HUANYU ELECTRIC

MCB

PRODUCT CATALOG

EXPLORER

HUANYU HIGH TECH CO.,LTD.
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Miniature Circuit Breakers

Functions and Features

Product Overview of circuit Breakers

Model No.	Explore Series		
	EXB3-63(H)	EXB3-125(H)	EXB3LE-63(H)
			
Product type	MCB	MCB	RCBO
Standards	IEC 60898-1	IEC 60947-2	IEC 61009-1
Number of poles	1P、1P+N、2P、3P、3P+N、4P	1P、1P+N、2P、3P、3P+N、4P	1P+N、2P、3P、3P+N、4P
Rated current (A)	1~63	63～125	6~63
Rated voltage (V)	AC230(1P、1P+N) AC400(2P、3P、3P+N、4P)	AC230(1P、1P+N) AC400(2P、3P、3P+N、4P)	AC220/230/240(1P+N、2P) AC380/400/415(3P、3P+N、4P)
Rated frequency(Hz)	50/60	50/60	50/60
Residual current type	-	-	Type AC/A
Rated residual operating current I△n (mA)	-	-	30、50、75、100、150、200、300
Rated residual current making & breaking capacity I△m(A)	-	-	630
Rated short-circuit breaking capacity Icu (A)	6000,10000(Type H)	6000,15000(Type H)	6000,10000(Type H)
Operating short-circuit breaking capacity Ics (A)	6000,7500(Type H)	6000,7500(Type H)	6000,7500(Type H)
Insulation voltage Ui (V)	500	500	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	6	4	4
Tripping curve	B,C,D	C,D	B,C,D
Product detail page	P3-5	P6-8	P9-11

Miniature Circuit Breakers

Functions and Features

Explore Series			
EXB3LE-125	EXB3LY-63	EXB3L1-100	EXH3-125
			
RCBO	RCBO	RCCB	Isolator Switch
IEC 60947.2	IEC 61009-1	IEC 61008-1	IEC 60947-3
1P+N、2P、3P、3P+N、4P	1P+N、2P	2P、4P	1P、2P、3P、4P
63~125	6~63	16～100	20~125
AC230（1P+N、2P） AC400（3P、3P+N、4P）	AC230	AC240(2P) AC415(4P)	AC220V/230V/240V(1P)， AC230V(2P)， AC380V/400V/415V(2P、3P、4P)
50/60	50/60	50/60	50/60
Type AC/A	Type AC/A	Type AC/A	-
30、50、75、100、150、200、300	30、50	10(16A、25A、32A、40A) 30、50、100、300	-
2500	2000	1000	-
10000	6000	-	-
7500	6000	-	-
500	500	500	500
4	4	4	6
C,D	B,C,D	-	-
P12-14	P15-17	P18-20	P21-22

Miniature Circuit Breakers

Functions and Features

EXB3-63(H) Series, Miniature Circuit Breaker
Standard: IEC60898-1
Certifications：CB、CE、CCC、RoHS、KEMA

Product Overview

- Overload protection - Short-circuit protection - Isolation function

Model description

EXB3	-	63	(H)	1P	C	16
Model number		Frame size	Breaking capacity	Number of Poles	Tripping curve	Rated current（A）
EXB3		63	H：10kA None：6kA	1P、1P+N 2P、3P 3P+N、4P	B C D	1~63

Main technical data

Product model	EXB3-63	EXB3-63H
Standard	IEC 60898-1	
Certificate	CB、CE、CCC、RoHS	CE、CB、CCC、KEMA
Electrical characteristics		
Number of poles	1P、1P+N、2P、3P、3P+N、4P	1P、1P+N、2P、3P、3P+N、4P
Rated current(A)	1、2、3、4、6、10、16、20、25、32、40、50、63	
Rated voltage (V)	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
Rated short-circuit breaking capacity Icu(A)	6000	10000
Operating short-circuit breaking capacity Ics(A)	6000	7500
Insulation voltage Ui (V)	500	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	6	6
Dielectric testing voltage (V)	(power frequency 1min) 2000	(power frequency 1min) 2000
Tripping curve	B、C、D	B、C、D
Electrical life (times)	10000	10000
Mechanical life (times)	20000	20000

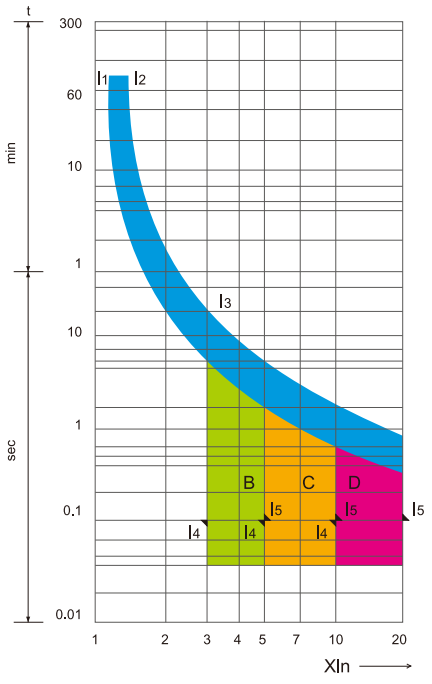
Normal operation conditions and installation features			
Anti-humidity		28 periodic cycles , RH:90-96% at 55°C RH:95-100% at 25°C	28 periodic cycles, RH:90-96% at 55°C RH:95-100% at 25°C
Benchmark ambient temperature(°C)		30	30
Operating ambient temperature(°C)		-35~+70	-35~+70
Storage ambient temperature(°C)		-35~+85	-35~+85
Applicable altitude height(m)		⩽2000m	⩽2000m
Max. wiring capacity (mm^2)		25	25
Max. ultimate torque （N ▪ m）		2	2
Incoming method		Top or bottom enter	Top or bottom enter
Mounting method		TH35-7.5 standard rail mounting	TH35-7.5 standard rail mounting
Pollution degree		2	2
Protection degree	Direct mounting	IP20	IP20
	Mounted in the distribution box	IP40	IP40

Tripping characteristics

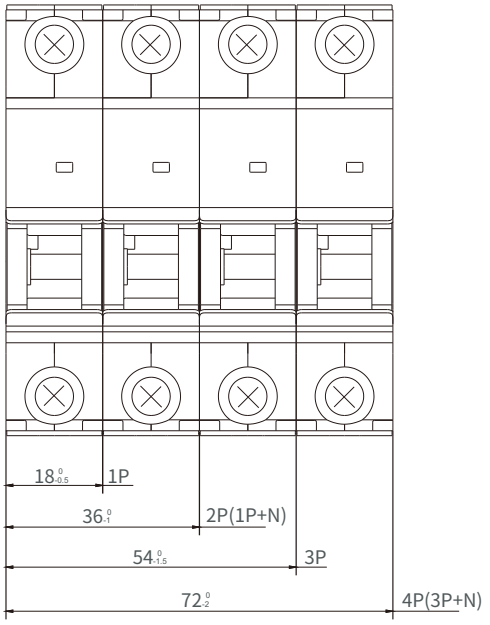
▪ Tripping characteristics

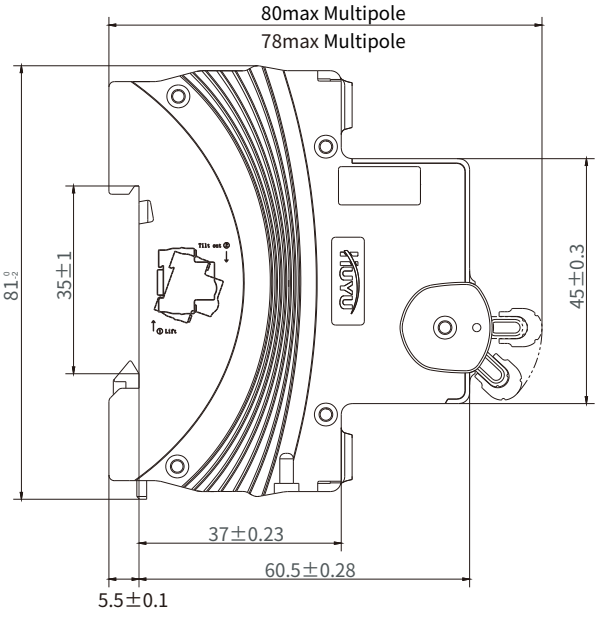
Release type		B	C	D	Start state	Tripping time	Expected outcome
Thermal tripping	I1	1.13In			Cold state	t⩽1h	No tripping
Thermal tripping	I2	1.45In			Following the above test	t＜1h	Tripping
Magnetic tripping	I4	3In	5In	10In	Cold state	t⩽0.1s	No tripping
Magnetic tripping	I5	5In	10In	20In	Cold state	t＜0.1s	Tripping

▪ Tripping characteristic curve



Outlines and dimensions





Miniature Circuit Breakers

Functions and Features

EXB3-125(H) Series, Miniature Circuit Breaker
Standard: IEC 60947-2
Certifications：CB、CE、CCC、TUV、RoHS

Product Overview

- Overload protection - Short-circuit protection - Isolation function

Model description

EXB3	-	125	(H)	1P	C	16
Model number		Frame size	Breaking capacity	Number of Poles	Tripping curve	Rated current（A）
EXB3		125	H：10kA None：6kA	1P、1P+N 2P、3P 3P+N、4P	C D	63～125

Main technical data

Product model	EXB3-125
Standard	IEC 60947-2
Certificate	CB、CE、CCC、TUV、RoHS
Electrical characteristics	
Number of poles	1P、1P+N、2P、3P、3P+N、4P
Rated current(A)	63、80、100、125
Rated voltage (V)	AC230(1P、1P+N) AC400(2P、3P、3P+N、4P)
Rated frequency(Hz)	50/60
Rated short-circuit breaking capacity Icu(A)	6000、15000(Type H)
Operating short-circuit breaking capacity Ics(A)	6000、7500(Type H)
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4
Dielect ric testing voltage (V)	(power frequency 1min) 2000
Tripping curve	C、D
Electrical life (times)	6000(In≤100A),4000(In>100A)
Mechanical life (times)	20000

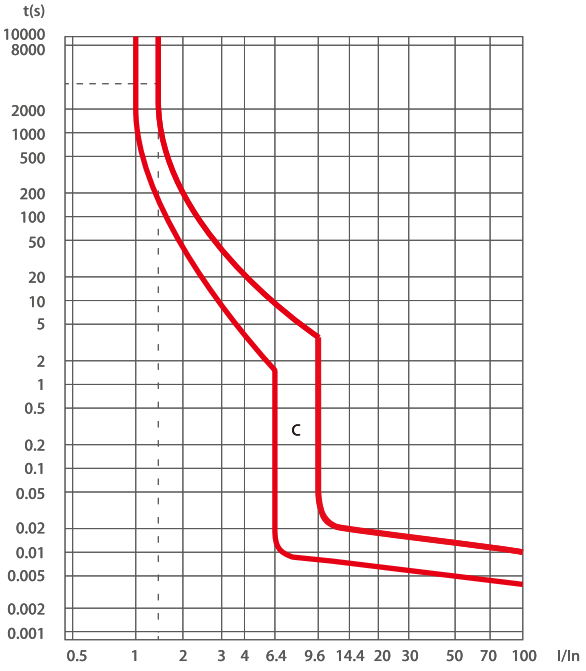
Normal operation conditions and installation features		
Anti-humidity		28 periodic cycles , RH:90-96%at 55°C RH:95-100%at 25°C
Benchmark ambient temperature(°C)		30
Operating ambient temperature(°C)		-35~+70
Storage ambient temperature(°C)		-35~+85
Applicable altitude height(m)		⩽2000m
Max. wiring capacity (mm^2)		50
Max. ultimate torque （N ▪ m）		3.5
Incoming method		Top or bottom enter
Mounting method		TH35-7.5 standard rail mounting
Pollution degree		3
Protection degree	Direct mounting	IP20
	Mounted in the distribution box	IP40

Tripping characteristics

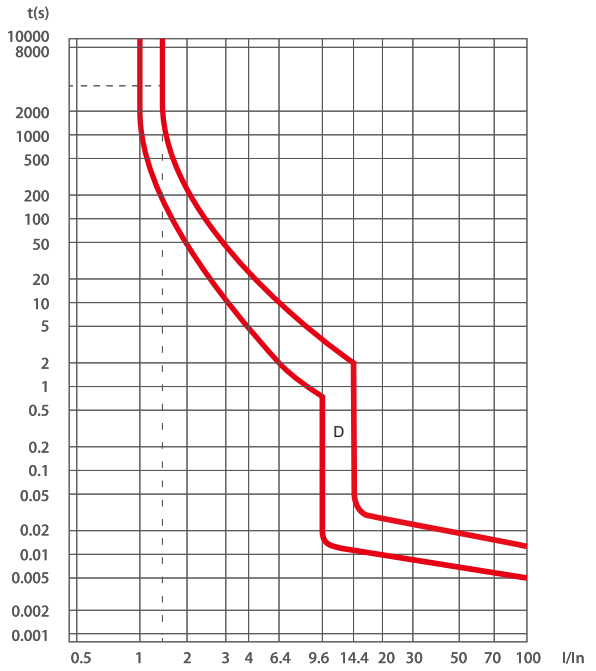
▪ Tripping characteristics

Over-current release type	Magnetic tripping In(A)	Test current (A)	Tripping time	Start state	Expected outcome	Testing ambient temperature
Thermal tripping	⩽63	1.05In	⩽1h	Cold state	No tripping	30°C±2°C
	＞63		⩽2h			
	⩽63	1.30In	＜1h	Thermal state	Tripping	
	＞63		＜2h			
Magnetic tripping	63、80、 100、125	6.4In	⩽0.2s	Cold state	No tripping	Normal temperature
		9.6In	＜0.2s		Tripping	
		8In	⩽0.2s		No tripping	
		12In	＜0.2s		Tripping	
		9.6In	⩽0.2s		No tripping	
		14.4In	＜0.2s		Tripping	

▪ Tripping characteristic curve

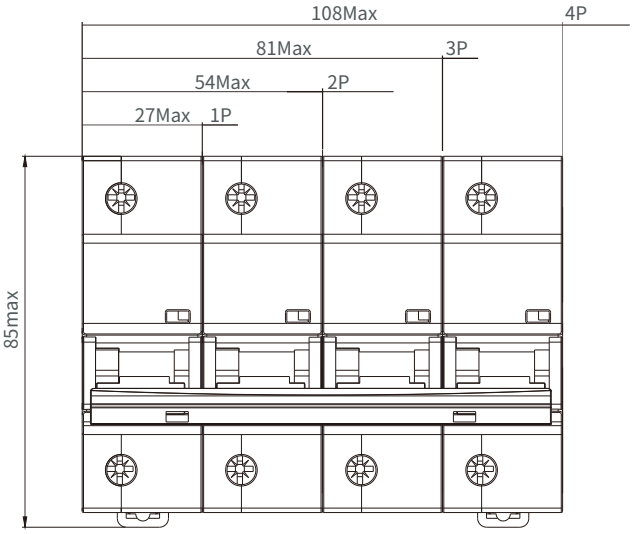


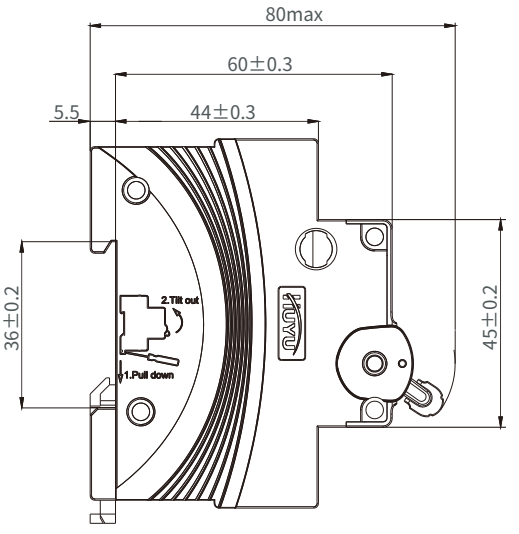
Type C thermal/electromagnetic tripping characteristic curve



Type D thermal/electromagnetic tripping characteristic curve

Outlines and dimensions





Miniature Circuit Breakers

Functions and Features

EXB3LE-63(H) Series
Residual Current Circuit Breaker with Overcurrent Protection
Standard: IEC 60947-2
Certifications：CB、CE、CCC、TUV、RoHS

Product Overview

- Overload protection
- Isolation function
- Short-circuit protection
- Earth leakage current production

Model description

EXB3LE	- 63	(H)	1P	C	16	30mA
Model number	Frame size	Breaking capacity	Number of Poles	Tripping curve	Rated current (A)	Rated residual operating current (mA)
EXB3LE	63	H：10kA None：6kA	1P+N 2P、3P 3P+N、4P	C D	6~63	30、50、75、100 150、200、300 (only 30mA for EXB3NLG)

