

ENGINEERING
TOMORROW

Danfoss

Brochure | DrivePro® Services

DrivePro® Services Overview



drivepro.danfoss.com



Table of contents

Page 04 - 05

DrivePro® Services Introduction

Page 06

Danfoss AC Drives lifecycle management model

Page 07 - 27

DrivePro® Services Portfolio

- Choosing the right maintenance mix
- DrivePro® Site Assessment
- DrivePro® Start-up
- DrivePro® Extended Warranty
- DrivePro® Spare Parts
- DrivePro® Preventive Maintenance
- DrivePro® Exchange
- DrivePro® Retrofit
- DrivePro® Remote Monitoring

Page 28 - 29

Lifecycle Service Support

Page 30 - 33

Service Network and Global Service Stocks (GSS)



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.





Services for every lifecycle phase of variable speed drives and power converters

DrivePro® Services go beyond simple troubleshooting, maintenance, repairs, and replacements. They also proactively improve productivity, performance, and uptime.

From optimized spare-part packages to condition-monitoring solutions, our products can be customized to help you achieve your business goals. Each service is designed to fit your AC drive throughout every

phase of its lifecycle. Plus, with one contact for your DrivePro® Services needs, we ensure you receive a fast response, save time, and avoid complexity.

Rest assured that your AC drive is well-taken care of and performs optimally from day one to disassembly and reuse, making the unsustainable, linear 'take-make-dispose' model a thing of the past. DrivePro® Services help ensure a reliable business

operations and a more sustainable consumption and production pattern. Durable AC drives maintained with excellent service are a wise investment not just for your business, but for the future of the planet.

Danfoss AC Drives lifecycle management model



New

AC Drives in the new phase are best for new projects or for retrofitting existing customer sites. These AC drives are supported with access to the full range of DrivePro® Services.

Active

AC Drives in the active phase are recommended for new installations and extensions to existing customer sites. These AC drives are supported with access to the full range of DrivePro® services and critical firmware upgrades.



Limited

AC Drives in the limited phase can no longer be purchased and have limited service options. Basic maintenance, spare parts, and repair services are available for a limited time.*

