



FUTUREENERGY™ AIRFORCE¹

Example of wind-solar hybrid installation with
24V 3-phase AC 1kW turbine suitable for
off-grid connection with appropriate inverter

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AF1 Wind Turbine 24V 3 phase
part no. A0344

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Charge Controller TS60
part no. PO822
Used in Diversion mode



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Dumload Resistor
part no. R15241000



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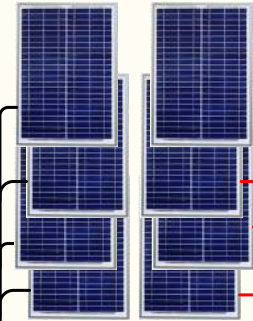
24V Immersion heater 1kW
part no. P0803
(dumload option)

Note 1: Solar panels, that can have an open voltage of 35V to 40V, are considered to be 24V in this installation

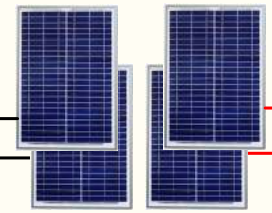
Note 2: Two charge controllers part no. PO822 are required or 3 charge controllers if 2kW solar panels are installed

Note 3: Items without **FUTUREENERGY** identification are client sourced. Contact **FUTUREENERGY** if further specification details are required

Note 4: Fuses should be rated slightly higher (~5A) than the maximum current rating of the controller used



8 x 250W 24V panels for
2kW wired in parallel
to charge controller



4 x 250W 24V panels for 1kW
wired in parallel
to charge controller



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Charge Controller
1x TS60 for 1kW part no. PO822
2x TS60 for 2kW part no. PO822
Used in Solar mode

Solar panel options

CAUTION: The voltage of the solar charge controller must be set to a lower value than the diversion voltage of the wind controller

Inverter specification:
24V pure sine-wave
minimum capacity 3.5kW

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Stop Switch
Part no. A0257



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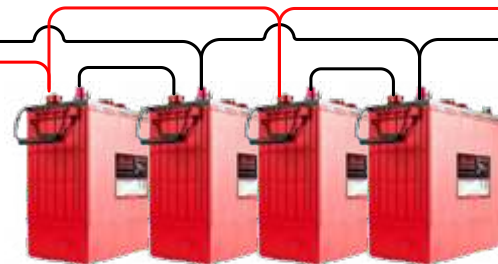
Bridge Rectifier
part no. REC02



Mount all items adjacent to controller and inverter with Stop Switch easily accessible

FUSE

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24V Battery bank

Recommended batteries are wet lead acid
L16 type (known as traction batteries)
e.g. Rolls 6V S605 with capacity 482Ah @ C20
(capacity as discharged over 20 hours)
Slower discharge gives greater capacity e.g 624AH @ C100

High current
fused circuit breaker



110/220/240V AC output