Main technical data

Product model	EXB3LE-63
Standard	IEC 61009-1
Certificate	CB、CE、CCC
Electrical characteristics	
Number of poles	1P+N、2P、3P、3P+N、4P (1P+N、2P for EXB3NLG)
Rated current(A)	6、10、16、20、25、32、40、50、63
Rated voltage (V)	AC220/230/240(1P+N、2P) AC380/400/415(3P、3P+N、4P)
Rated frequency(Hz)	50/60
Residual current type	Type AC/A
Rated residual operating current IΔn(mA)	30、50、75、100,150、200、300(only 30mA for EXB3NLG)
Rated short-circuit breaking capacity Icu(A)	6000,10000(Type H)
Operating short-circuit breaking capacity Ics(A)	6000,7500(Type H)
Rated residual current making & breaking capacity I△m(A)	630
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4
Dielectric testing voltage(V)	(power frequency 1min) 2000

Electrical characteristics		
Mechanical life (times)		20000
Electrical life (times)		10000
Tripping curve		B、C、D
Over-voltage protection range		(280±5%)V (for EXB3NLG)
Normal operation conditions and installation features		
Anti-humidity		28 periodic cycles , RH:90-96%at 55°C RH:95-100%at 25°C
Benchmark ambient temperature(°C)		30
Operating ambient temperature(°C)		-35~+70
Storage ambient temperature(°C)		-35~+85
Applicable altitude height(m)		⩽2000m
Max. wiring capacity (mm^2)		25
Max. ultimate torque （N ▪ m）		2
Incoming method		Top-in,Bottom-out
Mounting method		TH35-7.5 standard rail mounting
Pollution degree		2
Protection degree	Direct mounting	IP20
	Mounted in the distribution box	IP40

Tripping characteristics

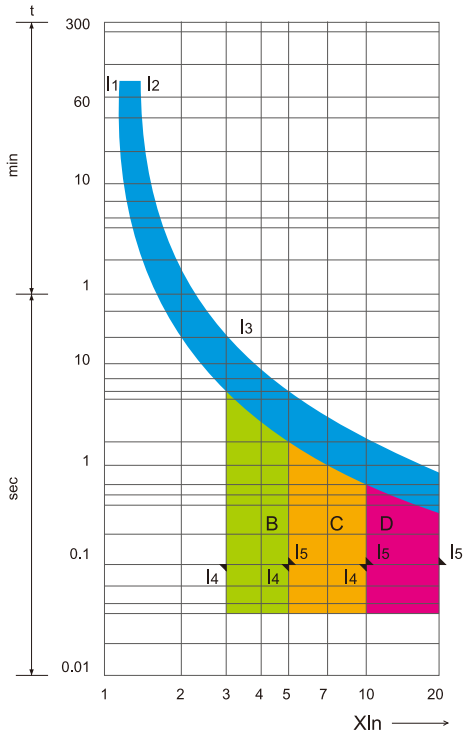
▪ Tripping characteristics

Release type		B	C	D	Start state	Tripping time	Expected outcome
Thermal tripping	I1	1.13In			Cold state	t⩽1h	No tripping
Thermal tripping	I2	1.45In			Following the above test	t＜1h	Tripping
Magnetic tripping	I4	3In	5In	10In	Cold state	t⩽0.1s	No tripping
Magnetic tripping	I5	5In	10In	20In	Cold state	t＜0.1s	Tripping

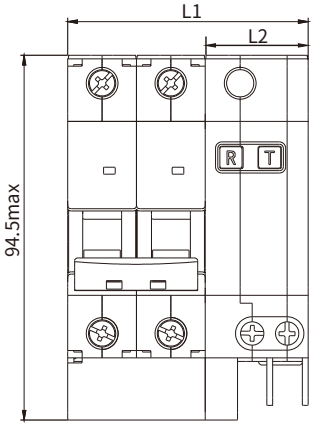
Miniature Circuit Breakers

Functions and Features

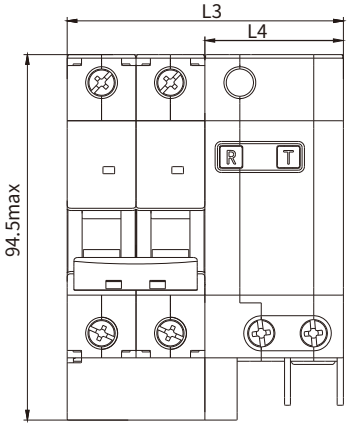
▪ Tripping characteristic curve



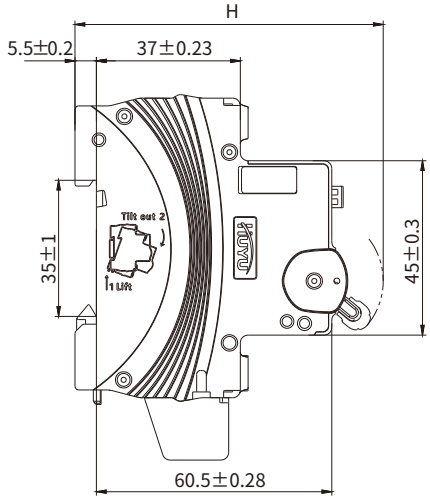
Outlines and dimensions



In＜32A



In＞40A



Rated Current	Width	1P+N	2P	3P	3P+N	4P
⩽32	L1(mm)	45 $^{0}_{-1.0}$	63 $^{0}_{-1.2}$	90 $^{0}_{-1.4}$	99 $^{0}_{-1.4}$	117 $^{0}_{-1.6}$
	L2(mm)	27 $^{0}_{-0.6}$	27 $^{0}_{-0.6}$	36 $^{0}_{-0.6}$	45 $^{0}_{-0.6}$	45 $^{0}_{-0.6}$
40、50、63	L3(mm)	54 $^{0}_{-1.0}$	72 $^{0}_{-1.2}$	103.5 $^{0}_{-1.4}$	117 $^{0}_{-1.4}$	135 $^{0}_{-1.6}$
	L4(mm)	36 $^{0}_{-0.6}$	36 $^{0}_{-0.6}$	49.5 $^{0}_{-0.6}$	63 $^{0}_{-0.6}$	63 $^{0}_{-0.6}$
H(mm)		78 $^{0}_{-1.0}$	80 $^{0}_{-1.0}$	80 $^{0}_{-1.0}$	80 $^{0}_{-1.0}$	80 $^{0}_{-1.0}$

Miniature Circuit Breakers

Functions and Features

EXB3LE-125 Series
Residual Current Circuit Breaker with Overcurrent Protection
Standard: IEC 60947-2

Product Overview

- Overload protection
- Short-circuit protection
- Isolation function
- Earth leakage current protection

Model description

EXB3LE	-	125	1P	C	16	30mA
Model number		Frame size	Number of Poles	Tripping curve	Rated current（A）	Rated residual operating current (mA)
EXB3LE		125	1P+N 2P、3P 3P+N、4P	C D	63~125	30、50、75 100、150、200、300

Main technical data

Product model	EXB3LE-125
Standard	IEC 60947.2
Electrical characteristics	
Number of poles	1P+N、2P、3P、3P+N、4P
Rated current(A)	63、80、100、125
Rated voltage (V)	AC230（1P+N、2P） AC400（3P、3P+N、4P）
Rated frequency(Hz)	50/60
Residual current type	Type AC/A
Rated residual operating current IΔn(mA)	30、50、75、100、150、200、300
Rated short-circuit breaking capacity Icu(A)	10000
Operating short-circuit breaking capacity Ics(A)	7500
Rated residual current making & breaking capacity I△m(A)	2500
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4
Dielectric testing voltage(V)	(power frequency 1min) 2000

Miniature Circuit Breakers
Functions and Features

Electrical characteristics		
Mechanical life (times)		20000
Electrical life (times)		6000(In≤100A) , 4000 (In＞100A)
Tripping curve		C、D
Normal operation conditions and installation features		
Anti-humidity		28 periodic cycles , RH:90-96%at 55°C RH:95-100%at 25°C
Benchmark ambient temperature(°C)		30
Operating ambient temperature(°C)		-35~+70
Storage ambient temperature(°C)		-35~+85
Applicable altitude height(m)		≤2000m
Max. wiring capacity (mm^2)		50
Max. ultimate torque （N ▪ m）		3.5
Incoming method		Top-in,Bottom-out
Mounting method		TH35-7.5 standard rail mounting
Pollution degree		3
Protection degree	Direct mounting	IP20
	Mounted in the distribution box	IP40

Tripping characteristics

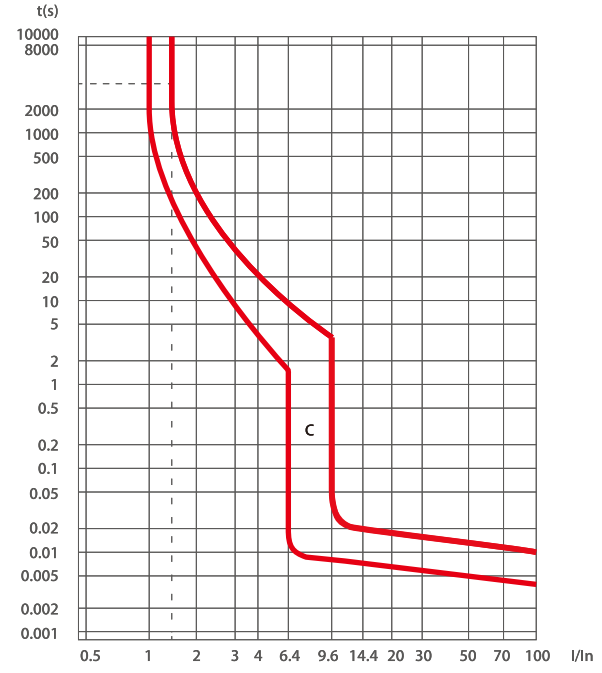
▪ Tripping characteristics

Over-current release type	Magnetic tripping In(A)	Test current (A)	Tripping time	Start state	Expected outcome	Testing ambient temperature
Thermal tripping	≤63	1.05In	≤1h	Cold state	No tripping	30°C±2°C
	＞63		≤2h			
	≤63	1.30In	＜1h	Thermal state	Tripping	
	＞63		＜2h			
Magnetic tripping	63、80、 100、125	6.4In	≤0.2s	Cold state	No tripping	Normal temperature
		9.6In	＜0.2s		Tripping	
		8In	≤0.2s		No tripping	
		12In	＜0.2s		Tripping	
		9.6In	≤0.2s		No tripping	
		14.4In	＜0.2s		Tripping	

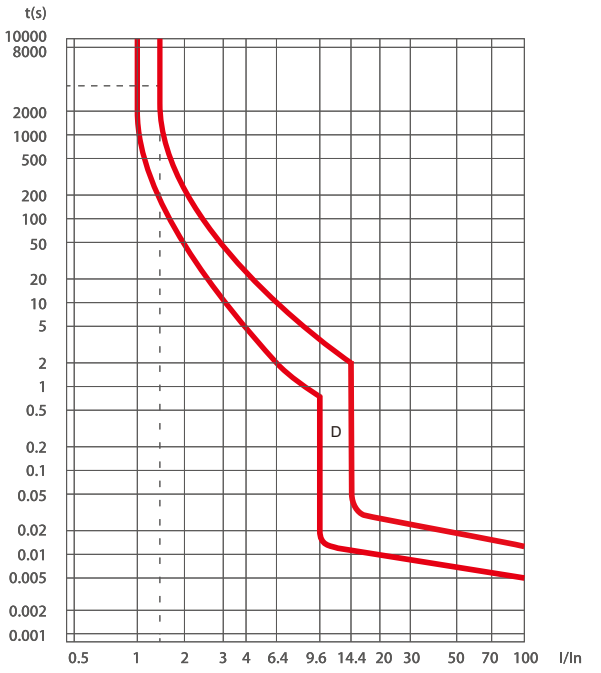
Miniature Circuit Breakers

Functions and Features

▪ Tripping characteristic curve

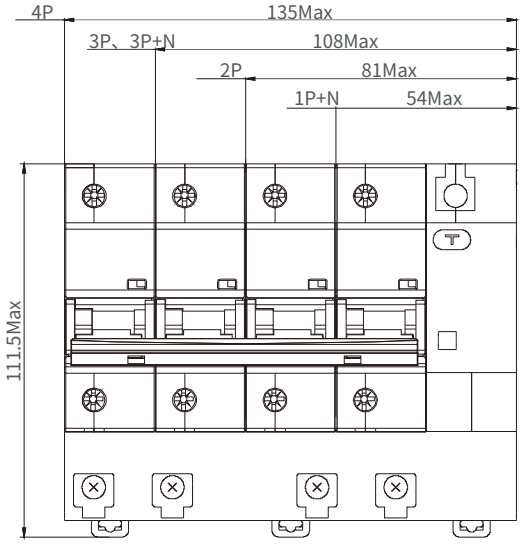


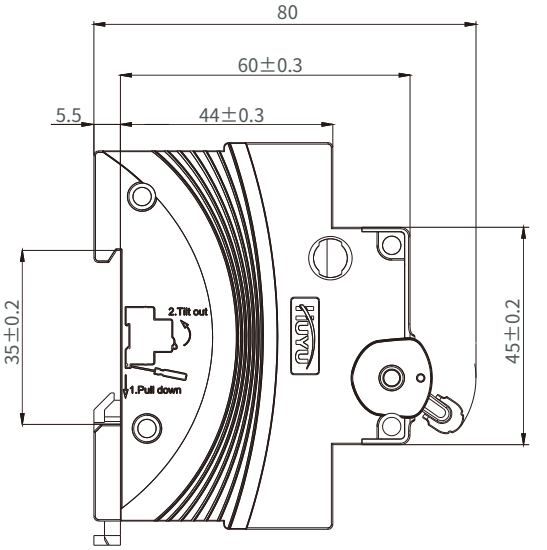
Type C thermal/electromagnetic tripping characteristic curve



Type D thermal/electromagnetic tripping characteristic curve

Outlines and dimensions





Miniature Circuit Breakers
Functions and Features

EXB3LY-63 Series
Residual Current Circuit Breaker with Overcurrent Protection
Standard: IEC 61009-1

Product Overview

- Overload protection
- Short-circuit protection
- Isolation function
- Earth leakage current protection

Model description

EXB3LY	-	63	W	/	C	16	30mA
↓		↓	↓		↓	↓	↓
Model number		Frame size	Function code		Tripping curve	Rated current (A)	Rated residual operating current (mA)
EXB3LY		63	W: N-pole through, no isolation function Y: Type S (delay type)		B C D	6~63	30 50

Main technical data

Product model	EXB3LY-63
Standard	IEC 61009-1
Electrical characteristics	
Number of poles	1P+N,2P
Rated current (A)	6、10、16、20、25、32、40、50、63
Rated voltage (V)	AC230V
Rated frequency(Hz)	50/60
Residual current type	Type AC/A
Rated residual operating current IΔn(mA)	30、50
Rated short-circuit breaking capacity Icu(A)	6000
Operating short-circuit breaking capacity Ics(A)	6000
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4
Dielectric testing voltage(V)	(power frequency 1min) 2000
Mechanical life (times)	20000
Electrical life (times)	10000
Tripping curve	B、C、D

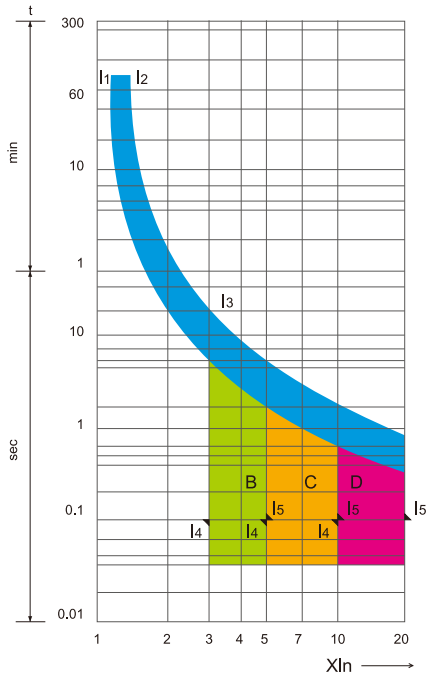
Normal operation conditions and installation features		
Anti-humidity		28 periodic cycles , RH:90-96%at 55°C RH:95-100%at 25°C
Benchmark ambient temperature(°C)		30
Operating ambient temperature(°C)		-35~+70
Storage ambient temperature(°C)		-35~+85
Applicable altitude height(m)		⩽2000m
Max. wiring capacity (mm^2)		25
Max. ultimate torque （N ▪ m）		2
Incoming method		Top-in,Bottom-out
Mounting method		TH35-7.5 standard rail mounting
Pollution degree		2
Protection degree	Direct mounting	IP20
	Mounted in the distribution box	IP40

