



Mini Circuit Breaker



Mini Circuit Breaker

DZ47-63 Series

Application



DZ47-63 Series miniature circuit breaker is mainly used in AC 50Hz/60Hz, rated voltage of 230V/400V, and rated current up to 63A for overload and short circuit functions, and also for not-frequent operational transformation in the circuit under normal conditions.

This product can be applied to various places such as industrial, commercial, tall buildings and residential houses.

The product meets the standards of GB10963.1 and IEC60898-1.

Model

DZ 47 – 63 / □
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 ① ② ③ ④

①	Miniature Circuit Breaker
②	Design Number
③	Frame Class rated current
④	Number of Pole

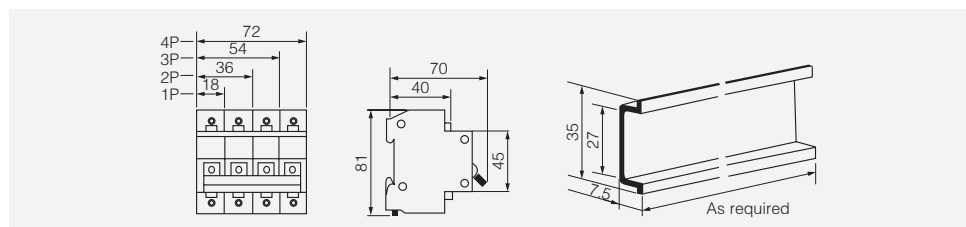
Main Technical Parameters



Rated Current(A)	Number Of Pole(P)	Rated Voltage(V)	Breaking Capacity(IA)	Instantaneous release type	Instantaneous protective current
1, 2, 3, 4, 6, 10 16, 20, 25, 32	1	230/400	4000	B	$3I_n < I \leq 5I_n$
	2			C	$5I_n < I \leq 10I_n$
	3			D	$10I_n < I \leq 20I_n$
40, 50, 63	4		4000	B	$3I_n < I \leq 5I_n$
		C		$5I_n < I \leq 10I_n$	
		D		$10I_n < I \leq 20I_n$	

Release Type	Rated Current I_n (A)	Initial Status	Test Current	Conventional Time	Expected Result	Remarks
B, C, D	value	Cold Status	$1.13I_n$	$t \leq 1h$	Not Tripping	
B, C, D	value	Thermal Status	$1.45I_n$	$t < 1h$	Tripping	The Current is rising within 5s
B, C, D	≤ 32	Cold Status	$2.55I_n$	$1s < t < 60s$	Tripping	
	> 32	Cold Status	$2.55I_n$	$1s < t < 120s$	Tripping	
B C D	value	Cold Status	$3I_n$	$t \leq 0.1s$	Not Tripping	The power supply is turned on by closing the auxiliary switch
			Cold Status			
			$10I_n$			
B C D	value	Cold Status	$5I_n$	$t < 0.1s$	Tripping	The power supply is turned on by closing the auxiliary switch
			$10I_n$			
			$20I_n$			

Overall And Mounting Dimensions (mm)



DZ47LE-63 Series

Application



DZ47LE-63 Series leakage miniature circuit breaker is mainly used in AC 50Hz/60Hz, rated voltage of 230V/400V, and rated current up to 63A for leakage, overload and short circuit functions, and also can add over-voltage, under-voltage and shunt protection functions as required.

This product can be applied to various places such as industrial, commercial, tall buildings and residential houses.

The product meets the standards of GB16917.1 and IEC61009-1.

Model

DZ 47 LE □ - □ / □ □ □

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 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①	Miniature Circuit Breaker
②	Design Number
③	Electronic Type Earth Leakage Circuit Breaker
④	Neutral wire connecting code: I or II
⑤	Frame Class Rated Current
⑥	Number of Pole
⑦	Use "N" for with neutral wire
⑧	Rated Residual Current

Structure Feature

DZ47LE-63 leakage miniature circuit breaker is made up of DZ47-63 high breaking capacity miniature circuit breaker and leakage release. The leakage circuit breaker is current action electronic type earth leakage circuit breaker. It is mainly including the zero sequence current transformer, electrical board, leakage release and overload and short-circuit circuit breaker.

