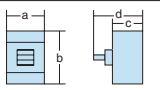


# 2

## Ratings and Specifications

### Moulded Case Circuit Breakers

#### 9 Circuit Breaker with earth leakage alarm (Harmonics/surge with countermeasure)

Frame size (A)	50	50	50	100	125	100	125
Type	PE50-NFZ	PS50-NFZ	ZAS50-GF	PE125-NFZ		ZAS125-SF	
Number of poles <sup>(14)(15)</sup>	3	3	3   4	3	3	3	3
<b>■ Ratings</b>							
Rated current, A	15	15	15   50	60	125	15   50	125
Calibrated at 40°C	20	20	20	75		20   60	
	30	30	30	100		30   75	
	40	40	40			40   100	
	50	50					
Rated operational voltage V	100-440 common	100-440 common	100-440 common	100-440 common	100-440 common	100-440 common	100-440 common
Applicable range V	80~484	80~484	80~484	80~484	80~484	80~484	80~484
Rated impulse withstand voltage [ $U_{imp}$ ] kV	6	6	8	6	6	8	8
<b>■ Rated breaking capacity, kA</b>							
JIS C 8201-2-1 Ann.2 AC 440V	2.5	7.5	50	10	10	25	25
$I_{cu}(sym)$ 415V	2.5	7.5	65	10	10	30	30
240V	7.5	15	85	30	30	50	50
<b>■ Earth leakage alarm specifications</b>							
Earth leakage detection (Current operation type)	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
Rated sensitivity current mA	30/100/500 selectable	30/100/500 selectable	100/200/500 selectable	30/100/500 selectable	30/100/500 selectable	100/200/500 selectable	100/200/500 selectable
Max. operating time sec	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable
Earth leakage alarm output contact configuration <sup>(30)</sup>	1c	1c	1c	1c	1c	1c	1c
Alarm reset function (manual reset) <sup>(39)</sup>	Push button	Push button	Push button <sup>(8)</sup>	Push button	Push button	Push button <sup>(8)</sup>	Push button <sup>(8)</sup>
<b>■ External dimensions, mm</b>							
	a	75	75	90   120	75	75	75
	b	130	130	155	130	130	130
	c	68	68	68	68	68	68
	d	90	90	92	90	95	95
Weight (● marked standard type) kg	0.8	0.8	1.3   1.7	0.9	0.9	0.95	0.95
<b>■ Connections and Mountings</b>							
Front-connected (FC) Terminal screws	● 45	● 45	● 45	● 45	● 45	● 4	● 4
With extension bars	○ 53	○ 53	○ 53	○ 53	○ 53	○ 53	○ 53
Rear-connected (RC) Flat bar studs	○	○	○	○	○	○	○
Plug-in (PM) For switchboards High-performance (PMB)	—	—	—	—	—	—	—
Standard (PMC)	—	—	—	—	—	—	—
For distribution boards (PMC)	—	—	—	—	—	—	—
(PMD)	—	—	—	—	—	—	—
Flush-mounted (FP) With flat bar studs	○	○	○	○	○	○	○
Draw-out type (DR)	—	—	—	—	—	—	—
TemPlug70 (PG)	—	—	○   —	—	—	○	○
DIN rail mount	○ 11	○ 11	○ 11	○ 11	○ 11	○ 11	○ 11
<b>■ Accessories (optional) Symbol</b>							
Auxiliary switch	A X ●	A X ●	A X ●	A X ●	A X ●	A X ●	A X ●
Alarm switch	A L ●	A L ●	A L ●	A L ●	A L ●	A L ●	A L ●
Shunt trips	S H —	S H —	S H △ 70/82	S H —	S H —	S H △ 70/82	S H △ 70/82
Undervoltage trips	U V —	U V —	U V —	U V —	U V —	U V —	U V —
Test lead	T L —	T L —	T L ● 82	T L —	T L —	T L —	T L —
Megger test switch	MG —	MG —	MG —	MG —	MG —	MG —	MG —
Motor operator	MC —	MC —	MC —	MC —	MC —	MC —	MC —
External operating handle Breaker-mounted	H B ●	H B ●	H B ●	H B ●	H B ●	H B ●	H B ●
Door-mounted (variable depth)	H P ●	H P ●	H P —	H P ●	H P ●	H P ●	H P ●
Toggle extension	H A —	H A —	H A —	H A —	H A —	H A —	H A —
Mechanical interlock Slide type	M S ●	M S ●	M S ●	M S ●	M S ●	M S ●	M S ●
Rear-connected type	M B —	M B —	M B —	M B —	M B —	M B —	M B —
Link type	M L —	M L —	M L —	M L —	M L —	M L —	M L —
Wire type	M W —	M W —	M W —	M W —	M W —	M W —	M W —
Toggle holder	H H ●	H H ●	H H ●	H H ●	H H ●	H H ●	H H ●
Toggle lock	H L ●	H L ●	H L ●	H L ●	H L ●	H L ●	H L ●
Terminal cover For front-connected	C F ●	C F ●	C F ●	C F ●	C F ●	C F ●	C F ●
For rear-connected and plug-in	C R ●	C R ●	C R ●	C R ●	C R ●	C R ●	C R ●
Terminal block for lead	T F ●	T F ●	T F —	T F ●	T F ●	T F ●	T F ●
Door flange	D F —	D F —	D F —	D F —	D F —	D F —	D F —
CE marking	Non	Non	Non	Non	Non	Non	Non
Overcurrent trip mechanism	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic
Earth leakage indication	LED (Red)	LED (Red)	LED (Red)	LED (Red)	LED (Red)	LED (Red)	LED (Red)
Colour of cover	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue
Trip button (Colour)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)
Suitability for isolation	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reverse connection	Non	Non	Yes	Non	Non	Yes <sup>(72)</sup>	Yes <sup>(72)</sup>
Page of characteristics and outline dimensions	7-124	7-124	7-128	7-124	7-124	7-126	7-126

