ENGINEERING
TOMORROW

Product Overview

Danfoss Drives
- for your applications

Quality,

application-optimized products, which target your needs

drives.danfoss.com

Contents

Products

Services

Communications functionality

This legend indicates the communication interface and fieldbus protocol functionality which is specific to each product. For details, please refer to the individual product brochures.

Integrated

BAC	BACnet (MSTP)
ASi	AS interface
META	Metasys N2
MOD	Modbus RTU
TCP	Modbus TCP
BIP	BACnet/IP
N2	N2 Metasys
FLN	FLN Apogee
FC	FC Protocol

Optional

PB	PROFIBUS DP V1
PN	PROFINET
PL	POWERLINK
DN	DeviceNet
CAN	CANopen
AKD	LONworks for AKD
LON	LONworks
BAC	BACnet (MSTP)
TCP	Modbus TCP
EIP	EtherNet/IP
ECAT	EtherCAT
DCP	DCP 3/4
DSP	CANopen DSP 417
BIP	BACnet/IP with MQTT UDMI
ASi	AS interface

Welcome

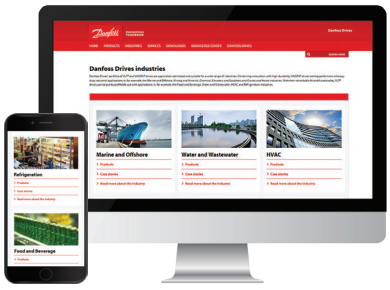
At Danfoss Drives, our leading-edge technology safeguards the environment and opens the route to competitive solutions. We partner with you, sharing our application know-how and engineering expertise to support your business growth.

Our solutions for superior motor control and electrification through power conversion open up for enhanced energy efficiency and productivity.

Through digitalization and integrated intelligence, our drives, power converters, and services save energy, maximize performance, and minimize emissions - to support you in meeting climate targets.

Most of the drives and power converters are available with integrated harmonic mitigation and meet EMC requirements to ensure a high quality, clean power supply. Many of them include dedicated application software, integrated condition-based monitoring (CBM), and are Industrial IoT-ready. Regional variations in drive availability can arise.

For more detailed information we refer to the brochures and manuals for each product, available on
drives.danfoss.com



Freedom to choose
- Connect with your preferred motor, PLC, and fieldbus

At Danfoss Drives, we focus on AC drives and power converters.
It's what we do best, and it helps you to focus on what you do best.
To solve your challenges in the best way, we give you freedom to choose: Freedom to optimize your systems, the power to freely equip your drives, and the choice to collaborate with your drives partner differently. You decide on the best equipment for your application. Then, we make sure the drive or power converter fits that choice and support you every step along the way.

Optimize differently

You have the freedom to optimize and create the system that suits your application best. Whether off the shelf or purpose built, we provide all the support and software necessary so that you can tailor your drive or power converter so that its form, fit and function meet your needs exactly.
We offer:

- The widest portfolio of AC drives
- Fast, simple tools for customization
- Programmable drives and special software
- DrivePro® service and maintenance support

Equip differently

When choosing a Danfoss drive or power converter, you get the flexibility to configure, modify and combine it with any type motor, PLC, or fieldbus. This allows you to match the drive to your specific application and to ensure you get the best mix of efficiency, speed and torque.
We offer:

- Compliance with the motor you need
- Compliance with the fieldbus you need
- Outstanding harmonic solutions expertise
- Innovation in energy storage projects

Collaborate differently

Dealing with Danfoss means selecting a vendor who goes the extra mile, who truly values your success and who works with you on your terms.
To give you the power to engineer the optimal solution, we focus on quality, speed and agility in all areas of our operations.
We offer:

- Independence and 100% drives expertise
- A non-competitive relationship with you on system solutions
- Global presence and local support

Low-voltage drives and power converters

Find the ideal drive for your low-voltage variable speed motor control or power conversion application.

iC7-Automation

Whatever the environment, the iC7-Automation delivers the reliability and performance you need. With connectivity, security and intelligence, this premium drive lets you take advantage of the latest in Industrial IoT.

Efficient and future-proof

iC7-Automation gives you a whole new way to optimize your system with selectable communication protocols and Safe Torque Off (STO) SIL3 as standard. The modular control platform allows you to expand functionality to meet your needs.

More precise than ever

Get superior shaft performance even at low speed, in open or closed loop. Commission fast with Automatic Motor Adaptation at standstill. Depending on your requirements, use the relevant application software: *Industry or Motion*.

Power range

Frequency converters:
3 x 380-500 V AC ..... 0.37-710 kW
Air-cooled system modules:
3 x 380-500 V AC ..... 200-2700 kW
Enclosed drives 6-pulse, LHD and regen:
3 x 380-500 V AC ..... 110-1400 kW

iC7-Hybrid

This intelligent power converter helps you tap into energy savings with hybrid and pure electric solutions.

Power conversion specialist

Enhance smart grid applications such as energy storage, shore supply, charging and electrolysis. Choose application software: *Grid Converter or DC/DC Converter.*

World's most compact

High power density reduces installation footprint to 50% of alternative modules while still giving the same power output. Now you can reduce the size of your electrical room and lower your cooling needs too.

Liquid-cooled system modules

Robust and ultra-compact power converters for system integration. Filters are contained in the pre-wired integration unit. Highly expandable option concept.

Power range

Liquid-cooled system modules:
Voltage rating:
3 x 380-500 VAC, 460-800 V DC
3 x 525-690 VAC, 640-1100 V DC
Current rating: 236-5750 A
Power range: 0.25-6.8 MVA & beyond
Enclosed drives:
3x525-690 V..... 200 kW-6 MW

iC7-Marine

With flexible integration and extraordinary power density, you enter a new dimension of opportunities with this ultra-compact drive.

Marine-dedicated

Enjoy unparalleled shaft performance and ease of system integration: for propulsion, thrusters, winches and more.
Choose between maritime-dedicated application software: *Propulsion and Machinery or Active Front-end,* ready for the most challenging of applications.

Secure-by-design

iC7-Marine is equipped with a unique world-class IoT security approach that enables you to future-proof your system for the decades ahead.

Pack in more power

This drive module takes up 40% less space than the closest competitor. With lower e-room air conditioning load, too.

Power range

Liquid-cooled system modules:
Voltage rating:
3 x 380-500 V AC
3 x 525-690 V AC
Output current: 170-6400 A
Enclosed drives:
3x525-690 V..... 200 kW-6 MW

Fieldbus

MOD		
PN	EIP	ECAT

Enclosure

IP00	IP20	IP21/Type 1
■	■	■ [1]

IP54	IP55/Type 12	IP66/Type 4X
■ [1]		

[1] Dependent upon enclosure size

Fieldbus

MOD		
PN	EIP	ECAT

Enclosure

IP00	IP20	IP21/Type 1
■		■

IP54	IP55/Type 12	IP66/Type 4X
■		

Fieldbus

MOD		
PN	EIP	ECAT

Enclosure

IP00	IP20	IP21/Type 1
■		■

IP54	IP55/Type 12	IP66/Type 4X
■		

VLT® AutomationDrive FC 302

This modular drive complies with all modern automation application requirements: easy configuration and a broad power range.

Safety where it matters

The VLT® AutomationDrive FC 302 features Safe Torque Off as standard. Easily configurable options are available: SS1, SLS, SMS and SSM.

Integrated Motion Controller

The Integrated Motion Controller software enables the VLT® AutomationDrive FC 302 to run induction and PM motors in positioning and synchronization applications, both with and without encoders.

Harmonic mitigation

Advanced active filter variants reduce harmonics to below 3% at best, and 12-pulse drives provide robust cost-effective harmonics reduction in supply applications.

Power range

3 x 200-240 V ..... 0.25-37 kW
3 x 380-500 V ..... 0.37-1100 kW
3 x 525-600 V ..... 0.75-75 kW
3 x 525-690 V ..... 1.1-1400 kW

Fieldbus

MOD				
DN	CAN	PB	TCP	EIP
ECAT	PN	PL		

Enclosure

IP00	IP20	IP21/Type 1
■	■	■
IP54/Type 12	**IP55/Type 12**	**IP66/Type 4X**
■	■	■

VLT® AQUA Drive FC 202

The VLT® AQUA Drive FC 202 drives and controls all types of pumps. In addition to the widely used centrifugal pumps (quadratic load torque), the VLT® AQUA Drive FC 202 is ideal for displacement pumps or eccentric screw pumps (constant load torque).

