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Innovator
2020

Miniature Circuit Breakers

BK63HU / BK63H



LS *ELECTRIC*

Miniature Circuit Breakers

BK63HU UL489 MCB

- Pole : 1P, 2P, 3P
- Rated current : 1~63A
- Curve : B, C, D, K
- Rated short current : 10kA
- Accessory : AX, AL, SHT, UVT



Ratings

Performance	UL489 MCB	
Standard	UL489, UL486E(Lug)	
Protection	Overload, short circuit	
Rated current	1, 2, 3, 4, 5, 6, 8, 10, 15, 16, 20, 25, 30, 32, 40, 50, 63A	
Number of poles	1P, 2P, 3P	
Rated short circuit capacity	AC	DC
	1P : 10kA@120/240VAC, 10kA@277VAC (1~25A) 10kA@120/240VAC(30~63A) 2P, 3P : 10kA@240VAC, 480Y/277VAC(1~25A) 10kA@240VAC(30~63A)	1P : 10kA@60VDC 2P, 3P : 10kA@125VDC
Rated frequency	50/60 Hz	
Reference temperature	40°C	
Normal ambient temperature	-5 ~ 40°C	
Tripping curve	B, C, D, K curve	
Trip type	Thermal magnetic	
Type of terminals	Terminal with stirrup (Indirect pressure)	
Terminal size acceptability-min/max	14 / 4AWG	
Tightening torque	3.9 Nm (35 lbf-in)	
Installation	Mounting on 35mm DIN rail	
Dimension of specimen (W×H×D)	18×105×66 (1P)	
Protection degree	IP20	
Accessory	AX-HU, AL-HU, SHT-HU, UVT-HU	
Relative humidity	45~85%RH	
Electrical endurance	6,000	
Maximum switching frequency (Time/h)	360/h	
Approvals	UL, CB, ABS	

BK63H UL1077 MCB

Miniature Circuit Breakers

- Pole : 1P, 2P, 3P, 4P
- Rated current : 1~63A
- Curve : B, C, D
- Rated short current : 10kA
- Accessory : AX, AL, SHT, UVT



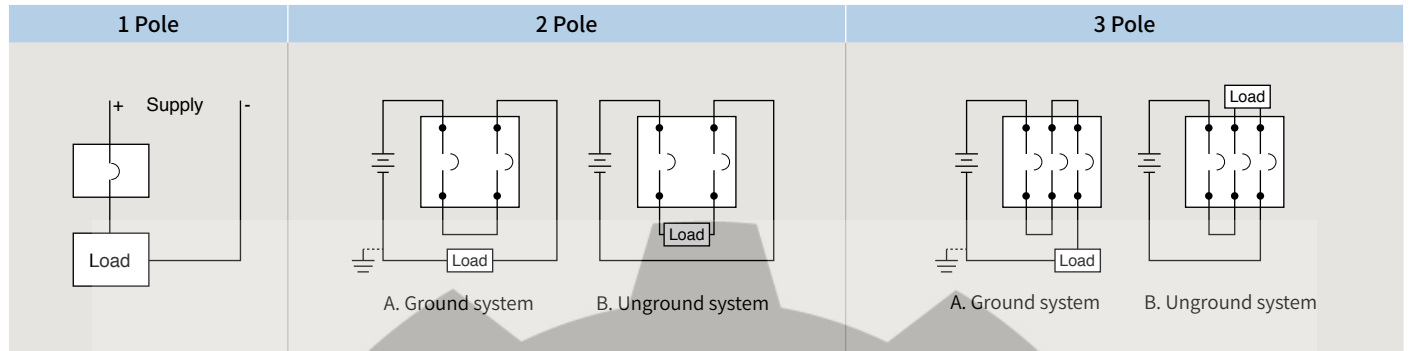
Ratings

Performance	UL1077 MCB	
Standard	UL 1077	
Protection	Overload, short circuit	
Rated current	1, 2, 3, 4, 5, 6, 8, 10, 15, 16, 20, 25, 30, 32, 40, 50, 63A	
Number of poles	1P, 2P, 3P, 4P	
Rated short circuit capacity	AC	DC
	1P : 10kA@120/240VAC 6kA@277VAC 2P~4P : 10kA@120/240VAC 6kA@480V/277VAC	1P : 10kA@60VDC 2P~4P : 10kA@125VDC
Rated frequency	50/60 Hz	
Reference temperature	40°C	
Normal ambient temperature	-5 ~ 40°C	
Tripping curve	B, C, D curve	
Trip type	Thermal magnetic	
Type of terminals	Terminal with stirrup (Indirect pressure)	
Terminal size acceptability-min/max	14 / 4AWG	
Tightening torque	2Nm (17.5 lbf-in)	
Installation	Mounting on 35mm DIN rail	
Dimension of specimen (W×H×D)	18×81×66 (1P)	
Protection degree	IP20	
Accessory	AX-H, AL-H, SHT-H, UVT-H	
Relative humidity	45~85%RH	
Electrical endurance	6,000	
Maximum switching frequency (Time/h)	360/h	
Approvals	UL, CB, ABS	