#### Notes:

- : Standard. This configuration used unless otherwise specified. ○ : Optional standard. Specify when ordering.
- : "yes" or "available". — : "no" or "not available". △ : Custom-built product. Please contact us for details.
- ④ : 50A or less is the M5 wire clamping terminal. ⑧ : Optional remote reset or automatic reset available on request. Please apply this when the reset button cannot be pressed due to the installation of external accessories, etc. See page 6-27 for details. ⑪ : Please order the DIN rail adapter separately. See page 6-156. ⑭ : When applying 3-pole type to a 1ø2W circuit, use both ends and do not use the central pole. ⑮ : When applying 3-pole type to a 1ø3W circuit, apply voltage to both ends and connect the neutral wire to the central pole.
- ⑳ : See page 6-22 for the contact rating. ㉑ : An earth leakage alarm maintains the operating state until pressing the reset button or turning the main circuit power OFF. If the electric leakage continues, it will be reset while you hold down the reset button, but when you release the reset button, it will return to the operating state. ㉒ : A wire clamping terminal is provided.
- ㉓ : For the extension bars, please place the order separately in parts.
- ㉔ : Flush-mounted type cannot be applied when a shunt trip device is mounted. ㉕ : There are some limitations. See page 5-23 for details. ㉖ : See page 6-27 for details.

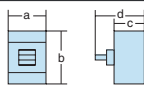
Remarks: The rated sensitivity current is set to 100mA and the time delay tripping type's operating time is set to 0.45 seconds before delivery.

