

Characteristic Curves & Dimensions

| UAB type / 30-100AF, 5-10kA |

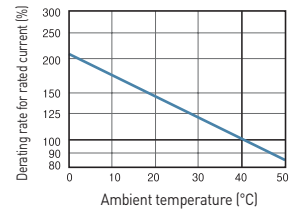
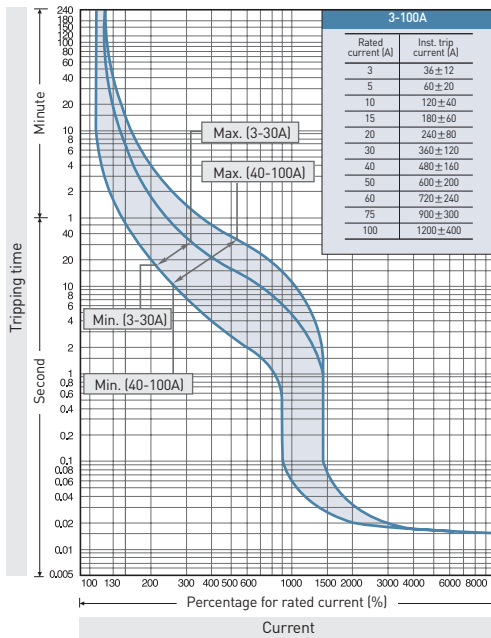


- UAB30C • UAB30R
- UAB50C • UAB50R
- UAB60C • UAB60R
- UAB100C

• UAD50C

※ Characteristic curves are not applicable.

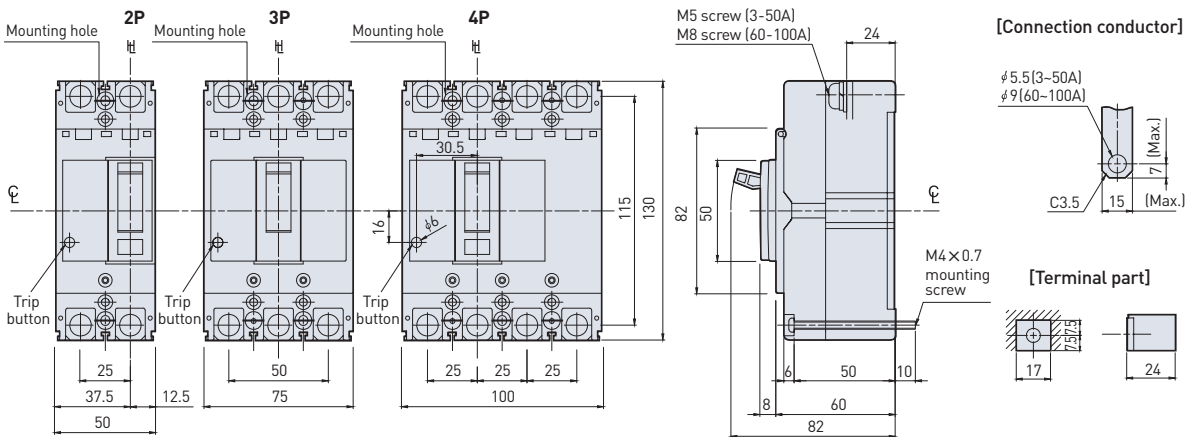
Tripping & temperature derating curves



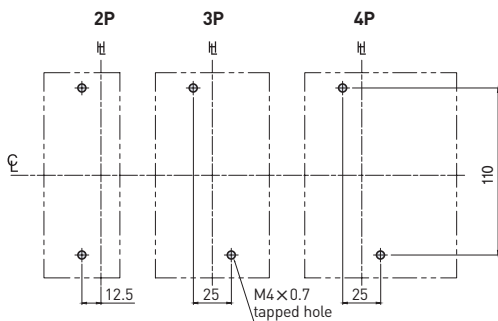
Dimensions

(Unit: mm)

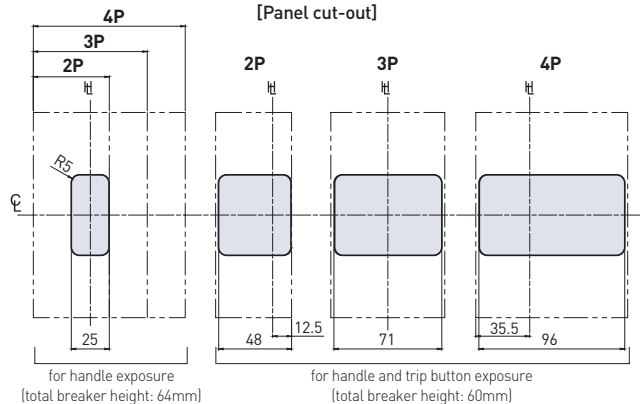
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]



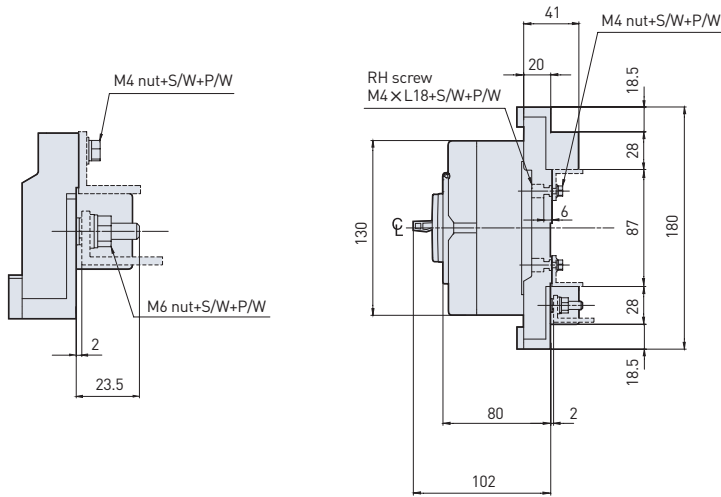
※ CL : Center line HL : Handle center line • The allowance of 1.5mm is given around the handle frame.

Dimensions

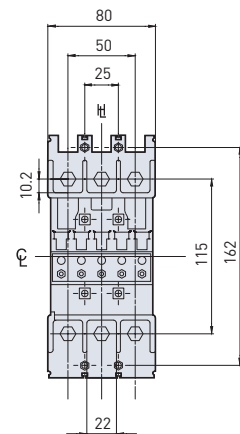
[Unit: mm]

Plug-in mounting

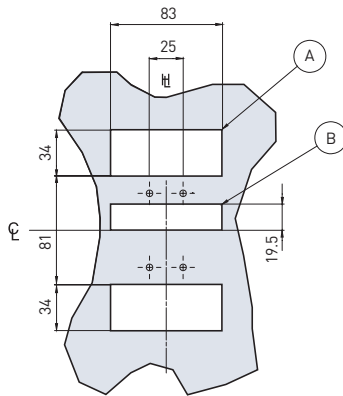
[Plug-in connection part]



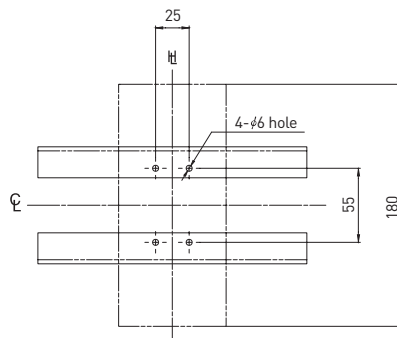
[Mounting base]



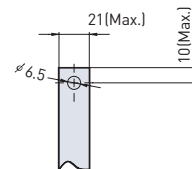
[Panel cut-out]



[Drilling holes for mounting]



[Connection conductor]

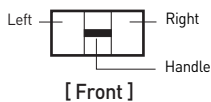


- (A) : Cut-out before bus bar assembly.
- (B) : Cut-out for wiring of signal accessories.

* TDF 10A for line side only type plug-in mounting, please refer to page no. 172.

Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AXT SHT	AXT UVT
3											



- * - AXT is combination of AUX and ALT.
- In case of 2P, all signal accessories shall be installed in left side of breaker.
- UVT operates at DC voltage. AC voltage will be converted to DC through UVT controller.

Characteristic Curves & Dimensions

| UAB type / 50-100AF, 25-30kA |

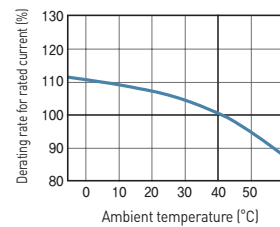
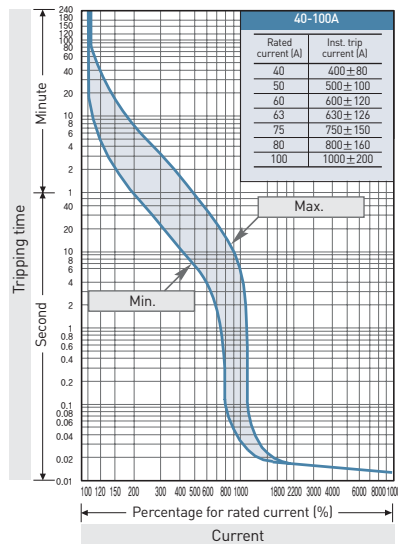
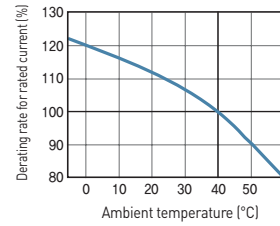
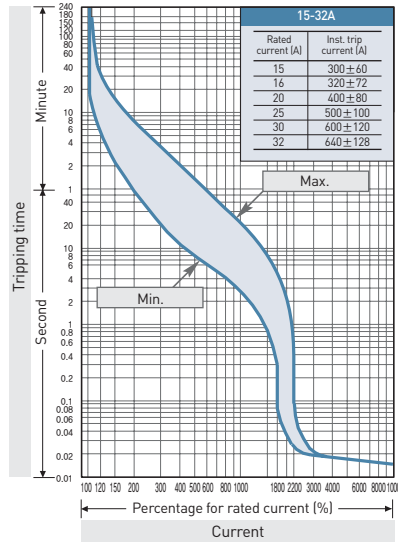


- UAB50S
- UAB50H
- UAB100R
- UAB100S

- UAD50S
- UAD100R

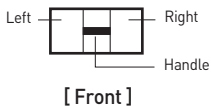
※ Characteristic curves are not applicable.

Tripping & temperature derating curves



Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AXT SHT	AXT UVT
3											



- ※ - AXT is combination of AUX and ALT.
- In case of 2P, all signal accessories shall be installed in left side of breaker.
- UVT operates at DC voltage. AC voltage will be converted to DC through UVT controller.

Characteristic Curves & Dimensions

| UCB type / 50-100AF, 25-36kA |

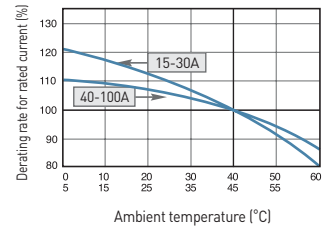
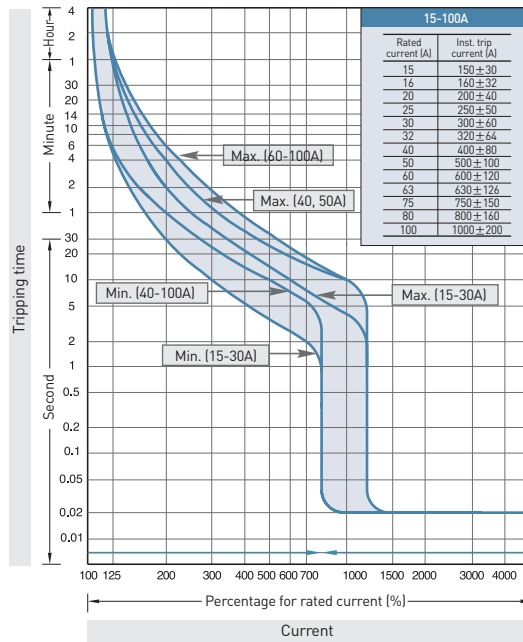


- UCB50R
- UCB100R
- UCB100S

- UCD100R

※ Characteristic curves are not applicable.

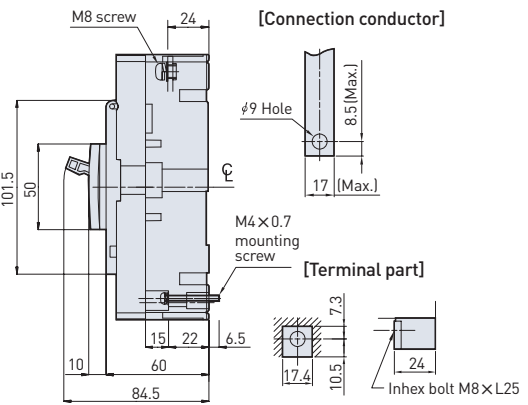
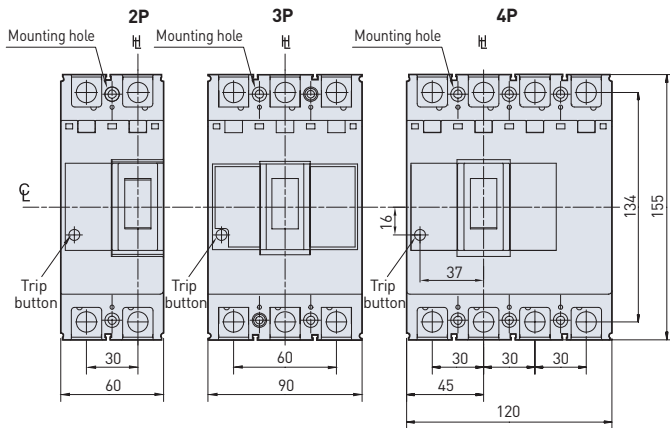
Tripping & temperature derating curves



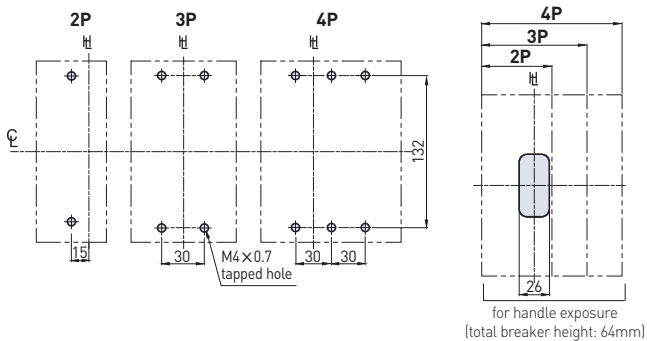
Dimensions

(Unit: mm)

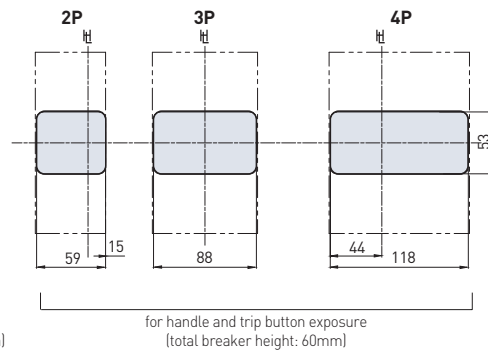
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]



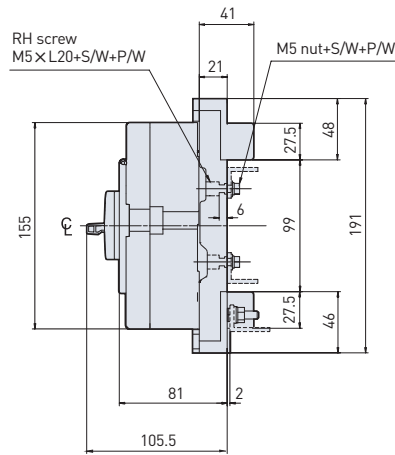
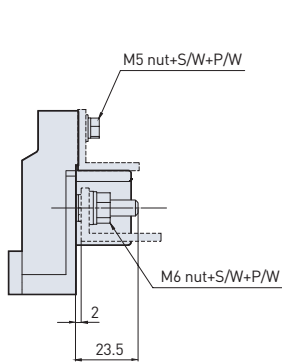
※ \odot : Center line \parallel : Handle center line • The allowance of 1.5mm is given around the handle frame.

Dimensions

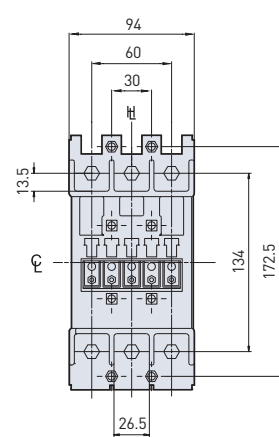
[Unit: mm]

Plug-in mounting

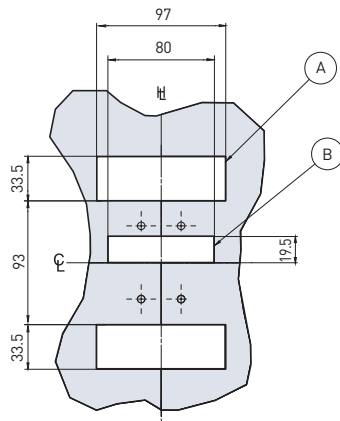
[Plug-in connection part]



[Mounting base]

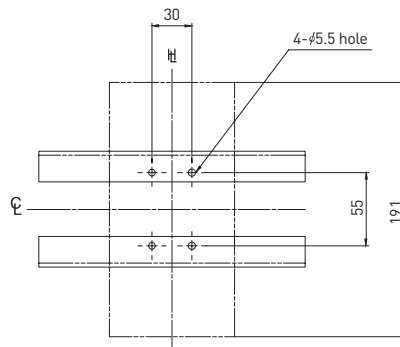


[Panel cut-out]

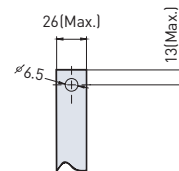


- (A) : Cut-out before bus bar assembly.
- (B) : Cut-out for wiring of signal accessories.

[Drilling holes for mounting]



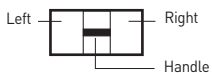
[Connection conductor]



※ TDF 10B for line side only type plug-in mounting, please refer to page no. 172.

Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AXT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AXT SHT	AXT UVT
3											



[Front]

- ※ - AXT is combination of AUX and ALT.
- In case of 2P, all signal accessories shall be installed in left side of breaker. SHT and UVT are not applicable to 2P.
- UVT operates at DC voltage. AC voltage will be converted to DC through UVT controller.

Characteristic Curves & Dimensions

| UCB type / 50-125AF, 42-50kA |

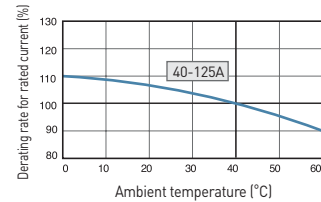
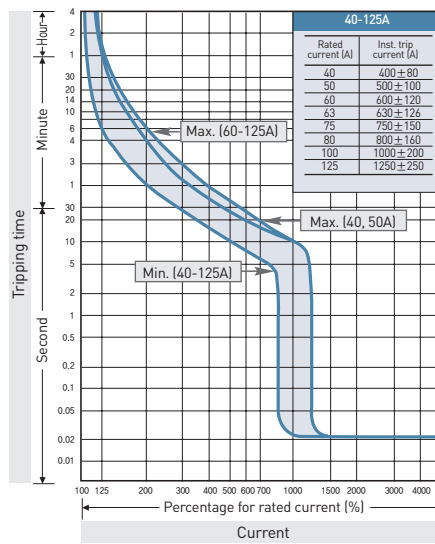
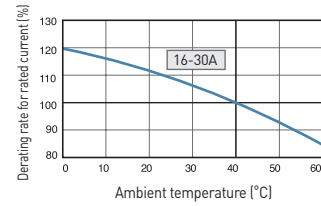
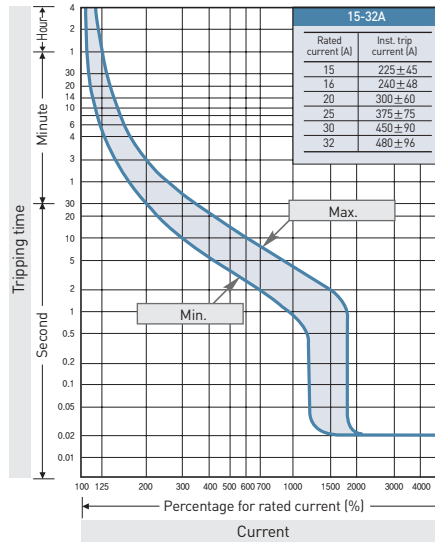


- UCB50H
- UCB50L
- UCB100H
- UCB100L

- UCD50H
- UCD100H

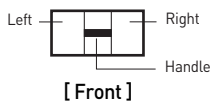
※ Characteristic curves are not applicable.

