



Beyond

™

Susol MCCB

Up to 690/800/1000Vac
for Renewable Application and High Altitude



LSELECTRIC

Characteristics and Rating

Characteristics

For renewable and high altitude applications

- High breaking capacity (up to 1000V AC)
- Compact size
- Various trip units
- Standards: IEC/UL rated

Rating



FRAME		UTV250		
Rated voltage		690 ¹⁾ /800/1000 Vac		
Rated current		60, 80, 100, 150, 200, 250A		
Number of poles		3/4		
Breaker type		E	N	H ²⁾
UL489				
Interrupting capacity (kA) UL, CSA	AC 800V	25	42	50
	AC 1000V	14	20	30
IEC 60947-2				
Maximum fault current (kA), Icu	AC 690V	65	85	100
	AC 800V	25	40	50
	AC 1000V	15	20	30
Fault breaking capacity (kA), Ics	AC 690V	65	85	100
	AC 800V	18.5	30	37.5
	AC 1000V	8	10	15
Insulation voltage, Ui		1000 Vac		
Impulse withstand voltage, Uimp		8 kV		
Utilization category		A		
IEC 60947-3				
Insulation voltage, Ui		1000 Vac		
Impulse withstand voltage, Uimp		8 kV		
Rated short-time withstand current, Icw		3 kA		
Utilization category		AC-23A		
Trip Unit				
Trip unit	FTU*	60, 80, 100, 150, 200, 250A		
	FMU*	60, 80, 100, 150, 200, 250A		
	ATU*	100, 150, 200, 250A		
	MCS**	60, 80, 100, 150, 200, 250A		
	DSU***	250A		
Accessories				
Unit mounted		available		
Mechanical lugs		available		
Busbar connectors		available		
Control wire terminal kit		available		
Motor operator		available		
Interphase barriers		available		
Shunt trip		available		
Undervoltage trip		available		
Auxiliary switch		available		
Alarm switch		available		
Directly-Mounted rotary operating handle		available		
IEC-Door-Mounted operating mechanisms		available		
Padlock attachment		available		
Weight(approximate), lbs.(kg)	3 Pole	4.85(2.20)		
	4 Pole	6.35(2.88)		
Dimensions, Inches(mm)		W	H	D
	3 Pole	4.13(105)	8.07(205)	3.62(92)
	4 Pole	5.51(140)	8.07(205)	3.62(92)

1), 2) TBD

* FTU, FMU, ATU: UL489, IEC 60947-2

** UL 489 Only

*** IEC 60947-3 Only



Rating

FRAME		UTV400		
Rated voltage		800/1000 Vac		
Rated current		320, 400A		
Number of poles		3/4		
Breaker type		E	N	H
IEC 60947-2				
Interrupting capacity (kA) AC 800V, Icu		25	42	50
Interrupting capacity (kA) AC 1000V, Icu		15	20	30
Fault breaking capacity (kA), AC Ics	AC 800V	25	25	25
	AC 1000V	13	13	13
Insulation voltage, Ui		1000 Vac		
Impulse withstand voltage, Uimp		8 kV		
Utilization category		A		
Trip Unit				
Trip unit	FTU*	320, 400A		
	FMU*	320, 400A		
	ATU*	320, 400A		
Accessories				
Unit mounted		available		
Mechanical lugs		available		
Busbar connectors		available		
Control wire terminal kit		available		
Motor operator		available		
Terminal shields		available		
Interphase barriers		available		
Shunt trip, SHT		available		
Undervoltage trip, UVT		available		
Auxiliary switch, AX		available		
Alarm switch, AL		available		
Directly-Mounted rotary operating handle		available		
IEC-Door-Mounted operating mechanisms		available		
Padlock attachment		available		
Weight(approximate), lbs.(kg)	3 Pole	15.87(7.2)		
	4 Pole	19.18(8.7)		
Dimensions, Inches(mm)		W	H	D
	3 Pole	5.51(140)	11.42(290)	4.33(110)
	4 Pole	7.34(186.5)	11.42(290)	4.33(110)