Inactive

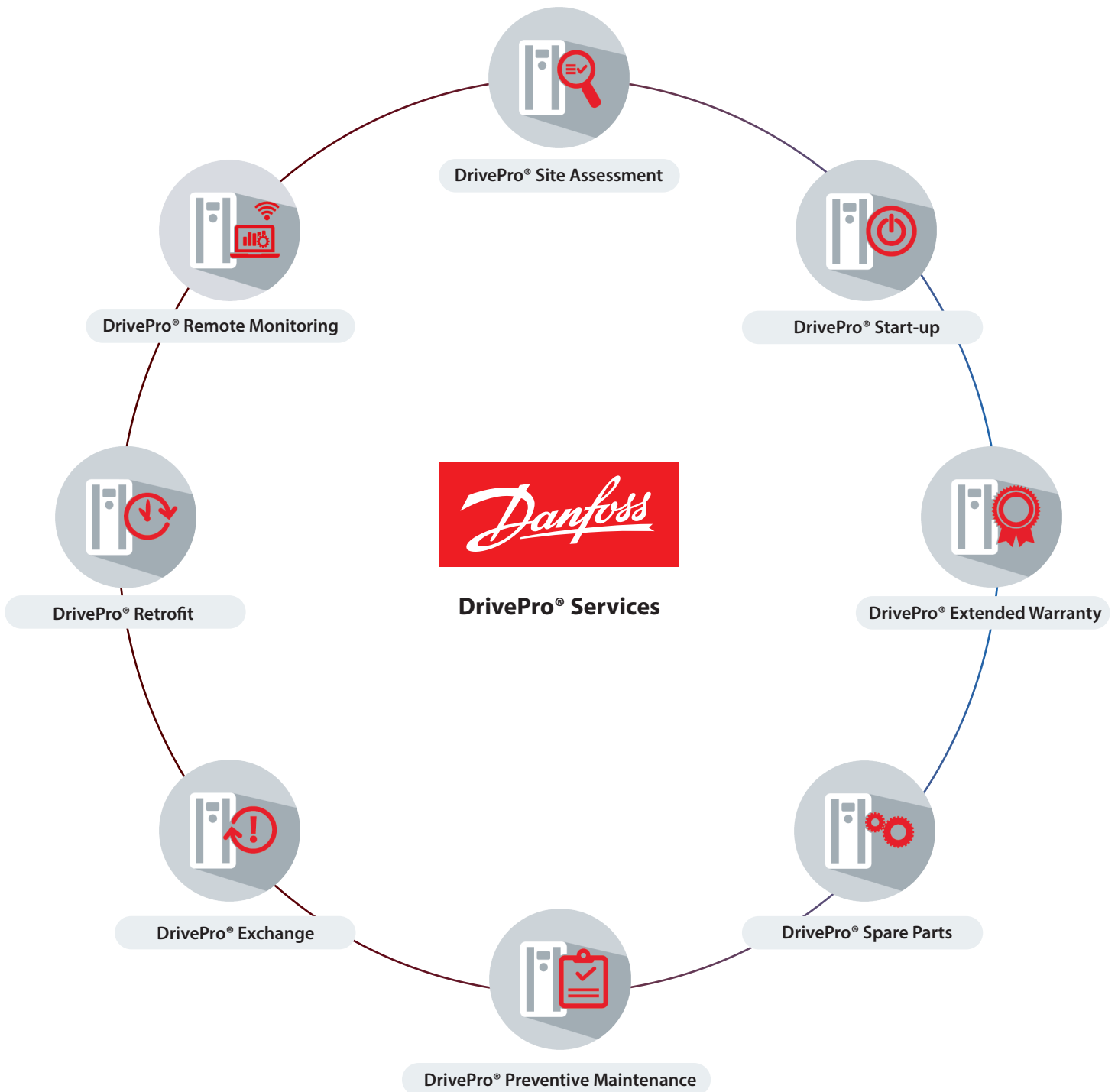
AC Drives in the inactive phase have been discontinued and spare parts and service options are no longer available, making it high risk. An onsite audit is recommended to ensure smooth planning of AC drive replacement with minimal downtime.



*Technical support is provided for all AC drives for up to 10 years. Spare part availability is provided for a minimum of 5 years after the product has been moved to a Limited lifecycle status.

DrivePro® Products Portfolio

Delivering a customized service experience



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 parameters 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 your AC drives.



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 by making 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 situation. 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's lifecycle

The DrivePro® Retrofit service prepares you for the 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

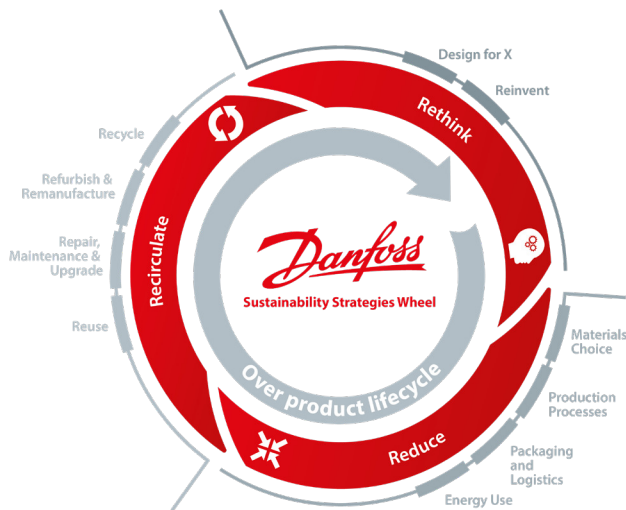
DrivePro® Remote Monitoring is a digital service that provides real-time remote monitoring by collecting drives performance parameter and fault values, storing them in the cloud, and representing analytics in an easily accessible and simplified way.



To learn which products are available in your region, please reach out to your local Danfoss Drives sales office or visit [our website](#).



Circularity is at the core of DrivePro® DNA



Danfoss AC drives play an instrumental part in making the most of the energy used in spinning motors across the globe. By applying a Danfoss AC drive to your motor, you can optimize its energy use, reduce wear and tear on your entire system, and maximize uptime. These are all benefits your bottom line will thank you for.