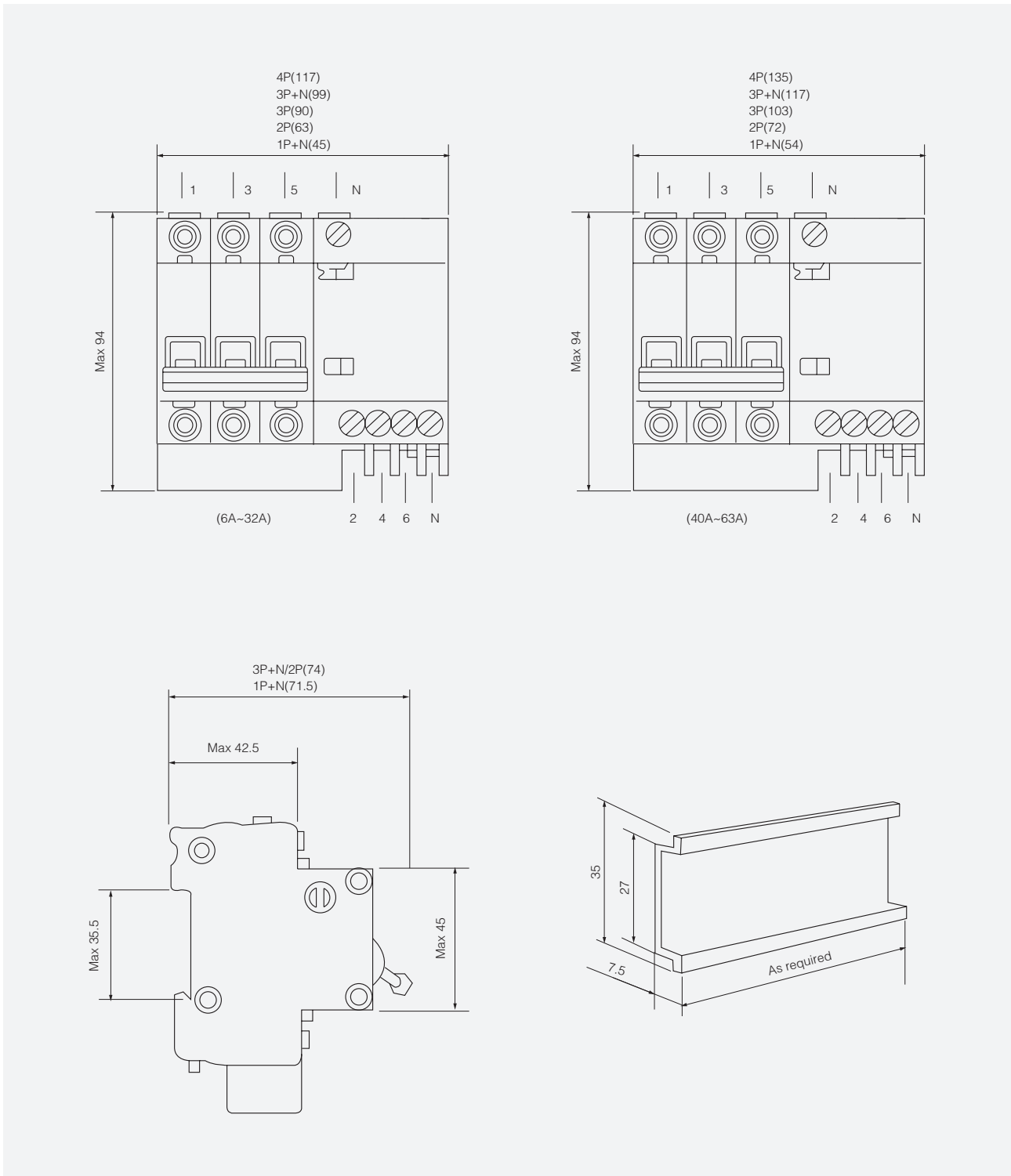
Main Technical Parameters



Frame Class Rated Current In(A)	Number Of Pole	Neutral Current	Rated Current In(A)In(A)	Rated Short Circuit Capacity			Rated leakage operating current I _{Δn} (mA)	Rated leakage non-operating current I _{Δno} (mA)	Release Type
				Voltage (V)	Breaking Capacity I _{cn}	cos (φ)			
32	1	N	6, 10, 16	230	4000	0.7	30	15	C
	2						50	25	
	3		20, 25, 32	400			75	40	
	3	N					100	50	
	4						300	150	
32	1	N	6, 10, 16	230	4000	0.8	30	15	D
	2						50	25	
	3		20, 25, 32	400			75	40	
	3	N					100	50	
	4						300	150	
63	1	N	40, 50, 63	230	4000	0.8	30	15	C, D
	2						50	25	
	3		400	75			40		
	3	N		100			50		
	4			300			150		