# 2

## Ratings and Specifications

### Moulded Case Circuit Breakers

#### 9 Circuit Breaker with earth leakage alarm (Harmonics/surge with countermeasure)

Frame size (A)	100	125	225	250	225	250		
Type	<b>ZAS100-GF</b>		<b>ZAS125-GF</b>		<b>ZAE250-SF</b>		<b>ZAS250-SF</b>	
Number of poles <sup>14</sup> <sub>15</sub>	3   4	3   4	3	3	3	3		
<b>■ Ratings</b>								
Rated current, A	15   50	125	125   225	250	125   225	250		
Calibrated at 40°C	20   60		150		150			
	30   75		175		175			
	40   100		200		200			
Rated operational voltage V	100-440 common		100-440 common		100-440 common		100-440 common	
Applicable range V	80~484		80~484		80~484		80~484	
Rated impulse withstand voltage [ $U_{imp}$ ] kV	8		8		8		8	
<b>■ Rated breaking capacity, kA</b>								
JIS C 8201-2-1 Ann.2 AC 440V	50	50	15	15	30	30		
$I_{cu}$ (sym) 415V	65	65	25	25	40	40		
240V	85	85	35	35	85	85		
<b>■ Earth leakage alarm specifications</b>								
Earth leakage detection (Current operation type)	Electronic		Electronic		Electronic		Electronic	
Rated sensitivity current mA	100/200/500 selectable		100/200/500 selectable		100/200/500 selectable		100/200/500 selectable	
Max. operating time sec	0.1/0.45/1.0 selectable		0.1/0.45/1.0 selectable		0.1/0.45/1.0 selectable		0.1/0.45/1.0 selectable	
Earth leakage alarm output contact configuration <sup>30</sup>	1c		1c		1c		1c	
Alarm reset function (manual reset) <sup>39</sup>	Push button <sup>8</sup>		Push button <sup>8</sup>		Push button <sup>8</sup>		Push button <sup>8</sup>	
<b>■ External dimensions, mm</b>								
	a	90   120	90   120	105	105	105	105	
	b	155	155	165	165	165	165	
	c	68	68	68	68	68	68	
	d	92	92	95	95	95	95	
Weight (● marked standard type) kg	1.3   1.7	1.3   1.7	1.7	1.7	1.7	1.7		
<b>■ Connections and Mountings</b>								
Front-connected (FC) Terminal screws	●	●	●	●	●	●		
With extension bars	○ <sup>53</sup>	○ <sup>53</sup>	○ <sup>53</sup>	○ <sup>53</sup>	○ <sup>53</sup>	○ <sup>53</sup>		
Rear-connected (RC) Flat bar studs	○	○	○	○	○	○		
Plug-in (PM) For switchboards High-performance (PMB)	—	—	—	—	—	—		
Standard (PMC)	—	—	—	—	—	—		
For distribution boards (PMC)	—	—	—	—	—	—		
(PMD)	—	—	—	—	—	—		
Flush-mounted (FP) With flat bar studs	○	○	○	○	○	○		
Draw-out type (DR)	—	—	—	—	—	—		
TemPlug70 (PG)	○	—	○	—	○	○		
DIN rail mount	○ <sup>11</sup>	○ <sup>11</sup>	—	—	—	—		
<b>■ Accessories (optional) Symbol</b>								
Auxiliary switch	A X	●	●	●	●	●		
Alarm switch	A L	●	●	●	●	●		
Shunt trips	S H	△ <sup>70 82</sup>	△ <sup>70 82</sup>	△ <sup>70 82</sup>	△ <sup>70 82</sup>	△ <sup>70 82</sup>		
Undervoltage trips	U V	—	—	—	—	—		
Test lead	T L	● <sup>82</sup>	● <sup>82</sup>	● <sup>82</sup>	● <sup>82</sup>	● <sup>82</sup>		
Megger test switch	MG	●	●	●	●	●		
Motor operator	M C	●	●	●	●	●		
External operating handle	Breaker-mounted H B	●	●	●	●	●		
Door-mounted (variable depth) H P	●	●	●	●	●	●		
Toggle extension	H A	—	—	—	—	—		
Mechanical interlock	Slide type M S	●	●	●	●	●		
Rear-connected type M B	—	—	—	—	—	—		
Link type M L	—	—	—	—	—	—		
Wire type M W	—	—	—	—	—	—		
Toggle holder	H H	●	●	●	●	●		
Toggle lock	H L	●	●	●	●	●		
Terminal cover	For front-connected C F	●	●	●	●	●		
For rear-connected and plug-in C R	●	●	●	●	●	●		
Terminal block for lead	T F	—	●	●	●	●		
Door flange	D F	—	—	—	—	—		
CE marking	Non	Non	Non	Non	Non	Non		
Overcurrent trip mechanism	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic		
Earth leakage indication	LED (Red)	LED (Red)	LED (Red)	LED (Red)	LED (Red)	LED (Red)		
Colour of cover	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue		
Trip button (Colour)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)		
Suitability for isolation	Yes	Yes	Yes	Yes	Yes	Yes		
Reverse connection	Yes	Yes	Yes	Yes	Yes	Yes		
Page of characteristics and outline dimensions	7-128	7-130	7-132	7-132	7-132	7-132		

