



VLT[®] 5000 Series

The VLT Series 5000 available
in the power range from
0.75 kW-500 kW
suits all industrial applications

We *are* the Frequency converter specialist - our knowledgeable sales & service staff offer comprehensive application support, worldwide service and hotline support around the clock.

We *offer* Drives solutions - with our application options and serial communication cards as well as our close co-operation with Danfoss Bauer manufacturing geared motors we offer exactly the combination of drive, option and motor that meets your requirements.

Benefits:

- Saves space and energy – the compact size saves valuable space. The perfect speed matching to actual load reduces your energy costs.
- Easy to commission and use - If you know one drive you also know the others and a Quick Menu guides you easily through the little programming work left for you to make the drive perfect for the job in your plant.
- Multi-Setup – The drive has four independent setups. Each one can be programmed for the application in question. You can also program 4 different settings for the same motor.
- PID controller built-in – ensures optimum process all the way
- AMA – Automatic Motor Adaptation – ensures the best possible torque performance of the motor in any application
- Safety is integrated – No need for extra safety precautions, the power section is galvanically isolated from control section

Enclosures

IP20, IP54, IP00, Optional coating providing extra protection for aggressive environments.

Compliance with international standards

Built-in RFI filters available for the entire product range complying with EN55011, class 1A and 1B. Complies also with IEC 61000-3-2 and 61000-3-4 as well as VDE 0160 as regards levels of harmonic suppression. That reduces the dimensions of cables substantially.

Product range:

380-500V:	0.75-500 kW with 110% overload torque 0.75-400 kW with 160/150% overload torque depending on power size
200-240V	0.75-45 kW with 110% overload torque 0.75 kW to 37 kW with 160/150% overload torque depending on power size

Fieldbus communication

We offer a wide range of standard industrial busses:

- PROFIBUS,
- INTERBUS,
- DeviceNet,
- LonWorks,
- ModbusPlus
- Modbus RTU

RS 485 serial port as standard

Application options

SyncPos Motion Controller, Synchronizing Controller, Positioning Controller

Hardware Variants

Built-in brake chopper. 24V external supply of control card

Technical Specificaiton

Line voltage 200-240V or 380-500V $\pm 10\%$

Supply frequency 48-62 Hz $\pm 1\%$

Overload torque 150-160%

True power factor/displacement power factor, $\cos\phi$ 0.90/1.0 at rated load

Switching on supply input approx. 1 time/minute

Control characteristics

Frequency range 0-1000 Hz

Speed accuracy (open loop)
< 1500 rpm: max error ± 7.5 rpm
> 1500 rpm: max. error 0.5% of actual speed

Speed accuracy (closed loop)
< 1500 rpm: max error ± 1.5 rpm
> 1500 rpm: max. error 0.1% of actual speed

Inputs and outputs

8 digital inputs (0-24V)

2 analogue outputs (2 x 0/4-20 mA)

2 digital outputs (0-24V)

3 analogue inputs (2 x 0-10V, 1 x 0/4-20 mA)

2 relay outputs