Tripping & temperature derating curves



Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AXT	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AXT SHT	AXT UVT
3												

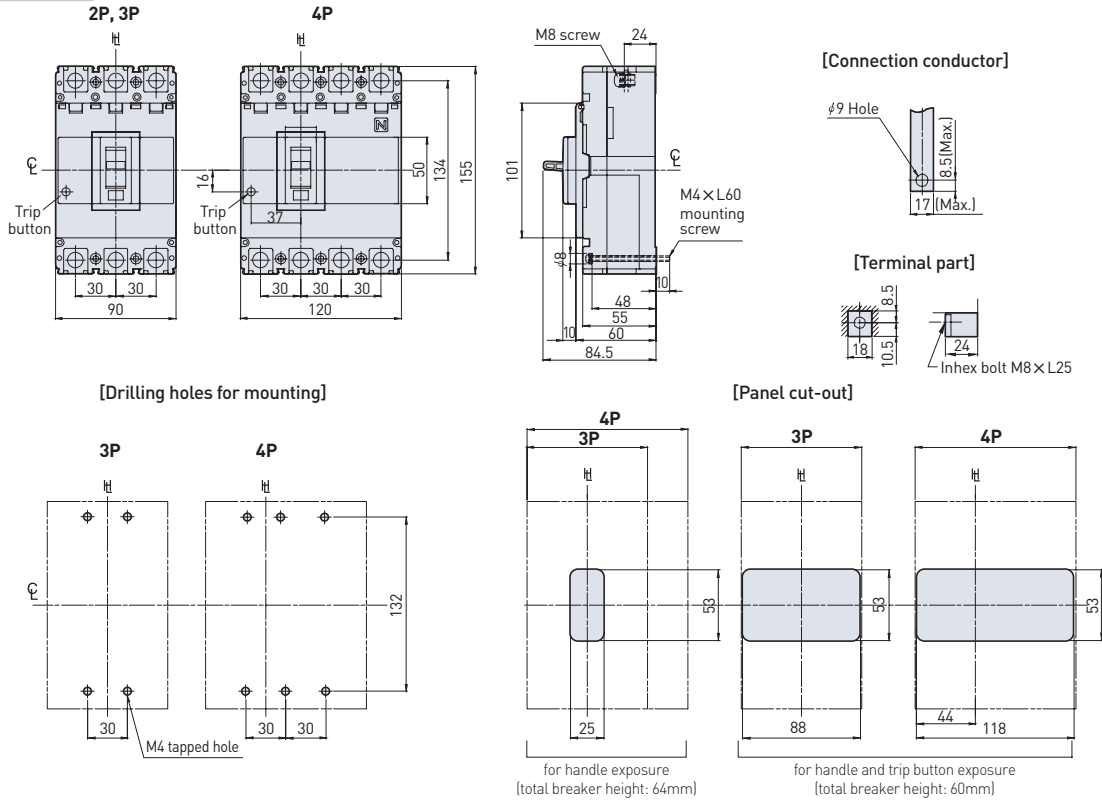


※ - AXT is combination of AUX and ALT.
- UVT operates at DC voltage. AC voltage will be converted to DC through UVT controller.

Dimensions

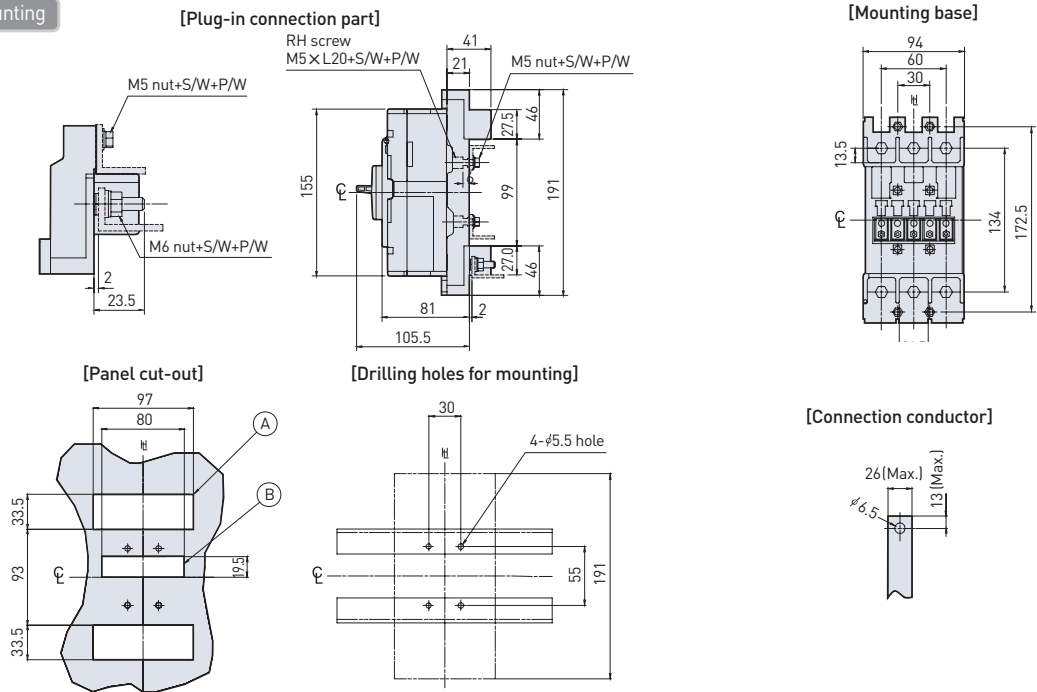
[Unit: mm]

Direct mounting



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

Plug-in mounting



(A) : Cut-out before bus bar assembly.
 (B) : Cut-out for wiring of signal accessories.

※ TDF 10B for line side only type plug-in mounting, please refer to page no. 172.

Characteristic Curves & Dimensions

| UCB type / 250AF, 18-36kA |

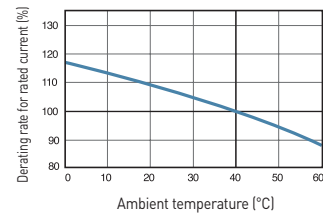
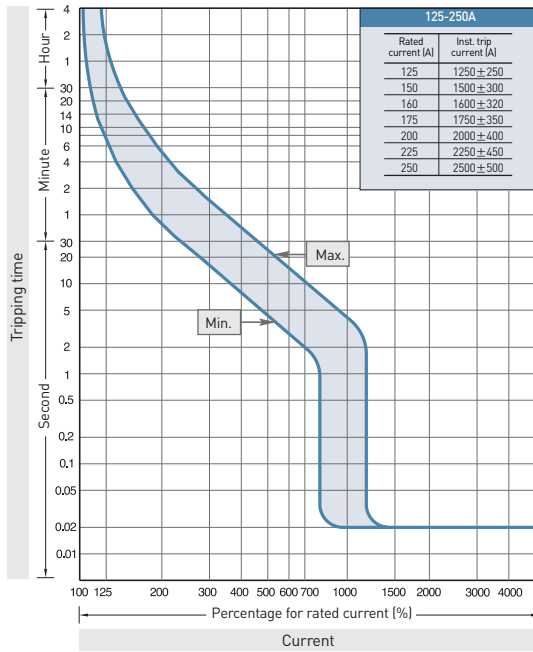


- UCB250R
- UCB250S
- UCB250N

- UCD250S

※ Characteristic curves are not applicable.

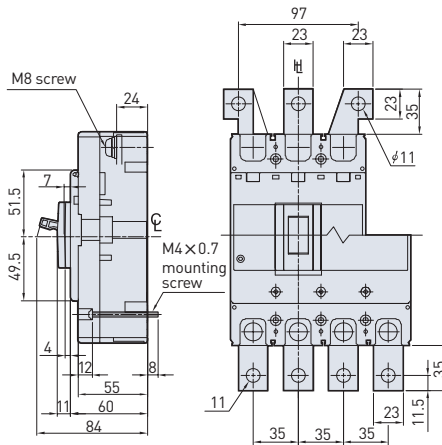
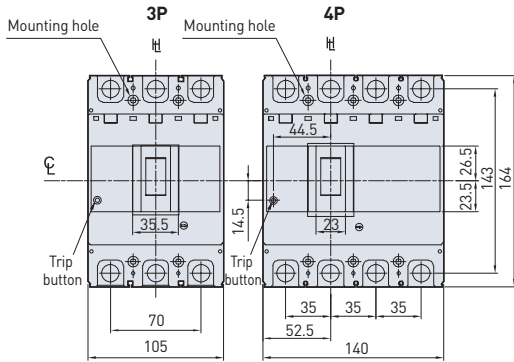
Tripping & temperature derating curves



Dimensions

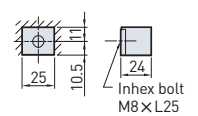
(Unit: mm)

Direct mounting

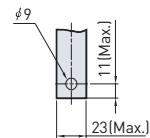


[with terminal bus bar*option]

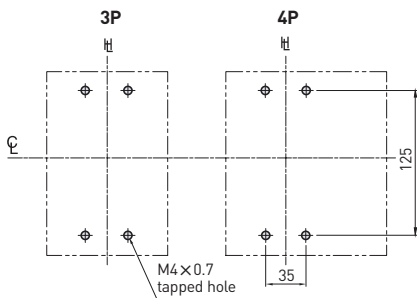
[Terminal part]



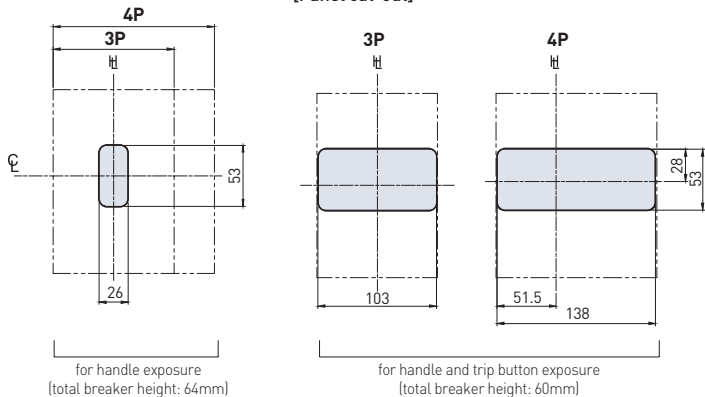
[Connection conductor]



[Drilling holes for mounting]



[Panel cut-out]

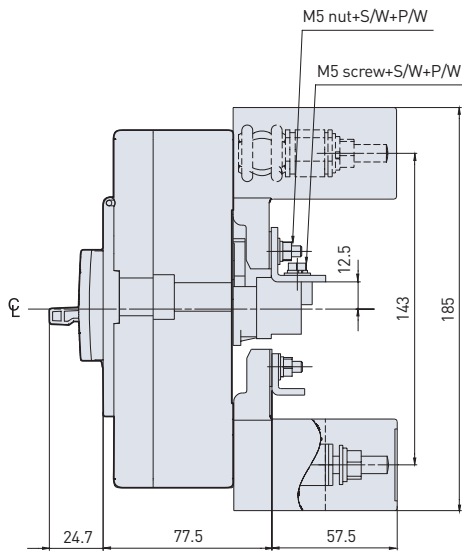


※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

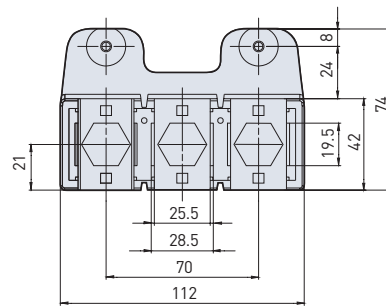
Dimensions

[Unit: mm]

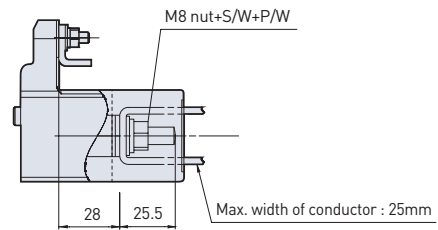
Plug-in mounting



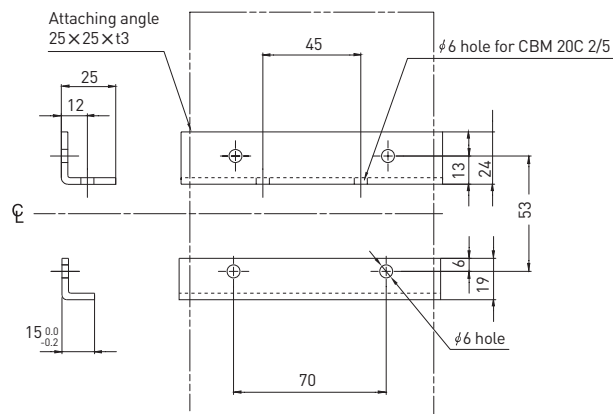
[Mounting base]



[Plug-in connection part]

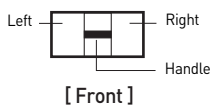


[Drilling holes for mounting]



Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AXT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AXT SHT	AXT UVT
3											



※ - AXT is combination of AUX and ALT.
- UVT operates at DC voltage. AC voltage will be converted to DC through UVT controller.

Characteristic Curves & Dimensions

| UCB type / 160-250AF, 42-50kA |

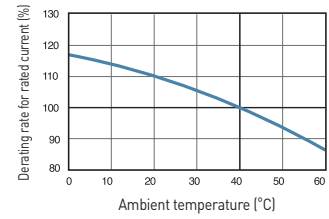
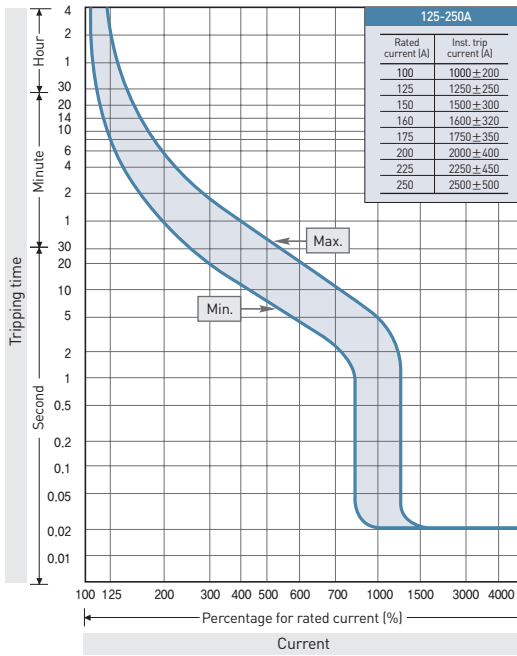


- UCB160H
- UCB160L
- UCB250H
- UCB250L

- UCD160H
- UCD250H

※ Characteristic curves are not applicable.

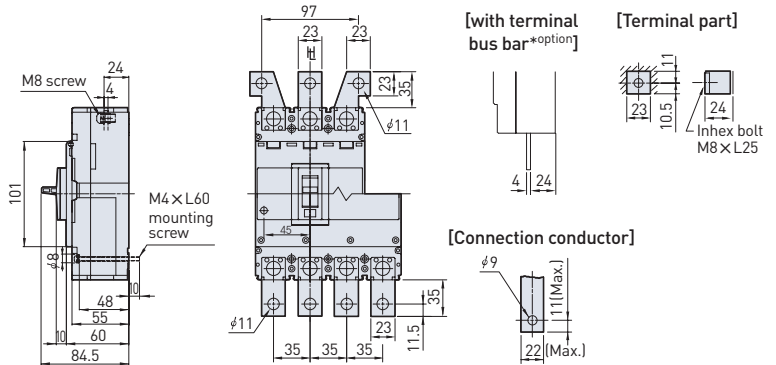
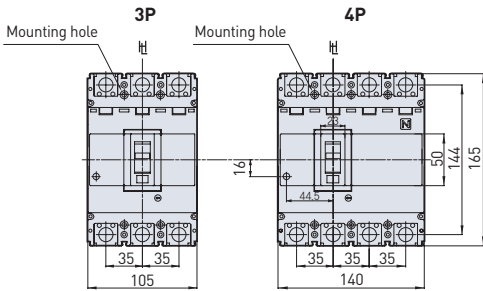
Tripping & temperature derating curves



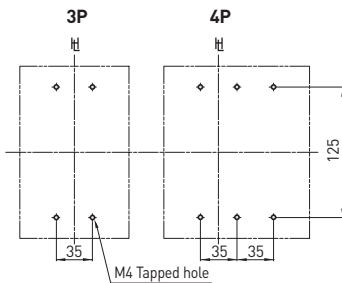
Dimensions

(Unit: mm)

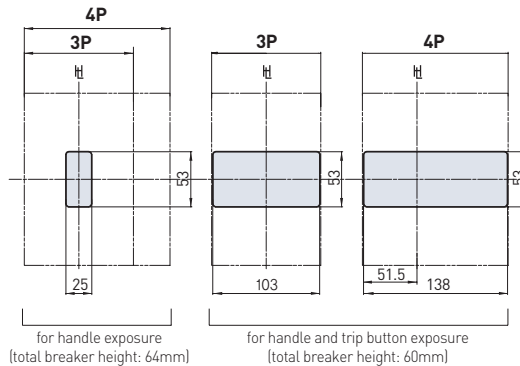
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]

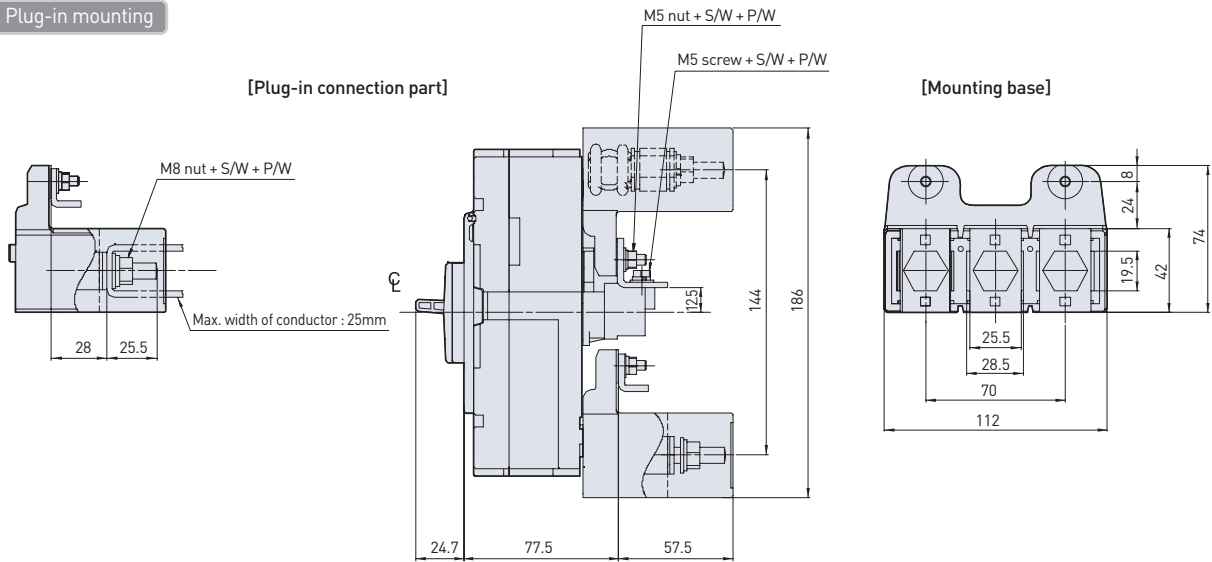


※ \ominus : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

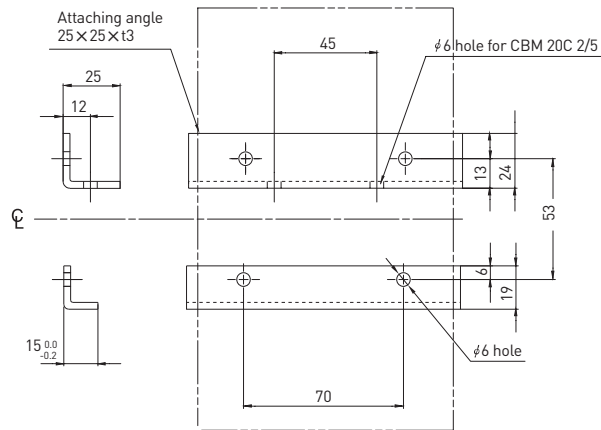
Dimensions

[Unit: mm]

Plug-in mounting

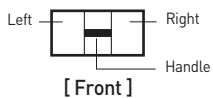


[Drilling holes for mounting]



Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AXT	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AXT SHT	AXT UVT
3												



※ - AXT is combination of AUX and ALT.
- UVT operates at DC voltage. AC voltage will be converted to DC through UVT controller.

Characteristic Curves & Dimensions

| UCB type / 400AF, 30-100kA |

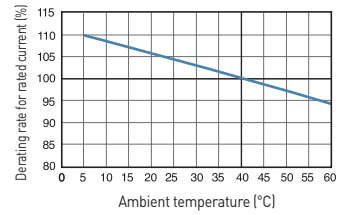
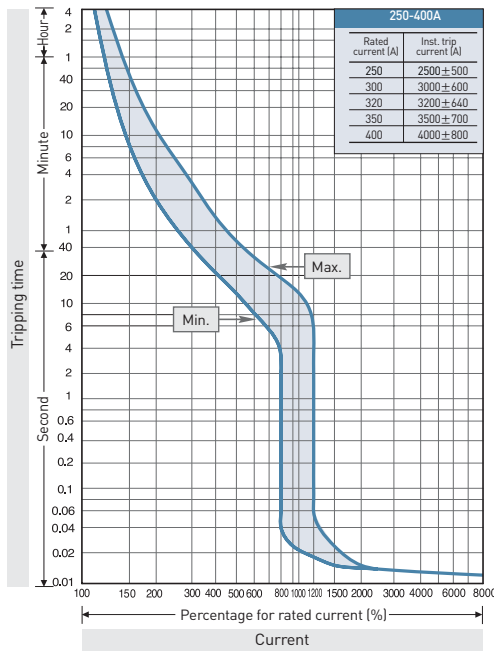


- UCB400R
- UCB400S
- UCB400H
- UCB400L

- UCD400S

※ Characteristic curves are not applicable.

