## DDCIVE

## THE NEXT GENERATION VARIABLE FREQUENCY DRIVE

CONTROL AND SAVINGS FOR PRESSURE BOOSTING
AND CIRCULATION







## DDCIVE

## **CONTROL, PROTECTION AND SAVINGS**

NgDrive is a protection and control variable frequency drive designed to manage pressure booster and circulation pumps, adjusting motor speed to suit the system's actual requirements.

Ideal for applications in residential and commercial settings, it optimizes installation management and monitoring; maximizes energy efficiency by reducing consumption and avoiding waste; and reduces mechanical stress on the motor, essentially making the whole pumping system more effective and reliable.

With a certified IP55 protection rating, it withstands the ingress of dust and water, so it can even be installed outdoors, where there is no direct and complete exposure to bad weather and sunlight.

Compatible with DAB pumps as well as other products in the market, **NgDrive** is also suitable for upgrading obsolete installations.





### **APPLICATION' EXAMPLE**







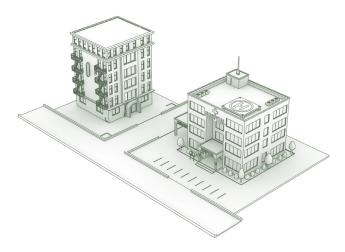






HEATING

CONDITIONING HOT WATER



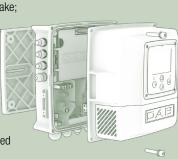
NgDrive is used for pressure booster and circulation in residential and commercial settings, in both internal and external plants, where there is no direct and complete exposure to bad weather and sunlight. It can manage systems ranging in size from a single house to commercial medium-sized complexes.

## **FUNCTIONAL DESIGN**

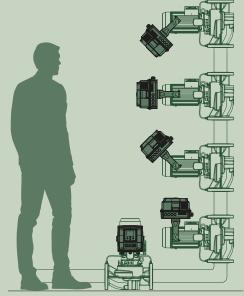


While NgDrive won the iF Design Award 2023, this is not just design for design's sake; instead, it was conceived specifically

to cater to the needs of its users: it can be mounted on a wall or on the pump; it is light and easy to handle, thus making it more practical to install; and it is split into two parts that can be separated so that the components inside can even be fitted at different times and serviced without disconnecting any wires.



Lastly, with the special mount designed to offer 5 tilt angles, NgDrive can be mounted on the actual pump in whatever position is most convenient for the system in question.



### **VERSION**









	NGDRIVE M/T 1.1kW*	NGDRIVE M/T 2.2 kW*	NGDRIVE T/T 2.2 kW*	NGDRIVE T/T 3.5 kW*	
FREQUENCY (Hz)	50/60				
INPUT VOLTAGE (VAC)	1 x 220-240 +/- 10%	1 x 220-240 +/- 10%	3 x 220-240 +/- 10%	3 x 400 +/- 10%	
OUTPUT VOLTAGE (VAC)	3 x 230	3 x 230	3 x 230	3 x 400	
MAX INPUT CORRENT (A)	6	10.5	10.5	8	

<sup>\*</sup> Typical power values for IE2/IE3 asynchronous motors

### **FOR USE WITH:**

### **CENTRIFUGAL PUMPS**



NKV, NKP-G, NKM-G, KDN

### **CIRCULATION AND IN-LINE PUMPS**



CM, CM-G, DCM, DCM-G, CP, CP-G, DCP, DCP-G, CP2, CP2-G, DCP2, DCP2-G



**SUBMERSBLE PUMPS** 

S4, SS6

## **DAB'S SMART SYSTEM**

When it comes to system safety and control, having an intuitive solution to keep everything under control is key. And when it comes to energy efficiency, even small variations in motor speed can greatly limit effectiveness in keeping consumption and costs down. This is why DAB has developed a controller to handle all this for you: **NgDrive** is not just a variable frequency drive, it is the hardware component of a fully-fledged smart system, the technological product of over 40 years' experience in the water handling sector.

**NgDrive** meets a system's every need. A single product, one device catering to pumps of different kinds — even from other brands — to produce savings, improve the system's efficiency and protect its components.





# **KEEPING YOU IN YOUR COMFORT ZONE**

### **WORK THE WAY YOU'RE USED TO**

With **DAB Virtual Cockpit**, you can control all your systems in exactly the same way that you would control the TV at home, for example.

So there is no need to change the way you approach everyday tasks in order to interact with **NgDrive**: everything from the initial configuration to system monitoring and monitoring consumption becomes a familiar, intuitive experience.



