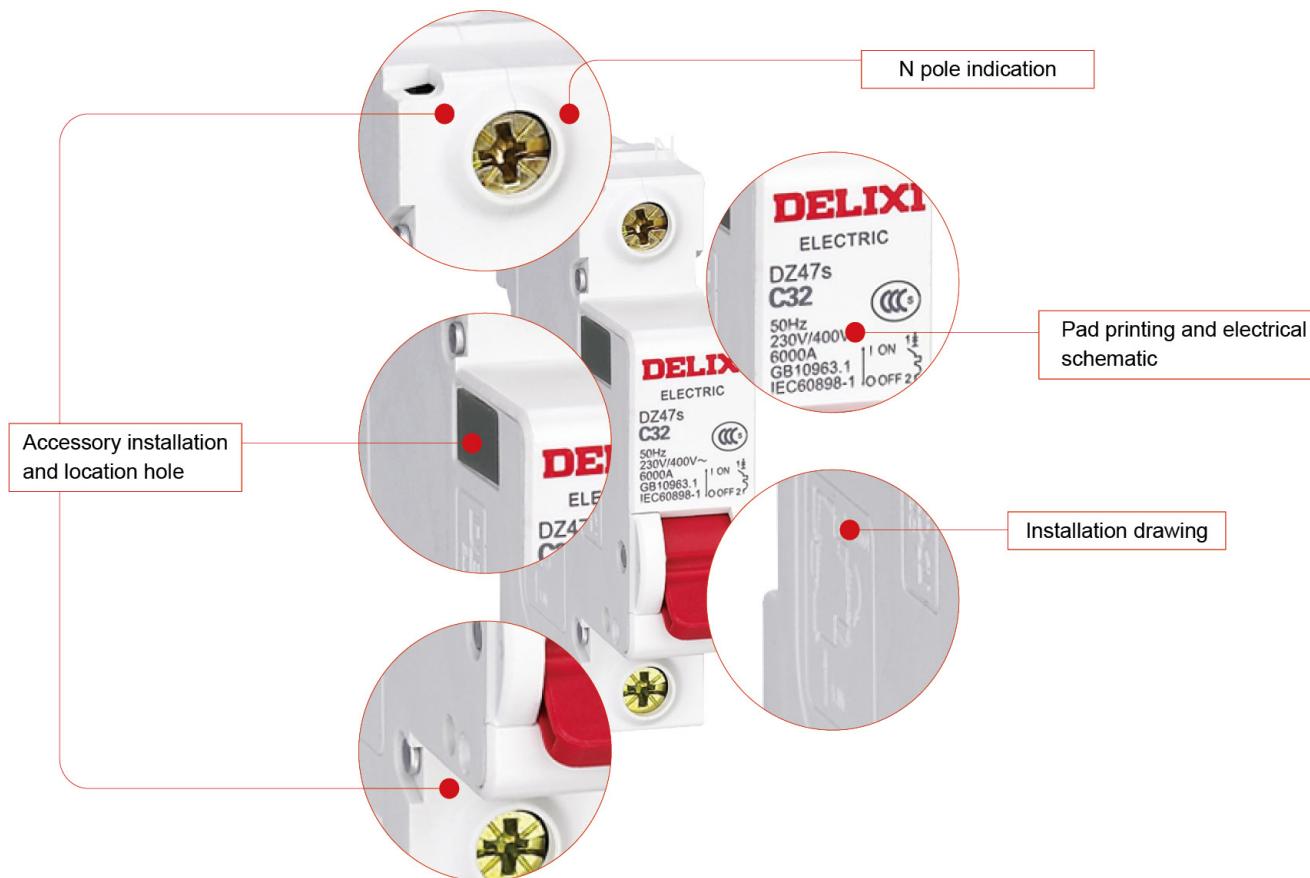
GB10963.1 IEC/EN60898-1

Certificate**DZ47s Miniature circuit breaker****DZ47s miniature circuit breaker has the following functions:**

