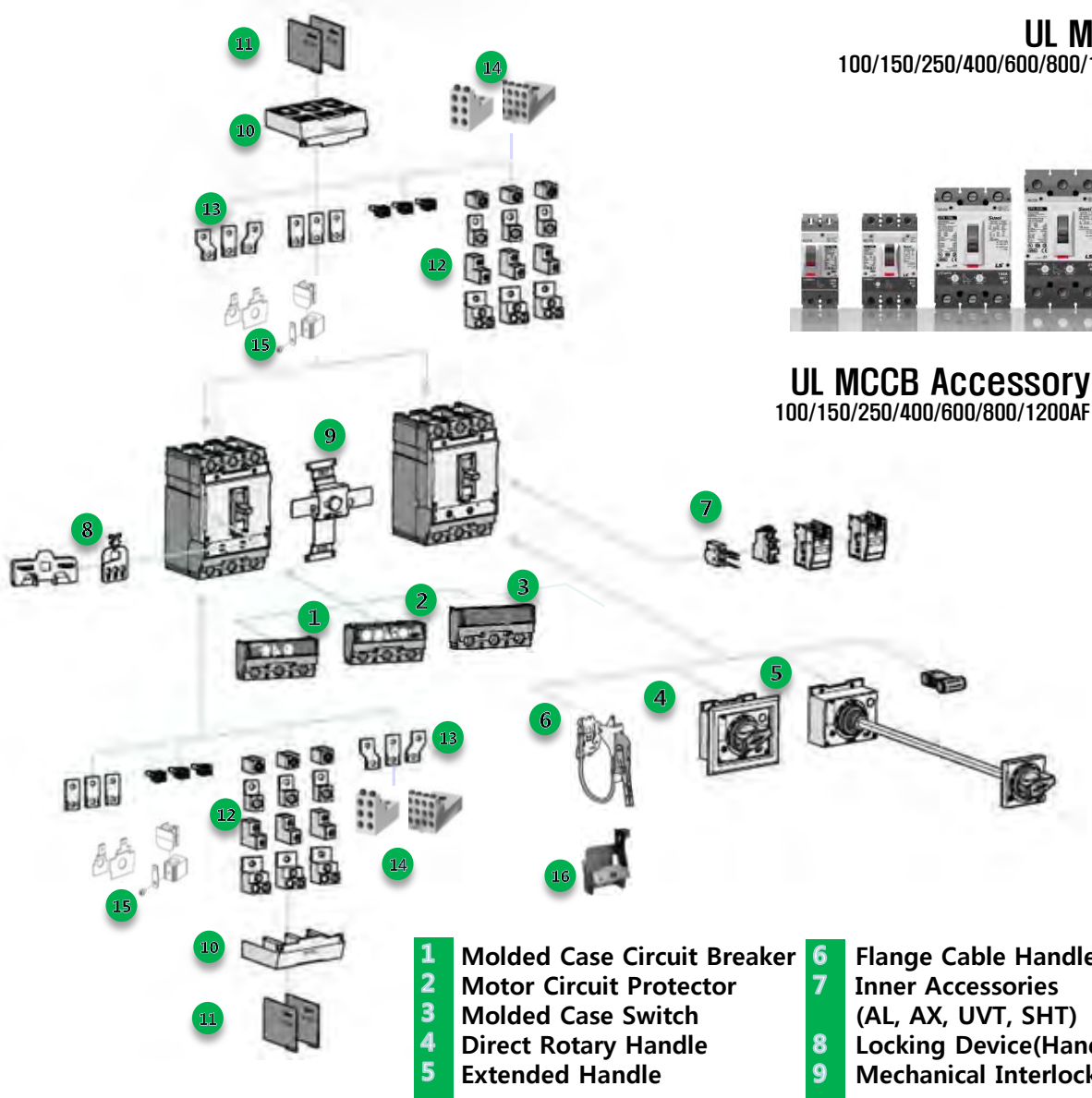


LSIS UL MCCB & Accessory



UL MCCB 100/150/250/400/600/800/1200AF



UL MCCB Accessory 100/150/250/400/600/800/1200AF

No.	Specification						
	100AF	150AF	250AF	400AF	600AF	800AF	1200AF
1	■	■	■	■	■	■	■
2	-	■	■	■	■	■	■
3	■	■	■	■	■	■	■
4	■	■	■	■	■	■	■
5	■	■	■	■	■	■	■
6	■	■	■	■	■	■	■
7	■	■	■	■	■	■	■
8	■	■	■	■	■	■	■
9	■	■	■	■	■	■	■
10	-	-	-	■	■	■	■
11	■	■	■	■	■	■	■
12	■	■	■	■	■	■	■
13	-	■	■	■	■	■	■
14	-	■	■	-	-	-	-
15	-	■	■	-	-	-	-
16	■	■	■	■	■	■	■

- 1 Molded Case Circuit Breaker
- 2 Motor Circuit Protector
- 3 Molded Case Switch
- 4 Direct Rotary Handle
- 5 Extended Handle

- 6 Flange Cable Handle
- 7 Inner Accessories (AL, AX, UVT, SHT)
- 8 Locking Device (Handle)
- 9 Mechanical Interlock

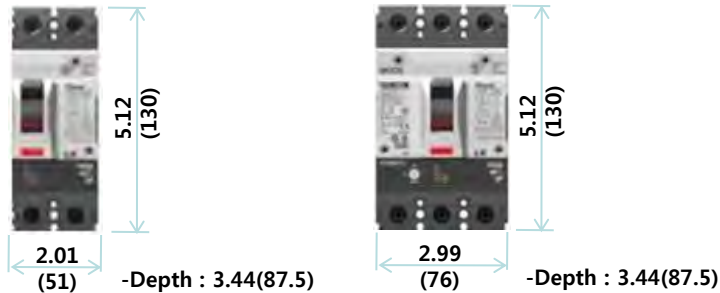
- 10 Terminal Shield
- 11 Interphase Barriers
- 12 Mechanical Lugs
- 13 Busbar Connectors
- 14 Multiwire Connector (~2015)
- 15 Control Terminal
- 16 VDM (Variable Depth Mechanism)