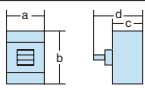
**Notes:**  
 ● : Standard. This configuration used unless otherwise specified. ○ : Optional standard. Specify when ordering.  
 ● : "yes" or "available". — : "no" or "not available". △ : Custom-built product. Please contact us for details.  
 ⑧ : Optional remote reset or automatic reset available on request. Please apply this when the reset button cannot be pressed due to the installation of external accessories, etc. See page 6-27 for details. ⑪ : Please order the DIN rail adapter separately. See page 6-156. ⑭ : When applying 3-pole type to a 1φ2W circuit, use both ends and do not use the central pole. ⑮ : When applying 3-pole type to a 1φ3W circuit, apply voltage to both ends and connect the neutral wire to the central pole. ⑳ : See page 6-22 for the contact rating.  
 ㉑ : An earth leakage alarm maintains the operating state until pressing the reset button or turning the main circuit power OFF. If the electric leakage continues, it will be reset while you hold down the reset button, but when you release the reset button, it will return to the operating state. ㉓ : For the extension bars, please place the order separately in parts.  
 ㉔ : Flush-mounted type cannot be applied when a shunt trip device is mounted. ㉕ : See page 6-27 for details.  
 Remarks: The rated sensitivity current is set to 100mA and the time delay tripping type's operating time is set to 0.45 seconds before delivery.

# 2

## Ratings and Specifications

### Moulded Case Circuit Breakers

#### 9 Circuit Breaker with earth leakage alarm (Harmonics/surge with countermeasure)

Frame size (A)	225	250	400	400	400	600	630
Type	ZAS225-GF	ZAS250-GF	ZAE400-NF	ZAS400-NF	ZAS400-GF	ZAS630-CF	
Number of poles <sup>(14)(15)</sup>	3   4	3   4	3	3   4	3   4	3	3
<b>■ Ratings</b>							
Rated current, A	125   225	250	250	250	250	500	630
Calibrated at 40°C	150 175 200		300 350 400	300 350 400	300 350 400	600	
Rated operational voltage V	100-440 common	100-440 common	100-440 common	100-440 common	100-440 common	100-440 common	100-440 common
Applicable range V	80~484	80~484	80~484	80~484	80~484	80~484	80~484
Rated impulse withstand voltage [ $U_{imp}$ ] kV	8	8	8	8	8	8	8
<b>■ Rated breaking capacity, kA</b>							
JIS C 8201-2-1 Ann.2 AC	440V	50	22	45	65	30	30
$I_{cu}(sym)$	415V 240V	65 85	65 85	25 35	50 85	70 100	36 50
<b>■ Earth leakage alarm specifications</b>							
Earth leakage detection (Current operation type)	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
Rated sensitivity current mA	100/200/500 selectable	100/200/500 selectable	100/200/500 selectable	100/200/500 selectable	100/200/500 selectable	100/200/500 selectable	100/200/500 selectable
Max. operating time sec	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable
Earth leakage alarm output contact configuration <sup>(30)</sup>	1c	1c	1c	1c	1c	1c	1c