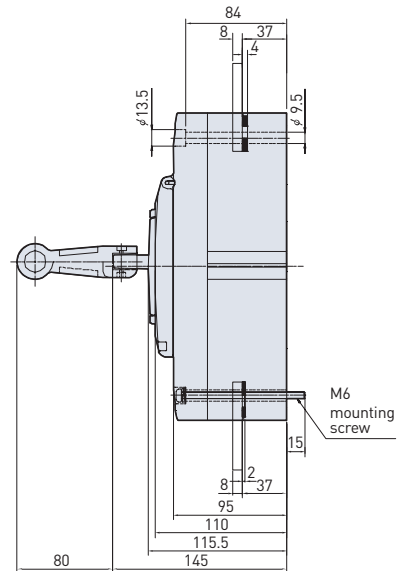
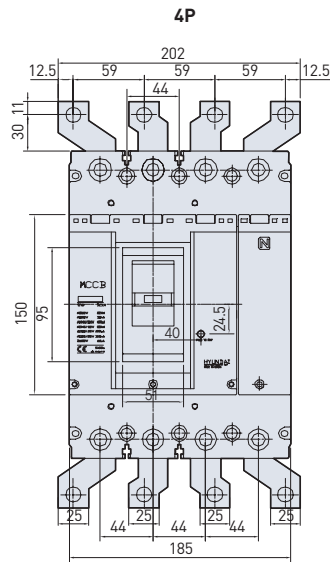
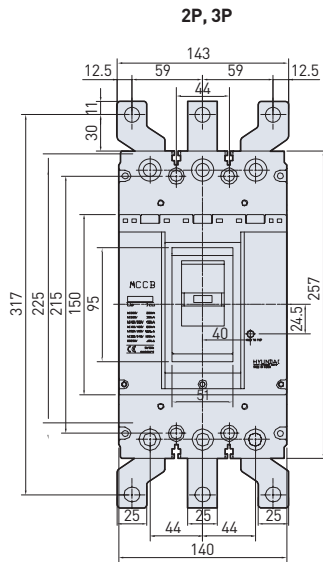
Tripping & temperature derating curves



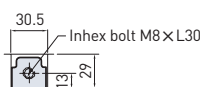
Dimensions

(Unit: mm)

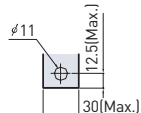
Direct mounting



[Terminal part]



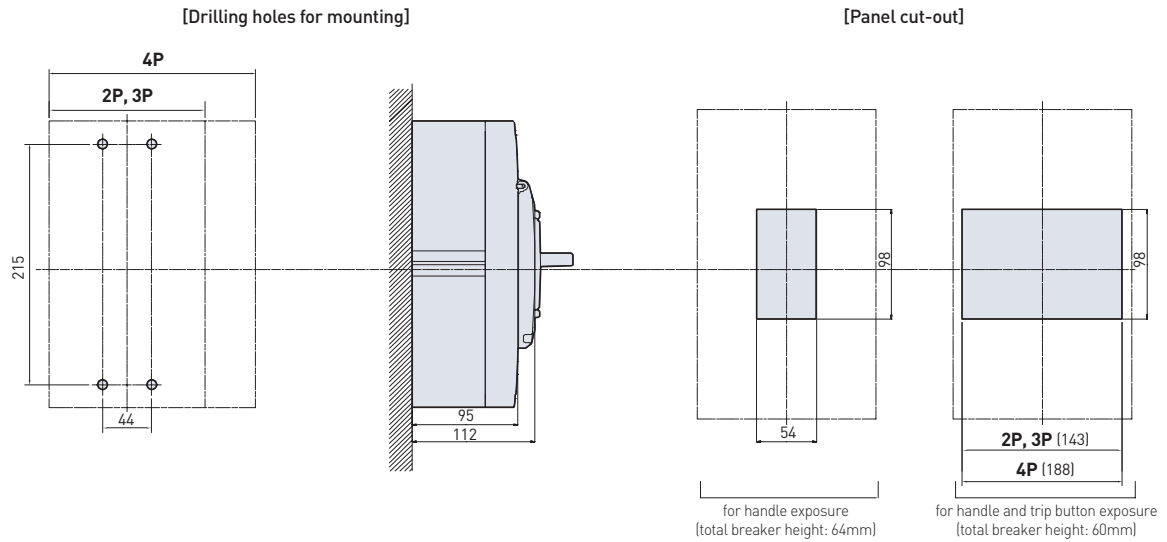
[Connection conductor]



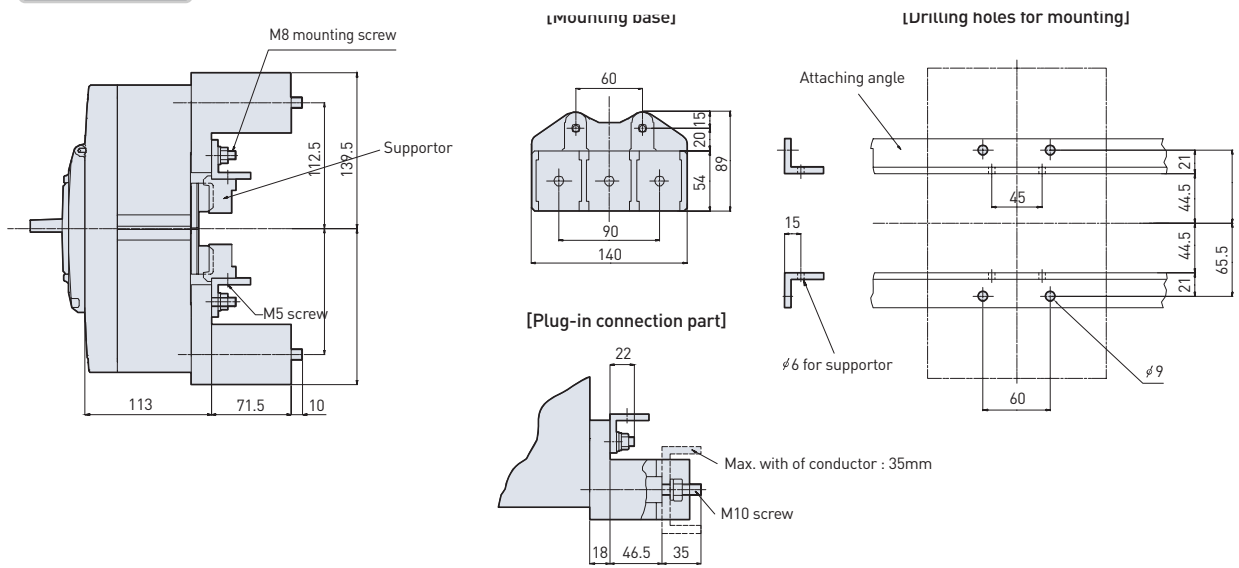
※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

Dimensions

[Unit: mm]



Plug-in mounting



Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AUX ALT SHT	AUX ALT UVT
3											

Left Right ※ - UVT operates at DC voltage. AC voltage will be conversed to DC through UVT controller.
Handle

[Front]

Characteristic Curves & Dimensions

| UCB type / 630AF, 45-100kA |

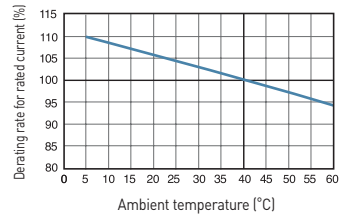
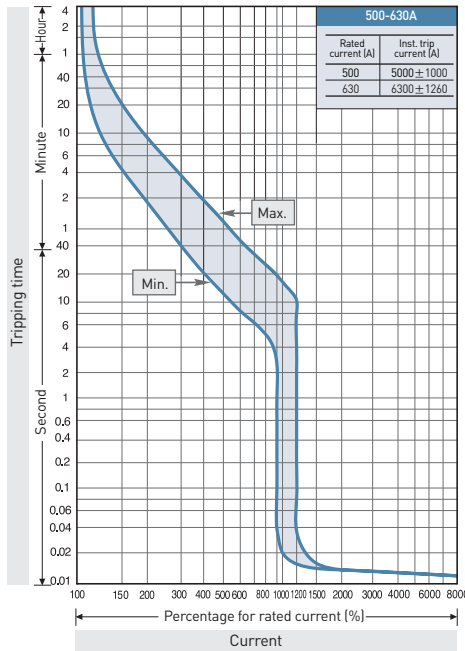


- UCB630R
- UCB630S
- UCB630H
- UCB630L

- UCD630S

※ Characteristic curves are not applicable.

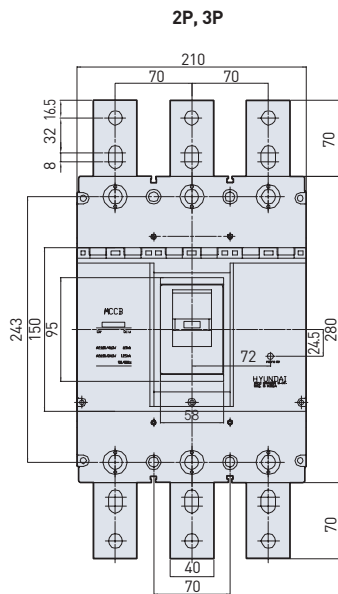
Tripping & temperature derating curves



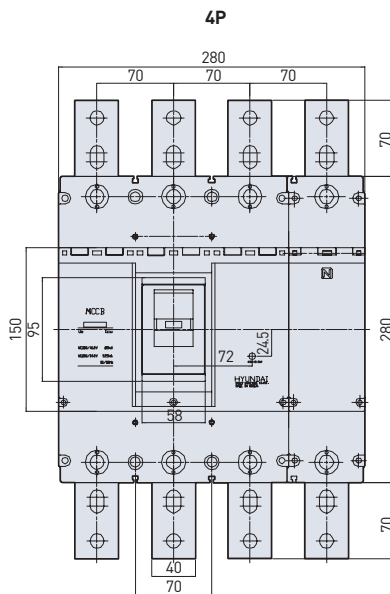
Dimensions

(Unit: mm)

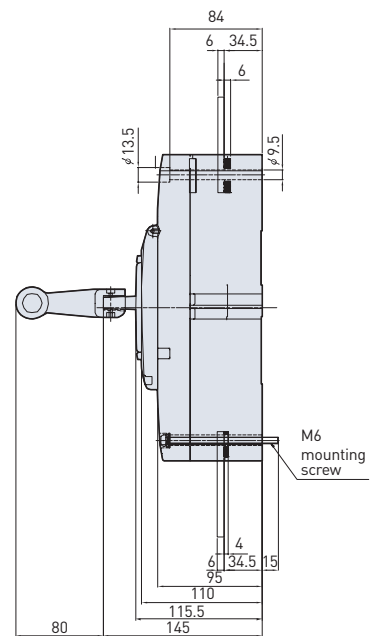
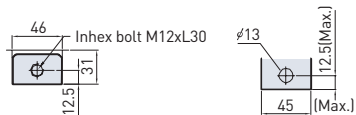
Direct mounting



[Terminal part]



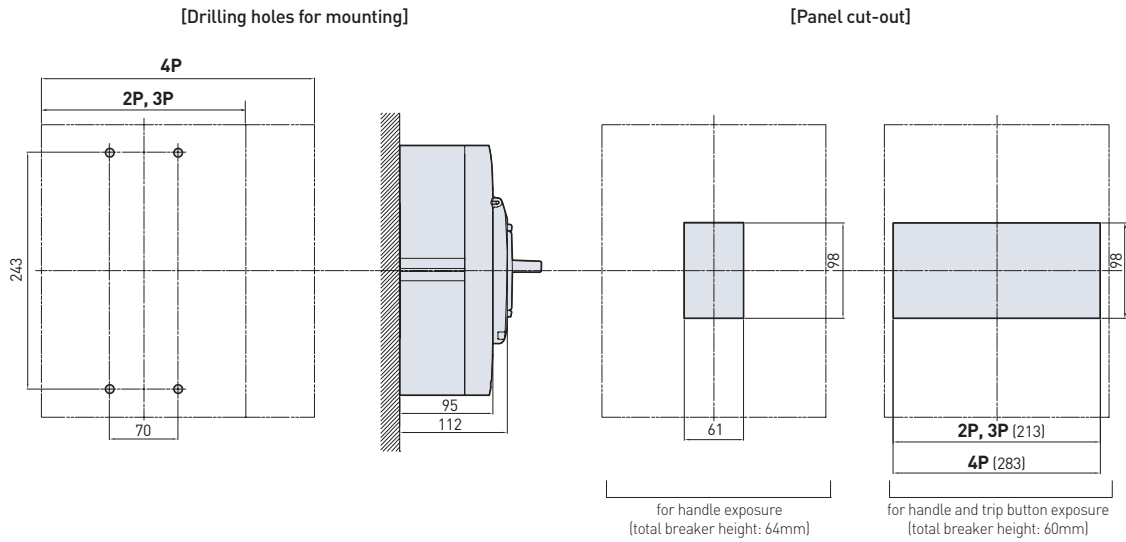
[Connection conductor]



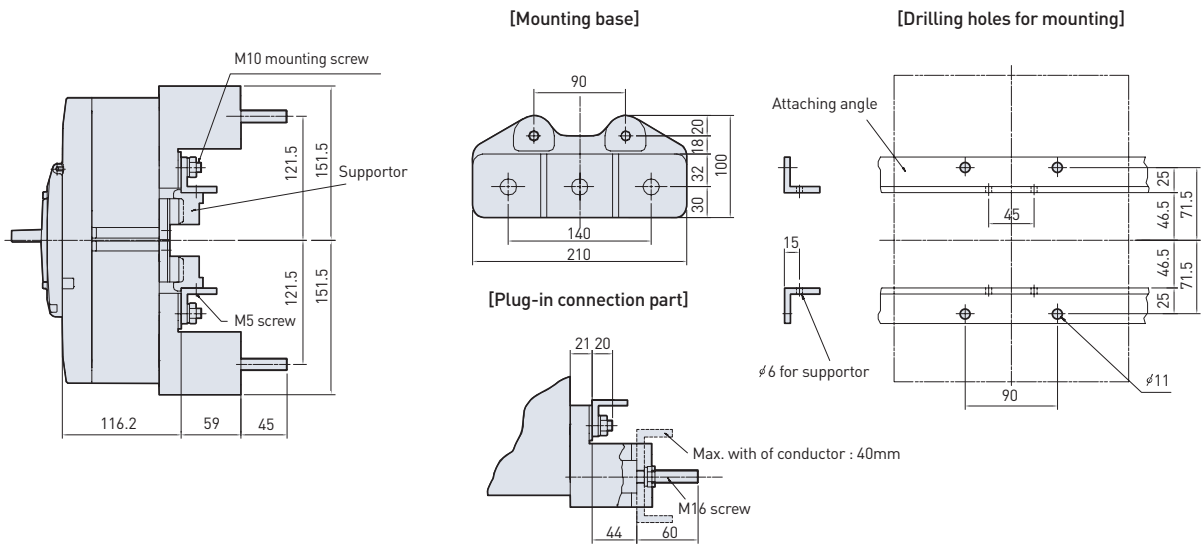
※ \odot : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

Dimensions

[Unit: mm]



Plug-in mounting



Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AUX ALT SHT	AUX ALT UVT
3											

Left Right Handle
 ※ - UVT operates at DC voltage. AC voltage will be conversed to DC through UVT controller.

Characteristic Curves & Dimensions

| UCB type / 800AF, 45-100kA |

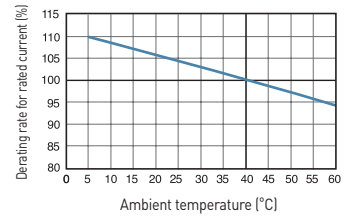
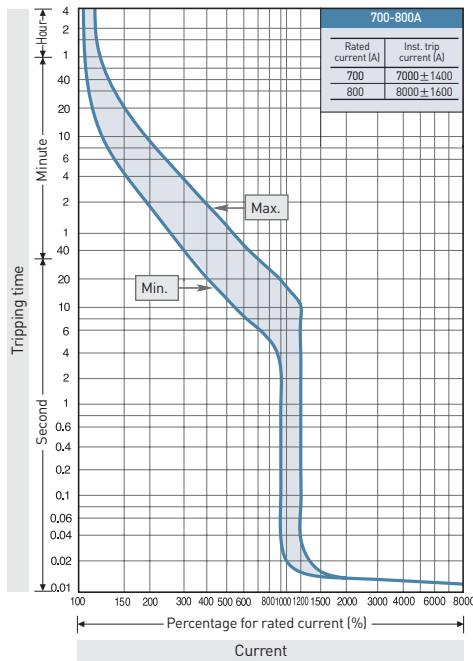


- UCB800R
- UCB800S
- UCB800H
- UCB800L

- UCD800S

※ Characteristic curves are not applicable.

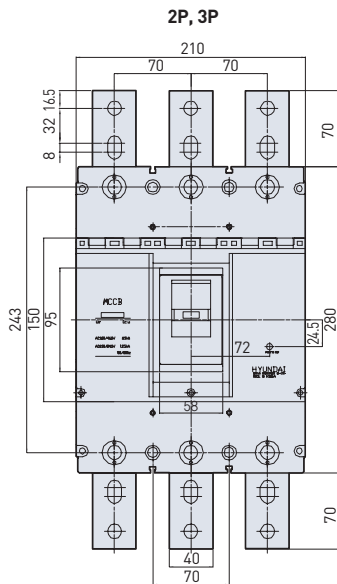
Tripping & temperature derating curves



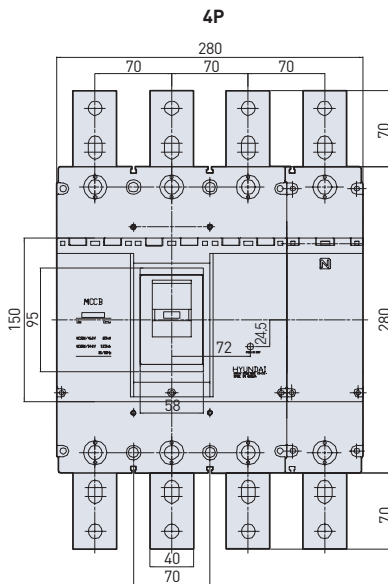
Dimensions

(Unit: mm)

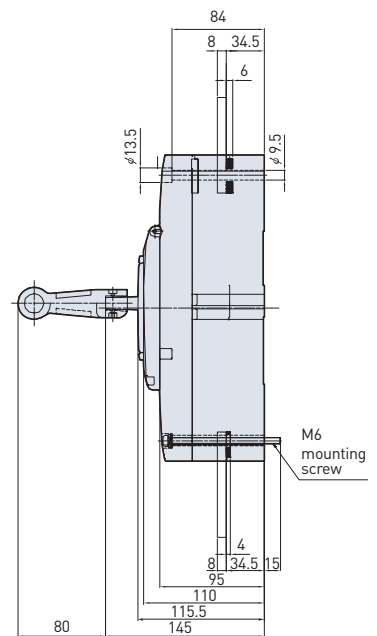
Direct mounting



[Terminal part]



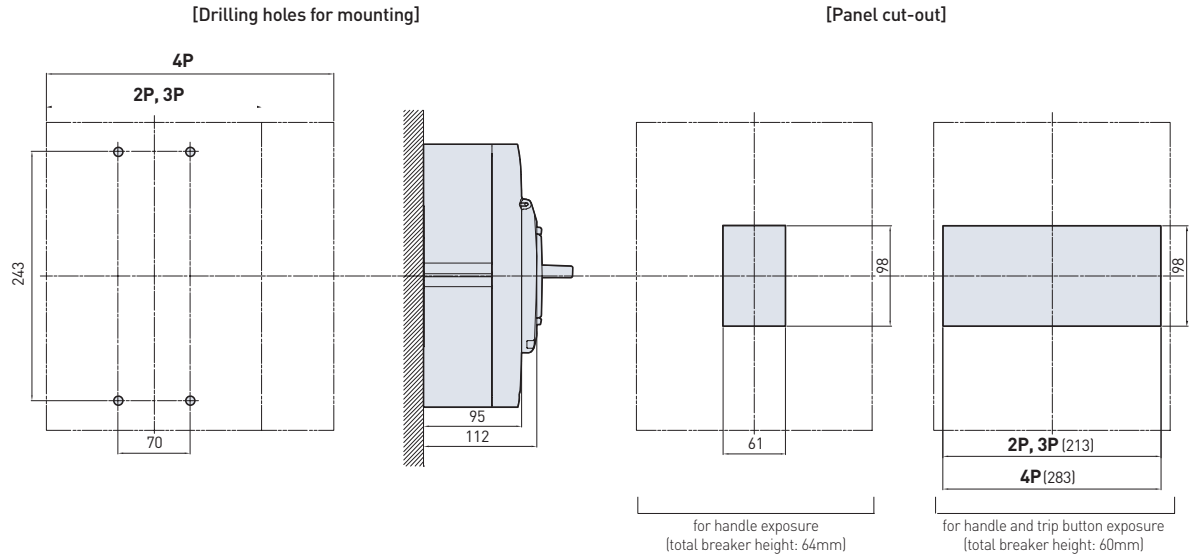
[Connection conductor]



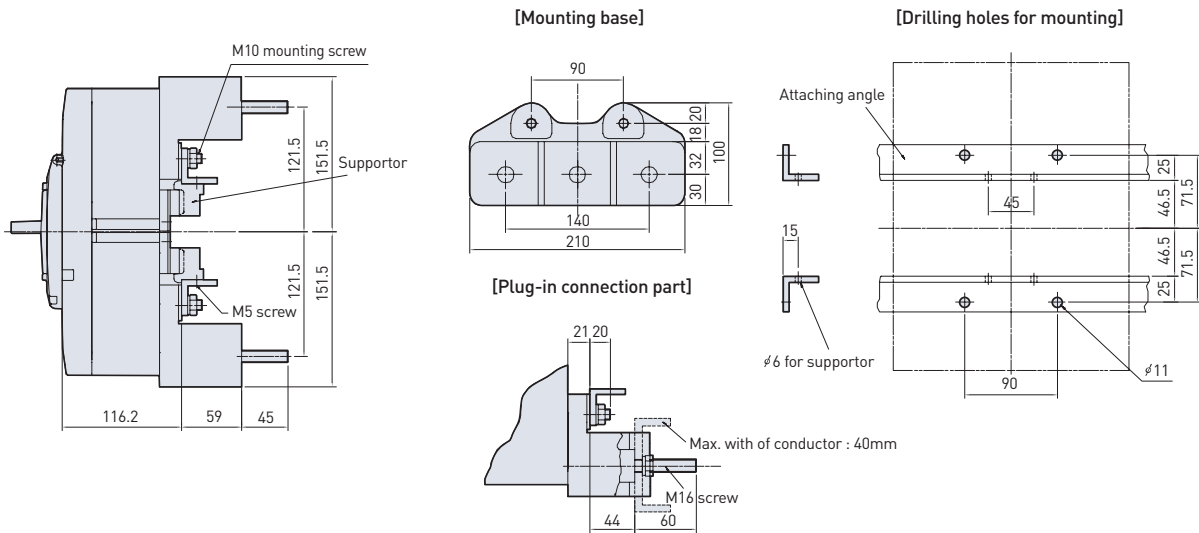
※ \ominus : Center line \parallel : Handle center line

Dimensions

[Unit: mm]



Plug-in mounting



Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AUX ALT SHT	AUX ALT UVT
3											

Left — Right ※ - UVT operates at DC voltage. AC voltage will be converted to DC through UVT controller.