Miniature Circuit Breakers

Accessory / Circuit diagrams (BK63HU)

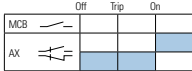
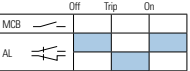
Exemplary DC circuit diagrams (BK63HU)



UL489 accessory

Type		AX-H	AL-H	Type	SHT-HU	UVT-HU																										
Appearance				Appearance																												
Rating	AC circuit	6A at 240VAC 3A at 415VAC		Control voltage [Ue]	AC 110~380V DC 60~220V	AC 110~120V AC 220~240V AC 380~415V																										
	DC circuit	1A at 110VDC 2A at 48VDC																														
Contact		<table border="1"><thead><tr><th></th><th>Off</th><th>Trip</th><th>On</th></tr></thead><tbody><tr><td>MCB</td><td></td><td></td><td></td></tr><tr><td>AX</td><td></td><td></td><td></td></tr></tbody></table>			Off	Trip	On	MCB				AX				<table border="1"><thead><tr><th></th><th>Off</th><th>Trip</th><th>On</th></tr></thead><tbody><tr><td>MCB</td><td></td><td></td><td></td></tr><tr><td>AL</td><td></td><td></td><td></td></tr></tbody></table>			Off	Trip	On	MCB				AL				Operation voltage	80~110% Ue	-
	Off	Trip	On																													
MCB																																
AX																																
	Off	Trip	On																													
MCB																																
AL																																
				Trip voltage	-	35~70% Ue																										
Dimension(W×H×D)		9 × 105 × 66		Dimension(W×H×D)	18 × 105 × 66																											

UL1077 accessory

Type		AX-H		AL-H	
Appearance					
Rating	AC circuit	6A at 240VAC 3A at 415VAC			
	DC circuit	1A at 110VDC			
Contact					
Dimension(W×H×D)		9 × 81 × 66			

Type		SHT-H		UVT-H	
Appearance					
Control voltage [Ue]		AC 110~380V DC 60~220V		AC 110~120V AC 220~240V AC 380~415V	
		80~110% Ue		-	
Trip voltage		-		35~70% Ue	
Dimension(W×H×D)		18 × 81 × 66			

Numbering system / Accessory connecting

UL 489/1077 MCB

BK	63H	U	1P	B	63A	10kA	240VAC	UL489
Series	AF	Standard	Pole	Type	A	kA	Rated voltage	Standard
MCB	63	U UL489 UL1077	1P 2P 3P 4P	B-Type C-Type D-Type K-Type	1, 2, 3, 4, 5, 6, 8, 10, 15, 16, 20, 25, 30, 32, 40, 50, 63	6 10	120/240VAC 240VAC 277VAC 480Y/277VAC	UL489 UL1077

AX	H	UL1077
Accessory	Applicable product	Applied standard
AX Auxiliary switch	H (UL1077) BK63H	UL1077 UL1077
AL Alarm switch	HU (UL489) BK63HU	UL489 UL489
SHUT Shunt trip device		
UVT Under voltage trip device		