- Short-circuit protection
- Over-load protection
- Isolation protection

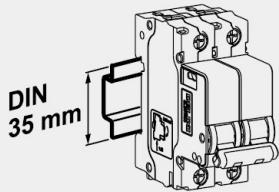
Specification

Rated working voltage (V)	1P: 230/400 AC 1P+N: 230 AC 2P,3P,3P+N,4P: 400 AC
Rated current(A)	1-63
Frequency (Hz)	50/60
Poles	1P,1P+N,2P,3P,3P+N,4P
Breaking capacity (kA)	6

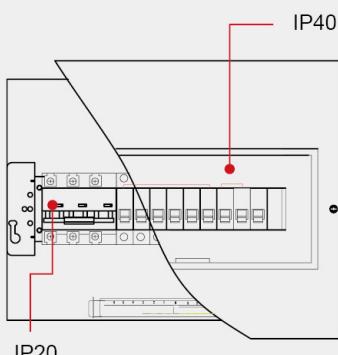
Product Details Showing

Electrical Characteristics

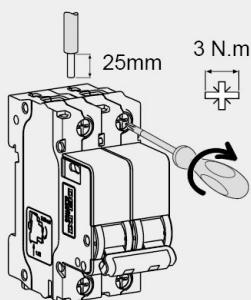
Rated insulation voltage (Ui)	250(phase to earth) / 500(phase to phase)		
Maximum operating voltage U_{Bmax}	1P,1P+N 2P,3P,4P,3P+N 1P	(V) (V) (V)	230/400 AC 400 AC 60 DC
Rated capacity of short-circuit	Icn (IEC/EN60898)	(kA)	6
Rated impulse withstand voltage	$Uimp(1.2/50)$	(kV)	4
Dielectric test voltage			2kV(50/60HZ,1mins)
Use category			A
Isolation function			YES
Pollution degree			2
Tripping type			Thermal magnetic tripping
Characteristic of Thermal-Magnetic Tripping	B Curve(3In~5In) C Curve(5In~10In) D Curve(10In~14In)		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Electrical and mechanical accessories			<input checked="" type="checkbox"/>



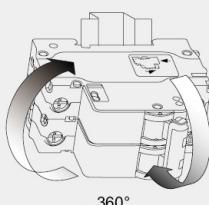
Mounted on 35mm standard Din-rail



IP20



Flexible installation direction



...360°

Mechanical Characteristics

Handle	Red, pad printing indication ON-OFF position	
Mechanical life	times	20000
Electrical life	times	10000
Protection degree Installed in distribution box Installed directly	Installed in distribution box	IP40
	Installed directly	IP20
Mechanical shock resistance	30g.3 times shock,duration 11ms (No significant vibration and shock place)	
Anti-vibration (IEC/EN 60068-2-6)	(No significant vibration and shock place)	
Damp and hot resistance (IEC 60068-2) Damp and hot $^{\circ}C$ /RH	2 type 28 cycles Temp. 55 $^{\circ}C$ Humidity 90%~96% Temp. 25 $^{\circ}C$ Humidity 95%~100%	
Reference ambient temperature	$^{\circ}C$	30 $^{\circ}C$
Ambient temperature (Daily average temperature \leq +35 $^{\circ}C$)	$^{\circ}C$	-35 $^{\circ}C$ ~+70 $^{\circ}C$
Stock Temperature	$^{\circ}C$	-40 $^{\circ}C$ ~+85 $^{\circ}C$

Installation Characteristics

Terminal type	U terminal	
Maximum wiring capability	(A)	Current rating 1-63:25mm ²
Maximum limit torque	(A)	Current rating 1-63:2.5 N.m
Tool		Crosshead or flathead screwdriver
Installation		Mounted on standard DIN rail (35mm)
Incoming type		Top or bottom

