

2

Ratings and Specifications

Moulded Case Circuit Breakers

2 Standard series

Frame size (A)	400		400		600		630		600		630		600					
Type	PS400-NF		PS400-NE		S630-CF		S630-CF		PS630-CF		S630-NF		PS630-NF					
Number of poles	3	4	3	4	3	4	3	4	3	4	3	4	3	4				
Ratings																		
Rated current, A	225		Adjustable		500		630		500		500		630		500			
Calibrated at 40°C	250		$I_n=250$ $I_n=400$		600		600		600		600		600		600			
45°C	300		125 175		—		—		78		—		—		78			
	350		150 200		—		—		—		—		—		—			
	400		175 225		—		—		—		—		—		—			
	—		200 250		—		—		—		—		—		—			
	—		225 300		—		—		—		—		—		—			
	—		250 350		—		—		—		—		—		—			
	—		400		—		—		—		—		—		—			
Rated insulation voltage [U_i] V	800		800		690		690		800		690		690		800			
Rated impulse withstand voltage [U_{imp}] kV	8		8		8		8		8		8		8		8			
Rated short time withstand current [I_{cw}] kA	—		5 (0.4sec.)		—		—		—		—		—		—			
Utilization Category	A		B		A		A		A		A		A		A			
Rated breaking capacity, kA																		
JIS C 8201-2-1 Ann.1 Ann.2	AC 690V		12/12		10/10		10/10		7/7		20/20		20/20		12/12			
IEC 60947-2	500V		30/30		15/15		15/15		25/25		30/30		30/30		30/30			
$I_{cu}/I_{cs}(sym)$	440V		45/45		30/30		30/30		30/30		50/50		50/50		45/45			
	415V		50/50		36/36		36/36		36/36		50/50		50/50		50/50			
	380V		50/50		36/36		36/36		36/36		50/50		50/50		50/50			
	240V		85/85		50/50		50/50		50/50		85/85		85/85		85/85			
	① DC 250V		50/50 17		—		50/50		50/50		25/25 17		50/50		50/50 17			
	125V		50/50 17		—		50/50		50/50		40/40 17		50/50		50/50 17			
NK	AC 690V		12/12		10/10		10/10		7/7		20/20		20/20		12/12			
$I_{cu}/I_{cs}(sym)$	450V		45/45		30/30		30/30		30/30		50/50		50/50		45/45			
	240V		85/85		50/50		50/50		50/50		85/85		85/85		85/85			
	① DC 250V		50/50 17		—		—		—		—		—		—			
External dimensions, mm																		
	a		140 185		140 185		210 280		210 280		140 185		210 280		210 280		140 185	
	b		260		260		273		273		260		273		273		260	
	c		103		103		103		103		103		103		103		103	
	d		151		151		145		145		151		145		145		151	
Weight (● marked standard type) kg	5.5 7.3		5.7 7.5		8.0 11.0		8.0 11.0		5.9 7.8		8.0 11.0		8.0 11.0		5.9 7.8			
Connections and Mountings																		
Front-connected (FC)	Terminal screws		●		●		—		—		—		—		—			
	With extension bars		○		○		●		●		●		●		●			
Rear-connected (RC)	Flat bar studs		○		○		○		○		○		○		○			
Plug-in (PM)	For switchboards		○ 50		○ 50		○ 51		○ 51		○ 50		○ 51		○ 50			
	High-performance (PMB)		—		—		—		—		—		—		—			
	Standard (PMC)		○ —		○ —		○ —		○ —		○ —		○ —		○ —			
	For distribution boards (PMD)		—		—		—		—		—		—		—			
Flush-mounted (FP)	With flat bar studs		○		○		○		○		○		○		○			
Draw-out type (DR)	—		▲		▲		▲		▲		▲		▲		▲			
TemPlug70 (PG)	○ —		○ —		○ —		○ —		○ —		○ —		○ —		○ —			
DIN rail mount	—		—		—		—		—		—		—		—			
Accessories (optional) Symbol																		
Internally mounted	Auxiliary switch		A X ●		●		●		●		●		●		●			
	Alarm switch		A L ●		●		●		●		●		●		●			
	Shunt trips		S H ●		●		●		●		●		●		●			
	Undervoltage trips		U V ●		●		●		●		●		●		●			
	Motor operator		M C ●		●		●		●		●		●		●			
Externally mounted	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	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes			
Overcurrent trip mechanism	Thermal-magnetic (adjustable)		Electronic		Thermal-magnetic (adjustable)		Thermal-magnetic (adjustable)		Thermal-magnetic (adjustable)		Thermal-magnetic (adjustable)		Thermal-magnetic (adjustable)		Thermal-magnetic (adjustable)			
Colour of cover	Grey Blue		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)		Yes (Red)			
Suitability for isolation	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes			
Reverse connection	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes			
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Notes:

● : Standard. This configuration used unless otherwise specified. ○ : Optional standard. Specify when ordering.

▲ : Semi-standard. ● : "yes" or "available". — : "no" or "not available".

① : DC is a special specification. When ordering, please specify DC.

⑨ : Mechanical interlocks cannot be applied to draw-out type (DR).

17 : See page 4-7 for the instantaneous trip value when using with DC.

50 : A safety trip function is provided. 51 : A safety lock function is provided.

78 : Plug-in type (PM), draw-out type (DR), and TemPlug70 (PG) are only 500A.