Accessory connecting

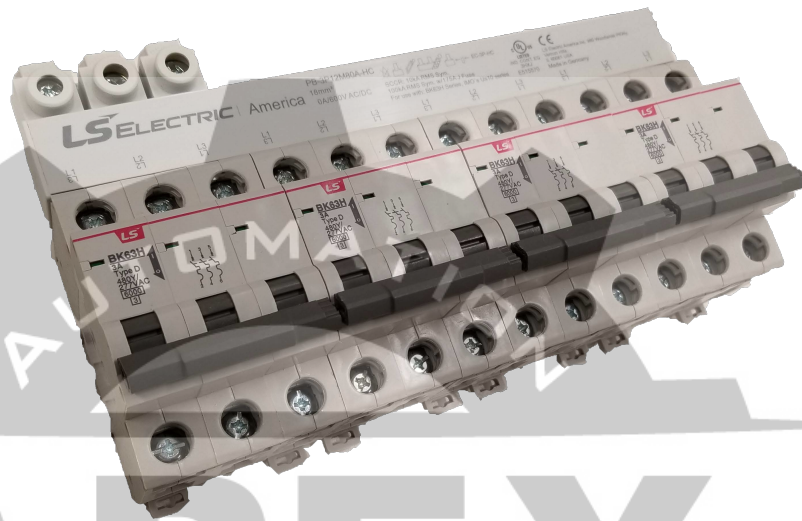
Aux. contacts	Tripping devices	Both Aux. contacts and tripping devices
Up to 18mm AL 9mm AX 9mm MCB	Up to 36mm SHT 18mm UVT 18mm MCB	Up to 54mm AL 9mm AX 9mm SHT 18mm UVT 18mm MCB

Miniature Circuit Breakers

Accessory/ Bus Bars (BK63H)

Busbars are used for easily connecting upstream power into multiple circuit breakers. See below parts for connection of BK63H (UL1077) MCBs. The busbars can be individually cut to a specific length for the application and isolated with end caps.

Three busbar models are available for use with auxiliary contact modules with a width of 9 mm.



Ordering

Item Code	Part number	Description
0692000163	PB-1P12M80A-HC	Cuttable Busbar, 1Pole, 12Pin, 18mm pitch, 80A, for UL1077 MCB
0692000263	PB-1P57M80A-HC	Cuttable Busbar, 1Pole, 57Pin, 18mm pitch, 80A, for UL1077 MCB
0692000363	PB-2P12M80A-HC	Cuttable Busbar, 2Pole, 12Pin, 18mm pitch, 80A, for UL1077 MCB
0692000463	PB-2P56M80A-HC	Cuttable Busbar, 2Pole, 56Pin, 18mm pitch, 80A, for UL1077 MCB
0692000563	PB-3P12M80A-HC	Cuttable Busbar, 3Pole, 12Pin, 18mm pitch, 80A, for UL1077 MCB
0692000663	PB-3P57M80A-HC	Cuttable Busbar, 3Pole, 57Pin, 18mm pitch, 80A, for UL1077 MCB
0693000163	TFT-1P115A-HC	Top Feed Terminal for 1Pole Busbar, 115A, for UL1077 MCB
0693001063	TFT-3P115A-HC	Top Feed Terminal for 2-3 Pole Busbar, 115A, for UL1077 MCB
0693000363	BFT-1P115A-HC	Bottom Feed Terminal, 115A, for UL1077 MCB
0693000563	EC-1P-HC	End Cap for Single Phase Busbars (2pk), for UL1077 MCB
0693000663	EC-3P-HC	End Cap for 2-3P Busbars, for UL1077 MCB
0693000863	SC-5M-HCY	Protection Cap, 5Pin, Yellow, for UL1077 MCB



