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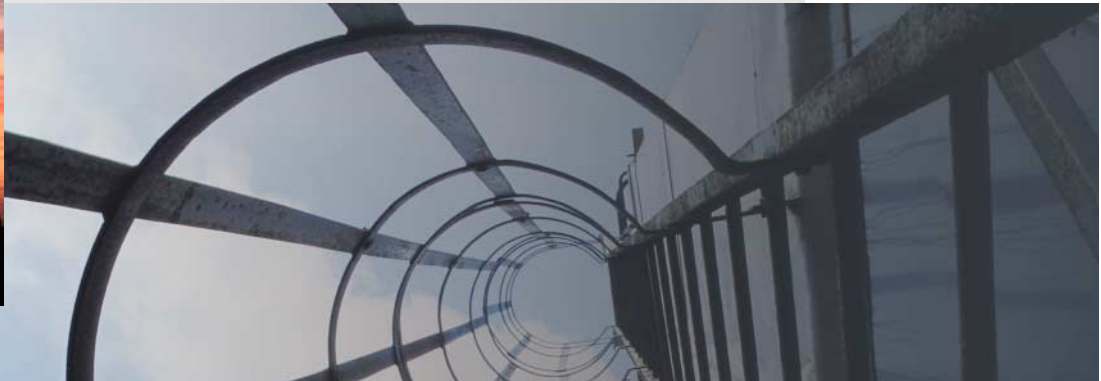
**Susol**  
Super Solution

**UL Molded case circuit breakers**

**LS IS**



# *Susol* UL UTE and UTS series



Susol UL UTE and UTS series



## Super Solution

# Contents :

<b>Description</b>	4
<b>General Information</b>	6
<b>UTE100</b>	12
<b>UTS150</b>	15
<b>UTS250</b>	18
<b>UTS400</b>	21
<b>UTS600</b>	24
<b>UTS800</b>	27
<b>UTS1200</b>	30

## Susol UL UTE and UTS series



# Susol UL MCCB <sup>NEW</sup> Series

Susol circuit breakers are designed to protect electrical system from damage caused by overload and short circuits.

## Susol UL UTE and UTS series

Susol with Thermal-Magnetic or Electronic Circuit Breakers



**UTE100**

**UTS150**

**UTS250**

**UTS400**

The new Susol series with thermal-magnetic or electronic circuit breakers are designed to protect electrical system from damage caused by overload and short circuit.

### For power distribution

- ▶ High breaking capacity
- ▶ Optimum coordination technique
- ▶ Powerful engineering tools
- ▶ Reverse feeding

To UTE100 from UTS600 frame circuit breakers are available with thermal-magnetic and UTS800, UTS1200 are electronic trip units.



**UTS600**



**UTS800**



**UTS1200**

## For motor protection & its control device

- ▶ Optimal overload protection
- ▶ Guaranteed Short Circuit Current Ratings

## For controlling and disconnecting circuits

## For extensive applications

- ▶ Wide range of optimized auxiliaries and accessories

# MCCB Characteristics

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## Molded Case Circuit Breaker

- Simplified product range  
AF: 100AF, 150AF, 250AF, 400AF, 600AF, 800AF, 1200AF  
Ampere Range: 15A ~ 1200A  
Pole: 2P, 3P
- High performance  
Ultimate breaking capacity (kA rms)  
Max 100kA @ 480VAC and 50kA @ 600V
- Standards  
World class with UL489
- Various accessories  
Electrical auxiliaries[AX, AL, UVT, SHT]  
Extended and directed rotary handle  
Flange handle with flexible cable and linkage  
Variable depth mechanism  
Locking devices  
LUG for CU/AL cable with UL486
- Various trip units  
ATU: Adjustable thermal & magnetic unit  
FMU: Adjustable thermal, fixed magnetic unit  
FTU: Fixed thermal & magnetic unit  
OCR: Electronic trip unit



## MCP Characteristics

### Motor Circuit Protector

- Simplified product range  
AF: 150AF, 250AF, 400AF, 600AF, 800AF, 1200AF  
Ampere Range: 1.6A ~ 1200A  
Only 3 Pole use
- Standards  
Instantaneous circuit breaker with UL489  
Motor protector with MC and Relay with UL508



## MCS Characteristics

### Molded Case Switch

- Simplified product range  
AF: 100AF, 150AF, 250AF, 400AF, 600AF, 800AF, 1200AF  
Ampere Range: 100A ~ 1200A  
Pole: 2P, 3P
- Standards  
World class with UL489.

# Technical Information

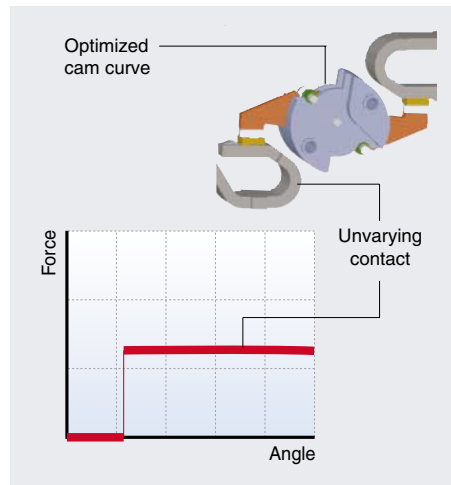
Susol

## Optimized contactors with toggle mechanism

- Easily induce arc mobility to grid direction
- Rapidly redeploy the arc from moving contactor
- Prevent contact tip from erosion
- Reduce the amount of peak current during a short circuit fault. It reduces the let through currents.

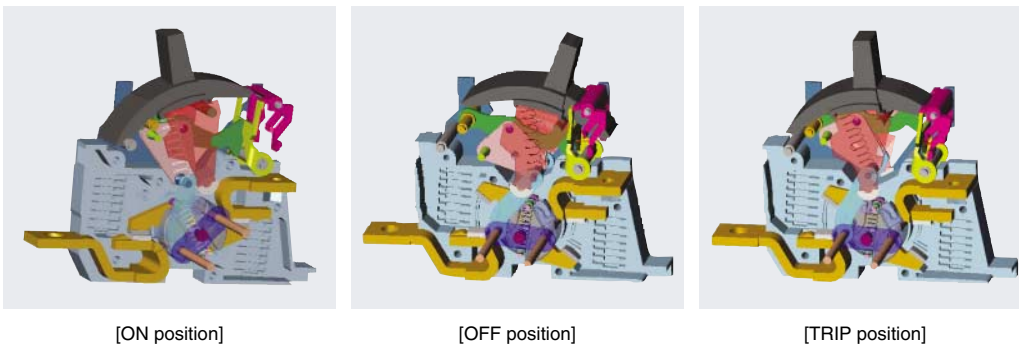
### Open speed & contact force

- Unvarying contact force regardless of Over-travel
- Rapid open speed of moving contact due to optimized cam curve regardless of trip signal.



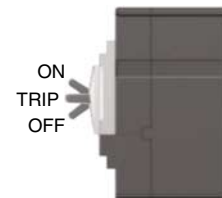
## Operating mechanism

- Susol circuit breakers have toggle handle operating mechanism, which also serves as switching position indicator. The indicator shows the positions of: ON, OFF, and TRIPPED.
- The circuit breakers have over-center toggle mechanism providing quick-make, quick-break operation. The operating mechanism is also trip-free, which allows tripping even when the circuit breaker handle is in "ON" position.