Prolong the lifetime of your AC drives with tailored lifecycle services. This reduces waste generation and raw material consumption through repair, maintenance, and reuse of products and parts — also known as product circularity.



[Read more about
Circularity at Danfoss](#)



Choosing the right maintenance mix

3 Types of Maintenance Strategies

Corrective

Corrective maintenance is a type of maintenance that is performed to correct problems and restore equipment and machines to a working condition in case of a sudden failure.

Preventive

Preventive maintenance is the regular and routine maintenance of equipment and assets in order to keep them running and prevent any costly unplanned downtime from unexpected equipment failure.

Predictive

Predictive maintenance techniques are designed to help determine the condition of in-service equipment in order to analyse when maintenance should be performed.





Choosing the right maintenance mix

Criteria for maintenance strategy selection

Corrective

- You have skilled people at your operations site equipped with the right tools to fix the failure.
- You have spare parts always available locally at your site.
- You have a redundant system that you can switch easily in case of non-serviceable failure.
- In case of unexpected downtime, it would not result in critical operation failure, and it would not be costly.

Preventive

- You currently have a regular maintenance schedule.
- You have a clear plan of critical components which needs regular replacement.
- You have an overview of your assets expected lifecycle and its current performance state.
- In case of unexpected downtime, it would result in a critical operation failure, which would be very costly to your operation.

Predictive

- You have the technology and tools to track and analyse data from the actual, current condition of the equipment in operation.
- You have an overview of your assets expected lifecycle and its current performance state.
- You have skilled people who can analyse failure modes, make predictions and deploy the predictive maintenance technology based on data.
- In case of unexpected downtime, it would result in a critical operation failure, which would be costly to your operation.



DrivePro® Site Assessment

Get a complete on-site survey of your AC drives

Did you know 1 out of 5 AC drives are at risk of failure?

DrivePro® Site Assessment is a service for asset management that includes a complete onsite survey and risk analysis of your whole installed base of AC drives.

Our Danfoss experts look at every drive onsite to record the asset condition, the criticality, and the lifecycle status. Based on these parameters, we calculate a risk result for every AC drive and make recommendations for the product's lifecycle journey accordingly.

The full analysis is then summarized in a customized and detailed report for you. On this basis, you can build a tailored plan for future maintenance or retrofits to the new generation together with our experts.

How it works

Step 1

Request DrivePro® Site Assessment

Contact your local sales office by e-mail or phone or fill out the form in Danfoss.com to request DrivePro® Site Assessment.

Step 2

Assess and analyze

We inspect the visual asset condition and lifecycle status, and discuss the criticality of each drive. Based on the results, we evaluate the operational risk of each individual AC drive.

Step 3

Receive your site survey

Sit down with our expert and evaluate the collected data based on recommendations we make for each AC drive.

Step 4

Optimize our maintenance strategy

Based on your advice you can implement an optimized maintenance plan. This also helps you plan your budget well in advance.

Features

Complete overview of your installed base of AC drives on-site

Detailed site analysis report

Interactive expert recommendation

Benefits

- See the latest lifecycle status of each Danfoss AC drive
- Asset criticality evaluation
- AC drives condition evaluation
- Asset risk analysis
- Risk mitigation plan
- Highlight high-risk AC drive
- Identify potential for improved energy efficiency
- Selection of services from our well-designed DrivePro® portfolio
- Optimized planning ensuring highest productivity with lowest cost impact

23%

Of the drives at our customers' operations are inactive or in a limited lifecycle status.

48%

Of the drives at our customers' plants are in a medium or poor condition.

54%

Of the drives at our customers' plants are critical.

20%

Of the drives at our customers' operations are at high risk.





DrivePro® Start-up

Take the complexity out of commissioning

DrivePro® Start-up includes a full range of operating health checks and parameters 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 your AC drives.

DrivePro® Start-up is built on more than 50 years of AC drives manufacturing experience and supports all the latest Danfoss drives product releases. Optimizing your AC drives during the commissioning process ensures maximum energy efficiency, lifetime extension, and cost savings for your system from day one.

Our trained engineers will inspect your installation, set drives parameters based on Danfoss manufacturer recommendations, and run a real test on the application.

