



MODEL SV48 E



-  Premium quality
-  Power output range 210 - 225 Wp
-  100% EL testing
-  Mechanical load up to 5400 Pa
-  Low weight
-  Module efficiency up to 17,03 %
-  Positive power tolerance -0/+4,9 W
-  Made in Europe
-  IEC EN 61215 certified
-  IEC EN 61730 - 1 certified
-  IEC EN 61730 - 2 certified
-  PID test passed

Warranty:

- 20** years manufacturing defects
- 15** years limited, 90% output power
- 30** years limited, 80% output power



Certificate Number B A B T 0715

Electrical parameters at Standard Test Conditions (STC)					
MODEL		SV48-210 E	SV48-215 E	SV48-220 E	SV48-225 E
Peak power P_{MPP}	[W]	210	215	220	225
Peak power tolerance	[W]	-0/+4,9			
Short circuit current I_{SC}	[A]	9,14	9,28	9,48	9,68
Open circuit voltage V_{OC}	[V]	30,4	30,5	30,7	30,8
Rated current I_{MPP}	[A]	8,50	8,62	8,84	9,06
Rated voltage V_{MPP}	[V]	24,8	25,0	24,9	25,0
Current and voltage tolerance	[%]	± 3			
Module efficiency	[%]	15,89	16,27	16,65	17,03

STC: 1000W/m² irradiance, 25 °C cell temperature, AM1, 5 g spectrum according to EN 60904-3
Average relative efficiency reduction of 3,4 % at 200 W/m² according to EN 60904-1

Electrical parameters at Nominal Operating Cell Temperature (NOCT)					
MODEL		SV48-210 E	SV48-215 E	SV48-220 E	SV48-225 E
Peak power P_{MPP}	[W]	152,82	156,19	159,55	164,27
Peak power tolerance	[W]	-0/+4,9			
Short circuit current I_{SC}	[A]	7,34	7,45	7,62	7,78
Open circuit voltage V_{OC}	[V]	28,1	28,2	28,3	28,4
Rated current I_{MPP}	[A]	6,73	6,82	6,99	7,17
Rated voltage V_{MPP}	[V]	22,7	22,9	22,8	22,9

NOCT: module operating parameters at 800 W/m² irradiance, 20 °C ambient temperature, 1 m/s wind speed

MECHANICAL DATA	
Dimensions (H x W x D)	[mm] 1324 x 992 x 35
Weight	[kg] 15,0
Solar cells	48 cells, monocrystalline Si, 156 x 156 mm
Cells encapsulation	Ethylene vinyl acetate (EVA)
Front	Tempered solar glass, 3,2 mm
Back	Composite polyester Film
Frame	Anodized aluminium frame with twin-wall profile and drainage holes
Junction box	IP67 with 3 Bypass diodes,
Cable and connectors	Solar cable 4 mm ² , length 1000 mm, MC4 compatible connectors

NOTE: For extended models, SV48 EYYY, voltages and currents can vary where YYY is optional based on the chosen YYY variant (YYY = letter(s), F for black frame, B for silver frame and black backsheet, BC for full black module)

OPERATING CONDITIONS	
Temperature range	[°C] -40 to +85
Maximum system voltage	[V] 1000
Max. series fuse rating	15A
Limiting reverse current	15A
Maximum surface load capacity	5400 Pa (Snow load)
Resistance against hail	Maximum diameter of 25 mm with impact speed 23 m/s

THERMAL CHARACTERISTICS	
Temperature coefficient of P_{MPP}	[%/K] -0,42
Temperature coefficient of I_{SC}	[%/K] 0,05
Temperature coefficient of V_{OC}	[%/K] -0,33