Focusing on water and pumps

Dedicated functions such as burst pipe monitoring, dry-running protection and flow compensation secure and empower your pumping application independent of the motor technology.

Cascade controller as standard

The cascade controller connects or disconnects pumps as necessary and according to specified limits. It also enables master/follower operation. Extended functionality is available via an option.

Power range

1 x 200-240 V ..... 1.1-22 kW
1 x 380-480 V ..... 7.5-37 kW
3 x 200-240 V ..... 0.25-45 kW
3 x 380-480 V ..... 0.37-1000 kW
3 x 525-600 V ..... 0.75-90 kW
3 x 525-690 V ..... 1.1-1400 kW

Power range - Low harmonic drive

3 x 380-480 V ..... 132-450 kW

Power range - 12-pulse drive

3 x 380-500 V ..... 250-1000 kW
3 x 525-690 V ..... 50-1400 kW

Fieldbus

MOD				
PN	DN	PB	TCP	EIP
BIP				

Enclosure

IP00	IP20	IP21/Type 1
■	■	■
IP54/Type 12	**IP55/Type 12**	**IP66/Type 4X**
■	■	■

VLT® Refrigeration Drive FC 103

Dedicated to control compressors, pumps and fans for significant energy savings in refrigeration plants, whilst prolonging the service life of components.

Improving COP (Coefficient of performance)

Intelligent compressor control meets demand, increases system stability, and optimizes refrigeration system efficiency.
Cascade control of multiple compressors reduces the number of starts and stops to maintain stable temperature, and extend compressor lifetime.

Refrigeration terminology

Refrigeration-based HMI enables quick configuration including selection of A2L and A3 refrigerants.

AC drive as standard

The combination of speed-controlled and mains-operated compressors enables the design of low-wear and energy-efficient systems.

Power range

3 x 200-240 V ..... 1.1-45 kW
3 x 380-480 ..... 1-560 kW
3 x 525-600 V ..... 1.1-90 kW
3 x 525-690 V. ..... 75-800 kW

Fieldbus

MOD	META			
AKD	PB	PN	TCP	EIP

Enclosure

IP00	IP20/Type 0	IP21/Type 1
■	■	■
IP54/Type 12	**IP55/Type 12**	**IP66/Type 4X**
■	■	■

VLT® HVAC Drive FC 102

This intelligent drive improves indoor climate with low energy usage, in applications ranging from air handling and rooftop units to simple fan and pump applications. Simple to commission and operate, it drives down OPEX and total cost of ownership.

HVAC Inside

The VLT® HVAC Drive FC 102 delivers smart control for building automation, with abilities like reliable -25 °C operability and remote control from outside the AHU.

Optimal EMC protection

Standard integrated chokes and high-quality RFI filters ensure interference-free operation at all times.

EC+

The intelligent VVC+ control principle enables the use of permanent magnet motors or synchronous reluctance motors with efficiency equal to or better than EC technology.

Power range

1 x 200-240 V ..... 1.1-22 kW
1 x 380-480 V ..... 7.5-37 kW
3 x 200-240 V ..... 1.1-45 kW
3 x 380-480 V ..... 1.1-160 kW
3 x 525-600 V ..... 1.1-90 kW
3 x 525-690 V ..... 1.1-1400 kW

Fieldbus

MOD [1]	META	BAC		
DN	LON	BAC	TCP	EIP
PB	PN	BIP		

[1] MODBUS includes master and follower versions

Enclosure

IP00	IP20/Type 0	IP21/Type 1
■	■	■

IP54/Type 12	IP55/Type 12	IP66/Type 4X
■	■	■

VLT® HVAC Basic Drive FC 101

Achieve the lowest cost of ownership with a drive dedicated to ventilation, heating, and refrigeration applications. The VLT® HVAC Basic Drive has built-in functions that reduce initial costs and increase productivity. This user-friendly drive is the most compact unit in its class.

Save energy

VLT® HVAC Basic Drive FC 101 efficiently controls induction and permanent-magnet (PM) motors and can deliver up to 50% energy savings.

Integrated harmonic mitigation

Integrated DC coils reduce harmonics without the extra cost and space required for external devices.

Power range

3 x 200-240 V ..... 0.25-45 kW
3 x 380-480 V ..... 0.37-90 kW
3 x 525-600 V ..... 2.2-90 kW

Fieldbus

BAC	MOD	N2	FLN

Enclosure

IP00	IP20	IP21/Type 1
	■	■

IP54/Type 12	IP55/Type 12	IP66/Type 4X
■		

VLT® Lift Drive LD 302

Suitable for both traction and hydraulic elevators, the VLT® Lift Drive is operating open or closed-loop systems.

Smooth, silent and safe

Absolute safety is standard with all VLT® drive solutions, and comfort is our highest priority. With a high switching frequency, optimized-controlled internal cooling fan and no motor contactors, VLT® Lift Drive ensures a quiet run with low acoustic noise and high reliability.

Operate without motor contactors

The embedded Safe Stop function matches safety standards of the conventional two-contactor version for elevators. This patented feature opens up new opportunities, especially for machine roomless lifts.

Operation with any typical motor type or brand

Regardless of motor type or brand, static automatic motor adaptation (AMA) enables easy commissioning, without having to remove the ropes from the traction sheaves.

Power range

380-400 V ..... 4-55 kW

Fieldbus

DCP	DSP

Enclosure

IP00	IP20	IP21/Type 1
	■	■

IP54/Type 12	IP55/Type 12	IP66/Type 4X
	■	

iC2-Micro

Here is the compact drive that's reliable and exible, ready to power your pumps, fans, conveyors and mixers, textile machinery, palletizers, and packaging machines.

Compact and easy retrofit

User-friendly, with condensed functionality and easy commissioning, this drive comes in a compact package. iC2-Micro is designed as an easy replacement for VLT® Micro Drive FC 51.

Built to last

This reliable and durable drive is even easier to use and install. You can reduce system complexity and cost whilst maintaining full performance.

Power range

1 x 200-240 V .....0.37-2.2 kW
3 x 380-480 V.....0.37-22 kW
1 x 100-120 V.....0.37-1.1 kW
3 x 200-240 V .....0.37-11 kW

Fieldbus

MOD

Enclosure

IP00	IP20	IP21
	■	■

IP54/Type 12	IP55/Type 12	IP66/Type 4X

VLT® Midi Drive FC 280

The VLT® Midi Drive FC 280 delivers flexible and efficient motor control for use in a wide variety of automation and machine building applications.

Flexible. Communicative.

The VLT® Midi Drive FC 280 is strong on control performance, functional safety, and flexible fieldbus communication. Integrated harmonics mitigation, RFI filter, dual-channel STO functional safety, and brake chopper save you from finding space and budget to install extra components.

Easy to use

A USB port provides easy PC connectivity. The VLT® Memory Module MCM 102 option facilitates fast implementation of factory settings, transfer of settings, and easy commissioning.

Easy retrofit

VLT Midi Drive is prepared for compatibility with the VLT® 2800. Its exterior dimensions, cable plugs, cable lengths, and set-up software tools enable easy retrofit in established plant or machinery concepts.

Power range

1 x 200-240 V .....0.37-2.2 kW
3 x 200-240 V .....0.37-3.7 kW
3 x 380-480 V.....0.37-22 kW

Fieldbus

MOD

PB	PN	CAN	EIP	PL

Enclosure

IP00	IP20	IP21/Type 1
	■	■

IP54/Type 12	IP55/Type 12	IP66/Type 4X

VACON® 100 FLOW

Delivering all the benefits of the VACON® 100 family of drives, the VACON® 100 FLOW offers dedicated functionality. It improves flow control and saves energy in industrial pump and fan applications in power sizes up to 800 kW.

Modules and enclosed drives

All power sizes are available as drive modules. The free-standing enclosed drive version for higher power sizes contains a wide range of configurable options and an innovative control compartment for safe access, without opening the cabinet door

Dedicated industrial flow control

The VACON® 100 FLOW provides specific flow control functions to enhance pump and fan performance and protect pipes and equipment, ensuring reliable operation.