Tripping characteristics

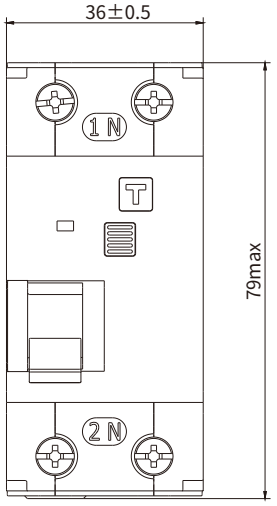
▪ Tripping characteristics

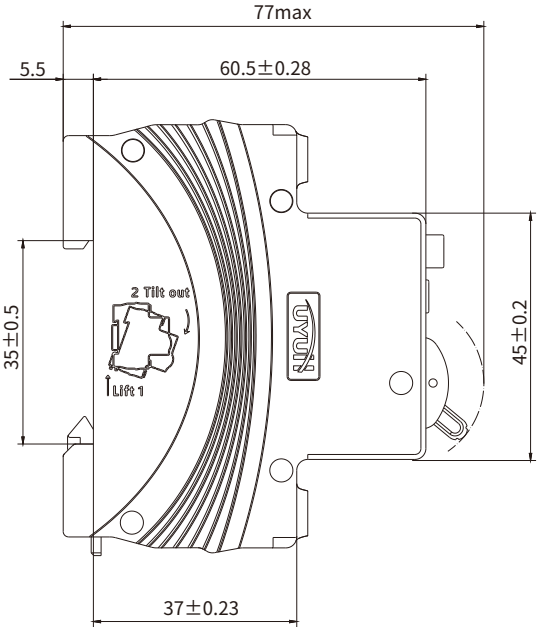
Release type		B	C	D	Start state	Tripping time	Expected outcome
Thermal tripping	I1	1.13In			Cold state	t⩽1h	No tripping
Thermal tripping	I2	1.45In			Following the above test	t＜1h	Tripping
Magnetic tripping	I4	3In	5In	10In	Cold state	t⩽0.1s	No tripping
Magnetic tripping	I5	5In	10In	20In	Cold state	t＜0.1s	Tripping

▪ Tripping characteristic curve



Outlines and dimensions





Miniature Circuit Breakers

Functions and Features

EXB3L1-100 Series,
Residual Current Circuit Breaker (magnetic)
Standard: IEC 61008-1
Certifications：CB、CE、CCC、RoHS

Product Overview

- Isolation function
- Earth leakage current protection

Model description

EXB3L1	- 100	/ 2P	40	30mA
Model number	Frame size	Number of Poles	Rated current（A）	Rated residual operating current (mA)
EXB3L	100	2P 4P	16～100	

Main technical data

Product model	EXB3L1
Standard	IEC 61008-1
Certificate	CB、CE、CCC、RoHS
Electrical characteristics	
Number of poles	2P、4P
Rated current(A)	16、25、32、40、50、63、80、100
Rated voltage (V)	AC240（2P) AC415(4P)
Rated frequency(Hz)	50/60
Residual current type	Type AC/A
Rated residual operating current IΔn(mA)	10mA(In=16A,25A,32A,40A)　30mA,50mA,100mA,300mA
Rated current making & breaking capacity(Im)	1000A
Rated residual current making & breaking capacity(I△m)	1000A
Rated conditional short-circuit current(Inc)	10kA
Rated residual conditional short-circuit current(I△c)	10kA
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4

Miniature Circuit Breakers
Functions and Features

Electrical characteristics		
Dielectric testing voltage(V)		(power frequency 1min) 2000
Mechanical life (times)		20000
Electrical life (times)		10000
Normal operation conditions and installation features		
Anti-humidity		28 periodic cycles , RH:90-96%at 55°C RH:95-100%at 25°C
Benchmark ambient temperature(°C)		30
Operating ambient temperature(°C)		-35~+70
Storage ambient temperature(°C)		-35~+85
Applicable altitude height(m)		⩽2000m
Max. wiring capacity (mm^2)		50
Max. ultimate torque （N ▪ m)		3.5
Incoming method		Top-in,Bottom-out
Mounting method		TH35-7.5 standard rail mounting
Pollution degree		2
Protection degree	Direct mounting	IP20
	Mounted in the distribution box	IP40

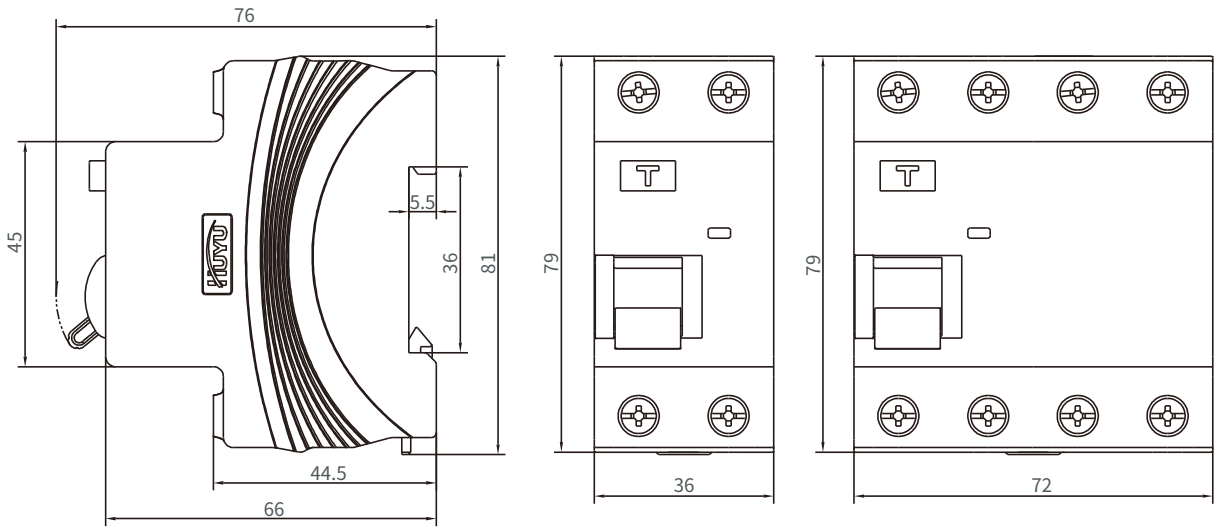
Breaking time of residual current under I△n

Type (wave form of the earth leakage sensed)	I△n(mA)	In(A)	Maximum breaking time			
			I△n	2I△n	5I△n	250mA
Rated sensitivity of A/AC type	＞30	16A,25A,32A,40A 50A,63A,80A,100A	0.1	0.1	0.04	—
	⩽30		0.1	0.1	—	0.04
Rated sensitivity of A type	I△n(mA)	In(A)	Maximum breaking time			
			1.4I△n	2.8I△n	7I△n	0.35A
	＞30	16A,25A,32A,40A 50A,63A,80A,100A	0.1	0.1	0.04	—
	⩽30		0.1	0.1	—	0.04

The circuit breaker is connected with cable Tightening torque:2.0 N·m～2.5 N·m

Rated current In(A)	16、20	25	32	40、50	63	80	100
Terminal size for cable(mm^2)	2.5	4	6	10	16	25	35

Outlines and dimensions



Miniature Circuit Breakers

Functions and Features

EXH3-125 Series Isolation Switch
Standard: IEC 60947-3
Certifications：CB

Product Overview

- Isolation function

Model description

EXH3	-	125	1P	40
Model number		Frame size	Number of Poles	Rated current（A）
EXH3		125	1P 2P 3P 4P	20~125

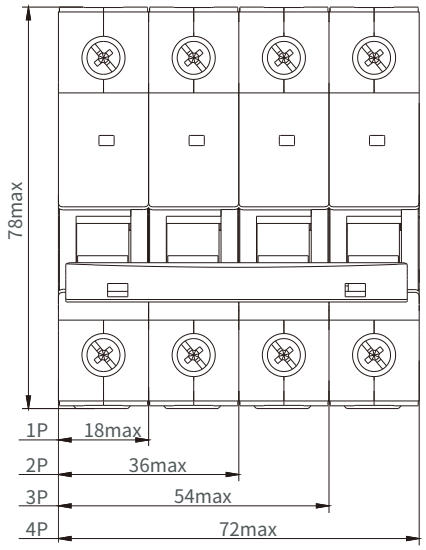
Main technical data

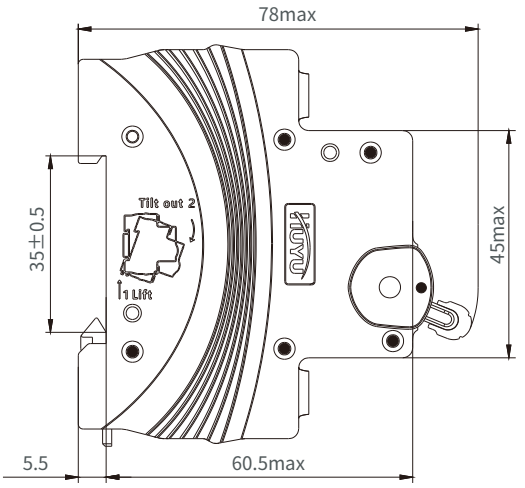
Product model	EXH3-125
Standard	IEC60947-3
Certificate	CB
Electrical characteristics	
Number of poles	1P、2P、3P、4P
Rated current(A)	20、25、32、40、50、63、80、100、125
Rated voltage (V)	AC220V/230V/240V (1P); AC230V(2P); AC380V/400V/415V（2P、3P、4P）
Rated frequency(Hz)	50/60
Rated short-time withstand current Icw	1.5kA(RMS)，t=1s
Rated short-circuit making capacity Icm(kA)	2.5(peak)
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	6
Dielectric testing voltage(V)	1890
Mechanical life (times)	8500
Electrical life (times)	3000
Utilization category	AC-22A，AC-21B

Miniature Circuit Breakers
Functions and Features

Normal operation conditions and installation features	
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-35~+70
Max. wiring capacity (mm^2)	50
Max. ultimate torque （N ▪ m)	3.5
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2
Protection degree	IP20

Outlines and dimensions





Miniature Circuit Breakers
Functions and Features

Product Overview OF circuit Breakers

Model No.	HU Series		
	HUM18-63	HUM18-63N	HUM18-63Z
			
Product type	MCB	MCB	MCB
Standards	IEC 60898-1	IEC 60898-1	IEC 60898-1、IEC 60898-2
Number of poles	1P、1P+N、2P、3P、3P+N、4P	1P、2P、3P、3P+N、4P	AC: 1P、2P、3P、4P、1P+N、3P+N DC: 1P、2P
Rated current (A)	1~63	1～63	1~63
Rated voltage (V)	AC230/400V(1P) AC230V(1P+N) AC400V(2P、3P、3P+N、4P)	AC230/400V (1P) AC400V (2P、3P、3P+N、4P)	AC230/400V(1P) AC400V(2P) DC220V(1P/2P)
Rated frequency(Hz)	50	50	50
Residual current type	-	-	-
Rated residual operating current I△n (mA)	-	-	-
Rated residual current making & breaking capacity I△m(A)	-	-	-
Rated short-circuit breaking capacity Icu (A)	10000	6000	10000(AC),6000(DC)
Operating short-circuit breaking capacity Ics (A)	7500	6000	7500(AC),6000(DC)
Insulation voltage Ui (V)	500	500	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4	4	4
Tripping curve	B,C,D	B,C,D	B(AC/DC),C(AC/DC),D(AC)
Product detail page	P25-27	P28-30	P31-33

Miniature Circuit Breakers

Functions and Features

HU Series				
HUM18PV-63	HUM18-125	HUM18LE-63	HUM18LY-63	HUH18
				
DC MCB	MCB	RCBO	RCBO	Isolator Switch
IEC 60947-2	IEC 60898-1	IEC 61009-1	IEC 61009-1	IEC 60947-3
1P、2P、3P、4P	1P、2P、3P、4P	1P+N、2P、3P、3P+N、4P	1P+N	1P、2P、3P、4P
6~63	63~125	6~63	6~63	32~125
DC250V(1P);DC500V(2P) DC750V(3P); DC1000V(4P)	AC230V/400V (1P) AC400V (2P、3P、4P)	AC230V(1P+N、2P) AC400V(3P、3P+N、4P)	AC230V	AC230V(1P) AC400V(2P、3P、4P)
50	50	50	50	50
-	-	Type AC/A	Type AC/A	-
-	-	30、50、75、100 150、200、300	30、50	-
-	-	3000	2000	-
10000	15000	10000	10000	-
7500	7500	7500	7500	-
1000	500	500	500	500
4 (1P、2P)/6 (3P、4P)	4	4	4	6
10In±20%	B,C,D	B,C,D	B,C,D	-
P34-36	P37-38	P39-41	P42-44	P45-46

Miniature Circuit Breakers

Functions and Features

HUM18-63 Series, Miniature Circuit Breaker
Standard: IEC 60898-1
Certifications：CB、CE、CCC、RoHS

Product Overview

- Overload protection - Short-circuit protection - Isolation function

Model description

HUM18	-	63	□	/	C	63
↓		↓	↓		↓	↓
Model number		Frame size	Number of Poles		Tripping curve	Rated current
HUM18		63	1P、1P+N 2P、3P 3P+N、4P		B C D	1～63

Main technical data

Product model	HUM18-63
Standard	IEC 60898-1
Certificate	CB、CE、CCC、RoHS
Electrical characteristics	
Number of poles	6、10、16、20、25、32、40、50、63
Rated current(A)	1~63
Rated voltage (V)	AC 230/400V(1P), AC 230V (1P+N) AC 400V (2P/3P/3P+N/4P)
Rated frequency(Hz)	50/60
Rated short-circuit breaking capacity Icu(A)	10000
Operating short-circuit breaking capacity Ics(A)	7500
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4
Tripping curve	B,C,D
Electrical life (times)	10000
Mechanical life (times)	20000

Miniature Circuit Breakers
Functions and Features

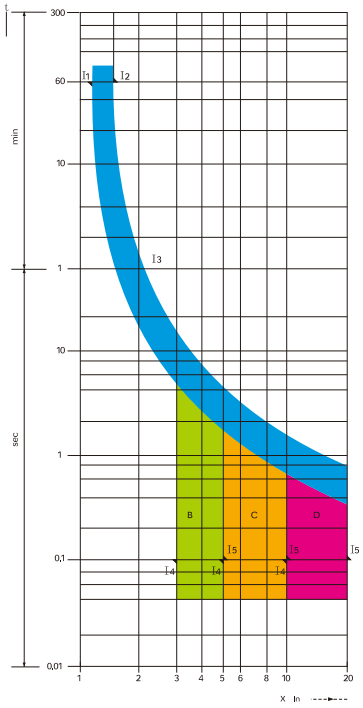
Normal operation conditions and installation features	
Anti-humidity	"RH: <50% at +40°C，RH:<90% in the wettest month(<25°C)"
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-5~+45
Applicable altitude height(m)	⩽2000m
Max. wiring capacity (mm^2)	25
Max. ultimate torque (N ▪ m)	2
Incoming method	Top or bottom enter
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2

Tripping characteristics

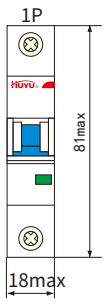
▪ Tripping characteristics

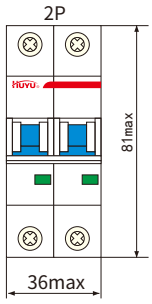
Release type		C	D	Tripping time (I)		Expecting result	Ambient temperature
Thermal release	I_1	1.13In	1.13In	In⩽63A	⩽1h	Non-tripping	30°C
				In>63A	⩽2h		
	I_2	1.45In	1.45In	In⩽63A	<1h	Tripping	
				In>63A	⩽2h		
Magnetic release	I_4	5In	10In	⩽0.1s	⩽0.1s	Non-tripping	Normal temperature
	I_5	10In	20In	<0.1s	<0.1s	Tripping	

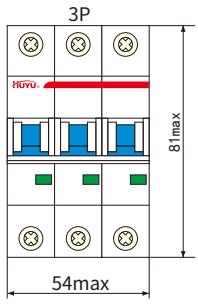
▪ Tripping characteristic curve

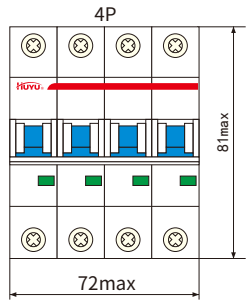


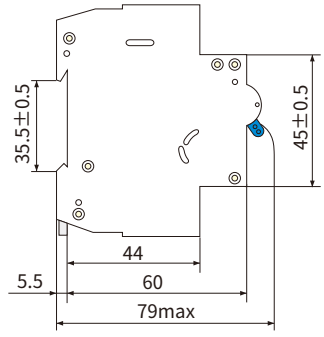
Outlines and dimensions











Miniature Circuit Breakers

Functions and Features

HUM18-63N Series, Miniature Circuit Breaker
Standard: IEC 60898-1
Certifications：CB、KEMA

Product Overview

- Overload protection - Short-circuit protection - Isolation function

Model description

HUM18	-	63	N	/	1P	C	63
Model number		Frame size	Breaking capacity		Number of Poles	Tripping curve	Rated current (A)
HUM18		63	N: 6kA None：10kA		1P 2P 3P (3P+N) 4P	B C D	6~63