DZ47LE-63 Series

Overall And Mounting Dimensions (mm)



DZ47LE-32, 63, 100 Leakage Release

Application



DZ47LE series leakage release is made up of high conducting magnetic zero sequence current current, electrical board and high resistant casing. The DZ47 miniature circuit breaker and leakage release is assembled to leakage miniature circuit breaker, and the rated current down rating factor 0.8. It is mainly used in AC 50Hz/60Hz, rated voltage of 230V/400V, and rated current up to 100A for leakage protection.

The product meets the standards of GB16917.1 and IEC61009-1.

Model

DZ 47 LE - □ / □ □ □

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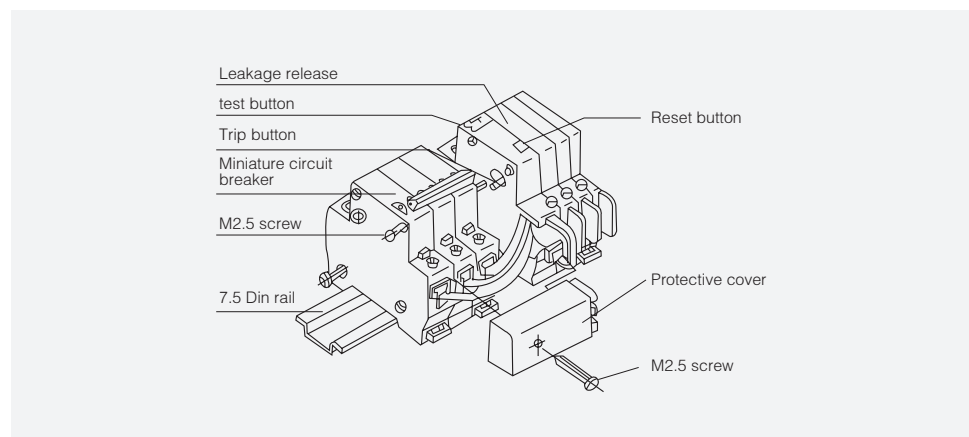
① ② ③ ④ ⑤ ⑥ ⑦

①	Miniature Circuit Breaker
②	Design Number
③	Electronic Type Earth Leakage Circuit Breaker
④	Frame Class Rated Current
⑤	Number of Pole
⑥	Use "N" for with neutral wire
⑦	Rated Residual Current

Main Technical Parameters

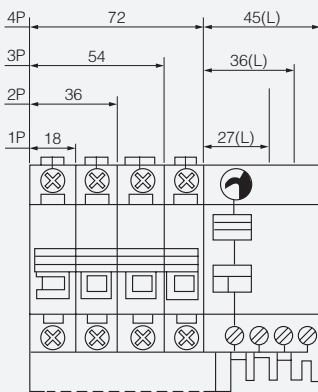
Rated Voltage (V)	Frame Class Rated Current Inm (A)	Number Of Pole	Neutral Wire	Rated Current(A)	Rated residual operating current I Δ n (mA)	Rated residual non-operating current I Δ no (mA)	Rated leakage operating time(S)
230	32	1	N	6, 10, 16	30	15	<0.1
230		2		20, 25	50	25	
400	63	3		32, 40	75	40	
400		3	N	50, 63	100	50	
400	100	4		80, 100	200	100	
400		4					