Order Guide

Order Selection and Code

DZ47s Miniature Circuit Breaker

Model	Breaking Capacity	Pole	Tripping Curve	Rated Current
DZ47s	N	1	C	6
	N: 6kA	1: 1P 2: 2P 3: 3P 4: 4P 5: 1P+N 6: 3P+N	B: B C: C D: D	1: 1A 13: 13A 2: 2A 16: 16A 3: 3A 20: 20A 4: 4A 25: 25A 5: 5A 32: 32A 6: 6A 40: 40A 8: 8A 50: 50A 10: 10A 63: 63A

DZ47s	Pole	Rated Current	Tripping type		
			B	C	D
1P		1	-	DZ47sN1C1	DZ47sN1D1
		2	-	DZ47sN1C2	DZ47sN1D2
		3	-	DZ47sN1C3	DZ47sN1D3
		4	-	DZ47sN1C4	DZ47sN1D4
		5	-	DZ47sN1C5	DZ47sN1D5
		6	DZ47sN1B6	DZ47sN1C6	DZ47sN1D6
		8	DZ47sN1B8	DZ47sN1C8	DZ47sN1D8
		10	DZ47sN1B10	DZ47sN1C10	DZ47sN1D10
		13	DZ47sN1B13	DZ47sN1C13	DZ47sN1D13
		16	DZ47sN1B16	DZ47sN1C16	DZ47sN1D16
		20	DZ47sN1B20	DZ47sN1C20	DZ47sN1D20
		25	DZ47sN1B25	DZ47sN1C25	DZ47sN1D25
		32	DZ47sN1B32	DZ47sN1C32	DZ47sN1D32
		40	DZ47sN1B40	DZ47sN1C40	DZ47sN1D40
		50	DZ47sN1B50	DZ47sN1C50	DZ47sN1D50
1P+N		63	DZ47sN1B63	DZ47sN1C63	DZ47sN1D63
		10	DZ47sN5B10	DZ47sN5C10	DZ47sN5D10
		13	DZ47sN5B13	DZ47sN5C13	DZ47sN5D13
		16	DZ47sN5B16	DZ47sN5C16	DZ47sN5D16
		20	DZ47sN5B20	DZ47sN5C20	DZ47sN5D20
		25	DZ47sN5B25	DZ47sN5C25	DZ47sN5D25
		32	DZ47sN5B32	DZ47sN5C32	DZ47sN5D32
		40	DZ47sN5B40	DZ47sN5C40	DZ47sN5D40
		50	DZ47sN5B50	DZ47sN5C50	DZ47sN5D50
		63	DZ47sN5B63	DZ47sN5C63	DZ47sN5D63
2P		1	-	DZ47sN2C1	DZ47sN2D1
		2	-	DZ47sN2C2	DZ47sN2D2
		3	-	DZ47sN2C3	DZ47sN2D3
		4	-	DZ47sN2C4	DZ47sN2D4
		5	-	DZ47sN2C5	DZ47sN2D5
		6	DZ47sN2B6	DZ47sN2C6	DZ47sN2D6
		8	DZ47sN2B8	DZ47sN2C8	DZ47sN2D8
		10	DZ47sN2B10	DZ47sN2C10	DZ47sN2D10
		13	DZ47sN2B13	DZ47sN2C13	DZ47sN2D13
		16	DZ47sN2B16	DZ47sN2C16	DZ47sN2D16
		20	DZ47sN2B20	DZ47sN2C20	DZ47sN2D20
		25	DZ47sN2B25	DZ47sN2C25	DZ47sN2D25
		32	DZ47sN2B32	DZ47sN2C32	DZ47sN2D32
		40	DZ47sN2B40	DZ47sN2C40	DZ47sN2D40
		50	DZ47sN2B50	DZ47sN2C50	DZ47sN2D50
		63	DZ47sN2B63	DZ47sN2C63	DZ47sN2D63