## Handle position

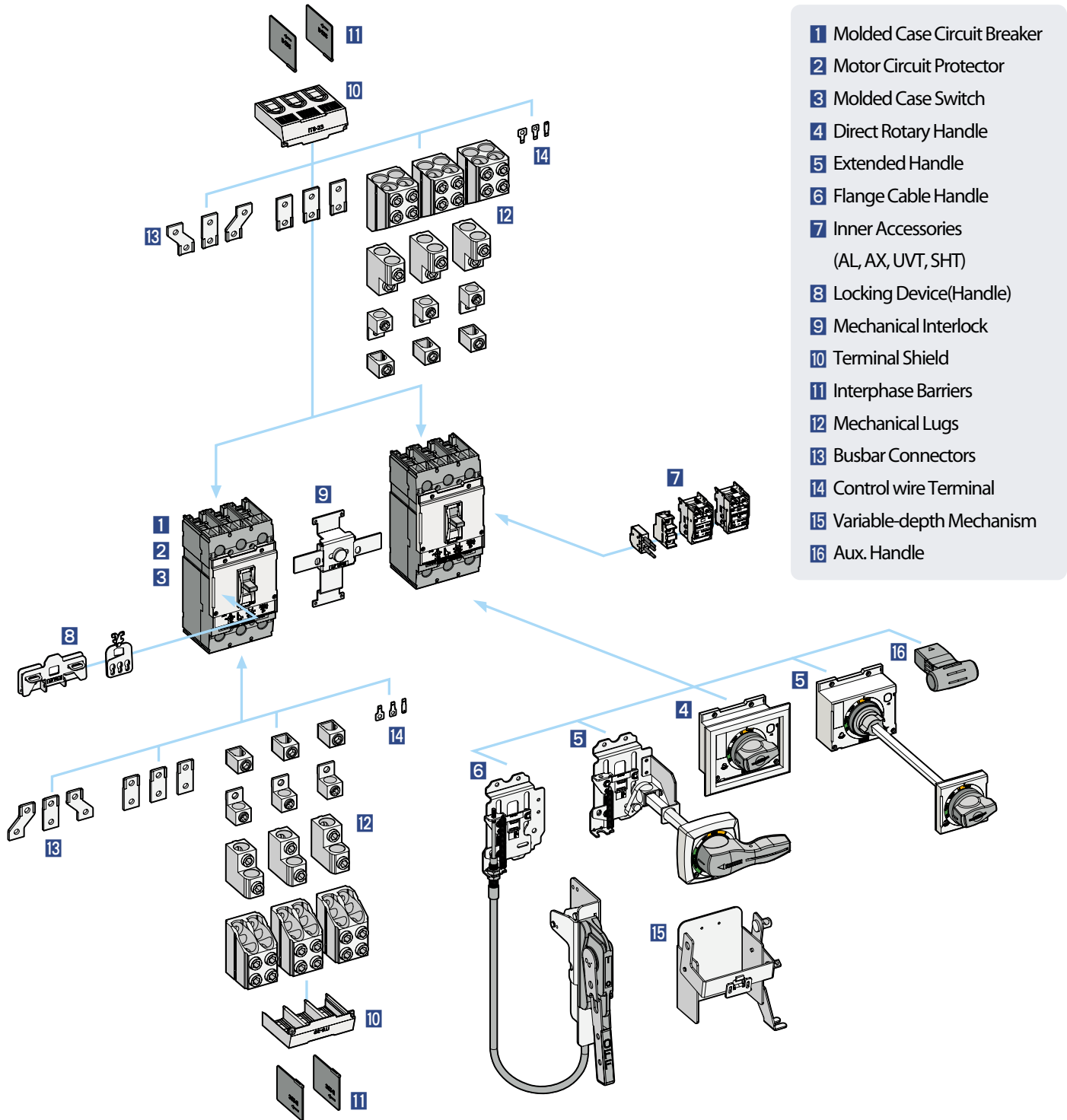
- Susol circuit breaker handle can assume any of the three positions: ON, TRIPPED, or OFF, as shown on the right. The center tripped position provides positive visual indication that the circuit breaker has tripped.
- The circuit breaker can be reset by first pushing the handle to "OFF" position. Power can then be restored to the load by pushing the handle to "ON" position.
- The circuit breakers have an integral push-to-trip button in the cover to manually trip the circuit breaker. This should be used as part of a regular preventive maintenance program.



# Field Installable Accessories

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Figure 1: Field install accessories





# Electrical Characteristics

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Maximum  
Rated Current  
(Amperes)



Circuit Breaker	
Breaker Type	
Number of Poles	
Breaker Capacity	120/240V
(kA rms)	240V
ac50~60Hz	480V
NEMA, UL	600V
	600Y347V
MCCB(Trip Units)	Amperes
F: Fixed A: Adjustable	ATU
T: Thermal M: Magnetic	FMU
	FTU
MCP	Amperes
	MCP
MCS	Amperes
	MCS
Unit Mounted	
Mechanical Lugs	
Busbar connectors	
Control Wire Terminal Kit	
Interphase Barriers	
Shunt Trip	
Undervoltage Trip	
Auxiliary Switch	
Alarm Switch	
Flange Cable Handle	
Flange Variable-Depth Mechanism	
Directly-Mounted Rotary Operating Handle	
NEMA-Door-Mounted Operating Mechanisms	
IEC-Door-Mounted Operating Mechanisms	
Mechanical Interlocks	
Handle Padlock Attachment	
Dimensions	
Inches(mm)	2-Pole
	3-Pole

UTE100		UTE100		UTS150		
E	N	E	N	N	H	L
2		3		2, 3		
50	65	50	65	-	-	-
50	65	50	65	65	100	150
25	35	25	35	35	65	100
-	-	-	-	18	35	50
14	18	14	18	-	-	-
15~100A		15~100A		40~150A		
-	-	-	-	●		
-	-	●	-	●		
●	-	●	-	●		
-	-	-	-	1.6~60A		
-	-	-	-	100, 150A		
-	-	-	-	●		
100A	-	100A	-	150A		
●	-	●	-	●		
●	-	●	-	●		
●	-	●	-	●		
●	-	●	-	●		
●	-	●	-	●		
●	-	●	-	●		
●	-	●	-	●		
●	-	●	-	●		
-	-	●	-	●		
-	-	●	-	●		
-	-	●	-	●		
●	-	●	-	●		
●	-	●	-	●		
●	-	●	-	●		
-	-	●	-	●		
●	-	●	-	●		
W	H	D		W	H	D
2.01(51)	5.12(130)	3.44(87.5)		4.13(105)	6.46(165)	3.44(87.5)
2.99(76)	5.12(130)	3.44(87.5)		4.13(105)	6.46(165)	3.44(87.5)

# Electrical Characteristics

Susol

Maximum  
Rated Current  
(Amperes)



Circuit Breaker	
Breaker Type	
Number of Poles	
Breaker Capacity (kA rms) ac50~60Hz NEMA, UL	240V
	480V
	600V
MCCB(Trip Units) F: Fixed A: Adjustable T: Thermal M: Magnetic	Amperes
	ATU
	FMU FTU
MCP	Amperes
	MCP
MCS	Amperes
	MCS
Unit Mounted	
Mechanical Lugs	
Busbar connectors	
Control Wire Terminal Kit	
Terminal Shields	
Interphase Barriers	
Shunt Trip	
Undervoltage Trip	
Auxiliary Switch	
Alarm Switch	
Flange Cable Handle	
Flange Variable-Depth Mechanism	
Directly-Mounted Rotary Operating Handle	
NEMA-Door-Mounted Operating Mechanisms	
IEC-Door-Mounted Operating Mechanisms	
Mechanical Interlocks	
Handle Padlock Attachment	
Dimensions	
inches(mm)	2-Pole
	3-Pole

UTS250			UTS400			UTS600		
N	H	L	N	H	L	N	H	L
2, 3			2, 3			2, 3		
65	100	150	65	100	150	65	100	150
35	65	100	35	65	100	35	65	100
18	35	50	18	35	50	18	35	50
150~250A			250~400A			500~600A		
●			●			●		
●			●			●		
●			●			●		
220A			320A			500A		
●			●			●		
175, 250A			400A			600A		
●			●			●		
●			●			●		
●			●			●		
●			●			●		
●			●			●		
●			●			●		
●			●			●		
●			●			●		
●			●			●		
●			●			●		
●			●			●		
●			●			●		
●			●			●		
W	H	D	W	H	D	W	H	D
4.13(105)	7.48(190)	3.44(87.5)	5.51(140)	11.42(290)	4.33(110)	5.51(140)	13.39(340)	4.33(110)
4.13(105)	7.48(190)	3.44(87.5)	5.51(140)	11.42(290)	4.33(110)	5.51(140)	13.39(340)	4.33(110)

Maximum  
Rated Current  
(Amperes)



Circuit Breaker	
Breaker Type	
Number of Poles	
Breaker Capacity	240V
(kA rms) ac50~60Hz	480V
NEMA, UL	600V
MCCB	Amperes
Trip Units	OCR
OCR: Electronics	MCP
MCP	Amperes
	MCS
MCS	Amperes
	MCS
Unit Mounted	
Mechanical Lugs	
Busbar connectors	
Terminal Shields	
Interphase Barriers	
Shunt Trip	
Undervoltage Trip	
Auxiliary Switch	
Alarm Switch	
Flange Cable Handle	
Flange Variable-Depth Mechanism	
Directly-Mounted Rotary Operating Handle	
NEMA-Door-Mounted Operating Mechanisms	
IEC-Door-Mounted Operating Mechanisms	
Mechanical Interlocks	
Handle Padlock Attachment	
Dimensions	
Inches(mm)	3-Pole

UTS800			UTS1200			
N	H	L	N	H	P	L
3			3			
65	100	150	50	100	65	150
35	65	100	35	65	50	100
18	35	50	18	25	50	35
400~800A			800~1200A			
●			●			
800A			1200A			
●			●			
800A			1200A			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
W	H	D	W	H	D	
8.5(216)	13(330)	6(152.5)	8.5(216)	16.26(413)	6(152.5)	

# UTE100-Frame

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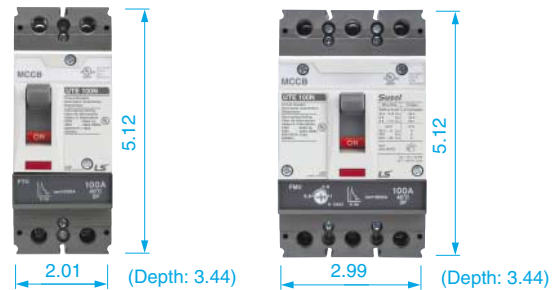
## Product Description

- UTE100 breaker is HACR rated
- SWD switch duty rating (applied only to 15 and 20A /347Vac or less)
- HID high intensity discharge lighting rating (15~50A /480Vac or less)

## Trip Unit

- FMU: Thermal(Adjustable), Instant(Fixed)
- FTU: Thermal(Fixed), Instant(Fixed)
- MCS: Only instant(Fixed)

