

ROPATEC SA 70



DESIGNED AND
MADE IN ITALY

TECHNICAL DATA

Turbine and generator manufacturer	ROPATEC
Model	SA-70
Power	10 kW
Swept area	70,2 m ²
Wind speed	ca. 3 m/s
Wind class according to IEC61400-2	Class III
Generator	Permanent magnet
Transmission system	Direct drive
Blade material	Fiberglass
Rotor diameter	7,8 m
Blade length	9 m
Overspeed control	Safety PLC Controller SIL-3 (electrical and hydraulic brake)
Noisiness	42 dB
Mast	18 m
Weights	2100 kg 2350 kg
Monitoring system	SDMR based on SCADA
Operating temperature	-20°C/+55°C (can be adapted to extreme temperatures upon request)



SILENT



INDEPENDENT OF WIND DIRECTION



APAS
ACTIVE PERFORMANCE ADAPTING SYSTEM



PRODUCTION AT HIGH WIND SPEED



HIGH EFFICIENCY AND RELIABILITY



LOW MAINTENANCE



MONITORING AND REMOTE CONTROL



PLUG AND PLAY



VERSATILE APPLICATIONS

APAS

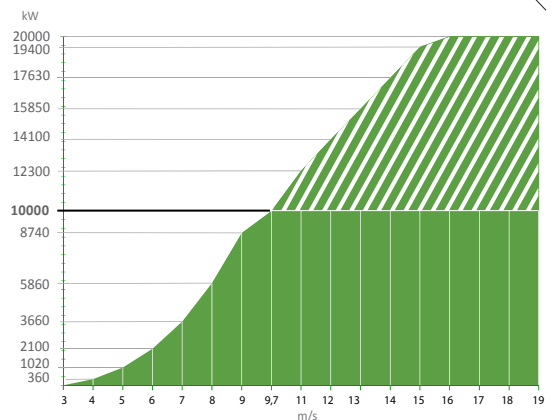
ACTIVE PERFORMANCE ADAPTING SYSTEM

The power curve is constantly trimmed to maximize efficiency in accordance with local wind conditions

AEP - Annual Energy Production*

Average annual wind speed [m/s]	[kWh] per year	Self-consumption coverage per household	CO ₂ EMISSION ANNUAL SAVING***
4,5	14150		6,4 t
5	19000		8,5 t
5,5	23950		10,8 t
6	28800		13,0 t
6,5	33400		15,0 t
7	37650		17,0 t

Nominal power curve**



The data reported reflect ideal work conditions and are subject to change due to external factors such as temperature, altitude, atmospheric pressure, turbulence level, humidity and presence of obstructions.

3500 kWh correspond to average annual consumption of a family of four.

* Production at sea level with laminar wind speed and Weibull distribution shape parameter k=2.

** The power curve is indicative and not explicative. It is set in accordance with site characteristics. The data correspond to laminar wind.

*** Calculated approximately on the basis of average European (EU-27) CO₂ benchmark of 0,45 t/MWh. This value may vary from country to country.