1P Top Feed
Terminal



2/3P Top Feed
Terminal



Bottom/Direct
Feeder Terminal



Endcap

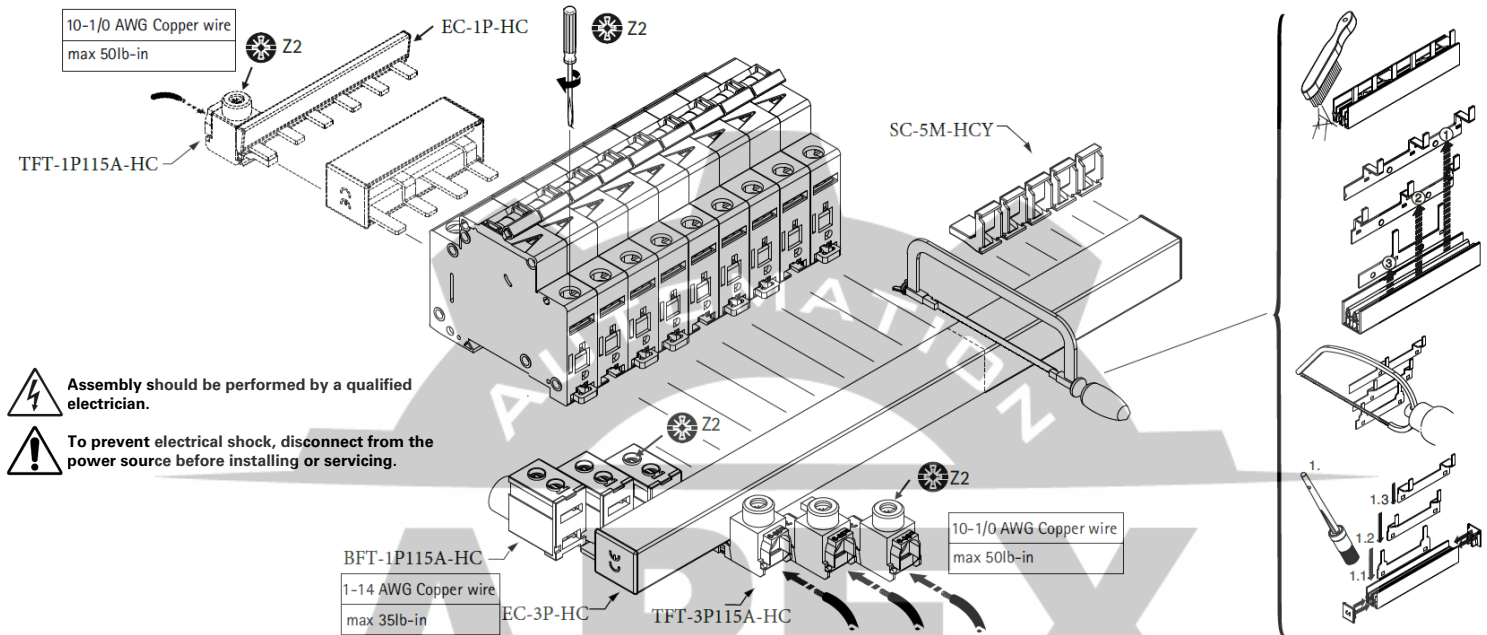


Protective Cap

Miniature Circuit Breakers

Accessory/ Bus Bars (BK63H)

Assembly



Technical Specifications

	UL1077 TFT-3P115A-HC TFT-1P115A-HC	EN/IEC 60947-2
U_e	1000 V AC/DC	
U_{imp}	9.5 kV	
I_e	115 A	
	#10-1/0 AWG 60°C Cu	2.5-35mm ² Cu
	0.56 in	14mm

	UL1077 BFT-1P115A-HC	EN/IEC 60947-2
U_e	1000V AC/DC	
U_{imp}	9.5 kV	
I_e	115 A	160 A
	#1-14 AWG 75°C Cu	2.5-50mm ² Cu
	0.56 in	14mm

	UL1077	EN/IEC 60947-2
U_e	1P 600 V AC 1000 V DC 2/3P 600 V AC/DC	
U_{imp}	9.5 kV	

I_e	Cross section	
	18mm ²	25mm ²
Infeed at the start of the busbar	80 A	100 A
Infeed at the center of the busbar	160 A	200 A

Dimensions

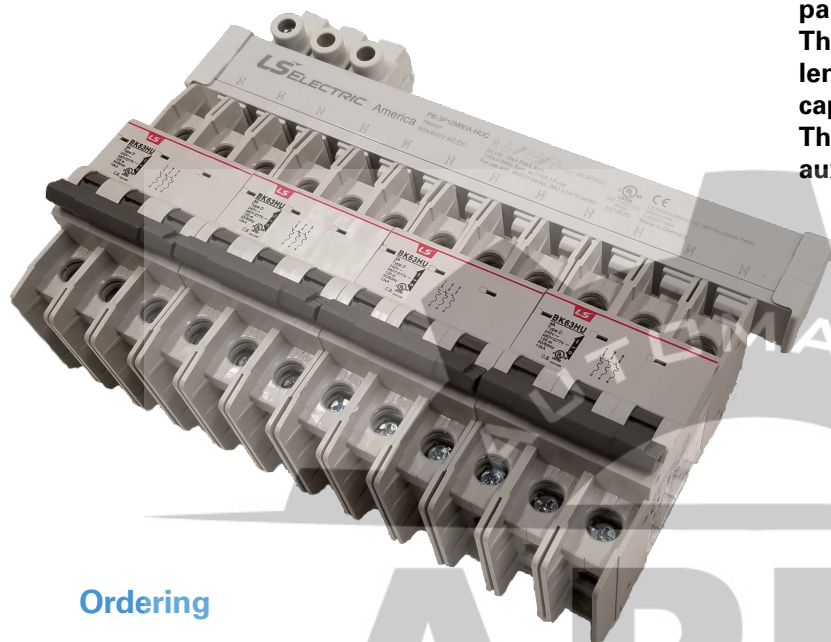
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Scan or click the QR code for dimensional drawings.