UL MCCB Specification

100/150/250/400/600/800/1200AF

Spec	Rating Range								
	Circuit Breaker Pole	UTE100	UTE100	UTS150	UTS250	UTS400	UTS600	UTS800	UTS1200
MCCB	Amperes	15~100A	15~100A	40~150A	150~250A	300~400A	500~600A	400~800A	800/1200A
	ATU (Ther. /Inst. : Adjustable)	-	-	■	■	■	■	-	-
	FMU (Ther.:Adjustable/Inst.:Fixed)	-	-	■	■	■	■	-	-
	FTU (Ther. /Inst. : Fixed)	■	■	■	■	■	■	-	-
	OCR (Electronics)	-	-	-	-	-	-	■	■
MCP	Amperes	-	-	1.6~60A 100,150A	220A	320A	500A	800A	1200A
	MCP	-	-	■	■	■	■	■	■
MCS	Amperes	100A	100A	150A	175, 250A	400A	600A	800A	1200A
	MCS	■	■	■	■	■	■	■	■
SIZE Inch(mm)	W	2.01(51)	2.99(76)	4.13(105)	4.13(105)	5.51(140)	5.51(140)	8.27(210)	8.27(210)
	H	5.12(130)	5.12(130)	6.46(165)	7.48(190)	11.42(290)	13.39(340)	13(330)	16.26(413)
	D	3.44(87.5)	3.44(87.5)	3.44(87.5)	3.44(87.5)	4.33(110)	4.33(110)	6(152.5)	6(152.5)
UL489	Interrupting Rating - kA rms (240VAC)	E	50	50	-	-	-	-	-
		N	65	65	65	65	65	65	50
		H	-	-	100	100	100	100	100
		L	-	-	150	150	150	150	150
	Interrupting Rating - kA rms (480VAC)	E	25	25	-	-	-	-	-
		N	35	35	35	35	35	35	35
		H	-	-	65	65	65	65	65
		L	-	-	100	100	100	100	100
	Interrupting Rating - kA rms (600Y347VAC)	E	14	14	-	-	-	-	-
		N	18	18	-	-	-	-	-
	Interrupting Rating - kA rms (600VAC)	N	-	-	18	18	18	18	18
		H	-	-	35	35	35	35	35
p		-	-	-	-	-	-	-	
L		-	-	50	50	50	50	50	
Unit Mounted	■	■	■	■	■	■	■	■	
Rear Connection	■	■	-	-	-	-	-	-	
Mechanical Lugs	■	■	■	■	■	■	■	■	
Power Distribution connectors	-	-	-	-	-	-	-	-	
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	■	■	■	■	■	■	■	■	

▪ MCCB/MCS



1. MCCB Type

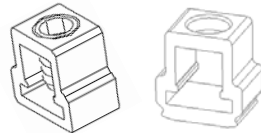
FMU : Thermal (Adjustable), Instant(Fixed)

FTU : Thermal(Fixed), Instant(Fixed)

2. MCS : Only Instant(Fixed)

3. LUG : CU Only('13.01 Open), AL/CU('13.05 Open)

4. Standard : UL486A, B, UL489, UL50E ('13.01 Open) UL508('13.05 Open)



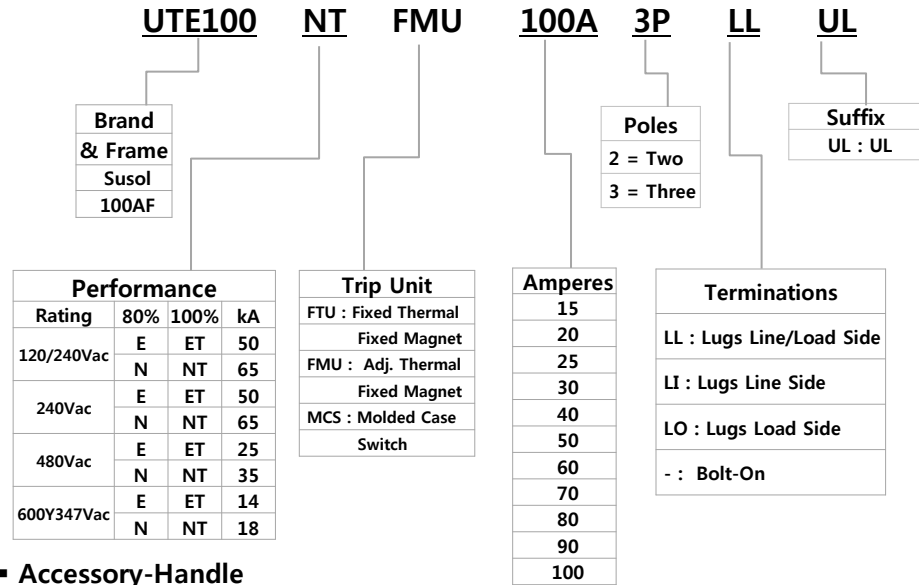
▪ Tightening Torque for Lugs

Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL100TE	Aluminum	~30A	Cu/Al	14~10	4(35.4)
		40~50A	Cu/Al	8	5(44.3)
		60~100A	Cu/Al	6~3	6(53.1)

▪ Enclosure

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

▪ Catalog Numbering [Product Selection]

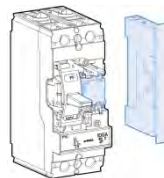


▪ Accessory-Handle

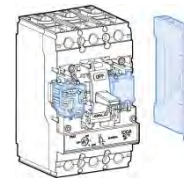
Type	Directly-Mounted	Door-Mounted	Flange Handle with Cable Operation Mechanism	Flange Handle with Variable-Depth Mechanism
IEC			-	-
Standard	NEMA Type 1			
NEMA	-			
Standard	NEMA Type 1, 12, 3, 3R, 4, 4X			

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

Accessory-Inner



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



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

*Applicable in indicated pole position-not synchronous

Undervoltage Release Mechanism

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 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% Vn		
	Reset/Closing	≥ 0.85Vn		

Shunt Trip

Control voltage, Ue		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 : 0.7~1.1Vn, DC : 0.8~1.1Vn		

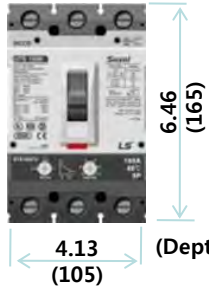
▪ Trip Unit

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

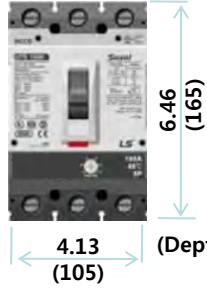
RATING UTE100	MCS	
	2P/3P	MAG TRIP (10xIn)
100	O	1000A

▪ MCCB/MCS



(Depth : 3.44(87.5))

▪ MCP



(Depth : 3.44(87.5))

1. MCCB Type

FMU : Thermal (Adjustable), Instant(Fixed)

FTU : Thermal(Fixed), Instant(Fixed)

ATU : Thermal(Adjustable), Instant(Adjustable)

2. MCP : Only Instant(Adjustable)

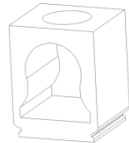
3. MCS : Only Instant(Fixed)