Runs high-efficiency motors

Select the most efficient motor for your task, such as permanent magnet and synchronous reluctance motors, for improved system efficiency.

Power range

3 x 208-240 V.....0.55-90 kW
3 x 380-500 V.....1.1-630 kW
3 x 525-690 V.....5.5-800 kW

Fieldbus

MOD	META	BAC	TCP	BIP
PB	DN	CAN	LON	EIP
PN	ECAT			

Enclosure

IP00	IP20	IP21/Type 1
■		■ [1]

IP54/Type 12	IP55/Type 12	IP66/Type 4X
■ [1]		

[1] Dependent upon enclosure size

VACON® 100 INDUSTRIAL

The VACON® 100 INDUSTRIAL is a workhorse for a wide range of industrial applications. It is easy to integrate into all major control systems and is easily adaptable to different needs.

Modules and enclosed drives

All power sizes are available as drive modules. The free-standing enclosed drive version for higher power sizes contains a wide range of configurable options and an innovative control compartment for safe access, without opening the cabinet door.

Cost-effective communication

Integrated Ethernet interfaces support all major industrial protocols. Save on extra interface cards - and use the same drive for all major protocols required.

Easy adaptation

OEMs can integrate their own functionality into the drive. The VACON® Drive Customizer facilitates smaller logic adaptations for special needs or retrofit situations.

Power range

3 x 208-240 V.....0.55-90 kW
3 x 380-500 V.....1.1-630 kW
3 x 525-690 V.....5.5-800 kW

Fieldbus

MOD	META	BAC	TCP	BIP
PB	DN	CAN	LON	EIP
PN	ECAT			

Enclosure

IP00	IP20	IP21/Type 1
■		■ [1]

IP54/Type 12	IP55/Type 12	IP66/Type 4X
■ [1]		

VACON® 20

VACON® 20 comes with compactness and programming functionality that makes it one of the most easily-adaptable drives available for OEM applications.

Saves machine costs

The VACON® 20 has a built-in PLC functionality according to IEC 61131-1 which brings cost savings to the user. For the OEM or machine builder it is easy to change the software logic of the drive to adapt to their own control needs.

High fieldbus connectivity

The VACON® 20 supports of a wide variety of fieldbus connections. Enables effective machine integration, eliminating the need for external fieldbus gateways and parallel I/O connections.

Configure without mains power

With the optional copying module, parameter configurations can be copied into the VACON® 20 during the installation phase with no need for mains power - saving both time and effort.

Power range

1 x 115 V.....0.25-1.1 kW
1 x 208-240 V.....0.25-2.2 kW
3 x 208-240 V.....0.25-11 kW
3 x 380-480 V.....0.37-18.5 kW

Fieldbus

MOD				
PB	DN	CAN	ECAT	PN
EIP	TCP			

Enclosure

IP00	IP20	IP21/Type 1
	■	■

IP54/Type 12	IP55/Type 12	IP66/Type 4X

VACON® NXP Air Cooled

The VACON® NXP Air Cooled drive is designed for a broad range of demanding industrial applications, focusing on higher power sizes and system drives.

Top performance

VACON® NXP control flexibility delivers maximum motor control performance and dynamics, in both single-shaft machines and drive systems.

Configurable on all levels

Fully configurable I/O and fieldbuses cater for any connectivity need. Fast optical drive-to-drive communication gives you the flexibility of load sharing and paralleling of power units.

Extremely flexible

Adapt the drive using VACON application software. Built-in PLC functionality according to IEC61131-1 enables you to create new functionality in the drive to obtain cost savings and deeper machine integration.

Power range

3 x 208-240 V.....0.55-90 kW
3 x 380-500 V.....1.5-1200 kW
with DriveSynch 1.5-4000 kW
3 x 525-690 V.....2.0-2000 kW
with DriveSynch 2.0-4500 kW

VACON® NXP Common DC Bus

VACON® NXP Common DC Bus components are designed to enable systems integrators, machine builders, and OEMs to design and build efficient industrial drives systems.

Comprehensive range

Build almost any kind of system imaginable, with this fully complete range of components, including inverter units (INUs), active front-end units (AFEs), non-regenerative front-end units (NFEs), and brake chopper units (BCUs).

Maximum uptime

Designed for absolutely reliable operation, the common DC bus range supports full availability with a minimum of operational interruptions.

Minimal installation width

Reduce installation cost and space requirements, with slim INU components optimized for minimal width of the complete drive line-up.

Power range

3 x 380-500 V.....1.5-1850 kW
3 x 525-690 V.....3-2000 kW

Fieldbus

PB	DN	CAN	BAC	LON
TCP	EIP	PN	MOD	META
ECAT				

Enclosure

IP00	IP20	IP21/Type 1
■		■ [1]

IP54/Type 12	IP55/Type 12	IP66/Type 4X
■ [1]		

[1] Dependent upon enclosure size

Fieldbus

PB	DN	CAN	BAC	LON
TCP	EIP	PN	MOD	META
ECAT				

Enclosure

IP00	IP20	IP21/Type 1
■		

IP54/Type 12	IP55/Type 12	IP66/Type 4X

VACON® NXP DCGuard™

This semiconductor protection device enables fast disconnection and full selectivity between DC grids for all VACON® NXP series drives.

Current range

465-800 V DC ..... 3-4140 A
640-1100 V DC..... 4-3100 A

VACON® NXP DC/DC Converter

This air-cooled or liquid-cooled converter matches source voltage to a common DC bus system in hybrid applications to connect to sources such as batteries, super capacitors, fuel cells and solar panels.

Power range

3 x 380-500 V..... 160-1800 kW
3 x 525-690 V..... 210-1800 kW

VACON® NXP Grid Converter

This range of air and liquid-cooled drives is specifically designed for energy storage and marine energy management applications.

Reliable grid

VACON® NXP Grid Converter assures a reliable grid in applications for energy storage and energy management.

Save on fuel and emissions

In marine applications fuel savings and reduced emissions are immediate benefits of grid converters in shaft generator applications.

Power range

Air-cooled
3 x 380-500 V..... 180-1100 kW
3 x 525-690 V..... 200-1200 kW

Liquid-cooled
3 x 400-500 V..... 160-1800 kW
3 x 525-690 V..... 210-1800 kW
To achieve even higher power capacity, combine multiple VACON® NXP Grid Converter units.

Fieldbus

PB	DN	CAN	BAC	LON
TCP	EIP	PN	MOD	META
ECAT				

Enclosure

IP00	IP20	IP21/Type 1
■		

IP54/Type 12	IP55/Type 12	IP66/Type 4X

Fieldbus

PB	DN	CAN	BAC	LON
TCP	EIP	PN	MOD	META
ECAT				

Enclosure

IP00	IP20	IP21/Type 1
■		

IP54/Type 12	IP55/Type 12	IP66/Type 4X

VACON® NXP Liquid Cooled

This dedicated liquid-cooled drive is well-suited to applications where air quality is critical, space is limited, and efficient heat transfer is required.

Compact

No need for air ducts or large fans, combined with a more compact size, means you achieve a high power density in your installation - and virtually silent operation.

Uptime and cost savings

Save on both investment and operating costs when removing heat using the liquid medium. Achieve maximum uptime, with robust operation even in demanding conditions and with only minimal air filtering in dusty conditions.

Highest control flexibility

The drive utilizes the full VACON® NXP family control functionality to achieve modularity and scalability in a wide range of AC drive applications.

Power range

3 x 400-500 V..... 132-4100 kW
3 x 525-690 V..... 110-5300 kW

Fieldbus

PB	DN	CAN	BAC	LON
TCP	EIP	PN	MOD	META
ECAT				

Enclosure

IP00	IP20	IP21/Type 1
■		

IP54/Type 12	IP55/Type 12	IP66/Type 4X

VACON® NXP Liquid Cooled Common DC Bus

This range of liquid-cooled common DC bus components brings the benefits of liquid cooling into common DC bus systems.

For demanding systems

Liquid cooling offers strong benefits in applications where cooling air supply or quality is limited, enabling creation of solutions that work even in demanding situations.

