

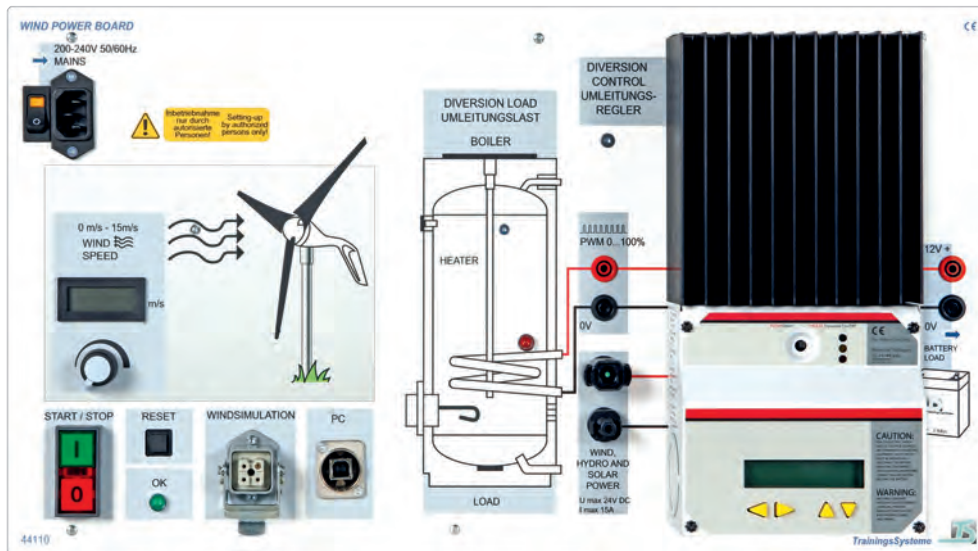
## WIND GENERATION SYSTEMS

Small-scale Wind Power System – Isolated System



# TRAINING SYSTEM – SMALL-SCALE WIND POWER SYSTEM

## Control unit for wind simulation and charge controller



1

### Learning targets

- › Installation of a small-scale wind power station
- › Installation of isolated systems
- › Working out of physical principles
- › Installation and start-up of a small-scale wind power generator
- › Reservoir operation for variations in wind power
- › Energy storage
- › Installation of an isolated system for generation of a 230V AC voltage
- › Hybrid systems for self-sufficient power supply

### Technical data

#### of the Wind Power Board

- › Controller of wind simulator 1 kW
- › LCD display for wind speed display
- › Potentiometer for adjusting the wind speed
- › USB interface for PC communication
- › System plugs for connections of the wind generation system
- › Diversion controller of max. 500 W
- › Measuring instrument for diversion controller indicating the battery voltage, diversion load, current and power
- › Maximum diversion load of 500 W
- › Connections for consumer and battery

No.	Description / Title	Order no.
1	Wind Power Board	44110
2	Windgenerator	44111
3	Battery Board	44102
4	Low Voltage Consumer Board	44103
5	Bulb Socket Board	43126
6	Off-Grid Inverter Board	44104
7	Set of ring binders	91904
8	Small-scale Wind Generation System in isolated operation – Student Manual	44112CD-ENG
9	Small-scale Wind Generation System in isolated operation – Instructor's Manual	44113CD-ENG
10	Small-scale Wind Generation System in isolated operation – Set of Transparencies	44114CD-ENG
11	TECHNOCard® Battery Board	44142-ENG
12	TECHNOCard® Low Voltage Consumer Board	44143-ENG
13	TECHNOCard® Wind Power Board	44116-ENG
14	TECHNOCard® Off-Grid Inverter Board	44144-ENG
Not ill.	Set of light fittings	43122
Not ill.	Set of 4mm safety test leads	90000

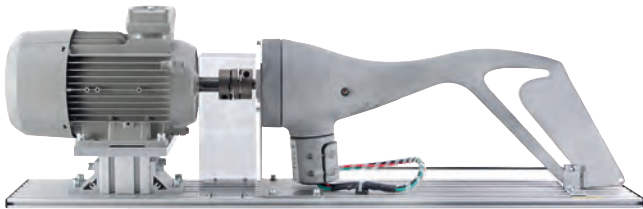
An asynchronous motor for wind simulation is controlled by the Wind Power Board. The values for wind speed, rotation speed and power can be displayed using the corresponding software. A diversion controller with diversion load is integrated for connecting the wind generator. Parameterisation and diagnosis of the system is shown in the integrated display. The maximum power is 500 W.

# TP 26.7.3

## Wind generator

### Technical data Wind generator

- › Windsimulationsmotor P maximal 1 kW
- › Small-scale wind power generator maximum 150 W/12 V
- › Support system
- › Connecting cables with system plug



### Wind power generator

with a maximum power of 150 W. The system voltage is 12 V DC. The wind generator is mounted on a support system together with an asynchronous motor (for wind simulation). Due to the system voltage of 12 V DC, the small-scale wind generator can be integrated in other 12 V DC isolated systems.

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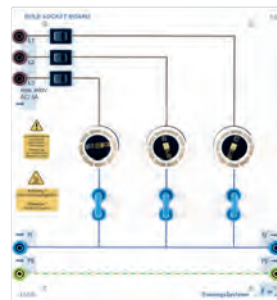
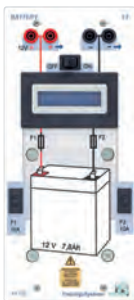
## Supplementations

### Battery 12 V DC

### Low voltage consumer

### Lighting technology board

### Stand-alone inverter



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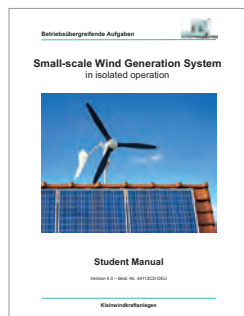
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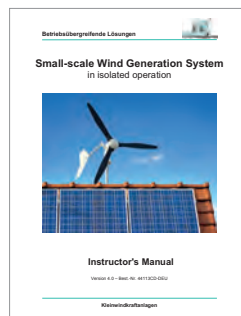
## Manual



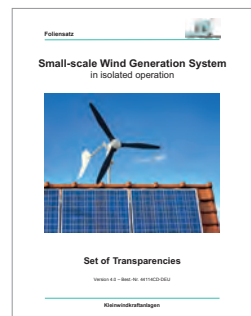
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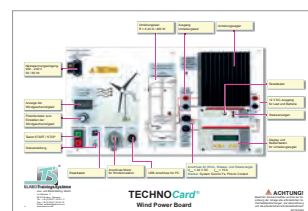
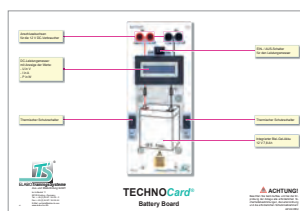


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### Set of TECHNOCards®



11 - 14

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## YOUR INQUIRY

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ZIP Code, City

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## We would like:

To be contacted by telephone     Information on seminar dates     On-site consultancy     Please send us an offer...

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	Set of 4mm safety test leads (optional)	90000

