

Danfoss VLT® Drive

General Description

The Danfoss VLT® drive is used for controlling the operating point of the connected electrical motor by adjusting the applied voltage and frequency. The VLT® drive consists of a rectifier, an intermediate DC link circuit with brake chopper and the inverter.

The model supports VLT® drives in Frame A to E, with some limitations, i.e., drives with Fan Power Cards are currently not supported. The model supports both N and P drives, which has different system architecture. Some eeprom data have been patched to be able to simulate N drives in the HIL system. The update does not affect the motor control, but rather the auxiliary circuits like fan control, etc.

Loading data

The data for selecting a specific drive size is loaded by selecting a *<typecode>_hil.pud* file, using the load data property in the component. The nameplate data and brake resistor value are updated at data loading.

Modifying brake resistor value

The brake resistor value is the minimum value for the drive selected and it is possible to adjust the value. If the simulation should be carried out without a brake resistor, the resistance should be set to *inf*.

Version	Date	Comment
0.9	06-07-2022	Document created
0.1	28-10-2022	Text divided into sections and load data text updated