

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



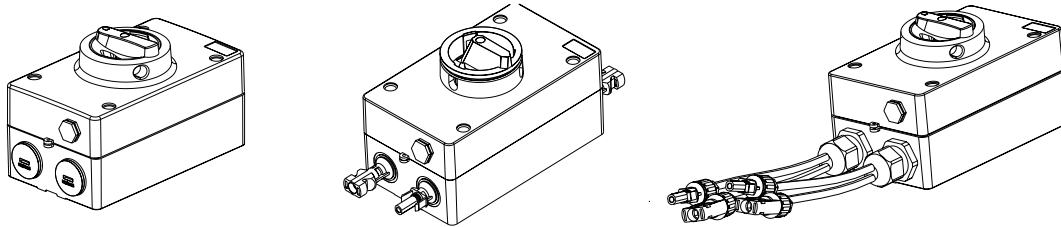
Technical Specifications

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
Rated short-time making capacity (I_{cm})	1.7kA
Rated conditional short-circuit current (I_{cn})	3kA
Rated impuled 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)	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
2 Pole <u> 1 </u> / <u> 2 </u> / <u> </u>	≤600	32	128
	800	13	52
	1000	9	36
	1200	9	36
4 Pole <u> 1 </u> / <u> 2 </u> / <u> 3 </u> / <u> 4 </u> / <u> </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)

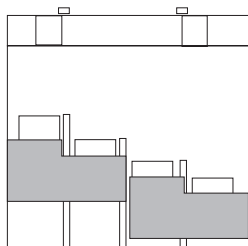
Contacts Wiring Diagram	300V	600V	800V	1000V	1200V	Poles in Series	Number of Strings	Type Number
	32A	32A	13A	9A	9A	2	2	4
	32A	32A	32A	32A	32A	4	1	4B

Switching Configurations

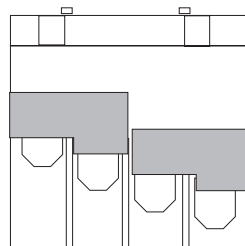
Type	4-Pole	4-Pole with Input and Output Bottom
/	4	4B
Contacts Wiring Graph		
Switching Example		

Bridging links installation

Installed Incorrectly





Installed Correctly



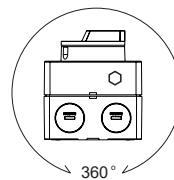
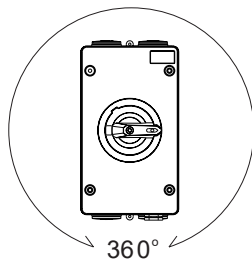
WARNING: Verify that all connections (including bridging link connections) are suitable for the rated current. Ensure only conductive parts are clamped and tightened to the manufacturers required torque before energization.

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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 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

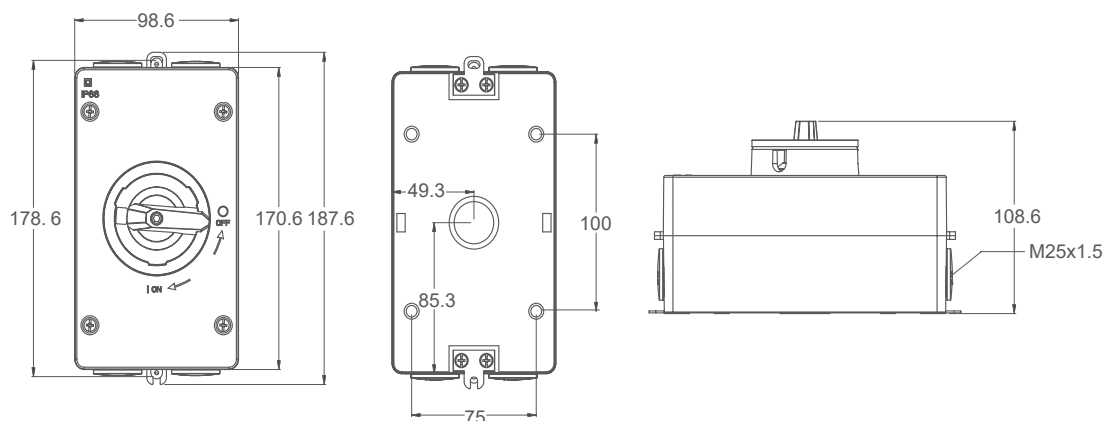


 IP66NW

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)



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Pole Rating: Data from AS60947-3: 2018

Main Contacts		Type		Appendix B5
Rated Thermal current I_{the}		A	32	Making & Breaking 5X operations
Rated Insulator Voltage U_i		V	1000	
Distance of contacts (per pole)		mm	8	
Rated Operational Current I_e (DC-PV2)				
1 pole 1	300V	A	25	100
	400V	A	10	40
	500V	A	8	32
	600V	A	8	32
	800V	A	3	12
	1000V	A	2	8
4 pole 2 pole in series 4	500V	A	32	128
	600V	A	32	128
	700V	A	13	52
	800V	A	13	52
	900V	A	9	36
	1000V	A	9	36
	1200V	A	9	36
2 pole 4 pole in series 4B	500V	A	32	128
	600V	A	32	128
	800V	A	32	128
	800V	A	32	128
	900V	A	32	32
	1000V	A	32	32
	1200V	A	32	32

Please Note:

Please consult with your Electrician/Engineer to ensure suitability for the intended application and installation.

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