Main technical data

Product model	HUM18-63N
Standard	IEC 60898-1
Certificate	CB、KEMA
Electrical characteristics	
Number of poles	1P、2P、3P、3P+N、4P
Rated current(A)	6、10、16、20、25、32、40、50、63
Rated voltage (V)	AC230/400V (1P), AC400V (2P、3P、3P+N、4P)
Rated frequency(Hz)	50/60
Type	AC
Rated short-circuit breaking capacity Icu(A)	6000
Operating short-circuit breaking capacity Ics(A)	6000
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4
Tripping curve	B,C,D
Electrical life (times)	10000
Mechanical life (times)	20000

Miniature Circuit Breakers
Functions and Features

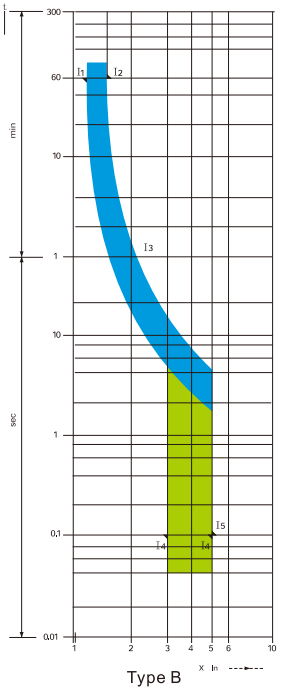
Normal operation conditions and installation features	
Anti-humidity	"RH: <50% at +40°C，RH:<90% in the wettest month(<25°C)"
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-5~+45
Applicable altitude height(m)	⩽2000m
Max. wiring capacity (mm^2)	25
Max. ultimate torque (N ▪ m)	2
Incoming method	Top or bottom enter
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2

Tripping characteristics

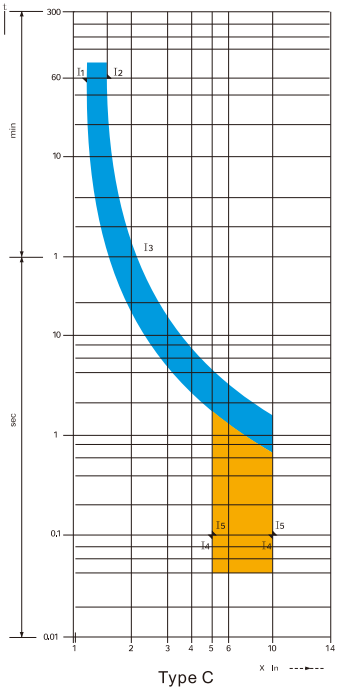
▪ Tripping characteristics

Release type		B	C	D	Tripping time (I)	Expecting result	Ambient temperature
Thermal release	I_1	1.131n			⩽1h	Non-tripping	30°C~35°C
	I_2	1.451n			＜1h	Tripping	
Magnetic release	I_4	3In	5In	10In	⩽0.1s	Non-tripping	Normal temperature
	I_5	5In	10In	20In	＜0.1s	Tripping	

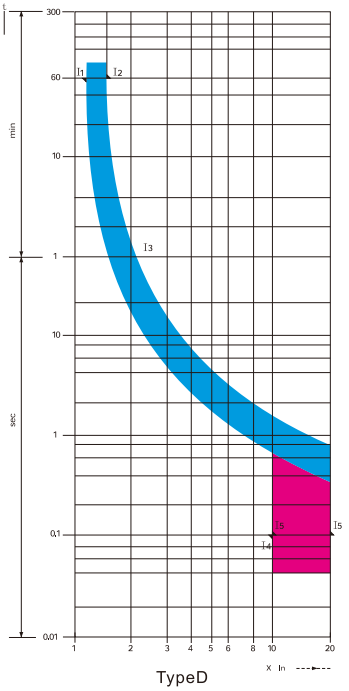
▪ Tripping characteristic curve



Type B

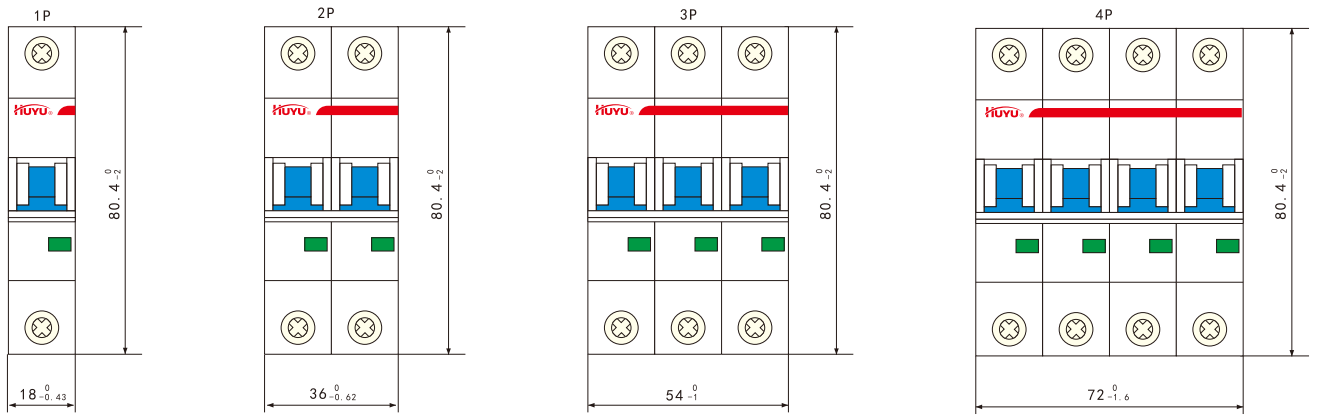


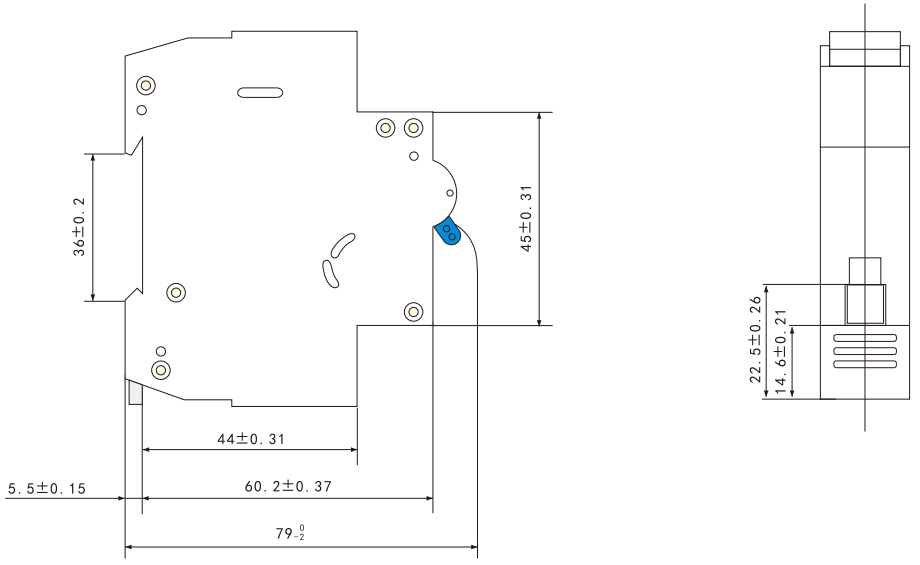
Type C



TypeD

Outlines and dimensions





Miniature Circuit Breakers

Functions and Features

HUM18-63Z Series AC/DC Miniature Circuit Breaker
Standard: IEC 60898-1、IEC 60898-2
Certifications：CB、CE

Product Overview

- Overload protection - Short-circuit protection - Isolation function

Model description

HUM18	-	63	□	Z	1P	C	63
Model number		Frame size	Functional code	Common used	Number of Poles	Tripping curve	Rated current（A）
HUM18		63	None:busbar and wire double connection function, E:no busbar wiring function	AC and DC	1P 2P	B（AC/DC） B（AC/DC） B（AC）	1~63

Main technical data

Product model	HUM18-63Z
Standard	IEC 60898-1、IEC 60898-2
Certificate	CB、CE
Electrical characteristics	
Number of poles	AC:1P、2P、3P、4P、1P+N、3P+N　DC:1P、2P
Rated current(A)	1、2、4、6、10、16、20、25、32、40、50、63
Rated voltage (V)	AC230/400V(1P) AC400V(2P) DC220V(1P/2P)
Rated frequency(Hz)	50
Type	AC/DC
Rated short-circuit breaking capacity Icu(A)	10000(AC)、6000(DC)
Operating short-circuit breaking capacity Ics(A)	7500(AC)、6000(DC)
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4
Tripping curve	B(AC/DC)、C(AC/DC)、D(AC)
Electrical life (times)	10000
Mechanical life (times)	20000

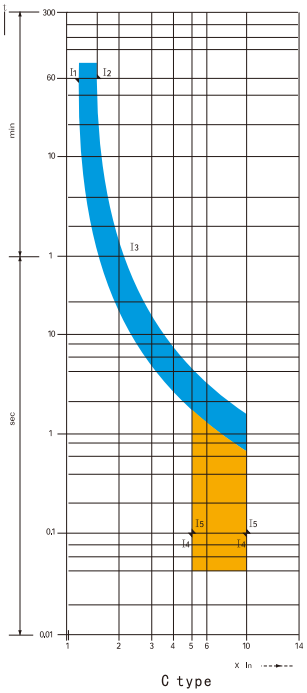
Normal operation conditions and installation features	
Anti-humidity	"RH: <50% at +40°C，RH:<90% in the wettest month(<25°C)"
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-25~+70
Applicable altitude height(m)	⩽2000m
Max. wiring capacity (mm^2)	25
Max. ultimate torque (N ▪ m)	2
Incoming method	Top-in,Bottom-out
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2

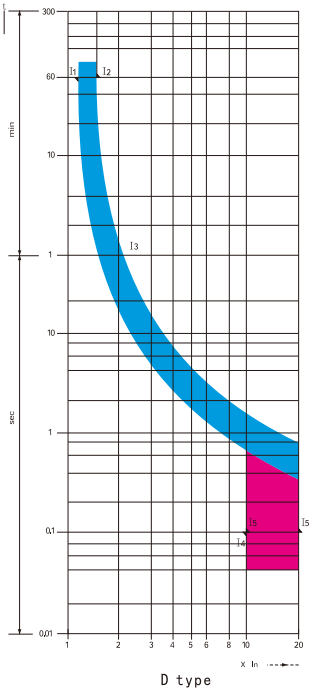
Tripping characteristics

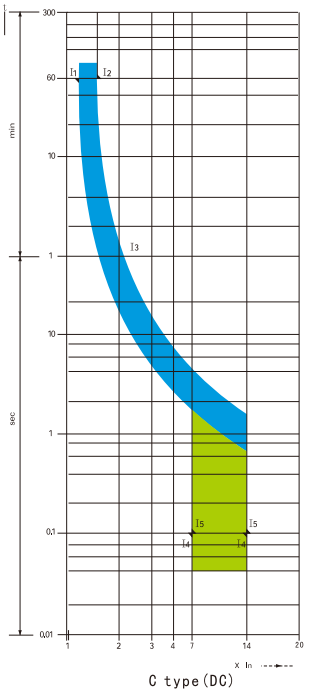
▪ Tripping characteristics

Curve	Thermal release characteristics			Expecting result					
	Testing current	Testing time	Start state	Expecting result	AC testing current	DC testing current	Testing time	Start state	Expecting result
C	1.131n	⩽1h	Cold state	Non-tripping	5In	7In	⩽0.1s	Cold state	Non-tripping
	1.451n	＜1h	Thermal state	Tripping	10In	14In	＜0.1s		Tripping
D	1.131n	⩽1h	Cold state	Non-tripping	10In		⩽0.1s		Non-tripping
	1.451n	＜1h	Thermal state	Tripping	20In		＜0.1s		Tripping

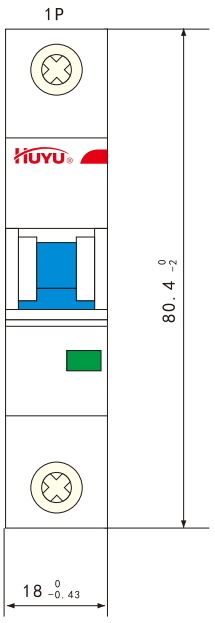
▪ Tripping characteristic curve

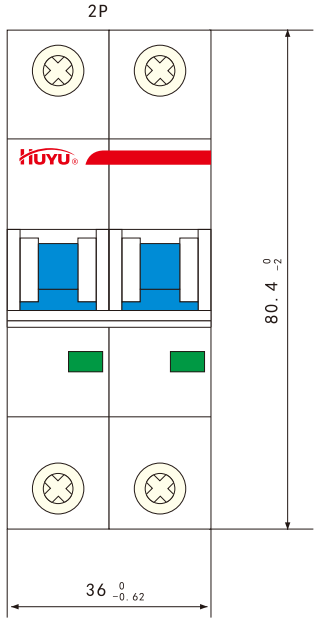






Outlines and dimensions





Miniature Circuit Breakers

Functions and Features

HUM18PV-63 Series DC Miniature Circuit Breakers
Application： Solar/ Photovoltaic Power Generation Systems
Standard: IEC 60947-2
Certifications：CB、CE、CCC、TUV

Product Overview

- Overload protection - Short-circuit protection - Isolation function

Model description

HUM18	PV	- 63	/ □	□
Model number	DC System	Frame size	Number of Poles	Wiring
HUM18	Solar/ Photovoltaic Power Generation Systems	63	1P 2P 3P 4P	2P：C、D， 3P：E、F， 4P：G、H、I

Main technical data

Product model	HUM18PV-63
Standard	IEC 60947-2
Certificate	CB、CE、CCC、TUV
Electrical characteristics	
Number of poles	1P、2P、3P、4P
Rated current(A)	1、2、3、4、5、6、10、16、20、25、32、40、50、63
Rated voltage (V)	DC250V(1P);DC500V(2P); DC750V(3P); DC1000V(4P)
Rated frequency(Hz)	50
Type	DC
Rated short-circuit breaking capacity Icu(A)	10000
Operating short-circuit breaking capacity Ics(A)	7500
Insulation voltage Ui (V)	1000
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4 (1P、2P)、6 (3P、4P)
Tripping curve	10In±20%
Electrical life (times)	10000
Mechanical life (times)	20000

Miniature Circuit Breakers
Functions and Features

Normal operation conditions and installation features	
Anti-humidity	"RH: <50% at +40°C，RH:<90% in the wettest month(<25°C)"
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-25~+70
Applicable altitude height(m)	⩽2000m
Max. wiring capacity (mm^2)	25
Max. ultimate torque (N ▪ m)	2
Incoming method	Top-in,Bottom-out
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2

Tripping characteristics

▪ Tripping characteristics

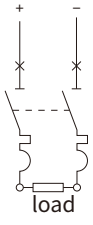
Overcurrent tripping characteristics	Rated current(A)	Initial State	Testing Current(a)	Tripping Time(t)	Expected Result	Ambient Temperature
Time delay	⩽63	cold state	1.05In	⩾1h	No tripping	30°C±2°C
		Thermal State (instantly Following The Above Experiment)	1.30In	<1h	Trip	
Instant Protection		Cold State	8In	⩽0.2s	No tripping	Room Temperature
			12In	<0.2s	Trip	

▪ Rated dispersion coefficient when used in combiner box

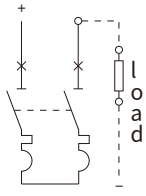
Number of main circuits	2、3	4、5	6-9	>10
Rated dispersion coefficient	0.8In	0.85In	0.8In	0.8In