## Dimensions



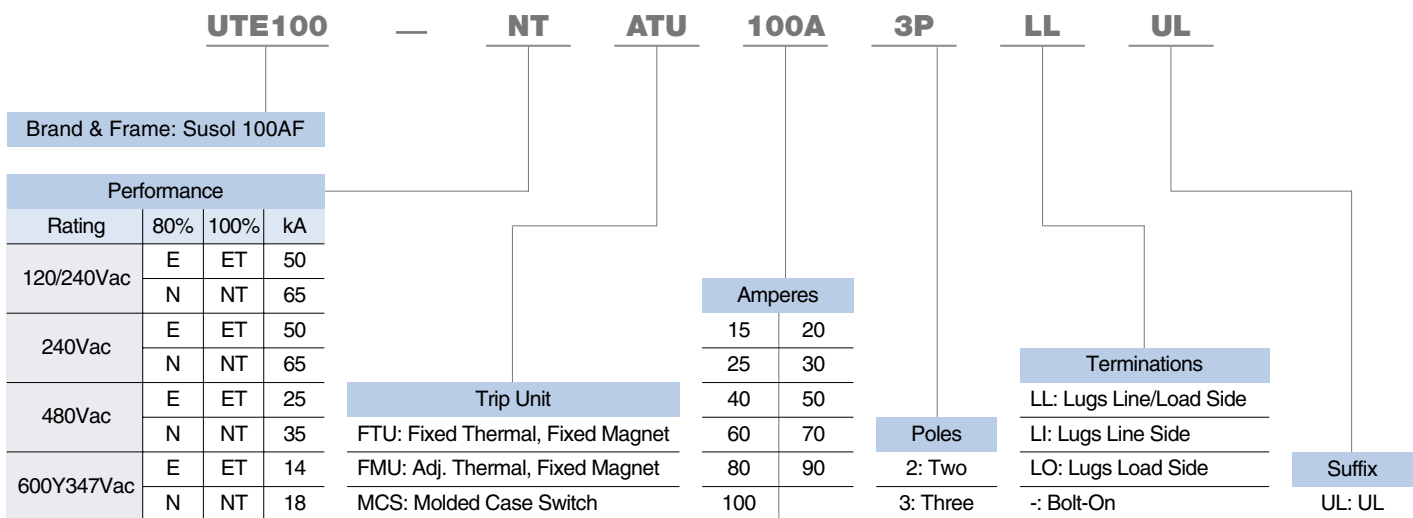
Rating UTE100	FTU	
	2P/3P	MAG TRIP
15	O	400A
20	O	
25	O	
30	O	
40	O	
50	O	800A
60	O	
70	O	
80	O	
90	O	1000A
100	O	

Rating UTE100	FMU		
	3P	Rating Range	MAG TRIP
25	O	20~25A	400A
40	O	32~40A	
60	O	48~60A	800A
80	O	64~80A	
100	O	80~100A	1000A

Rating UTE100	MCS (2P/3P)
	MAG (10×In)
100	1000A

## Product Selection

### Catalog Numbering (Product Selection)

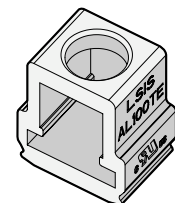


**Table 2. Technical Data and Specifications**

Spec	Rating Range		
	Circuit Breaker	UTE100	UTE100
MCCB	Pole	2	3
	Amperes	15~100A	15~100A
	FMU	-	■
	FTU	■	■
MCS	Amperes	100A	100A
	MCS	■	■
SIZE	W	2.01(51)	2.99(76)
	Inch	H	5.12(130)
	(mm)	D	3.44(87.5)
Interrupting Rating kA rms (240VAC)	E	50	50
	N	65	65
Interrupting Rating kA rms (480VAC)	E	25	25
	N	35	35
Interrupting Rating kA rms (600Y347VAC)	E	14	14
	N	18	18

**Table 3. Tightening Torque for Lugs**

Lug Type	Terminal Body Material	Wire Type	Breaker Amps Range	AWG Wire Range	Torque N.m(lb-in)	
AL100TE	Aluminum	CU	60°C	15~30A	14~10	4(35.4)
				40A	8	5(44.3)
				50~80A	6~3	6(53.1)
			75°C	90~100A	2~1	7(61.9)
				15~30A	14~10	4(35.4)
				40~50A	8	5(44.3)
		AL	60°C	60~100A	6~3	6(53.1)
				40~60A	6~3	6(53.1)
				70~80A	2~1	7(61.9)
			75°C	50~70A	6~3	6(53.1)
				80~100A	2~1/0	7(61.9)



**Table 4. Enclosure Dimensions**

Circuit Breaker	Amperage	Enclosure Dimension(W×H×D)(mm)	
		80%	100%
UTE100	15~100A	210×439.4×101.6	

**Table 5. Inner Accessory**

Type	Right(T)		Type	Left(R)	
	1	1		1	1
AX	1	1	AX	1	1
AL	1	1	AL	1	1
AX+AL	1	1	AX+AL	1	1
SHT	1	1	SHT		1
UVT	1	1	UVT		1

\*Applicable in indicated pole position-not synchronous.

# UTE100-Frame

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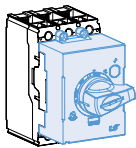
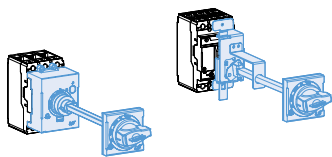
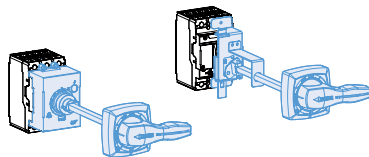
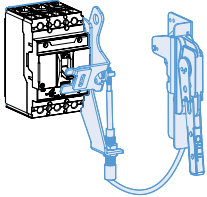
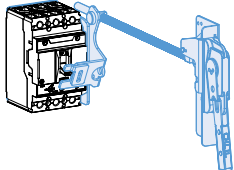
**Table 5. Undervoltage Trip UVT**

Control voltage, U <sub>e</sub>		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	AC/DC 24V	0.64	0.65	27
	AC/DC 48V	1.09	1.1	23
	AC/DC 100~110V	0.73	0.75	5.8
	AC/DC 200~220V	1.21	1.35	5.4
	AC 380~440V	1.67	-	3.8
	AC 440~480V	1.68	-	3.5
Max. opening time		50ms (max.)		
Tightening torque of terminal screw		8.2 kgf • cm		
Operating voltage range	Trip	20~70% V <sub>n</sub>		
	Reset/Closing	≥ 0.85V <sub>n</sub>		

**Table 6. Shunt Trip SHT**

Control voltage, U <sub>e</sub>		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	AC/DC 12V	0.35	0.36	30
	AC/DC 24V	0.64	0.65	27
	AC/DC 48V	1.09	1.1	23
	AC/DC 60V	1.2	1.22	20
	AC/DC 100~130V	0.73	0.75	5.8
	AC/DC 200~250V	1.21	1.35	5.4
	AC 380~450V	1.67	-	3.8
	AC 440~500V	1.68	-	3.5
Max. opening time		50ms (max.)		
Tightening torque of terminal screw		8.2 kgf • cm		
Operating voltage range		AC: 0.7~1.1V <sub>n</sub> , DC: 0.8~1.1V <sub>n</sub>		

**Table 7. Handle [Rotary and Cable]**

Type	Directly-Mounted	Door-Mounted	Flange Handle with Cable Operation Mechanism	Flange Handle with Variable Depth Mechanism
IEC			-	-
Standard	NEMA Type 1			
NEMA	-			
Standard	NEMA Type 1, 12, 3, 3R, 4, 4X			

# UTS150-Frame

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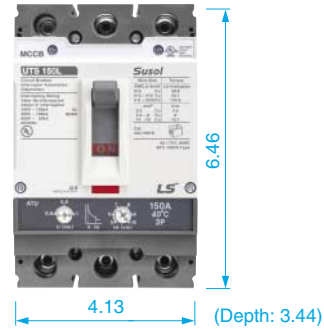
## Product Description

- UTS150 breaker is HACR rated

## Trip Unit

- FMU: Thermal (Adjustable), Instant(Fixed)
- FTU: Thermal(Fixed), Instant(Fixed)
- ATU: Thermal(Adjustable), Instant(Adjustable)
- MCP: Only Instant(Adjustable)
- MCS: Only instant(Fixed)

## Dimensions



Rating UTS150	FTU	
	2P/3P	MAG TRIP
40	O	500A
50	O	
60	O	800A
70	O	
80	O	1000A
90	O	
100	O	1500A
125	O	
150	O	

Rating UTS150	2P/3P	FMU	
		Rating Range (0.8~1×In)	MAG TRIP
40	O	32~40A	500A
60	O	48~60A	800A
80	O	64~80A	800A
100	O	80~100A	1000A
150	O	120~150A	1500A