4. LUG : CU Only('13.01 Open), AL/CU('13.05 Open)

5. Standard : UL486A, B, UL489, UL50E ('13.01 Open) UL508('13.05 Open)

▪ Tightening Torque for Lugs

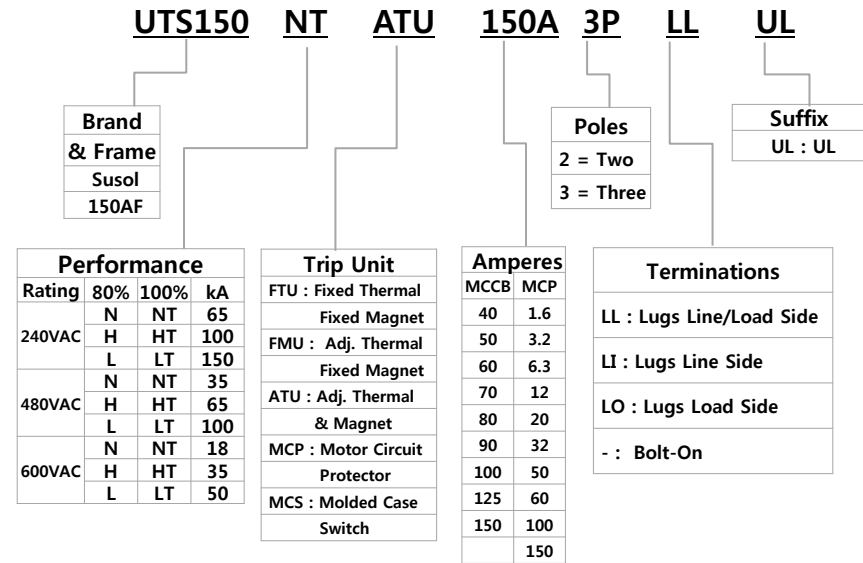
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL150TS	Aluminum	~15A	Cu/Al	14	4.5(39.8)
		20~30A	Cu/Al	12~10	6(53.1)
		40~175A	Cu/Al	8-2/0	15.1(133.6)



▪ Enclosure

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

▪ Catalog Numbering [Product Selection]

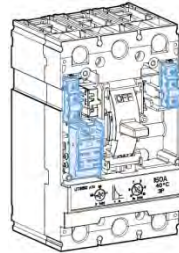


▪ Accessory-Handle

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

Spec	Rating Range	
	Circuit Breaker	UTS150
MCCB	Pole	2/3
	Amperes	40~150A
	ATU	■
	FMU	■
	FTU	■
MCP	Amperes	1.6~60A 70~150A
	MCP	■
MCS	Amperes	150A
	MCS	■
SIZE Inch(mm)	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
Unit Mounted		■
Rear Connection		-
Mechanical Lugs		■
Power Distribution connectors		-
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		■

▪ Accessory-Inner



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

*Applicable in indicated pole position-not synchronous

▪ Undervoltage Release Mechanism

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 200~240V/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		

▪ Shunt Trip

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		

▪ Trip Unit

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

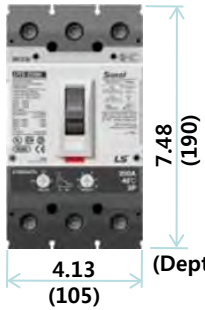
RATING UTS150	FMU (2P/3P)		
	-	RATING RANGE (0.8~1xIn)	MAG TRIP
40	O	32~40A	500A
60	O	48~60A	800A
80	O	64~80A	800A
100	O	80~100A	1000A
150	O	120~150A	1500A

RATING UTS150	ATU (2P/3P)		
	-	RATING RANGE (0.8~1xIn)	MAG TRIP (5~10xIn)
100	O	80~100A	500~1000A
150	O	120~150A	750~1500A

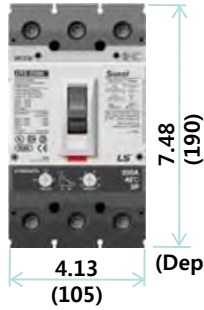
RATING UTS150	MCS (2P/3P)	
	-	MAG TRIP (10xIn)
150	O	1500A

RATING UTS150	MCP (3P)	
	-	MAG TRIP (6~12xIn)
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

▪ MCCB/MCS



▪ MCP



1. MCCB Type

FMU : Thermal (Adjustable), Instant(Fixed)

FTU : Thermal(Fixed), Instant(Fixed)

ATU : Thermal(Adjustable), Instant(Adjustable)

2. MCP : Only Instant(Adjustable)

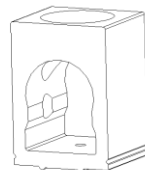
3. MCS : Only Instant(Fixed)

4. LUG : CU Only('13.01 Open), AL/CU('13.05 Open)

5. Standard : UL486A, B, UL489, UL50E ('13.01 Open) UL508('13.05 Open)

▪ Tightening Torque for Lugs

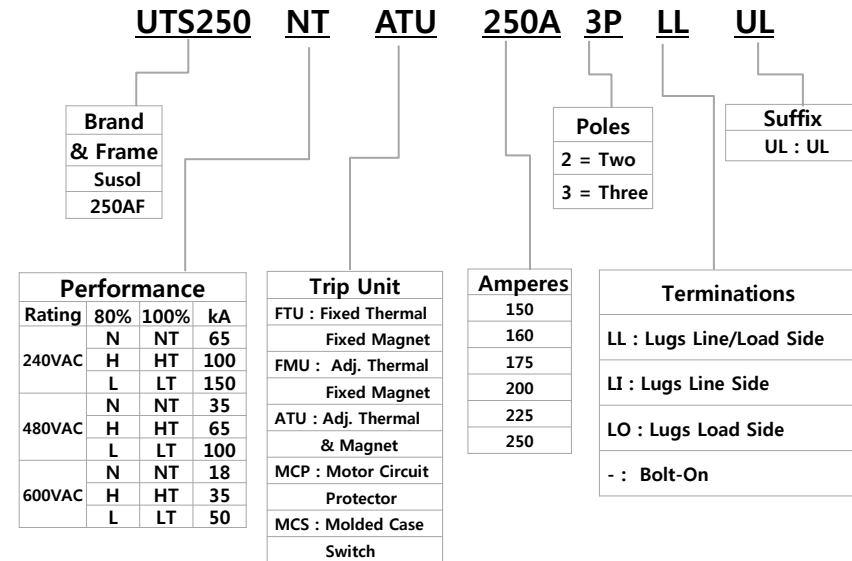
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL250TS	Aluminum	150A	Cu/Al	1/0-4/0	28.8(254.9)
		250A	Cu/Al	250~300	39.6(350.5)



▪ Enclosure

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

▪ Catalog Numbering [Product Selection]

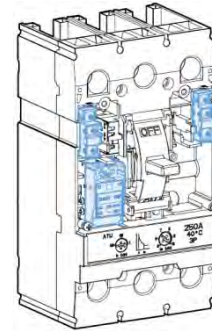


▪ Accessory-Handle

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

Spec	Rating Range	
	Circuit Breaker	UTS250
MCCB	Pole	2/3
	Amperes	150~250A
	ATU	■
	FMU	■
	FTU	■
MCP	Amperes	220A
	MCP	■
MCS	Amperes	175, 250A
	MCS	■
SIZE Inch(mm)	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
Unit Mounted		■
Rear Connection		-
Mechanical Lugs		■
Power Distribution connectors		-
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		■