Minimum amount of spare parts

Built on a unified product platform reduces costs and increases availability of spare parts and service units, since there is a common hardware platform for all variants used.

Reliable and cost-saving

Enjoy economical installation cost, maximum uptime and full VACON® NXP control functionality.

Power range

400-500 V.....90-5150 kW
525-690 V.....110-5300 kW

Fieldbus

PB	DN	CAN	BAC	LON
TCP	EIP	PN	MOD	META
ECAT				

Enclosure

IP00	IP20	IP21/Type 1
■		

IP54/Type 12	IP55/Type 12	IP66/Type 4X

VACON® NXP Liquid Cooled Enclosed Drive

The VACON® NXP Liquid Cooled Enclosed Drive offers all the benefits of VACON® NXP Liquid Cooled drives for high power applications in a compact IP54 rated enclosed drive package.

Predesigned is easy

Being predesigned and engineered, these drives are ready to go as soon as you receive them. Simply connect to the cooling system and the power and motor supplies.

Active Front End for clean supply

Drives with active front end minimize harmonic disturbance to the grid, enable regenerative braking and reduce the scale of infrastructure required, such as transformers and generators.

Fast serviceability

Fast access to the modules using pull-out rails saves time and money in service and maintenance situations.

Power range

400-500 V.....90-5150 kW
525-690 V.....110-5300 kW

Fieldbus

PB	DN	CAN	BAC	LON
TCP	EIP	PN	MOD	META
ECAT				

Enclosure

IP00	IP20	IP21/Type 1

IP54/Type 12	IP55/Type 12	IP66/Type 4X
■		

VACON® NXC Air Cooled Enclosed Drives

The VACON® NXC combines the VACON® NXP product range with a wide range of options in a single enclosed drive format.

Reliable operation

Based on a Rittal enclosure, the VACON® NXC enclosed drive is fully pre-designed and factory tested in order to ensure reliable and trouble-free operation.

Easy to work with

Access to the control equipment is easy and safe, due to the dedicated control compartment. It is also internally protected against unintentional touch to increase user safety.

Easy to configure

Choose from a wide range of cabinet-installed options; and 6 or 12 pulse rectifiers or Active Front End (AFE).

Power range

3 x 380-500 V.....132-1200 kW
3 x 525-690 V.....110-2000 kW

Power range - AFE supply

3 x 380-500 V.....132-1500 kW
3 x 525-690 V.....110-2000 kW

Power range - Low harmonic, Active Filter supplies

400 V.....132-560 kW
500 V[1].....132-560 kW
690 V.....110-800 kW

[1] requires 690 V active filter

Fieldbus

PB	DN	CAN	BAC	LON
TCP	EIP	PN	MOD	META
ECAT				

Enclosure

IP00	IP20	IP21/Type 1
		■

IP54/Type 12	IP55/Type 12	IP66/Type 4X
■		

VACON® NXP System Drive

By combining common DC bus components the VACON® NXP System Drive provides you a drive configured and assembled to meet your needs.

Simplicity in projects

Using pre-designed enclosed drive sections for all main system parts, it enables a short engineering and configuration time for any drive system. Every project design is fully documented for the specific configuration.

Reliability is key

The drive and its components are tested, for verified reliability.

Easy serviceability

A pullout system allows quick replacement of drives modules in service situations. Safety is a priority with internal touch protection and high power busbar sections in separate compartments.

Current ratings (main busbars)

3 x 380-500 V.....630-5000 A
3 x 525-690 V.....630-5000 A

Fieldbus

PB	DN	CAN	BAC	LON
TCP	EIP	PN	MOD	META
ECAT				

Enclosure

IP00	IP21/Type 1	IP31
	■	■

IP54/Type 12	IP55/Type 12	IP66/Type 4X

Power options

Compact and cost-saving solutions improve system efficiency for clean grids, long-term energy savings and trouble-free operation.

Danfoss Advanced Active Filter AAF 007

This advanced active filter gives you harmonic mitigation, power factor correction, and imbalance compensation, all in one product. Selective harmonic mitigation and automatic resonance detection ensure reliable operation tailored to your application requirements

Superior efficiency

The newest-generation SiC switches give unmatched 98.2% filter efficiency with 60% lower power losses compared to similar filters and effective elimination of high-order harmonics.

The advanced filter is compatible with all drives in the Danfoss product portfolio, for central or decentral installation. Pre-configured and tuned from factory, it is ready to use with the accompanying current transducers.

Line voltage and filter current[1]

3 x 380-480 V AC, 35 A/ 55 A/100 A/ 150 A modules.
Maximum 600 A with 4 x 150 A modules mounted in parallel.

[1]Additional voltage ranges and filter currents are available on request.

Advanced Harmonic Filter OF7P2

This advanced passive harmonic filter delivers optimized harmonic performance for iC7 drives rated up to 480 A. Meet higher capacity requirements by paralleling. This program offers 2 versions, for THDi system levels of 10% and 5% or better, respectively. This passive harmonic solution provides the best possible energy efficiency in part-load application, outperforming most AFE-based solutions.

Benefits:

- Suppresses harmonics to meet THDi 10% or 5%, or better
- Improves power quality to ensure maximum uptime
- Ensures compliance with IEEE 519-2022 when installed with an iC7 drive

LC Filter OF7Z1

LC Filter for AFE and grid converter drives in regenerative and low-harmonic applications.

When regenerative or low-harmonic application, an LC or LCL filter is mounted between the power supply and the drive. In close combination with the AFE or grid converter, this filter ensures correct power quality and minimal interruption to the grid. When one dedicated transformer serves each drive, then this LC filter is the correct choice.

Benefits:

- Ensures correct power quality
- Minimizes interruption to the grid
- Optimally combines the waveform smoothing qualities of capacitor and inductor

L Filter OF7Z5

For liquid-cooled applications requiring an LCL filter, use LC Filter OF7Z1 in combination with L Filter OF7Z5. Do not use this L filter on its own.

Benefits:

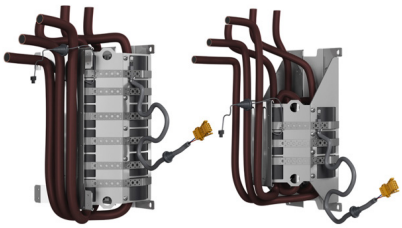
- Enables optimal performance of the LCL filter
- Minimizes harmonic distortion in the grid
- Suitable for regenerative and low-harmonic applications

LCL Filter OF7Z3

LCL filter for air-cooled AFE and grid converter drive modules in regenerative and low-harmonic applications. When regenerative or low-harmonic functionality is required in an application, an AFE module in combination with its dedicated LCL filter is the right choice. In close combination with the AFE or grid converter, this filter ensures optimal performance and minimizes harmonic distortion in the grid. For liquid-cooled applications requiring an LCL filter, use LC Filter OF7Z1 in combination with L Filter OF7Z5.

Benefits:

- Ensures optimal performance of the drive or power converter
- Minimizes harmonic distortion in the grid
- Suitable for regenerative and low-harmonic applications



Sine-wave Filter OF7S1

This sine-wave filter provides a sinusoidal phase-to-phase motor supply voltage. The filter reduces motor insulation stress and acoustical switching noise from the motor and allows the use of unscreened motor cables.

Benefits:

- Allows the use of unscreened motor cables
  - Up to 600 m unscreened cable
  - Up to 300 m screened cables
- Reduces motor insulation stress
- Reduces common-mode currents
- Reduces acoustical switching noise from the motor
- Provides optimum motor protection to prolong lifetime
- Reduces losses in the motor

dU/dt Filter OF7U1

Install the dU/dt filter between the AC drive and the motor to eliminate very fast voltage changes. The motor terminal phase-to-phase voltage is still pulse shaped but its dU/dt values are reduced.

Benefits:

- Reduces dU/dt values on the motor terminal voltage
- Protects motor insulation by suppressing output voltage spikes
- Reduces current leakage and losses in the motor cable and motor

dU/dt & CM Filter OF7U2

The combined dU/dt and common mode filter eliminates fast voltage changes to reduce stress on the motor insulation. It also mitigates high frequency noise in the motor cable (shielded or unshielded) and reduces bearing currents in the motor.