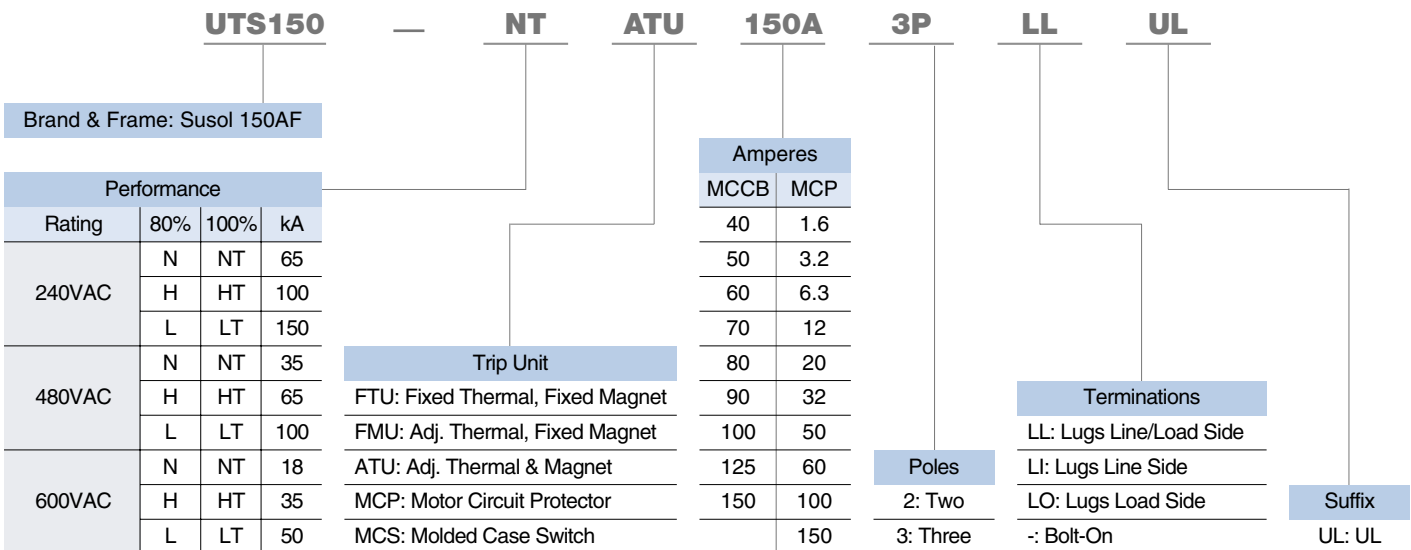
Rating UTS150	2P/3P	ATU	
		Rating Range (0.8~1×In)	MAG TRIP (5~10×In)
100	O	80~100A	500~1000A
150	O	120~150A	750~1500A

Rating UTS150	MCS (2P/3P)
	MAG TRIP (10×In)
150	1500A

Rating UTS150	MCP (3P)
	MAG TRIP (6~12×In)
1.6	10~20A
3.2	20~40A
6.3	40~80A
12	70~140A
20	120~240A
32	190~380A
50	300~600A
60	360~720A
100	600~1200A
150	900~1800A

## Product Selection

### Catalog Numbering (Product Selection)



# UTS150-Frame

Susol

**Table 2. Technical Data and Specifications**

Spec	Rating Range	
	Circuit Breaker	UTS150
MCCB	Pole	2/3
	Amperes	40~150A
	ATU	■
	FMU	■
	FTU	■
MCP	Amperes	1.6~60A
		70~150A
MCS	MCP	■
	Amperes	150A
SIZE	W	4.13(105)
	H	6.46(165)
	D	3.44(87.5)
Interrupting Rating kA rms (240VAC)	N	65
	H	100
	L	150
Interrupting Rating kA rms (480VAC)	N	35
	H	65
	L	100
Interrupting Rating kA rms (600VAC)	N	18
	H	35
	L	50

**Table 3. Tightening Torque for Lugs**

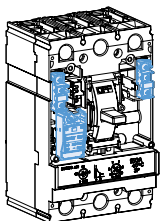
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL150TS	Aluminum	~15A	Cu/Al	14	4.5(39.8)
		20~30A	Cu/Al	12~10	6(53.1)
		40~175A	Cu/Al	8-2/0	15.1(133.6)
		50~70A	Al	6~3	6(53.1)
		90~150A	Al	2~3/0	15.6(160.0)



**Table 4. Enclosure Dimensions**

Circuit Breaker	Amperage	Enclosure Dimension(W×H×D)(mm)	
		80%	100%
UTS150	40~150A	218×460×102	

**Table 5. Inner Accessory**



Type	Left(R)	Right(T)
AX	1	1
AL	1	-
SHT	1*	-
UVT	1*	-

\*Applicable in indicated pole position-not synchronous.



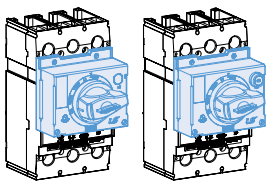
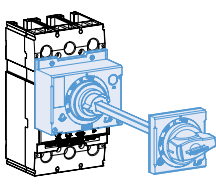
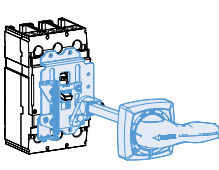
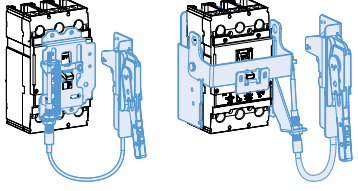
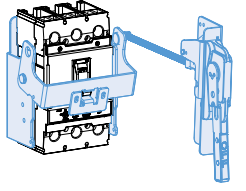
**Table 5. Undervoltage Trip UVT**

Control voltage, Ue		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	AC/DC 24V	0.64	0.65	27
	AC/DC 48V	1.09	1.1	23
	AC/DC 110~130V	0.73	0.75	5.8
	AC/DC 220~240V / DC 250V	1.21	1.35	5.4
	AC 380~440V	1.67	-	3.8
	AC 440~480V	1.68	-	3.5
Max.opening time		50ms (max.)		
Tightening torque of terminal screw		8.2 kgf • cm		
Operating voltage range	Trip	35~70% Vn		
	Reset/Closing	≥ 0.85Vn		

**Table 6. Shunt Trip SHT**

Control voltage, Ue		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	DC 12V	-	0.36	30
	AC/DC 24V	0.58	0.58	24
	AC/DC 48V	1.22	1.23	25
	AC/DC 110~130V	1.36	1.37	10.5
	AC 220~240V/DC250V	1.8	1.88	7.5
	AC 380~500V	1.15	-	2.3
Max.opening time		50ms (max.)		
Tightening torque of terminal screw		8.2 kgf • cm		
Operating voltage range		0.7~1.1Vn		

**Table 7. Handle [Rotary and Cable]**

Type	Directly-Mounted	Door-Mounted	Flange Handle with Cable Operation Mechanism	Flange Handle with Variable Depth Mechanism
IEC			-	-
Standard	NEMA Type 1			
NEMA	-			
Standard	NEMA Type 1, 12, 3, 3R, 4, 4X			

# UTS250-Frame

Susol

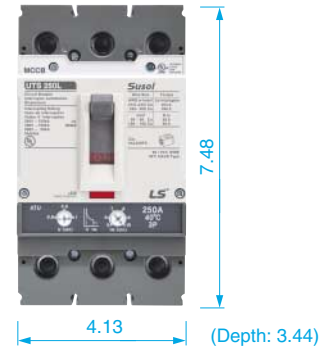
## Product Description

- UTS250 breaker is HACR rated

## Trip Unit

- FMU: Thermal (Adjustable), Instant(Fixed)
- FTU: Thermal(Fixed), Instant(Fixed)
- ATU: Thermal(Adjustable), Instant(Adjustable)
- MCP: Only Instant(Adjustable)
- MCS: Only instant(Fixed)

## Dimensions



Rating UTS250	FTU	
	2P/3P	MAG TRIP
150	O	1500A
175	O	1750A
200	O	2000A
225	O	2250A
250	O	2500A

Rating UTS250	2P/3P	FMU	
		Rating Range (0.8~1×In)	MAG TRIP
160	O	128~160A	1600A
200	O	160~200A	2000A
250	O	200~250A	2500A

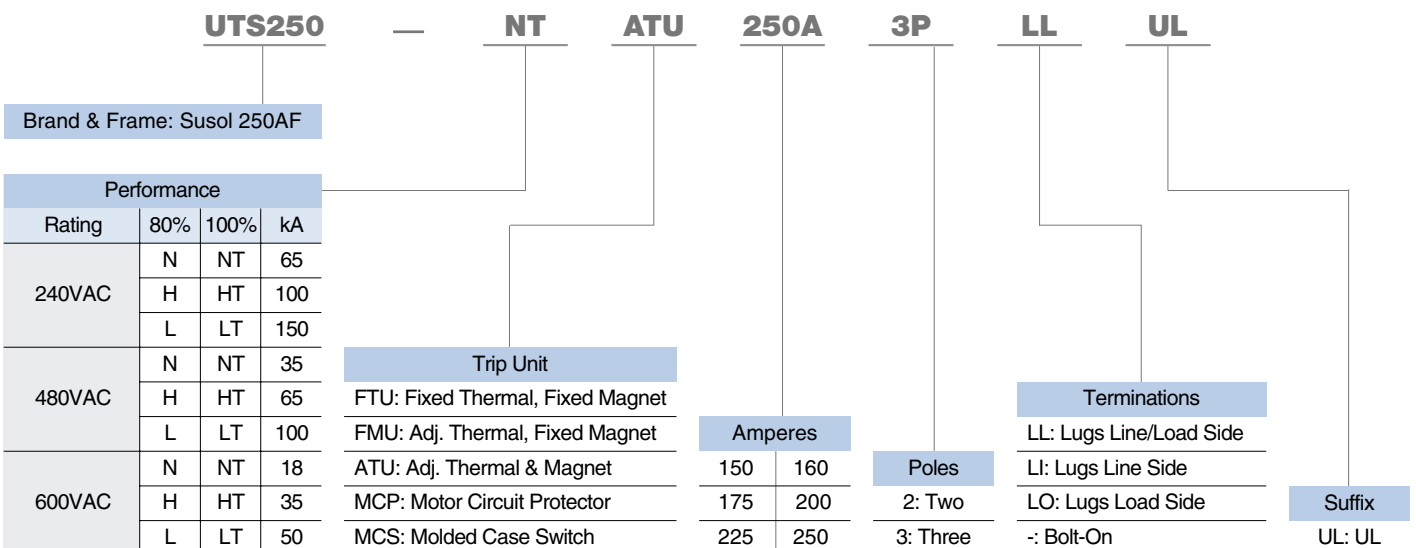
Rating UTS250	MCS (2P/3P)	
	MAG TRIP (10×In)	
175	1750A	
250	2500A	