2

Ratings and Specifications

Moulded Case Circuit Breakers

2 Standard series

Frame size (A)	630		630		800		800		800		1000		1250		1600		
Type	S630-NE		PS630-NE		S800-CF		S800-NF		S800-NE		S1000-CE		S1250-NE		S1600-NE		
Number of poles	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	
■ Ratings																	
Rated current, A	Adjustable		Adjustable		700		700		Adjustable		Adjustable		Adjustable		Adjustable		
Calibrated at 40°C	$I_{CT}=630$		$I_n=630$		800		800		$I_{CT}=800$		$I_{CT}=1000$		$I_{CT}=1250$		$I_{CT}=1600$		
45°C	250	300	250	300	350	400	350	400	450	500	400	450	500	600	500	600	
	350	400	350	400	450	500	450	500	600	700	600	700	700	800	700	800	
	500	600	500	600	600	700	600	700	800	1000	800	1000	800	1000	1000	1200	
	600	630	600	630													
Rated insulation voltage [U_i] V	690		800		690		690		690		690		690		690		
Rated impulse withstand voltage [U_{imp}] kV	8		8		8		8		8		8		8		8		
Rated short time withstand current [I_{sw}] kA	10 (0.3sec.)		—		—		—		10 (0.3sec.)		—		15 (0.3sec.)		20 (0.3sec.)		
Utilization Category	B		A		A		A		B		A		B		B		
■ Rated breaking capacity, kA																	
JIS C 8201-2-1 Ann.1 Ann.2	AC	690V	20/20	12/12	10/10	20/20	20/20	20/20	20/20	25/19	25/20	25/20	25/20	45/34	45/34		
IEC 60947-2		500V	30/30	30/30	15/15	30/30	30/30	30/30	30/30	45/34	45/34	45/34	45/34	65/50	65/50		
I_{cu}/I_{cs} (sym)		440V	50/50	45/45	30/30	50/50	50/50	50/50	50/50	65/50	65/50	65/50	65/50	85/65	85/65		
		415V	50/50	50/50	36/36	50/50	50/50	50/50	50/50	65/50	70/50	70/50	70/50	85/65	85/65		
		380V	50/50	50/50	36/36	50/50	50/50	50/50	50/50	85/50	85/50	85/50	85/50	100/75	100/75		
		240V	85/85	85/85	50/50	85/85	85/85	85/85	85/85	100/75	100/75	100/75	100/75	125/94	125/94		
	① DC	250V	—	—	50/50	50/50	50/50	50/50	—	—	—	—	—	—	—		
		125V	—	—	50/50	50/50	50/50	—	—	—	—	—	—	—	—		
NK	AC	690V	20/20	—	10/10	20/20	20/20	20/20	—	—	—	—	25/20	—	—		
I_{cu}/I_{cs} (sym)		450V	50/50	—	30/30	50/50	50/50	50/50	—	—	—	—	65/50	—	—		
		240V	85/85	—	50/50	85/85	85/85	85/85	—	—	—	—	100/75	—	—		
	DC	250V	—	—	—	—	—	—	—	—	—	—	—	—	—		
■ External dimensions, mm																	
		a	210	280	140	185	210	280	210	280	210	280	210	280	210	280	
		b	273	260	273	273	273	273	273	273	273	273	370	370	370		
		c	103	103	103	103	103	103	103	103	103	103	120	140	140		
		d	145	151	145	145	145	145	145	145	145	145	171	191	191		
Weight (● marked standard type) kg			8.7	11.9	6.0	8.0	8.5	11.5	8.5	11.5	9.1	12.3	11.0	14.8	19.8	25.0	
■ Connections and Mountings																	
Front-connected (FC)	Terminal screws	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	With extension bars	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	
Rear-connected (RC)	Flat bar studs	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	
Plug-in (PM) For switchboards	High-performance (PMB)	○ ⑤①	—	○ ⑤①	○ ⑤①	○ ⑤①	○ ⑤①	○ ⑤①	○ ⑤①	○	○	○	○	○	○	○	
	Standard (PMC)	○	—	○	—	○	—	○	—	○	—	○	—	○	—	—	
	For distribution boards (PMD)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Flush-mounted (FP)	With flat bar studs	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Draw-out type (DR)		▲	—	▲	▲	▲	▲	▲	▲	—	—	—	▲	—	—	○	
TempPlug70 (PG)		○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
DIN rail mount																	
■ Accessories (optional) Symbol																	
Internally mounted	Auxiliary switch	A X	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Alarm switch	A L	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Shunt trips	S H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Undervoltage trips	U V	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Motor operator	M C	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Externally mounted	External operating handle	Breaker-mounted H B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Door-mounted (variable depth)	H P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Externally mounted	Toggle extension	H A	●	●	●	●	●	●	●	●	●	●	●	● ⑳	● ⑳	● ⑳	
	Mechanical interlock	Slide type	M S	●	—	—	—	—	—	—	—	—	—	—	—	—	—
		Rear-connected type	M B	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	⑨	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		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Overcurrent trip mechanism		Electronic 16	Electronic 16	Thermal-magnetic (adjustable)	Thermal-magnetic (adjustable)	Electronic 16	Electronic 16	Electronic 16	Electronic 16	Electronic 16	Electronic 16	Electronic 16	Electronic 16	Electronic 16	Electronic 16	Electronic 16	
Colour of cover		Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue	Grey Blue	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)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	
Suitability for isolation		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Reverse connection		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
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Notes:

- : Standard. This configuration used unless otherwise specified. ○ : Optional standard. Specify when ordering.
- ▲ : Semi-standard. ● : "yes" or "available". — : "no" or "not available".
- ① : DC is a special specification. When ordering, please specify DC.
- ⑨ : Mechanical interlocks cannot be applied to draw-out type (DR). 16 : Optional preferential alarm or ground fault trip function available on request.
- ㉔ : One is supplied with every five breakers. Please specify if more are required.
- ⑤① : A safety lock function is provided.