▪ Wiring

2P circuit breaker

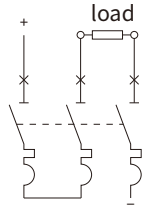


C type

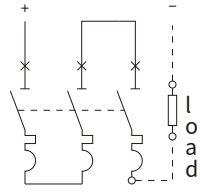


D type

3P circuit breaker



E type

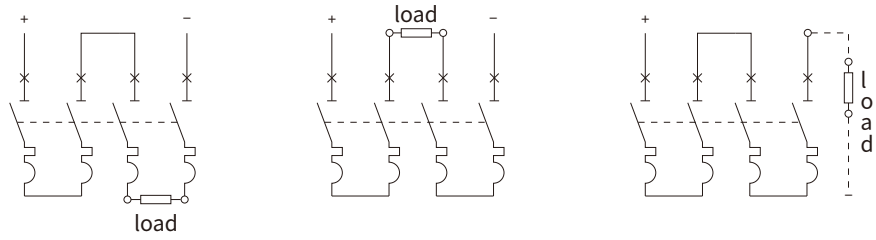


F type

Miniature Circuit Breakers

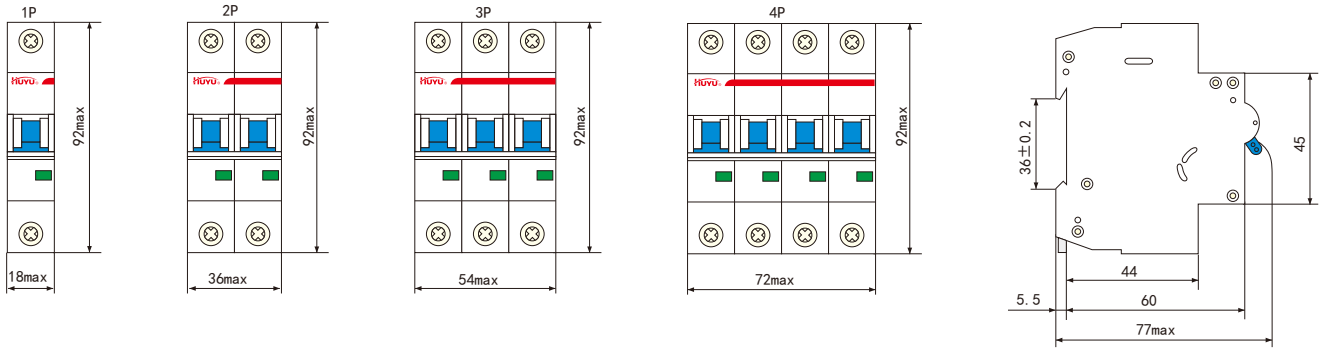
Functions and Features

4P circuit breaker



G type H type I type

Outlines and dimensions



Miniature Circuit Breakers
Functions and Features

HUM18-125 Series Isolation Switch
Standard: IEC 60947-3
Certifications：CCC

Product Overview

- Isolation function

Model description

HUM18	-	125	/	□
↓		↓		↓
Model number		Frame size		Number of poles
HUM18		125		1P 2P 3P 4P

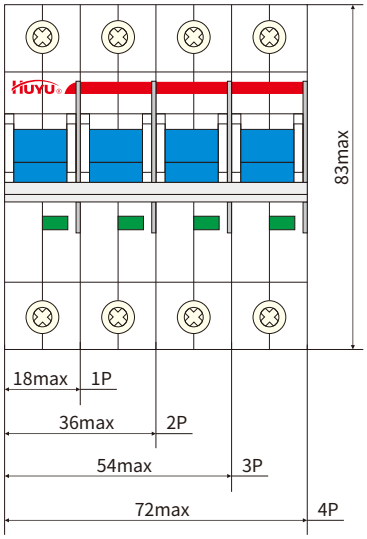
Main technical data

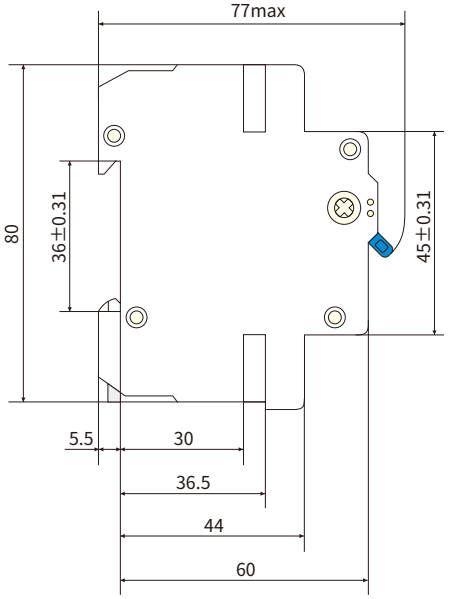
Product model	HUM18-125
Standard	IEC 60898-1
Certificate	CCC、CB、CE
Electrical characteristics	
Number of poles	1P、2P、3P、4P
Rated current(A)	63、80、100、125
Rated voltage (V)	AC230V/400V (1P) AC400V (2P,3P,4P)
Rated frequency(Hz)	50/60
Type	AC
Rated short-circuit breaking capacity Icu(A)	15000
Operating short-circuit breaking capacity Ics(A)	7500
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4
Tripping curve	B,C,D
Electrical life (times)	4000
Mechanical life (times)	8000

Miniature Circuit Breakers
Functions and Features

Normal operation conditions and installation features	
Anti-humidity	RH: <50% at +40°C，RH:<90% in the wettest month(<25°C)
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-5~+45
Applicable altitude height(m)	⩽2000m
Max. wiring capacity (mm^2)	50
Max. ultimate torque (N ▪ m)	3.5
Incoming method	Top or bottom entering
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2

Outlines and dimensions





Miniature Circuit Breakers

Functions and Features

HUM18LE-63 Series,
Residual Current Circuit Breaker with Overcurrent Protection
Standard: IEC 61009-1
Certifications：CCC、RoHS

Product Overview

- Overload protection
- Short-circuit protection
- Isolation function
- Earth leakage current production

Model description

HUM18LE	-	□	/	□	G	A
Model number		Frame size		Number of Poles	Special function code	Residual current type
HUM18LE		63		1P、1P+N 2P、3P 3P+N、4P	G represents over-voltage protection function	Type A and Type AC (AC type is not marked)

Main technical data

Product model	HUM18LE-63
Standard	IEC 61009-1
Certificate	CCC、RoHS
Electrical characteristics	
Number of poles	1P+N、2P、3P、3P+N、4P
Rated current(A)	6、10、16、20、25、32、40、50、63
Rated voltage (V)	AC230V(1P+N、2P) AC400V(3P、3P+N、4P)
Rated frequency(Hz)	50
Residual current type	Type AC/A
Rated residual operating current lΔn(mA)	30、50、75、100,150、200、300
Rated residual current making & breaking capacity I△m(A)	2000
Rated short-circuit breaking capacity Icu(A)	10000
Operating short-circuit breaking capacity Ics(A)	7500
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4
Tripping curve	B、C、D
Mechanical life (times)	20000
Electrical life (times)	10000

Miniature Circuit Breakers
Functions and Features

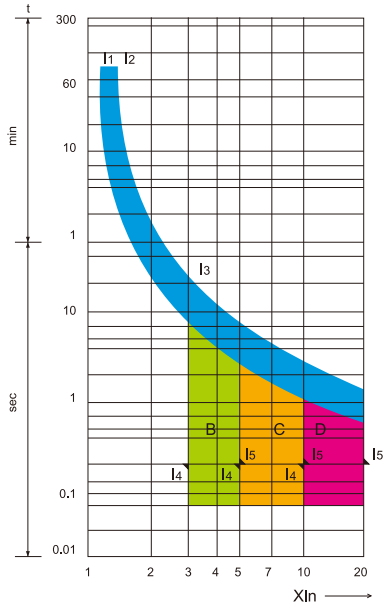
Normal operation conditions and installation features	
Anti-humidity	RH: <50% at +40°C，RH:<90% in the wettest month(<25°C)
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-5~+45
Applicable altitude height(m)	⩽2000m
Max. wiring capacity (mm^2)	25
Max. ultimate torque （N ▪ m)	2
Incoming method	Top-in,Bottom-out
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2

Tripping characteristics

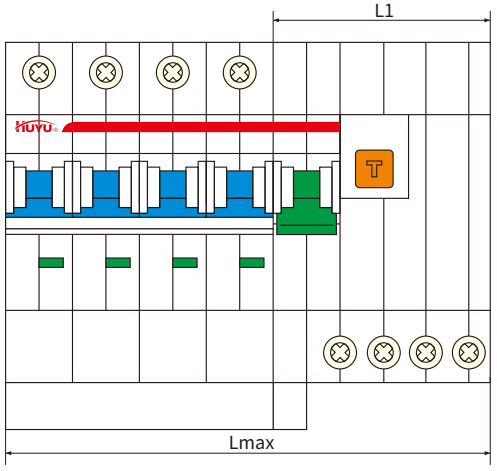
▪ Tripping characteristics

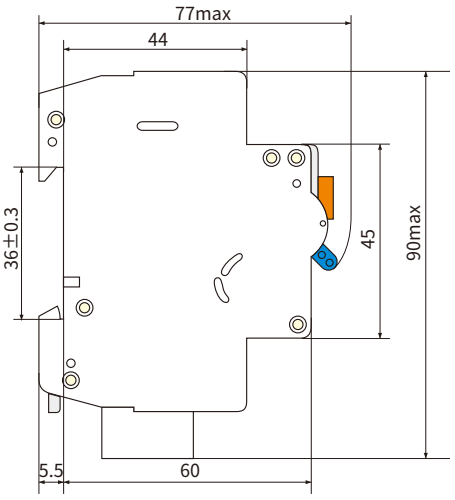
Release type		B	C	D	Tripping time (I)	Expecting result	Ambient temperature
Thermal release	I_1	1.13In	1.13In	1.13In	⩽1h	Non-tripping	30°C~35°C
	I_2	1.45In	1.45In	1.45In	＜1h	Tripping	
Magnetic release	I_4	3In	5In	10In	⩽0.1s	Non-tripping	Normal temperature
	I_5	5In	10In	20In	＜0.1s	Tripping	

▪ Tripping characteristic curve



Outlines and dimensions





Width	Number of Poles				
	1P+N	2P	3P	3P+N	4P
L1	35.5±0.31	35.5±0.31	46.5±0.31	58±0.37	58±0.37
Lmax	54	72	100	112	130

Miniature Circuit Breakers

Functions and Features

HUM18LY-63 Series,
Residual Current Circuit Breaker with Overcurrent Protection
Standard: IEC 61009-1
Certifications：CCC

Product Overview

- Overload protection
- Short-circuit protection
- Isolation function
- Earth leakage current production

Model description

HUM18LY - 63 / W

HUM18LY	63	W
Model number	Frame size	Special designators
HUM18LY	63	None (with a switched neutral pole); W (for an uninterrupted neutral pole)

Main technical data

Product model	HUM18LY-63
Standard	IEC 61009-1
Certificate	CCC
Electrical characteristics	
Number of poles	1P+N
Rated current(A)	6、10、16、20、25、32、40、50、63
Rated voltage (V)	AC230V
Rated frequency(Hz)	50/60
Residual current type	Type AC/A
Rated residual operating current IΔn(mA)	30、50
Rated residual current making & breaking capacity I△m(A)	2000
Rated short-circuit breaking capacity Icu(A)	10000
Operating short-circuit breaking capacity Ics(A)	7500
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	4
Tripping curve	B、C、D
Mechanical life (times)	20000
Electrical life (times)	10000

Miniature Circuit Breakers
Functions and Features

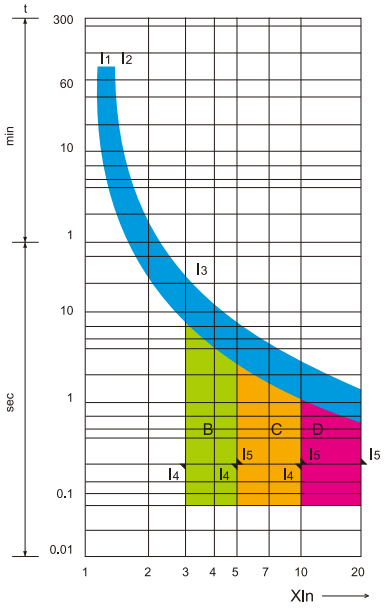
Normal operation conditions and installation features	
Anti-humidity	RH: <50% at +40°C，RH:<90% in the wettest month(<25°C)
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-5~+45
Applicable altitude height(m)	⩽2000m
Max. wiring capacity (mm^2)	25
Max. ultimate torque （N ▪ m)	2
Incoming method	Top-in,Bottom-out
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2

Tripping characteristics

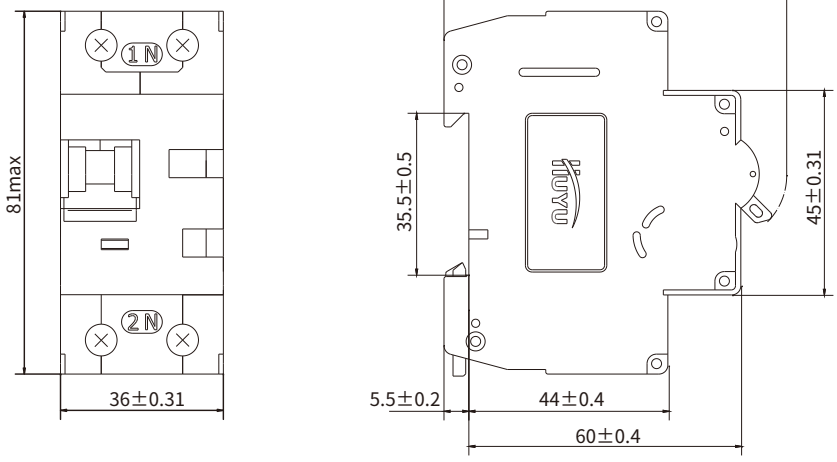
▪ Tripping characteristics

Release type		B	C	D	Tripping time (I)	Expecting result	Expecting result
Thermal release	I_1	1.13In	1.13In	1.13In	⩽1h	No-tripping	Cold state
	I_2	1.45In	1.45In	1.45In	＜1h	Tripping	Thermal state
Magnetic release	I_4	3In	5In	10In	⩽0.1s	No-tripping	Normal temperature
	I_5	5In	10In	20In	＜0.1s	Tripping	

▪ Tripping characteristic curve



Outlines and dimensions



Miniature Circuit Breakers
Functions and Features

HUH18-125 Series Isolation Switch
Standard: IEC 60947-3
Certifications：CCC

Product Overview

- Isolation function

Model description

HUH18	-	125	/	□
↓		↓		↓
Model number		Frame size		Number of Poles
HUH18		125		1P 2P 3P 4P

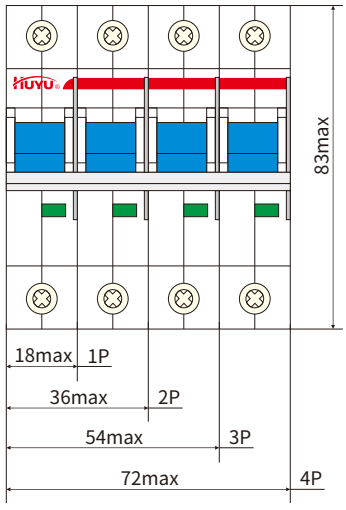
Main technical data

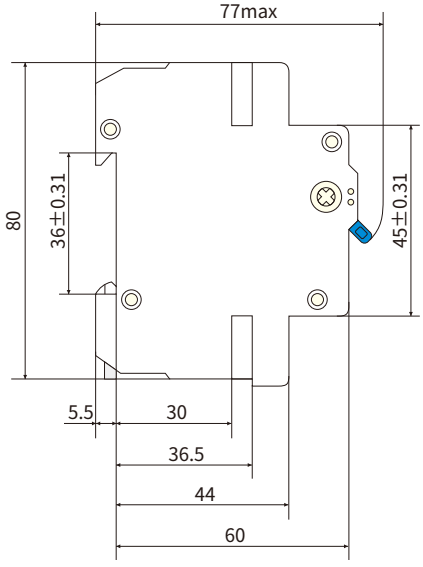
Product model	HUH18-125
Standard	IEC 60947-3
Certificate	CCC
Electrical characteristics	
Number of poles	1P、2P、3P、4P
Rated current(A)	32、40、50、63、80、100、125
Rated voltage (V)	AC230V(1P) AC400V(2P、3P、4P)
Rated frequency(Hz)	50
Rated short-time withstand current (Icw)	20Ie/1s
Rated short-circuit making capacity (Icm)	28.1Ie
Insulation voltage Ui (V)	500
Rated impulse withstand voltage Uimp (1.2/50) (kV)	6
Service Life (times)(Operating frequency:120/h)	10000,1500 with loads(Ie<100A)
	8000,1000 with loads(Ie=125A)
Utilization Category	AC-22A

Miniature Circuit Breakers
Functions and Features

Normal operation conditions and installation features	
Anti-humidity	RH: <50% at +40°C，RH:<90% in the wettest month(<25°C)
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-5~+45
Applicable altitude height(m)	⩽2000m
Max. wiring capacity (mm^2)	50
Max. ultimate torque （N ▪ m)	3.5
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2
Protection degree	IP20

Outlines and dimensions





Miniature Circuit Breakers

Functions and Features

Miniature Circuit Breakers

Functions and Features

HUB9S-80 IoT circuit breaker
Standard: GB/T 14048.2
Certifications：CQC1148 CCC

Product Overview

1. Application: office buildings，shopping malls, home intelligent power management systems, intelligent property management systems and etc.

1.2 Function:

Functions and Accuracy	
short circuit protection overload protection overvoltage protectio nundervoltage protection	Parameters such as overload, short circuit, isolation, overvoltage,undervoltage, phase loss, overtemperature, power limit, electricity consumption limit, threshold, delay time, shutdown, alarm and trip are adjustable to meet different requirements.
	Electromagnetic Type C (li=8In)、D(li=12In)
	Thermal magnetic type；Comply with GB/T14048.2, CQC1148; Parameters can be adjusted to make the MCB electronic type.
	1.1Ue~1.4Ue (parameter for overvoltage is adjustable)
	06Ue~0.9Ue (parameter for undervoltage is adjustable)
Metering	Parameters such as voltage, temperature, power, power factor, electricityconsumption, and frequency are measurable.
Accuracy Measuring	voltage accuracy : Class 0.5, current accuracy: Class 0.5 power accuracy : Class 1.0 electricity consumption accuracy : Class 1.
Temperature	85°C(adjustable), accuracy ±2°C
Control	Multiple Control Ways: Manual and automatic integrated control, automatic button control, manual push rod control , mobile phone remote control
Communication	Multiple Communication Ways: It supports RS485/Bluetooth/WiFi in the downlink and WiFi/4G/RJ45 in the uplink. 1.RS485/Bluetooth/Wifi in the down link 2.Wifi/4G/R145 in the uplink
other	The circuit breaker has built-in coils, bi-metal and other physical protection devices. Even when the digital chip fails, the circuit breaker can still achieve basic safety protection functions such as short circuit protection and overload protection.