* FTU, FMU, ATU: IEC 60947-2 ** IEC 60947-3 Only

Ordering & Temperature derating

Ordering

UT	V	250	ET	FTU	250A	4P	UL
UL MCCB	AC 800/1000V	AF	Type Rating Interrupting (800V AC)	Trip unit	Rated current	Poles	UL standard
		250 250AF 400 400AF	ET 100% E 80% NT 100% N 80% HT 100% H 80%	FTU Fixed Thermal, Fixed Magnet FMU Adj. Thermal, Fixed Magnet ATU Adj. Thermal, Magnet MCS Molded Case Switch DSU Disconnect Switch (NA type Only)	60A : 400A	3P 3-pole 4P 4-pole	

Temperature derating

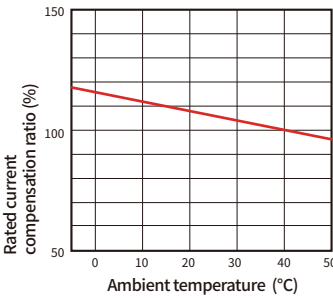
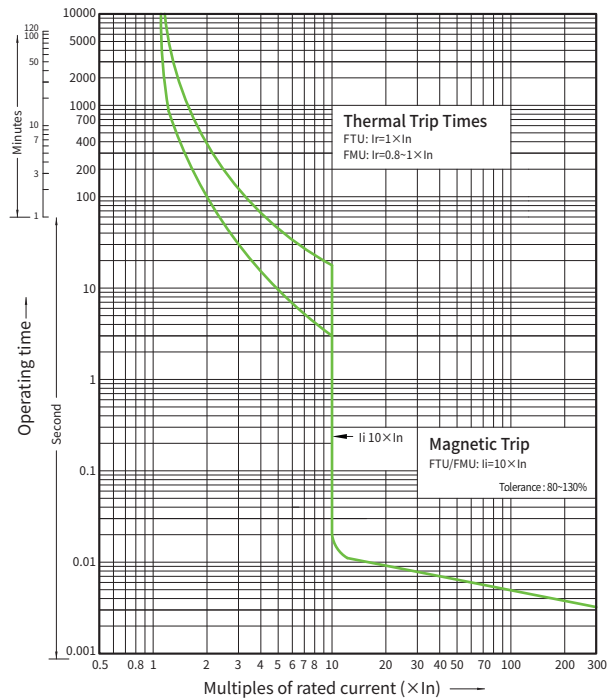
Type		Rated current (A)	Derating current (A)	Compensated rated current in accordance with ambient temperature (A)															
				10°C		20°C		30°C		40°C		45°C		50°C		60°C		70°C	
UL489	UTV250	60	60 100%	60	100%	60	100%	60	100%	60	100%	59	98%	57	95%	53	89%	50	83%
		80	80 100%	80	100%	80	100%	80	100%	80	100%	78	98%	76	95%	71	89%	66	83%
		100	100 100%	100	100%	100	100%	100	100%	100	100%	98	98%	95	95%	89	89%	83	83%
		150	150 100%	150	100%	150	100%	150	100%	150	100%	146	97%	141	94%	132	88%	123	82%
		200	200 100%	200	100%	200	100%	200	100%	200	100%	196	98%	190	95%	178	89%	166	83%
		250	250 100%	250	100%	250	100%	250	100%	250	100%	243	97%	235	94%	220	88%	205	82%
IEC 60947-2	UTV400	320	320 100%	320	100%	320	100%	320	100%	320	100%	310	98%	301	95%	282	89%	262	83%
		400	400 100%	400	100%	400	100%	400	100%	400	100%	388	97%	376	94%	352	88%	328	82%

Characteristic curve

MCCB up to 690/800/1000Vac

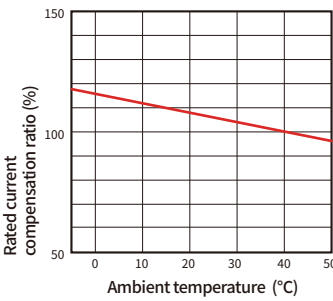
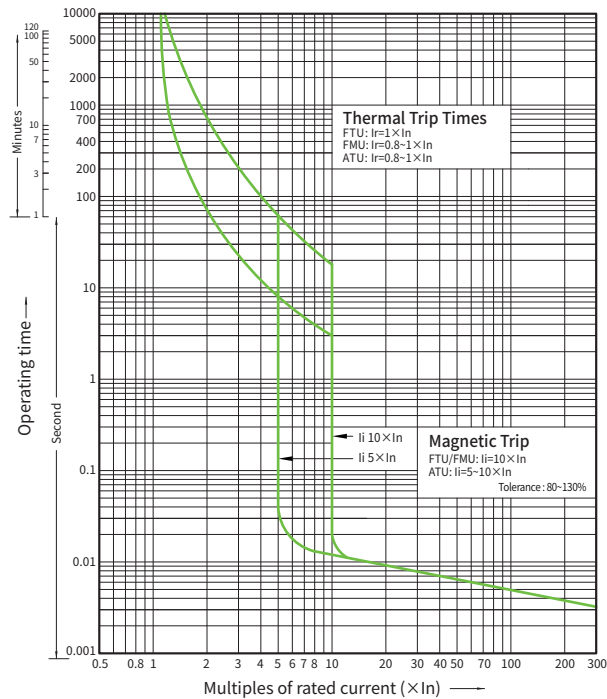
UTV250 MCCB