DZ47s Miniature Circuit Breaker



1P

1P+N

2P

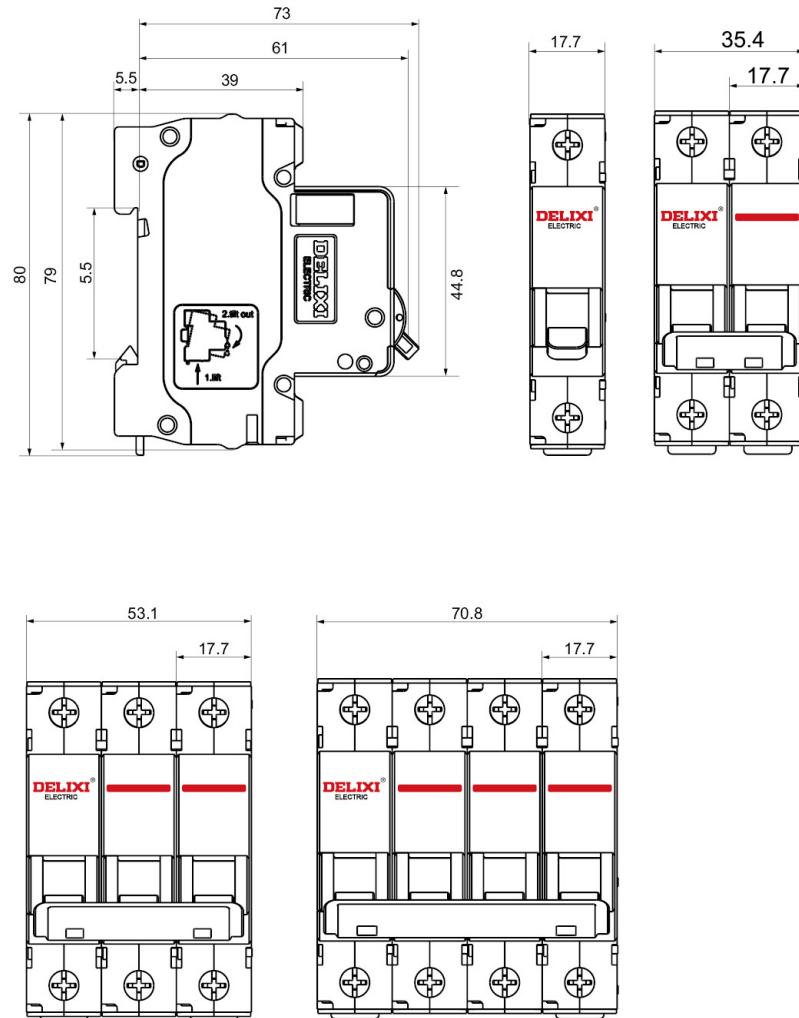
3P

3P+N

4P

DZ47s	Pole	Rated Current	Tripping type		
			B	C	D
3P		1	-	DZ47sN3C1	DZ47sN3D1
		2	-	DZ47sN3C2	DZ47sN3D2
		3	-	DZ47sN3C3	DZ47sN3D3
		4	-	DZ47sN3C4	DZ47sN3D4
		5	-	DZ47sN3C5	DZ47sN3D5
		6	DZ47sN3B6	DZ47sN3C6	DZ47sN3D6
		8	DZ47sN3B8	DZ47sN3C8	DZ47sN3D8
		10	DZ47sN3B10	DZ47sN3C10	DZ47sN3D10
		13	DZ47sN3B13	DZ47sN3C13	DZ47sN3D13
		16	DZ47sN3B16	DZ47sN3C16	DZ47sN3D16
		20	DZ47sN3B20	DZ47sN3C20	DZ47sN3D20
		25	DZ47sN3B25	DZ47sN3C25	DZ47sN3D25
		32	DZ47sN3B32	DZ47sN3C32	DZ47sN3D32
		40	DZ47sN3B40	DZ47sN3C40	DZ47sN3D40
		50	DZ47sN3B50	DZ47sN3C50	DZ47sN3D50
3P+N		63	DZ47sN3B63	DZ47sN3C63	DZ47sN3D63
		10	DZ47sN6B10	DZ47sN6C10	DZ47sN6D10
		13	DZ47sN6B13	DZ47sN6C13	DZ47sN6D13
		16	DZ47sN6B16	DZ47sN6C16	DZ47sN6D16
		20	DZ47sN6B20	DZ47sN6C20	DZ47sN6D20
		25	DZ47sN6B25	DZ47sN6C25	DZ47sN6D25
		32	DZ47sN6B32	DZ47sN6C32	DZ47sN6D32
		40	DZ47sN6B40	DZ47sN6C40	DZ47sN6D40
4P		50	DZ47sN6B50	DZ47sN6C50	DZ47sN6D50
		63	DZ47sN6B63	DZ47sN6C63	DZ47sN6D63
		1	-	DZ47sN4C1	DZ47sN4D1
		2	-	DZ47sN4C2	DZ47sN4D2
		3	-	DZ47sN4C3	DZ47sN4D3
		4	-	DZ47sN4C4	DZ47sN4D4
		5	-	DZ47sN4C5	DZ47sN4D5
		6	DZ47sN4B6	DZ47sN4C6	DZ47sN4D6
		8	DZ47sN4B8	DZ47sN4C8	DZ47sN4D8
		10	DZ47sN4B10	DZ47sN4C10	DZ47sN4D10
		13	DZ47sN4B13	DZ47sN4C13	DZ47sN4D13
		16	DZ47sN4B16	DZ47sN4C16	DZ47sN4D16
		20	DZ47sN4B20	DZ47sN4C20	DZ47sN4D20
		25	DZ47sN4B25	DZ47sN4C25	DZ47sN4D25
		32	DZ47sN4B32	DZ47sN4C32	DZ47sN4D32
		40	DZ47sN4B40	DZ47sN4C40	DZ47sN4D40