Assembling

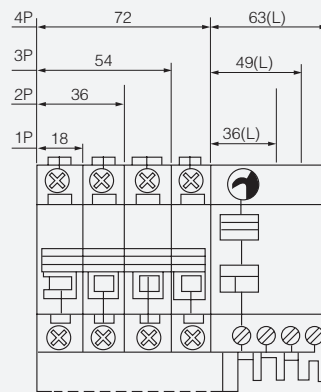


DZ47LE-32, 63, 100 Leakage Release

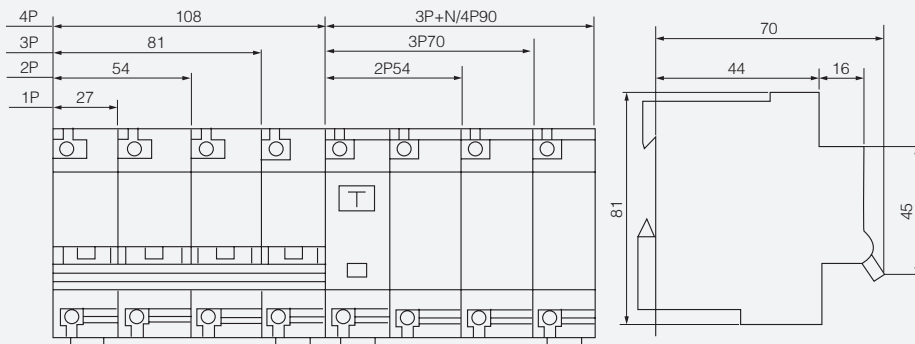
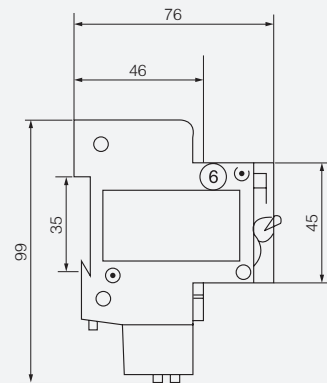
Overall And Mounting Dimensions (mm)



DZ47LE-32



DZ47LE-63



DZ47LE-100

RDM1-32 Series

Application

RDM1-32(DPN, DZ30)"Phase wire + Neutral wire" circuit breaker is mainly used in AC 50Hz/60Hz single-pole 230V for overload and short-circuit protection.This product is high breaking capacity, small size and 18mm width.

The product meets the standards of GB10963.1 and IEC60898-1.



Model

RD M 1 - 32
 ↓ ↓ ↓ ↓
 ① ② ③ ④

①	Company Code
②	Miniature Circuit Breaker
③	Design Number
④	Rated Current

Main Technical Parameters

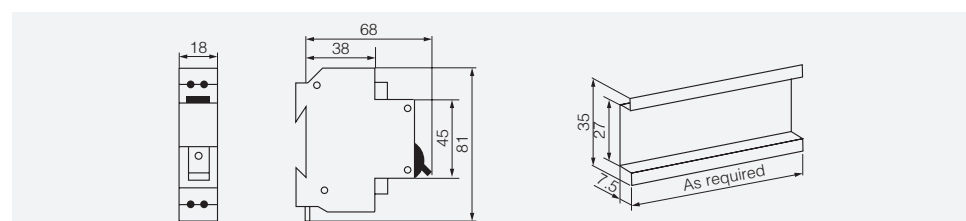
Rated Voltage(V)	Number Of Poles (P)	Main Technical Data(A)	Rated Current In (A)	Rated Short Circuit Capacity		Electro-Mechanical Life	Operation Frequency
				Test Current (A)	Power Factor		
230	1P+N	32	3, 6, 10, 16, 20, 25, 32	4500	0.75-0.80	4000	240

Note: • Heat Resistance Type: Temperature 55°C , relative humidity 95%.
 • Wiring with terminal and the hard wire below 10mm².

Tripping Characteristics Table

Test Current (A)	Tripping Characteristics Table(A)	Conventional Time	Expected Result	Initial Status	Remarks
1.13In	Value	t≤1h	Not Tripping	Cold Status	
1.45In	Value	t<1h	Tripping	Thermal Status	The Current is rising within 5s
2.55In	Value	1<t<60s	Tripping	Cold Status	The power supply is turned on by closing the auxiliary switch
5In, 10In	Value	t≤0.1s	Not Tripping	Cold Status	The power supply is turned on by closing the auxiliary switch
10In, 20In	Value	t<0.1s	Tripping	Cold Status	The power supply is turned on by closing the auxiliary switch

Overall And Mounting Dimensions (mm)



Mini Circuit Breaker

RDM1LE-32 Series

Application



RDM1LE-32(DPNLE, DZ30LE) earth leakage circuit breaker is mainly used in AC 50Hz/60Hz single-pole 230V for overload and short-circuit protection. This product is high breaking capacity, small size. And it can avoid mistripping of instant voltage and instant current.