FTU
FMU
60~80A



UTV250 MCCB

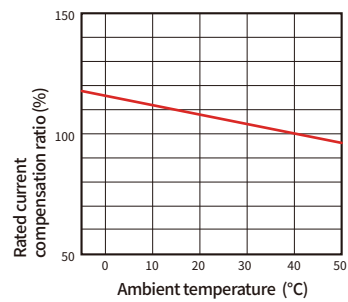
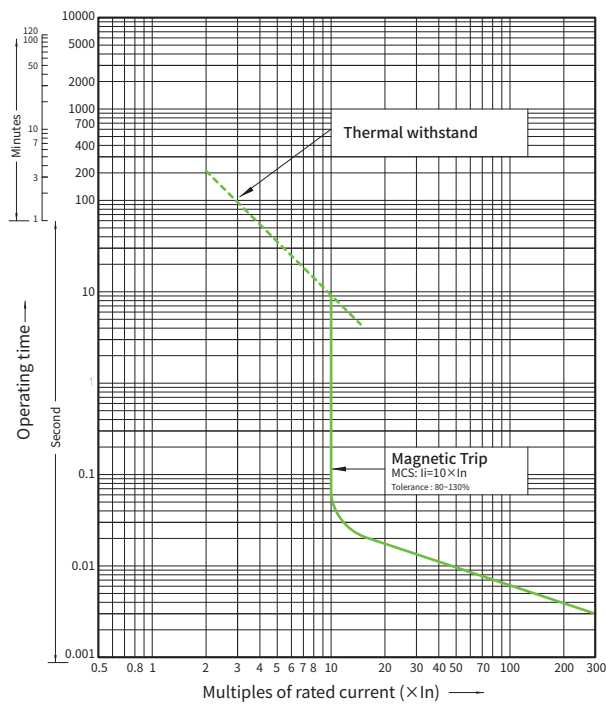
FTU
FMU
ATU
100~250A



Characteristic curve

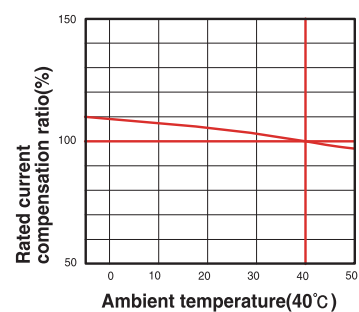
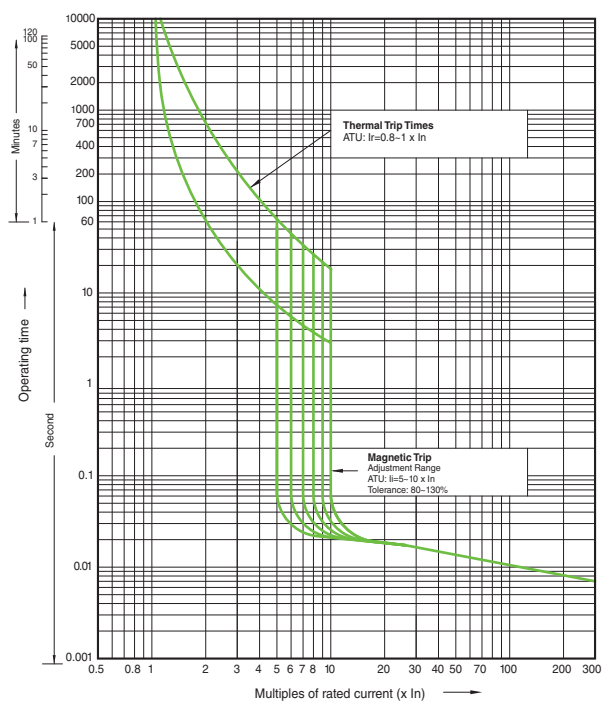
UTV250 MCS