		50	DZ47sN4B50	DZ47sN4C50	DZ47sN4D50
		63	DZ47sN4B63	DZ47sN4C63	DZ47sN4D63

Installation Dimensions





Accessories

Remote indication accessories

- OF Auxiliary contact
- External circuit, indicating the status of the circuit breaker
- Basic form of the auxiliary contact: 1 NO, 1 NC
- Wiring ability: 1-2.5mm²

SD Alarm contact

- Signal when the circuit breaker fault trips
- Mechanical indication on the front panel to indicate fault tripping
- Basic form of the auxiliary contact: 1 NO, 1 NC
- Wiring ability: 1-2.5mm²

Trip accessories

■ MX+OF Shunt release

- External circuit, indicating the status of the circuit breaker
- When the signal is obtained, the circuit breaker trips.
- Basic form of the auxiliary contact: 1 NO, 1 NC
- Wiring ability: 1-2.5mm²

■ MV Overvoltage release

- Protection against line overvoltage faults
- When the voltage across the trip unit rises to the rated range, the circuit breaker trips.
- There is a fault trip indication on the front panel, and the indicator pops up for overvoltage tripping.
- Rated working trip overvoltage: (280+/-14)V AC
- Wiring ability: 1-2.5mm²

■ MN Undervoltage release

- Protection against line undervoltage faults
- When the voltage across the trip unit drops to the rated range, the circuit breaker trips.
- There is a fault trip indication on the front panel, and the indicator pops up for undervoltage tripping.
- Rated working trip undervoltage: (161+/-8.05) VAC, undervoltage protection interval is (35%~70%)Ue
- Wiring ability: 1-2.5mm²