The product meets the standards of GB16917.1 and IEC61009-1.

Model

RD M 1 LE - 32
 ↓ ↓ ↓ ↓ ↓
 ① ② ③ ④ ⑤

①	Company Code
②	Miniature Circuit Breaker
③	Design Number
④	Electronic Type Earth Leakage Circuit Breaker
⑤	Frame Class Rated Current

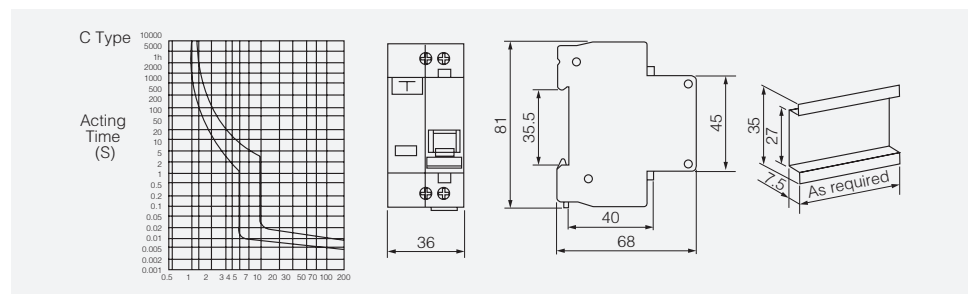
Main Technical Parameters

- Phase wire + neutral wire + leakage+overload (protection);
- Rated Current:6, 10, 16, 20, 25, 32A;
- Rated Voltage:230V, 50Hz;
- Breaking Capacity:4500A;
- Leakage Acting Current: 30mA, AC Type;
- The product meets the standards of:IEC61009-1, GB16917.1;
- Tripping Characteristics:C Type 5s to 10s In Tripping
D Type 10s to 14s In Tripping;
- Wiring: Below 10 mm² hard wire;
- Width: 36mm (4 times the modulus);
- The tripping indicator is in the front of device;

Tripping Characteristics Table

Test Current (A)	Rated Current (A)	Conventional Time	Expected Result	Initial Status	Remarks
1.13In	Value	t≤1h	Not Tripping	Cold Status	
1.45In	Value	t<1h	Tripping	Thermal Status	The Current is rising within 5s
2.55In	Value	1<t<60s	Tripping	Cold Status	The power supply is turned on by closing the auxiliary switch
5In, 10In	Value	t≤0.1s	Not Tripping	Cold Status	The power supply is turned on by closing the auxiliary switch
10In, 20In	Value	t<0.1s	Tripping	Cold Status	The power supply is turned on by closing the auxiliary switch

Acting Curve And Overall Mounting Dimensions



RDM7-100 Series

Application



RDM7-100(NC, DZ47-100) series circuit breaker is good shape, light weight, reliable performance, high breaking capacity, quick tripping, rail installation and long life span. It is mainly used in AC 50Hz/60Hz single-pole 230V, two poles, three poles and four poles 400V for overload and short-circuit protection and also can be used for infrequent switch on-off the device and lighting under normal conditions.

The product meets the standards of GB14048.2 and IEC60947-2.

Model

RD M 7 - 100 / □

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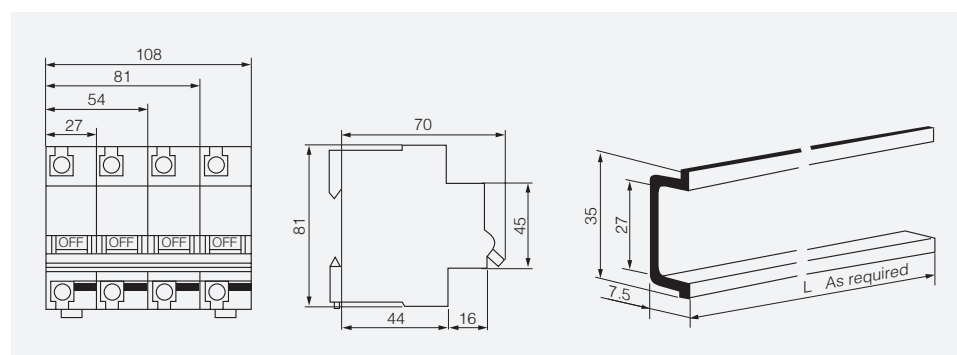
①	Company Code
②	Miniature Circuit Breaker
③	Design Number
④	Frame Class Rated Current
⑤	Number of Pole