Alarm reset function (manual reset) <sup>(39)</sup>	Push button <sup>(8)</sup>	Push button <sup>(8)</sup>	Push button <sup>(8)</sup>	Push button <sup>(8)</sup>	Push button <sup>(8)</sup>	Push button <sup>(8)</sup>	Push button <sup>(8)</sup>
<b>■ External dimensions, mm</b>							
	a   b   c   d	105   140   165   68   92	105   140   165   68   92	140   260   103   145	140   185   260   103   145	140   185   260   103   145	210   273   103   145
Weight (● marked standard type) kg	1.7   2.1	1.7   2.1	5.2	5.2   6.6	5.2   6.6	10.0	10.0
<b>■ Connections and Mountings</b>							
Front-connected (FC) Terminal screws	●	●	●	●	●	—	—
With extension bars	○ <sup>(53)</sup>	○ <sup>(53)</sup>	—	—	—	—	—
Rear-connected (RC) Flat bar studs	○	○	○	○	○	○	○
Plug-in (PM) For switchboards High-performance (PMB)	—	—	—	—	—	—	—
Standard (PMC)	—	—	—	—	—	—	—
For distribution boards (PMC)	—	—	—	—	—	—	—
(PMD)	—	—	—	—	—	—	—
Flush-mounted (FP) With flat bar studs	○	○	○	○	○	○	○
Draw-out type (DR)	—	—	—	—	—	—	—
TemPlug70 (PG)	○   —	○   —	○	○   —	○   —	○	○
DIN rail mount	—	—	—	—	—	—	—
<b>■ Accessories (optional)</b>							
<b>Symbol</b>							
Auxiliary switch	A X ●	●	●	●	●	●	●
Alarm switch	A L ●	●	●	●	●	●	●
Shunt trips	S H △ <sup>(70)(82)</sup>	△ <sup>(70)(82)</sup>	● <sup>(62)</sup>	● <sup>(62)</sup>	● <sup>(62)</sup>	● <sup>(62)</sup>	● <sup>(62)</sup>
Undervoltage trips	U V —	—	—	—	—	—	—
Test lead	T L ● <sup>(82)</sup>	● <sup>(82)</sup>	● <sup>(82)</sup>	● <sup>(82)</sup>	● <sup>(82)</sup>	● <sup>(82)</sup>	● <sup>(82)</sup>
Megger test switch	M G ●	●	●	●	●	●	●
Motor operator	M C ●	●	●	●	●	●	●
External operating handle Breaker-mounted	H B ●	●	●	●	●	●	●
Door-mounted (variable depth)	H P ●	●	●	●	●	●	●
Toggle extension	H A —	—	—	—	—	—	—
Mechanical interlock Slide type	M S ●	●	●	●	●	●	●
Rear-connected type	M B —	—	—	—	—	—	—
Link type	M L —	—	—	—	—	—	—
Wire type	M W —	—	—	—	—	—	—
Toggle holder	H H ●	●	●	●	●	●	●
Toggle lock	H L ●	●	●	●	●	●	●
Terminal cover For front-connected	C F ●	●	●	●	●	●	●
For rear-connected and plug-in	C R ●	●	●	●	●	●	●
Terminal block for lead	T F ●	●	●	●	●	●	●
Door flange	D F —	—	—	—	—	—	—
CE marking	Non	Non	Non	Non	Non	Non	Non
Overcurrent trip mechanism	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic (adjustable)	Thermal-magnetic (adjustable)	Thermal-magnetic (adjustable)	Thermal-magnetic (adjustable)
Earth leakage indication	LED (Red)	LED (Red)	LED (Red)	LED (Red)	LED (Red)	LED (Red)	LED (Red)
Colour of cover	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue
Trip button (Colour)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)
Suitability for isolation	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reverse connection	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Page of characteristics and outline dimensions	7-134	7-136	7-138	7-138	7-138	7-140	7-140

