

Product Description

Product data

Product model	EXB3-40	EXB3-63	EXB3-63H
			
Standards	GB/T 10963.1、IEC 60898-1	GB/T 10963.1、IEC 60898-1	GB/T 10963.1、IEC 60898-1
Number of poles	1P+N	1P、1P+N、2P、3P、3P+N、4P	1P、1P+N、2P、3P、3P+N、4P
Rated current (A)	6 ~ 40	1 ~ 63	1 ~ 63
Rated voltage (V)	AC230	AC230 (1P、1P+N) AC400 (2P、3P、3P+N、4P)	AC230 (1P、1P+N) AC230/400 (2P) AC400 (3P、3P+N、4P)
Rated frequency(Hz)	50/60	50/60	50/60
Residual current type	-	-	-
Rated residual operating current IΔn(mA)	-	-	-
Rated short-circuit breaking capacity Icu(A)	4500	6000	10000
Operating short-circuit breaking capacity Ics(A)	4500	6000	7500
Rated short-time withstand current Icw(kA)	-	-	-
Rated short-circuit making capacity Icm(kA)	-	-	-
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4	6	6
Dielectric testing voltage(V)	(power frequency 1min) 2000	(power frequency 1min) 2000	(power frequency 1min) 2000
Mechanical life (times)	20000	20000	20000
Electrical life (times)	10000	10000	10000
Thermal magnetic tripping characteristics	B (3In ~ 5In)	■	■
	C (5In ~ 10In)	■	■
	D (10In ~ 20In)	■	■
	C (6.4In ~ 9.6In)		
	Regular (8In ~ 12In)		
	D (9.6In ~ 14.4In)		
Anti-humidity (GB/T2423.4)	28 periodic cycles , RH: 90-96% at 55°C RH: 95-100% at 25°C	28 periodic cycles , RH: 90-96% at 55°C RH: 95-100% at 25°C	28 periodic cycles , RH: 90-96% at 55°C RH: 95-100% at 25°C
Benchmark ambient temperature (°C)	30	30	30
Operating ambient temperature (°C)	-35 ~ +70	-35 ~ +70	-35 ~ +70
Storage ambient temperature (°C)	-35 ~ +85	-35 ~ +85	-35 ~ +85
Applicable altitude height (m)	≤2000m	≤2000m	≤2000m
Max. wiring capacity (mm ²)	10	25	25
Max. ultimate torque (N·m)	1.5	2	2
Incoming method	Top or bottom enter	Top or bottom enter	Top or bottom enter
Mounting method	TH35-7.5 standard rail mounting	TH35-7.5 standard rail mounting	TH35-7.5 standard rail mounting
Pollution degree	2	2	2
Protection degree	Direct mounting	IP20	IP20
	Mounted in the distribution box	IP40	IP40
Accessories that can be assembled	OF auxiliary contact SD alarm contact MX+OF shunt release MN under-voltage release MV over-voltage release MVMN over/under-voltage release MNs no-voltage release	OF auxiliary contact SD alarm contact MX+OF shunt release MN under-voltage release MV over-voltage release MVMN over/under-voltage release MNs no-voltage release	OF auxiliary contact SD alarm contact MX+OF shunt release MN under-voltage release MV over-voltage release MVMN over/under-voltage release MNs no-voltage release

Product Description

Product description and selection

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The miniature circuit breakers can be used in circuit with AC 50Hz/60Hz, rated voltage up to 400V, and rated current up to 125A, to offer overload and short-circuit protection for construction power distribution, similar power line facilities and electrical equipment.

The residual current circuit breakers can be used in circuit with AC 50Hz/60Hz, rated voltage up to 400V, and rated current up to 125A, to offer residual current, overload and short circuit protections. They can also be used for direct or indirect personal protection against electric shock or for protection against fire hazards due to ground fault currents.

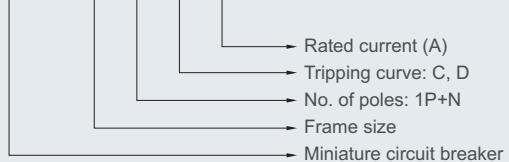
The disconnecting switches can be used in circuit with AC 50Hz/60Hz, rated voltage up to 400V, and rated current up to 125A, to offer isolating and functional breaking for terminal power distribution.