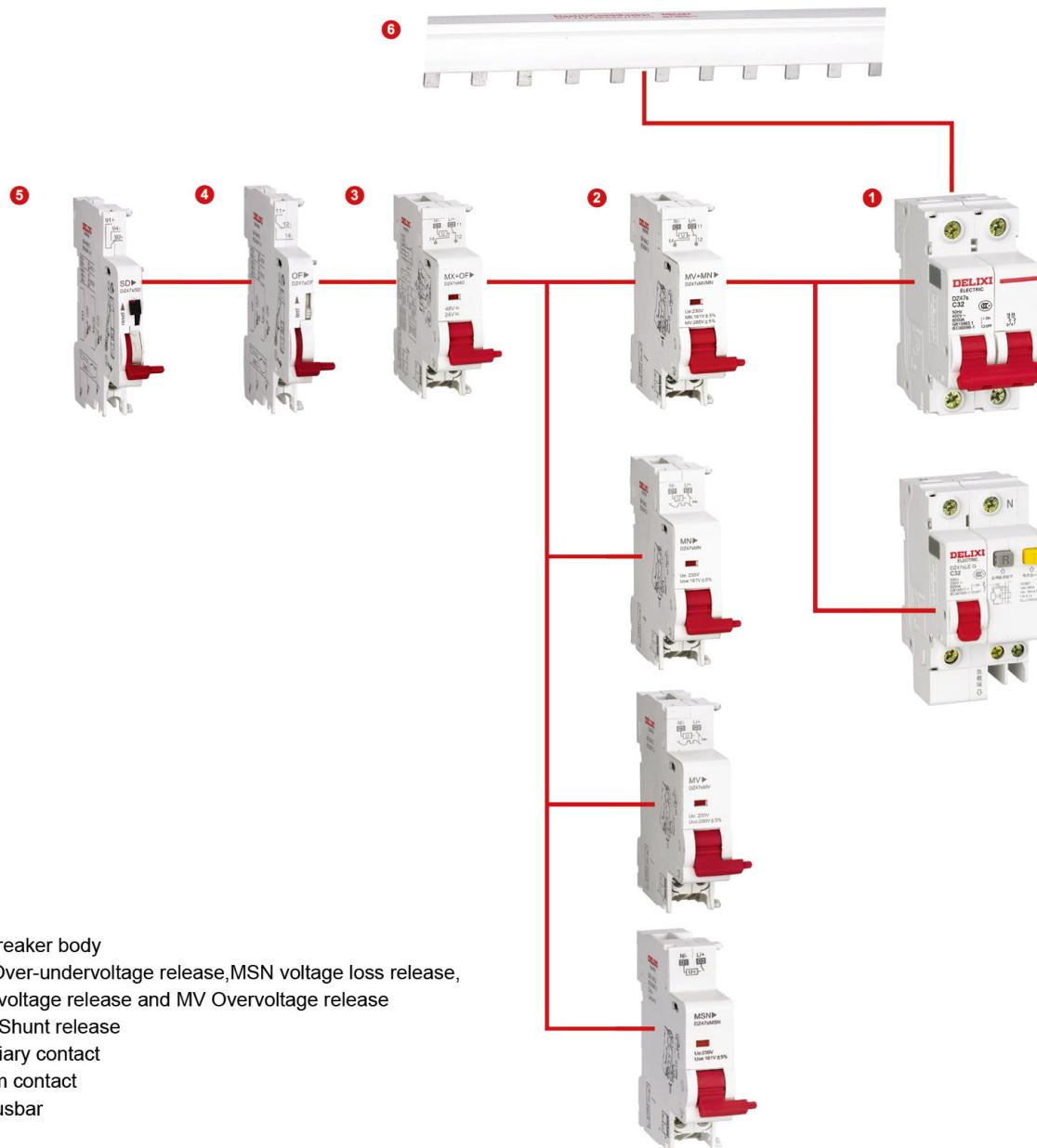
■ MVMN Over-undervoltage release

- Protection against line overvoltage and undervoltage
- When the voltage across the trip unit rises or falls to the rated range, the circuit breaker trips.
- There is a fault trip indication on the front panel, and the indicator pops up for overvoltage or undervoltage tripping.
- Rated working trip overvoltage: (280+/-14) V AC, rated working trip undervoltage: (161+/-8.05) V AC, undervoltage protection interval is (35%~70%)Ue
- Wiring ability: 1-2.5mm²