[Front]

Characteristic Curves & Dimensions

| UCB type / 1000AF, 100-130kA |

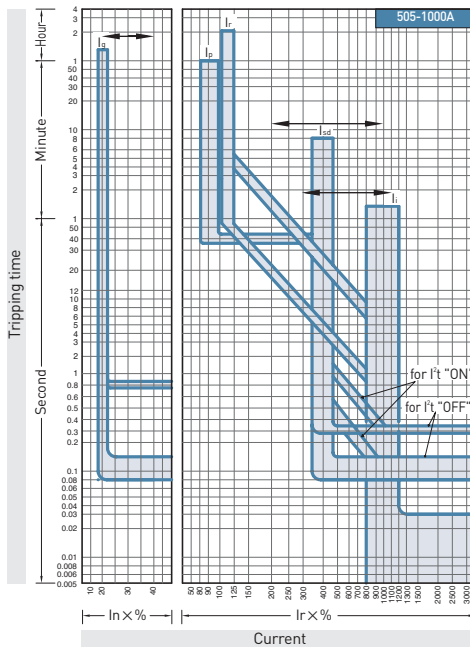


- UCB1000S
- UCB1000L

- UCD1000S

※ Characteristics are not applicable.

Tripping & temperature derating curves



Protection characteristics

Characteristics	Setting value or range	Tolerance	
Rated (CT) current [In] (A)	<u>1000</u>		
LTD	Rated setting current [Ir] (A)	50S, 53S, 56S, 60S, 63S, 64S, 68S, 72S, 76S, 80S, 85S, 90S, 95S, <u>1000</u>	
	Tripping time [tr]	2-4-6-8-12 sec. at Ir x 600%	±20%
STD ¹⁾	Short time pick-up current [Isd] (A)	Ir x NON-200-400-600-800- <u>1000</u> %	±15%
	Tripping time [tsd] ²⁾	0-0.1-0.2-0.3 sec. at definite time-limit section	+50ms -20ms
INST	Rated instantaneous short time current [Ii] (A)	Ir x NON-300-600-800-1000- <u>1100</u> %	±20%
GFT ³⁾	Ground fault current [Ig] (A)	Ir x NON-20-30- <u>40</u> %	±15%
	Tripping time [tg]	0.1-0.2-0.3-0.4- <u>0.8</u> sec. at definite time-limit section	+50ms -20ms
PTA	Pre-trip alarm current [Ip] (A)	Ir x <u>90</u> %	±10%
	Alarm time [tp]		±10%

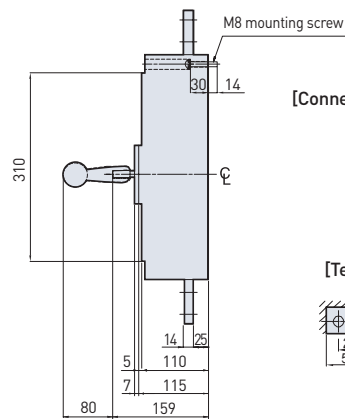
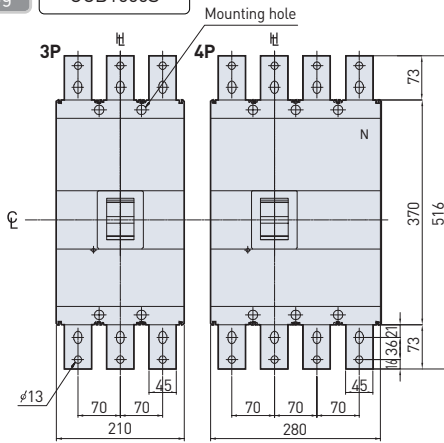
※ -The default values are underlined. Please check and adjust the setting condition of each characteristic before use.
 -1) I_t characteristic can be ON or OFF by adjusting the [tsd] knob.
 -2) GFT protection is option.

Dimensions

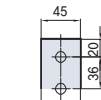
(Unit: mm)

Direct mounting

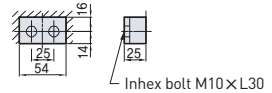
UCB1000S



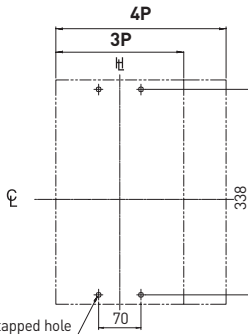
[Connection conductor]



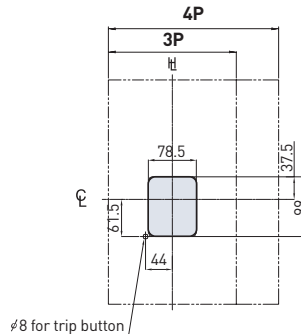
[Terminal part]



[Drilling holes for mounting]



[Panel cut-out]



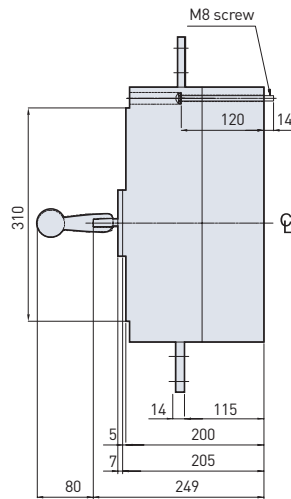
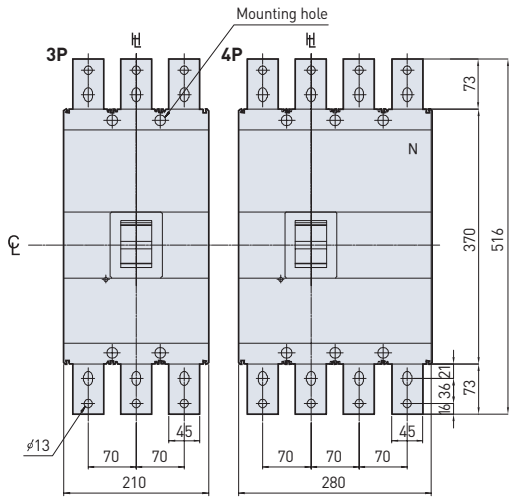
※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

Dimensions

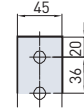
[Unit: mm]

Direct mounting

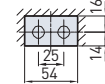
UCB1000L



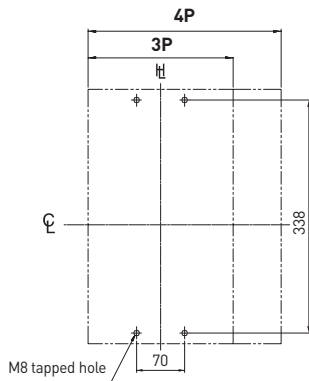
[Connection conductor]



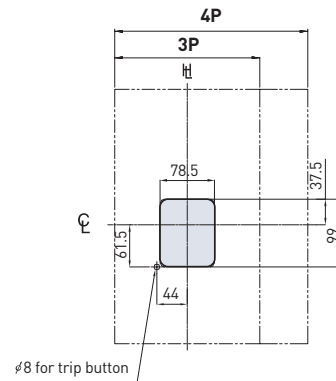
[Terminal part]



[Drilling holes for mounting]



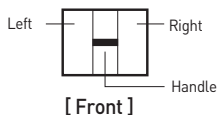
[Panel cut-out]



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AUX ALT SHT	AUX ALT UVT
3											



※ - AXT is combination of AUX and ALT.

Characteristic Curves & Dimensions

| UCB type / 1250AF, 100-130kA |

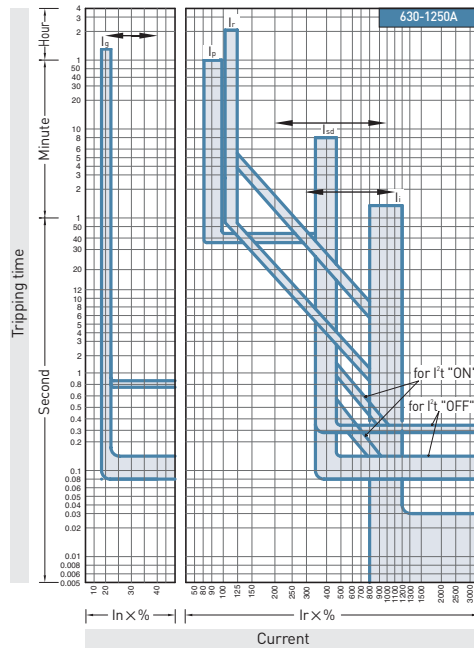


- UCB1250S
- UCB1250L

- UCD1250S

※ Characteristics are not applicable.

Tripping & temperature derating curves



Protection characteristics

Characteristics	Setting value or range	Tolerance	
Rated (CT) current [In] (A)	<u>1250</u>		
LTD	Rated setting current [Ir] (A)	630, 670, 710, 750, 790, 800, 850, 900, 950, 1000, 1060, 1125, 1190, <u>1250</u>	
	Tripping time [tr]	2-4-6-8-12 sec. at Ir x 600%	±20%
	Short time pick-up current [Isd] (A)	Ir x NON-200-400-600-800- <u>1000</u> %	±15%
STD ¹⁾	Tripping time [tsd] ¹⁾	0-0.1-0.2-0.3 sec. at definite time-limit section	+50ms -20ms
	Rated instantaneous short time current [Ii] (A)	Ir x NON-300-600-800-1000- <u>1100</u> %	±20%
GFT ²⁾	Ground fault current [Ig] (A)	Ir x NON-20-30- <u>40</u> %	±15%
	Tripping time [tg]	0.1-0.2-0.3-0.4- <u>0.8</u> sec. at definite time-limit section	+50ms -20ms
PTA	Pre-trip alarm current [Ip] (A)	Ir x <u>90</u> %	±10%
	Alarm time [tp]		±10%

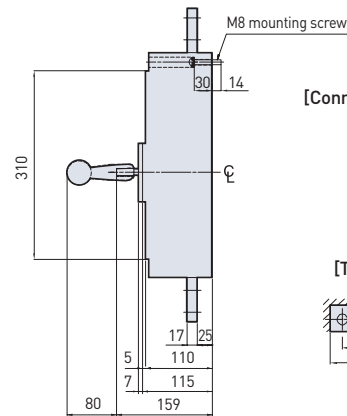
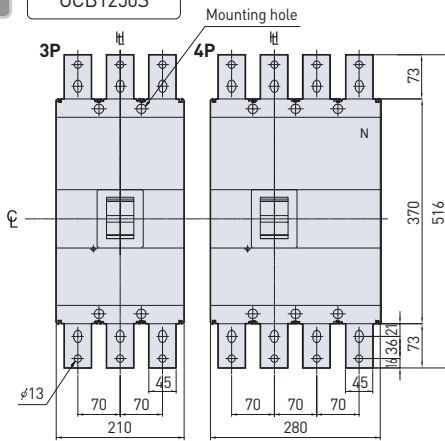
※ -The default values are underlined. Please check and adjust the setting condition of each characteristic before use.
 -1) I't characteristic can be ON or OFF by adjusting the [tsd] knob.
 -2) GFT protection is option.

Dimensions

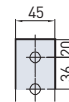
(Unit: mm)

Direct mounting

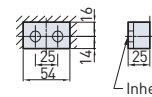
UCB1250S



[Connection conductor]

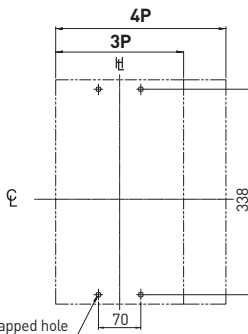


[Terminal part]

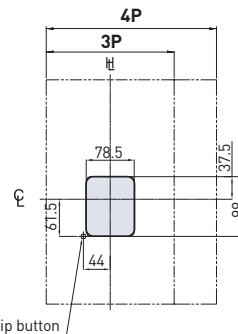


Inhex bolt M10 x L30

[Drilling holes for mounting]



[Panel cut-out]



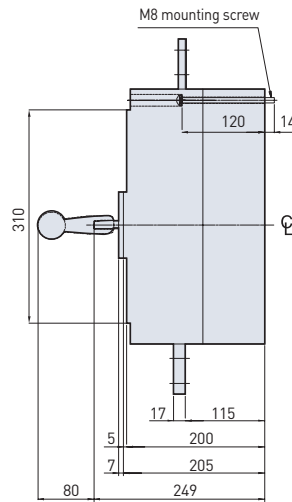
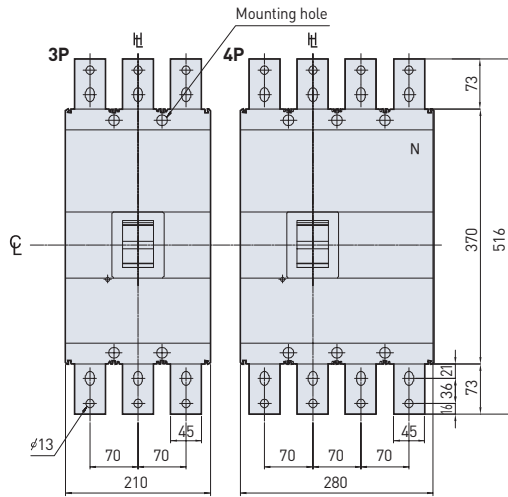
※ ϕ : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

Dimensions

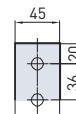
[Unit: mm]

Direct mounting

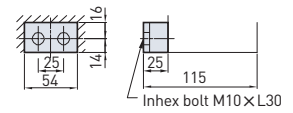
UCB1250L



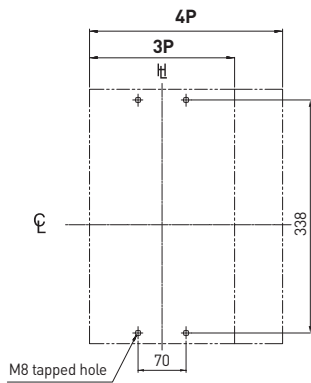
[Connection conductor]



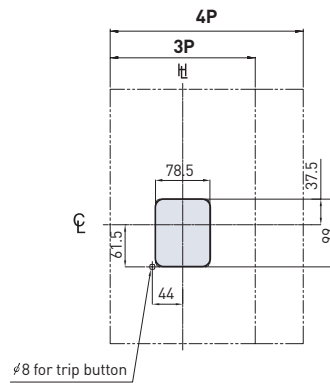
[Terminal part]



[Drilling holes for mounting]



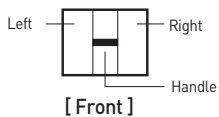
[Panel cut-out]



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AXT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AUX ALT SHT	AUX ALT UVT
3											



※ - AXT is combination of AUX and ALT.

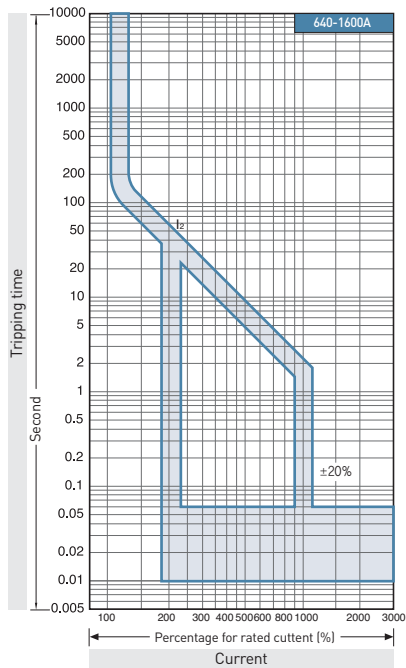
Characteristic Curves & Dimensions

| UCB type / 1600AF, 65kA |



• UCB1600S

Tripping & temperature derating curves



Protection characteristics

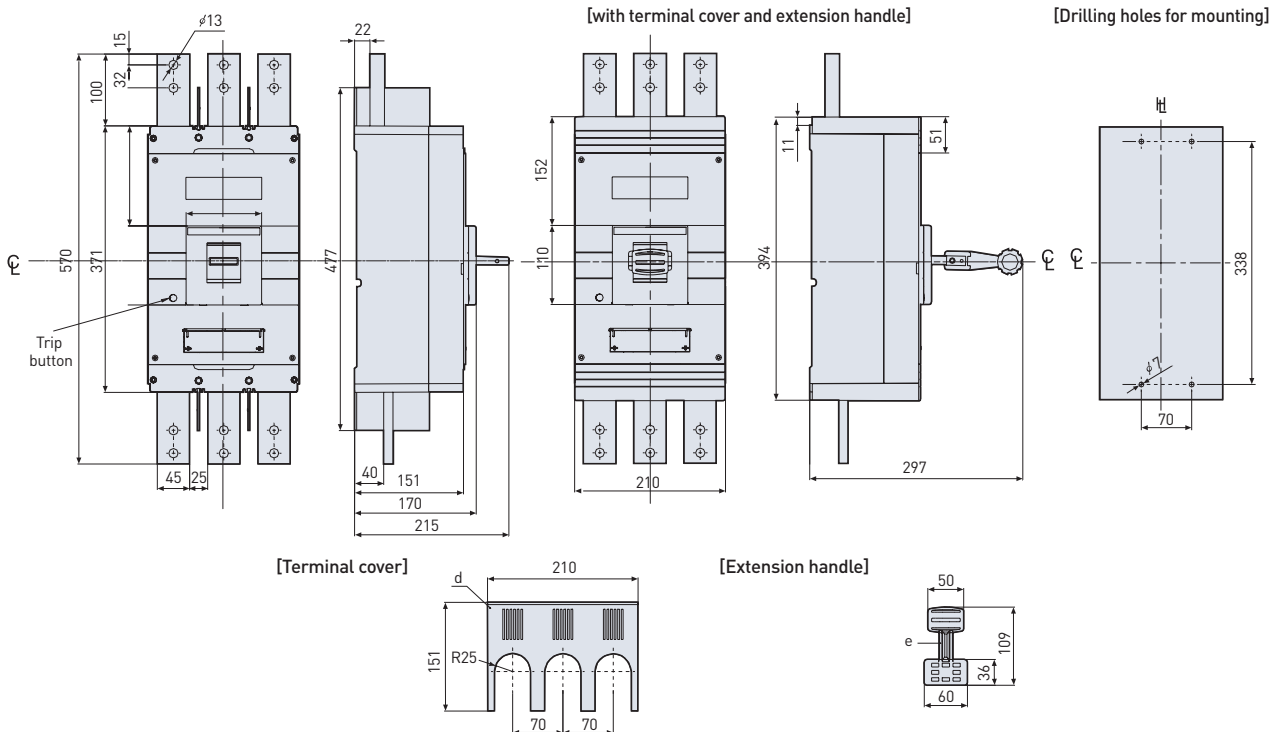
Characteristics	Setting value or range	Tolerance
Rated (CT) current [I _n] [A]	<u>1600</u>	
LTD Rated setting current [I _t] [A]	640, 800, 960, 1120, 1250, 1440, 1520, <u>1600</u>	
INST Rated instantaneous short-time current [I _i] [A]	I _n x 200-300-400-500-600-700-800- <u>1000</u> %	±10%

※ -The default values are underlined. Please check and adjust the setting condition of each characteristic before use.