Rating UTS250	MCP (3P)	
	MAG TRIP (6~12×In)	
220	1320~2640A	

Rating UTS250	2P/3P	ATU	
		Rating Range (0.8~1×In)	MAG TRIP (5~10×In)
160	O	128~160A	800~1600A
200	O	160~200A	1000~2000A
250	O	200~250A	1250~2500A

## Product Selection

### Catalog Numbering (Product Selection)

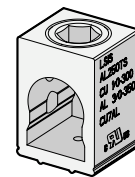


**Table 2. Technical Data and Specifications**

Spec	Rating Range	
	Circuit Breaker	UTS250
	Pole	2/3
MCCB	Amperes	150~250A
	ATU	■
	FMU	■
	FTU	■
MCP	Amperes	220A
	MCP	■
MCS	Amperes	175, 250A
	MCS	■
SIZE	W	4.13(105)
	H	7.48(190)
	D	3.44(87.5)
Interrupting Rating kA rms (240VAC)	N	65
	H	100
	L	150
Interrupting Rating kA rms (480VAC)	N	35
	H	65
	L	100
Interrupting Rating kA rms (600VAC)	N	18
	H	35
	L	50

**Table 3. Tightening Torque for Lugs**

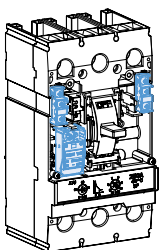
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL250TS	Aluminum	150A	Cu/Al	1/0-4/0	28.8(254.9)
		250A	Cu/Al	250~350	39.6(350.5)



**Table 4. Enclosure Dimensions**

Circuit Breaker	Amperage	Enclosure Dimension(W×H×D)(mm)	
		80%	100%
UTS250	150~250A	308 × 724 × 136	

**Table 5. Inner Accessory**



Type	Left(R)	Right(T)
AX	1	1
AL	1	-
SHT	1*	-
UVT	1*	-

\*Applicable in indicated pole position-not synchronous.

# UTS250-Frame

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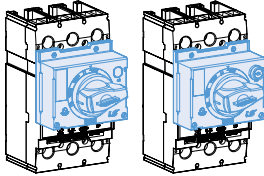
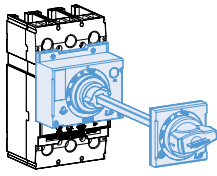
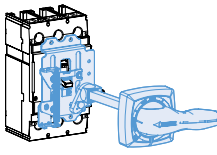
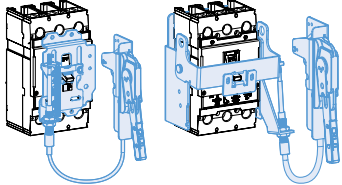
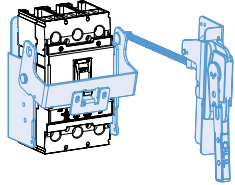
**Table 5. Undervoltage Trip UVT**

Control voltage, U <sub>e</sub>		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	AC/DC 24V	0.64	0.65	27
	AC/DC 48V	1.09	1.1	23
	AC/DC 110~130V	0.73	0.75	5.8
	AC 220~240V / DC 250V	1.21	1.35	5.4
	AC 380~440V	1.67	-	3.8
	AC 440~480V	1.68	-	3.5
Max. opening time		50ms (max.)		
Tightening torque of terminal screw		8.2 kgf • cm		
Operating voltage range	Trip	35~70% V <sub>n</sub>		
	Reset/Closing	≥ 0.85V <sub>n</sub>		

**Table 6. Shunt Trip SHT**

Control voltage, U <sub>e</sub>		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	DC 12V	-	0.36	30
	AC/DC 24V	0.58	0.58	24
	AC/DC 48V	1.22	1.23	25
	AC/DC 110~130V	1.36	1.37	10.5
	AC 220~240V/DC250V	1.8	1.88	7.5
	AC 380~500V	1.15	-	2.3
Max. opening time		50ms (max.)		
Tightening torque of terminal screw		8.2 kgf • cm		
Operating voltage range		0.7~1.1V <sub>n</sub>		

**Table 7. Handle [Rotary and Cable]**

Type	Directly-Mounted	Door-Mounted	Flange Handle with Cable Operation Mechanism	Flange Handle with Variable Depth Mechanism
IEC			-	-
Standard	NEMA Type 1			
NEMA	-			
Standard	NEMA Type 1, 12, 3, 3R, 4, 4X			

# UTS400-Frame

Susol

## Product Description

- UTS400 breaker is HACR rated

## Trip Unit

- FMU: Thermal (Adjustable), Instant(Fixed)
- FTU: Thermal(Fixed), Instant(Fixed)
- ATU: Thermal(Adjustable), Instant(Adjustable)
- MCP: Only Instant(Adjustable)
- MCS: Only instant(Fixed)

## Dimensions



Rating UTS400	FTU	
	2P/3P	MAG TRIP
250	O	2500A
300	O	3000A
350	O	3500A
400	O	4000A

Rating UTS400	2P/3P	FMU	
		Rating Range (0.8~1×In)	MAG TRIP
300	O	240~300A	3000A
400	O	320~400A	4000A

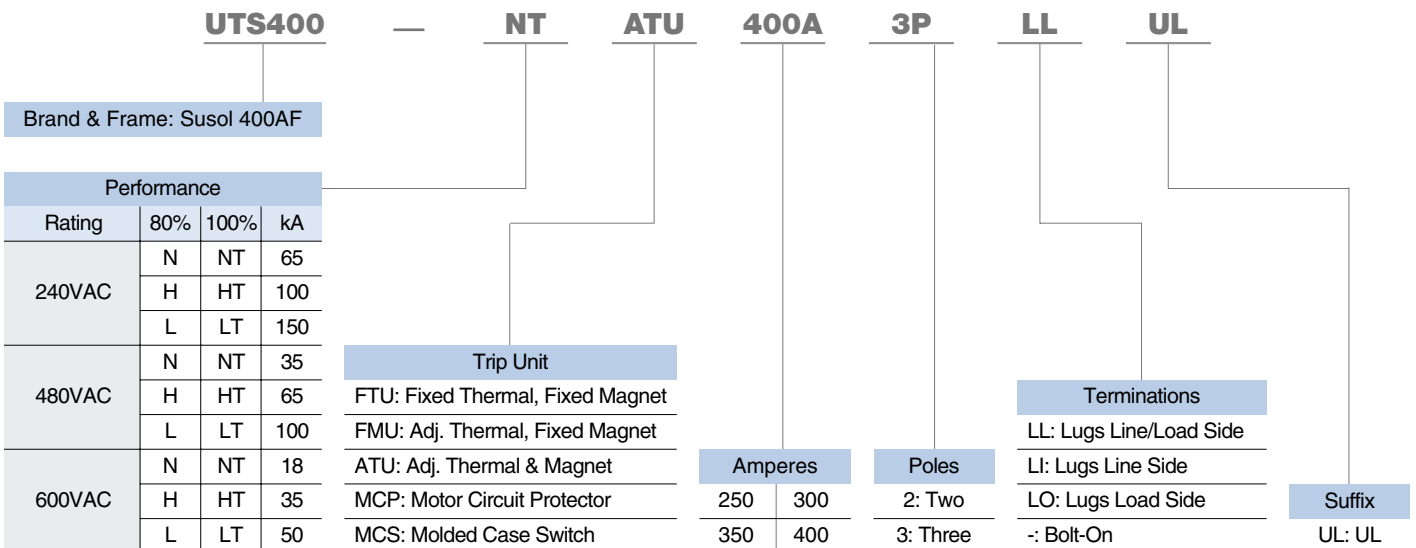
Rating UTS400	MCS (2P/3P)
	MAG TRIP (10×In)
400	4000A

Rating UTS400	MCP (3P)
	MAG TRIP (6~12×In)
320	1920~3840A

Rating UTS400	2P/3P	ATU	
		Rating Range (0.8~1×In)	MAG TRIP (5~10×In)
300	O	240~300A	1500~3000A
400	O	320~400A	2000~4000A