■ MSN Voltage loss release

- When the supply voltage drops within the rated range, the circuit breaker trips to realize the undervoltage protection of the line;
- When the power supply voltage returns to normal, ensure that the circuit breaker is normally closed.
- Prevent the circuit breaker from reclosing when the supply voltage is zero or falls within the rated range.
- There is a fault trip indication on the front panel, and the indicator pops up for under voltage tripping.
- Rated working trip undervoltage: (161+/-8.05) V AC, undervoltage protection interval (35%~70%)Ue
- Normal recovery voltage ($\geq 85\%$ Ue), Voltage loss protection interval ($< 35\%$ Ue)
- Wiring ability: 1-2.5mm²

Accessory installation diagram



Assembly instructions

1. Accessory tool-free installation, installation location on the left side of the circuit breaker
- 2.The total width of the accessories assembled within 54mm, from left to right in order and number:OF,SD(3 max.)+MO,MSN,MV,MN,MVM N(2max.)+MCB.
- 3.Accessories are common to DZ47s,DZ47sLE,DZ47P,DZ47PLE

Accessories Introduction



Name	Width(mm)	Voltage range(V)	Order code
OF	9	AC: 415V/3A ,240V/6A; DC: 130V/1A,48V/2A,24V/6A	DZ47sOF
SD	9	AC: 415V/3A , 240V/6A; DC: 130V/1A, 48V/2A,24V/6A	DZ47sSD
MX+OF	18 18	AC: 130V-415V; DC: 110-130v AC/DC: 24V-48V;	DZ47sMO220 DZ47sMO24
MV	18	AC: 230V	DZ47sMV
MN	18	AC: 230V	DZ47sMN
MVMN	18	AC: 230V	DZ47sMVMN
MSN	18	AC: 230V	DZ47sMSN

Type	Number of roots per plastic seal	Thickness *Width(mm)	Phase spacing(mm)	Reference
PT type purple copper bus DPN 40A	10	1.2*5	18	HLPDPN40A1205Z1M
PT type purple copper bus DPN 50A	10	1.4*5	18	HLPDPN50A1405Z1M
PT type purple copper bus DPN+L 32A	10	1.0*5	36	HLPDPNL32A1005Z1M
PT type purple copper bus DPN+L 50A	10	1.4*5	36	HLPDPNL50A1405Z1M

Tripping characteristics

B type

B tripping characteristics miniature circuit breakers comply with the GB 10963.1 IEC60898 standard and are suitable for protecting resistive loads or loads without inrush current.

C type

C tripping characteristics miniature circuit breakers comply with GB 10963.1 IEC60898 standard and are suitable for protecting inductive loads with resistive loads or low inrush current.

D type

D tripping characteristics miniature circuit breaker complies with the GB 10963.1 IEC60898 standard and is suitable for protecting loads with high inrush current when the line is connected.

Trip type	Standard	Thermal tripping characteristics				Electromagnetic tripping characteristics			
		Test current	Test time	Starting state	Result	Test current AC	Test time	Starting state	Result
B	IEC60898 GB10963	1.13In	>1h	Cold	No trip	3In	>0.1s	Cold	No trip
		1.45In	<1h	Hot	Trip	5In	<0.1s		Trip
C	IEC60898 GB10963	1.13In	$\geq 1h (\leq 63A)$ $\geq 2h (>63A)$	Cold	No trip	5In	$\geq 0.1s$	Cold	No trip
		1.45In	$<1h (\leq 63A)$ $<2h (>63A)$	Hot	Trip	10In	<0.1s		Trip
D	IEC60898 GB10963	1.13In	$\geq 1h$	Cold	No trip	10In	$\geq 0.1s$	Cold	No trip
		1.45In	<1h	Hot	Trip	20In	<0.1s		Trip

Tripping curve