60 ~ 250A



UTV400 MCCB

ATU
300~400A

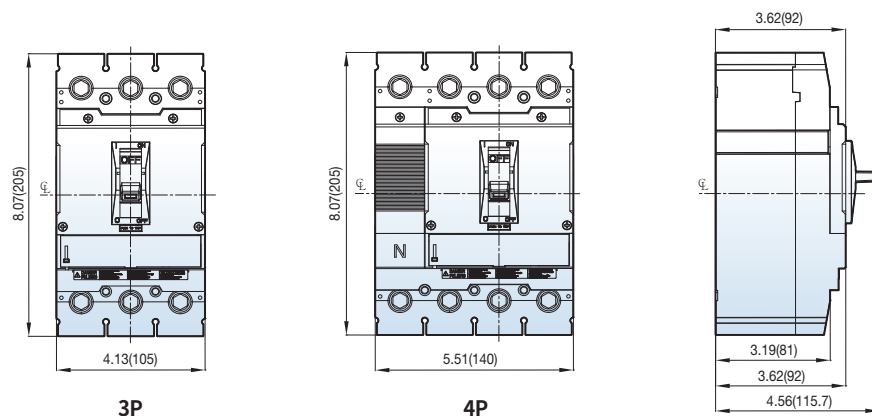


Rating UTS400	ATU		
	2P/3P	Rating Range ($0.8\sim1 \times I_n$)	MAG Trip (80%~120%) ($5\sim10 \times I_n$)
320	○	256~320A	1600~3200A
400	○	320~400A	2000~4000A

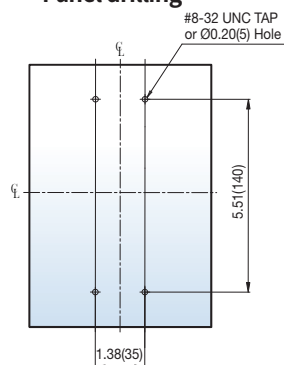
Dimensions

UTV250

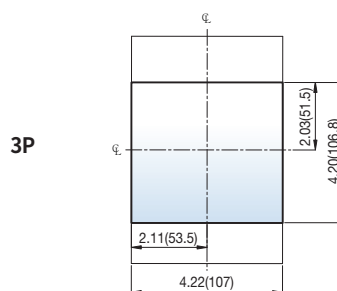
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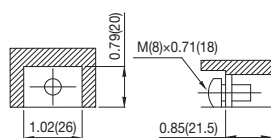
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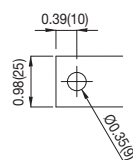
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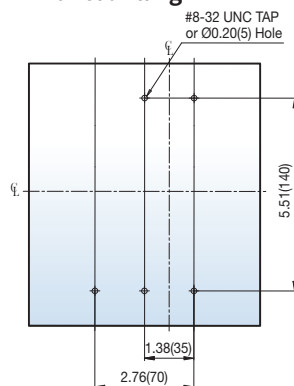
Terminal section



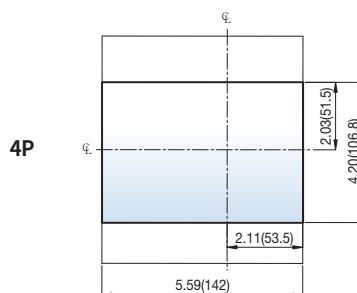
Conductor



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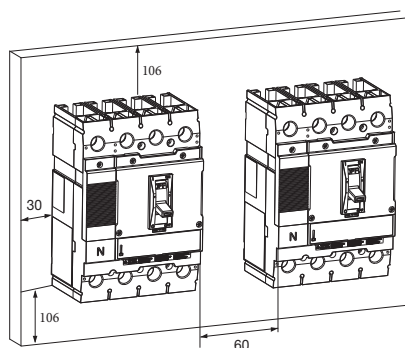


