

# 125AF MCCB

## ABS125c, ABH125c



ABS102c



ABS103c



ABS104c

### For more information

- Drawings ▶ 107 page
- Trip curves ▶ 99 page
- Accessories ▶ 74 page
- Connection and mounting ▶ 123 page

## Ratings

Frame size		125AF						
<b>Type and Pole</b>		<b>S-Type</b>			<b>H-Type</b>			
	2-pole	<b>ABS102c</b>			<b>ABH102c</b>			
	3-pole	<b>ABS103c</b>			<b>ABH103c</b>			
	4-pole	<b>ABS104c</b>			<b>ABH104c</b>			
Rated current, I <sub>n</sub>		15-20-30-40-50-60-75-100-125A						
Rated operational voltage, U <sub>e</sub>		AC: 690V						
		DC: 500V						
Rated insulation voltage, U <sub>i</sub>		AC: 750V						
Rated impulse withstand voltage, U <sub>imp</sub>		8kV						
<b>Rated short-circuit breaking capacity, I<sub>cu</sub></b>		<b>S-Type</b>			<b>H-Type</b>			
AC	690V	8kA			10kA			
	480/500V	26kA			35kA			
IEC 60947-2 (I <sub>cu</sub> )		<b>460V</b>			<b>37kA</b>			
I <sub>cs</sub> =100%I <sub>cu</sub>	415V	37kA			50kA			
	380V	42kA			50kA			
	<b>220/250V</b>	<b>85kA</b>			<b>100kA</b>			
DC	500V(3P)	20kA			30kA			
	250V(2P)	20kA			30kA			
<b>Protective function</b>		Overload, Short-circuit						
Type of trip unit		Thermal-Magnetic						
Magnetic trip range		12 × I <sub>n</sub> (30A and under: 400A)						
Endurance	Mechanical	25000 operations						
	Electrical	10000 operations						
Connection	Standard	Front connection						
	Optional	Rear connection						
Mounting		Plug-in						
Standard		Screw fixing						
<b>Dimensions (mm)</b>		Pole	2p	3p	4p	2p	3p	4p
		a	60	90	120	60	90	120
		b	155			155		
		c1 <small>Note)</small>	60			60		
		c2 <small>Note)</small>	64			64		
		d	82			82		
		Weight, kg	Standard	0.7	1	1.2	0.7	1
<b>Certification</b>		Pole	2p	3p	4p	2p	3p	4p
CE marking			○			○		

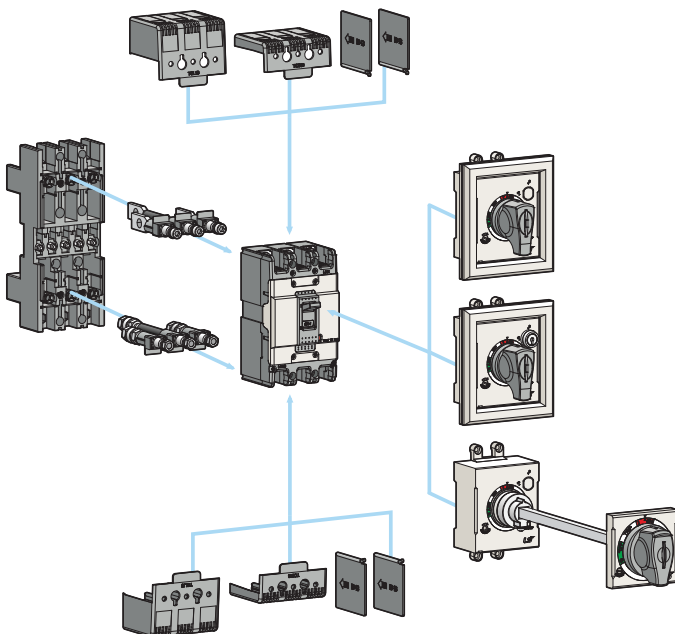
Note) Depth by door cut size : c1 for large cut, c2 for small cut