Miniature Circuit Breakers

Accessory/ Bus Bars (BK63HU)



Busbars are used for easily connecting upstream power into multiple circuit breakers. See below parts for connection of BK63HU (UL489) MCBs. The busbars can be individually cut to a specific length for the application and isolated with end caps.

Three busbar models are available for use with auxiliary contact modules with a width of 9 mm.

Ordering

Item Code	Part number	Description
0692000763	PB-1P12M80A-HUC	UL489, 1pole Cuttable Busbar, 12pins, 18mm pitch, 80A, for UL489 MCB
0692000863	PB-1P18M80A-HUC	UL489, 1pole Cuttable Busbar, 18pins, 18mm pitch, 80A, for UL489 MCB
0692000963	PB-1P57M80A-HUC	UL489, 1pole Cuttable Busbar, 57pins, 18mm pitch, 80A, for UL489 MCB
0692001063	PB-2P12M80A-HUC	UL489, 2pole Cuttable Busbar, 12pins, 18mm pitch, 80A, for UL489 MCB
0692001163	PB-2P18M80A-HUC	UL489, 2pole Cuttable Busbar, 18pins, 18mm pitch, 80A, for UL489 MCB
0692001263	PB-2P56M80A-HUC	UL489, 2pole Cuttable Busbar, 56pins, 18mm pitch, 80A, for UL489 MCB
0692001363	PB-3P12M80A-HUC	UL489, 3pole Cuttable Busbar, 12pins, 18mm pitch, 80A, for UL489 MCB
0692001463	PB-3P18M80A-HUC	UL489, 3pole Cuttable Busbar, 18pins, 18mm pitch, 80A, for UL489 MCB
0692001563	PB-3P57M80A-HUC	UL489, 3pole Cuttable Busbar, 57pins, 18mm pitch, 80A, for UL489 MCB
0693000263	TFT-1P115A-HUC	Input terminal 35mm ² , UL489 0,035kg
0693000463	BFT-1P115A-HUC	Center Feed Terminal, 50mm ² , for UL489 MCB
0693000763	EC-AP-HUC	Endcap, suitable for UL489
0693000963	SC-3M-HUCY	Yellow Protective Caps for UL489