Accessory-Inner



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

*Applicable in indicated pole position-not synchronous

Trip Unit

RATING UTS250	FTU(2P/3P)	
	-	MAG TRIP (10xIn)
150	O	1500A
175	O	1750A
200	O	2000A
225	O	2250A
250	O	2500A

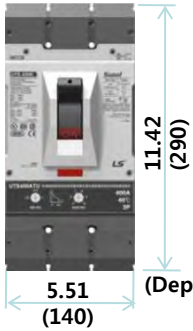
RATING UTS250	FMU(2P/3P)		
	-	RATING RANGE (0.8~1xIn)	MAG TRIP (10xIn)
160	O	128~160A	1600A
200	O	160~200A	2000A
250	O	200~250A	2500A

RATING UTS250	ATU(2P/3P)		
	-	RATING RANGE (0.8~1xIn)	MAG TRIP (5~10xIn)
160	O	128~160A	800~1600A
200	O	160~200A	1000~2000A
250	O	200~250A	1250~2500A

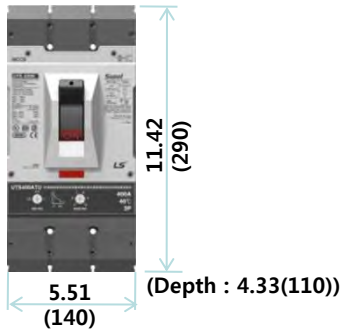
RATING UTS250	MCS(2P/3P)	
	-	MAG TRIP (10xIn)
175	O	1750A
250	O	2500A

RATING UTS250	MCP(3P)
	MAG TRIP (6~12xIn)
220	1320~2640A

▪ MCCB/MCS



▪ MCP



1. MCCB Type

FMU : Thermal (Adjustable), Instant(Fixed)

FTU : Thermal(Fixed), Instant(Fixed)

ATU : Thermal(Adjustable), Instant(Adjustable)

2. MCP : Only Instant(Adjustable)

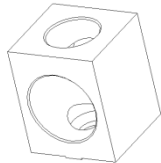
3. MCS : Only Instant(Fixed)

4. LUG : CU Only('13.01 Open), AL/CU('13.05 Open)

5. Standard : UL486A, B, UL489, UL50E ('13.01 Open) UL508('13.05 Open)

▪ Tightening Torque for Lugs

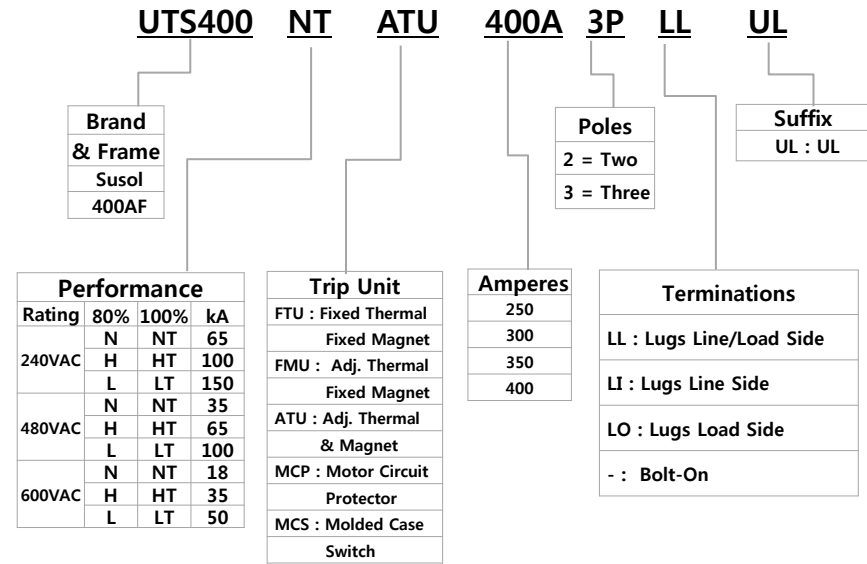
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL400TS	Aluminum	300A	Cu/Al	1/0~300	40.5(358.5)
		400A	Cu/Al	350~600	54(477.9)



▪ Enclosure

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

▪ Catalog Numbering [Product Selection]

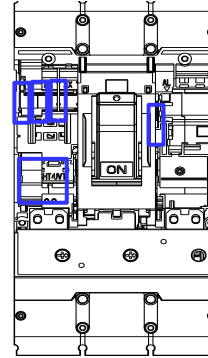


▪ Accessory-Handle

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

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 Inch(mm)	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
Unit Mounted		■
Rear Connection		-
Mechanical Lugs		■
Power Distribution connectors		-
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		■

Accessory-Inner



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

*Applicable in indicated pole position-not synchronous

Trip Unit

RATING UTS400	FTU(2P/3P)	
	-	MAG TRIP (10xIn)
250	O	2500A
300	O	3000A
350	O	3500A
400	O	4000A

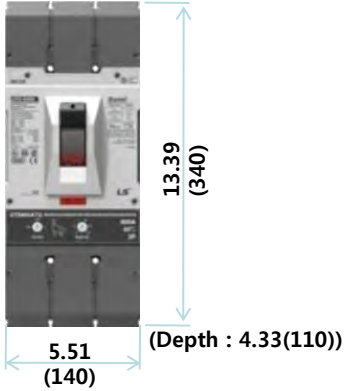
RATING UTS400	FMU(2P/3P)		
	-	RATING RANGE (0.8~1xIn)	MAG TRIP (10xIn)
300	O	240~300A	3000A
400	O	320~400A	4000A

RATING UTS400	ATU(2P/3P)		
	-	RATING RANGE (0.8~1xIn)	MAG TRIP (5~10xIn)
300	O	240~300A	1500~3000A
400	O	320~400A	2000~4000A

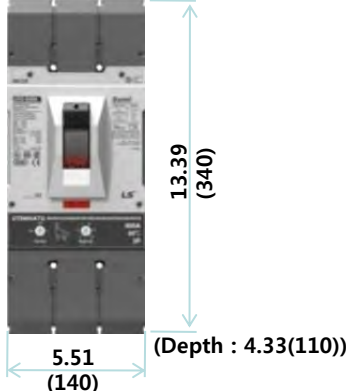
RATING UTS400	MCS(2P/3P)	
	-	MAG TRIP (10xIn)
400	O	4000A

RATING UTS400	MCP(3P)
	MAG TRIP (6~12xIn)
320	1920~3840A

MCCB/MCS



MCP



1. MCCB Type

FMU : Thermal (Adjustable), Instant(Fixed)

FTU : Thermal(Fixed), Instant(Fixed)

ATU : Thermal(Adjustable), Instant(Adjustable)

2. MCP : Only Instant(Adjustable)

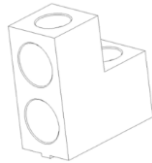
3. MCS : Only Instant(Fixed)