Product selection



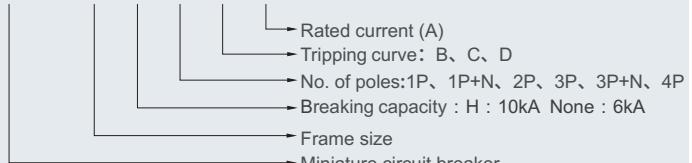
Product model description (40A Frame Size Miniature Circuit Breaker)

EXB3 - 40 1N C 16



Product model description (63A Frame Size Miniature Circuit Breaker)

EXB3 - 63 (H) 1P C 16



EXB3 Miniature Circuit Breakers

Functions and Features

In accordance with GB/T 10963.1 and IEC60898-1

The EXB3-40 miniature circuit breakers functions:

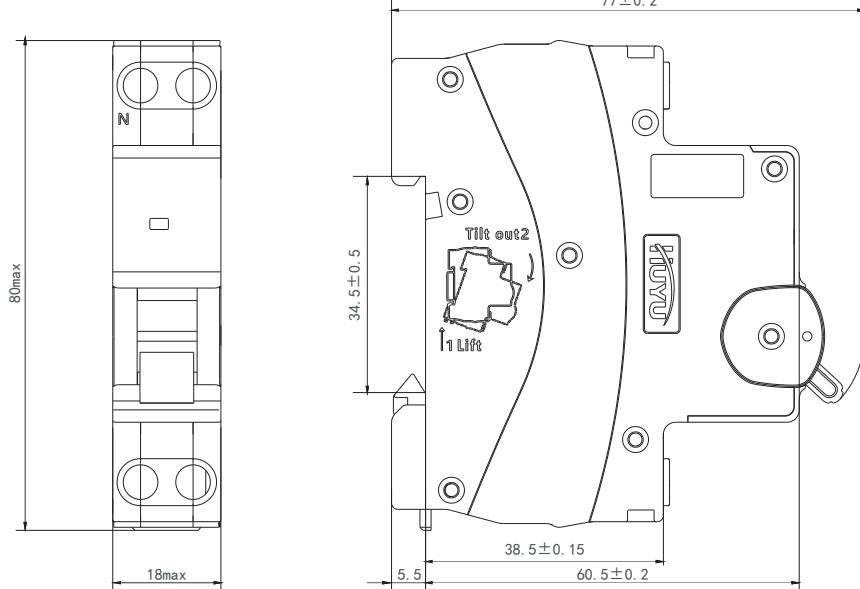
- Overload protection
- Short-circuit protection
- Isolation function

Technical data



Product model	EXB3-40
No. of poles	1P+N
Rated current	6A、10A、 16A、20A、25A、32A、40A
Rated voltage	AC230V
Rated operating frequency	50Hz/60Hz
Rated impulse withstand voltage	4kV
Rated short-circuit breaking capacity	4500A
Operating short-circuit breaking capacity	4500A
Instantaneous tripping type	C、D
Mechanical life(times)	20000
Electrical life(times)	10000