Main Technical Parameters



Number of Pole	1, 2, 3, 4
Rated Frequency (Hz)	50, 60
Frame Class Rated Current (A)	100
Rated Voltage (V)	230/400
Rated Current (A)	63, 80, 100
Rated Breaking Capacity (KA)	10

Overall And Mounting Dimensions (mm)



RDM7LE-100 Series

Application



RDM7LE-100(NCLE, DZ47LE-100) circuit breaker is mainly used in AC 50Hz/60Hz rated voltage up to 4000V, rated current up to 100A for leakage, overload and short-circuit protection. And it can add the over voltage and under voltage excitation functions.

The product meets the standards of GB14048.2 and IEC60947-2.

Model

RD M 7 LE - 100 / □ □
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 ① ② ③ ④ ⑤ ⑥ ⑦

①	Company Code
②	Miniature Circuit Breaker
③	Design Number
④	Special Code (Electronic Type Earth Leakage Circuit Breaker)
⑤	Frame Class Rated Current
⑥	Number of Pole
⑦	Use "N" for with neutral wire

Structure Feature

RDM7LE-100 leakage circuit breaker is made up of RDM7-100 high breaking capacity circuit breaker and leakage release. The leakage circuit breaker is current action electronic type earth leakage circuit breaker. It is mainly including the zero sequence current transformer, electrical board, leakage release and overload and short-circuit circuit breaker.

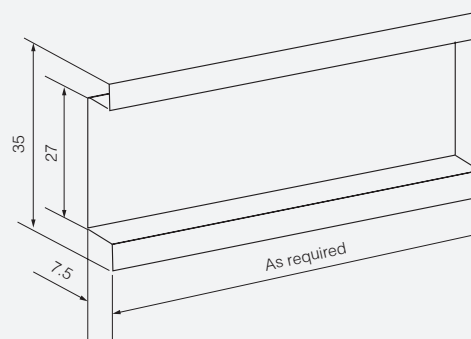
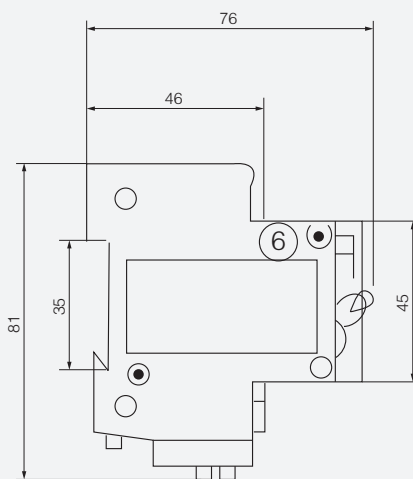
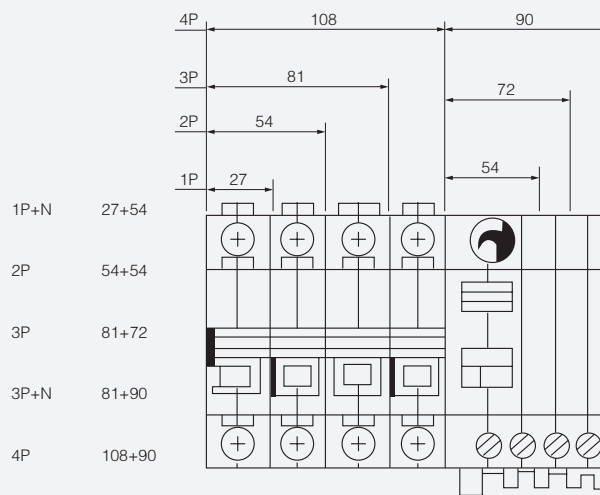
Main Technical Parameters