Miniature Circuit Breakers
Functions and Features

Model description

HUB9S	-	80	Z	□
Model number		Frame size	Current type	Breaking capacity
HUB9S		80	No Description: AC MCB Z: AC and DC	No Description: Normal Type, 6KA H: High Breaking Capacity Type, 10KA

Main technical data

Product model		HUB9S-80
Standard		GB/T 14048.2 CQC1148
Certificate		CCC
Electrical characteristics		
Number of poles		1P、1P+N、2P、3P、3P+N、4P
Rated current(A)		1A、2A、3A、4A、6A、10A、16A、20A、25A、32A、40A、50A、63A、80A
Rated voltage (V)		AC220V、AC230V、AC240V(1P、1P+N、2P) AC380V、AC400V,AC415V(3P、3P+N、4P) DC48、DC60、DC80、DC110、DC125(1P),DC220V、DC250V(2P)
Rated frequency(Hz)		50/60
Rated short-circuit breaking capacity Icu(A)		6kA(HUB9S-80,HUB9S-80Z),10kA(HUB9S-80H,HUB9S-80ZH)
Operating short-circuit breaking capacity Ics(A)		6kA(HUB9S-80,HUB9S-80Z),7.5kA(HUB9S-80H,HUB9S-80ZH)
Remote automatic closing time(tc)		tc≤3s
Automatic disconnect time(to)		to≤2s
Power-on delay time(td)		td≤4s or user defined
Rated impulse withstand voltage Uimp(1.2/50) (kV)		6
Thermal magnetic tripping characteristics	C(Ii=8In)	■
	D(Ii=12In)	■
Electrical life (times)		>10000
Mechanical life (times)		>20000

Miniature Circuit Breakers
Functions and Features

Normal operation conditions and installation features	
Anti-humidity(GB/T2423.4)	28 periodic cycles ,RH:90-96% at 55°C，RH:95-100% at 25°C
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-35°°C~+70°C
Applicable altitude height(m)	⩽2000m
Max. wiring capacity (mm^2)	35
Max. ultimate torque （N ▪ m）	3.5
Incoming method	Top-in,Bottom-out
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2
Protection degree	IP20

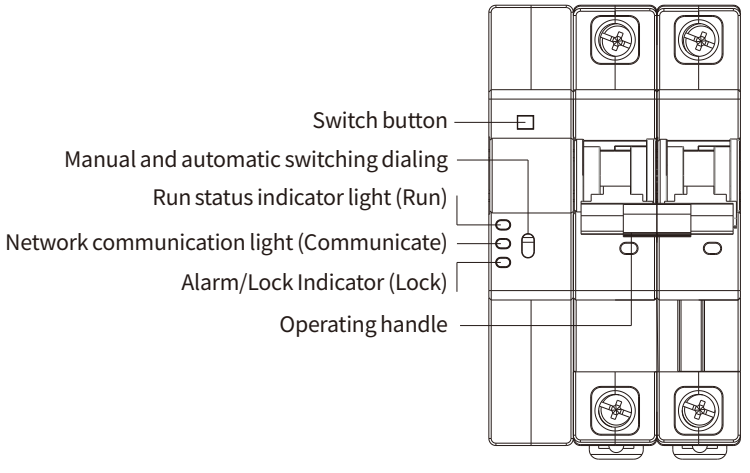
Overcurrent protection characteristics

▪ Tripping characteristics

Trip unit		C type(li=8In)	D type(li=12In)	Initial State	Tripping Time	Expected Result
Thermal trip	I_1	1.05In		Cold chain	t⩽1h（In⩽63A） 2h (In>63A)	No Tripping
	I_2	1.3In		Instantly Following above Experiment	t<1h（In⩽63A） t < 2h (In>63A)	Trip
Magnetic trip	I_4	6.4In	9.6In	Cold State	t⩽0.2s	No Tripping
	I_6	9.6In	14.4In	Cold State	t<0.2s	Trip

Note: The thermal tripping characteristics in the table are the expected results obtained at a temperature of 30-35°C, if wired correctly and correspondently. The product is debugged accordingly when it leaves the factory. When the conditions are different , the rated current should be compensated accordingly.

▪ Instructions

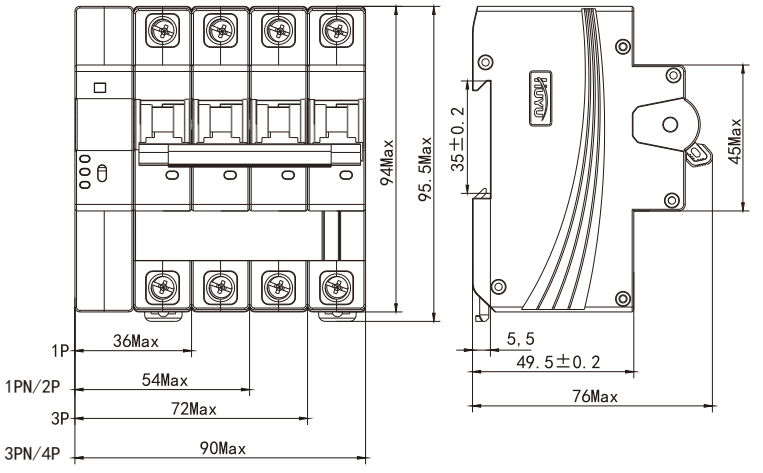


Miniature Circuit Breakers

Functions and Features

1.Operating handle:
push upward to close, push downward to open.
2. Switch button:
Click - open and close. If the switch is in locked state, you can press and hold 5 seconds to unlock.
3.Manual and automatic switching dialing:
4.Indicator status:
Run status indicator light (Run): If green light is always on then it means the circuit breaker is closed, if flashing, it means open.
Network communication light (Communicate): If blue light is flashing then it means network pairing is in progress, if always on, it means network communication is successful. Alarm/Lock Indicator (Lock): If red light is flashing then it is a product fault alarm, if always on when it's opening, it is a fault trip or it can be remotely controlled to lockout.

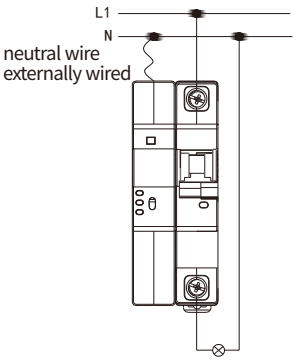
Outlines and dimensions



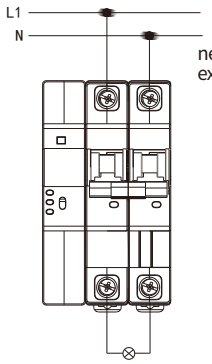
Wiring diagram

AC type circuit breaker wiring diagram

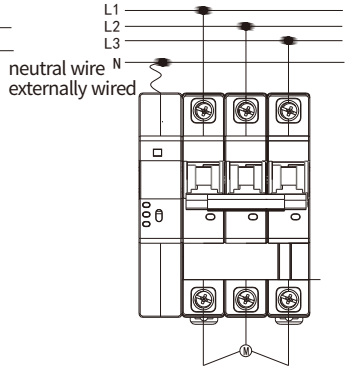
1P wiring diagram



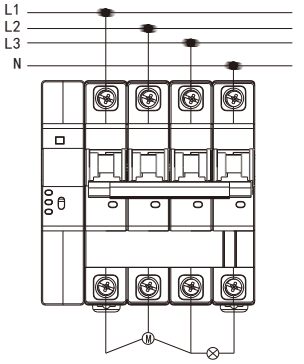
1PN/2P wiring diagram



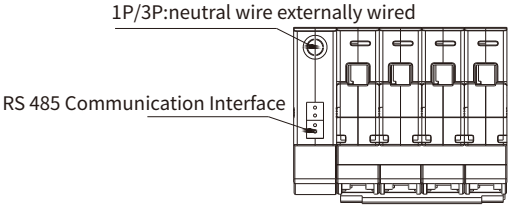
3P wiring diagram

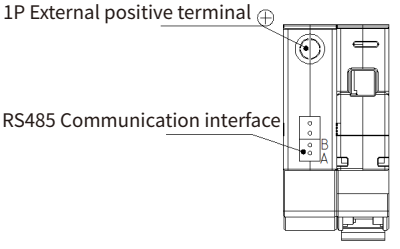


3PN/4 wiring diagram



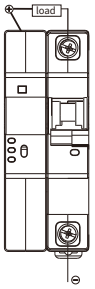
Port wiring diagram



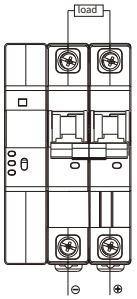


DC type circuit breaker wiring diagram

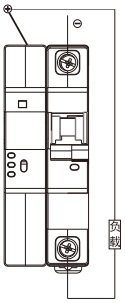
Lower Entry
1P DC



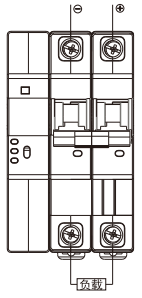
Lower Entry
2P DC



Upper Entry
1P DC



Upper Entry
2P DC



Miniature Circuit Breakers

Functions and Features

HUB9SL-80 IoT Earth Leakage Circuit Breaker
Standard: GB/T 16917.1 CQC1149
Certifications: CCC

Product Overview

1. 1 Product overview
Application: office buildings，shopping malls,
home intelligent power management systems,
intelligent property management systems and etc.

1.2 Function:

Function list and accuracy	
Protection against short circuit, overload, overvoltage and undervoltage	Parameters like overload, short circuit, isolation, overvoltage, undervoltage, phase loss, overtemperature, power limit,electricity consumption limit, threshold, delay time, shutdown, alarm and trip are adjustable to meet different requirements.
	Electromagnetic type B(3-5In), C(5-10In), D(10-16In)
	Thermal magnetic type； Comply with GB/T14048.2, CQC1148; Parameters can be adjusted to make the MCB electronic type.)
	1.1Ue~1.4Ue (parameter for overvoltage is adjustable)
	06Ue~0.9Ue (parameter for undervoltage is adjustable)
Metering	Parameters like voltage, temperature, power, power factor, electricity consumption, and frequency are measurable.
Accuracy Measuring	voltage accuracy : Class 0.5, current accuracy: Class 0.5 power accuracy : Class 1.0 electricity consumption accuracy : Class 1.
Temperature	85°C(adjustable), accuracy ±2°C
Control	Multiple Control Ways: Manual and automatic integrated control, automatic button control, manual push rod control , mobile phone remote control
Communication	Multiple Communication Ways: It supports RS485/Bluetooth/WiFi in the downlink and WiFi/4G/RJ45 in the uplink. Making real-time viewing of parameters possible, including current, voltage, power, power factor, electricity consumption, leakage, frequency and etc. It also provides real time alarm push.
other	The circuit breaker has built-in coils, bi-metal and other physical protection devices. Even when the digital chip fails, the circuit breaker can still achieve basic safety protection functions such as short circuit protection and overload protection.

Miniature Circuit Breakers
Functions and Features

Model description

HUB9SL	-	80	Z	□
Model number		Frame size	Current type	Breaking capacity
HUB9SL		80	No Description: AC MCB Z: AC and DC	No Description: 6KA H：10KA

Main technical data

Product model		HUB9SL-80
Standard		GB/T16917.1、CQC1149
Certificate		CCC
Electrical characteristics		
Number of poles		1P+N、2P、3P+N、4P
Rated current(A)		1A、2A、3A、4A、6A、10A、16A、20A、25A、32A、40A、50A、63A、80A
Rated voltage (V)		AC220V、AC230V、AC240V(1P+N、2P), AC380、AC400V、AC415V(3P+N、4P)
Rated frequency(Hz)		50/60
Residual current type		Type AC
Rated residual operating current IΔn(mA)		30mA(10mA~1000mA adjusttable)
Rated short-circuit breaking capacity Icu(A)		6kA(HUB9SL-80),10kA(HUB9SL-80H)
Operating short-circuit breaking capacity Ics(A)		6kA(HUB9SL-80),7.5kA(HUB9SL-80H)
Remote automatic closing time(tc)		tc≤3s
Automatic disconnect time(to)		to≤2s
Power-on delay time(td)		td≤4s or user defined
Rated impulse withstand voltage Uimp (1.2/50) (kV)		6kV
Electrical life (times)		>10000
Mechanical life (times)		>20000
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)	-

Miniature Circuit Breakers
Functions and Features

Normal operation conditions and installation features	
Anti-humidity(GB/T2423.4)	28 periodic cycles ,RH:90-96% at 55°C，RH:95-100% at 25°C
Benchmark ambient temperature(°C)	30
Operating ambient temperature(°C)	-35~+70°C
Storage ambient temperature(°C)	-35~+85°C
Applicable altitude height(m)	⩽2000m
Max. wiring capacity (mm^2)	35
Max. ultimate torque （N ▪ m）	3.5
Incoming method	Top-in,Bottom-out
Mounting method	TH35-7.5 standard rail mounting
Pollution degree	2
Protection degree	IP20

Overcurrent protection characteristics

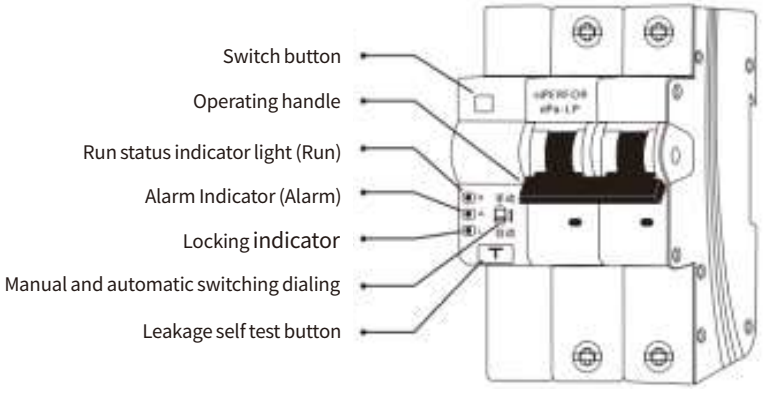
▪ Tripping characteristics

Trip unit		B type	C type	D type	Initial State	Tripping Time	Expected Result
Thermal trip	I_1	1.13In			Cold chain	t⩽1h（In⩽63A） 2h (In>63A)	No Tripping
	I_2	1.45In			Instantly Following above Experiment	t<1h（In⩽63A） t < 2h (In>63A)	Trip
Magnetic trip	I_4	3In	5In	10In	Cold State	t⩽0.2s	No Tripping
	I_6	5In	10In	16In	Cold State	t<0.2s	Trip

Note: The thermal tripping characteristics in the table are the expected results obtained at a temperature of 30-35°C, if wired correctly and correspondently. The product is debugged accordingly when it leaves the factory. When the conditions are different , the rated current should be compensated accordingly.