4. LUG : CU Only('13.01 Open), AL/CU('13.05 Open)

5. Standard : UL486A, B, UL489, UL50E ('13.01 Open) UL508('13.05 Open)

Tightening Torque for Lugs

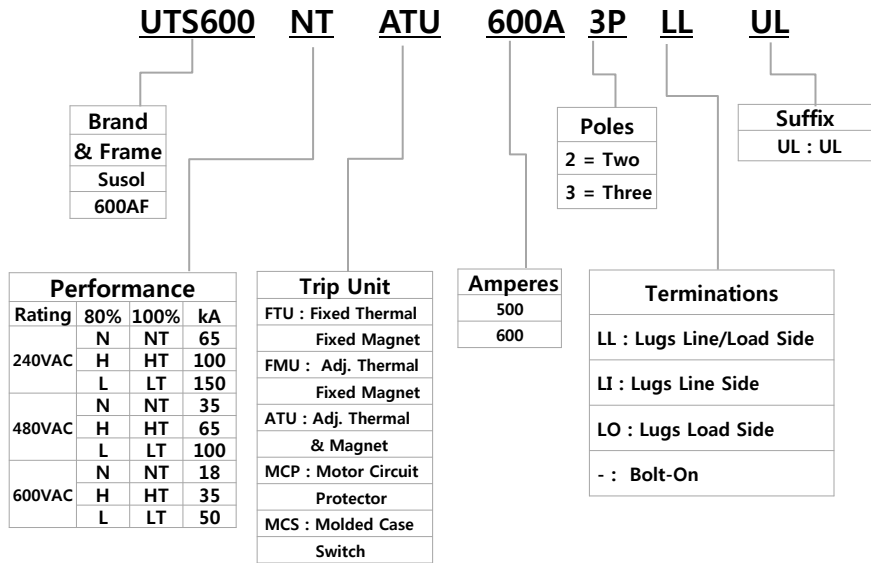
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL600TS	Aluminum	500A 600A	Cu/Al	2/0~350	40.5(358.5)
			Al	400~500	40.5(358.5)



Enclosure

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

Catalog Numbering [Product Selection]

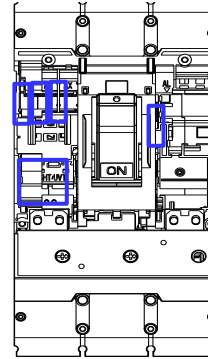


Accessory-Handle

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

Spec	Rating Range	
	Circuit Breaker	UTS600
MCCB	Pole	2/3
	Amperes	500~600A
	ATU	■
	FMU	■
	FTU	■
MCP	Amperes	500A
	MCP	■
MCS	Amperes	600A
	MCS	■
SIZE Inch(mm)	W	5.51(140)
	H	13.39(340)
	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
Unit Mounted		■
Rear Connection		-
Mechanical Lugs		■
Power Distribution connectors		-
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		■

Accessory-Inner



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

*Applicable in indicated pole position-not synchronous

Trip Unit

RATING UTS600	FTU(2P/3P)	
	-	MAG TRIP (10xIn)
500	O	5000A
600	O	6000A

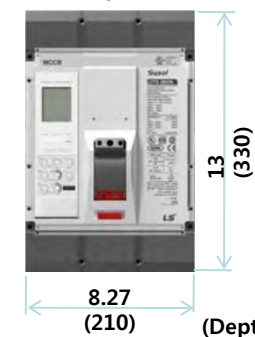
RATING UTS600	FMU(2P/3P)		
	-	RATING RANGE (0.8~1xIn)	MAG TRIP (10xIn)
500	O	400~500A	2500~5000A
600	O	480~600A	3000~6000A

RATING UTS600	ATU(2P/3P)		
	-	RATING RANGE (0.8~1xIn)	MAG TRIP (5~10xIn)
500	O	400~500A	2500~5000A
600	O	480~600A	3000~6000A

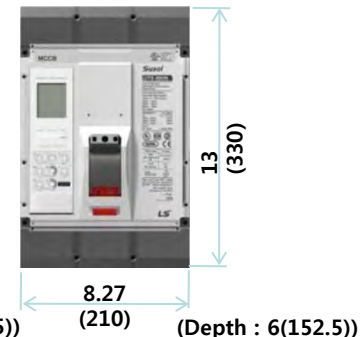
RATING UTS600	MCS(2P/3P)	
	-	MAG TRIP (10xIn)
600	O	6000A

RATING UTS600	MCP(3P)
	MAG TRIP (6~12xIn)
500	3000~6000A

▪ MCCB/MCS



▪ MCP



1. MCCB Type

OCR : Electronic Type

2. MCP : Only Instant(Adjustable)

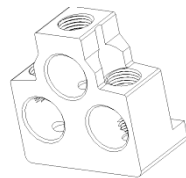
3. MCS : Only Instant(Fixed)

4. LUG : CU Only('13.01 Open), AL/CU('13.05 Open)

5. Standard : UL486A, B, UL489, UL50E ('13.01 Open) UL508('13.05 Open)

▪ Tightening Torque for Lugs

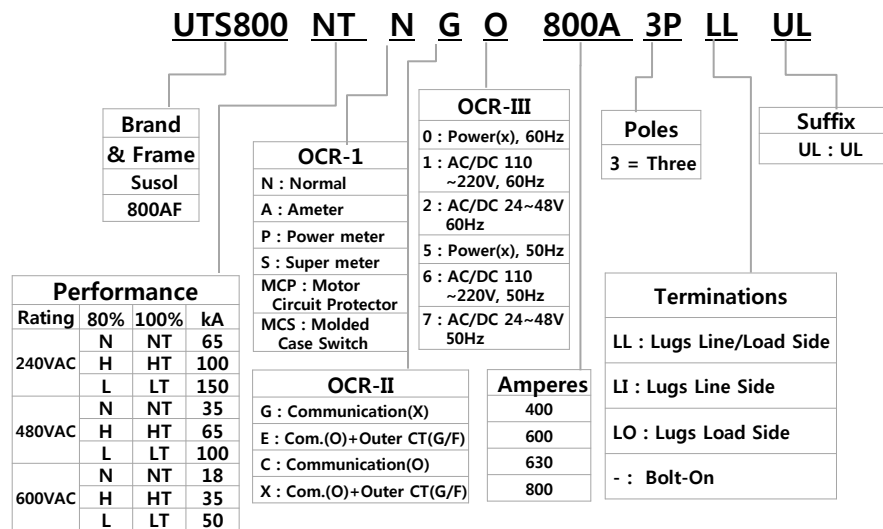
Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)
AL800TS	Aluminum	400~800A	Cu/Al	3/0~300 (400 AL)	45(398.3)



▪ Enclosure

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

▪ Catalog Numbering [Product Selection]