In addition, we will provide you with hands-on instructions and a Danfoss recommendation for commissioned AC drives operating ensuring reduced carbon emissions and energy waste, while maximizing the value of your drive.

How it works

STEP 1

Place your order

Order DrivePro® Start-up together with your order of AC drives for additional cost savings.

STEP 2

Schedule your service time

Order DrivePro® Start-up together with your order of AC drives for additional cost savings.

STEP 3

Receive hands-on instructions

Have a conversation with our experts on how to best operate and maintain your commissioned drives.

STEP 4

Get the custom commissioning report

The DrivePro® Start-up report is your assurance that your AC drives are optimized from the point of first use.

Features

Ensure correct installation and optimal fine-tuning for the application and process

Danfoss expertise improves process efficiency and energy savings

Shorten commissioning time with proven start-up procedures tailored for Danfoss AC drives

Benefits

- Extend the AC drive lifetime by up to 50%
- Decrease your operational downtime by up to 30%

- Improve operational efficiency, up to 20% annual energy savings right from the first start-up

- Save on commissioning costs

20%

annual energy savings right from the first start-up.





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.

Extend the lifetime of your AC drives with expert service support available around-the-clock and enjoy peace of mind avoiding costly repairs and replacements.

Unlock maximum uptime with fast response time, predictable maintenance, and repair budget, as well as reduced costs with a wide range of warranty options to fit your needs.

Choose between two types of DrivePro® Extended Warranty

Standard Extended Warranty

On-site Extended Warranty

*With DrivePro® Extended Warranty, we support all Danfoss AC drives in a new or active lifecycle status.

How it works

STEP 1

Choose warranty type

Contact Danfoss experts and find the option that best fits your application needs.

STEP 2

Select terms of warranty coverage

Choose up to 6 years from the date of manufacture.

STEP 3

Enjoy peace of mind

Continuous service support is always one call away.

Features

Coverage for up to six years

Pre-agreed conditions

Original Danfoss spare parts

Benefits

- Predictable long-term business case
- Ensure maximum uptime with ongoing fast reaction time

- Save precious time when every minute counts

- World's most reliable AC drive components, with TS 16949 approval
- 100% compatibility and durability
- Best protection for your other equipment

6 years

Longest industry warranty with up to 6 years coverage.



DrivePro® Spare Parts

Original Danfoss Spare Parts at your fingertips

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

With DrivePro® Spare Parts, you can enjoy peace of mind knowing you have the right spare parts on hand for repair and maintenance of your AC drives. To ensure you have the right spare parts, we also recommend purchasing the maintenance and repair kits to your stock, so you have access to the correct spare parts when you need them. The content of the repair spare part packages is designed to ensure you have immediate access to the correct set of spares you need in case of a repair.

To make you ready for planned maintenance, our individual maintenance packages provide the exact set of components that are naturally exposed to wear and tear (such as cooling fans or capacitors).

How it works

STEP 1

Select the right spare part package

Contact Danfoss experts to help you select the best set of spares and maintenance parts for your AC drive setup.

STEP 2

Place your order

Having the right spare parts at hand, you can react fast if an unexpected breakdown happens and restore operations quickly.

STEP 3

Match your order with your maintenance plan

For optimal planning, combine the spare parts order with DrivePro Preventive Maintenance, which will save you time and cost in planning AC drives maintenance.

Individual DrivePro® Spare Parts & Packages

Individual
DrivePro® Spare Parts

Standard Package

Advanced Package

Maintenance Package

Features

**Original Danfoss spare parts
at your fingertips**

**Always the newest hardware and
software revisions at delivery**

**The right part at the right time thanks
to tailored spare parts assortments**

**Spare Parts packages are aligned
with maintenance plans**

Benefits

- Maximize your uptime and sustainability
 - World's most reliable drive components, with TS 16949 approval
 - 100% compatibility and durability
 - Best protection for your other equipment
-
- Operate at top efficiency
 - Save time on separate software updates
-
- Avoid unexpected cost for emergency AC drive support
 - Save precious time if downtime occurs
 - Only pay for what you need
-
- Save time and cost in maintenance planning

50%

Increased uptime of
AC drives with the
right spare parts
readily available on-
site.