▪ Circuit breaker switch button, indicator light status, manual and automatic mode instructions

The product has three states: closed, open, and locked (In this case, the operating handle cannot be closed anymore)

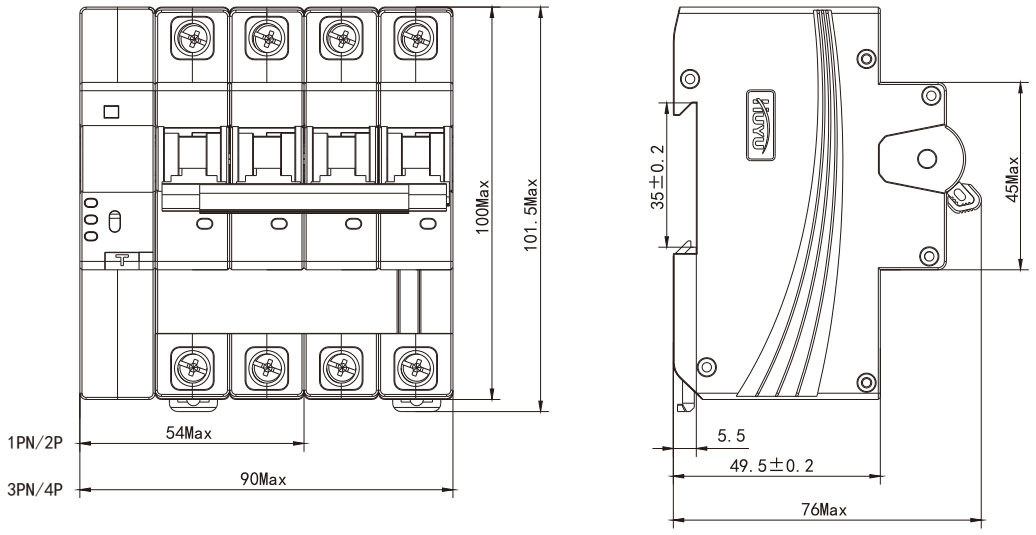


Miniature Circuit Breakers

Functions and Features

1.Operating handle:
push upward to close, push downward to open.
2. Switch button:
Click - open and close. If the switch is in locked state, you can press and hold 5 seconds to unlock.
3.Manual and automatic switching dialing:
By dialing up and down, the circuit breaker switches between local manual mode and remote automatic mode.
Local manual mode: You can open and close the circuit breaker locally through the operating handle or switch button; you cannot control the closing of the circuit breaker remotely, but you can control the opening of the circuit breaker and open it to the locked state. In the locked state, you cannot manually close the circuit breaker, at the same time, it enters the maintenance state . After the maintenance, if you need to manually close the circuit breaker, press and hold the switch button for 5 seconds to unlock it. Then you can manually close or remotely close the circuit breaker.
Remote automatic mode: You can open and close the circuit breaker directly through the operating handle or switch button locally: You can remotely control the closing and opening of the circuit breaker, and open it to the locked state. In the locked state, you cannot manually close the circuit breaker. When closing the circuit breaker, press and hold the switch button for 5 seconds to unlock it, and then you can manually open and close the circuit breaker.
4.Indicator status:
Run status indicator light (Run): If green light is always on then it means the circuit breaker is closed, if flashing, it means open.
Network communication light (Communicate): If blue light is flashing then it means network pairing is in progress, if always on, it means network communication is successful. Alarm/Lock Indicator (Lock): If red light is flashing then it is a product fault alarm, if always on when it's opening, it is a fault trip or it can be remotely controlled to lockout.
5. Leakage test button
It is used for self-test of leakage protection. The circuit breaker trips instantly after pressing the button. The handle automatically closes 5 seconds after the test is completed.

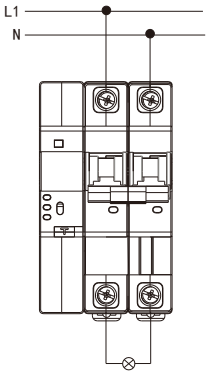
Outlines and dimensions



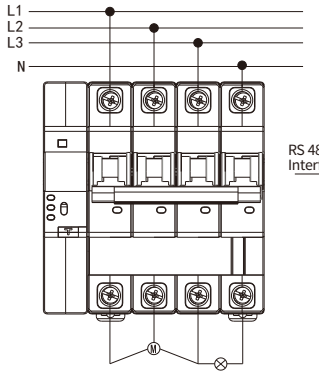
Wiring diagram

- Circuit breaker wiring diagram

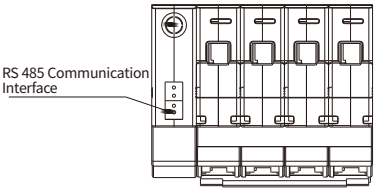
1PN/2P wiring diagram



3PN/2P wiring diagram



Port wiring diagram



Miniature Circuit Breakers

Functions and Features

NT50 Series,
Residual Current Circuit Breaker with Overcurrent Protection
Standard: IEC 60898-1 IEC 61008-1

Product Overview

1. 1 Application
Residential electrical systems or similar power distribution premises

1.2 Function:
- Overload protection
- Short circuit protection
- Isolation function
- Leakage protection

Model description

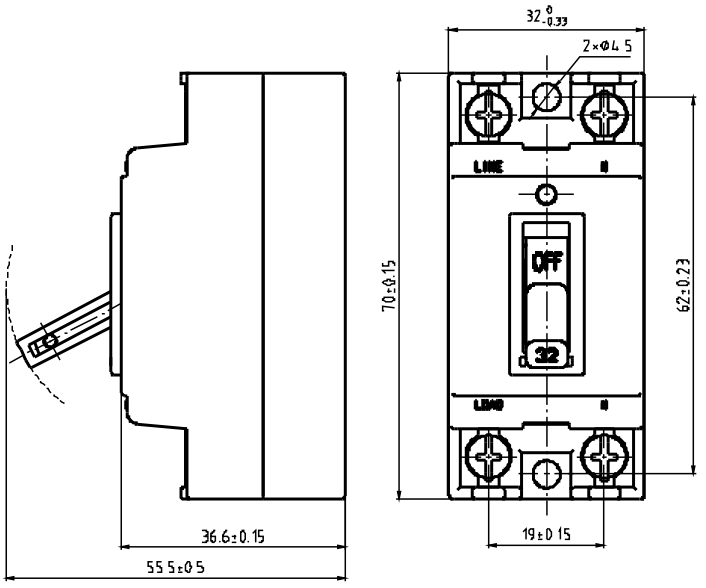
NT50	□	- □	□	□
Model number	Rated Current	Type of protecion	Color	LED indicator
NT50	6、10、16、20、25、32、40	No Description: No Overload Protection S: Overload and Instantaneous Tripping protection	No Description: White B: Black	No Description: No Light D: With LED Light

□ /	2P	□
Prouduct cover	Number of Poles	Type of overload protecion
No Description: No Cover K: With Cover	2P	1E: One Way Overload Protection 2E: Two Way Overload Protection

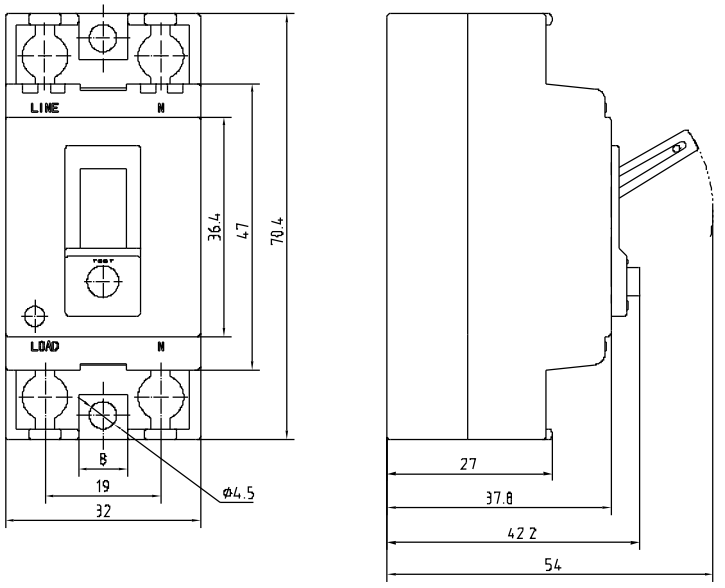
Main technical data

Product model		NT50
Standard		IEC 60898-1 , IEC 61008-1
Electrical characteristics		
Number of poles		2P1E、2P2E
Rated current (A)		5A、10A、15A、20A、25A、30A、40A
Rated voltage (V)		AC 230V
Rated frequency(Hz)		50/60
Residual current type		Type AC
Rated short-circuit breaking capacity Icu(A)		1500
Rated residual operating current IΔn(mA)		30
Rated impulse withstand voltage Uimp (1.2/50) (kV)		2.5
Mechanical life (times)		-
Electrical life (times)		-
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)	-
Normal operation conditions and installation features		
Anti-humidity(GB/T2423.4)		28 periodic cycles ,RH:90-96% at 55°C，RH:95-100% at 25°C
Benchmark ambient temperature(°C)		30
Operating ambient temperature(°C)		-35~+70
Storage ambient temperature(°C)		-35~+85
Applicable altitude height(m)		⩽2000m
Max. wiring capacity (mm^2)		10
Max. ultimate torque （N ▪ m）		2
Incoming method		Top-in,Bottom-out
Pollution degree		2
Protection degree	Direct mounting	IP20
	Mounted in the distribution box	-

Outlines and dimensions



Nt50（Without Leakage Protection）



NT50（With Leakage Protection）

Miniature Circuit Breakers

Functions and Features

HYU3 Series surge protection devices
Standard: IEC 61643-1/ II

Product Overview

1. 1 Application:
Home electrical systems, distribution systems in commercial buildings, industrial control systems, communication base stations, and data centers, etc

1.2 Function:
Prevent transient surge voltage caused by lightning strikes or switch operations, limit transient overvoltage and discharge surge current.

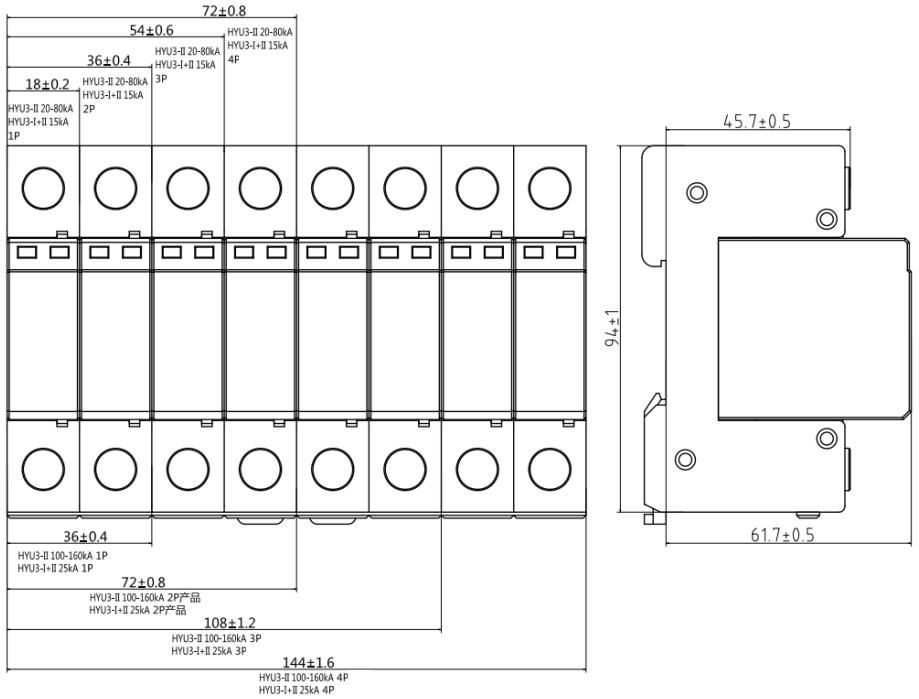
Model description

HYU3	-	□	□	/	□	/	□
Model number		Test type	Maximum discharge current / Impulse current		Maximum continuous operating voltage		Number of Poles
HYU3		Class I + II Class II	15～160kA		385/440V		1P、1N、2P 3P、3N、4P

Main technical data

Experimental category	I + II				II													
Model	15kA		25kA		20kA		40kA		65kA		80kA		100kA		120kA		160kA	
Index	385	440	385	440	385V	440V	385V	440V	385V	440V	385V	440V	385V	440V	385V	440V	385V	440V
Voltage protection level Up(kV)	2.0	2.0	2.3	2.3	1.5	1.7	1.8	2.0	2.0	2.2	2.2	2.4	2.4	2.5	2.4	2.7	3.0	3.0
Maximum continuous operating voltageUc(V～)	385	440	385	440	385	440	385	440	385	440	385	440	385	440	385	440	385	440
Nominal discharge current In (8/20μs) kA	20	20	30	30	10	10	20	20	30	30	40	40	50	50	60	60	80	80
Maximum discharge current Imax (8/20μs) kA	40	40	60	60	20	20	40	40	65	65	80	80	100	100	120	120	160	160
Impulse discharge current limp (10/350μs) kA	15	15	25	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Response time ta (ns)	<25																	
Corresponding backup protection period specifications	HYSCB3-I 15		HYSCB3-I 25		HYSCB3-II 20		HYSCB3-II 40		HYSCB3-II 65		HYSCB3-II 80		HYSCB3-II 100		HYSCB3-II 120		HYSCB3-II 160	
Terminal wiring capability	multi strand hard wire 4mm2 ～25mm2																	

Outlines and dimensions



Miniature Circuit Breakers

Functions and Features

HYSCB3 series surge protection devices
Standard: NB/T 42150

Product Overview

1. 1 Application:
Power systems in industrial plants, data centers, low-voltage power systems in buildings

1.2 Function:
- Overload protection
- Selective disconnection: distinguish power frequency current and lightning current and respond accordingly
- Lightning current withstand and short-circuit current breaking
- SPD fire protection

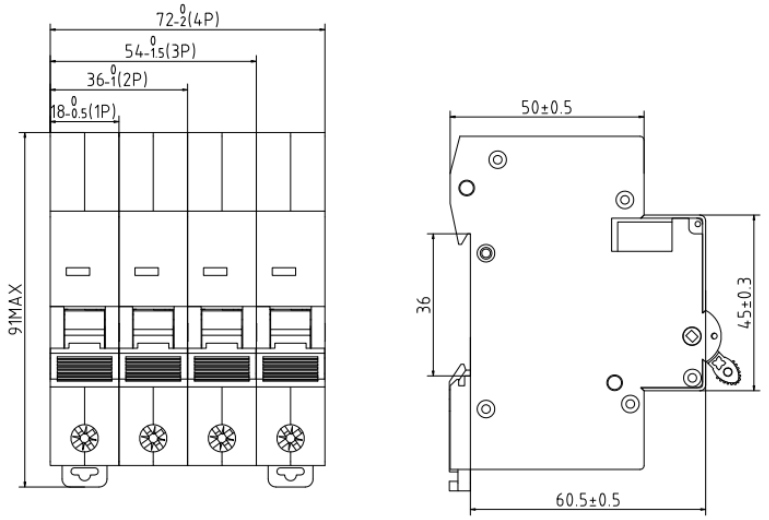
Model description

HYSCB3	-	□	□	/	□	/	□
Model number		Test type	Maximum discharge current / Impulse current		Number of Poles		Rated short-circuit breaking capability
HYSCB3		Class I Class II	20～160kA		1P、2P、3P、4P		65KA、100KA

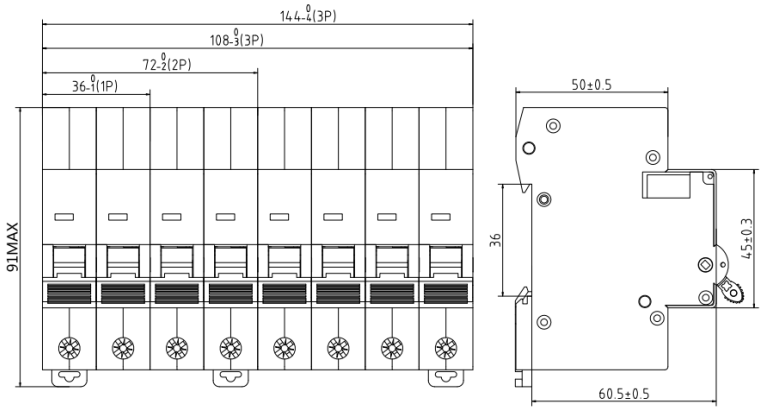
Main technical data

Model	HYSCB3-I		HYSCB3-II						
	15	25	20	40	65	80	100	120	160
Rated ultimate breaking capacity(kA)	65kA、100kA		65kA、100kA						
Test type	T1(10/350μs)		T2(8/20μs)						
Nominal discharge current In(kA)	20	30	10kA	20kA	30kA	40kA	50kA	60kA	80kA
Maximum discharge current Imax(kA)	/	/	20kA	40kA	65kA	80kA	100kA	120kA	150kA
Impulse discharge current Iimp(kA)	15	25	/	/	/	/	/	/	/
Rated working voltage Ue	AC230V(1P)；AC230V/400V(2P、3P、4P)								
Minimum delay action current Id	3±1A								
Minimum instantaneous action current Ii	6A								
Mechanical lifespan	4000								
Shell protection level	IP20								
Wiring screws	M5 torque 2.5N.m								
Wiring ability	2.5mm2～25mm2								
Installation DIN rail	EN60715(35mm)								
Rated operating frequency f/Hz	50Hz								

Outlines and dimensions



Class II 20kA、40kA、60kA、80kA、100kA



Class II 120kA、160kA and Class I 15kA、25kA product extend dimensions

If remote signaling function is required for backup protection, the corresponding model width size should be increased by 9mm.

Miniature Circuit Breakers

Functions and Features

DZ47 series Miniature circuit breaker
Standard: GB10963.1

Product Overview

Application:

The DZ47-63 series miniature circuit breaker(hereinafter referred to as the "breaker") is mainly suitable for power line installations and electrical equipment in buildings and similar places, operating at AC 50Hz with a rated voltage up to 400V and a rated working current up to 63A, providing overcurrent protection. It is also applicable for infrequent switching operations.
This breaker complies with the standard GB10963.1: Electrical accessories—Circuit breakers for overcurrent protection for household and similar installations—Part 1: Circuit breakers for AC operation.

