Schüco MPE Modules in the PS 09 Series

Technical Information for Performance Classes 220 - 235 W_a





Durable and Economical Polycrystalline Modules

Schüco MPE Modules in the PS 09 Series are known for their rugged design and outstanding performance, making them a popular choice for both commercial and residential installations.

The production process for Schüco polycrystalline cells is more energy efficient than that of some other photovoltaic technologies, helping the earth and the bottom line. Starting with high quality materials, these modules are manufactured to a stringent specification, resulting in a sturdy product with optimized yields.

Schüco modules are designed to withstand a wide variety of weather extremes and manufactured to a strict set of quality standards. Performance data is measured prior to the module leaving the factory and labeled both on the backsheet and the module packaging, for a more convenient installation experience.

Key Features

- High-efficiency polycrystalline cells provide advanced power output
- Comprehensive warranty ensures investment security and reliable system operation*
- Perfect for both commercial and residential applications
- Manufactured with high quality, robust materials
- Schüco racking systems are specially designed for Schüco modules, resulting in optimized PV package solutions
- In accordance with the warranty conditions of Schüco USA L.P.





Schüco MPE Modules in the PS 09 Series

Technical Data

Photovotlaic modules					
Product name	MPE 220	MPE 225	MPE 230	MPE 235	
	PS 09	PS 09	PS 09	PS 09	
Schüco article number	232 537	232 538	232 539	232 540	
Cell type		poly			
Number of cells / cell arrangement		60 / 6 × 10			
Cell dimension		6" (156 mm)			
Module efficiency	13.4 %	13.7 %	14.0 %	14.3 %	

Electrial specifications					
STC rated output (P _{mpp})	220	225	230	235	W _o
PTC rated output (P _{mpp})	199.5	204.1	208.0	213.4	VV _p
Output tolerance STC (Δ P _{mpp})		+5	/ -0		%
Warranted power output STC (P _{mpp min})	220	225	230	235	W _p
Rated voltage (V _{mpp})*	29.7	29.76	29.81	29.85	V
Rated current (I _{mpp})*	7.38	7.55	7.69	7.84	Α
Open circuit voltage (Voc)*	36.77	36.88	37.00	37.11	V
Short circuit current (I _{sc})*	8.12	8.27	8.43	8.58	Α

Electrical specification parameters		
Temperature coefficient α (P _{mop}) 1)	-0.46	
Temperature coefficient β (I _{sc}) 1)	+0.045	
Temperature coefficient χ (V_{oc}) 1)	-0.35	% / °C
Temperature coefficient δ (I _{mon}) 1)	+0.045	
Temperature coefficient ε (V_{moo}) 1)	-0.35	
Normal Operating Cell Temperature (NOCT) 2)	109.4 ± 3.6	°F
	43 ± 2	°C
Maximum system voltage USA NEC	600	V
Max. series fuse rating	15	Α

Mechanical specification	
Frame technology	Aluminum frame, silver
Compound	Glass / EVA / backsheet
Weight (module only)	44.1 lbs (20 kg)
Junction box IP rating	IP 65
Cable length / diameter	$39.37 \text{ in } \pm 1.97 \text{ in}$ $1000 \text{ mm } \pm 50 \text{ mm}$
Connector type	Schüco MC-T4 compatible / 4 mm ²
Packing unit	2 modules
Weight of packing unit	90.4 lbs / 41 kg

Qualification and warranties	
Product standard	UL 1703
Extended product warranty ³⁾	5 years
Output warranty of 90% performance P_{mpp} (STC) 3)	12 years
Output warranty of 80% performance P _{mpp} (STC) ³⁾	25 years

- 1) Irradiance 1,000 W/m², air mass index 1.5, cell temperature 25°C (77°F)
- $^{2)}$ $\,$ Irradiance 800 W/m², wind speed 1 m/s, ambient temp. 20°C (68°F)
- ³⁾ In accordance with the warranty conditions of Schüco USA L.P. and Schüco Canada, Inc.





