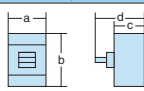


# 2

## Ratings and Specifications

### Moulded Case Circuit Breakers

#### 1 Economical series

Frame size (A)	30	50	60	100	125	225	250	400
Type	<b>PE30-NF</b>	<b>PE50-NF</b>	<b>PE60-NF</b>	<b>PE125-NF</b>		<b>E250-SF</b>		<b>E400-NF</b>
Number of poles	2   3	2   3	2   3	2   3	2   3	2*   3	2*   3	3
<b>■ Ratings</b>								
Rated current, A	3	15	60	60	125	125	250	250
Calibrated at 40°C	5	20		75		150		300
45°C	10	30		100		175		350
	15	40				200		400
* 2 poles breakers use the terminals of both ends of 3 poles breakers.	20	50				225		
	30							
Rated insulation voltage [ $U_i$ ] V	690	690	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 [ $I_{cw}$ ] kA	—	—	—	—	—	—	—	—
Utilization Category	A	A	A	A	A	A	A	A
<b>■ Rated breaking capacity, kA</b>								
JIS C 8201-2-1 Ann.1 Ann.2 AC	690V	—	—	—	—	—	—	—
IEC 60947-2	500V	—	—	—	—	—	—	—
$I_{cu}/I_{cs}(sym)$	440V	1.5/1.5	2.5/2.5	2.5/2.5	10/5	10/5	15/12	15/12
	415V	1.5/1.5	2.5/2.5	2.5/2.5	10/5	10/5	15/12	15/12
① DC	380V	1.5/1.5	5/5	5/5	10/5	10/5	25/19	25/19
	240V	2.5/2.5	7.5/7.5	7.5/7.5	30/15	30/15	35/27	35/27
NK AC	250V	—	2.5/2.5 (17) (27)	2.5/2.5 (17) (27)	7.5/4 (17) (27)	7.5/4 (17) (27)	15/12 (89)	15/12 (89)
	125V	—	2.5/2.5 (17) (27)	2.5/2.5 (17) (27)	7.5/4 (17) (27)	7.5/4 (17) (27)	25/19 (89)	25/19 (89)
$I_{cu}/I_{cs}(sym)$	690V	—	—	—	—	—	—	—
	450V	1.5/1.5 (83)	2.5/2.5 (83)	2.5/2.5 (83)	10/5 (83)	10/5 (83)	15/12	15/12
① DC	240V	2.5/2.5 (83)	7.5/7.5 (83)	7.5/7.5 (83)	30/15 (83)	30/15 (83)	35/27	35/27
	250V	—	2.5/2.5 (17) (27) (83)	2.5/2.5 (17) (27) (83)	7.5/4 (17) (27) (83)	7.5/4 (17) (27) (83)	—	—
<b>■ External dimensions, mm</b>								
	a	50   75	50   75	50   75	50   75	50   75	105   105	105   105
	b	130	130	130	130	130	165	165
	c	68	68	68	68	68	68	68
	d	90	90	90	90	90	95	95
Weight (● marked standard type) kg	0.5   0.7	0.5   0.7	0.6   0.8	0.6   0.8	0.6   0.8	1.5   1.5	1.5   1.5	4.2
<b>■ Connections and Mountings</b>								
Front-connected (FC)	Terminal screws	● 45	● 45	●	●	●	●	●
	With extension bars	○ 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 (PMD)	(PMC)	○ 85	○ 85	○ 85	○ 85	○ 85	—	—
	(PMD)	○ 87	○ 87	○ 87	○ 87	○ 87	—	—
Flush-mounted (FP)	With flat bar studs	○	○	○	○	○	○	○
Draw-out type (DR)		—	—	—	—	—	—	—
TempPlug70 (PG)		—	—	—	—	—	○	○
DIN rail mount		—   ○ (1)	—   ○ (1)	—   ○ (1)	—   ○ (1)	—   ○ (1)	—   ○	—   ○
<b>■ Accessories (optional)</b>								
Internally mounted	Auxiliary switch	A X	●	●	●	●	●	●
	Alarm switch	A L	●	●	●	●	●	●
Externally mounted	Shunt trips	S H	●	●	●	●	●	●
	Undervoltage trips	U V	●	●	●	●	●	●
Motor operator	M C	—	—	—	—	—	—	—
External operating handle	Breaker-mounted	H B	—   ●	—   ●	—   ●	—   ●	—   ●	—   ●
	Door-mounted (variable depth)	H P	—   ●	—   ●	—   ●	—   ●	—   ●	—   ●
Mechanical interlock	Toggle extension	H A	—	—	—	—	—	—
	Slide type	M S	—   ●	—   ●	—   ●	—   ●	—   ●	—   ●
Toggle holder	Rear-connected type	M B	—	—	—	—	—	—
	Link type	M L	—	—	—	—	—	—
Toggle lock	Wire type	M W	—	—	—	—	—	—
	H H	H H	●	●	●	●	●	●
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 (17)	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic
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 (72)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Page of characteristics and outline dimensions	7-4	7-4	7-8	7-8	7-8	7-28	7-28	7-42

#### Notes:

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

● : "yes" or "available". — : "no" or "not available".

① : DC is a special specification. When ordering, please specify DC. (17) : Hydraulic-magnetic type for below 10A rating.

(11) : Please order the DIN rail adapter separately. See page 6-156. (17) : See page 4-7 for the instantaneous trip value when using with DC.

(27) : Applicable to only 2 poles breakers. (45) : A wire clamping terminal is provided. (53) : For the extension bars, please place the order separately in parts.

(72) : There are some limitations. See page 5-23 for details. (83) : This is the planned application value. (85) : If you do not require internal accessories, please specify PMC.

(87) : If you require internal accessories, please specify PMD. (89) : DC is a 2-pole product that uses both ends of a 3-pole circuit breaker.