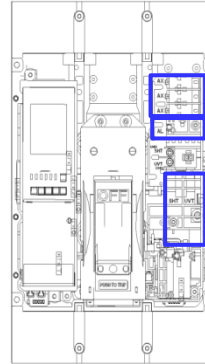


▪ Accessory-Handle

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

Spec	Rating Range	
	Circuit Breaker	UTS800
MCCB	Pole	3
	Amperes	400~800A
	MCP	■
MCP	Amperes	800A
	OCR	■
MCS	Amperes	800A
	MCS	■
SIZE Inch(mm)	W	8.27(210)
	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
Unit Mounted		■
Rear Connection		-
Mechanical Lugs		■
Power Distribution connectors		-
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		■

Accessory-Inner



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

*Applicable in indicated pole position-not synchronous

Undervoltage Release Mechanism

Control voltage, Ue		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 110~130V			
	AC/DC200~250V			
	AC 380~440V			
Operating voltage range	Drop Out	0.44~0.66Vn		
	Pick up	0.65~0.85Vn		

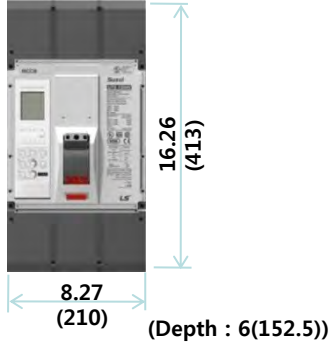
Shunt Trip

Control voltage, Ue		Operating voltage range	Power consumption(VA or W)	
			Inrush	Steady-state
Voltage	DC 24~30V	0.6~1.1Vn	200	5
	AC 48/DC 48~60V	0.6~1.1Vn		
	AC/DC 110~130V	0.56~1.1Vn		
	AC/DC200~250V	0.56~1.1Vn		
	AC 380~440V	0.56~1.1Vn		
Max.opening time		40ms (max.)		

▪ MCCB/MCS



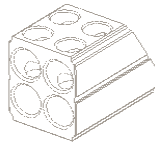
▪ MCP



1. MCCB Type
OCR : Electronic Type
2. MCP : Only Instant(Adjustable)
3. MCS : Only Instant(Fixed)
4. LUG : CU Only('13.01 Open), AL/CU('13.05 Open)
5. Standard : UL486A, B, UL489, UL50E ('13.01 Open)
UL508('13.05 Open)

▪ 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)



▪ Enclosure

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

▪ Catalog Numbering [Product Selection]

UTS1200 NT N G O 1200A 3P LL UL

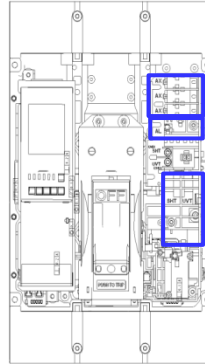
Brand & Frame Susol 1200AF	OCR-I N : Normal A : Ameter P : Power meter S : Super meter MCP : Motor Circuit Protector MCS : Molded Case Switch	OCR-III 0 : Power(x), 60Hz 1 : AC/DC 110 ~220V, 60Hz 2 : AC/DC 24~48V 60Hz 5 : Power(x), 50Hz 6 : AC/DC 110 ~220V, 50Hz 7 : AC/DC 24~48V 50Hz	Poles 3 = Three	Suffix UL : UL																																											
Performance	OCR-II G : Communication(X) E : Com.(O)+Outer CT(G/F) C : Communication(O) X : Com.(O)+Outer CT(G/F)	Amperes 800 1000 1200	Terminations LL : Lugs Line/Load Side LI : Lugs Line Side LO : Lugs Load Side - : Bolt-On																																												
<table border="1"> <thead> <tr> <th>Rating</th> <th>80%</th> <th>100%</th> <th>kA</th> </tr> </thead> <tbody> <tr> <td rowspan="4">240VAC</td> <td>N</td> <td>NT</td> <td>50</td> </tr> <tr> <td>H</td> <td>HT</td> <td>100</td> </tr> <tr> <td>P</td> <td>PT</td> <td>65</td> </tr> <tr> <td>L</td> <td>LT</td> <td>150</td> </tr> <tr> <td rowspan="4">480VAC</td> <td>N</td> <td>NT</td> <td>35</td> </tr> <tr> <td>H</td> <td>HT</td> <td>65</td> </tr> <tr> <td>P</td> <td>PT</td> <td>50</td> </tr> <tr> <td>L</td> <td>LT</td> <td>100</td> </tr> <tr> <td rowspan="4">600VAC</td> <td>N</td> <td>NT</td> <td>18</td> </tr> <tr> <td>H</td> <td>HT</td> <td>25</td> </tr> <tr> <td>P</td> <td>PT</td> <td>50</td> </tr> <tr> <td>L</td> <td>LT</td> <td>35</td> </tr> </tbody> </table>	Rating	80%	100%	kA	240VAC	N	NT	50	H	HT	100	P	PT	65	L	LT	150	480VAC	N	NT	35	H	HT	65	P	PT	50	L	LT	100	600VAC	N	NT	18	H	HT	25	P	PT	50	L	LT	35				
Rating	80%	100%	kA																																												
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600VAC	N	NT	18																																												
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	P	PT	50																																												
	L	LT	35																																												

▪ Accessory-Handle

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

Spec	Rating Range	
	Circuit Breaker	UTS1200
MCCB	Pole	3
	Amperes	800~1200A
	OCR	■
MCP	Amperes	1200A
	MCP	■
MCS	Amperes	1200A
	MCS	■
SIZE Inch(mm)	W	8.27(210)
	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
Unit Mounted		■
Rear Connection		-
Mechanical Lugs		■
Power Distribution connectors		-
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		■

Accessory-Inner



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

*Applicable in indicated pole position-not synchronous

OCR(Trip Unit)

Circuit Breaker	UTS800-800AF			UTS1200-1200AF			
Circuit Breaker Type	N	H	L	N	P	H	L
Number of poles	3	3	3	3	3	3	3
Amperage Range (A)	400-800			800-1200			

UL 489 Circuit Breaker Ratings

UL/CSA/NOM (kA rms)	240 Vac	50	100	150	50	65	100	150
	480 Vac	35	65	100	35	50	65	100
	600 Vac	18	35	50	18	50	25	35

Applicable OCR type

OCR Type	N	H	L	N	P	H	L
N TYPE	■	■	■	■	■	■	■
A TYPE	■	■	■	■	■	■	■
P TYPE	■	■	■	■	■	■	■
S TYPE	■	■	■	■	■	■	■
MCP800 TYPE	■		■				
MCP1200 TYPE					■		■
MCS TYPE	■		■		■		■




Operations (Open-Close Cycles)

Without Current	3000	2000
With Current	500	500

Dimension(mm)


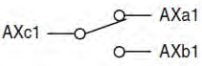
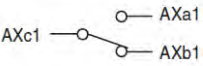


Dimension(mm)	3-Pole (W * H * D)	210*330*152.5	210*413*152.5

8. 800/1200AF Trip Unit


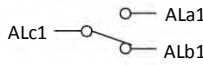
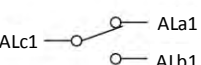