DrivePro® Preventive Maintenance

Take the guesswork out of your maintenance plan

DrivePro® Preventive Maintenance consists of regular inspections and time interval component replacement according to the product-specific maintenance schedule based on an on-site audit of your installation, environment, and load profile.

The maintenance plan is custom designed to suit specific AC drive types, AC drive system demands, and environmental challenges per installation. Tailored plans can be created by measured values for environment conditions, current loading, and customer application. Installation and environment conditions are recorded at each maintenance inspection for variations. Customers will receive report recommendations after each inspection for further service actions if required or changes to the maintenance plan based on variations to environment, load, line power, process control, aging, or customer use to ensure trouble-free operation and long life of the AC drive.

Audit Process

Quick check:

- Installation
- Environment
- Process profile

Detailed report: Tailored maintenance plan

Module 2

Scheduled maintenance actions:

- Spare parts and repair work based on technical expertise
- Performed every 3-6 years
- Detailed report
- Labor and parts included

Module 1

Scheduled maintenance actions:

- Yearly inspection
- Visual inspection
- Functional tests
- Measurements
- Detailed report

Module 3

Scheduled maintenance actions:

- Spare parts and repair work based on technical expertise
- Performed every 6-17 years
- Detailed report
- Labor and parts included

How it works

STEP 1

Schedule an onsite audit

Contact Danfoss experts and request an optional DrivePro® Preventive Maintenance audit. We will assess your environment and load profile to recommend a custom maintenance plan.

STEP 2

Receive your audit report

We will deliver an audit report with your custom maintenance plan, budget, and quotation for services.

STEP 3

Place an order

Once you agree on the maintenance plan, place your order for your individual DrivePro® Preventive Maintenance.

STEP 4

Reliable maintenance and reports

Receive regular inspections and a report after each visit with recommendations based on the condition of the AC drive.

Features

Prevent unexpected issues by systematically ensuring the optimal condition of the AC drive

Reduce the effects of wear and tear

Avoid reactive maintenance and reactive spare parts costs through tailored a maintenance program

Original equipment

Benefits

- Improved availability
- Extend the drive lifetime
- Predictable cost saving long-term maintenance plan
- Avoid complexity and take the guess work out of your maintenance plan
- World's most reliable AC drive components, with TS 16949 approval
- 100% compatibility and durability
- Best protection for your other equipment

x2

longer lifetime of AC drives by ensuring regular maintenance and repairs.





DrivePro® Exchange

Reduce costly downtime with a fast replacement

Maintain uptime with a fast alternative to repair when there is a time critical situation. If an AC drive fails, the DrivePro® Exchange service can quickly exchange any AC drive to a new unit of the same type to ensure as little production delay as possible.

Count on a fast delivery of your replacement AC drive and avoid the costs and downtime for repair. Ensure a seamless exchange and reduce the time that the operation does not run optimally or is in downtime

With DrivePro® Exchange, you get a replacement of equal size, power, performance and software or better for the best performance match.

Rest assured that your drive is well-taken care of and performs optimally from installation, throughout the use, and after the end of its lifecycle.

How it works

STEP 1

Request DrivePro® Exchange

Contact Danfoss experts and agree on replacement based on urgency.

STEP 2

Receive your AC Drive

We ship your replacement AC drive within 24 hours of ordering.

STEP 3

Install and commission your AC drive

Request DrivePro® Start-up and let us help you get your new AC drive up and running fast or let us help you select any of our other DrivePro® services for a long and smooth operation of your new AC drive.

Features

Utilize an alternative solution to drive repair when time matters

24 hours exchange AC drive shipping after ordering

Ensure the best dimensional match for fast installation

Power, performance, and software of exchange AC drive is equal to or better than that of the failed AC drive

Benefits

- Obtain the fastest and most cost-efficient solution when an AC drive fails
- Fast delivery of exchange AC drives to your site
- Prevent excessive downtime on the production line when an AC drive fails
- Avoid turnover losses due to lost process availability during replacement
- Ongoing reliability thanks to best performance match

24h

DrivePro® Exchange unit shipping after placing an order from the Global Service Stock.