Frame Class Current Inm(A)	Number of Pole	Neutral Wire	Rated Current In(A)	Rated Short-Circuit Capacity			Rated leakage operating current I _{Δn} (mA)	Rated leakage non-operating current I _{Δno} (mA)	Rated leakage operating time (s)	Tripping Type
				Voltage (V)	Breaking Capacity I _{cn}	cos (Φ)				
100	1	N	63 80	230	10000	0.5	30	15	<0.1	C, D
100	2			230	10000	0.5	30	15	<0.1	C, D
100	3			400	10000	0.5	30	15	<0.1	C, D
100	3	N		400	10000	0.5	30	15	<0.1	C, D
100	4			400	10000	0.5	30	15	<0.1	C, D
100	1	N	100	230	10000	0.5	30	15	<0.1	C, D
100	2			230	10000	0.5	30	15	<0.1	C, D
100	3			400	10000	0.5	30	15	<0.1	C, D
100	3	N		400	10000	0.5	30	15	<0.1	C, D
100	4			400	10000	0.5	30	15	<0.1	C, D

• Rated residual operating current Wiring with terminal and the hard wire below 35mm²

RDM7LE-100 Series

Overall And Mounting Dimensions (mm)



HL30-100 Series Disconnecter Switch

Application



HL30-100 Disconnecter switch is mainly used in AC 50Hz/60Hz, rated voltage not more than 400V in the power distribution and control loop. It is mainly as the main switch in the end of electrical appliances, also as a line conversion.

The product meets the standards of GB14048.3 and IEC60947-3.

Model

HL 30-100 / □
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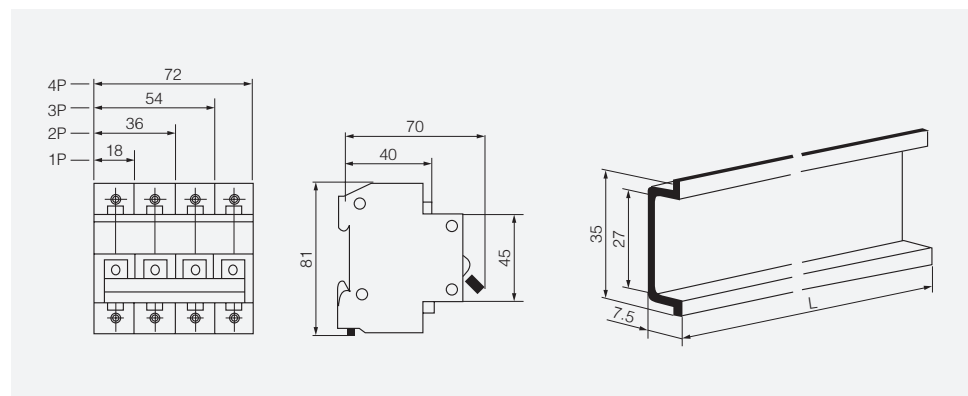
①	Company Code
②	Design Number
③	Frame Class Rated Current
④	Number of Pole

Main Technical Parameters

Rated Voltage (V)	230/400
Rated Current (A)	32, 40, 50, 63, 80, 100
Rated making and breaking capacity	1.05U _e , 3I _e cosΦ=0.65
Rated short-time withstand current (A)	12I _e , t=1s
Rated short-time making capacity	20I _e , t≥0.1s cosΦ=0.9
Rated short circuit current (kA)	20

- Disconnecter Switch number of pole: single pole, two poles, three poles and four poles;
- The disconnecter switch is insert-in installation (It can be installed on the Din rail);
- Power Frequency Withstand Voltage: After the heat resistance test, it can withstand 2500V power frequency withstand voltage test 1 min without flashover and puncture;
- Electro-Mechanical life : Mechanical life is 10, 000 times, Electrical life is 6, 000 times.

Overall And Mounting Dimensions (mm)



DZ47F-63 Series

Application



DZ47F-63 series miniature circuit breaker is mainly used in AC 50Hz/60Hz single-pole 230V/400V, rated current up to 63A for overload and short-circuit protection and also can be used for infrequent switch on-off the device and lighting under normal conditions. It can work well with prepayment meter, and reduce the electric power loss.

The product meets the standards of GB10963.1 and IEC60898-1.