Feeder Terminal



Bottom/Direct
Feeder Terminal



Endcap

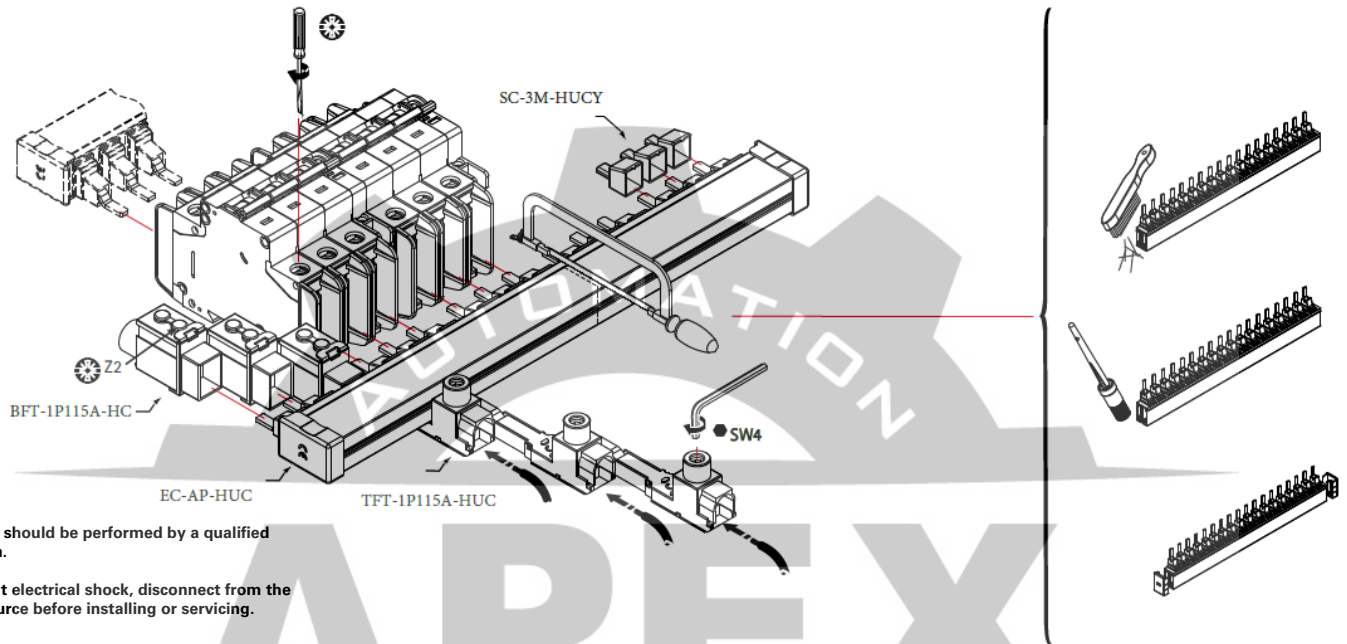


Protective Cap

Miniature Circuit Breakers

Accessory/ Bus Bars (BK63HU)

Assembly



Assembly should be performed by a qualified electrician.



To prevent electrical shock, disconnect from the power source before installing or servicing.

Technical Specifications

TFT-1P115A-HUC

	UL TFT-1P115A-HUC	EN/IEC 60947-2
U_e	1000V AC/DC	
U_{imp}	9,5 kV	
I_e	115A	160A
	#14-2 AWG 60/75°C Cu	2.5-35mm ² Cu
	0.56 in	14mm

BFT-1P115A-HC

	UL 508 802-ESB50UL489	EN/IEC 60947-2
U_e	1000V AC/DC	
U_{imp}	9,5 kV	
I_e	115A	160A
	#14-1 AWG 60/75°C Cu	1.5-35mm ² Cu
	0.56 in	14mm

PB-*P**M80A-HUC

	UL	EN/IEC 60947-2
U_e	1P 1000V AC/DC	2/3P 600V AC/DC
U_{imp}	9,5 kV	
I_e	Cross section	
	18 mm ²	
Infeed at the start of the busbar	80 A	
Infeed at the center of the busbar	160 A	

Dimensions

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Scan or click the QR code for dimensional drawings.