Benefits:

- Eliminates fast voltage changes to reduce stress on the motor insulation
- Mitigates high frequency noise in the motor cable
- Reduces bearing currents in the motor

Common-Mode Filter OFXC1

This common-mode filter reduces high-frequency currents associated with electrical discharges in the motor currents. It reduces or even eliminates these electrical discharges. This effect reduces wear on the bearings, which extends their lifetime, reduces maintenance costs, and improves uptime. Compatible with iC7 drives.

Benefits:

- Reduces high-frequency currents
- Reduces wear on the bearings and extends the lifetime of the bearings
- Reduces maintenance costs and improves uptime

DC/DC Filter OF7D1

A DC/DC converter requires a DC filter between the DC source and the converter for current control and the ability to boost voltage. The DC/DC filter smooths the current and voltage waveforms, making them suitable for most DC sources or loads.

Benefits:

- Smooths the current and voltage waveforms, to make them suitable for most DC sources and loads
- Boosts voltage on the DC/DC converter
- Stores energy and reduces the di/dt slope of the load current. The stored energy is released back to the system with decreasing current

VLT® Advanced Harmonic Filter AHF 005 and AHF 010

These passive harmonic filters are robust and easy to use. They reduce harmonics while maintaining good system energy efficiency.

Strong performance

The AHF 005 and AHF 010 filters deliver superior system performance, and reduce THDi to less than 5% or 10% respectively, at nominal conditions.

Optimized design

The filters offer superior cooling, very low heat losses and a compact footprint. The integrated capacitors can be switched off to reduce the reactive current at low loads.

Line voltage and filter current

3 x 380/400/500/600/690 V..... 10-480 A[1]

[1]Achieve higher ratings by connecting in parallel. See AHF 005 or AHF 010 Design Guide for details.

VLT® Sine-wave Filters

VLT® Sine-wave Filters smooth the output voltage of a VLT® drive and reduce motor insulation stress and bearing currents as well as noise development in the motor.

For critical motors

Use the filter especially for AC drive operation of older motors, low permitted voltages in terminal boxes or without phase insulation.

Long motor cables

Enable use of motor cables with a length of 500 m and more, using a sine-wave filter.

Line voltage and filter current

3 x 200-690 V.....2.5-800 A[2]

[2]For higher power ratings, combine multiple modules.

VLT® dU/dt Filters

VLT® dU/dt Filters reduce the rate of voltage rise on the motor terminals and protect old or weak motor insulation against breakdown. This is particularly important for short motor cables.

Retrofit

Retrofit is easy in older systems or motors.

Compact

These filters are smaller, lighter and more affordable, compared to sine-wave filters.

Line voltage and filter current

3 x 200-690 V..... 15-880 A[3]

[3]For higher power ratings, combine multiple modules.

Enclosure

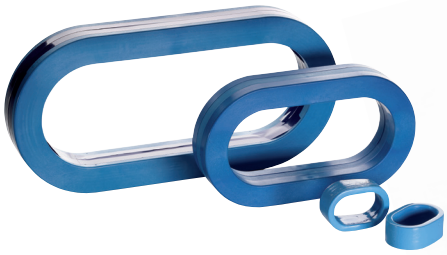
IP00	IP20	IP21/Type 1
	■	
IP54/Type 12	**IP55/Type 12**	**IP66/Type 4X**

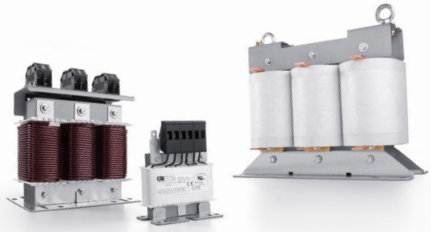
Enclosure

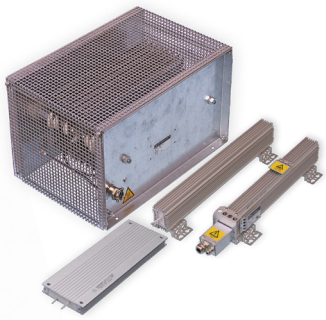
IP00	IP20	IP21/Type 1
■	■	
IP54/Type 12	**IP55/Type 12**	**IP66/Type 4X**
■		

Enclosure

IP00	IP20	IP21/Type 1
■	■	
IP54/Type 12	**IP55/Type 12**	**IP66/Type 4X**
■		







VLT® Common Mode Filter

High-frequency common mode cores reduce electromagnetic interference and protect against bearing currents.

Wide coverage
Just 5 sizes cover the range up to 480 A.

Combinable
The filters can be combined with other output filters.

Line voltage and filter current
3 x 380-690 V..... 10-480 A

VLT® Line Reactor MCC 103

This line reactor ensures current balance in load-sharing applications, where the DC-side of the rectifier of multiple drives is connected. UL-recognized, for applications using load sharing.

When planning load-sharing applications, pay special attention to different enclosure type combinations and inrush concepts
For technical advice regarding load-sharing applications, contact Danfoss application support.

Compatible with:
- VLT® AutomationDrive, VLT® AQUA Drive and VLT® HVAC Drive
- 50 Hz or 60 Hz mains supply

VLT® Brake Resistor MCE 101

Energy generated during braking is absorbed by the resistors, protecting electrical components from heating up. VLT® brake resistors are optimized for the FC-series and general versions for horizontal and vertical motion are available. A selection of the vertically mounted units is UL-recognized. With built-in thermo switch.

Power range
Precision electrical match to each individual VLT® drive power size for FC 102, FC 202, FC 301 and FC 302.

Enclosure

IP00	IP20	IP21/Type 1
	■	■

IP54/Type 12	IP55/Type 12	IP65/Type 4X
■		■

Decentral drives

Rugged design with high protection ratings enables you to mount decentral drives close to the motor in demanding applications. When required, hygienic design is available.

VLT® Decentral Drive FCD 302

This decentral drive in a rugged design offers a high degree of flexibility and functionality. It can be mounted close to the motor and is ideal for demanding applications.

One-box concept

All required modules and available options are accommodated in the AC drive housing.

Minimizing installation costs

Fewer external components and connectors save installation, assembly and maintenance time.

Hygienic design

The VLT® Decentral Drive FCD 302 complies with requirements for ease of cleaning and hygienic design.

Power range

3 x 380-480 V..... 0.37-3.0 kW

VLT® DriveMotor FCP 106

For full flexibility in motor choice, system design and energy efficiency, choose your own PM or induction motor and attach the standalone VLT® DriveMotor FCP 106.

Easy to install

Installation is simple due to the integrated cooling system and an individually adjustable motor adapter plate.

High performance

The standalone VLT® DriveMotor FCP 106 provides you with a high level of flexibility and stable, energy-efficient operation as the drive automatically sets the optimal parameters for the attached motor.

Power range

3 x 380-480 V.....0.55-7.5 kW

VACON® 100 X

Achieve maximum performance in extreme environments.

The harsher - the better

The drive withstands high-pressure water, high vibration levels, heat and dirt. A Gore® vent membrane, IP66 / Type 4X outdoor enclosure and a temperature range from -40°C to +60°C give you the freedom for unlimited outdoor installations.

Wide power range

With power range extending up to 37 kW, this drive makes the benefits of decentralized solutions available for a wide range of applications.

Power range

3 x 208-240 V..... 1.1-15 kW
3 x 380-500 V..... 1.1-37 kW

Fieldbus

MOD				
PN	EIP	PB	PL	ECAT

Enclosure

IP 00	IP20	IP21/Type 1
IP54/Type 12	IP55/Type 12	IP66/Type 4X
		■

Fieldbus

MOD	
BAC	PB

Enclosure

IP00	IP20	IP21/Type 1
IP54/UL Type 3R	IP55/Type 12	IP66/Type 4X
		■

Fieldbus

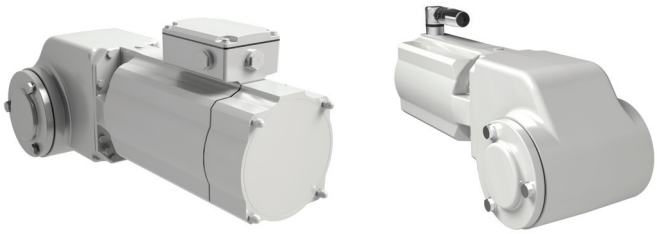
MOD	META	BAC	TCP	BIP
PB	DN	CAN	LON	EIP
PN	ECAT	ASI		

Enclosure

IP00	IP20	IP21/Type 1
IP54/Type 12	IP55/Type 12	IP66/Type 4X
		■

Gear motors

The highly efficient combination of a permanent magnet motor and optimized bevel gearing supports many diverse applications. These gear motors reduce complexity with a limited number of variants, resulting in low operating and maintenance costs.