AS EASY AS USING REMOTE CONTROL





### **THE WIZARD**

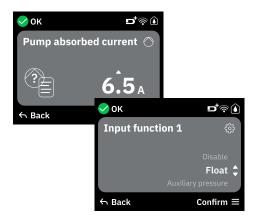
Setting up the system is extremely quick thanks to the wizard, which walks you through the process in a few simple key steps that in just 5 minutes to get the system up and running.

#### The steps:

- 1) Language and measure system setting
- 2) Choice of operating mode
- 3) Operation mode: pressurization or circulation

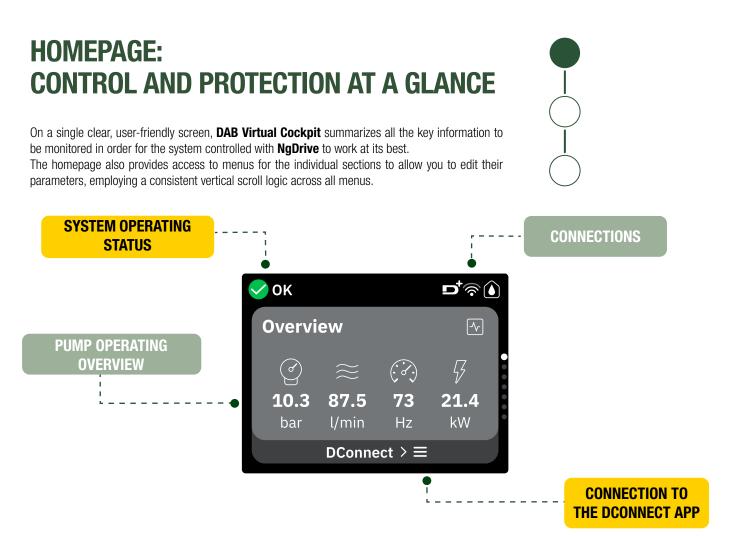






## **SYSTEM SPECIFIC PARAMETERS**

The **2** compulsory basic parameters to be entered, instead of starting with factory settings, provide guidance, helping you set up the system exactly how you need it to be. The need to customize these settings is an added value, resulting in a quality installation, as you can be confident that you have set everything up perfectly to ensure the wastewater management system works as efficiently as possible.

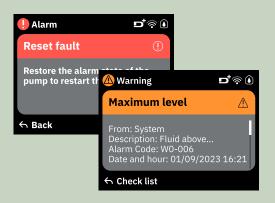


# ERRORS AND WARNINGS LOG

This section records a **log of errors** that have occurred and provides you with the information required to determine why and when the system had issues. This is actually a useful analysis tool to have in your arsenal, helping you keep constant track of the installations' performance.









# DCONNECT. YOUR SYSTEM IS ONLINE

With the new portal and **DConnect app**, you can communicate with **NgDrive** even metres away from the installation — or even from your living room — to monitor and control your pumps in the same way as your day-to-day interactions with the smart objects we are all familiar with.

For example, in situations where accessing the panel is particularly awkward, the local connection can prove useful to finish setting up the system.

And that is just the beginning. When it is online, **NgDrive** manages to harness all the potential offered by **DConnec**t, collecting and recording in real time the pumping station's operating data so that they are always available through the mobile app or web portal.

This means you always have full control of the system. **DConnect** not only allows for constant analysis of operating parameters but, with **push notifications**, it alerts you to possible critical issues clearly and simply before they occur, thus allowing you to take prompt and effective action on site, being already aware of the reason for the issue.

### **FEATURES:**



System monitoring and settings management



Dealing with malfunctioning and alarms



Planning routine activities



Historical data record of the plant status

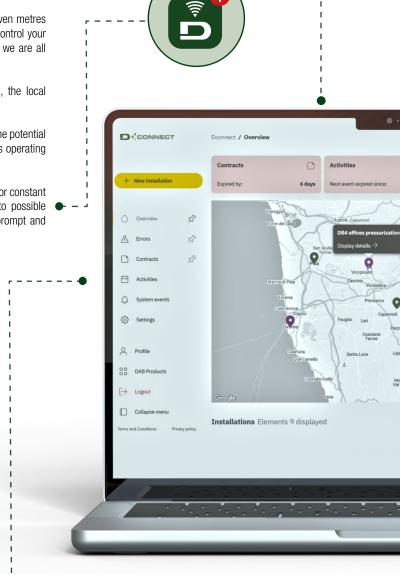


Customer and contract details

## TRY IT, IT'S FREE!



**NgDrive** gives you the opportunity to try **DAB**'s integrated smart system experience free for a whole year.



## **ACTIVITY CALENDAR**

Whether it's scheduled maintenance or contracts up for renewal, these pages automatically compile a list of all upcoming activities to be carried out, helping you plan your work. As a result, customer service is prompt and flawless, and work is **organised efficiently** as there is less wasting of time and money: by cross-referencing the maintenance calendar and the map of local installations, it's easy to optimise mileage and the time spent travelling, too.

