Moulded Case Circuit Breakers for DC750V-1000V

Frame size (A)		160	160	160	160		
Туре		PVE160-SDL	PVS160-SDL	PVS160-SDH	PVS160-GDH		
Number of poles		3	3	4	4	 	
Ratings							
Rated current, A		25 (16-25)	50 (32-50)	50 (32-50)	50 (32-50)	 ·	
Calibrated at 45°C	3	32 (20-32)	63 (40-63)	63 (40-63)	63 (40-63)		
	4	10 (25-40)	100 (63-100)	100 (63-100)	100 (63-100)		
		63 (40-63)	125 (80-125)	125 (80-125)	125 (80-125)		
		80 (50-80)	160 (100-160)	160 (100-160)	160 (100-160)		
		100 (63-100)	(,	(111 (111)	()		
		125 (80-125)					
		160 (100-160)					
Rated insulation voltage (U _i) V		300	800	1000	1000		
Rated impulse withstand voltage (U_{imp}) kV		3	8	8	8	 	
■ Rated breaking capacity, kA			<u> </u>	<u> </u>	0	 	
JIS C 8201-2-1 Ann.1 Ann.2 DC	1000V -			5/5	10/5	 	
IEC 60947-2 I_{CI}/I_{CS} ①②		3/3	10/5	5/5	10/3	 	
■ External dimensions, mm	730 V	0/3	10/3			 	
External differisions, film		75	105	140	140	 	
-a - d-c-		130+50×2 ⑦	165+55×2 ⑦	165+55×2 ⑦	165+55×2 ⑦	 	
		58	68	68	68	 	
		95	95	95	95	 	
Weight (● marked standard type) kg		0.8	1.5	1.9	1.9	 	
■ Connections and Mountings							
Front-connected (FC) Terminal screws		•	<u>•</u>	<u>•</u>	<u>•</u>	 	
With extension bars		(BAR)	O(BAR)	O(BAR)	O(BAR)	 	
Rear-connected (RC) Flat bar studs		<u> </u>	0	<u>O</u>	0	 	
Plug-in (PM) For switchboards						 	
For distribution boards						 	
Draw-out type (DR)						 	
TemPlug70 (PG)							
TemPlug45B (PG4)						 	
DIN rail mount						 	
Clip-in chassis mount						 	
Accessories (optional)	Symbol					 	
Auxiliary switch	AX		•		•		
Alarm switch Shunt trips	AL	•	•	•	•		
<u>불</u> Shunt trips	SH	•	•	•	•		
Undervoltage trips	UV	•	•		•		
Motor operator	MC -		•	•	•	 	
External operating Breaker-mounted	нв (•	•	•	•	 	
handle Door-mounted (variable depth)) HP (•				
Toggle extension	HA -	_	_	_	_		
Mechanical interlock Slide type	MS -	_	_	_	_		
Rear-connected type	MB -	_	_	_	_		
Link type	ML -		_		_	 	
Link type Wire type Toggle holder	MW -		_		_		
× Toggle holder	нн (•	•	•	•		
Toggle lock	HL (•	•	•	•		
Terminal cover For front-connected	C F	● ⑧	• 8	● ⑧	• (8)	 	
For rear-connected and plug-		8	• 8	● 8	• 8	 	
Interpole barrier	B A				=	 	
Terminal block for lead		•	•		•	 	
Door flange			•		•	 	
■Standard specifications						 	
Overcurrent trip mechanism		Adj. thermal,	Adj. thermal,	Adj. thermal,	Adj. thermal,	 	
5.5.5arront trip moontailion		ixed magnetic	fixed magnetic	fixed magnetic	fixed magnetic		
Colour of cover		Grey	Grey	Grey	Grey	 	
Trip button (Colour)		Yes (Red)	Yes (Red)	Yes (Red)	Yes (Red)	 	
Handle position indication (ON: Red, OFF: Green						 	
		Yes	Yes	Yes	Yes	 	
Suitability for isolation		Yes	Yes	Yes	Yes	 	
Reverse connection		Yes	Yes	Yes	Yes	 	
Notes:							

Notes:

- Standard. This configuration used unless otherwise specified. ○: Optional standard. Specify when ordering. ●: "yes" or "available". —: "no" or "not available".
- ① : Connect 3poles or 4poles in series.
- 2 : The time constant (L/R) of the circuit should be, less than 2.0ms nearby rated current

less than 5ms for short circuit \leq 10KA

- less than 10ms for short circuit \leq 20KA less than 15ms for short circuit > 20KA
- ®: Two terminal covers are supplied as standard. Be sure to install the terminal covers on Line side (ON side) and Load side (OFF side).
- ①: + means the dimension of the terminal cover. See outline dimensions for details.