VLT® OneGearDrive®

The highly efficient combination of a permanent magnet motor and optimized bevel gearing, powered by a central or decentral VLT® drive, contributes significantly to operating and maintenance cost savings.

Long service intervals

VLT® OneGearDrive® operating under partial load does not require an oil change until after 35,000 operating hours.

Fewer variants

With only one motor type and three gear ratios available, the motor concept covers most typical conveyor drives.

Hygienic version

Use it with confidence in wet areas including aseptic areas and clean room production areas.

Power range

3 x 380-480 V.....1.0-3.0 kW

Fieldbus

MOD

Enclosure

IP00	IP20	IP21/Type 1

IP54/Type 12	IP67/IP69K	IP67
	■ [1]	■ [2]

[1] OGD-H version; [2] OGD-S version

Motion control and servo drives

Select servo drives and motion solutions, designed to meet the requirements of tomorrow's machine architecture, today. Uniquely open, modular, and scalable. You get one system capable of creating a diversity of machine concepts, based on decentral and central servo drives.

VLT® FlexMotion™

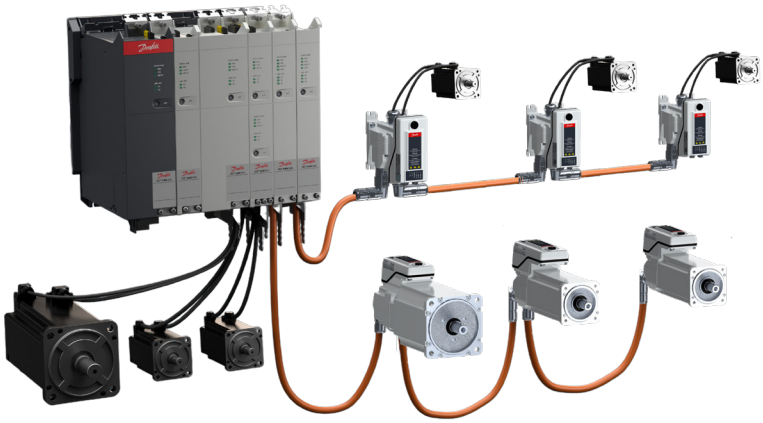
This portfolio is a modular and multi-purpose servo drive solution, adaptable to suit your business.

VLT® FlexMotion™ meets the requirements of tomorrow's machine architecture, today. Its modular platform provides you one system capable of creating a diversity of machine concepts, based on three servo product lines:

The future of smart machine design is flexible

Combine and scale this portfolio of central and decentral drives to achieve maximum flexibility for your machine design and system integration. Open system architecture gives you total freedom to integrate with the motors and PLC you prefer. Save time and cost thanks to numerous finesses facilitating fast installation, commissioning, and maintenance. All designed for absolutely reliable operation in demanding environments.

Achieve a whole new degree of customization and precision using the VLT® FlexMotion™ portfolio – enabling you to get more from less.
VLT® FlexMotion™ portfolio comprises:
- VLT® Multiaxis Servo Drive MSD 510
- VLT® Integrated Servo Drive ISD® 520
- VLT® Decentral Servo Drive DSD 520



VLT® Multiaxis Servo Drive MSD 510

This central servo drive with flexible modularity is a generic central servo solution and the fundamental power supply to the VLT® FlexMotion™ concept.

Its flexibility and modularity in hardware and software gives the freedom to design or engineer machines according to the application needs.

MSD 510 comprises these modules:
- VLT® Power Supply Module PSM 510
- VLT®Servo Drive Module SDM 511 for single axis and SDM 512 for double axis
- VLT® Decentral Access Modules DAM 510
- VLT®Auxiliary Capacitor Module ACM 510
- VLT® Expansion Module EXM 510

To optimize space requirements, some modules are available in two enclosure sizes: width 50 mm or 100 mm

Supply and DC-link voltage

Nominal input voltage:
3 x 400-480 V AC ±10%

DC link voltage:
565-680 V DC ±10%

Fieldbus

PN	ECAT	PL

Enclosure

IP00	IP20	IP21/Type 1
	■	

IP54/Type 12	IP55/Type 12	IP66/Type 4X

VLT® Integrated Servo Drive ISD® 520

A high-performance decentral servo motion drive combined with a servo motor in one compact unit. ISD 520 extends the VLT® FlexMotion™ decentral servo drive concept. Ideal for applications such as turntables, labeling, capping, and packaging in food, beverage, pharmaceutical, metal forming, material handling, and textile industries.

Fast and fail-safe installation

Installation is fast, easy, fail-safe end cost-efficient. No distribution boxes are required, and you can reduce cabling to a minimum.

Choose your protocol

Open connectivity to common real-time Ethernet systems. IEC 61131-3 based programming and PLCopen certified Motion libraries makes the system easy to integrate.

Torque range

Rated voltage:
565-680 V DC ±10%

Rated torque:
1.5-16 Nm

Peak torque:
6.3-39 Nm

Fieldbus

PN	ECAT	PL

Enclosure

IP00	IP20	IP21/Type 1

IP54/Type 12	IP55/Type 12	IP67/Type 4X
		■

VLT® Decentral Servo Drive DSD 520

This servo drive extends the VLT® FlexMotion™ decentral servo drive concept.

Flexible modularity for decentral servo applications

Supporting a wide range of feedback encoders and sensorless control, its architecture is completely open and allows you to choose your preferred PM or ACM motor.

Use the Integrated Motion Controller (IMC) to run the motion sequence independently and free up capacity in the central PLC.

High performance in harsh environments

A completely smooth and easy-to-clean surface together with high-protection IP67 enclosures and vibration resistance class 3M7 ensures the perfect fit for all kind of rotating applications in demanding environments.

Rated voltage, power and current

Rated voltage:
565-680 V DC ±10%
Rated power: 3 kW
Rated current: 4.5 A

Fieldbus

PN	ECAT	PL

Enclosure

IP00	IP20	IP21/Type 1

IP54/Type 12	IP55/Type 12	IP67/Type 4X
		■

Soft starters

Save energy with a soft starter. You can also reduce wear with a soft starter to control your motor start and ramping. Danfoss Drives offers VLT® soft starters and soft-start controllers.

VLT® Soft Start Controller MCD 100

The compact soft starter series is a cost-effective alternative to traditional contactors and can also replace star/delta combinations. The ramp time and the starting torque and kick start are adjusted via controls on the front of the unit.

Almost unlimited number of motor starts

For a power rating of up to 25 A, up to 480 starts per hour are possible. This is a true "fit and forget" soft starter for DIN rail mount. The unique contactor design allows an almost unlimited number of starts per hour without derating.

Technical data

Input ..... 3 x 208-600 V
Control voltage ..... 24-480 V AC or DC
Power ..... 0.1 kW-11 kW (25 A)

VLT® Compact Starter MCD 201 and 202

While the basic and the starting torque VLT® Compact Starter MCD 201 version is only used for motor starting, the extended VLT® Compact Starter MCD 202 version offers additional motor protection functions. These include, for example, current limitation during motor starting.

Built-in bypass

After the motor is started, the MCD 201 and MCD 202 automatically connect the motor to the mains supply via the built-in bypass relay. This minimizes losses during operation under full load.

Technical data

Input ..... 3 x 200-575 V
Control voltage ..... 24 V AC or DC/110-440 V AC
Power ..... 7.5 kW-110 kW (200 A)

VLT® Soft Starter MCD 600

The VLT® Soft Starter MCD 600 delivers superior performance in fixed-speed applications.