## Ordering types

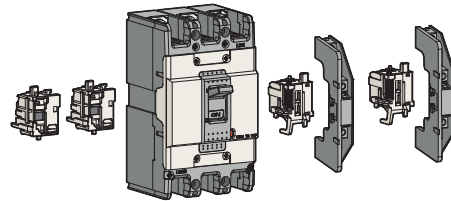
### Breaker types

ABS type (37kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
15 A	ABS102c/15	ABS103c/15	ABS104c/15
20 A	ABS102c/20	ABS103c/20	ABS104c/20
30 A	ABS102c/30	ABS103c/30	ABS104c/30
40 A	ABS102c/40	ABS103c/40	ABS104c/40
50 A	ABS102c/50	ABS103c/50	ABS104c/50
60 A	ABS102c/60	ABS103c/60	ABS104c/60
75 A	ABS102c/75	ABS103c/75	ABS104c/75
100 A	ABS102c/100	ABS103c/100	ABS104c/100
125 A	ABS102c/125	ABS103c/125	ABS104c/125

ABH type (50kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
15 A	ABH102c/15	ABH103c/15	ABH104c/15
20 A	ABH102c/20	ABH103c/20	ABH104c/20
30 A	ABH102c/30	ABH103c/30	ABH104c/30
40 A	ABH102c/40	ABH103c/40	ABH104c/40
50 A	ABH102c/50	ABH103c/50	ABH104c/50
60 A	ABH102c/60	ABH103c/60	ABH104c/60
75 A	ABH102c/75	ABH103c/75	ABH104c/75
100 A	ABH102c/100	ABH103c/100	ABH104c/100
125 A	ABH102c/125	ABH103c/125	ABH104c/125

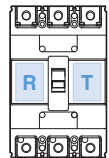


### Accessories



#### Electrical auxiliaries

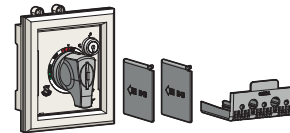
<b>AX</b>	Auxiliary Switch
<b>AL</b>	Alarm Switch
<b>AX+AL</b>	Combination switch
<b>SHT</b>	Shunt Trip
<b>UVT</b>	Undervoltage trip



#### Maximum possibilities

<b>T-position</b>	One of above auxiliaries
<b>R-position</b>	Option of AX or AL or AX+AL

Note) For more detail see 74 page



#### External accessories

ABS125c ABH125c	Name
<b>IB23</b>	Insulation barrier
<b>TCL23</b>	Terminal cover (Long) - Inde type, D-Handle type, N-Handle type
<b>TCS23</b>	Terminal cover (Short) - Inde type, D-Handle type, N-Handle type
<b>DH125</b>	Rotary handle (Direct)
<b>DHK125</b>	Rotary handle (Direct, Key lock)
<b>EH125</b>	Rotary handle (Extended)
<b>RTB2</b>	Rear terminal (Bar)
<b>RTR2</b>	Rear terminal (Round)
<b>PB-C3</b>	Plug-in kit
<b>PHL125</b>	Pad handle lock

Note) For more detail see 82 page

- Inde type: This cover is used without auxiliary Handle.
- D-Handle type: This cover is used with D-Handle.
- N-Handle type: This cover is used with N-Handle.

# 250AF MCCB

ABN250c, ABS250c, ABH250c

Metasol



ABS202c



ABS203c



ABS204c

## Ratings

Frame size		250AF										
<b>Type and Pole</b>		<b>N-Type</b>			<b>S-Type</b>			<b>H-Type</b>				
2-pole		<b>ABN202c</b>			<b>ABS202c</b>			<b>ABH202c</b>				
3-pole		<b>ABN203c</b>			<b>ABS203c</b>			<b>ABH203c</b>				
4-pole		<b>ABN204c</b>			<b>ABS204c</b>			<b>ABH204c</b>				
Rated current, I <sub>n</sub>		100-125-150-175-200-225-250A										
Rated operational voltage, U <sub>e</sub>		AC: 690V										
		DC: 500V										
Rated insulation voltage, U <sub>i</sub>		AC: 750V										
Rated impulse withstand voltage, U <sub>imp</sub>		8kV										
<b>Rated short-circuit breaking capacity, I<sub>cu</sub></b>		<b>N-Type</b>			<b>S-Type</b>			<b>H-Type</b>				
AC 690V		8kA			8kA			10kA				
480/500V		18kA			26kA			35kA				
IEC 60947-2 (I <sub>cu</sub> )		<b>460V</b>			<b>26kA</b>			<b>37kA</b>				
IEC 60947-2 (I <sub>cs</sub> )		<b>26kA</b>			<b>37kA</b>			<b>50kA</b>				
415V		26kA			37kA			50kA				
380V		30kA			42kA			50kA				
<b>220/250V</b>		<b>65kA</b>			<b>85kA</b>			<b>100kA</b>				
DC 500V(3P)		10kA			20kA			30kA				
250V(2P)		10kA			20kA			30kA				
<b>Protective function</b>		Overload, Short-circuit										
Type of trip unit		Thermal-Magnetic										
Magnetic trip range		12 × I <sub>n</sub>										
Endurance		Mechanical			25000 operations							
		Electrical			10000 operations							
Connection		Standard			Front connection							
		Optional			Rear connection							
					Plug-in							
Mounting		Standard			Screw fixing							
<b>Dimensions (mm)</b>		Pole		2p	3p	4p	2p	3p	4p	2p	3p	4p
		a		105	105	140	105	105	140	105	105	140
		b		165			165			165		
		c1 <small>Note)</small>		60			60			60		
		c2 <small>Note)</small>		64			64			64		
		d		87			87			87		
Weight, kg		Standard		1.1	1.2	1.6	1.1	1.2	1.6	1.1	1.2	1.6
<b>Certification</b>		Pole		2p	3p	4p	2p	3p	4p	2p	3p	4p
CE marking		CE		○			○			○		