## Product Selection

### Catalog Numbering (Product Selection)



# UTS400-Frame

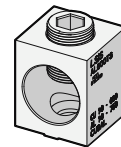
Susol

**Table 2. Technical Data and Specifications**

Spec	Rating Range	
	Circuit Breaker	UTS400
MCCB	Pole	2/3
	Amperes	250~400A
	ATU	■
	FMU	■
	FTU	■
MCP	Amperes	320A
	MCP	■
MCS	Amperes	400A
	MCS	■
SIZE	W	5.51(140)
	H	11.42(290)
	D	4.33(110)
Interrupting Rating kA rms (240VAC)	N	65
	H	100
	L	150
Interrupting Rating kA rms (480VAC)	N	35
	H	65
	L	100
Interrupting Rating kA rms (600VAC)	N	18
	H	35
	L	50

**Table 3. Tightening Torque for Lugs**

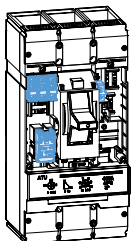
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL400TS	Aluminum	300A	Cu/Al	1/0~300	40.5(358.5)
		400A	Cu/Al	350~600	54(477.9)



**Table 4. Enclosure Dimensions**

Circuit Breaker	Amperage	Enclosure Dimension(W×H×D)(mm)	
		80%	100%
UTS400	250~400A	350×1020×152	350×1020×182

**Table 5. Inner Accessory**



Type	Left(R)	Right(T)
AX	3	-
AL	-	1
SHT	1*	-
UVT	1*	-

\*Applicable in indicated pole position-not synchronous.

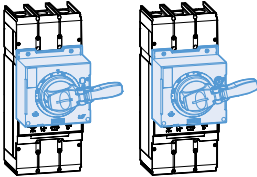
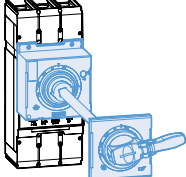
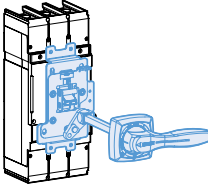
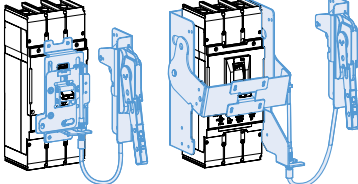
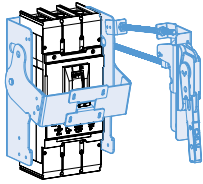
**Table 5. Undervoltage Trip UVT**

Control voltage, Ue		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	AC/DC 24V	0.64	0.65	27
	AC/DC 48V	1.09	1.1	23
	AC/DC 110~130V	0.73	0.75	5.8
	AC 220~240V / DC 250V	1.21	1.35	5.4
	AC 380~440V	1.67	-	3.8
	AC 440~480V	1.68	-	3.5
Max.opening time		50ms (max.)		
Tightening torque of terminal screw		8.2 kgf • cm		
Operating voltage range	Trip	35~70% Vn		
	Reset/Closing	≥ 0.85Vn		

**Table 6. Shunt Trip SHT**

Control voltage, Ue		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	DC 12V	-	0.36	30
	AC/DC 24V	0.58	0.58	24
	AC/DC 48V	1.22	1.23	25
	AC/DC 110~130V	1.36	1.37	10.5
	AC 220~240V/DC250V	1.8	1.88	7.5
	AC 380~500V	1.15	-	2.3
Max.opening time		50ms (max.)		
Tightening torque of terminal screw		8.2 kgf • cm		
Operating voltage range		0.7~1.1Vn		

**Table 7. Handle [Rotary and Cable]**

Type	Directly-Mounted	Door-Mounted	Flange Handle with Cable Operation Mechanism	Flange Handle with Variable Depth Mechanism
IEC			-	-
Standard	NEMA Type 1			
NEMA	-			
Standard	NEMA Type 1, 12, 3, 3R, 4, 4X			

# UTS600-Frame

Susol

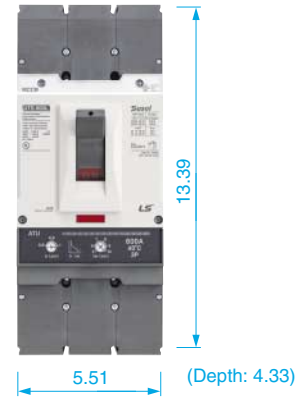
## Product Description

- UTS600 breaker is HACR rated

## Trip Unit

- FMU: Thermal (Adjustable), Instant(Fixed)
- FTU: Thermal(Fixed), Instant(Fixed)
- ATU: Thermal(Adjustable), Instant(Adjustable)
- MCP: Only Instant(Adjustable)
- MCS: Only instant(Fixed)

## Dimensions



Rating UTS600	FTU	
	2P/3P	MAG TRIP
500	O	5000A
600	O	6000A

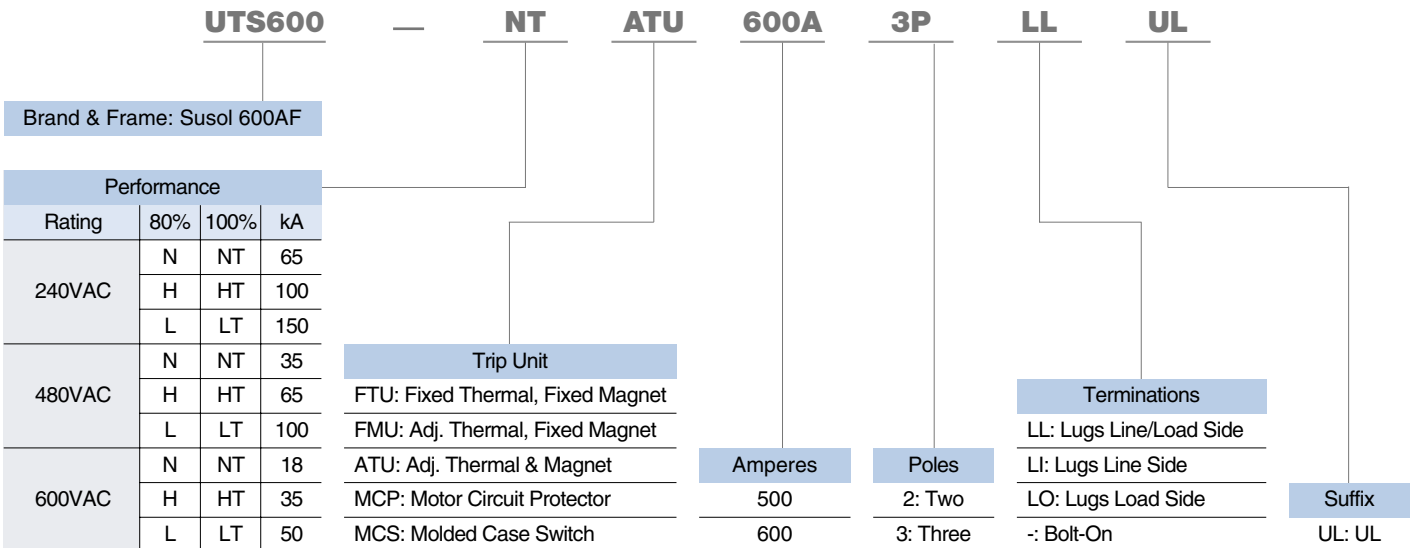
Rating UTS600	2P/3P	FMU	
		Rating Range (0.8~1×In)	MAG TRIP
500	O	400~500A	2500~5000A
600	O	480~600A	3000~6000A

Rating UTS600	MCS (2P/3P)		Rating UTS600	MCP (3P)	
	MAG TRIP (10×In)			MAG TRIP (6~12×In)	
600	6000A		500	3000~6000A	

Rating UTS600	2P/3P	ATU	
		Rating Range (0.8~1×In)	MAG TRIP (5~10×In)
500	O	400~500A	2500~5000A
600	O	480~600A	3000~6000A

## Product Selection

### Catalog Numbering (Product Selection)



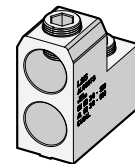


**Table 2. Technical Data and Specifications**

Spec	Rating Range	
	Circuit Breaker	UTS600
	Pole	2/3
MCCB	Amperes	500~600A
	ATU	■
	FMU	■
	FTU	■
MCP	Amperes	500A
	MCP	■
MCS	Amperes	600A
	MCS	■
SIZE	W	5.51(140)
	Inch	13.39(340)
	(mm)	4.33(110)
Interrupting Rating kA rms (240VAC)	N	65
	H	100
	L	150
Interrupting Rating kA rms (480VAC)	N	35
	H	65
	L	100
Interrupting Rating kA rms (600VAC)	N	18
	H	35
	L	50

**Table 3. Tightening Torque for Lugs**

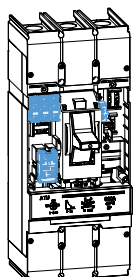
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL600TS	Aluminum	500A	Cu/Al	2/0~350	40.5(358.5)
		600A	Cu/Al	400~500	40.5(358.5)



**Table 4. Enclosure Dimensions**

Circuit Breaker	Amperage	Enclosure Dimension(W×H×D)(mm)	
		80%	100%
UTS600	500~600A	350×1020×152	360×1050×182

**Table 5. Inner Accessory**



Type	Left(R)	Right(T)
AX	3	-
AL	-	1
SHT	1*	-
UVT	1*	-

\*Applicable in indicated pole position-not synchronous.