Fast and flexible installation

The MCD 600 is more flexible than ever to install, thanks to a wide variety of Ethernet and serial-based communication option cards, application-dedicated smart cards and support for eight languages.

Pump Clean / reverse function

The pump clean function uses reverse operation. Motor control is simple, with soft ramps in both directions.

More uptime

More extensive motor and starter protections ensure more uptime.

Technical data

Input ..... 3 x 200-690 V
Control voltage ..... 24 V DC or 110-240 V AC
Current range IP20 ..... 20-129 A
Current range IP00 ..... 144-579 A

Enclosure

IP00	IP20	IP21/Type 1
	■	
IP54/Type 12	**IP55/Type 12**	**IP66/Type 4X**

Fieldbus

PB	DN	MOD	EIP

Enclosure

IP00	IP20	IP21/Type 1
■	■	
IP54/Type 12	**IP55/Type 12**	**IP66/Type 4X**

Fieldbus

PB	DN	MOD	EIP

Enclosure

IP00	IP20	IP21/Type 1
■	■	
IP54/Type 12	**IP55/Type 12**	**IP66/Type 4X**

Medium-voltage drives

Discover the Danfoss range of medium-voltage drives, available in modular or enclosed format.

VACON® 3000 Enclosed Drive

Ready-to-run medium-voltage drives offer superior performance and high reliability. Select a standard enclosed drive to get up and running fast.

Modular and configurable cabinet drive

This definite-purpose MV drive is extremely reliable in heavy-duty engineering applications. This modular and configurable cabinet-built drive is robust, compact, and weight-efficient.

Low complexity

Choose these pre-engineered drives to save time and reduce complexity. Performance is robust and reliable despite high ambient temperatures and tough environments, with an innovative integrated cooling system.

Power range

Continuous rating (variable torque)
3300 V.....2430-7030 kVA
4160 V.....2450-7060 kVA
Low overload 110% (constant torque)
3300 V.....2210-6390 kVA
4160 V.....2230-6420 kVA
High overload 150% (constant torque)
3300 V.....1620-4680 kVA
4160 V.....1630-4060 kVA

Fieldbus

PB	CAN	DN	ECAT	EIP

Enclosure

IP00	IP20	IP21/Type 1

IP54/Type 12	IP55/Type 12	IP67/Type 4X
■		

VACON® 3000 Drive Kit

This is the only medium-voltage drive (MV drive) available as a modular kit. The kit accommodates flexible arrangements, straightforward system integration and easy maintenance.

Modular advantage

When customization counts, choose this range of modular medium-voltage (MV) drives. Empowering systems integrators and OEMs, it delivers a whole new approach to attaining the ultimate in performance, exactly tailored to the needs of each application and installation environment.

Partners

Danfoss Drives works with select, qualified partners to push the boundaries of the medium-voltage drives market to deliver something never seen before.

Power range

Continuous rating (variable torque)
3300 V.....2430-7030 kVA
4160 V.....2450-7060 kVA
Low overload 110% (constant torque)
3300 V.....2210-6390 kVA
4160 V.....2230-6420 kVA
High overload 150% (constant torque)
3300 V.....1620-4680 kVA
4160 V.....1630-4060 kVA

Fieldbus

PB	CAN	DN	ECAT	EIP

Enclosure

IP00	IP20	IP21/Type 1
■		

IP54/Type 12	IP55/Type 12	IP67/Type 4X

VACON® 1000

This air-cooled medium-voltage drive is ideal for general-purpose industrial MV applications, especially for variable torque loads such as pumps and fans in the low and mid-power range.

Reliable

The drive is 100% full-load burn-in tested before shipping for high reliability, fast commissioning, and start-up. Detailed fault monitoring reduces downtime. Redundant cooling fan supports non-stop operation.

Safe and user-friendly

Simple, easy UI selections support a wide variety of flexible configurations. Good access for easy installation, service and maintenance.

Compact

Stand-alone design with smallest footprint in the market, at 215 A and below (≤6.9 kV).

Power range

2400-3000 V AC.....150-3530 kVA
3300-4160 V AC.....210-4900 kVA
6000-6900 V AC.....375-8130 kVA
10000-11000 V AC.....625-12960 kVA

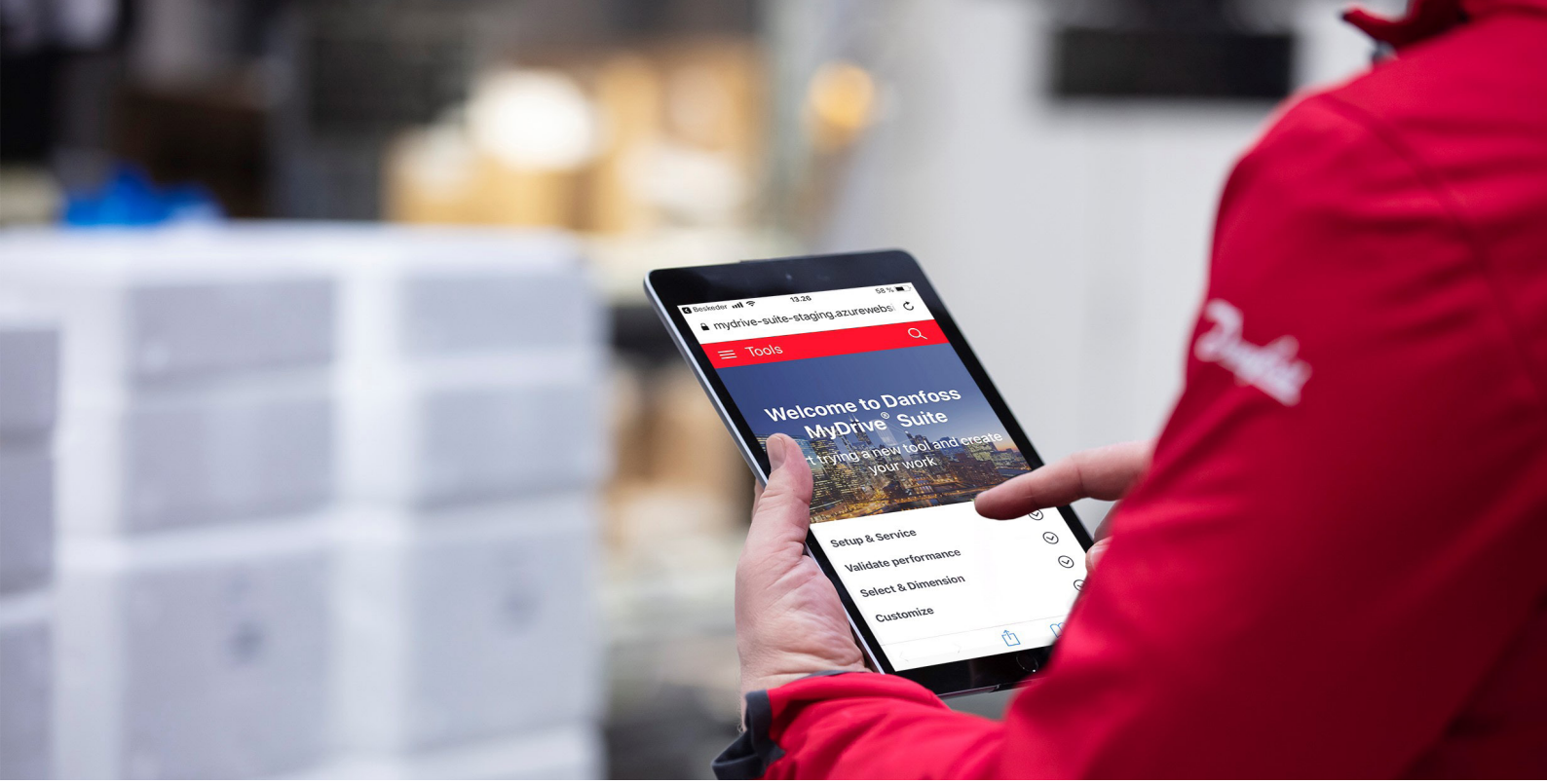
Fieldbus

PB	CAN	DN	ECAT	EIP

Enclosure

IP00	IP31	IP42
	■	■

IP54/Type 12	IP55/Type 12	IP67/Type 4X



MyDrive®Suite ensures your digital tools are only one click away

MyDrive® Suite brings all your tools together to support you during engineering, operation and service. What is MyDrive® Suite? It's a tool providing a single point of access for the other digital tools supporting you during engineering, operation and service, thereby covering the whole life cycle of the drive.