Dimensions

(Unit: mm)

Direct mounting



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

Characteristic Curves & Dimensions

| UPB type / 125-250AF, 85-150kA / Adjustable thermal |

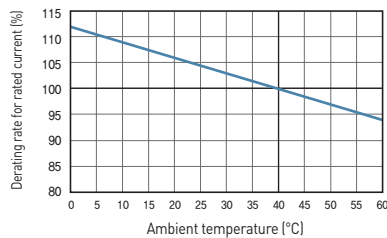
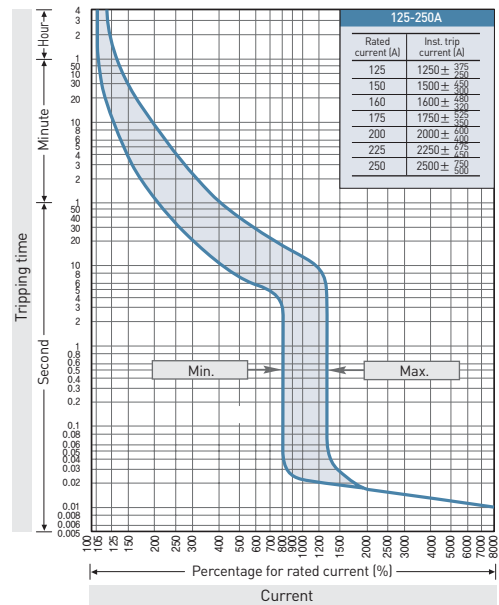
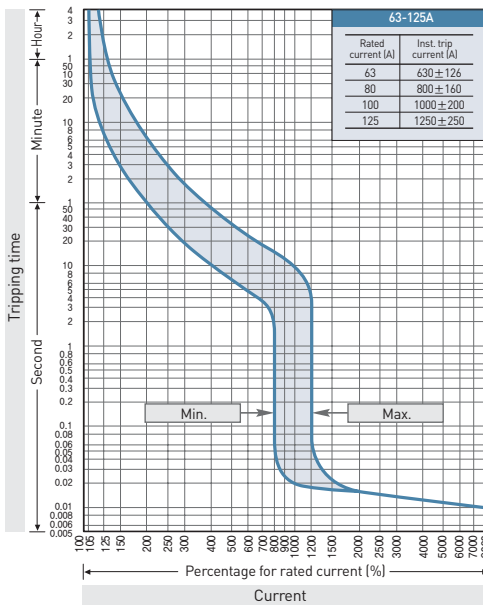
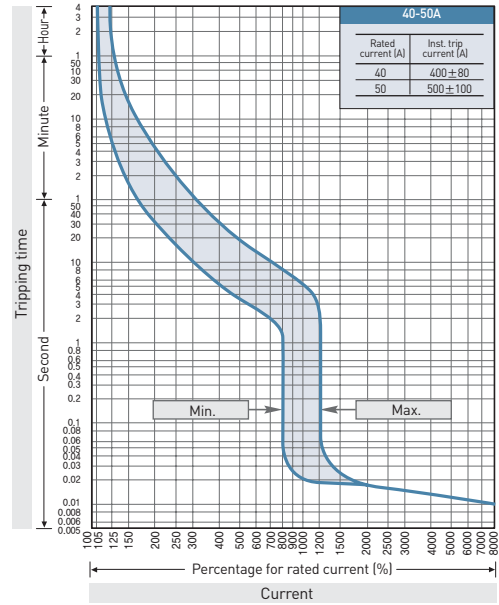
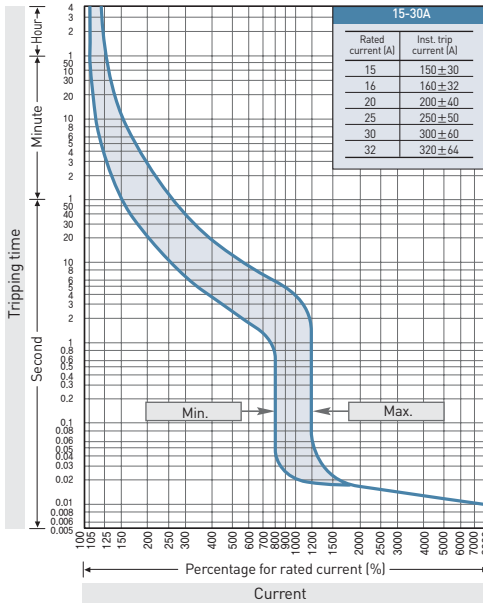


- UPB100S • UPB100H
- UPB100L • UPB100X
- UPB160S • UPB160H
- UPB160L • UPB160X
- UPB250S • UPB250H
- UPB250L • UPB250X

- UPD100S • UPD160S
- UPD250S

※ Characteristic curves are not applicable.

Tripping & temperature derating curves



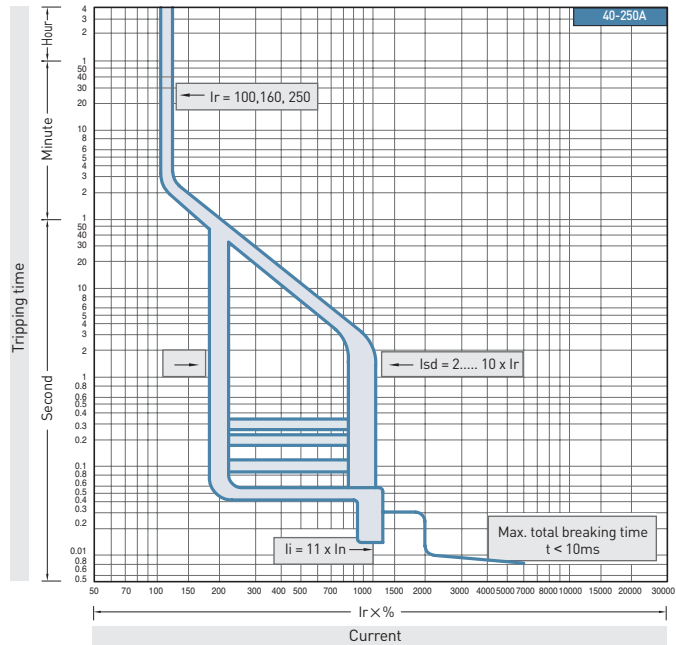
Characteristic Curves & Dimensions

| UPB type / 125-250AF, 85-150kA / Electronic |



Tripping & temperature derating curves

- UPB100S • UPB100H
- UPB100L • UPB100X
- UPB160S • UPB160H
- UPB160L • UPB160X
- UPB250S • UPB250H
- UPB250L • UPB250X



Protection characteristics

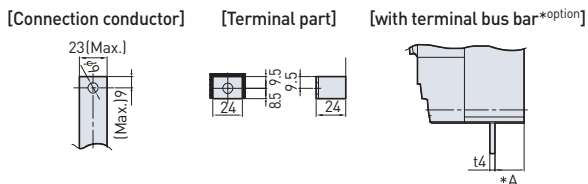
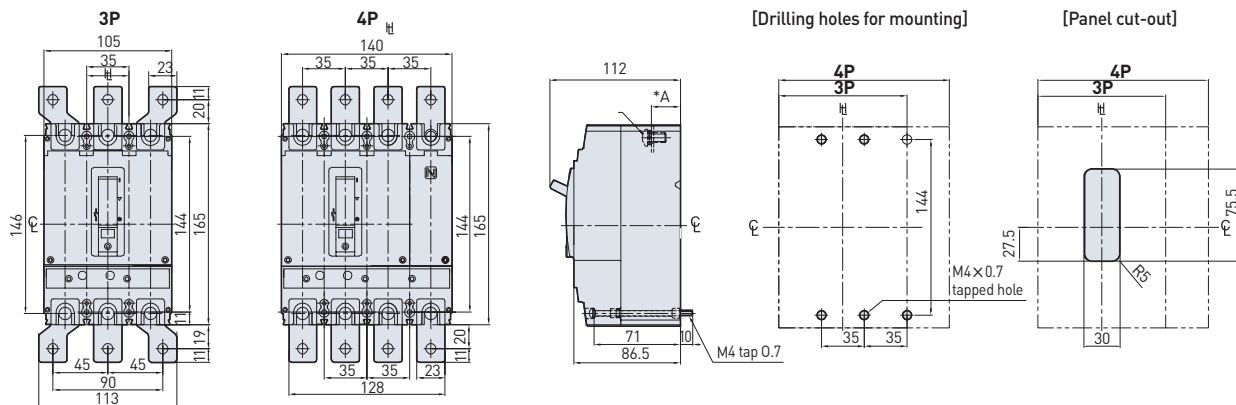
Characteristics		Setting value or range			Tolerance
		UPB100	UPB160	UPB250	
Rated (CT) current [In] (A)		<u>125</u>	<u>160</u>	<u>250</u>	
LTD	Rated setting current [Ir] (A)	50, 55, 63, 70, 80, 90, 100, 115, <u>125</u>	63, 70, 80, 90, 100, 110, 125, 140, <u>160</u>	100, 110, 125, 140, 160, 175, 200, 225, <u>250</u>	
	Tripping time [tr]	6.25 sec. at Ir x 600%			±20%
STD	Short time pick-up current [Isd] (A)	Ir x NON-200-300-400-500-600-700-800-900- <u>1000</u> %			
	Tripping time [tsd]	0.05-0.1-0.2- <u>0.3</u> sec. at definite time-limit section			+50ms -20ms
INST	Rated instantaneous short time current [Ii] (A)	In x <u>1100</u> %			±20%
PTA	Pre-trip alarm current [Ip] (A)				
	Alarm time [tp]				

※ - The default values are underlined. Please check and adjust the setting condition of each characteristic before use.

Dimensions

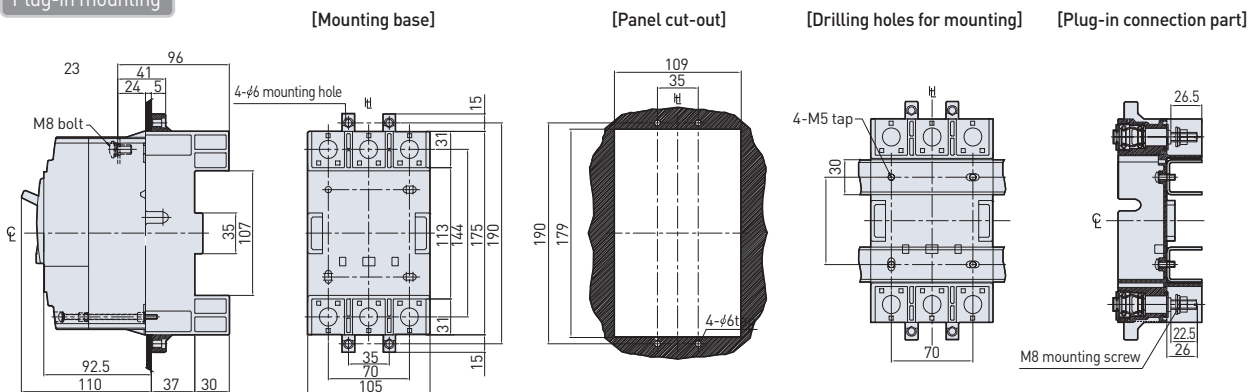
(Unit: mm)

Direct mounting



Dimension A
 Line side : 24mm for UPB100
 26mm for UPB160, UPB250
 Load side : 24mm

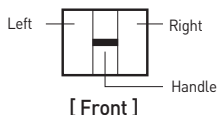
Plug-in mounting



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AUX ALT SHT	AUX ALT UVT
3											



Characteristic Curves & Dimensions

| UPB type / 400-630AF, 85-150kA |

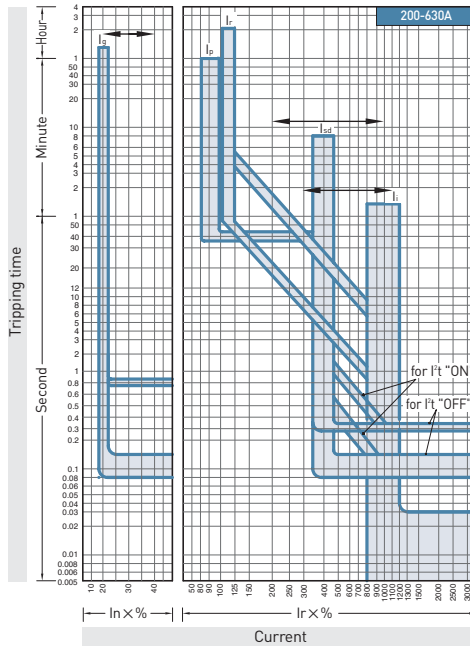


- UPB400S • UPB400H
- UPB400L • UPB400X
- UPB630S • UPB630H
- UPB630L • UPB630X

- UPD400S • UPD630S

※ Characteristics are not applicable.

Tripping & temperature derating curves



Protection characteristics

Characteristics	Setting value or range		Tolerance
	UPB400	UPB630	
Rated (CT) current [In] (A)	<u>400</u>	<u>630</u>	
LTD			
Rated setting current [Ir] (A)	200, 215, 225, 240, 250, 255, 270, 290, 300, 320, 340, 360, 380, <u>400</u>	320, 340, 360, 380, 400, 430, 450, 480, 500, 540, 570, 600, <u>630</u>	
Tripping time [tr]	<u>2-4-6-8-12</u> sec. at Ir x 600%		±20%
STD ¹⁾			
Short time pick-up current [Isd] (A)	Ir x NON-200-400-600-800- <u>1000</u> %		±15%
Tripping time [tsd] ¹⁾	0- <u>0.1</u> -0.2-0.3 sec. at definite time-limit section		+50ms -20ms
INST			
Rated instantaneous short time current [Ii] (A)	Ir x NON-300-600-800- <u>1000-1100</u> %		±20%
GFT ²⁾			
Ground fault current [Ig] (A)	Ir x NON-20-30- <u>40</u> %		±15%
Tripping time [tg]	0.1-0.2-0.3-0.4- <u>0.8</u> sec. at definite time-limit section		+50ms -20ms
PTA			
Pre-trip alarm current [Ip] (A)	Ir x <u>90</u> %		±10%
Alarm time [tp]			±10%

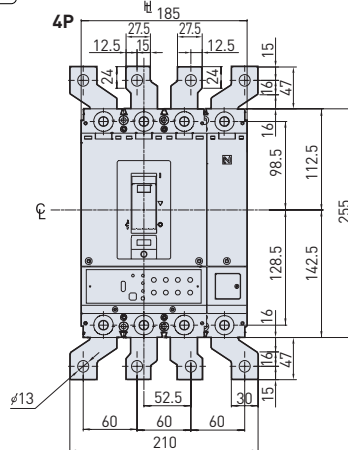
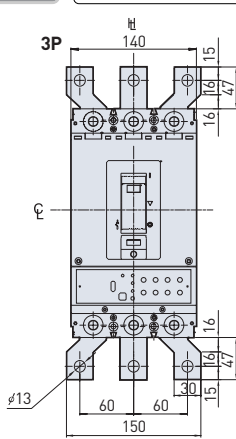
※ -The default values are underlined. Please check and adjust the setting condition of each characteristic before use.
 -1) I_t characteristic can be ON or OFF by adjusting the [tsd] knob.
 -2) GFT protection is option.

Dimensions

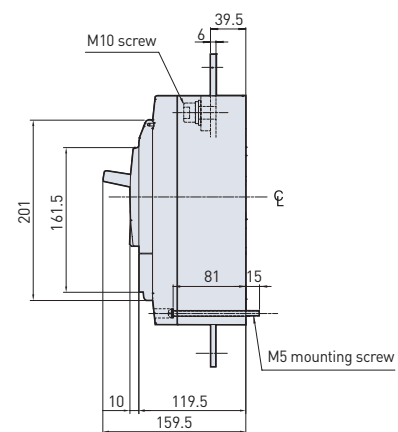
(Unit: mm)

Direct mounting

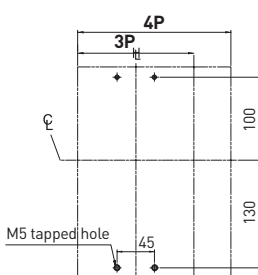
UPB400, UPD400S



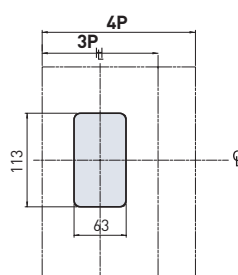
[with terminal bus bar*option]



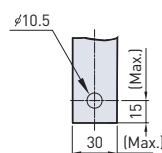
[Drilling holes for mounting]



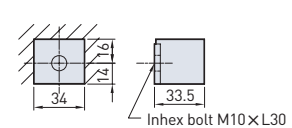
[Panel cut-out]



[Connection conductor]



[Terminal part]



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

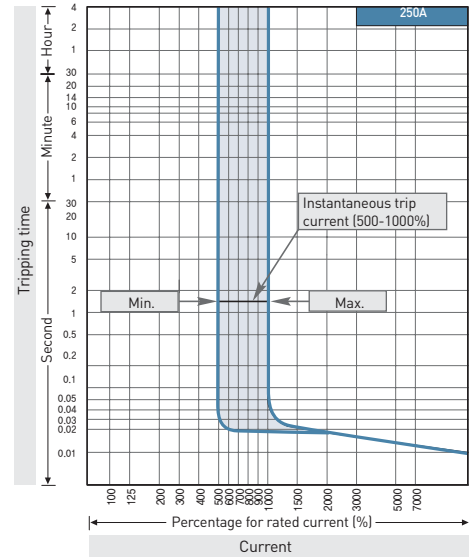
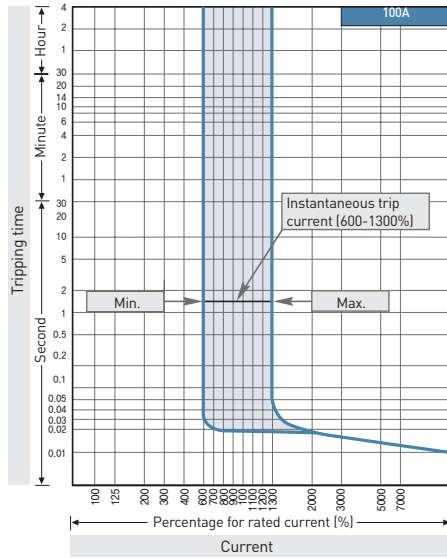
Characteristic Curves & Dimensions

| Motor protection / UPB type 125-250AF, 100-130kA |



- UPB100H
- UPB100L
- UPB250H
- UPB250L

Tripping curves



Instantaneous trip current

UPB100

Rated current (A)	Multiple for rated current							
	6	7	8	9	10	11	12	13
2.5	15	17.5	20	22.5	25	27.5	30	32.5
3.2	19.2	22.4	25.6	28.8	32	35.2	38.4	41.6
6.3	37.8	44.1	50.4	56.7	63	69.3	75.6	81.9
12.5	75	87.5	100	112.5	125	137.5	150	162.5
20	120	140	160	180	200	220	240	260
32	192	224	256	288	320	352	384	416
50	300	350	400	450	500	550	600	650
63	378	441	504	567	630	693	756	819
80	480	560	640	720	800	880	960	1040
100	600	700	800	900	1000	1100	1200	1300

※ Tolerance for setting current: -20% - +30%

UPB250

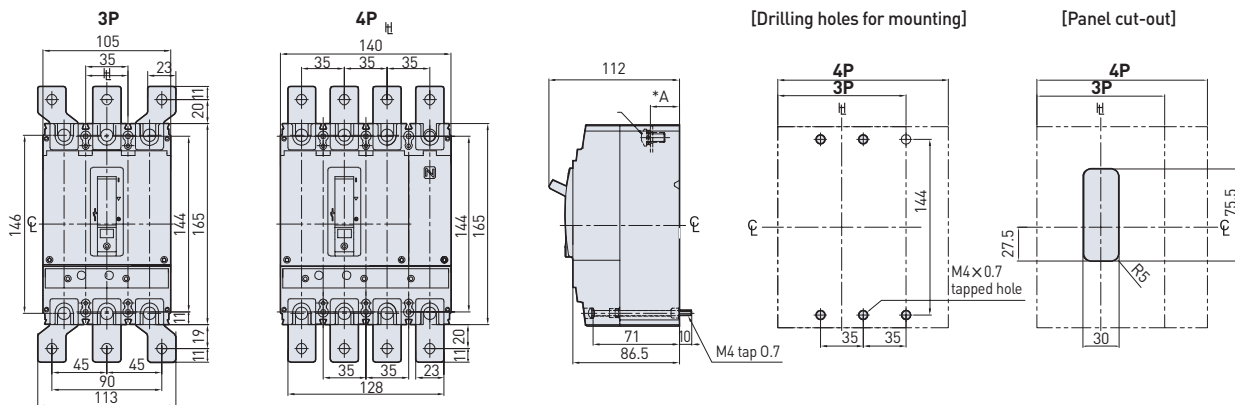
Rated current (A)	Multiple for rated current					
	5	6	7	8	9	10
125	625	750	875	1000	1125	1250
150	750	900	1050	1200	1350	1500
175	875	1050	1225	1400	1575	1750
200	1000	1200	1400	1600	1800	2000
225	1125	1350	1575	1800	2025	2250

※ Tolerance for setting current: -20% - +30%

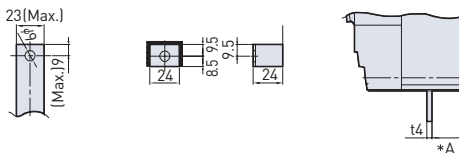
Dimensions

[Unit: mm]