# UTS600-Frame

Susol

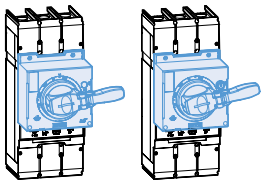
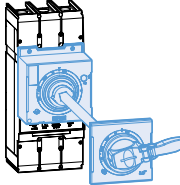
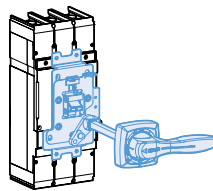
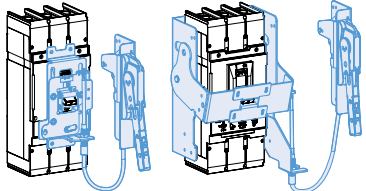
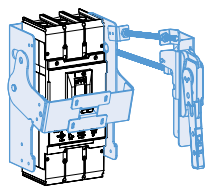
**Table 5. Undervoltage Trip UVT**

Control voltage, Ue		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	AC/DC 24V	0.64	0.65	27
	AC/DC 48V	1.09	1.1	23
	AC/DC 110~130V	0.73	0.75	5.8
	AC 220~240V / DC 250V	1.21	1.35	5.4
	AC 380~440V	1.67	-	3.8
	AC 440~480V	1.68	-	3.5
Max. opening time		50ms (max.)		
Tightening torque of terminal screw		8.2 kgf • cm		
Operating voltage range	Trip	35~70% Vn		
	Reset/Closing	≥ 0.85Vn		

**Table 6. Shunt Trip SHT**

Control voltage, Ue		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	DC 12V	-	0.36	30
	AC/DC 24V	0.58	0.58	24
	AC/DC 48V	1.22	1.23	25
	AC/DC 110~130V	1.36	1.37	10.5
	AC 220~240V/DC250V	1.8	1.88	7.5
	AC 380~500V	1.15	-	2.3
Max. opening time		50ms (max.)		
Tightening torque of terminal screw		8.2 kgf • cm		
Operating voltage range		0.7~1.1Vn		

**Table 7. Handle [Rotary and Cable]**

Type	Directly-Mounted	Door-Mounted	Flange Handle with Cable Operation Mechanism	Flange Handle with Variable Depth Mechanism
IEC			-	-
Standard	NEMA Type 1			
NEMA	-			
Standard	NEMA Type 1, 12, 3, 3R, 4, 4X			

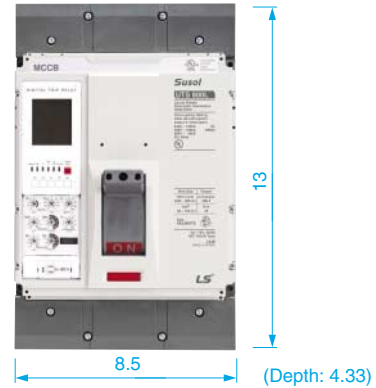
# UTS800-Frame

Susol

## Product Description

- UTS800 breaker is HACR rated

## Dimensions



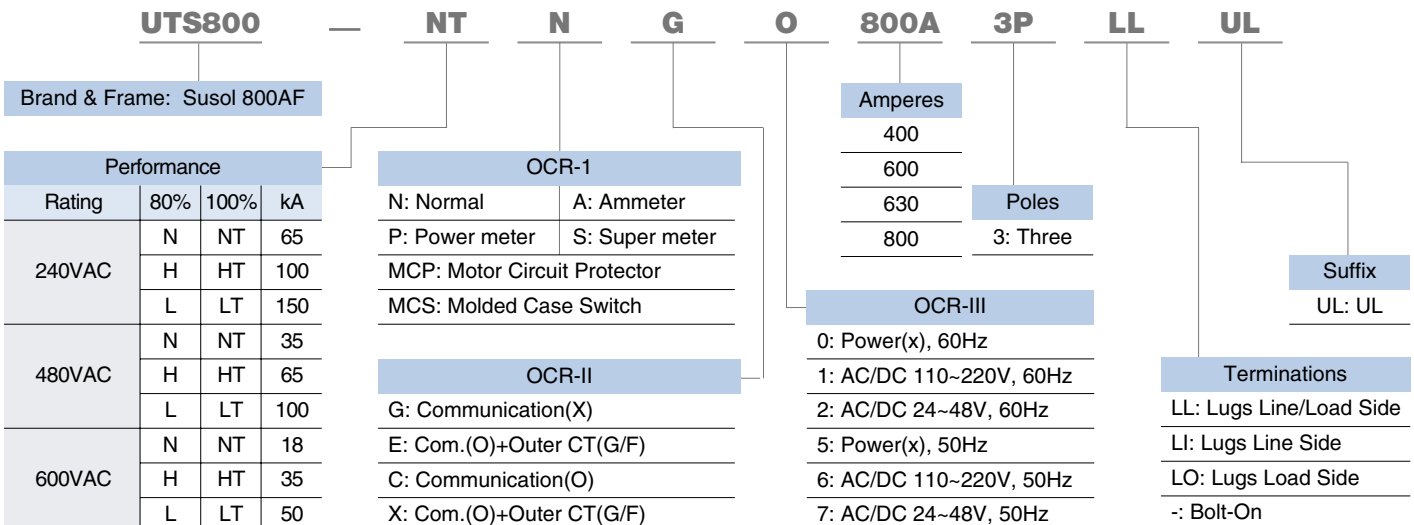
## Trip Unit

N type	Long time delay / Short time delay Instantaneous / Ground faults / Self power ※LCD/SMPS is Removed from A type	The range of rated current setting is same with 4Types but P/S type is able to set detail adjustment of rated current per 1A (Fine Adjustable) ■ Ir (rated current): 0.4~1.0 In ■ Tr (long time tripping delay): 0.5~20 Sec ■ Isd (short time current): 1.5~10 Ir ■ Tsd (short time tripping delay): 0.05~0.4 Sec ■ li (instantaneous current): 2~15 In ■ Tg (ground fault tripping delay): 0.05~0.4 Sec ■ Ig (ground fault current): 0.2~1In
A type	All function of N type / Earth Leakage (Except residual current) ZSI / COMM. (MODBUS, Profibus) AC110~220V / DC24~48V Fault Recording 10ea	
P type	All function of A type (UV/OV/OF/UF/RV/Vun/Cun) <sup>a)</sup> Measuring (V/A/W/P/F/PF) <sup>b)</sup> Fault Recording 256ea / Event Recording 256ea	
S type	All function of P type. Display Harmonics and wave forms	
MCP800	Instant Only	
MCS	Instant Only	li (adjustable instant): 2~12In li (fixed instant current): 12,000A

a) UV: Under Voltage // OV: Over Voltage // OF: Over Frequency // UF: Under Frequency // RV: Reverse power // Vun: Voltage Unbalance // Cun: Current Unbalance  
b) V: Voltage // A: Ampere // W: Watt // P: Power // F: Frequency // PF: Power factor

## Product Selection

### Catalog Numbering (Product Selection)



# UTS800-Frame

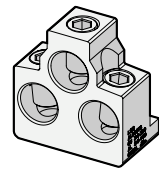
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**Table 2. Technical Data and Specifications**

Spec	Rating Range	
	Circuit Breaker	UTS800
	Pole	3
MCCB	Amperes	400~800A
	OCR	N/A/P/S
MCP	Amperes	800A
	MCP	MCP800
MCS	Amperes	800A
	MCS	MCS
SIZE	W	8.5(216)
	H	13(330)
	D	6(152.5)
Interrupting Rating kA rms (240VAC)	N	50
	H	100
	L	150
Interrupting Rating kA rms (480VAC)	N	35
	H	65
	L	100
Interrupting Rating kA rms (600VAC)	N	18
	H	35
	L	50

**Table 3. Tightening Torque for Lugs**

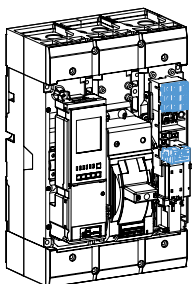
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL800TS	Aluminum	400~800A	Cu/Al	3/0~300 (400 AL)	45(398.3)



**Table 4. Enclosure Dimensions**

Circuit Breaker	Amperage	Enclosure Dimension(W×H×D)(mm)	
		80%	100%
UTS800	400~800A	514.4×1318.3×196.9	

**Table 5. Inner Accessory**



Type	Right(T)
AX	3
AL	1
SHT	1
UVT	1

\*Applicable in indicated pole position-not synchronous.