Based on your needs, the tools are accessible via different platforms. They can be integrated into your system and business processes to enable a world-class end-to-end experience with full flexibility. Your data is synchronized between the tools, and by sharing the same data backend, information is always correct and up to date.

Our suite of software tools is designed to ensure you easy operation and the highest level of customization of your AC drives. Whether you're a beginner or a pro, you have everything you need to go from selecting to programmability of a drive.

Try MyDrive® Suite today:
https://suite.mydrive.danfoss.com/content/tools

Easy to use

- One tool suite
- One common look and feel
- Single login to all tools
- Seamless usage across devices and touchpoints
- Platform enables coherent workflows
- Data synchronization between tools. There is no need to enter information twice, which means your information is always correct and up to date
- Search and smart filtering
- Tutorials and documentation

Keeps your data safe

- Data security through user levels and authentication
- End-to-end secure communication

Fits your needs

- Data integration into your tools and systems
- APIs and open interfaces facilitate third-party applications or branded versions
- The tools are available as web app, desktop application, dedicated tablet and smartphone app, all with offline functionality. No internet connection is required once the tool is installed to your device

Discover MyDrive® Suite digital tools here:

Digital tools

Digital tools ensure easy operation and great flexibility in customization of your drives. In our Downloads area you can also download application software, configuration files, PLC libraries and firmware updates.

Select and dimension

Select the right AC drive based on motor and load characteristics. Find general product, segment and application information

- **MyDrive® Select**

Validate performance

Monitor the performance of your drives, analyze harmonics content, calculate the energy savings achievable, and validate compliance to norms and standards.

- **MyDrive® Insight**
- **MyDrive® ecoSmart™**
- **MyDrive® Harmonics**
- **MyDrive® Energy**

Set-up and service

Set up a drive or power converter to operate according to your requirements. Monitor drive performance throughout the entire lifecycle of your drive or power converter

- **MyDrive® Connect**
- **VLT® Motion Control Tool MCT 10**
- **Danfoss AAF 007 Setup Tool**
- **VLT® Servo Toolbox**
- **VACON® NCDrive**
- **VACON® Live**
- **DrivePro® Site Assessment**
- **DrivePro® Start-up**
- **DrivePro® Preventive Maintenance**

Customize

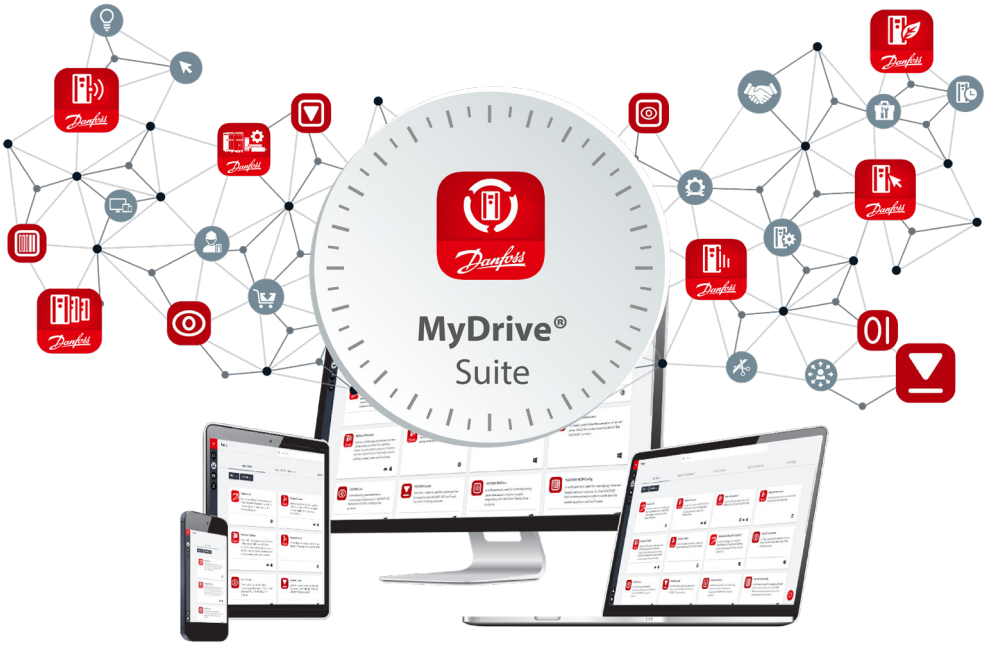
Freely customize the interface and operation of your drive. Modify or create unique splash screens, initial values, and start-up wizards

- **VLT® Software Customizer**
- **VACON® Customizer**

Simulate

Simulate your drive or power converter environment to benefit from fast response time and flexibility in product development. This approach helps you go to market faster and gain competitive advantage. MyDrive® simulation tools put the best predictive simulation software and hardware tools in your hands, equipping you with the tools and expertise necessary to achieve your design goals.

- **MyDrive® Simulation**
  High-fidelity drive models that are compatible with over 150 simulation tools worldwide.
- **MyDrive® HIL**
  Real-time hardware in the loop simulation. This tool combines actual Danfoss control components with virtual applications, offering unmatched fidelity and cost savings.
- **MyDrive® Virtual**
  Cloud-based simulation platform for enhanced collaboration between colleagues, for high efficiency.



DrivePro® Services

Delivering a customized service experience

Every AC drive application is different. DrivePro® Services is a collection of tailor-made products designed around your needs. From optimized spare part packages to condition-monitoring solutions, we deliver customized service offerings to support your business through the different lifecycle stages of your AC drive.

Learn more about DrivePro® Services here

You are covered
with DrivePro® Services products

DrivePro® Site Assessment
Get a complete on-site survey of your AC drives
Optimize your maintenance strategy with a complete onsite survey and risk analysis of all your AC drives, collected in one detailed report.

DrivePro® Start-up
Take the complexity out of commissioning
DrivePro® Start-up includes a full range of operating health checks and parameter adjustments. Based on a manufacturer´s commissioning checklist, our experts will inspect and test your AC drive and its motor performance to ensure the best configuration of each drive.

DrivePro® Extended Warranty
The industry´s longest warranty coverage
Even the best performing AC drives need protection. DrivePro® Extended Warranty offers a wide range of warranty options and provides the longest coverage in the industry - up to 6 years.

DrivePro® Spare Parts
Original Danfoss spare parts at your fingertips
Maximize uptime and maintain peak performance throughout the lifetime of your AC drives. DrivePro® Spare Parts makes sure you are equipped with the original spare parts from Danfoss Drives.

DrivePro® Preventive Maintenance
Take the guesswork out of your maintenance plan
With a structured maintenance program tailored to your needs, you can boost operational efficiency. Reduce the effects of wear and tear with DrivePro® Preventive Maintenance.

DrivePro® Exchange
Reduce costly downtime with a fast replacement
Maintain uptime with a fast alternative to repair in time-critical situations. If an AC drive fails, the DrivePro® Exchange service ensures quick exchange to a new unit of the same type, for shortest possible production delay.

DrivePro® Retrofit
Be prepared for the end of a drive service life
The DrivePro® Retrofit service prepares you for end of the drive service life. Replace outdated drives with optimal successor products and recommended conversion plan - while minimizing unscheduled downtime.

DrivePro® Remote Monitoring
Minimize unexpected downtime and increase your efficiency with faster response
DrivePro® Remote Monitoring is a digital service that provides real-time remote monitoring by collecting drives performance parameter and fault values, storing them in the cloud, and representing analytics in an easily accessible and simplified way.

ENGINEERING
TOMORROW

Imagine versatile and highly secure power conversion and motor control. Intensely powerful and compact converters and drives built to optimize a vast range of systems while giving you the flexibility to distribute intelligence the way you want. Paving the way for a new dimension, where open, connected and intelligent systems are the new reality.

iC7

Open up a new dimension with iC7 series

iC7-Automation | iC7-Marine | iC7-Hybrid

Contact us

Some functionalities listed in this fact sheet are for future implementation