Note) Depth by door cut size : c1 for large cut, c2 for small cut

### For more information

- Drawings ▶ 108 page
- Trip curves ▶ 100 page
- Accessories ▶ 74 page
- Connection and mounting ▶ 123 page

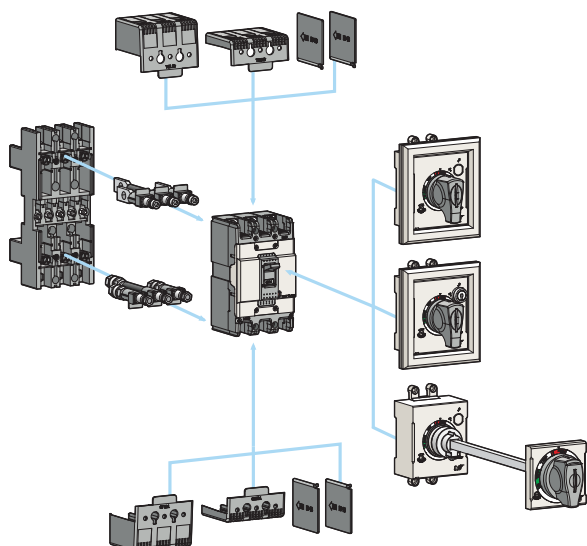
## Ordering types

### Breaker types

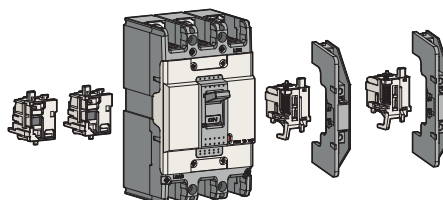
ABN type (25kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
100 A	ABN202c/100	ABN203c/100	ABN204c/100
125 A	ABN202c/125	ABN203c/125	ABN204c/125
150 A	ABN202c/150	ABN203c/150	ABN204c/150
175 A	ABN202c/175	ABN203c/175	ABN204c/175
200 A	ABN202c/200	ABN203c/200	ABN204c/200
225 A	ABN202c/225	ABN203c/225	ABN204c/225
250 A	ABN202c/250	ABN203c/250	ABN204c/250

ABS type (37kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
100 A	ABS202c/100	ABS203c/100	ABS204c/100
125 A	ABS202c/125	ABS203c/125	ABS204c/125
150 A	ABS202c/150	ABS203c/150	ABS204c/150
175 A	ABS202c/175	ABS203c/175	ABS204c/175
200 A	ABS202c/200	ABS203c/200	ABS204c/200
225 A	ABS202c/225	ABS203c/225	ABS204c/225
250 A	ABS202c/250	ABS203c/250	ABS204c/250

ABH type (50kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
100 A	ABH202c/100	ABH203c/100	ABH204c/100
125 A	ABH202c/125	ABH203c/125	ABH204c/125
150 A	ABH202c/150	ABH203c/150	ABH204c/150
175 A	ABH202c/175	ABH203c/175	ABH204c/175
200 A	ABH202c/200	ABH203c/200	ABH204c/200
225 A	ABH202c/225	ABH203c/225	ABH204c/225
250 A	ABH202c/250	ABH203c/250	ABH204c/250



