

### Prijzen januari 2009.

#### **Venco 1000 T**

Stalen steunen voor muur bevestiging

ex btw € 6.750,-

€ 300,-

incl btw

€ 8.032,50

€ 357,00

Inclusief:

- Minimast

Exclusief

Keuze uit: Net inverter , verwarmingselement, acculader of gelijkrichter

- Net inveter

€ 1.365,-

€ 1.624,35

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### Certificaten

IEC88/191/CDV worden binnenkort verwacht.

### Prijzen juni 2008.

#### **Venco 300 T**

Stalen steunen

ex btw

€ 3.340,00

€ 250,00

incl btw

€ 3.974,60

€ 297,50

Inclusief:

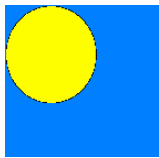
- Minimast
- Verwarmingselement of acculader 12 of 24 Volt DC

Net inverter alleen mogelijk met minimaal 3 Marc 300 turbines.

### Levertijd

Ca. 8 tot 10 weken

Prijzen kunnen veranderen, vraag PyroSolar om een offerte.



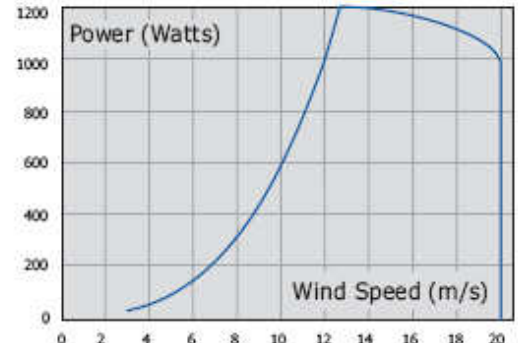
## VENCO-Twister-1000-T

### Vertical Axis Wind Turbine



The VENCO-Twister-1000-T is designed to start rotating at 1.5 m/s wind speed and to produce power at a wind speed of 3.5 m/s. Due to his special design the VENCO-Twister-1000-T is operating virtually quiet.

The robust construction is without wearing parts. It needs low maintenance and works reliable even under extreme conditions.

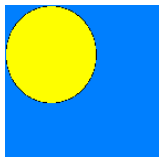


VAWT output rates 1000 Watts at 12 meters per second.



### Technical Data

Rotor	Rotor type	Vertical Axis Wind Turbine (VAWT)
	Rated output	1000 W
	Rated wind speed	12 m/s
	Max. Power	1200 W
	Cut-in wind speed	3.5 m/s
	Cut-off wind speed	20 m/s
	Yaw control	Not required
	Rotor speed control	Microcontroller guided
	Survival wind speed	50 m/s
	Rotor diameter	1.9 m
	Blade height	1.9 m
	Swept area	3.61 m <sup>2</sup>
	Gear box	No gear box
	Brake systems	Eddy current and short circuit
	Safety system	Self supplying generator control (patent pending)
Generator	Generator type	Three-phase synchronus generator, PM shrunk-on-disk-rotor
	Voltage	0 to 400 V DC
	Electronics	Overvoltage and safety controller; Prepared for grid inverter connection
Materials	Rods	Galvanised steel
	Generator casing	Galvanised steel / stainless steel
	Rotor blades	Epoxy glass and carbon resin
Miscellaneous	Weight incl. mini-pole	apx. 150 kg
	Warranty period	2 Years

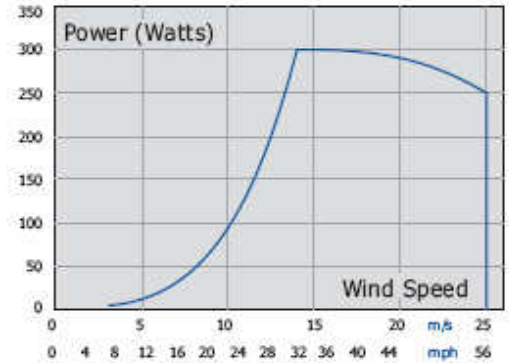


## VENCO-Twister-300-T Vertical Axis Wind Turbine



The VENCO-Twister-300-T is designed to start rotating at 3.0 m/s wind speed and to produce power at a wind speed of 3.5 m/s. Due to his special design the VENCO-Twister-300-T is operating virtually quiet.