DrivePro® Retrofit

Be prepared for the end of a drive's lifecycle

The DrivePro® Retrofit service prepares you for the end of the lifecycle of your AC drives. We can provide you with the most optimal product for the replacement of outdated drives and a conversion plan recommendation while ensuring minimal unexpected downtime.

Ensure maximum production and efficiency

Boost overall performance and energy efficiency of your AC drive system by replacing outdated AC drives with the latest technology.

With the proactive approach of planning the replacement well in advance, you can fit the retrofit into your timeline and adjust for any production restriction that may occur. This keeps your production running with minimum delay, and you can enjoy a reliable budget without unexpected costs.

How it works

STEP 1

Request an on-site audit

Danfoss Drives performs an optional on-site audit to assess the AC drive system and the application.

STEP 2

Discuss the optimal replacement option

Danfoss Drives recommends the optimal AC drive replacement, bringing immediate performance improvements to a plant or process.

STEP 3

Schedule your delivery

You order retrofit drives and schedule replacements during a production stop that fits the budget and timeline of your operations, while ensuring maximum uptime and productivity of the site.

STEP 4

Install and commission your AC drive

We help you replace the outdated drives with new AC drives, while helping you to select the most optimal services with DrivePro® for the new drive setup.

Features

Adopt the latest technology with the right drive for the application

Coordinated replacement of large volumes of AC drives

Schedule replacement

Benefits

- Achieve additional process and energy efficiency in your existing system
 - Only pay for what you need
 - 100% compatibility and durability
 - Ensure best protection for your other equipment
-
- Benefit from Danfoss expertise to ensure fast and easy replacement selection, commissioning, and maintenance planning
-
- Efficiently replace outdated products with latest technology AC drives
 - Ensure maximum uptime with careful planning
 - Avoid unexpected costs for emergency drive support



100%

Retrofit drive compatibility and durability.



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 it in the cloud, and representing analytics in easily accessible and simplified way.

Minimize unexpected downtime and increase your efficiency with faster response.

With DrivePro® Remote Monitoring, you will have a system that provides online information available for monitoring in real time. You can react much faster to incidents where an AC drive is involved. This is possible due to the built-in alerting system that generates faults and warnings. Because you are immediately made aware of potential drive problems – even if you're not on site – you can react equally quickly to avoid unexpected failures, minimize costly downtime, and eliminate disruption of your operations.

What's more, DrivePro® Remote Monitoring offers centralized backup and restore capabilities for all AC drives connected under this setup, as well as full visibility of and access to the entire connected drive asset, including drive firmware versions.

How it works

STEP 1

Request DrivePro® Remote Monitoring

Contact us to describe your setup, define your maintenance strategy, and the criticality of your machines. Our DrivePro® Remote Monitoring experts will assist you in finding the best solution for your application needs.

STEP 2

Place your order

Order DrivePro® Remote Monitoring along with the customized IoT getaway. You can also customize your solution's support and use the tool independently or with support from Danfoss or DrivePro® Service Partners.

STEP 3

Schedule system installment on your site

Our DrivePro® Remote Monitoring experts will deliver your equipment, set up the online web portal, and ensure that your AC drives are visible in the system online.

STEP 4

Track your performance

Stay informed about early warnings regularly and instantly take recommended actions when an issue is indicated. Danfoss experts are a call away to support you along the way.

Features

Remote alerts and warnings with contextual information on the incident

Essential drive data and insights accessible to remote users

Access to historical telemetry data

Accurate, real-time measurements and analytics KPIs from the drives

Drive parameters are backed up automatically safely in a centralized location

Help while troubleshooting

Benefits

- Contextual information for better troubleshooting
- Fast access to essential information
- Users can develop more effective maintenance strategies
- Rapid, accurate resolution. Users can investigate the root cause of issues
- Ability to check the status and make the right decisions
- Remotely identify incorrect drive settings, enabling energy savings by allowing users to adjust settings without being on-site
- Simple recovery in case of drive failure or exchange
- Support from Danfoss or a local DrivePro® partner to maximize your uptime



Lifecycle Service Support

When you deal with Danfoss AC Drives, we give you extra support to help you get the most out of your applications. You get access to specialized training and expert knowledge, to benefit your business directly.