## **CUSTOMIZABLE HOMEPAGE**

The **homepage** can be set up to best suit your individual work requirements and how you're used to doing things\*, creating a dashboard tailored to your personal needs: all the information is there at a glance, giving you a full picture of your installations.

And optimizing work hours even more, push notifications are a valuable aid for more effective and convenient management of your day-to-day work, while still giving customers complete peace of mind.

The box goes red if something is wrong, and purple if the system is offline



## **SYSTEM EVENTS**

**DConnect** keeps track of everything that happens on each unit installed: you always know who did what and when. It takes just 1 click to call up the details of the installation that the system event refers to.

## **ERRORS PAGE**

The **errors page** provides a list of systems requiring attention. In other words, all system errors for each installation are displayed here: that way, it is easy to take prompt action to solve the problem, before the customer even realises there is one! Moreover, correctly diagnosing the malfunction before you even have people in the field can save you the time required for a site visit and mean you can procure any spare parts needed beforehand.

Again, the colours tell you what sort of issue there is and errors can be filtered by alarm type: systems not running, checks required, or systems offline. Of course, if the icon is green, it means everything is OK.

The box is red, better check!, better check!



## **SYSTEM SECURITY AND RELIABILITY**

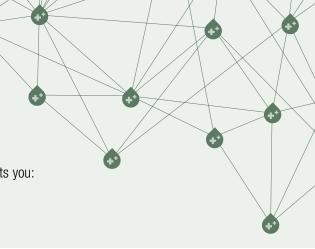
In compliance with current **GDPR** regulations, **DConnect** meets high standards of security to ensure full data **integrity and protection**. We're constantly reviewing security rules and relevant certificates at regular intervals to ensure we're up to date.



## DGDUVE

## WHAT ABOUT THE RULES?

**NgDrive** is a versatile controller that you can reach any time, in whatever way suits you: either using remote access or on-site access through the app.



## REMOTE ACCESS 🛜



Remote access even allows you to monitor pumping station operation from the office, or anywhere else with an internet connection: this means you can take fast action in the event of a breakdown or malfunction.

In addition, a full complement of sensors and the continuous exchange of data makes it easy to analyse and optimize the system.

## **LOCAL ACCESS** \*

When dealing with installations where NgDrive is hard to access, a local Bluetooth connection can be used to interact effortlessly with the system straight from the **DConnect** app.





## **BUILDING AUTOMATION SYSTEM**

With the Modbus RTU communication module, NgDrive can communicate with all BMSs (Building Management Systems).

Modbus is used to collect and transmit data over an RS485 line, and allows communication between different devices connected to the same network. In simple terms, it can be used to transmit information over serial lines between electronic devices.





## DOCIVE



**DIFFERENTIAL SENSOR** 



FLOW SENSOR



PRESSUR SENSOR 25 BAR



FLANGE FOR FLOW SENSOR



PRESSUR SENSOR 4-20 MA - 25 BAR



PRESSURE SENSOR CABLE

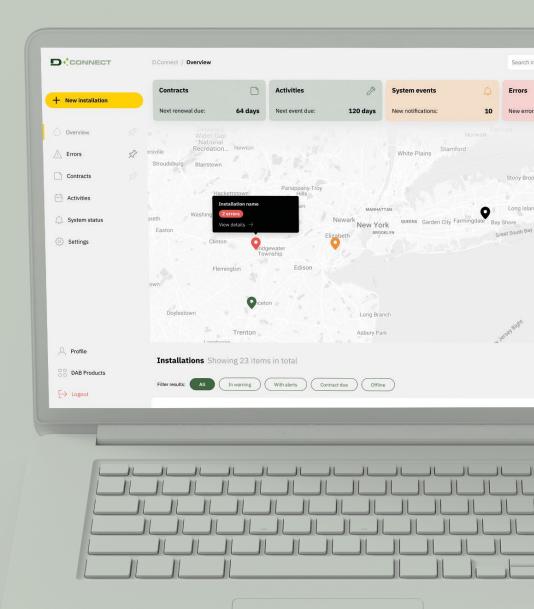


FLOW SENSOR CABLE



## **Easy with DConnect!**

Systems under control Simplified work routine Growing business









INTERNETOFPUMPS.COM





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