

# SE030C, SE030D, SE030F, SE042D, SE042F, SE042I 1200V DC Isolator 32A



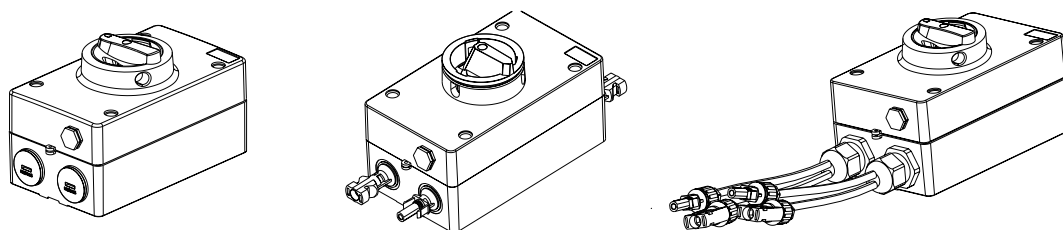
## Technical Specifications

Type	SE030C, SE030D, SE030F, SE042F, SE042D, SE042I, SE030N, SE030M
Function	Isolator, Control
Standard	IEC60947-3, AS60947.3
Utilization category	DC-PV2 / DC-21B
Pole	4P
Rated frequency	DC
Rated operational voltage ( $U_e$ )	600V, 800V, 1000V, 1200V
Rated operational current ( $I_e$ )	See the next page
Rated insulation voltage ( $U_i$ )	1200V
Conventional free air thermal current ( $I_{th}$ )	II
Conventional enclosed thermal current ( $I_{th}$ )	Same as $I_e$
Rated short-time withstand current ( $I_{cw}$ )	1kA, 1s (4, 4S, 4B); 1.7kA, 1s (2H)
Rated short-time making capacity ( $I_{cm}$ )	1.7kA (4, 4S, 4B); 3kA (2H)
Rated conditional short-circuit current ( $I_{cn}$ )	3kA
Rated impulsive withstand voltage ( $U_{imp}$ )	8.0kV
Overvoltage category	II
Suitability for isolation	Yes
Polarity	No polarity, "+" and "-" polarities could be interchanged.
Mechanical	15000
Electrical	1000
Ingress Protection Enclosure	IP66
Ingress Protection Switch body	IP20
Storage Temperature	-5°C - +85°C
Mounting Type	Isolator can be can be mounted in any plane
Pollution degree	3
Suitable environment	Outdoor / Indoor

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## Breathing Valve



PGK DC Isolator positioning of condensation breathing/pressure equalization valve.

Identification	Rating Data		
	$I_{th}$ rated thermal current, unenclosed, at 40°C shade ambient air temperature	$I_{the}$ rated thermal current, indoors, at 40°C shade ambient air temperature, in a specific dedicated enclosure	$I_{the}$ rated thermal current outdoors at 40°C shade ambient air temperature without solar effects in a specific dedicated enclosure rated IP66NW
Switch, unenclosed - catalogue number (with DC-PV2 rating)	SE030N, SE030M		
Specific dedicated individual enclosure - catalogue number (with minimum IP56NW rating)	SE030C IP66NW		
Assembly of switch and specific dedicated individual enclosure - catalogue number	SE030C, SE030D, SE030F, SE042F, SE042D, SE042I		
$I_{th}$ rated thermal current, unenclosed, at 40°C shade ambient air temperature	32 amps		
$I_{the}$ rated thermal current, indoors, at 40°C shade ambient air temperature, in a specific dedicated enclosure	32 amps		
$I_{the}$ rated thermal current outdoors at 40°C shade ambient air temperature without solar effects in a specific dedicated enclosure rated IP66NW	32 amps		
$I_{the}$ solar current value outdoors at 60°C shade ambient air temperature (see D.8.3.11, table D3 ), with solar effects in a specific dedicated enclosure rated IP66NW	29 amps		
	$U_e$ rated operational voltage DC volts	$I_e$ : DCPV2 rated operational current Amps	$I_{(make)}$ and $I_{c(break)}$ DC-PV2 4 x $I_e$ Amps
<b>2 Pole</b>  ( <u>1</u> / <u>2</u> / — )	≤600	32	128
	800	13	52
	1000	9	36
	1200	9	36
<b>4 Pole</b>  ( <u>1</u> / <u>2</u> / <u>3</u> / <u>4</u> / — )	≤600	32	128
	800	32	128
	1000	32	128
	1200	32	128

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## Wiring Diagram for Rated operational voltage $U_e$ (V) & Rated operational current $I_e$ (A)

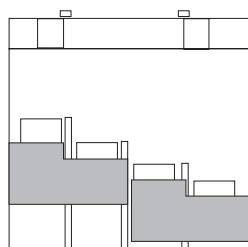
Contacts Wiring Diagram	600V	800V	1000V	1200V	Poles in Series	Number of Strings	Type Number	Weight kg/PCS
	32A	13A	9A	9A	2	2	4	0.70
	40A	/	/	/	2	1	2H	0.70
	32A	32A	32A	32A	2	1	4B	0.70
	32A	32A	32A	32A	4	1	4S	0.70

## Switching Configurations

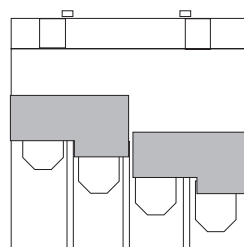
Type	4-Pole	2-Pole 4 Paralleled Poles	4-Pole with Input and Output Bottom	4-Pole with Input and Output Bottom
/	4	2H	4B	4S
Contacts Wiring Graph				
Switching Example				

## Bridging links installation

Installed Incorrectly





Installed Correctly



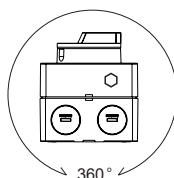
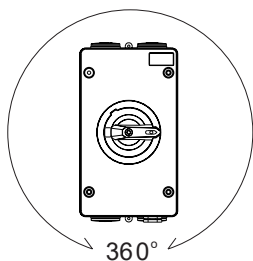
**WARNING:** Verify that all connections (including bridging link connections) are suitable for the rated current. Ensure only conductive parts are clamped and tightened to the manufacturers required torque before energization.

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Terminals/Connection	
Type	SE030C, SE030D, SE030F, SE042D, SE042F, SE042I, SE030N, SE030M
Number of poles	4-pole
Terminal designation, main circuit	1; 3; 5; 2; 4; 6; 7; 8
Type of terminal, main circuit	Screw terminal
Rated cross sectional area, main circuit	4.0-16mm <sup>2</sup>
Type of conductor	 4-16mm <sup>2</sup> (Rigid: Solid or Stranded)  4-10mm <sup>2</sup> (Flexible)
Number of conductors per terminal	1
Required preparation of the conductor	Yes
Stripping length (mm), main circuit	8mm
Tightening torque (M4), main circuit	Min: 1.2Nm
	Max: 1.8Nm

## IP Rating



 IP66NW

PGK DC Isolator can be mounted in any plane

Note: The isolator must be protected from direct exposure to sun and rain as per the CEC guidelines

## Dimensions (mm)