Training

Take advantage of our numerous training programs available to improve your personal knowledge and skills to help you get the most out of your drives, and keep them running at full potential. We also aim to keep you up to date on trends, methods and features that save additional energy or offer new ways to increase performance or decrease process downtime.

Staff at any level will benefit from our programs that cover a wide range of topics, such as utilization of DrivePro® products, services, technology, engineering, tools, application on different industries covering all three AC drives brands VACON®, VLT® and iC7 Series.

Technical support application design and engineering excellence

Tap into a wealth of expert application know-how from Danfoss Drives professionals. Pre-sales and post sales support experts are ready to help you needs or demanding installations. No matter where in the world you are located, our experts will assist you.

You get access to:

- Specialist engineering solutions to your applications
- On-site or in-house services



Interested?

[Contact your local sales office](#)

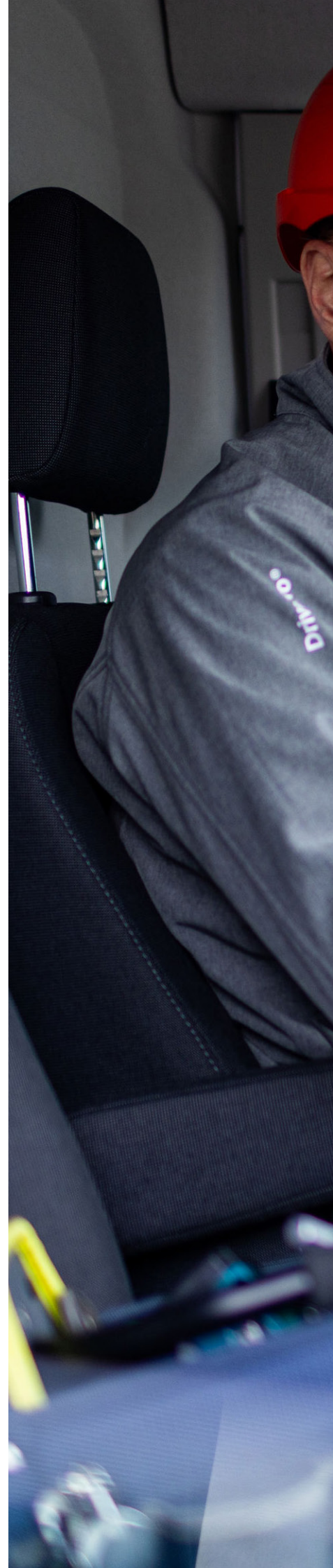


[Explore learning platform](#)



Need answers fast?

[Ask MyDrive® Assistant](#)





Service Network and Global Service Stocks (GSS)

Over **500** Danfoss service partners in **78** countries.



Over **120** of all partners are qualified as DrivePro[®] Service Partners



The core functions of regional service centers

The Regional Service Centers are positioned as a **central function fostering collaboration between sales regions, country teams, and all other functions within the Danfoss Power Electronics and Drives organization related to service delivery.** It offers and provides services covering the entire Danfoss Power Electronics and Drives segment product portfolio, supporting customers, and partners.

24/7
Customer
Support



Field
service
support



Workshop
repair
services



Commercial
service order
handling



Training



*Contact your local service center to ask about your service support options.





Contact us

 [Contact your local Danfoss experts](#)

 [Learn more about DrivePro® Services](#)



Any information, including, but not limited to information on selection of product, its application or use, product design, weight, dimensions, capacity or any other technical data in product manuals, catalogues descriptions, advertisements, etc. and whether made available in writing, orally, electronically, online or via download, shall be considered informative, and is only binding if and to the extent, explicit reference is made in a quotation or order confirmation. Danfoss cannot accept any responsibility for possible errors in catalogues, brochures, videos and other material. Danfoss reserves the right to alter its products without notice. This also applies to products ordered but not delivered provided that such alterations can be made without changes to form, fit or function of the product. All trademarks in this material are property of Danfoss A/S or Danfoss group companies. Danfoss and the Danfoss logo are trademarks of Danfoss A/S. All rights reserved.