### Accessories



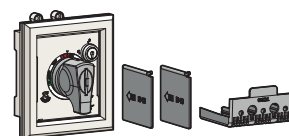
#### Electrical auxiliaries

<b>AX</b>	Auxiliary Switch	
<b>AL</b>	Alarm Switch	
<b>AX+AL</b>	Combination switch	
<b>SHT</b>	Shunt Trip	
<b>UVT</b>	Undervoltage trip	

#### Maximum possibilities

<b>T-position</b>	One of above auxiliaries
<b>R-position</b>	Option of AX or AL or AX+AL

Note) For more detail see 74 page



#### External accessories

ABH250c	Name
<b>B33</b>	Insulation barrier
<b>TCL33</b>	Terminal cover (Long) - Inde type, D-Handle type, N-Handle type
<b>TCS33</b>	Terminal cover (Short) - Inde type, D-Handle type, N-Handle type
<b>DH250</b>	Rotary handle (Direct)
<b>DHK250</b>	Rotary handle (Direct, Key lock)
<b>EH250</b>	Rotary handle (Extended)
<b>RTB3</b>	Rear terminal (Bar)
<b>RTR3</b>	Rear terminal (Round)
<b>PBA250C</b>	Plug-in kit
<b>PHL250</b>	Pad handle lock

Note) For more detail see 82 page

- Inde type: This cover is used without auxiliary Handle.
- D-Handle type: This cover is used with D-Handle.
- N-Handle type: This cover is used with N-Handle.

# 400AF MCCB

ABN400c, ABS400c, ABH400c, ABL400c

Metasol



ABS403c



ABL404c

## Ratings

Frame size		400AF														
<b>Type and Pole</b>		<b>N-Type</b>			<b>S-Type</b>			<b>H-Type</b>			<b>L-Type</b>					
	2-pole	<b>ABN402c</b>			<b>ABS402c</b>			<b>ABH402c</b>			<b>ABL402c</b>					
	3-pole	<b>ABN403c</b>			<b>ABS403c</b>			<b>ABH403c</b>			<b>ABL403c</b>					
	4-pole	<b>ABN404c</b>			<b>ABS404c</b>			<b>ABH404c</b>			<b>ABL404c</b>					
Rated current, I <sub>n</sub>		250-300-350-400A														
Rated operational voltage, U <sub>e</sub>		AC: 690V														
		DC: 500V														
Rated insulation voltage, U <sub>i</sub>		AC: 750V														
Rated impulse withstand voltage, U <sub>imp</sub>		8kV														
<b>Rated short-circuit breaking capacity, I<sub>cu</sub></b>		<b>N-Type</b>			<b>S-Type</b>			<b>H-Type</b>			<b>L-Type</b>					
	AC 690V	5kA			8kA			10kA			14kA					
		480/500V			18kA			35kA			50kA			65kA		
IEC 60947-2 (I <sub>cu</sub> )		<b>415/460V</b>			<b>37kA</b>			<b>50kA</b>			<b>65kA</b>			<b>85kA</b>		
		380V			42kA			65kA			70kA			100kA		
	DC 500V(3P)	10kA			20kA			40kA			40kA					
		DC 250V(3P)	10kA			20kA			40kA			40kA				
I <sub>cs</sub> =100%I <sub>cu</sub>	125V		100%			100%			100%			75%				
<b>Protective function</b>		Overload, Short-circuit														
Type of trip unit		Thermal-Magnetic														
Magnetic trip range		8~12I <sub>n</sub>														
Endurance	Mechanical	4000 operations														
	Electrical	1000 operations														
Connection	Standard	Front connection														
	Optional	Rear connection														
		Plug-in														
Mounting		Standard		Screw fixing												
<b>Dimensions (mm)</b>		Pole	2p	3p	4p	2p	3p	4p	2p	3p	4p	2p	3p	4p		
		a	140	140	184	140	140	184	140	140	184	140	140	184		
		b	257			257			257			257				
		c1 <small>Note)</small>	109			109			109			109				
		c2 <small>Note)</small>	113			113			113			113				
		d	145			145			145			145				
		Weight, kg	Standard	5.2	6.2	7.8	5.2	6.2	7.8	5.2	6.2	7.8	5.2	6.2	7.8	
<b>Certification</b>		Pole	2p	3p	4p	2p	3p	4p	2p	3p	4p	2p	3p	4p		
CE marking			○			○			○			○				