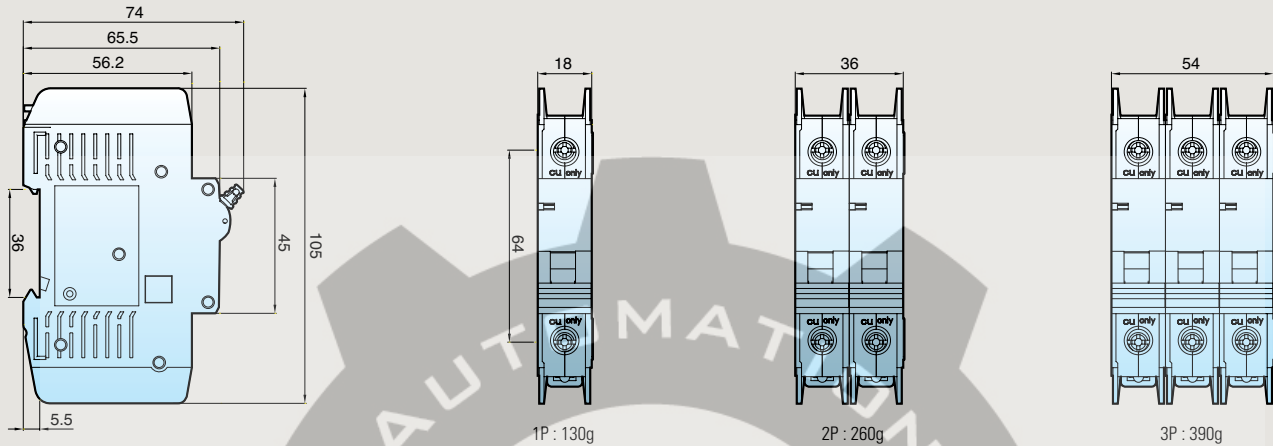


Miniature Circuit Breakers

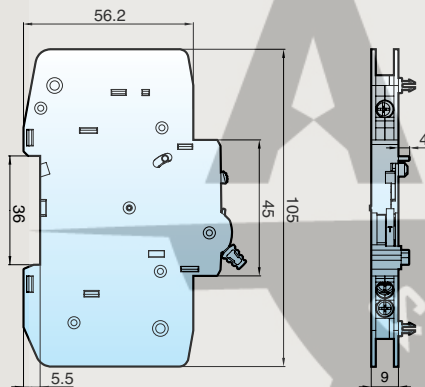
Dimension / Operating curve

UL489 MCB

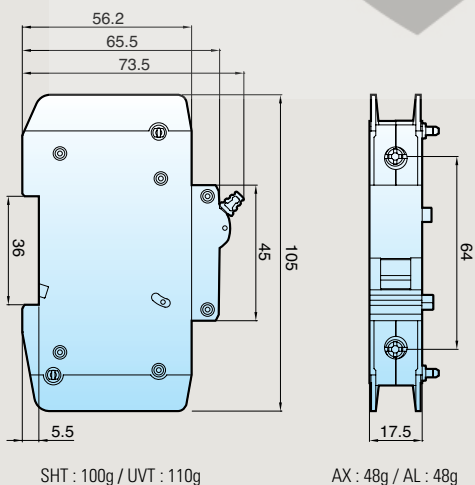
BK63HU



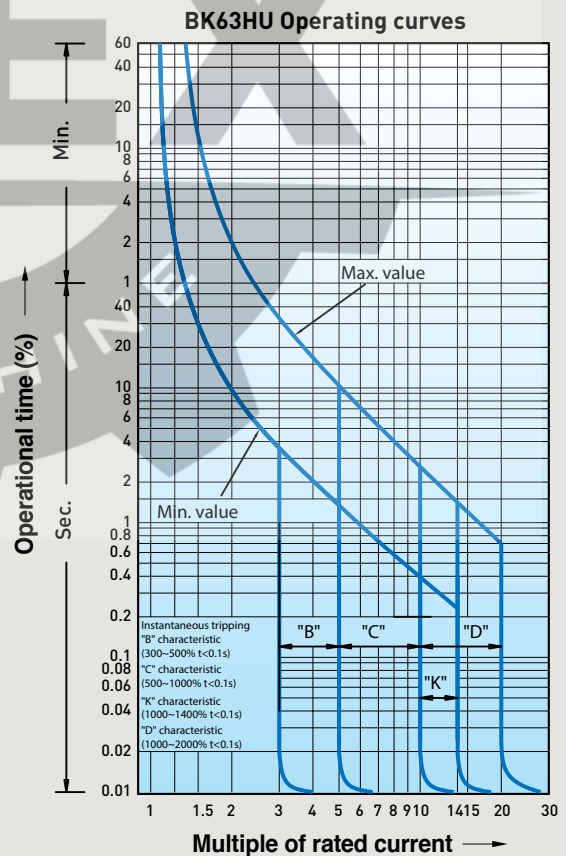
AX-HU/AL-HU



SHT-HU/UVT-HU

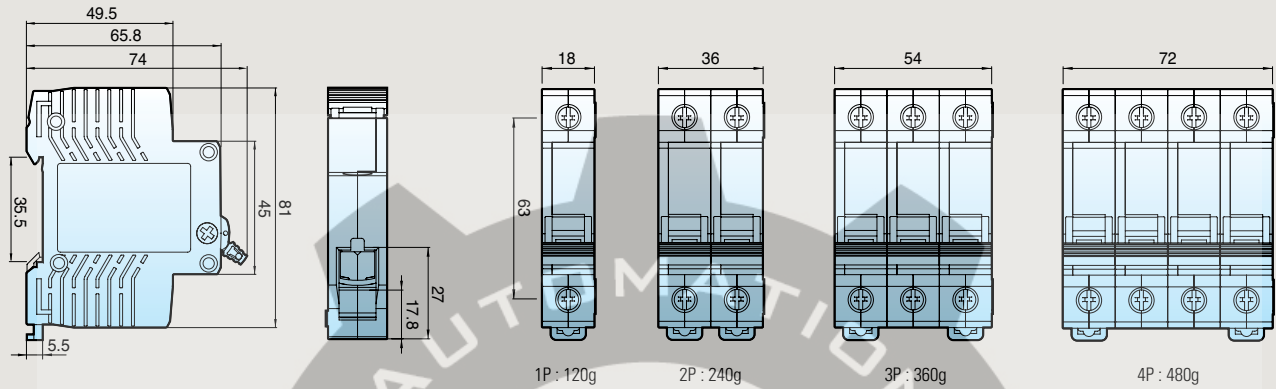


UL489 MCB operating curve

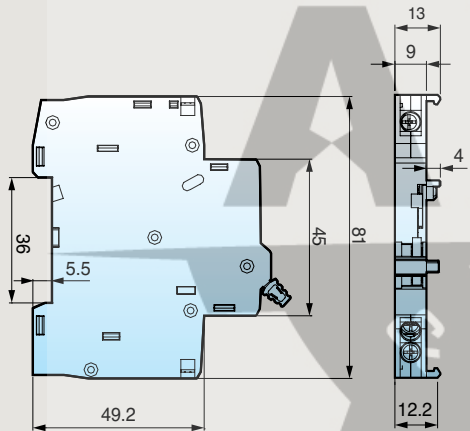


UL1077 MCB

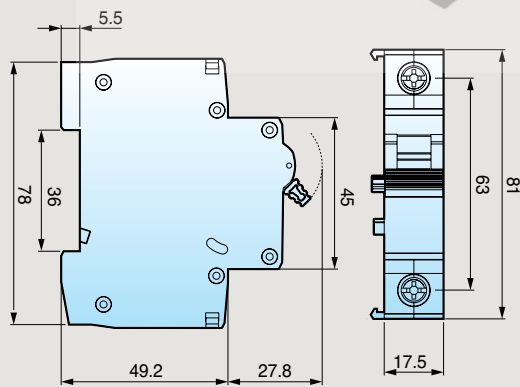
