ENGINEERING TOMORROW



Fact Sheet

# Ensure optimal performance with **DrivePro® professional services & spare parts**

### DrivePro® Start-up



Professional start-up service performed by certified DrivePro® technicians ensure that customers realize the maximum benefits of their Danfoss drive products. Variable speed system utilization and efficiency are optimized. Drive service life is maximized. Unplanned project delays and expenses are eliminated. Danfoss authorized service providers have the training / experience to program drives for today's application challenges and Danfoss stands behind the start-up work they perform when dispatched from the factory.

DrivePro® Start-up includes verification that the drive is complete, undamaged

and properly installed. Proper product match to the application, protection from the environment and installation requirements for cooling are confirmed. Proper wiring to the drive including; line, load and control connections, wire routing, shielding and grounding are verified. Field connections to the product are properly tightened and internal connections are inspected to ensure they have not loosened during transport or onsite handling.

Start-up service is scheduled when the drive installation and system are ready. The large Danfoss network of professional service providers ensure the service is typically provided on the date requested by the customer. DrivePro® Start-up includes all services essential for proper drive operation:

- Adjustment of the drive parameters for the motor and load characteristics
- Drive programming for the application

- Setting of the internal time clock (if so equipped)
- Verification of drive functionality including proper motor rotation, phase balance at the drive output and response to field control systems
- Notification (of both the customer and Danfoss) of any installation shortcomings that may affect the drive's operation or longevity as well as any functions that could not be verified due to incomplete system readiness
- Should a product issue arise during start-up the factory authorized technician can quickly provide a solution.

Additional programming and functional testing services are available. Onsite training is also available to ensure the customers are comfortable with the functionality and operation of the drive.

## **DrivePro® Spare Parts**



To save precious time in critical situations and extend the lifetime of your drives, ensure you are equipped with original DrivePro® Spare Parts. Danfoss Drives offers selected assortments to meet your exact requirements.

Danfoss genuine replacement parts are available for most Danfoss drives, panels and related products currently produced as well as many legacy Danfoss products. Use of replacement parts specified by the factory ensures optimal drive product performance and maximum product life.

The Danfoss online product configurator backed by friendly and proficient DrivePro customer service personnel provides quick identification of the proper replacement part. Danfoss parts

inventories ensure quick-delivery in most cases, minimizing customer down-time.







#### **DrivePro® Preventive Maintenance**



Preventive maintenance is available to suit specific drive application demands and environmental challenges. While minimal maintenance is required for many drive installations, drives applied in highly demanding applications or harsh environments will benefit from regularly scheduled maintenance by a professional drives technician.

- Cleaning of heat sink cooling areas and filters
- Operational checks of cooling fans
- Visual inspections and thermal scans

- Reviews of fault and warning logs
- Review of parameter settings
- Proactive replacement of worn parts

Tailored PM plans can be developed by Danfoss to suit the product application and scheduled to minimize impact to operational needs. Time and material based pricing is developed based on the drive quantity, service type and frequency, job site location and time of day/week scheduling requirements. Contact Danfoss DrivePro® Service for a PM consultation and quotation.

#### **Other Services:**

#### **Danfoss Factory Repairs**

Product repair and reconditioning by Danfoss is available at the Danfoss Drives factories. Troubleshooting and repairs are completed by factory trained technicians. Danfoss genuine parts are utilized. Products are tested to factory specifications before return shipment to the customer. Flat-rate repair pricing is provided for the most popular drive power sizes and configurations to ensure customers are able to quickly make

repair vs. replace decisions. Expedited repair service is available to minimize customer down-time. Factory repairs are warranted by Danfoss for 6 months.

Program Availabilty	VLT® Drives	VACON® Drives
DrivePro® Start-up Service (1)	Flat-rate pricing <sup>(2)</sup> for VLT® HVAC Drive     Half day or full day rates for VLT® Automation or VLT® AQUA Drive	Hourly or full day rates for all drive series
DrivePro® Spare parts	<ul> <li>Most current product offerings</li> <li>Minimum of five years following the end of production of legacy products to 90 kW <sup>(3)</sup></li> <li>Minimum of ten years following the end of production of legacy products above 90 kW <sup>(3)</sup></li> </ul>	
Danfoss Factory Repair (4)	- Flat-rate pricing for all FC series drive to 90 kW - Inspection & quote fees for all other products	Flat-rate pricing for NXS and NXP drive series to frame size FR11 and X series up to frame size T5     Inspection & quote fees for all other products
DrivePro® PM Service	All current product offerings and most legacy product offerings	

<sup>&</sup>lt;sup>(1)</sup> DrivePro® Start-up pricing applies to drives installed within the continental US, Oahu-Hawaii or Canada

(3) Danfoss also provides comparable replacement products for legacy products.

**Danfoss Drives** 

DrivePro® Services

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<sup>&</sup>lt;sup>(2)</sup> One trip per maximum 6 drives and two hours round-trip travel time from the nearest Danfoss authorized service provider included. Additional trips and travel time available at Danfoss hourly field service rate.

<sup>(4)</sup> Customer responsible for packaging return drive to prevent shipping damage and freight costs to and from the US Danfoss factory or Canadian repair center