Note) Depth by door cut size : c1 for large cut, c2 for small cut

### For more information

- Drawings ▶ 109 page
- Trip curves ▶ 101 page
- Accessories ▶ 75 page
- Connection and mounting ▶ 124 page

## Ordering types

### Breaker types

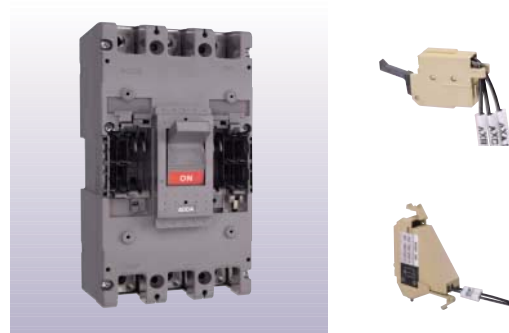
ABN type (37kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
250 A	ABN402c/250	ABN403c/250	ABN404c/250
300 A	ABN402c/300	ABN403c/300	ABN404c/300
350 A	ABN402c/350	ABN403c/350	ABN404c/350
400 A	ABN402c/400	ABN403c/400	ABN404c/400

ABS type (50kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
250 A	ABS402c/250	ABS403c/250	ABS404c/250
300 A	ABS402c/300	ABS403c/300	ABS404c/300
350 A	ABS402c/350	ABS403c/350	ABS404c/350
400 A	ABS402c/400	ABS403c/400	ABS404c/400

ABH type (65kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
250 A	ABH402c/250	ABH403c/250	ABH404c/250
300 A	ABH402c/300	ABH403c/300	ABH404c/300
350 A	ABH402c/350	ABH403c/350	ABH404c/350
400 A	ABH402c/400	ABH403c/400	ABH404c/400

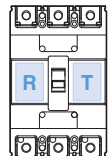
ABL type (85kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
250 A	ABL402c/250	ABL403c/250	ABL404c/250
300 A	ABL402c/300	ABL403c/300	ABL404c/300
350 A	ABL402c/350	ABL403c/350	ABL404c/350
400 A	ABL402c/400	ABL403c/400	ABL404c/400

### Accessories



#### Electrical auxiliaries

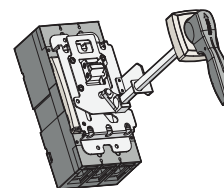
<b>AX</b>	Auxiliary Switch
<b>AL</b>	Alarm Switch
<b>SHT</b>	Shunt Trip
<b>UVT</b>	Undervoltage trip



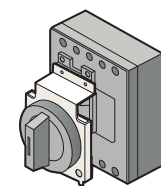
Maximum possibilities

<b>T-position</b>	Option of 2AX, 2AL and SHT or UVT
<b>R-position</b>	Option of 2AX, 2AL and SHT or UVT

*Note*) For more detail see 75 page



E-70U



N-70

#### External accessories

<b>IBL400</b>	Insulation barrier
<b>T1-43A</b>	Terminal cover (Long) - 2, 3pole
<b>T1-44A</b>	Terminal cover (Long) - 4pole
<b>N-70</b>	Rotary handle (Direct)
<b>E-70U</b>	Rotary handle (Extended)
<b>MI-43</b>	Mechanical interlock - 2, 3pole
<b>MI-44</b>	Mechanical interlock - 4pole
<b>PB-I3-FR</b>	Plug-in kit

