

SE030A, SE030B, SE030E, SE042B, SE042E, SE042H 1000V DC Isolator 32A



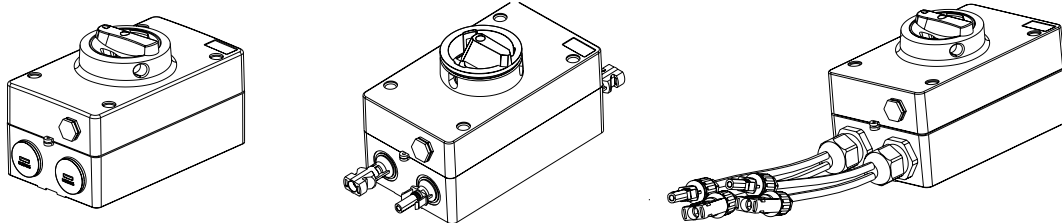
Technical Specifications

Type	SE030A, SE030B, SE030E, SE042E, SE042B, SE042H
Function	Isolator, Control
Standard	IEC60947-3, AS60947.3
Utilization category	DC-PV2 / DC-21B
Pole	4P
Rated frequency	DC
Rated operational voltage (U_e)	500V, 600V, 800V, 1000V
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		
Switch, unenclosed - catalogue number (with DC-PV2 rating)	SE030L, SE030K		
Specific dedicated individual enclosure - catalogue number (with minimum IP56NW rating)	SE030A IP66NW		
Assembly of switch and specific dedicated individual enclosure - catalogue number	SE030A, SE030B, SE030E, SE042E, SE042B, SE042H		
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
2 Pole (<u>1</u> / <u>2</u> / —)	≤500	32	128
	600	13	52
	800	9	36
	1000	9	36
4 Pole (<u>1</u> / <u>2</u> / <u>3</u> / <u>4</u> / —)	≤500	32	128
	600	32	128
	800	32	128
	1000	32	128

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

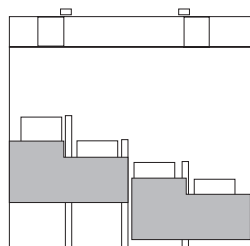
Contacts Wiring Diagram	500V	600V	800V	1000V	Poles in Series	Number of Strings	Type Number	Weight kg/PCS
	32A	13A	9A	9A	2	2	4	0.70
	40A	/	/	/	2	1	2H	0.70
	32A	32A	32A	32A	2	1	4B	0.70
	32A	32A	32A	32A	4	1	4S	0.70

Switching Configurations

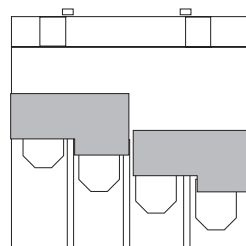
Type	4-Pole	2-Pole 4 Paralleled Poles	4-Pole with Input and Output Bottom	4-Pole with Input and Output Bottom
/	4	2H	4B	4S
Contacts Wiring Graph				
Switching Example				

Bridging links installation

Installed Incorrectly





Installed Correctly



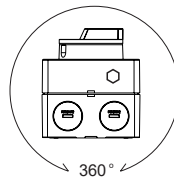
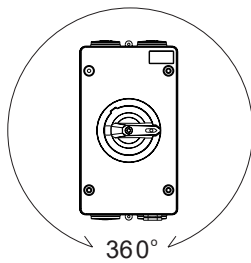
WARNING: Verify that all connections (including bridging link connections) are suitable for the rated current. Ensure only conductive parts are clamped and tightened to the manufacturers required torque before energization.

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Terminals/Connection	
Type	SE030A, SE030B, SE030E, SE042E, SE042B, SE042H
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 ²
Type of conductor	 4-16mm ² (Rigid: Solid or Stranded)  4-10mm ² (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)