N type	A type	P type	S type	MCP800	MCP1200	MCS
						
<ul style="list-style-type: none"> - Long time delay - Short time delay - Instantaneous - Ground faults - Self power ※LCD/SMPS is Removed from A type	<ul style="list-style-type: none"> - All function of N type - Earth Leakage (Except residual current) - ZSI - COMM. (MODBUS, Profibus) - AC110~220V - DC24~48V - Fault Recording 10ea 	<ul style="list-style-type: none"> - All function of A type - UV/OV/OF/UF/RV /Vun/Cun a) - Measuring (V/A/W/P/F/PF) b) - Fault Recording 256ea - Event Recording 256ea 	<ul style="list-style-type: none"> - All function of P type - Display Harmonics and wave forms 	Instant Only	Instant Only	Instant Only
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)				▶ Ii (adjustable instant) : 2~12In	▶ Ii (adjustable instant) : 2~8In	▶ Ii (fixed instant current) UTS800 : 12,000A UTS1200 : 18,000A
Compatible Rating PLUG		400, 600, 630, 800, 1000, 1200		800	1200	800, 1200

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

AX

AX	BREAKER TYPE	WIRE SIZE	ON	OFF/TRIP
	UTE100	24 AWG (0.2 mm ²)		
	UTS150 UTS250 UTS400 UTS600	18 AWG (0.82 mm ²)		
	UTS800 UTS1200	18 AWG (0.82 mm ²)		

AL

AL	BREAKER TYPE	WIRE SIZE	ON	OFF/TRIP
	UTE100	24 AWG (0.2 mm ²)		
	UTS150 UTS250 UTS400 UTS600	18 AWG (0.82 mm ²)		
	UTS800 UTS1200	18 AWG (0.82 mm ²)		

•UTE100

SHT

Control voltage, Ue		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 : 0.7~1.1Vn, DC : 0.8~1.1Vn		



•UTE100

UVT

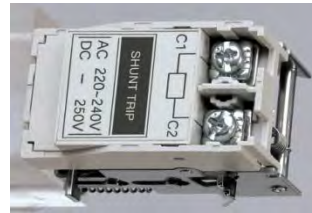
Control voltage, Ue		Power consumption		
		AC (VA)	DC (W)	mA
Voltage	AC/DC 24V	0.64	0.65	27
	AC/DC 48V	1.09	1.1	23
	AC/DC 100~110V	0.73	0.75	5.8
	AC/DC 200~220V	1.21	1.35	5.4
	AC 380~440V	1.67	-	3.8
	AC 440~480V	1.68	-	3.5
	Max.opening time		50ms (max.)	
Tightening torque of terminal screw		8.2 kgf-cm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



▪ SHT

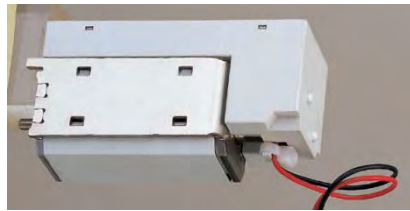
•UTS150/UTS250/UTS400/UTS600

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		



•UTS800/UTS1200

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



▪ UVT

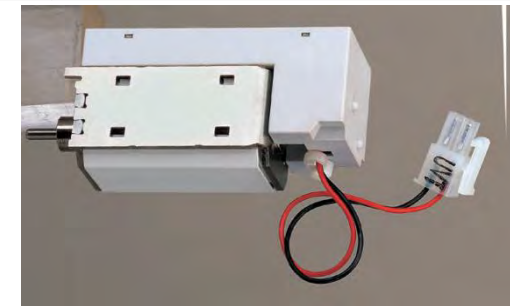
•UTS150/UTS250/UTS400/UTS600

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		35~70% Vn		
Reset/Closing		≥ 0.85Vn		



•UTS800/UTS1200



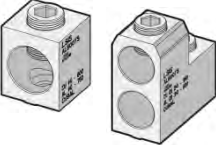
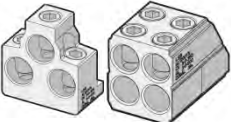
Control voltage, Ue		Power consumption(VA or W)		Max.opening time(ms)
		Inrush	Steady-state	
Voltage	DC 24~30V	200	5	50 (max.)
	AC 48/DC 48~60V			
	AC/DC 100~130V			
	AC/DC 200~250V			
	AC 380~480V			
Operating voltage range		0.44~0.66Vn		0.65~0.85Vn
Pick up		0.65~0.85Vn		



■ Enclosure

Circuit Breaker	Amperage	Enclosure Dimension(W x H x D) (mm)	
		80%	100%
UTE100	15~100A	210 x 439.4 x 101.6	
UTS150	40~150A	218 x 460 x 102	
UTS250	150~250A	308 x 724 x 136	
UTS400	300~400A	350 x 1020 x 152	350 x 1020 x 182
UTS600	500~600A	350 x 1020 x 152	360 x 1050 x 182
UTS800	500~800A	514.4 x 1318.3 x 196.9	
UTS1200	1000~1200A	514.4 x 1318.3 x 196.9	584.2 x 1581.2 x 374.7

■ Tightening Torque for Lugs

Shape	Lug Type	Terminal Body Material	Breaker Amps Range	Wire Type	AWG Wire Range	Torque N.m(lb-in)	Catalogue Number Package of 3 Terminals	
	AL100TE	Aluminum	~30A	Cu/Al	14~10	4(35.4)	AL100TE3T	
			40~50A	Cu/Al	8	5(44.3)		
			60~100A	Cu/Al	6~3	6(53.1)		
	AL150TS	Aluminum	~15A	Cu/Al	14	4.5(39.8)	AL150TS3T	
			20~30A	Cu/Al	12~10	6(53.1)		
	AL250TS	Aluminum	40~175A	Cu/Al	8-2/0	15.1(133.6)		
	AL400TS	Aluminum	150A	Cu/Al	1/0-4/0	28.8(254.9)	AL250TS3T	
			250A	Cu/Al	250~350	39.6(350.5)		
	AL600TS	Aluminum	500A 600A	250A	Cu/Al	1/0~300	40.5(358.5)	AL400TS3T
				400A	Cu/Al	350~600	54(477.9)	AL600TS3T
	AL800TS	Aluminum	400~800A	Cu/Al	3/0~300(400 AL)	45(398.3)	AL800TS3T	
	AL1200TS	Aluminum	800~1200A	Cu/Al	3/0~350(500 AL)	45(398.3)	AL1200TS3T	