Direct mounting



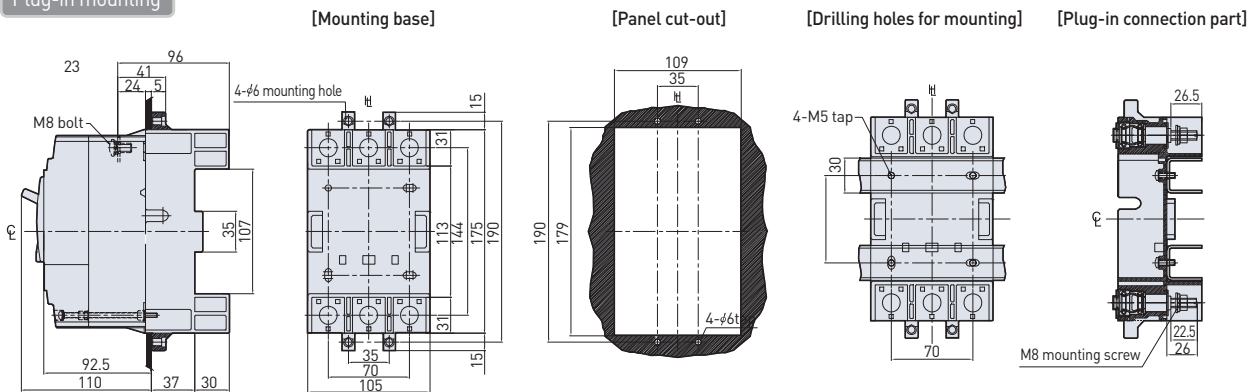
[Connection conductor] [Terminal part] [with terminal bus bar*option]



Dimension A

Line side : 24mm for UPB100
26mm for UPB250
Load side : 24mm

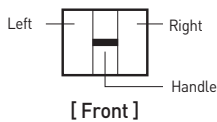
Plug-in mounting



※ \odot : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AUX ALT SHT	AUX ALT UVT
3											



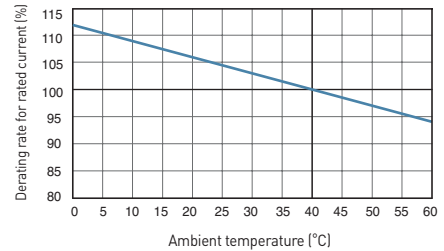
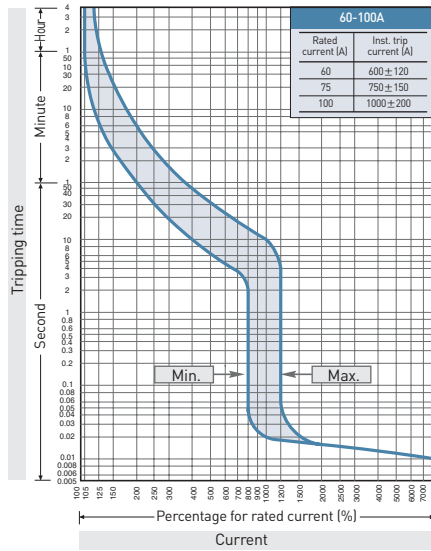
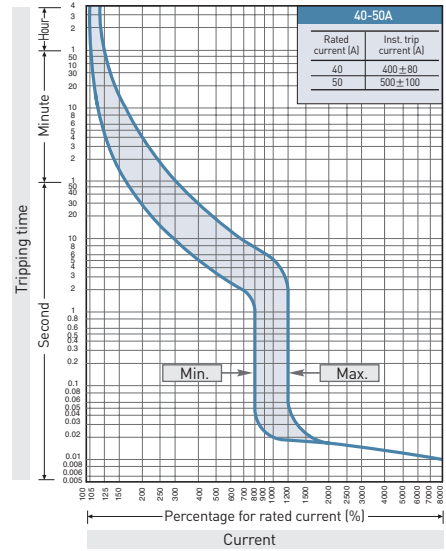
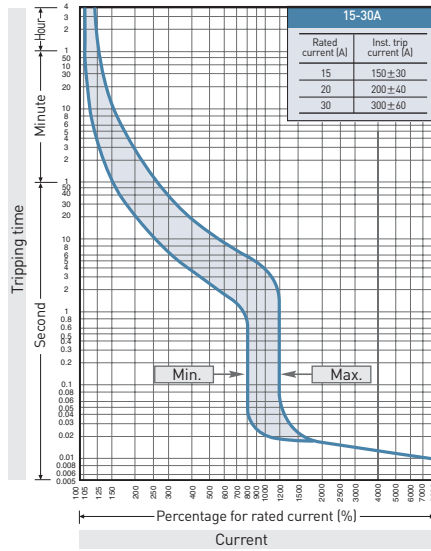
Characteristic Curves & Dimensions

| Q-class (for nuclear power plant application) / HBL type 100AF, 85kA |



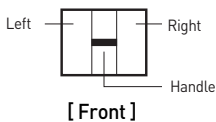
- HBL103U
- HBL103UQ

Tripping & temperature derating curves



Installation of signal accessories

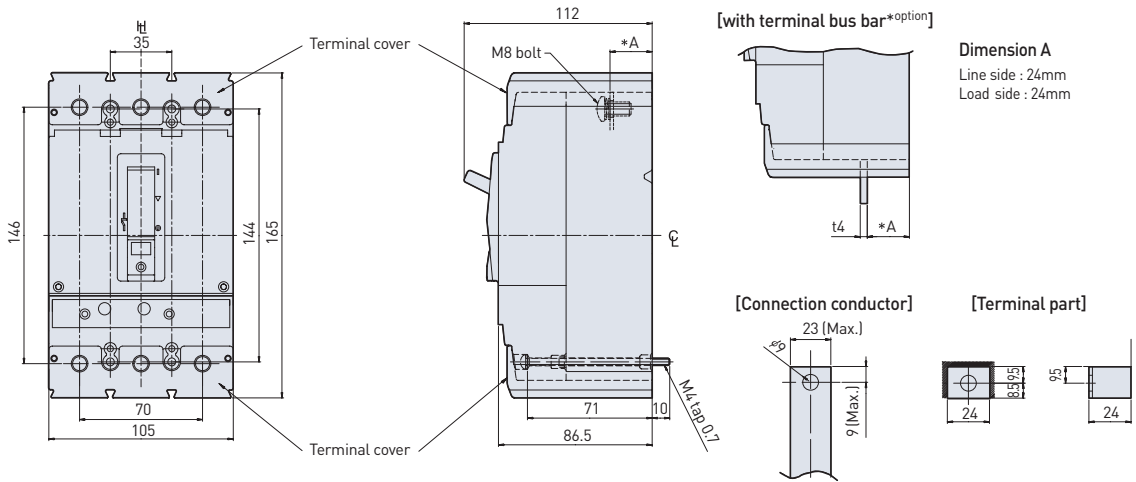
No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AUX ALT SHT	AUX ALT UVT
3											



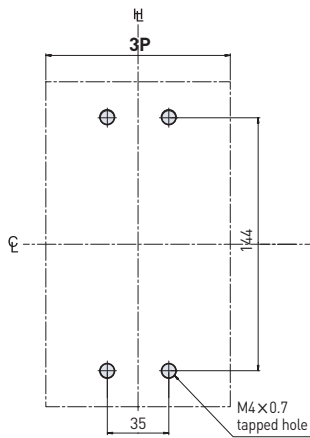
Dimensions

[Unit: mm]

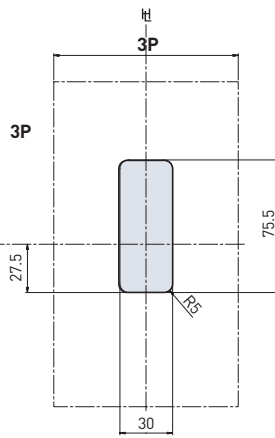
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]



※ \ominus : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

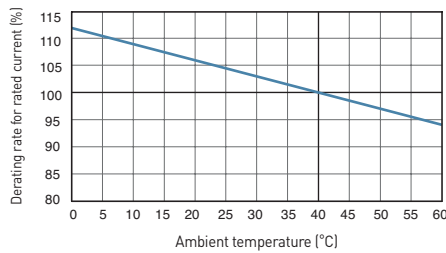
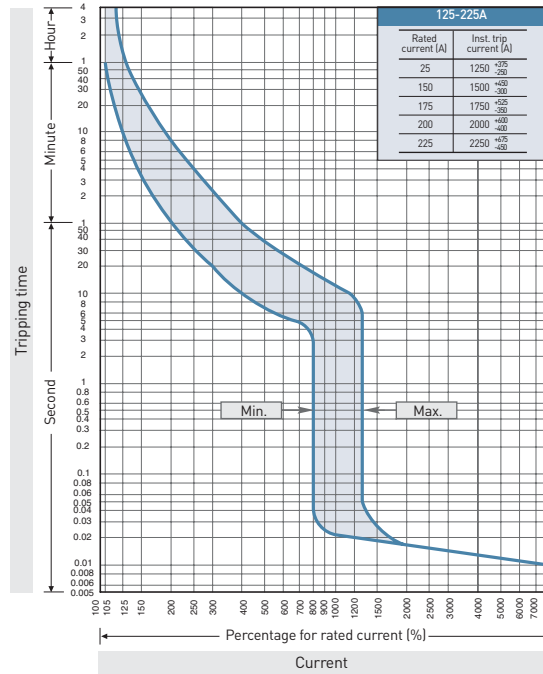
Characteristic Curves & Dimensions

| Q-class (for nuclear power plant application) / HBL type 225AF, 85kA |



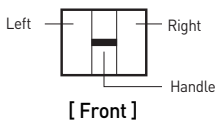
- HBL203U
- HBL203UQ

Tripping & temperature derating curves



Installation of signal accessories

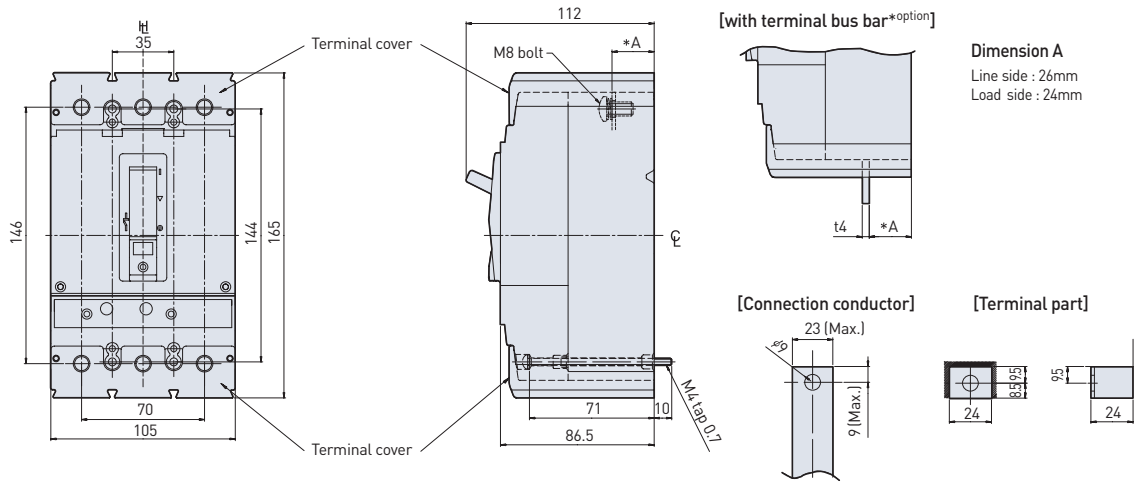
No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	SHT Shunt trip	UVT Under voltage trip	AUX ALT	AUX SHT	AUX UVT	ALT SHT	ALT UVT	AUX ALT SHT	AUX ALT UVT
3											



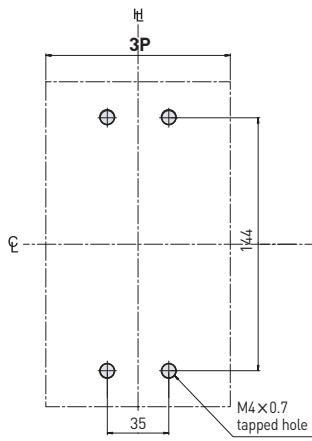
Dimensions

[Unit: mm]

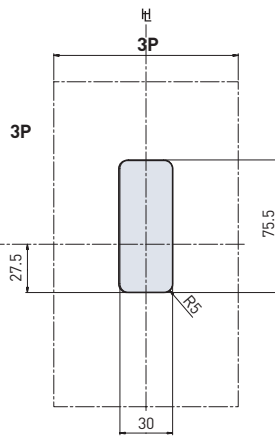
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

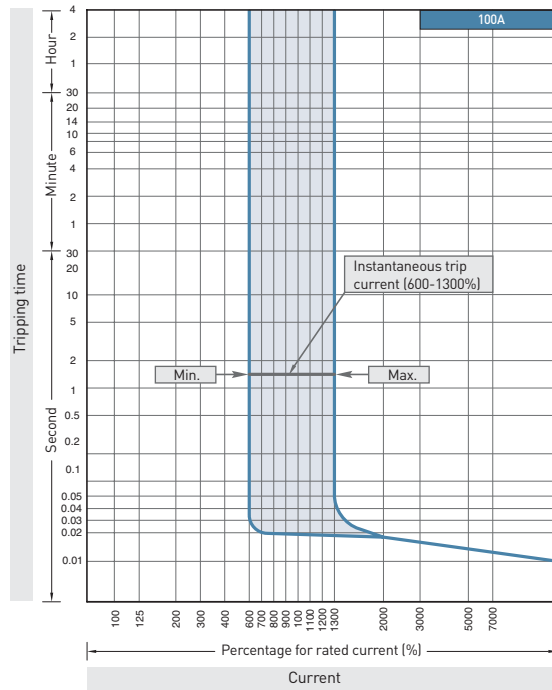
Characteristic Curves & Dimensions

| Q-class (for nuclear power plant application) / HBL type 100AF, 85kA / Motor protection |



- HBL103UM
- HBL103UMQ

Tripping curves

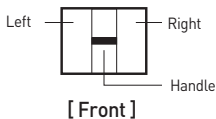
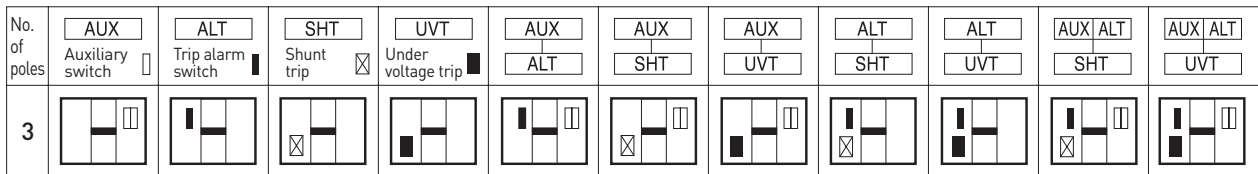


Instantaneous trip current

Rated current (A)	Multiple for rated current							
	6	7	8	9	10	11	12	13
2.5	15	17.5	20	22.5	25	27.5	30	32.5
3.2	19.2	22.4	25.6	28.8	32	35.2	38.4	41.6
6.3	37.8	44.1	50.4	56.7	63	69.3	75.6	81.9
12.5	75	87.5	100	112.5	125	137.5	150	162.5
20	120	140	160	180	200	220	240	260
32	192	224	256	288	320	352	384	416
50	300	350	400	450	500	550	600	650
63	378	441	504	567	630	693	756	819
80	480	560	640	720	800	880	960	1040
100	600	700	800	900	1000	1100	1200	1300

※ Tolerance for setting current: -20% - +30%

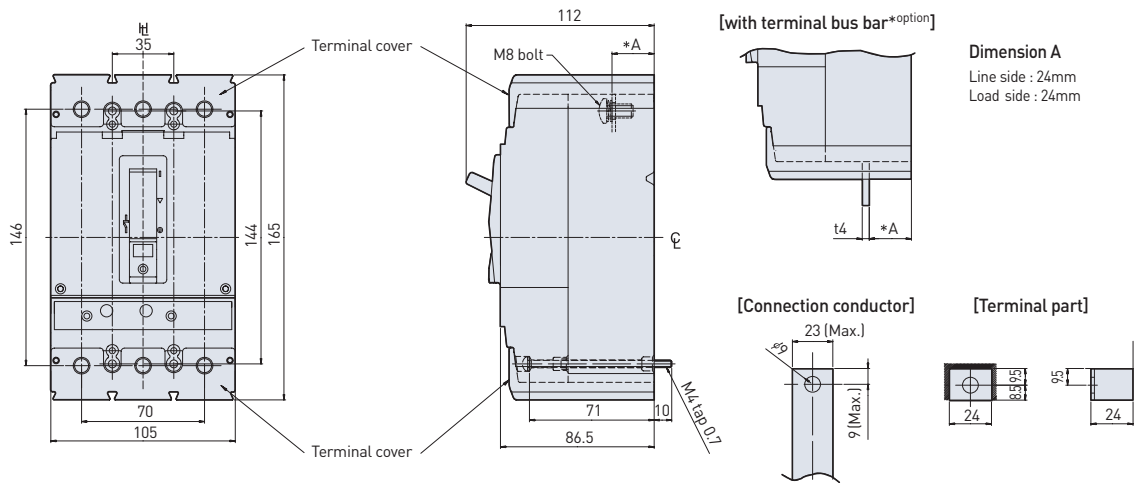
Installation of signal accessories



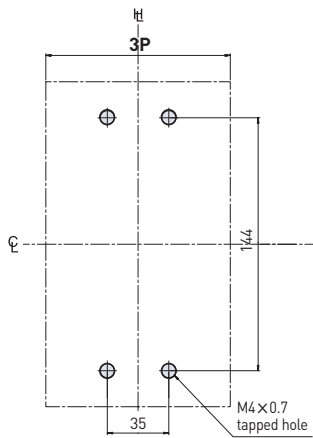
Dimensions

[Unit: mm]

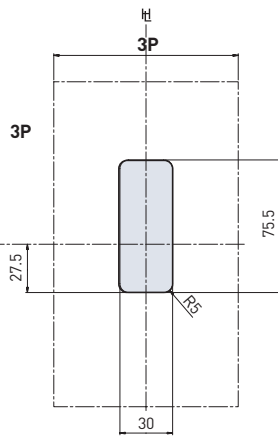
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]



※ CL : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

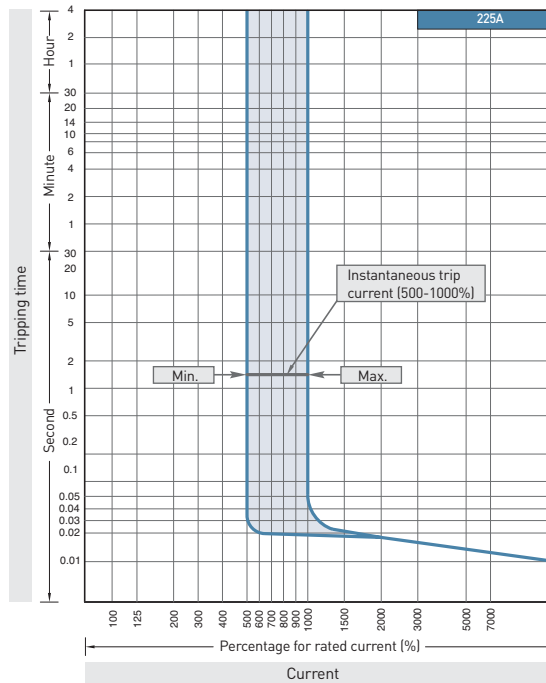
Characteristic Curves & Dimensions

| Q-class (for nuclear power plant application) / HBL type 225AF, 85kA / Motor protection |



- HBL203UM
- HBL203UMQ

Tripping curves

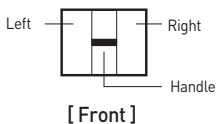
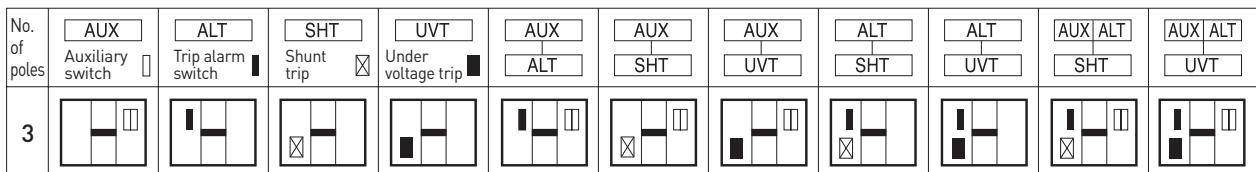


Instantaneous trip current

Rated current (A)	Multiple for rated current					
	5	6	7	8	9	10
125	625	750	875	1000	1125	1250
150	750	900	1050	1200	1350	1500
175	875	1050	1225	1400	1575	1750
200	1000	1200	1400	1600	1800	2000
225	1125	1350	1575	1800	2025	2250