The robust construction is without wearing parts. It needs low maintenance and works reliable even under extreme conditions.

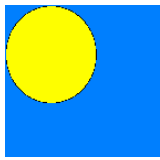


*VAWT output rates 300 Watts at 14 meters per second.*

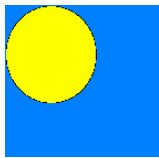


### Technical Data

Rotor	Rotor type	Vertical Axis Wind Turbine (VAWT)
	Rated output	300 W
	Rated wind speed	14 m/s
	Max. Power	300 W
	Cut-in wind speed	3.5 m/s
	Cut-off wind speed	25 m/s
	Yaw control	Not required
	Rotor speed control	Microcontroller guided
	Survival wind speed	50 m/s
	Rotor diameter	1.0 m
	Blade height	1.0 m
	Swept area	1.0 m <sup>2</sup>
	Gear box	No gear box
Brake system	Generator short circuit	
Generator	Generator type	Three-phase synchronus generator, PM shrunk-on-disk-rotor
	Voltage	0 to 70 V DC
	Electronics	Ovoltage and safety controller
	Charge controller	12 / 24 V, 25 A max. charging current
Materials	Rods	Stainless steel
	Generator casing	Stainless steel
	Rotor blades	Epoxy glass and carbon resin
Miscellaneous	Weight without pole	apx. 52 kg
	Warranty period	2 Years



gemiddelde windsnelheid per jaar m/s	Marc 1000 gem opbrengst per jaar ca. kWh pj	Marc 300 gem opbrengst per jaar ca. kWh pj
3,5	553	74
4	773	103
4,5	1044	137
5	1359	179
5,5	1721	232
6	2106	291
6,5	2509	361
7	2913	439



## MARC-Twister Series Applications



*MARC-Twister-300-L battery charger with integrated basic electronic unit controller.*

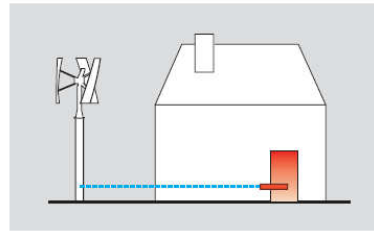
MARC-Twister rotor/generator component is pre-assembled with an appropriate basic electronic unit control for various applications. This unit control is designed for overload protection of the following possible components:

- **Heating support**
- **Battery charger**
- **Rectifier**

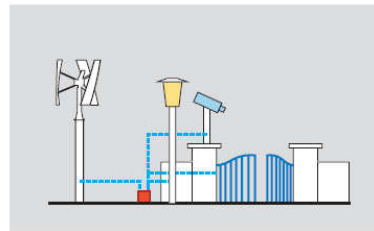


*SMA rectifier with special configuration for usage with a cluster of 3 or 4 MARC-Twister-300-T units.*

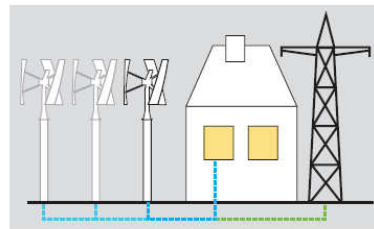
The use of rectifiers for grid connection or isolated systems is possible with both, single MARC-Twister-1000-T and clusters of 3 or 4 MARC-Twister-300-T.



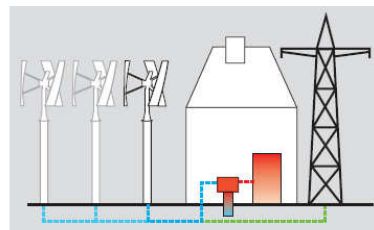
*MARC-Twister setup for use with heating support.*



*MARC-Twister connected to battery charger (12 V or 24 V DC).*



*Single MARC-Twister or cluster with rectifier for grid connection or isolated systems.*



*Single MARC-Twister or cluster for heating support in combination with rectifier and grid connection (heat pump).*

**Your dealer for  
MARC Power Systems  
small wind turbines:**



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