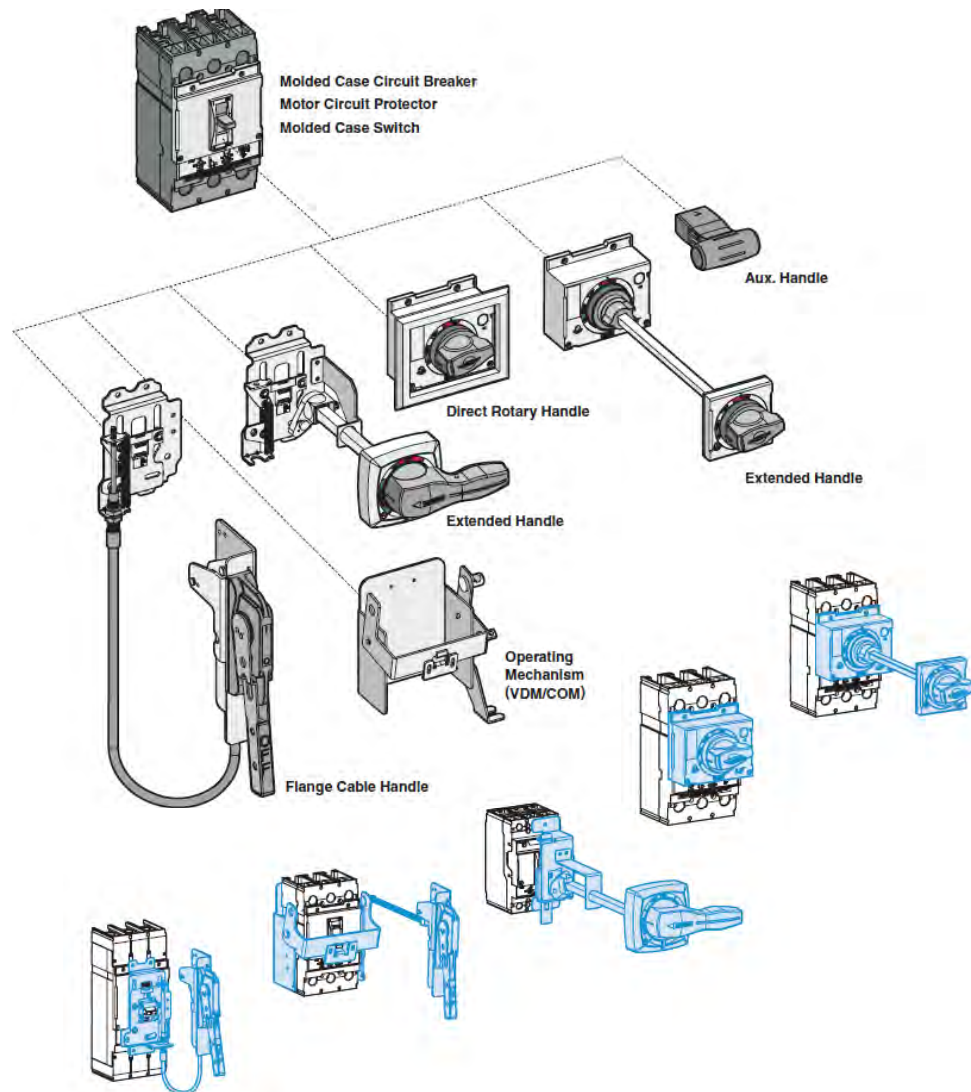
▪ Catalog Numbering [Product Selection]

EHU - 1 - 12

Installation	
EHU	Extended Handle (Type 1, 12)
EHV	Extended Handle (Type 3, 3R, 4)
EHX	Extended Handle (Type 3, 4, 4X)
FHU	Flange Mounting Handle (Type 1, 3, 3R, 4, 12)
FHX	Flange Mounting Handle (Type 4, 4X)
REH	Extended Rotary Handle (TYPE 1)
RDH	Direct Rotary Handle (TYPE 1)
RDHK	Direct Rotary Handle Keylock type (TYPE 1)
VDM	Variable Depth Mechanism
COM	Cable Operating Mechanism

Model type per Circuit breaker frame	
0	100 AF (for all type)
1	125 AF (for type EHU, EHV, FHU, FHX)
2	150/250 AF (for all type)
3	400/600 AF (for all type)
4	800 AF (TS TYPE) (for type EHU, EHV, FHU, FHX)
5	800/1200 AF (UTS TYPE) (for all type)
S	Standard type (Without mechanism)
L	Long type (Without mechanism)

Shaft & Cable size Per handles	
12	12inch (Shaft)
16	16inch (Shaft)
24	24inch (Shaft)
36	36inch (Cable)
48	48inch (Cable)
60	60inch (Cable)
72	72inch (Cable)
84	84inch (Cable)
120	120inch (Cable)
C	Compact Size
Blank	No type



10. Comparison of Spec. - Comparing with SquareD

Description	Square D-MG						LSIS Susol Series						
													
Breaker Type	GJL100	HL150	JL250	DL400,600	MJ800	PL1200	UTE100	UTS150	UTS250	UTS400	UTS600	UTS800	UTS1200
	GJL	D/G/J/L	D/G/J/L	G/J/L	G/J	G/J/K/L	E/N	N/H/L	N/H/L	N/H/L	N/H/L	N/H/L	N/H/P/L
Number of Poles	3	2, 3	2, 3	3, 4	2, 3	2, 3	2 / 3	2/3	2/3	2/3	2/3	3	3
Frame Rated Current In max (A)	100	15~60A 70~150A	250	160~600A 400,600A 400~600A	300~800A	250~1200A	100	150	250	400	600	800	1200
Rated Current In (A) MCCB	15~100A	15~60A 70~150A	150~250A	160~600A	300/350/400/450/500/600/700/800 A	250~1200A	15 .. 100	40 .. 150	150 .. 250	250 .. 400	500, 600	400 .. 800	800 .. 1200
MCS	100A	150A		400,600A		600/800/1000/1200	100	150	175, 250	400	600	800	1200
MCP	MCP : 3,7, 15, 30, 50, 70, 75A	15~60A 70~150A	150 .. 250	400~400A	300 .. 800	600 .. 1200	-	1.6~60 100, 150	220	320	500	800	1200
Dimensions													
Height in (mm)	4.72(120)	6.4(163)	7.5(191)	13.38(340)	12.86(326)	16.26(413)	5.12(130)	6.46(165)	7.48(190)	11.42(290)	13.39(340)	13(330)	16.26(413)
Width in (mm)	3.54(90)	4.1(104)	4.1(104)	5.51(140)	8.3(210)	8.3(210)	2.99(76)	4.13(105)	4.13(105)	5.51(140)	5.51(140)	8.27(210)	8.27(210)
Depth in (mm)	3.94(100)	3.4(86)	3.4(86)	4.33(110)	5.8(148)	5.8(148)	3.44(87.5)	3.44(87.5)	3.44(87.5)	4.33(110)	4.33(110)	6(152.5)	6(152.5)
Interrupting Ratings @ 240VAC UL/CSA/NOM Rating(50/60Hz) kA	100	125	125	125	100	125	65	150	150	150	150	150	150
Interrupting Ratings @ 480VAC UL/CSA/NOM Rating(50/60Hz) kA	65	100	100	100	65	100	35	100	100	100	100	100	100
Interrupting Ratings @ 600VAC UL/CSA/NOM Rating(50/60Hz) kA	18	50	50	50	25	25	18	50	50	50	50	50	50