*Note*) For more detail see 82 page

# 800AF MCCB

ABN800c, ABS800c, ABL800c

Metasol



ABS803c



ABL804c

## Ratings

Frame size		800AF									
<b>Type and Pole</b>		<b>N-Type</b>			<b>S-Type</b>			<b>L-Type</b>			
2-pole		<b>ABN802c</b>			<b>ABS802c</b>			<b>ABL802c</b>			
3-pole		<b>ABN803c</b>			<b>ABS803c</b>			<b>ABL803c</b>			
4-pole		<b>ABN804c</b>			<b>ABS804c</b>			<b>ABL804c</b>			
Rated current, I <sub>n</sub>		500-630-700-800A									
Rated operational voltage, U <sub>e</sub>		AC: 690V									
		DC: 500V									
Rated insulation voltage, U <sub>i</sub>		AC: 750V									
Rated impulse withstand voltage, U <sub>imp</sub>		8kV									
<b>Rated short-circuit breaking capacity, I<sub>cu</sub></b>		<b>N-Type</b>			<b>S-Type</b>			<b>L-Type</b>			
AC 690V		8kA			10kA			14kA			
480/500V		25kA			45kA			65kA			
IEC 60947-2 (I <sub>cu</sub> )		<b>415/460V</b>			<b>37kA</b>			<b>65kA</b>			
380V		45kA			75kA			100kA			
		<b>220/250V</b>			<b>50kA</b>			<b>85kA</b>			
DC 500V(3P)		10kA			20kA			40kA			
250V(3P)		10kA			20kA			40kA			
I <sub>cs</sub> =100%I <sub>cu</sub>		125V			100%			100%			
75%											
<b>Protective function</b>		Overload, Short-circuit									
Type of trip unit		Thermal-Magnetic									
Magnetic trip range		8~12I <sub>n</sub>									
Endurance		Mechanical			2500 operations						
		Electrical			500 operations						
Connection		Standard			Front connection						
		Optional			Rear connection						
					Plug-in						
Mounting		Standard			Screw fixing						
<b>Dimensions (mm)</b>		Pole	2p	3p	4p	2p	3p	4p	2p	3p	4p
		a	210	210	280	210	210	280	210	210	280
		b			280			280			280
		c1 <small>Note)</small>			109			109			109
		c2 <small>Note)</small>			113			113			113
		d			145			145			145
		Weight, kg	Standard	11	11.5	18.2	11	11.5	18.2	11	11.5
<b>Certification</b>		Pole	2p	3p	4p	2p	3p	4p	2p	3p	4p
CE marking		CE		o			o			o	

Note) Depth by door cut size : c1 for large cut, c2 for small cut

### For more information

- Drawings ▶ 110 page
- Trip curves ▶ 101 page
- Accessories ▶ 75 page
- Connection and mounting ▶ 124 page

## Ordering types

### Breaker types

ABN type (37kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
500 A	ABN802c/500	ABN803c/500	ABN804c/500
630 A	ABN802c/630	ABN803c/630	ABN804c/630
700 A	ABN802c/700	ABN803c/700	ABN804c/700
800 A	ABN802c/800	ABN803c/800	ABN804c/800

ABS type (65kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
500 A	ABS802c/500	ABS803c/500	ABS804c/500
630 A	ABS802c/630	ABS803c/630	ABS804c/630
700 A	ABS802c/700	ABS803c/700	ABS804c/700
800 A	ABS802c/800	ABS803c/800	ABS804c/800

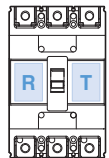
ABL type (85kA/460V)			
Rated current, In	2-pole	3-pole	4-pole
500 A	ABL802c/500	ABL803c/500	ABL804c/500
630 A	ABL802c/630	ABL803c/630	ABL804c/630
700 A	ABL802c/700	ABL803c/700	ABL804c/700
800 A	ABL802c/800	ABL803c/800	ABL804c/800

### Accessories



#### Electrical auxiliaries

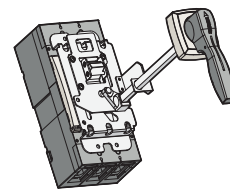
<b>AX</b>	Auxiliary Switch
<b>AL</b>	Alarm Switch
<b>SHT</b>	Shunt Trip
<b>UVT</b>	Undervoltage trip



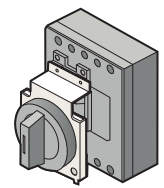
#### Maximum possibilities

<b>T-position</b>	Option of 2AX, 2AL and SHT or UVT
<b>R-position</b>	Option of 2AX, 2AL and SHT or UVT

Note) For more detail see 75 page



E-80U



N-80

#### External accessories

<b>IBL800</b>	Insulation barrier
<b>T1-63A</b>	Terminal cover (Long) - 2, 3pole
<b>T1-64A</b>	Terminal cover (Long) - 4pole
<b>N-80</b>	Rotary handle (Direct)
<b>E-80U</b>	Rotary handle (Extended)
<b>MI-83S</b>	Mechanical interlock - 2, 3pole
<b>MI-84S</b>	Mechanical interlock - 4pole
<b>PB-J3-FR</b>	Plug-in kit

Note) For more detail see 82 page