Moulded Case Circuit Breakers for DC750V-1000V

Frame size (A)	250	250	250		
Туре	PVS250-SDL	PVS250-SDH	PVS250-GDH		
Number of poles	3	4	4		
·			4	 	
Ratings				 	
Rated current, A	100 (63-100)	100 (63-100)	100 (63-100)		
Calibrated at 45°C	125 (80-125)	125 (80-125)	125 (80-125)		
	160 (100-160)	160 (100-160)	160 (100-160)		
	200 (125-200)	200 (125-200)	200 (125-200)		
	250 (160-250)	250 (160-250)	250 (160-250)		
Rated insulation voltage (U _i) V	800	1000	1000	 	
				 	
Rated impulse withstand voltage (U_{imp}) kV	8	8	8		
■Rated breaking capacity, kA				 	
JIS C 8201-2-1 Ann.1 Ann.2 DC 100	00V —	5/5	10/5		
IEC 60947-2 I _{cu} /I _{cs} ①②	50V 10/5				
■External dimensions, mm		-		 	
==x.omar americiono, min	a 105	140	140	 	
<u>d</u> − −				 	
	b 165+55×2 ⑦	165+55×2 ⑦	165+55×2 ⑦	 	
	<u>c</u> 68	68	68	 	
	d 95	95	95		
Weight (● marked standard type) kg	1.5	1.9	1.9		
■ Connections and Mountings				 	
	•			 	
Front-connected (FC) Terminal screws		<u>•</u>	<u>•</u>		
With extension bars	○(BAR)	○(BAR)	O(BAR)	 	
Rear-connected (RC) Flat bar studs	0	0	0		
Plug-in (PM) For switchboards				 	
For distribution boards					
Draw-out type (DR)		- =		 	
TemPlug70 (PG)					
TemPlug45B (PG4)				 	
DIN rail mount	_	_	_		
Clip-in chassis mount					
■Accessories (optional) Sym	hol				
	XX				
	<u>L</u>				
풀 Shunt trips S	H •				
Undervoltage trips	IV •	•	•		
	1C •	•	•		
	IB •	_	•		
. •		-		 	
	<u> </u>		•	 	
Toggle extension	<u> </u>			 	
Mechanical interlock Slide type N	1S —	_	_		
	1B —	_			
	1L —			 	
. <u>o</u> <u>Link type</u> N					
O Million Alice	_			 	
Wire type N	1W —				
Toggle holder		<u> </u>			
Toggle lock	1W —	•	•		
Toggle lock		• • • • 8	• • • • 8		
Toggle lock For front-connected C	1 H				
Toggle lock Terminal cover For front-connected For rear-connected and plug-in C	MW	• • • • • • • • • • • • • • • • • • •	• 8 • 8 • 8		
Toggle lock Terminal cover For front-connected Connected and plug-in Connected Barrier Ending Connected C	M				
Toggle lock Terminal cover For front-connected CFor rear-connected and plug-in CInterpole barrier Forminal block for lead			• 8 - •		
Toggle lock Terminal cover For front-connected Content For rear-connected and plug-in Content Forminal block for lead Door flange	M				
Toggle lock Terminal cover For front-connected CFor rear-connected and plug-in CInterpole barrier Forminal block for lead	MW		• 8 - •		
Toggle lock Terminal cover For front-connected Content For rear-connected and plug-in Content Forminal block for lead Door flange	MW		• 8 - •		
Toggle lock Terminal cover For front-connected Content of the Property of the		● ⑧ Adj. thermal,	● ⑧		
Toggle lock For rear-connected For rear-connected and plug-in (Interpole barrier Terminal block for lead Door flange Standard specifications Overcurrent trip mechanism	W H H H H H H H H H	Adj. thermal,	Adj. thermal,		
Toggle lock For rear-connected For rear-connected and plug-in C Interpole barrier Terminal block for lead Door flange Standard specifications Overcurrent trip mechanism Colour of cover	Adj. thermal, fixed magnetic Grey	Adj. thermal, fixed magnetic Grey	Adj. thermal, fixed magnetic		
Toggle lock Terminal cover For front-connected For rear-connected and plug-in Connected	Adj. thermal, fixed magnetic Grey Yes (Red)	Adj. thermal, fixed magnetic Grey	Adj. thermal, fixed magnetic Grey		
Toggle lock For rear-connected For rear-connected and plug-in C Interpole barrier Terminal block for lead Door flange Standard specifications Overcurrent trip mechanism Colour of cover	Adj. thermal, fixed magnetic Grey	Adj. thermal, fixed magnetic Grey	Adj. thermal, fixed magnetic		
Toggle lock Terminal cover For front-connected For rear-connected and plug-in Connected	Adj. thermal, fixed magnetic Grey Yes (Red)	Adj. thermal, fixed magnetic Grey	Adj. thermal, fixed magnetic Grey		
Toggle lock For rear-connected For rear-connected and plug-in (Interpole barrier Ferminal block for lead Door flange Standard specifications Overcurrent trip mechanism Colour of cover Trip button (Colour) Handle position indication (ON: Red, OFF: Green) Suitability for isolation	Adj. thermal, fixed magnetic Grey Yes (Red) Yes Yes	Adj. thermal, fixed magnetic Grey Yes (Red) Yes	Adj. thermal, fixed magnetic Grey Yes (Red) Yes		
Toggle lock Terminal cover For front-connected For rear-connected and plug-in Content of the connected and plug-in Content	Adj. thermal, fixed magnetic Grey Yes (Red) Yes	Adj. thermal, fixed magnetic Grey Yes (Red)	Adj. thermal, fixed magnetic Grey Yes (Red)		

