



Wind Cluster®
Creating Synergy

DC-DC booster

May 2009

DC-DC booster

The Wind Cluster DC-DC booster is designed for use in the electrical pitch systems of wind turbines.

The DC-DC booster feeds a standard industrial pitch drive from a low voltage battery or ultracapacitor emergency back-up and converts the lower battery voltage 48, 110 and 220 V to a suitable, higher level for the frequency converter's DC link.

Operation

The DC-DC booster is a step-up converter which converts the lower input voltage to a higher output voltage.

When battery voltage is switched on, the booster automatically controls the output voltage so that it is suitable for connection to the DC link of the frequency converter. The output voltage is either 350 VDC or 550 VDC depending on factory setting.

Internal RFI filter in series with input choke prevents any high frequency noise from conducting into the input voltage (battery grid).

Technical data

Input voltage (battery voltage):

48 VDC (-25% ... +25%)
110 VDC (-25% ... +25%)
220 VDC (-25% ... +25%)

The control electronics of the converter is fed by the input voltage (battery voltage). To ensure operation, a minimum battery voltage of 32VDC is required.

DC link voltage of the frequency converter:

Frequency converter mains	DC link voltage (typical)
1*230 V input	350 VDC
3*230 V input	350 VDC
3*400 V input	550 VDC

Input signals

Power stage enabling ON/OFF, digital input.

Output signals

Fault relay output.

Mechanics

Dimensions:

Width: 144 mm
Height: 419 mm
Depth: 214 mm

IP Class: 20

Cooling: 190m³/h ... 380 m³/h depending on converter type.



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