※ Tolerance for setting current: -20% - +30%

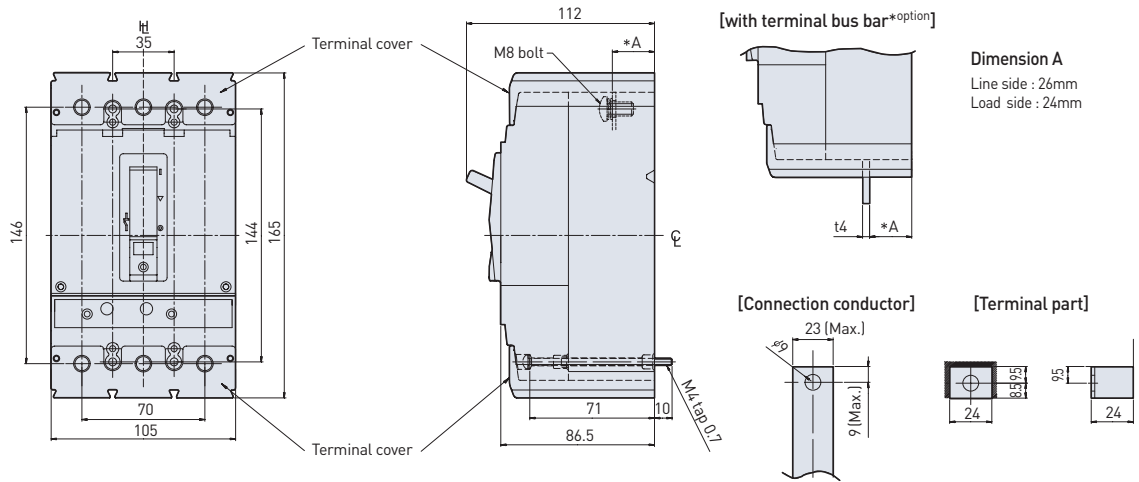
Installation of signal accessories



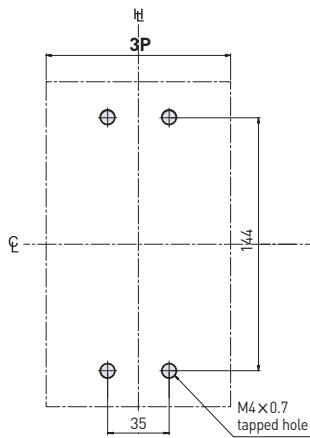
Dimensions

[Unit: mm]

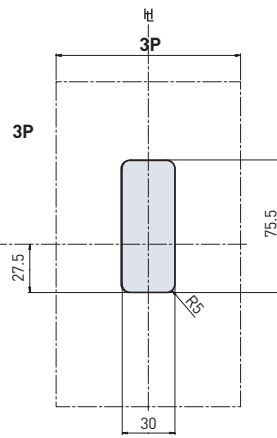
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

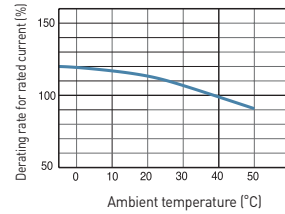
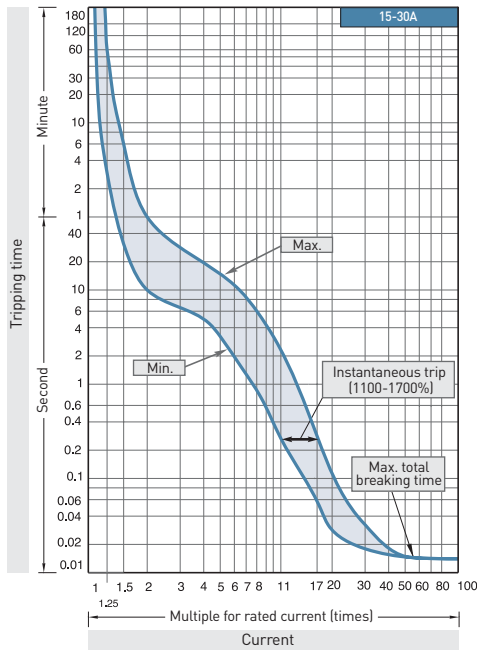
Characteristic Curves & Dimensions

Miniature type / Molded case circuit breaker



- UBD30L
- UBD30H

Tripping & temperature derating curves

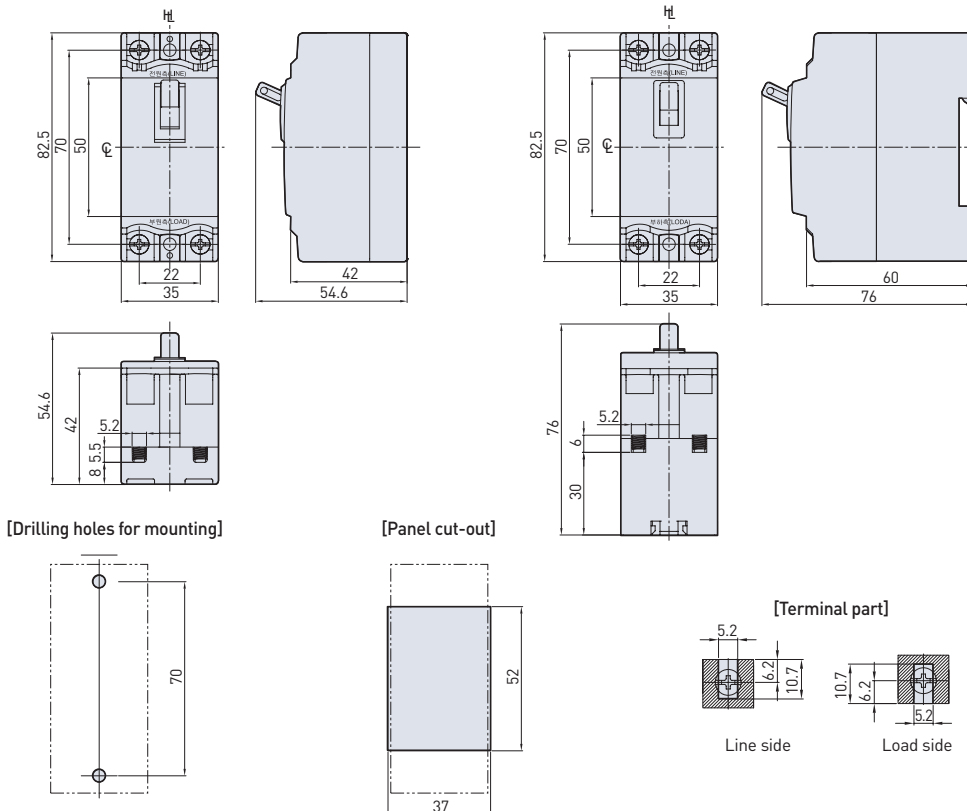


Dimensions

(Unit: mm)

Direct mounting

UBD30L, UBD30H

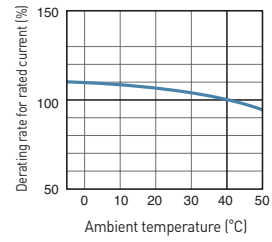
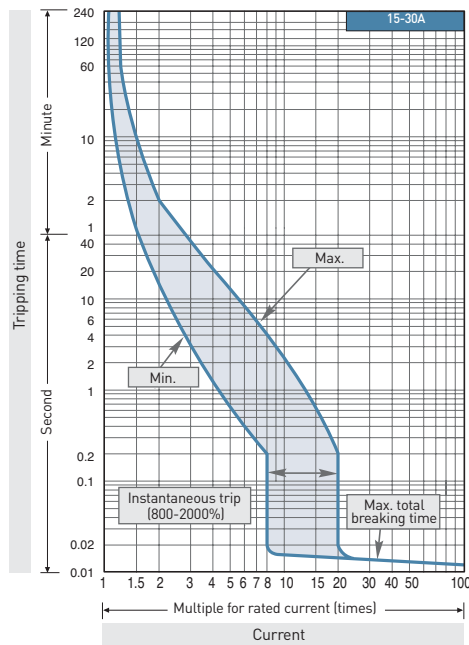


※ \odot : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.



• UMB30R

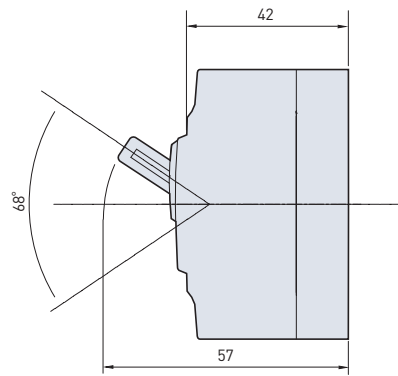
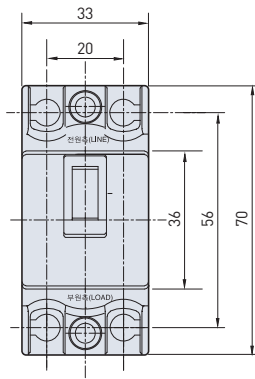
Tripping & temperature derating curves



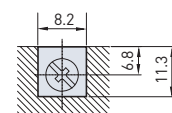
Dimensions

(Unit: mm)

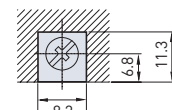
Direct mounting



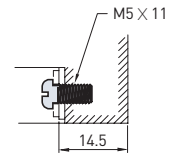
[Terminal part]



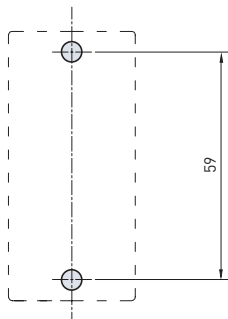
Line side



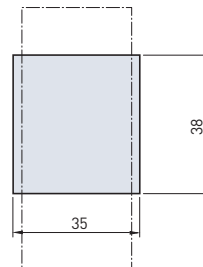
Load side



[Drilling holes for mounting]



[Panel cut-out]



※ \odot : Center line \parallel : Handle center line • The allowance of 1.5mm is given around the handle frame.

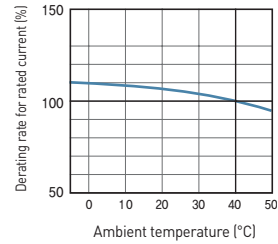
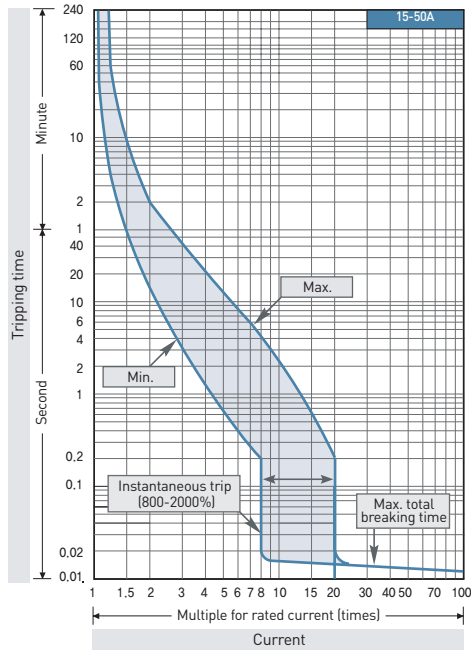
Characteristic Curves & Dimensions

Miniature type / Molded case circuit breaker



- UMB30S
- UMB50S

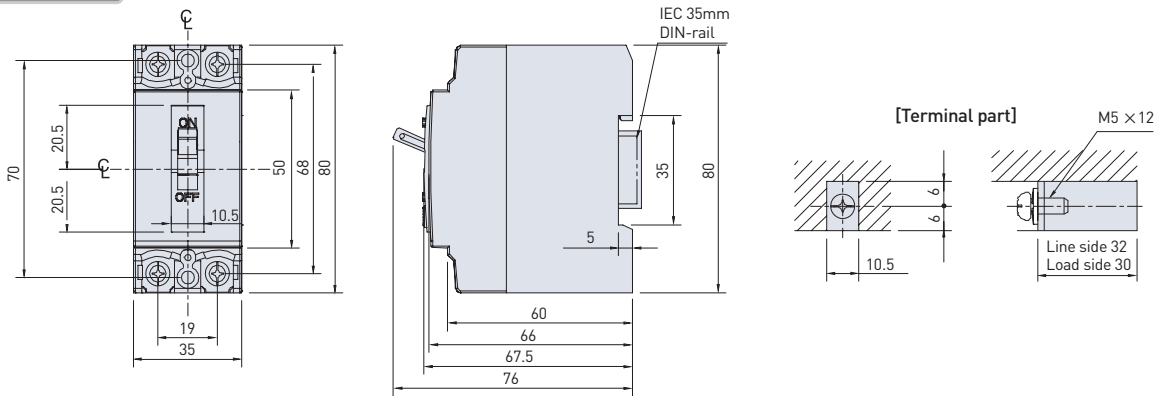
Tripping & temperature derating curves



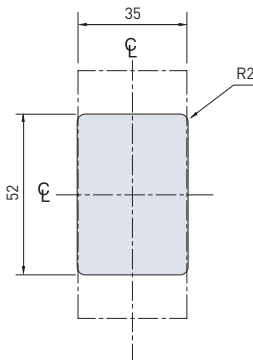
Dimensions

(Unit: mm)

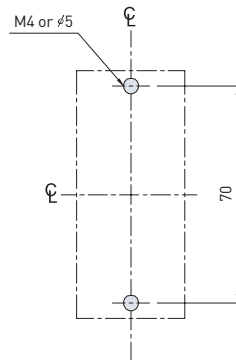
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]

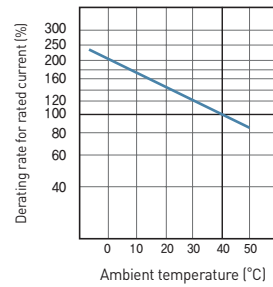
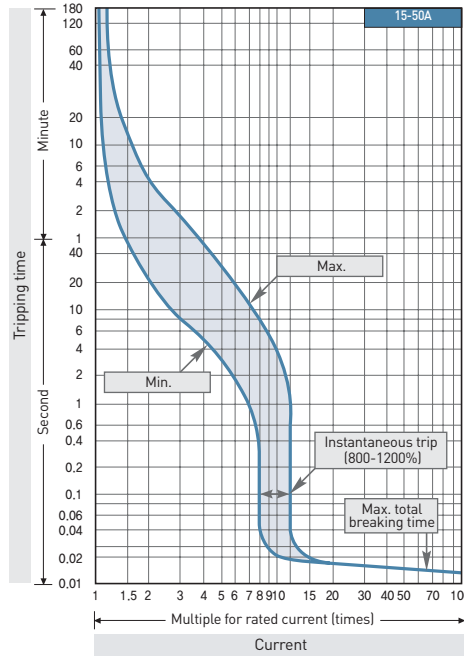


* \ominus : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.



- UMB30H
- UMB50H

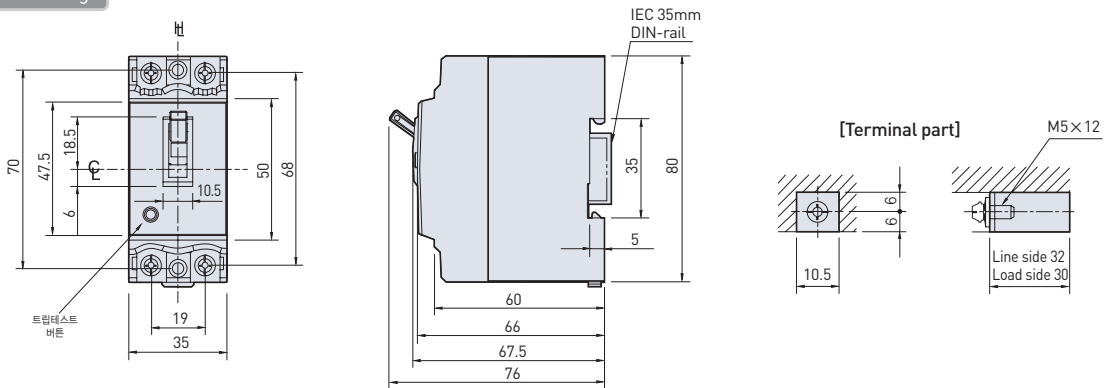
Tripping & temperature derating curves



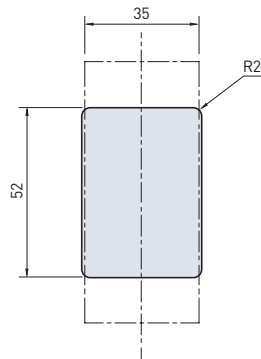
Dimensions

[Unit: mm]

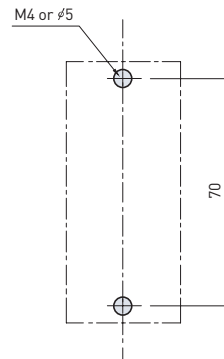
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

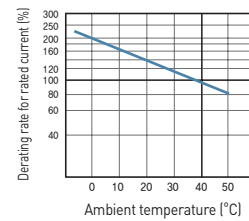
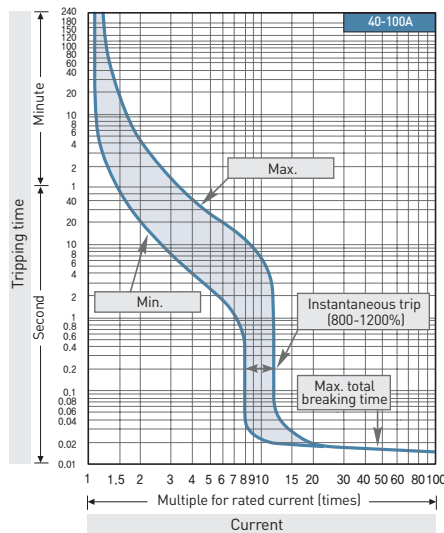
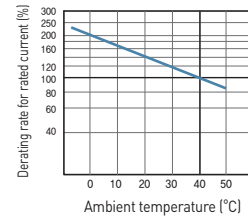
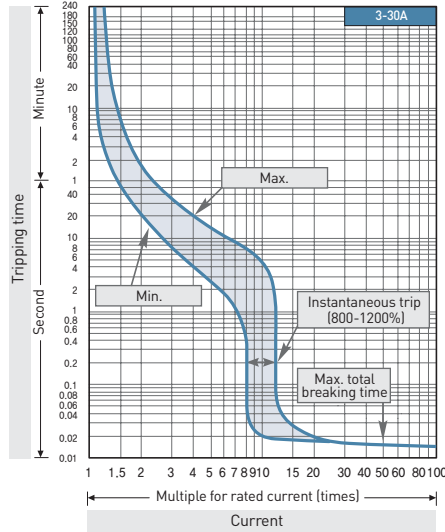
Characteristic Curves & Dimensions

Miniature type / Molded case circuit breaker



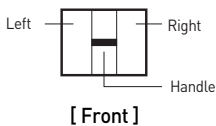
- UDB30S
- UDB30H
- UDB50S
- UDB50H
- UDB100S
- UDB100H

Tripping & temperature derating curves



Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	AXT	SHT Shunt trip	AUX SHT	ALT SHT	AUX ALT SHT
3							



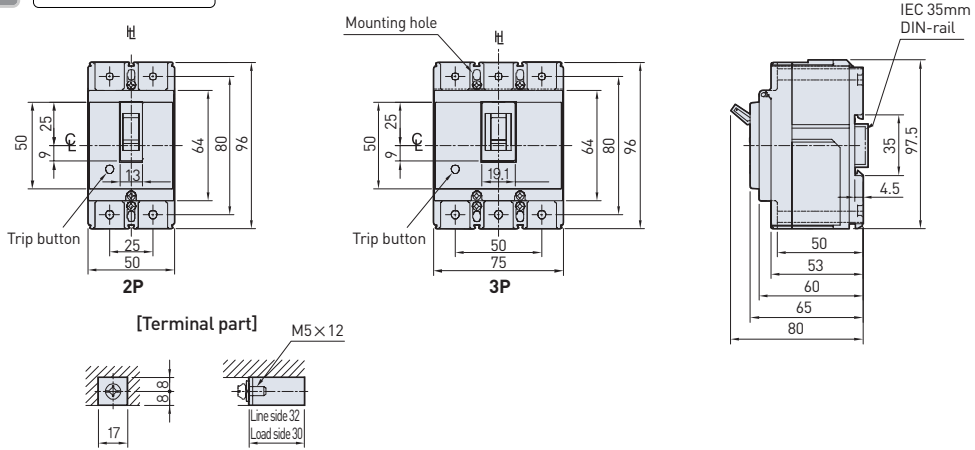
※ - In case of 2P, all signal accessories shall be installed in left side of breaker.
- SHT is not applicable to 2P.