- e: Standard. This configuration used unless otherwise specified. ○: Optional standard. Specify when ordering. ●: "yes" or "available". —: "no" or "not available".
- ① : Connect 3poles or 4poles in series.
- 2 : The time constant (L/R) of the circuit should be, less than 2.0ms nearby rated current less than 5ms for short circuit \leq 10KA
 - less than 10ms for short circuit \leq 20KA less than 15ms for short circuit > 20KA
- (a): Two terminal covers are supplied as standard. Be sure to install the terminal covers on Line side (ON side) and Load side (OFF side).

 (b): + means the dimension of the terminal cover. See outline dimensions for details.

Moulded Case Circuit Breakers for DC750V-1000V

Frame size (A)	400	400 PV\$400-NDL		800 PVS800-NDL		800	
Туре	PVS400-NDL					PVS800-NDH	
Number of poles	3	4	4	3	4	4	
Ratings							
Rated current, A	250 (160-250)	250 (160-250)	250 (160-250)	630 (400-630)	630 (400-630)	630 (400-630)	
Calibrated at 45°C	400 (250-400)	400 (250-400)	400 (250-400)	800 (500-800)	800 (500-800)	800 (500-800)	

Rated insulation voltage (U_i) V	800	1150	1150	800	1150	1150
Rated impulse withstand voltage (U_{imp}) kV	8	8	8	8	8	8
■Rated breaking capacity, kA						
JIS C 8201-2-1 Ann.1 Ann.2 DC 100	0V		10/5	. =		10/5
IEC 60947-2 I _{CU} /I _{CS} ①② 75	0V 10/5	10/10	. =	10/10	10/10	
■External dimensions, mm				,		·
├_a -	a 140	185	185	210	280	280
	b 260	260	260	273	273	273
	c 103	103	103	103	103	103
	d 145	145	145	145	145	145
Weight (marked standard type) kg	4.2	5.6	5.6	8.5	11.5	11.5
■ Connections and Mountings				,		
Front-connected (FC) Terminal screws	•	•	•			
With extension bars	○(BAR)	○(BAR)	○(BAR)	•	•	•
Rear-connected (RC) Flat bar studs	0	0	0	0	0	0
Plug-in (PM) For switchboards						
For distribution boards						
Draw-out type (DR)						
TemPlug70 (PG)	_ =					
TemPlug45B (PG4)						
DIN rail mount						
Clip-in chassis mount	_ =					. <u></u>
Accessories (optional) Symb						·
	X	•	•	•	•	•
<u> </u>	L	•	•	•	•	•
	Н	•	•		•	
- ·	V	•	•			
Motor operator M		•	•	•	•	•
. •	В •	•	•	•	•	•
, , , ,	P •	•	•	•	•	•
	Α •	•	•	•	•	•
Mechanical interlock Slide type M						
	В —					
Link type M	L —					. <u>- </u>
	w —					
- 33	<u>H</u>		•	•	•	•
	<u> </u>	<u>-</u>				
	F •	•	•	•	•	•
For rear-connected and plug-in C		•	•	•	•	•
	A • 16	• 9	• 9	● 16	• 10	• 10
	F •	•	. •	•	•	•
	F —					. =
■Standard specifications						
Overcurrent trip mechanism	Adj. thermal,					
	fixed magnetic					
Colour of cover	Grey	Grey	Grey	Grey	Grey	Grey
Trip button (Colour)	Yes (Red)					
Handle position indication (ON: Red, OFF: Green)	Yes	Yes	Yes	Yes	Yes	Yes
Suitability for isolation	Yes	Yes	Yes	Yes	Yes	Yes
Reverse connection	Yes	Yes	Yes	Yes	Yes	Yes

Notes:

- Standard. This configuration used unless otherwise specified. ○: Optional standard. Specify when ordering. ●: "yes" or "available". —: "no" or "not available".
- ① : Connect 3poles or 4poles in series.
- 2 : The time constant (L/R) of the circuit should be, less than 2.0ms nearby rated current

less than 5ms for short circuit \leq 10KA

less than 10ms for short circuit \leq 20KA less than 15ms for short circuit > 20KA

- ⑨: For front connection, both line and load side interpole barriers are supplied as standard.
 - For rear connection, line side interpole barriers are supplied as standard.
- 10 : For front connection, 5pcs line side interpole barriers and 3pcs load side interpole barriers are supplied as standard. For rear connection, 5pcs line side interpole barriers are supplied as standard.
- (6): For front connection and rear connection, 2pcs line side interpole barriers are supplied as standard.