Model

DZ 47 F - 63 - / □

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 ① ② ③ ④ ⑤

①	Company Code
②	Design Number
③	Derived Code:F-shunt G-over-voltage N-under-voltage
④	Frame Class Rated Current
⑤	Number of Pole

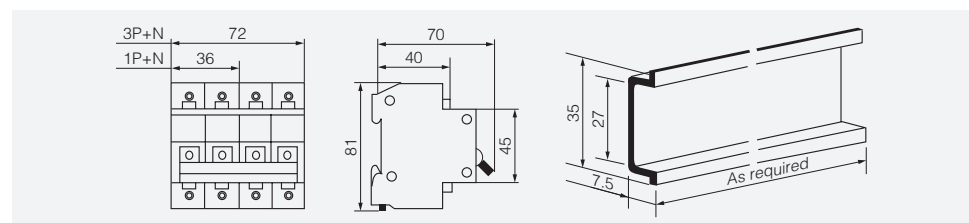
Main Technical Parameters



Rated Current	Number Of Pole(P)	Rated Voltage(V)	Breaking Capacity(IA)	Instantaneous release type	Instantaneous protective current range
1, 2, 3, 4, 6, 10,16, 20,25, 32,40, 50, 63	1P+N	230/400	4000	B	$3I_n < I \leq 5I_n$
				C	$5I_n < I \leq 10I_n$
	3P+N		4000	D	$10I_n < I \leq 20I_n$
				B	$3I_n < I \leq 5I_n$
			C	$5I_n < I \leq 10I_n$	
			D	$10I_n < I \leq 20I_n$	

release type	Rated Current I_n A	Initial Status	test current	Conventional time	expected result	Remarks
B, C, D	value	cold Status	$1.13I_n$	$t \leq 1h$	Not-tripping	
B, C, D	value	thermal Status	$1.45I_n$	$t < 1h$	tripping	The Current is rising within 5s
B, C, D	≤ 32	cold Status	$2.55I_n$	$1s < t < 60s$	tripping	
	> 32	cold Status	$2.55I_n$	$1s < t < 120s$	tripping	
B	value	cold Status	$3I_n$	$t \leq 0.1s$	not-tripping	The power supply is turned on by closing the auxiliariy switch
C			$5I_n$			
D			$10I_n$			
B	value	cold Status	$5I_n$	$t < 0.1s$	tripping	The power supply is turned on by closing the auxiliariy switch
C			$10I_n$			
D			$20I_n$			

Overall And Mounting Dimensions (mm)



Mini Circuit Breaker

DZ47-63 Series Auxiliary Switch



OF Auxiliary Contact

Application

- To be mounted on the left side of the MCBs/RCBOs
- ON/OFF Auxiliary contact (OF)
- It shows the circuit breaker "ON" or "OFF" positions.



MX+OF Shunt Release

Application

- To be mounted on the right side of the MCBs/RCBOs. Meanwhile it have NO and NC contacts
- Remote opening of the device when a voltage is applied.



SD Alarm Auxiliary Contact

Application

- To be mounted on the left side of the MCBs/RCBOs
- It shows the circuit breaker off state under tripping condition.



SD Alarm Auxiliary Contact

Application

- To be mounted on the left side of the MCBs/RCBOs
- It shows the circuit breaker off state under tripping condition.



MG Over-Voltage Release

Application

- To be mounted on the right side of the MCBs/RCBOs
- Protection of the load in the event of a voltage increased.



DZ47LE+MX Shunt Release

Application

- To be mounted on the right side of the MCBs/RCBOs. Meanwhile it have NO and NC contacts
- Remote opening of the device when a voltage is applied. And it have leakage protective function.

Main Technical Parameters

Model	OF		SD		MX+OF		MN	MG
	415V~	125V-	415V~	125V-	24V-	230V~		
Working voltage	415V~	125V-	415V~	125V-	24V-	230V~	170V±5%	280V±5%
working current	3A	1A	3A	1A	6A	6A	0.1A	0.1A
working indication	ON OFF	ON OFF	ON OFF	ON OFF	ON OFF	ON OFF		
Environment	Moisture resistance: 2 types (Ambient temperature 55°C Relative humidity 95%)							

Note:OF, SD can be fitted with MX-OF, MN, MG.

Overall And Mounting Dimensions (mm)