Model description

DZ47	- □	□	/ □
Model number	Number of Poles	Tripping curve type	Rated current(A)
DZ47	1P、2P、3P、4P	B C D	1、2、3、4、6 10、16、20、25 32、40、50、63

Main technical data

Frame class rated current Inm: 63A
Rated voltage Ue: 50Hz AC 230V/400V (1P), AC 400V (2P, 3P, 4P),Rated current In: B, C, D types: 1~63A
Rated breaking capacity Icn: 6000A（≤40A）、4500A（50A and 63A）
Poles: 1P, 2P, 3P, 4P
Lifespan:
Mechanical: 20,000 cycles
Electrical: 4,000 cycles

Product Features

Tripping Units:

Thermal trip
Magnetic trip

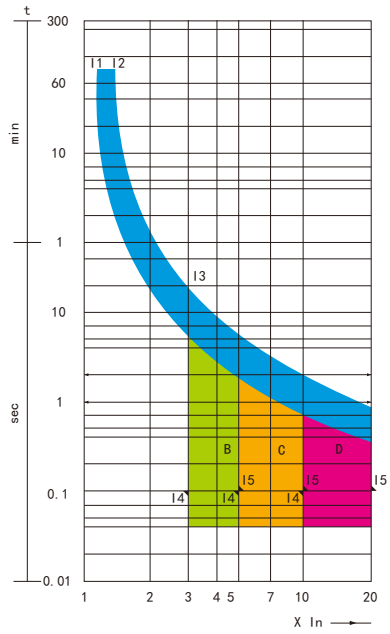
Miniature Circuit Breakers

Functions and Features

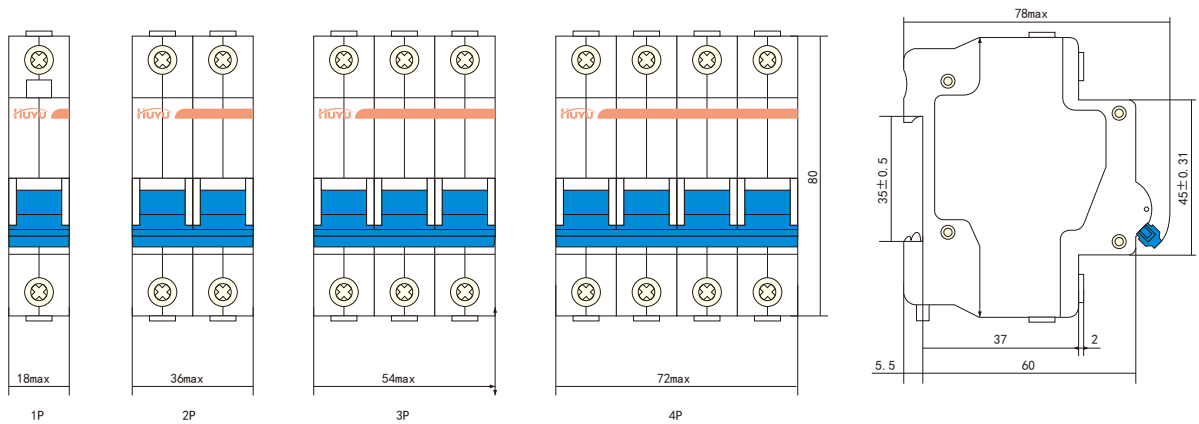
Test Current (A)	Type B	Type C	Type D	Tripping Time	Expected Result	Notes
1.13In	√	√	√	⩽1h	No trip	Cold state
1.45In	√	√	√	<1h	Trip	Thermal
3In	√	√	√	⩽0.1s	No trip	Hot state
5In	√	√	√	<0.1s	Trip	
10In	×	√	√	<0.1s	Trip	
20In	×	×	√	<0.1s	Trip	

Note: Thermal tripping characteristics are based on ambient temperature 30–35°C and wire connections as per Table 4. Adjustments should be made for different operating conditions.

Tripping Characteristic curve diagram



Outlines and dimensions



Accessories

EXB3 accessories (63 frame size)

Remote indication accessories

■ OF auxiliary contact
- External circuit, indicating the circuit breaker's ON/OFF status
- Basic type of auxiliary contact: 1NO/1NC
- Wiring capacity: 1-2.5mm² wire

■ SD alarm contact
- Send signals of fault tripping of the circuit breaker
- With mechanical indication available on the front panel, to indicate fault tripping
- Basic type of auxiliary contact: 1NO/1NC
- Wiring capacity: 1-2.5mm² wire

Tripping accessories

■

MX+OF shunt release

- External circuit, indicating the circuit breaker's ON/OFF status
- The circuit breaker for use with the release will be triggered to trip upon receiving a signal
- Basic type of auxiliary contact: 1NO/1NC
- Wiring capacity: 1-2.5mm² wire

MV over-voltage release

- Provide line protection due to over-voltage fault
- The circuit breaker for use with the release will be triggered to trip when the voltages at both ends of the releasee rise to the rated voltage range

■ With fault tripping indication available on the front panel, to indicate an over-voltage tripping with the indicator popped up
- Rated operating tripping over-voltage: (280±14) V AC
- Wiring capacity: 1-2.5mm² wire

MN under-voltage release

- Provide line protection due to under-voltage fault
- The circuit breaker for use with the release will be triggered to trip when the voltages at both ends of the releasee drop to the rated voltage range

■
- With fault tripping indication available on the front panel, to indicate under-voltage tripping with the indicator popped up
- Rated operating tripping under-voltage: (161±8.05) V AC
- Under-voltage protection range: (35%～70%) of Ue
- Wiring capacity: 1-2.5mm² wire

MVMN over/under-voltage release

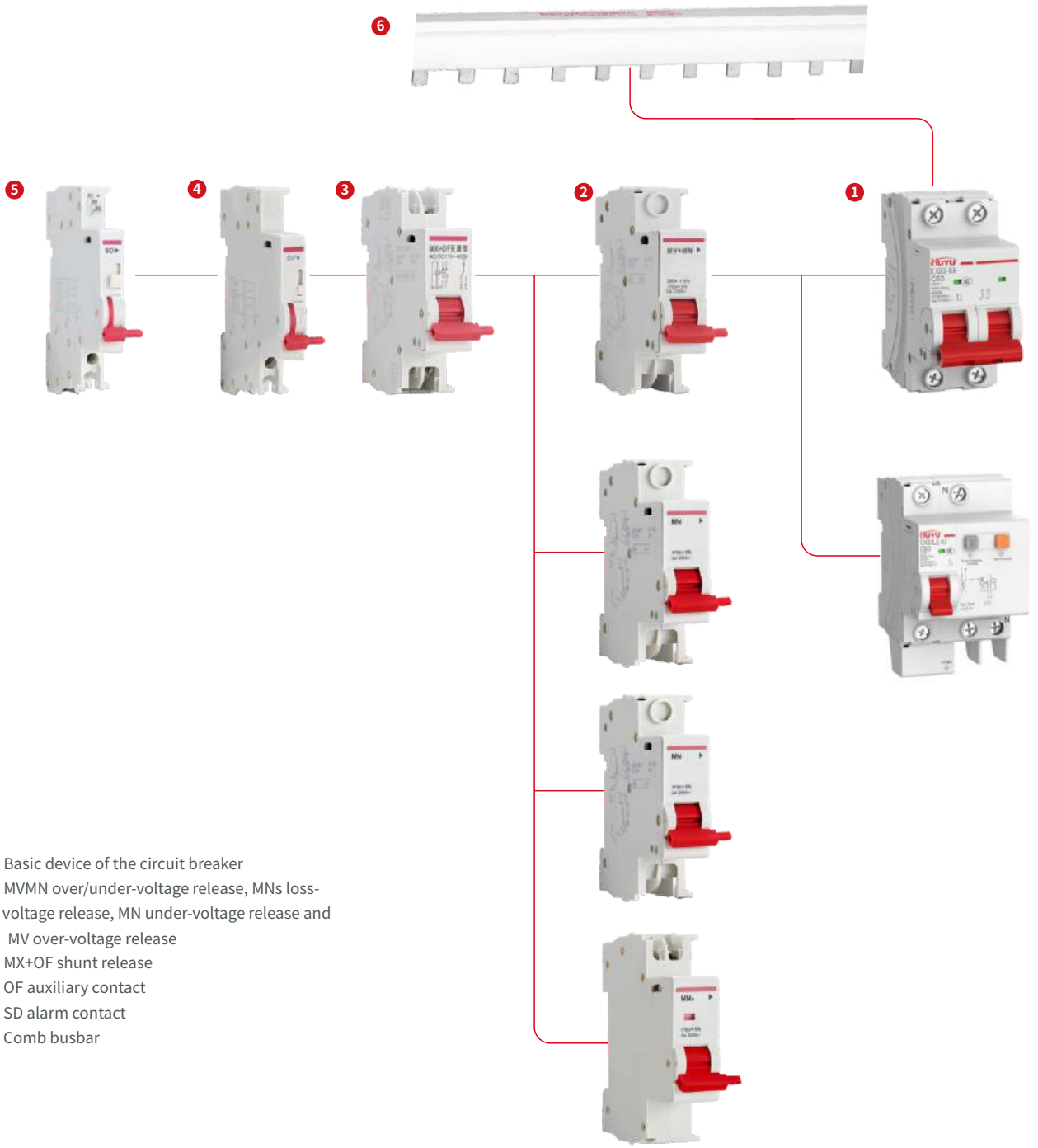
■ Provide line protection due to over-voltage and under-voltage fault
- The circuit breaker for use with the release will be triggered to trip when the voltages at both ends of the releasee rise or drop to the rated range
- With fault tripping indication available on the front panel, to indicate over-voltage or under-voltage tripping with the indicator popped up
- Rated operating tripping over-voltage: (280±14) VAC
- Rated operating tripping under-voltage: (161±8.05) VAC
- Under-voltage protection range: (35%～70%) of Ue
- Wiring capacity: 1-2.5mm² wire

MNs loss-voltage release

Accessories

EXB3 accessories (63 frame size)

Accessory mounting diagram



1、Basic device of the circuit breaker
2、MVMN over/under-voltage release, MNs loss-voltage release, MN under-voltage release and MV over-voltage release
3、MX+OF shunt release
4、OF auxiliary contact
5、SD alarm contact
6、Comb busbar

Mounting instruction

1、Accessories can be assembled to breaker left side by tool-free.
2、The total mounting width is within 54mm, including OF, SD (3 max.) +MO, MNs, MV, MN, MVMN (2 max.) + MCB from left to right.

Accessories

EXB3 accessories (125 frame size)

Remote indication accessories

■ OF auxiliary contact
- External circuit, indicating the circuit breaker's ON/OFF status
- Basic type of auxiliary contacts: 1NO/1NC
- Wiring capacity: 1-2.5mm² wire

■ SD alarm contact
- Send signals of fault tripping of the circuit breaker
- With mechanical indication available on the front panel, to indicate fault tripping
- Basic type of auxiliary contacts: 1NO/1NC
- Wiring capacity: 1-2.5mm² wire

Tripping accessories

■ MX+OF shunt release
- External circuit, indicating the circuit breaker's ON/OFF status
- The circuit breaker for use with the release will be triggered to trip upon receiving a signal
- Basic type of auxiliary contacts: 1NO/1NC
- Wiring capacity: 1-2.5mm² wire

■ MV over-voltage release
- Offer line protection in case of over-voltage faults
- The circuit breaker for use with the release will be triggered to trip when the voltages at both ends of the releasee rise to the rated voltage range
- With fault tripping indication available on the front panel, to indicate an over-voltage tripping with the indicator popped up
- Rated operating tripping over-voltage: (280±14) V AC
- Wiring capacity: 1-2.5mm² wire

■ MN under-voltage release
- Offer line protection in case of under-voltage faults
- The circuit breaker for use with the release will be triggered to trip when the voltages at both ends of the releasee drop to the rated voltage range
- With fault tripping indication available on the front panel, to indicate an under-voltage tripping with the indicator popped up
- Rated operating tripping under-voltage: (161±8.05) V AC
- Under-voltage protection range: (35%～70%) of Ue
- Wiring capacity: 1-2.5mm² wire

■ MVMN over/under-voltage release
- Offer line protection in case of over-voltage and under-voltage faults
- The circuit breaker for use with the release will be triggered to trip when the voltages at both ends of the releasee rise or drop to the rated voltage range
- With fault tripping indication available on the front panel, to indicate over-voltage or under voltage tripping with the indicator popped up
- Rated operating tripping over-voltage: (280±14) VAC
- Rated operating tripping under-voltage: (161±8.05) V AC
- Under-voltage protection range: (35%～70%) of Ue
- Wiring capacity: 1-2.5mm² wire

■ MNs loss-voltage release
- The circuit breaker for use with the release will be triggered to trip when the power supply voltage drops to the rated voltage range, to achieve loss-voltag protection
- Ensure the circuit breaker to close normally when the power supply voltage returns to normal
- Prevent the circuit breaker from re-closing when the power supply voltage is zero or drops to the rated voltage range
- With fault tripping indication available on the front panel, to indicate loss-voltag tripping when popped up
- Rated operating tripping loss-voltag: (161±8.05) V AC, with loss-voltag protection range of (35%～70%) of Ue
- Normal recovery voltage: ⩾85%Ue, with loss-voltage protection range ＜35%Ue
- Wiring capacity: 1-2.5mm² wire

Accessories

EXB3 accessories (125 frame size)

Accessory mounting diagram

1、Circuit breaker
2、MVMN over/under-voltage release, MNs loss-voltage release, MN under-voltage release and MV over-voltage release
3、MX+OF shunt release
4、OF auxiliary contact
5、SD alarm contact

Mounting instruction

1、OF and SD are mounted on the left side of the circuit breaker, and only one accessory can be mounted on the left side of each circuit breaker
2、MX+OF, MV, MN, and MVMN are mounted on the right side of the circuit breaker, and only one accessory can be mounted on the right side of each circuit breaker
3、Accessories can not be mounted on the right side of EXB3LE-125 residual current products
4、Accessories can be mounted to EXB3-125 and EXB3LE-125 series circuit breakers
5、The above accessories cannot be ordered separately; they need to be mounted onto the circuit breaker before delivery from the factory

Accessories

Temperature correction table

Temperature correction table

- 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
1-6	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 EXB3-63H

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 EXB3-125H

Rated current A	Rated current correction value A											
	-40°C	-30°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
63	1.31	1.29	1.25	1.2	1.15	1.11	1.05	1	0.94	0.88	0.82	0.75
80	1.31	1.29	1.25	1.2	1.15	1.11	1.05	1	0.94	0.88	0.82	0.75
100	1.31	1.29	1.25	1.2	1.15	1.11	1.05	1	0.94	0.88	0.82	0.75
125	1.31	1.29	1.25	1.2	1.15	1.11	1.05	1	0.94	0.88	0.82	0.75

- Temperature correction table of EXB3LY-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
6	1.45	1.4	1.3	1.23	1.15	1.08	1	0.98	0.96	0.93	0.91
10-25	1.27	1.24	1.19	1.13	1.08	1.04	1	0.98	0.95	0.92	0.89
32-40	1.27	1.24	1.19	1.13	1.08	1.04	1	0.97	0.92	0.89	0.87
50-63	1.26	1.25	1.18	1.13	1.08	1.03	1	0.95	0.9	0.86	0.84

Accessories

Temperature correction table

- Temperature correction table of EXB3LE-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
6	1.45	1.4	1.3	1.23	1.15	1.08	1	0.98	0.96	0.93	0.91
10-25	1.27	1.24	1.19	1.13	1.08	1.04	1	0.98	0.95	0.92	0.89
32-40	1.27	1.24	1.19	1.13	1.08	1.04	1	0.97	0.92	0.89	0.87
50-63	1.26	1.25	1.18	1.13	1.08	1.03	1	0.95	0.9	0.86	0.84

- Temperature correction table of EXB3LE-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
6	1.45	1.4	1.3	1.23	1.15	1.08	1	0.98	0.96	0.93	0.91
10-25	1.27	1.24	1.19	1.13	1.08	1.04	1	0.98	0.95	0.92	0.89
32-40	1.27	1.24	1.19	1.13	1.08	1.04	1	0.97	0.92	0.89	0.87
50-63	1.26	1.25	1.18	1.13	1.08	1.03	1	0.95	0.9	0.86	0.84

- Temperature correction table of EXB3LE-125

Rated current A	Rated current correction value A											
	-40°C	-30°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
63	1.31	1.29	1.25	1.2	1.15	1.11	1.05	1	0.94	0.88	0.82	0.75
80	1.31	1.29	1.25	1.2	1.15	1.11	1.05	1	0.94	0.88	0.82	0.75
100	1.31	1.29	1.25	1.2	1.15	1.11	1.05	1	0.94	0.88	0.82	0.75
125	1.31	1.29	1.25	1.2	1.15	1.11	1.05	1	0.94	0.88	0.82	0.75

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HUANYU HIGH-TECH CO.,LTD.

ADD:Wenzhou Bridge Industrial Zone,Yueqing,Zhejiang,China.

WhatsApp/MOB:0086-135 0655 2522

Email:austin@huyu.com.cn

www.huyuelectric.com

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