

# LISEPRO horizontal windturbines

The wind is your present from the nature, the LISEPRO small windturbines drop you power and heat!

> Made in Germany

www.lisepro.com.tr

## Data Sheets LISEPRO wind turbines 10 kW - 100 kW



#### The advantages of the LISEPRO Small Wind Turbines

- For exposed wind sites optionally with various rotor diameters (1,2 9.50 m)
- Low-noise blade profile
- For grid connected, heating systems and as battery charger
- Storm protection with helicopter function and electronic braking
- Easy to install

#### General information on the LISEPRO Wind Power System

The LİSEPRO wind turbine is a wind power system which is ideal for inland sites.

It was developed especially for grid feed-in, charging batteries (24 V DC / 48 V DC etc.) and for the support of heating systems.

As a result of the robust design the LISEPRO is also suitable for exposed wind sites, optionally with various rotor diameters (1, 2 - 9.50 m). The manually la - minated rotor blades benefit from a computer-designed aerodynamic profile. Needless to say that each blade is dynamically and statically balanced and has an identification number and documentation.

To facilitate easy installation we set the focus on enabling fast setup and manual installation of the turbine. Due to the robust design the LISEPRO is extremely efficient and for the base installation has a very attractive price. Here, special attention should be put on the excellent starting behaviour, which at a wind velocity below 1.8 m/sec. operates at a very low noise (24 – 36 dB). This means that the system can also be set up in housing areas.

Grid-connected operation requiers the Smart! wind and PowerOne inverter with characteristics matched to the LISEPRO and local wind conditions. The grid-connected inverters feature an according declaration of conformity and are registered for the grid-feed-in mode, the LP are already integrated!

If the LISEPRO is used in heating applications a control cabinet with control electronics is used for the optimum wind characteristic management in conjunction to a heating rod with 9000 Watt!



Example: LISEPRO 2.5 kW - 3.5 kW



Example: LISEPRO 5.5 kW - 10.0 kW



## LISEPRO LP10-H

Alternator		Turbine Data	Turbine Data	
Туре	3-phasig permanent magnet	Туре	Grid connected heating system	
Efficiency	96%	Speed range	0 rpm – 600 rpm	
Nominal capacity	10.0 kW	Working range	130 rpm – 400 rpm	
Maximum capacity	12 kW	Engagement speed	2,5 m/s	
Nominal voltage	400 VAC	Storm safety	9.0 m/s	
Protection class	IP56	Max. wind velocity	58 m/s	

Mechanical Data		Storm Protection	
Repeller diameter	7,6 m	Automatic system	Helicopter position, bra- king resistance, electro- magnetic brake (optional)
Sweep area	45,36 m <sup>2</sup>	Manually	Short-circuit braking, braking resistance
Rotor blades	3 piece carbon / glass fibre		
Rotor blade protection	UV-, chemistry and temperature resistant	Standard norms and certificate CE-DIN EN 60204 DIN VDE 0113 DIN EN 121 DIN EN 4 Accident prevention regulati BGV A3 (VBG4) according	
Turbine material	High-temperature galvanized		
Colour	RAL 9010		
Total weight	450 kg		

IEC 61400-2







## LP20-H

Alternator		Turbine Data	Turbine Data	
Туре	3-phase permanent magnet	Туре	Grid connected heating system	
Efficiency	94%	Speed range	0 rpm – 600 rpm	
Nominal capacity	20 kW	Working range	115 rpm – 430 rpm	
Maximum capacity	24 kW	Engagement speed	2,5 m/s	
Nominal voltage	400 VAC	Storm safety	13.0 m/s	
Protection class	IP56	Max. wind velocity	58 m/s	

Mechanical Data		Storm Protection	
Repeller diameter	10.0 m	Automatic system	Helicopter position, bra- king resistance, electro- magnetic brake (optional)
Sweep area	78,53m <sup>2</sup>	Manually	Short-circuit braking, bra- king resistance
Rotor blades	3 piece carbon / glass fibre		
Rotor blade protection	UV-, chemistry and temperature resistant	Standard norms and certificate CE-DIN EN 60204 DIN VDE 0113 T DIN EN 1210 DIN EN 4 Accident prevention regulatio BGV A3 (VBG4) according	
Turbine material	High-temperature galvanized		
Colour	RAL 9010		
Total weight	960 kg		

IEC 61400-2







## LP30-H 30.0 kW

Alternator		Turbine Data	Turbine Data	
Туре	3-phase permanent magnet	Туре	Grid connected heating system	
Efficiency	95,3%	Speed range	0 rpm – 350 rpm	
Nominal capacity	30.0 kW	Working range	75 rpm –300 rpm	
Maximum capacity	36 kW	Engagement speed	2,5 m/s	
Nominal voltage	400 VAC	Storm safety	13.0 m/s	
Protection class	IP56	Max. wind velocity	58 m/s	

Mechanical Data		Storm Protection	
Repeller diameter	15,6 m	Automatic system	Helicopter position, bra- king resistance, electro- magnetic brake (optional)
Sweep area	191,13 m <sup>2</sup>	Manually	Short-circuit braking, bra- king resistance
Rotor blades	3 piece carbon / glass fibre		
Rotor blade protection	UV-, chemistry and temperature resistant	Standard norms and certificate CE-DIN EN 60204 DIN VDE 0113 DIN EN 121 DIN EN 121 DIN EN 4 Accident prevention regulati BGV A3 (VBG4) accordine	
Turbine material	High-temperature		
	galvanized		
Colour	RAL 9010		
Total weight	3.430 kg		

/ IEC 61400-2