#### Notes:

- : Standard. This configuration used unless otherwise specified. ○ : Optional standard. Specify when ordering.
- : "yes" or "available". — : "no" or "not available". △ : Custom-built product. Please contact us for details.
- (8) : Optional remote reset or automatic reset available on request. Please apply this when the reset button cannot be pressed due to the installation of external accessories, etc. See page 6-27 for details. (14) : When applying 3-pole type to a 1ø2W circuit, use both ends and do not use the central pole.
- (15) : When applying 3-pole type to a 1ø3W circuit, apply voltage to both ends and connect the neutral wire to the central pole. (30) : See page 6-22 for the contact rating.
- (39) : An earth leakage alarm maintains the operating state until pressing the reset button or turning the main circuit power OFF. If the electric leakage continues, it will be reset while you hold down the reset button, but when you release the reset button, it will return to the operating state. (53) : For the extension bars, please place the order separately in parts. (62) : Factory-installed.
- (70) : Flush-mounted type cannot be applied when a shunt trip device is mounted. (82) : See page 6-27 for details.

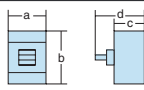
Remarks: The rated sensitivity current is set to 100mA and the time delay tripping type's operating time is set to 0.45 seconds before delivery.

# 2

## Ratings and Specifications

### Moulded Case Circuit Breakers

#### 9 Circuit Breaker with earth leakage alarm (Harmonics/surge with countermeasure)

Frame size (A)	600	630	800	800				
Type	ZAS630-NF		ZAS800-CF	ZAS800-NF				
Number of poles <sup>14</sup> <sub>15</sub>	3	3	3	3				
<b>■ Ratings</b>								
Rated current, A	500	630	700	700				
Calibrated at 40°C	600		800	800				
<b>■ Rated breaking capacity, kA</b>								
Rated operational voltage V	100-440 common	100-440 common	100-440 common	100-440 common				
Applicable range V	80~484	80~484	80~484	80~484				
Rated impulse withstand voltage [ $U_{imp}$ ] kV	8	8	8	8				
JIS C 8201-2-1 Ann.2 AC 440V	45	45	30	45				
$I_{cu}$ (sym) 415V	50	50	36	50				
240V	85	85	50	85				
<b>■ Earth leakage alarm specifications</b>								
Earth leakage detection (Current operation type)	Electronic	Electronic	Electronic	Electronic				
Rated sensitivity current mA	100/200/500 selectable	100/200/500 selectable	100/200/500 selectable	100/200/500 selectable				
Max. operating time sec	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable	0.1/0.45/1.0 selectable				
Earth leakage alarm output contact configuration <sup>30</sup>	1c	1c	1c	1c				
Alarm reset function (manual reset) <sup>39</sup>	Push button <sup>8</sup>	Push button <sup>8</sup>	Push button <sup>8</sup>	Push button <sup>8</sup>				
<b>■ External dimensions, mm</b>								
	a	210	210	210	210			
	b	273	273	273	273			
	c	103	103	103	103			
	d	145	145	145	145			
Weight (● marked standard type) kg	10.0	10.0	11.0	11.0				
<b>■ Connections and Mountings</b>								
Front-connected (FC) Terminal screws	—	—	—	—				
With extension bars	●	●	●	●				
Rear-connected (RC) Flat bar studs	○	○	○	○				
Plug-in (PM) For switchboards High-performance (PMB)	—	—	—	—				
Standard (PMC)	—	—	—	—				
For distribution boards (PMC)	—	—	—	—				
(PMD)	—	—	—	—				
Flush-mounted (FP) With flat bar studs	○	○	○	○				
Draw-out type (DR)	—	—	—	—				
TemPlug70 (PG)	○	○	—	—				
DIN rail mount	—	—	—	—				
<b>■ Accessories (optional) Symbol</b>								
Auxiliary switch	A X	●	●	●	●			
Alarm switch	A L	●	●	●	●			
Shunt trips	S H	● <sup>62</sup>	● <sup>62</sup>	● <sup>62</sup>	● <sup>62</sup>			
Undervoltage trips	U V	—	—	—	—			
Test lead	T L	● <sup>82</sup>	● <sup>82</sup>	● <sup>82</sup>	● <sup>82</sup>			
Megger test switch	MG	●	●	●	●			
Motor operator	M C	●	●	●	●			
External operating handle Breaker-mounted	H B	●	●	●	●			
Door-mounted (variable depth)	H P	●	●	●	●			
Toggle extension	H A	●	●	●	●			
Mechanical interlock Slide type	M S	●	●	●	●			
Rear-connected type	M B	—	—	—	—			
Link type	M L	—	—	—	—			
Wire type	M W	—	—	—	—			
Toggle holder	H H	●	●	●	●			
Toggle lock	H L	—	—	—	—			
Terminal cover For front-connected	C F	●	●	●	●			
For rear-connected and plug-in	C R	●	●	●	●			
Terminal block for lead	T F	—	—	—	—			
Door flange	D F	—	—	—	—			
CE marking	Non	Non	Non	Non				
Overcurrent trip mechanism	Thermal-magnetic (adjustable)	Thermal-magnetic (adjustable)	Thermal-magnetic (adjustable)	Thermal-magnetic (adjustable)				
Earth leakage indication	LED (Red)	LED (Red)	LED (Red)	LED (Red)				
Colour of cover	Grey Blue	Grey Blue	Grey Blue	Grey Blue				
Trip button (Colour)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)				
Suitability for isolation	Yes	Yes	Yes	Yes				
Reverse connection	Yes	Yes	Yes	Yes				
Page of characteristics and outline dimensions	7-140	7-140	7-142	7-142				

**Notes:**  
 ● : Standard. This configuration used unless otherwise specified. ○ : Optional standard. Specify when ordering.  
 ● : "yes" or "available". — : "no" or "not available".  
<sup>8</sup> : Optional remote reset or automatic reset available on request. Please apply this when the reset button cannot be pressed due to the installation of external accessories, etc. See page 6-27 for details.  
<sup>14</sup> : When applying 3-pole type to a 1φ2W circuit, use both ends and do not use the central pole.  
<sup>15</sup> : When applying 3-pole type to a 1φ3W circuit, apply voltage to both ends and connect the neutral wire to the central pole. <sup>30</sup> : See page 6-22 for the contact rating.  
<sup>39</sup> : An earth leakage alarm maintains the operating state until pressing the reset button or turning the main circuit power OFF. If the electric leakage continues, it will be reset while you hold down the reset button, but when you release the reset button, it will return to the operating state. <sup>62</sup> : Factory-installed. <sup>82</sup> : See page 6-27 for details.  
 Remarks: The rated sensitivity current is set to 100mA and the time delay tripping type's operating time is set to 0.45 seconds before delivery.