Dimensions

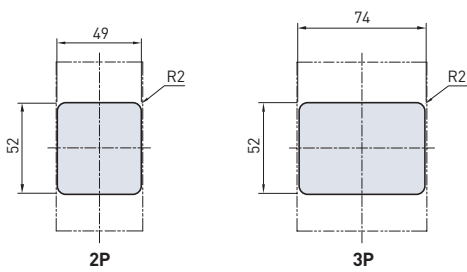
(Unit: mm)

Direct mounting

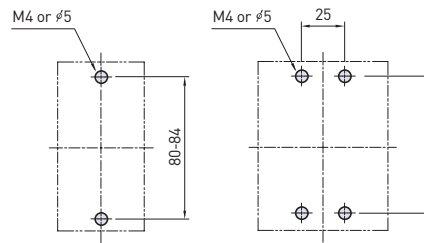
UDB30, UDB50



[Drilling holes for mounting]

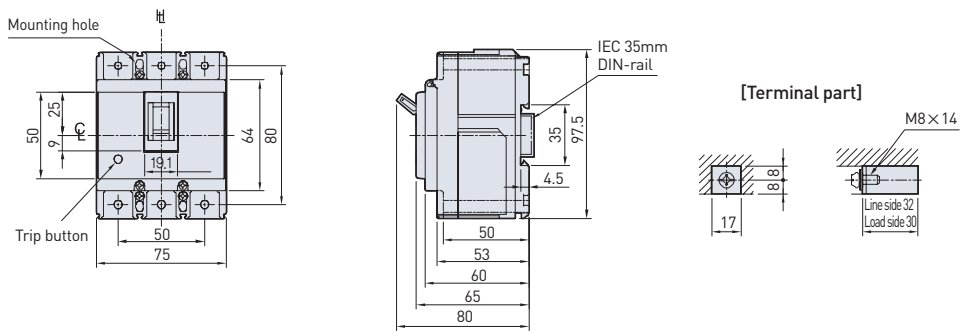


[Panel cut-out]

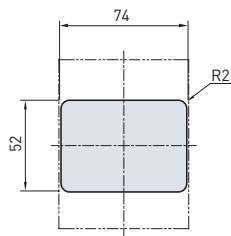


Direct mounting

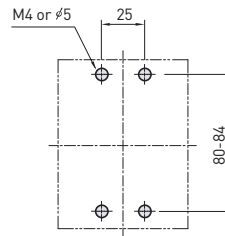
UDB100



[Drilling holes for mounting]



[Panel cut-out]



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

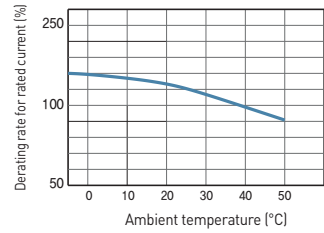
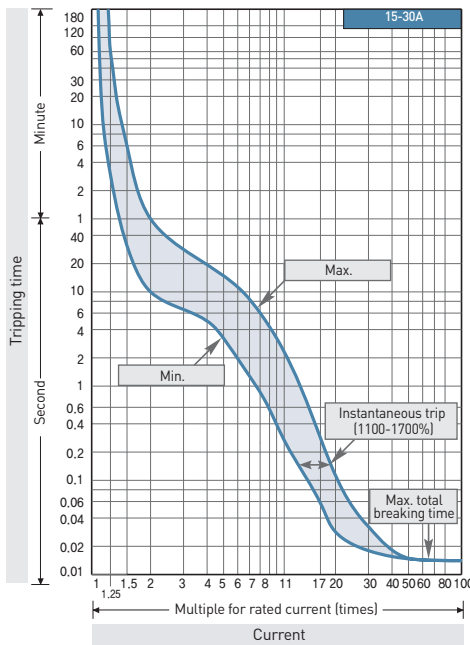
Characteristic Curves & Dimensions

Miniature type / Earth leakage circuit breaker



- UGD30L
- UGD30H

Tripping & temperature derating curves

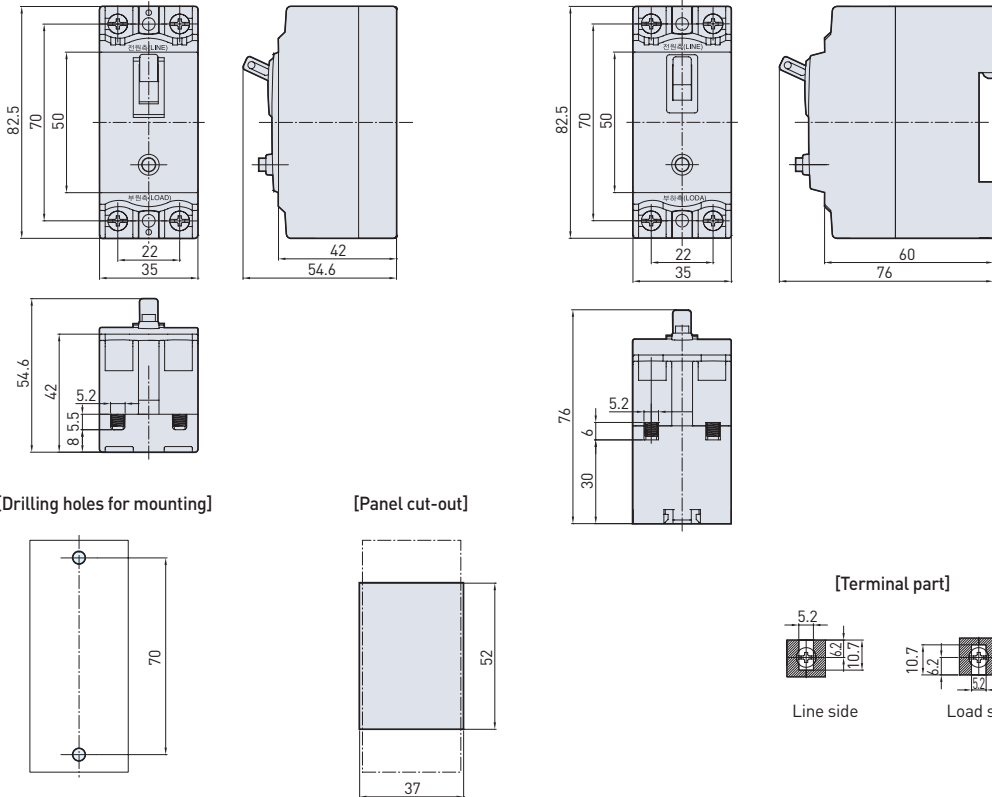


Dimensions

(Unit: mm)

Direct mounting

UGD30L, UGD30H

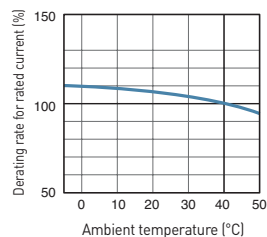
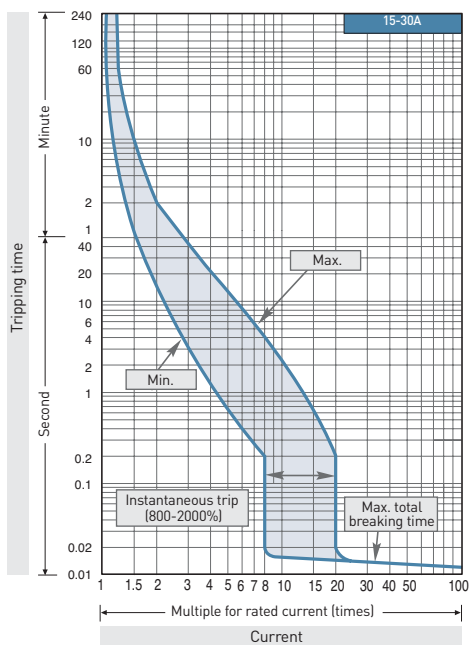


※ \odot : Center line \parallel : Handle center line • The allowance of 1.5mm is given around the handle frame.



• UMG30R

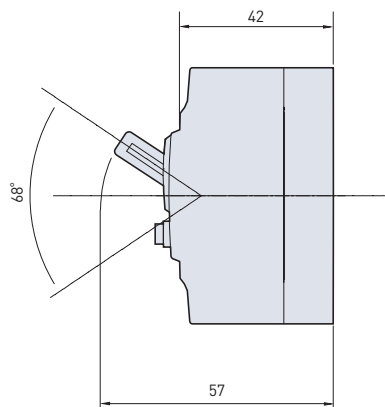
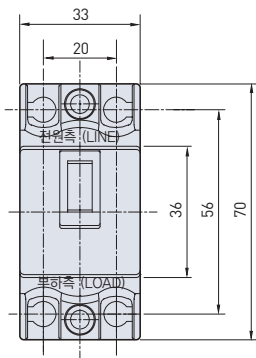
Tripping & temperature derating curves



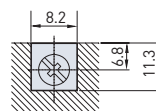
Dimensions

(Unit: mm)

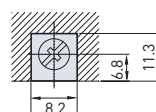
Direct mounting



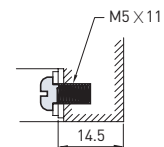
[Terminal part]



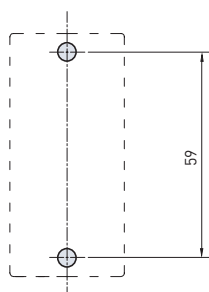
Line side



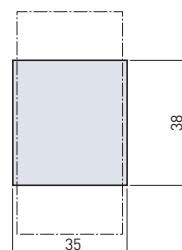
Load side



[Drilling holes for mounting]



[Panel cut-out]



※ \odot : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

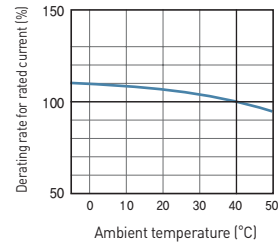
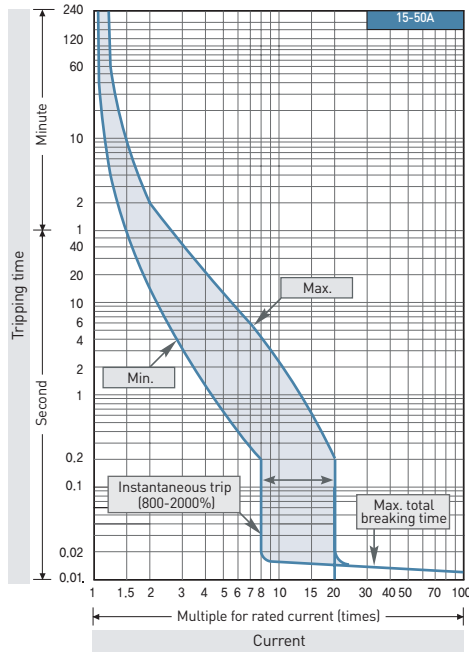
Characteristic Curves & Dimensions

Miniature type / Earth leakage circuit breaker



- UMG30S
- UMG50S

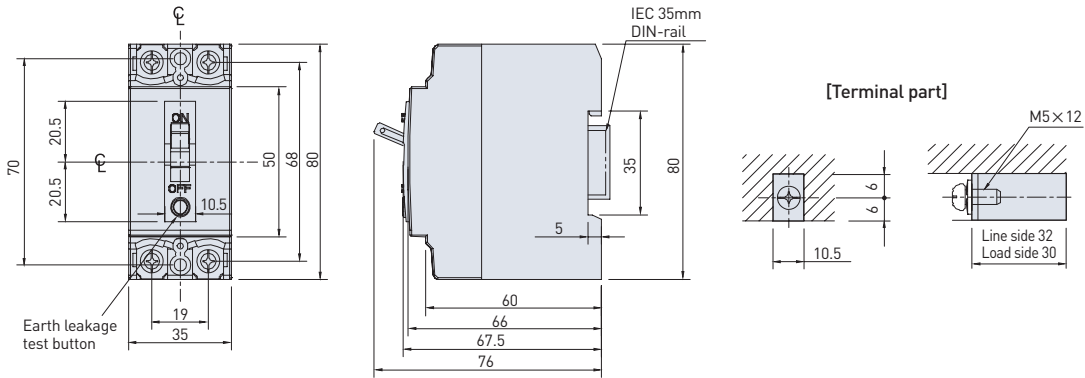
Tripping & temperature derating curves



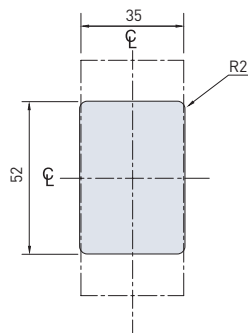
Dimensions

(Unit: mm)

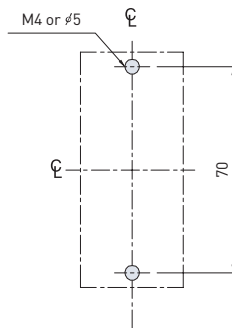
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]

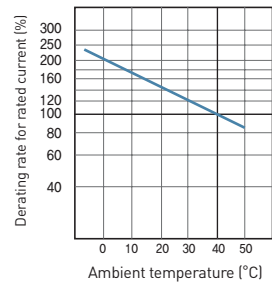
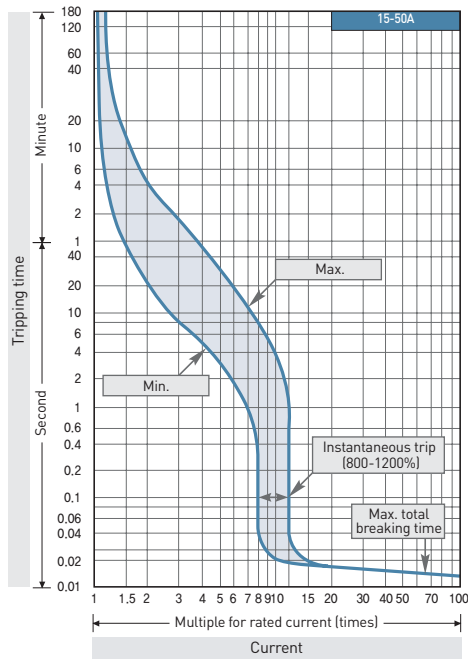


※ \ominus : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.



- UMG30H
- UMG50H

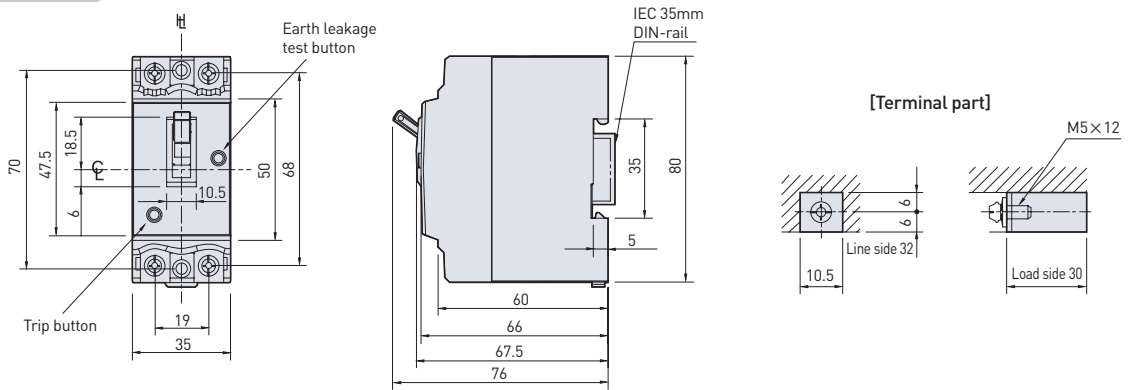
Tripping & temperature derating curves



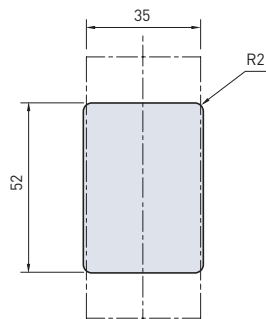
Dimensions

(Unit: mm)

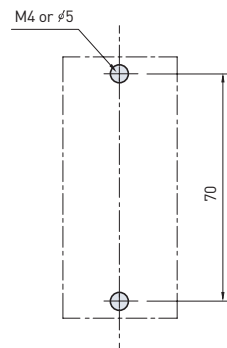
Direct mounting



[Drilling holes for mounting]



[Panel cut-out]



※ \ominus : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.

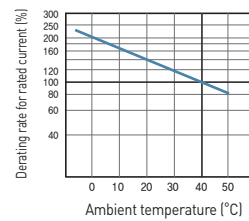
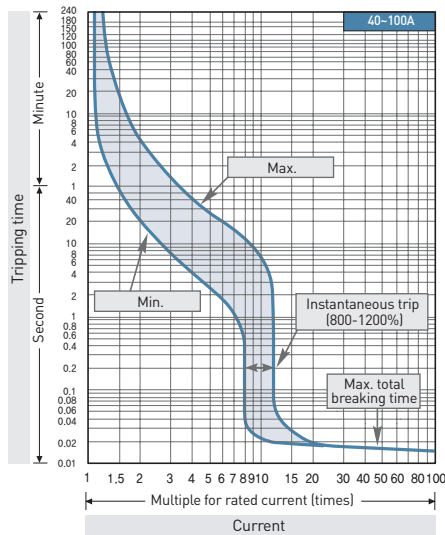
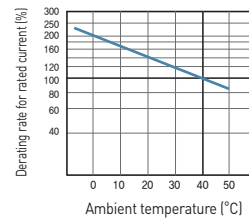
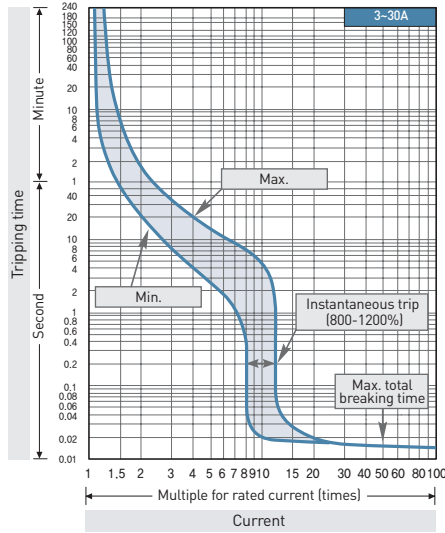
Characteristic Curves & Dimensions

Miniature type / Earth leakage circuit breaker



- UDG30S
- UDG30H
- UDG50S
- UDG50H
- UDG100S
- UDG100H

Tripping & temperature derating curves



Installation of signal accessories

No. of poles	AUX Auxiliary switch	ALT Trip alarm switch	AXT
3			

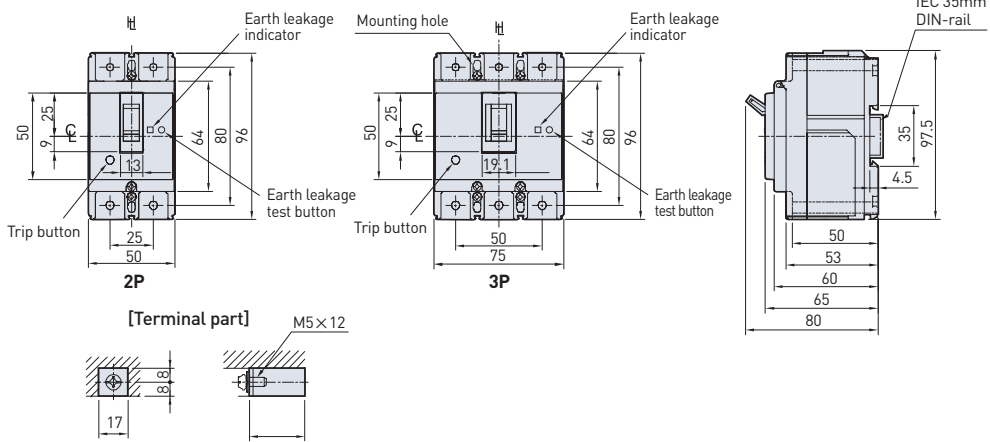
Left Right ※ - In case of 2P, all signal accessories shall be installed in left side of breaker.
[Front] Handle

Dimensions

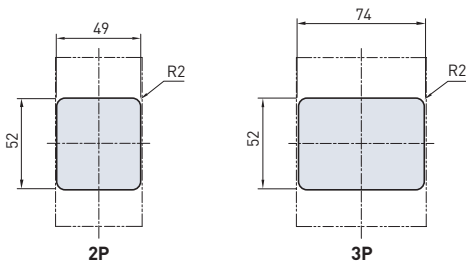
(Unit: mm)

Direct mounting

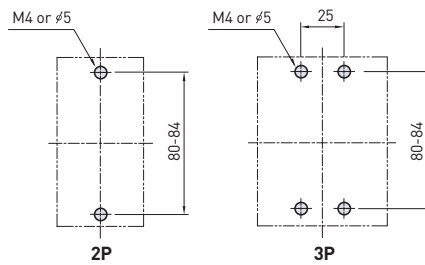
UGD30, UGD50



[Drilling holes for mounting]

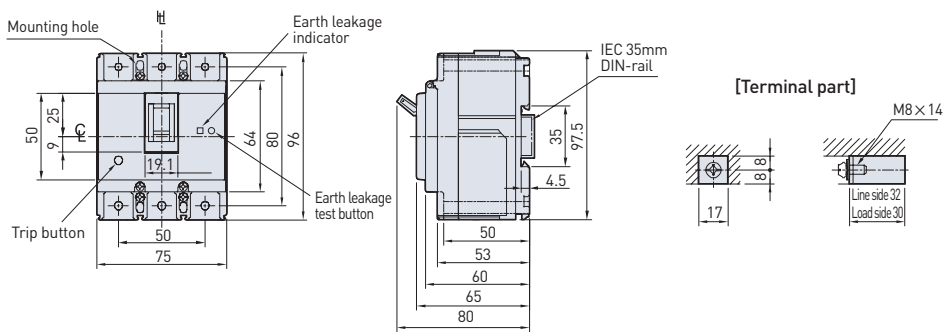


[Panel cut-out]

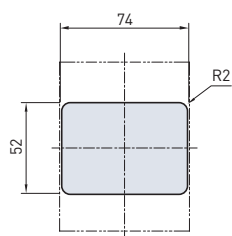


Direct mounting

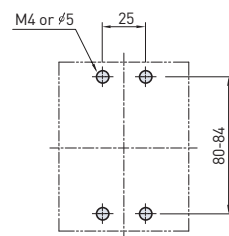
UGD100



[Drilling holes for mounting]



[Panel cut-out]



※ C : Center line H : Handle center line • The allowance of 1.5mm is given around the handle frame.