

Danfoss mass produces low harmonic drives

Danfoss Drives now launch the first mass produced VLT® Low Harmonic Drive. The Low Harmonic Drive eliminates the harmonic disturbances on the supply grid by actively imposing currents into the grid so that the high quality sine wave of the grid **current is restored.**

Like other VLT® drives, the Low Harmonic Drive is built on a highly modular technology platform basic the elements that proved their functionality, quality and overall reliability in other parts of the broad VLT® drives program.

The VLT® Low harmonic drive has the same modular build-up as our normal high power drives and share features like high energy efficiency, backchannel cooling and user-friendly operation.

Due to the modular principle, most elements are produced in large scale, leading to cost effective production.

Since VLT® drives are all individually configured according to the customers specific needs - and only the VLT® Micro Drive produced to stock – the VLT® drives represent the value of a highly customised quality drive – for the price of a mass produced unit.

Where the performance of other low harmonic technologies depends of stability and load or effect the controlled motor, the new Danfoss Low Harmonic drives continuously regulate the network and load conditions without affecting the connected motor.

VLT® Low Harmonic Drives causes no increased winding stress or reduction of the bearing lifetime.

The VLT® Low Harmonic Drive meets the toughest harmonic recommendations and gives the user full readout of the unit performance towards the grid including graphical overview of grid behaviour.

VLT® Low Harmonic Drives are available in the power range 160 - 710 kW.

The issue of preventing harmonic disturbances is growing with the employment of more and more powerful frequency converters. Even after many years growth of the drives market, only one out of eight motors is operated by a frequency converter. It's expected that the huge potential for energy savings by employing frequency converters will increase the number of drives – and hence the potential harmonic disturbance on the supply grid.

The VLT® Low Harmonic Drive meets the IEEE519 recommendation and is suited for generator powered installations like in back-up systems.