The feed-in converter aeocon for small wind turbines has been developed based on a concept by SIEB & MEYER. It compensates mechanical construction tolerances of the wind turbine. The wide input voltage range reaches excellent control performances. Furthermore, the control speed meets the high demands of small wind turbines. The control ensures smooth start-up of the wind turbine at every time and selection of the optimum operating point during different wind conditions. Thanks to the Maximum Power Point Tracking (MPPT), the best possible efficiency is reached particularly during partial loading conditions.

The converter is a real expert for the operation of wind turbines. The “brain” of aeocon is the control especially adapted to the requirements of small wind turbines at powers up to 14 kW. The control ensures smooth start-up of the wind turbine at every time and selection of the optimum operating point during different wind conditions. Thanks to the Maximum Power Point Tracking (MPPT), the best possible efficiency is reached particularly during partial loading conditions.

As soon as the small wind turbine supplies aeocon with power, aeocon activates the turbine. Since small wind turbines often operate under partial load, aeocon is optimized towards high-efﬁciency also in this range. This can be positive effects on the energy yield. But what happens, if the wind turbine generates more power that can be fed into the electric mains or if mains power fails? aeocon extracts the maximum of the small wind turbine. This energy – converted into heat – can for example be used to support the heating system. The integrated galvanic separation allows parallel connection of the devices ensuring an optimal ﬁeld of application also in three-phase feed-in small wind turbines.

The interfaces of aeocon

Why aeocon?

aeocon combines the maximums of the small wind turbine and the inverter and the ballast circuit in one compact housing. This concept allows effective operation also at low wind speeds. When the small wind turbine not generate power, aeocon shuts down and does not use power from the grid. The control allows efﬁcient and smooth start-up of the wind turbine at every time and selection of the optimum operating point during different wind conditions. The control ensures smooth start-up of the wind turbine at every time and selection of the optimum operating point during different wind conditions. Thanks to the Maximum Power Point Tracking (MPPT), the best possible efficiency is reached particularly during partial loading conditions. The control ensures smooth start-up of the wind turbine at every time and selection of the optimum operating point during different wind conditions. Thanks to the Maximum Power Point Tracking (MPPT), the best possible efficiency is reached particularly during partial loading conditions.

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The stated current and voltage values are rms values. Subject to changes and errors.