BK63H



AX-H/AL-H



SHT-H/UVT-H

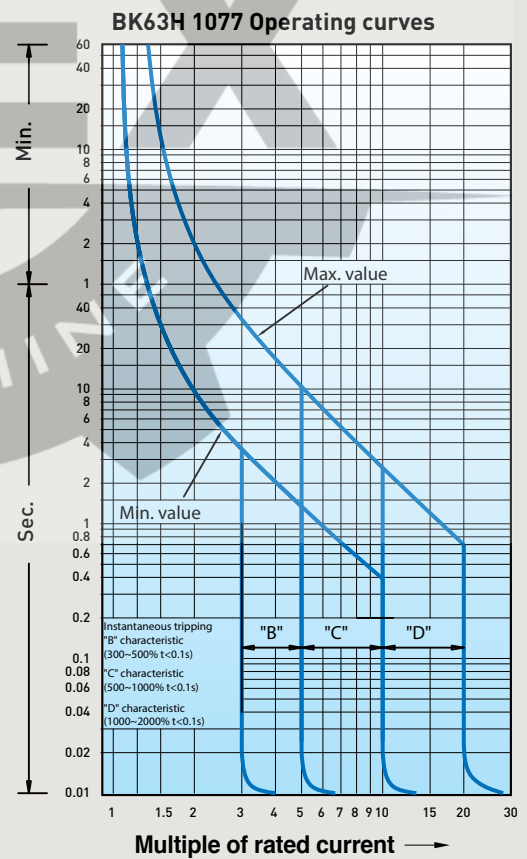


SHT : 100g / UVT : 110g

AX : 48g / AL : 48g

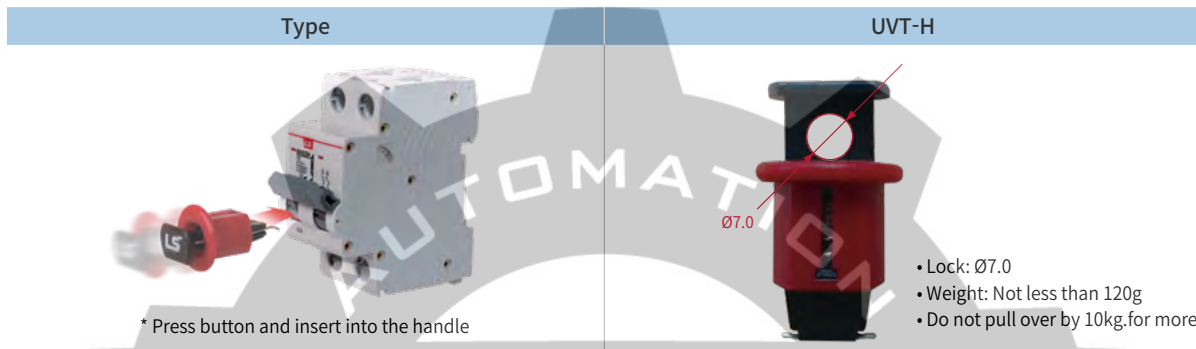
UL 1077 MCB operating curve

Operational time (%)



Accessory (Locking device)

Code	Name	ea
06410096	Locking device	1set (12ea)



According to The WEEE Directive, please do not
discard the device with your household waste.

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