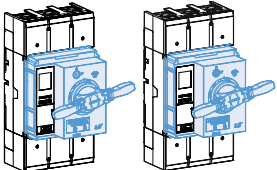
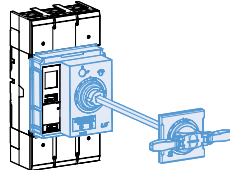
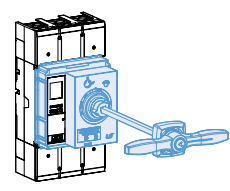
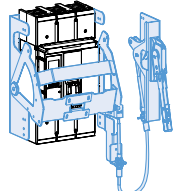
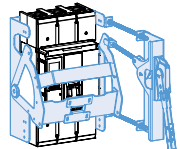
**Table 5. Undervoltage Trip UVT**

Control voltage, U <sub>e</sub>		Power consumption(VA or W)		Max.opening time(ms)
		Inrush	Steady-state	
Voltage	DC 24~30V	200	5	50 (max.)
	AC 48 / DC 48~60V			
	AC/DC 100~130V			
	AC/DC 200~250V			
	AC 380~480V			
Operating voltage range	Drop Out	0.44~0.66V <sub>n</sub>		
	Pick up	0.65~0.85V <sub>n</sub>		

**Table 6. Shunt Trip SHT**

Control voltage, U <sub>e</sub>		Operating voltage range	Power consumption(VA or W)	
			Inrush	Steady-state
Voltage	DC 24~30V	0.6~1.1V <sub>n</sub>	200	5
	AC 48 / DC 48~60V	0.6~1.1V <sub>n</sub>		
	AC/DC 100~130V	0.56~1.1V <sub>n</sub>		
	AC/DC 200~250V	0.56~1.1V <sub>n</sub>		
	AC 380~480V	0.56~1.1V <sub>n</sub>		
Max.opening time		40ms (max.)		

**Table 7. Handle [Rotary and Cable]**

Type	Directly-Mounted	Door-Mounted	Flange Handle with Cable Operation Mechanism	Flange Handle with Variable Depth Mechanism
IEC			-	-
Standard	NEMA Type 1			
NEMA	-			
Standard	NEMA Type 1, 12, 3, 3R, 4, 4X			

# UTS1200-Frame

Susol

## Product Description

- UTS1200 breaker is HACR rated

## Dimensions



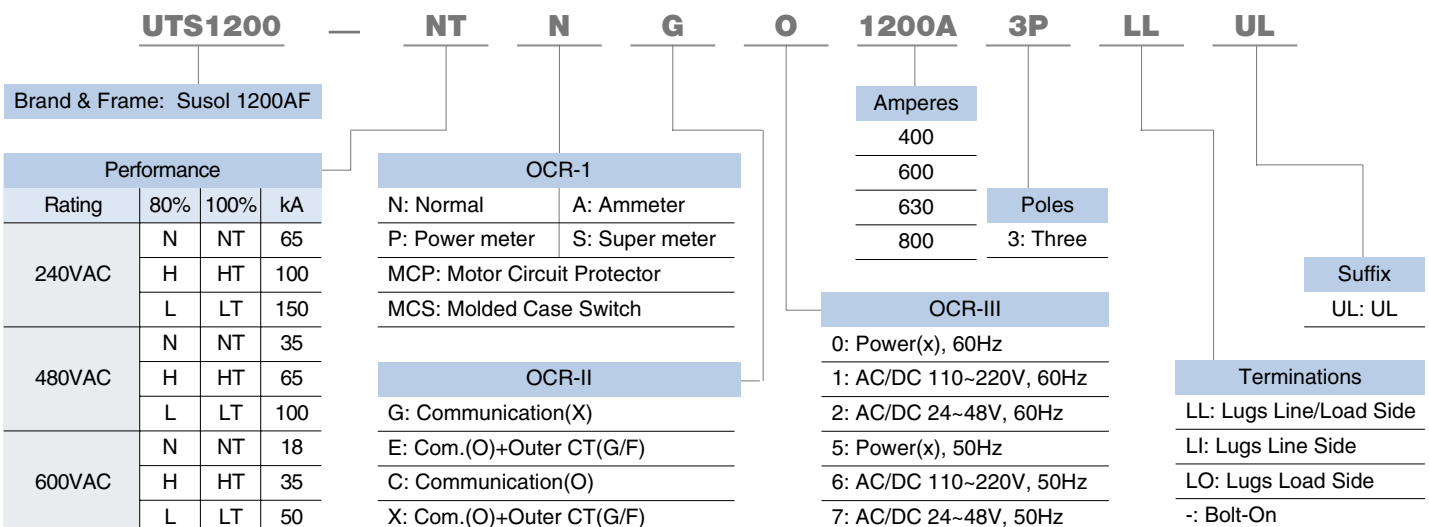
## Trip Unit

N type	Long time delay / Short time delay Instantaneous / Ground faults / Self power ※LCD/SMPS is Removed from A type	The range of rated current setting is same with 4Types but P/S type is able to set detail adjustment of rated current per 1A (Fine Adjustable)
A type	All function of N type / Earth Leakage (Except residual current) ZSI / COMM. (MODBUS, Profibus) AC110~220V / DC24~48V Fault Recording 10ea	<ul style="list-style-type: none"> <li>■ Ir (rated current): 0.4~1.0 In</li> <li>■ Tr (long time tripping delay): 0.5~20 Sec</li> <li>■ Isd (short time current): 1.5~10 Ir</li> <li>■ Tsd (short time tripping delay): 0.05~0.4 Sec</li> </ul>
P type	All function of A type (UV/OV/OF/UF/RV/Vun/Cun) <sup>a)</sup> Measuring (V/A/W/P/F/PF) <sup>b)</sup> Fault Recording 256ea / Event Recording 256ea	<ul style="list-style-type: none"> <li>■ li (instantaneous current): 2~15 In</li> <li>■ Tg (ground fault tripping delay): 0.05~0.4 Sec</li> <li>■ Ig (ground fault current): 0.2~1In</li> </ul>
S type	All function of P type. Display Harmonics and wave forms	
MCP1200	Instant Only	li (adjustable instant): 2~8In
MCS	Instant Only	li (fixed instant current): 18,000A

a) UV: Under Voltage // OV: Over Voltage // OF: Over Frequency // UF: Under Frequency // RV: Reverse power // Vun: Voltage Unbalance // Cun: Current Unbalance  
b) V: Voltage // A: Ampere // W: Watt // P: Power // F: Frequency // PF: Power factor

## Product Selection

### Catalog Numbering (Product Selection)

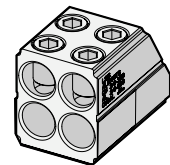


**Table 2. Technical Data and Specifications**

Spec	Rating Range	
	Circuit Breaker	UTS1200
	Pole	3
MCCB	Amperes	800~1200A
	OCR	N/A/P/S
MCP	Amperes	1200A
	MCP	MCP1200
MCS	Amperes	1200A
	MCS	MCS
SIZE	W	8.5(216)
	H	16.26(413)
	D	6(152.5)
Interrupting Rating kA rms (240VAC)	N	50
	H	100
	P	65
	L	150
Interrupting Rating kA rms (480VAC)	N	35
	H	65
	P	50
	L	100
Interrupting Rating kA rms (600VAC)	N	18
	H	25
	P	50
	L	35

**Table 3. Tightening Torque for Lugs**

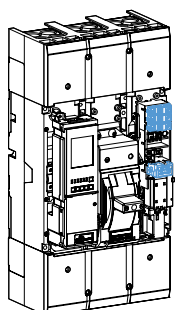
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL1200TS	Aluminum	800~1200A	Cu/Al	3/0~350 (500 AL)	45(398.3)



**Table 4. Enclosure Dimensions**

Circuit Breaker	Amperage	Enclosure Dimension(W×H×D)(mm)	
		80%	100%
UTS1200	800~1200A	514.4×1318.3×196.9	584.2×1581.2×374.7

**Table 5. Inner Accessory**



Type	Right(T)
AX	3
AL	1
SHT	1
UVT	1

\*Applicable in indicated pole position-not synchronous.

# UTS1200-Frame

Susol

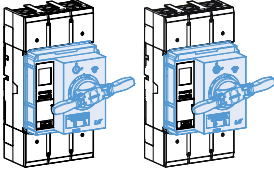
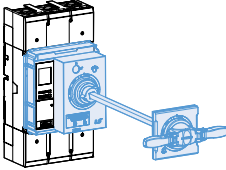
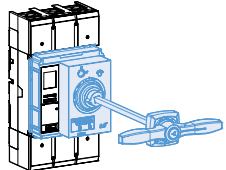
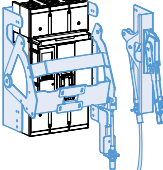
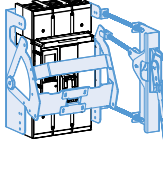
**Table 5. Undervoltage Trip UVT**

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	AC 380~480V			
Operating voltage range	Drop Out	0.44~0.66V <sub>n</sub>		
	Pick up	0.65~0.85V <sub>n</sub>		

**Table 6. Shunt Trip SHT**

Control voltage, U <sub>e</sub>		Operating voltage range	Power consumption(VA or W)	
			Inrush	Steady-state
Voltage	DC 24~30V	0.6~1.1V <sub>n</sub>	200	5
	AC 48 / DC 48~60V	0.6~1.1V <sub>n</sub>		
	AC/DC 100~130V	0.56~1.1V <sub>n</sub>		
	AC/DC 200~250V	0.56~1.1V <sub>n</sub>		
	AC 380~480V	0.56~1.1V <sub>n</sub>		
Max.opening time		40ms (max.)		

**Table 7. Handle [Rotary and Cable]**

Type	Directly-Mounted	Door-Mounted	Flange Handle with Cable Operation Mechanism	Flange Handle with Variable Depth Mechanism
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Standard	NEMA Type 1			
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Standard	NEMA Type 1, 12, 3, 3R, 4, 4X			



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