Outlines and dimensions

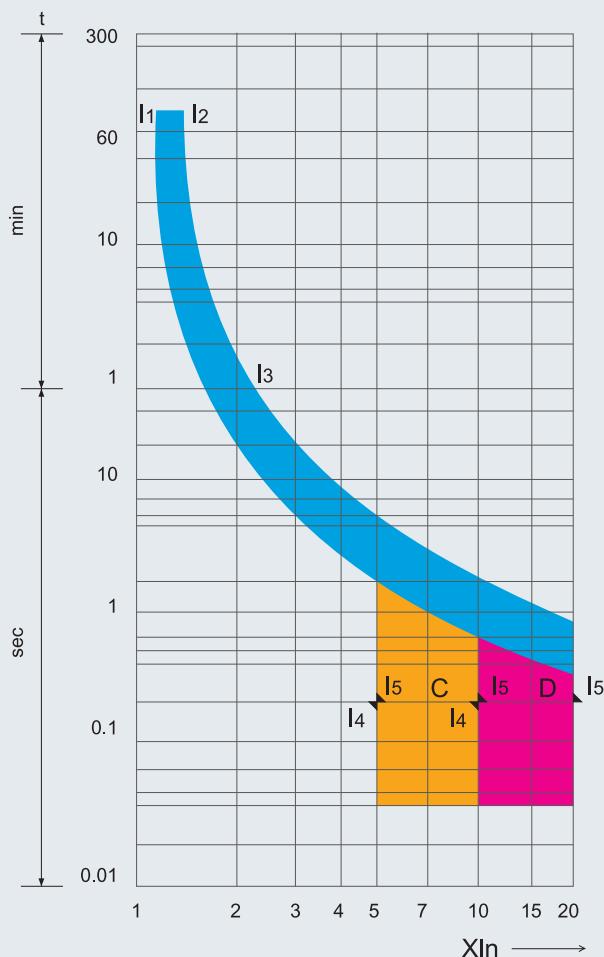


Tripping characteristics

- Tripping characteristics of EXB3-40

Release type		C	D	Start state	Tripping time	Expected outcome
Thermal tripping	I1	1.13In		Cold state	$t \leq 1h$	No tripping
Thermal tripping	I2	1.45In		Following the above test	$t < 1h$	Tripping
Magnetic tripping	I4	5In	10In	Normal temperature	$t \leq 0.1s$	No tripping
Magnetic tripping	I5	10In		Normal temperature	$t < 0.1s$	Tripping

- Tripping characteristic curves



Temperature correction table

- Temperature correction table of EXB3-40

Rated current A	Rated current correction value A										
	-35°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
6	7.68	7.5	7.08	6.78	6.48	6.18	6	5.76	5.46	5.22	4.92
10	12.7	12.4	11.9	11.3	10.7	10.2	10	9.6	9.1	8.7	8.2
16	20.32	19.84	19.04	18.08	17.12	16.32	16	15.36	14.56	13.92	13.12
20	25.4	24.8	23.8	22.6	21.4	20.4	20	19.2	18.2	17.4	16.4
25	31.75	31	29.75	28.25	26.75	25.5	25	24	22.75	21.75	20.5
32	40.64	39.68	60.8	36.16	34.56	33.28	32	31.04	29.44	28.16	26.56
40	50.8	49.6	76	45.2	43.2	41.6	40	38.8	36.8	35.2	33.2

- Temperature correction table of EXB3-63

Rated current A	Rated current correction value A										
	-35°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
1	1.28	1.25	1.18	1.13	1.08	1.03	1	0.96	0.91	0.87	0.82
2	2.56	2.5	2.36	2.26	2.16	2.06	2	1.92	1.82	1.74	1.64
3	3.84	3.75	3.54	3.39	3.24	3.09	3	2.88	2.73	2.61	2.46
4	5.12	5	4.72	4.52	4.32	4.12	4	3.84	3.64	3.48	3.28
5	6.4	6.25	5.9	5.65	5.4	5.15	5	4.8	4.55	4.35	4.1
6	7.68	7.5	7.08	6.78	6.48	6.18	6	5.76	5.46	5.22	4.92
10	12.7	12.4	11.9	11.3	10.7	10.2	10	9.6	9.1	8.7	8.2
16	20.32	19.84	19.04	18.08	17.12	16.32	16	15.36	14.56	13.92	13.12
20	25.4	24.8	23.8	22.6	21.4	20.4	20	19.2	18.2	17.4	16.4
25	31.75	31	29.75	28.25	26.75	25.5	25	24	22.75	21.75	20.5
32	40.64	39.68	60.8	36.16	34.56	33.28	32	31.04	29.44	28.16	26.56
40	50.8	49.6	76	45.2	43.2	41.6	40	38.8	36.8	35.2	33.2
50	64	62.5	59	56.5	54	51.5	50	48	45.5	43.5	41
63	80.64	78.75	74.34	71.19	68.04	64.89	63	60.48	57.33	54.81	51.66

- Temperature correction table of EXB3-63H

Rated current A	Rated current correction value A										
	-35°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
1-6	1.28	1.25	1.18	1.13	1.08	1.03	1	0.96	0.91	0.87	0.82
10-25	1.27	1.24	1.19	1.13	1.07	1.02	1	0.96	0.91	0.87	0.82
32-40	1.27	1.24	1.19	1.13	1.08	1.04	1	0.97	0.92	0.88	0.83
50-63	1.28	1.25	1.18	1.13	1.08	1.03	1	0.96	0.91	0.87	0.82

- Temperature correction table of EXB3-125

Rated current A	Rated current correction value A										
	-35°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
63	78.6	76.3	73.8	71.3	68.6	65.9	63	60	56.8	53.5	49.9
80	98.4	95.6	92.7	89.7	86.6	83.4	80	76.5	72.8	69	64.9
100	124.5	120.7	116.9	112.9	108.8	104.5	100	95.3	90.4	85.2	79.6
125	157	152.2	147.1	141.9	136.5	130.9	125	118.8	112.3	105.4	98