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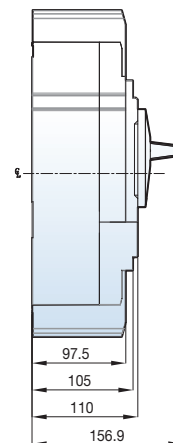
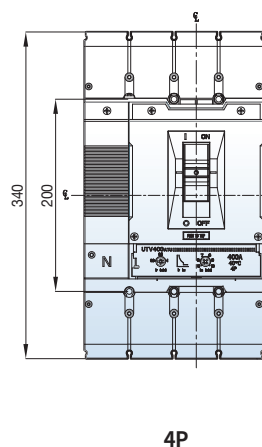
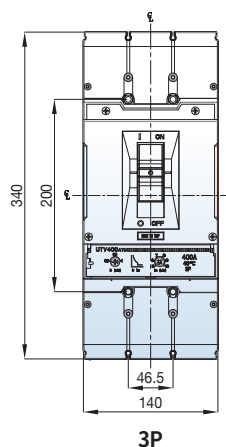
- One side (30mm or more),
- Top and bottom (106mm or more)
- Between products (60mm or more)



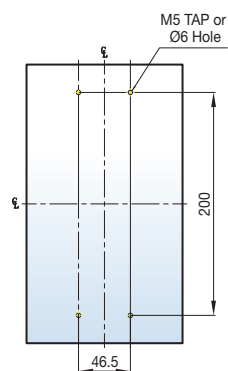
Dimensions

UTV400

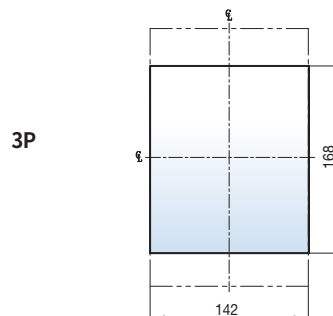
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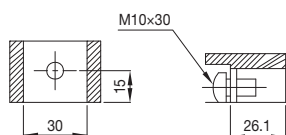
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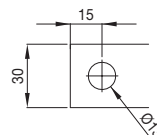
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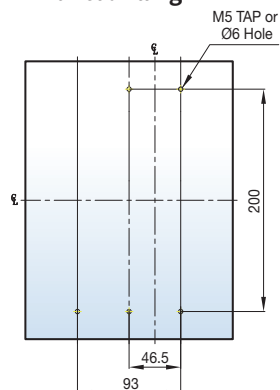
Terminal section



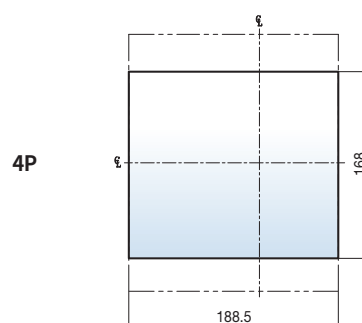
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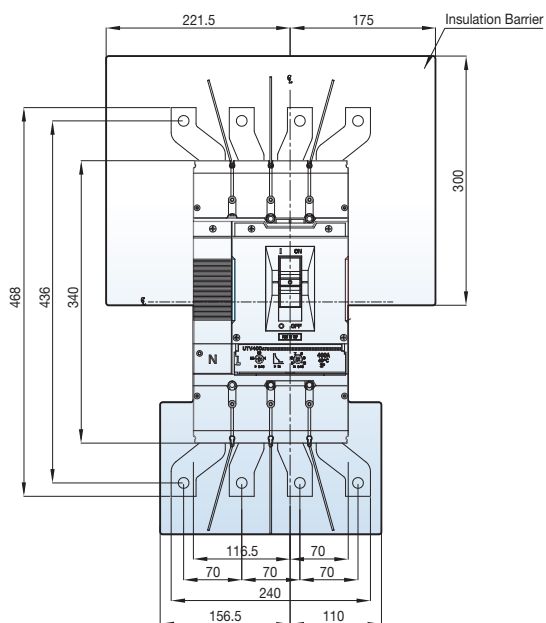
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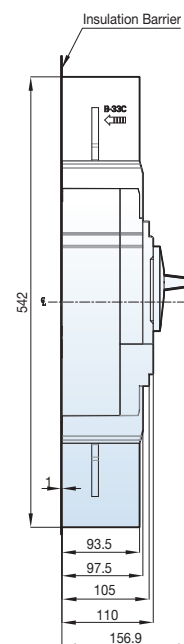
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3P



4P





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