

EDrive Flexis Pro

The most intelligent, high-frequency battery charger



**UPGRADE
PRO EDITION**

Thanks to a thorough upgrade, the new EDrive Flexis Pro has a larger colour screen, a simple modular structure and intelligent charging curves. Battery voltage and capacity is now automatically detected. This brings numerous advantages. No additional settings are required, each battery receives exactly the required charge and water consumption. In addition, the battery also generates less heat, which increases its life span. In short, this makes the EDrive Flexis Pro the most intelligent, flexible and energy-efficient charger on the market today.

Applications:

Internal logistics
Cleaning machines
Aerial platforms
Electric Vehicles

EDrive Flexis Pro

A clear choice.

The EDrive Flexis Pro is a high-frequency charger that can be used in a wide range of applications. From electric forklifts, stackers, cleaning machines, aerial work platforms to all kinds of electric vehicles. They can all be charged with the EDrive Flexis Pro. Why choose this charger is actually a very simple choice. We would like to make it clear for you and list all the benefits.

1 Highly energy-efficient battery charger

The EDrive Flexis Pro is one of the most energy-efficient chargers on the market today. Thanks to intelligent charging curves, which ensure that each battery receives exactly the charge it needs. So there is never any

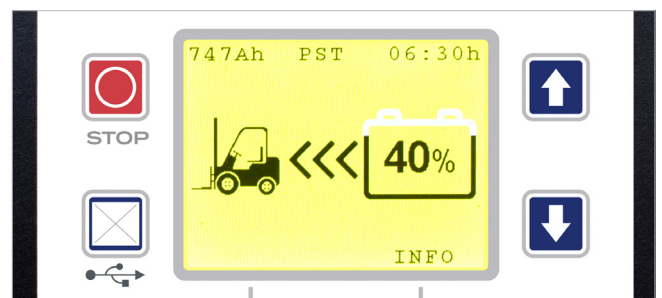
overcharging. In concrete terms, up to 96% of the energy actually goes into the battery.

2 Automatically detects battery voltage and capacity

The EDrive Flexis Pro automatically determines the battery's voltage and capacity at the start of charging. The charger's software then determines the ideal charging curve. If necessary, this is adjusted during the charging process. This is called the ARB charging curve, Automatic Recognition Battery. As a result, each battery receives exactly the right amount of charge, and there is never any overcharging. This results in longer battery life and lower energy bills. This is only suitable for wet batteries.

It is possible that different technologies of batteries are used interchangeably. Such as gel and wet. In this case, identification modules can be placed on the battery. These modules tell the charger which charging graph should be

used to charge the connected battery. Both options make it possible to charge different types of batteries with one charger, without having to make adjustments yourself. This makes the EDrive Flexis Pro very simple and easy to use.



3 Very robust, industrial and modular charger

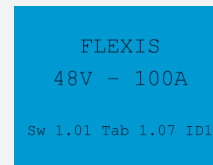


The charger has a very solid and robust housing. This makes it perfect for use in any industrial environment. The charger can also be easily suspended. No additional mounting accessories are required.

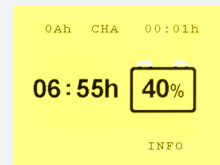
During the development and design of the EDrive Flexis Pro, a strong modular structure was chosen. As advantage the components and modules can easily be added or changed at a later date.

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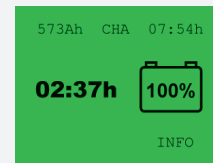
User-friendly and clear full colour display



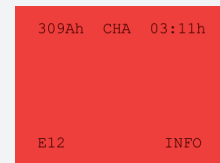
Standby modus



Charging



Charge ready



Error

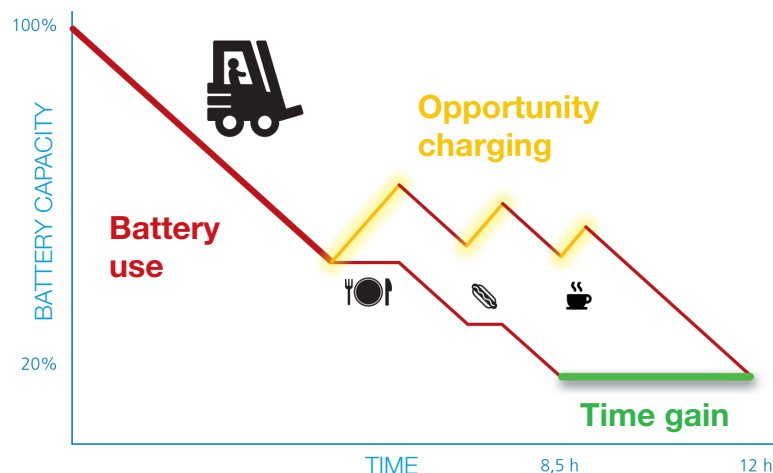
The EDrive Flexis Pro is equipped with a large and clear colour display. This ensures pleasant and easy operation. The status is clearly visible from a distance due to different colours. Blue, yellow, green and red (see above). The estimated time until the end of the charge is also clearly displayed. In the example above, the charge is completed in 6 hours and 55 minutes.

5

Possibility of intermediate recharging and fast charging (opportunity charging)

It is possible to set Flexis Pro chargers for opportunity charging. In this form of fast charging, higher charge currents are given to the battery. They provide an increased capacity in a short time. In this way, it is possible to recover 30% of capacity within one hour. This is ideal when working one shift and there is just not enough capacity to get through the day. In this case, fast charging can solve the problem perfectly, for example during the lunch break. Opportunity charging can be set to happen on certain

days between predefined hours. All charging outside of these days or hours will then be carried out with a normal charging profile. Once a week, however, each battery should receive a normal, slow charge. When using opportunity charging, a temperature sensor is strongly recommended. The charger must also be adapted to its use. That is why we would like to discuss the specific possibilities of opportunity charging with you personally.



6 Possibility of integrating EDrive Take This System

6.1 EDrive Take This System

EDrive Take this is a FIFO system. It ensures that the user is more or less obliged to take the battery that has been ready for charging already the longest time. It consists of a small unit with a display showing the number of the charger that has been ready for the longest time. This is the battery that should be taken. If the user takes another battery, an

alarm will sound. This alarm is expandable and audible.

The EDrive Take This system works for one type of battery: for example 24V, 250Ah or 48V, 620Ah. One Take This system must be implemented per group of batteries of the same type.



6.2 EDrive Axinet

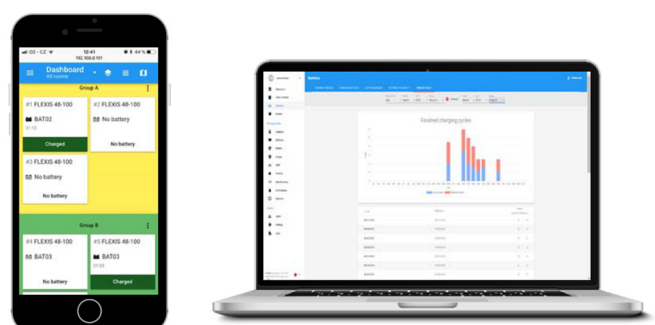
EDrive Axinet is the highly advanced version of the Take This system. It provides a fully digital management of your entire battery fleet and all processes associated with it. It works perfectly with all types of batteries mixed together and can be monitored via a VPN browser or mobile version. The system can be configured completely according to your needs and is even capable of linking several charging stations together.

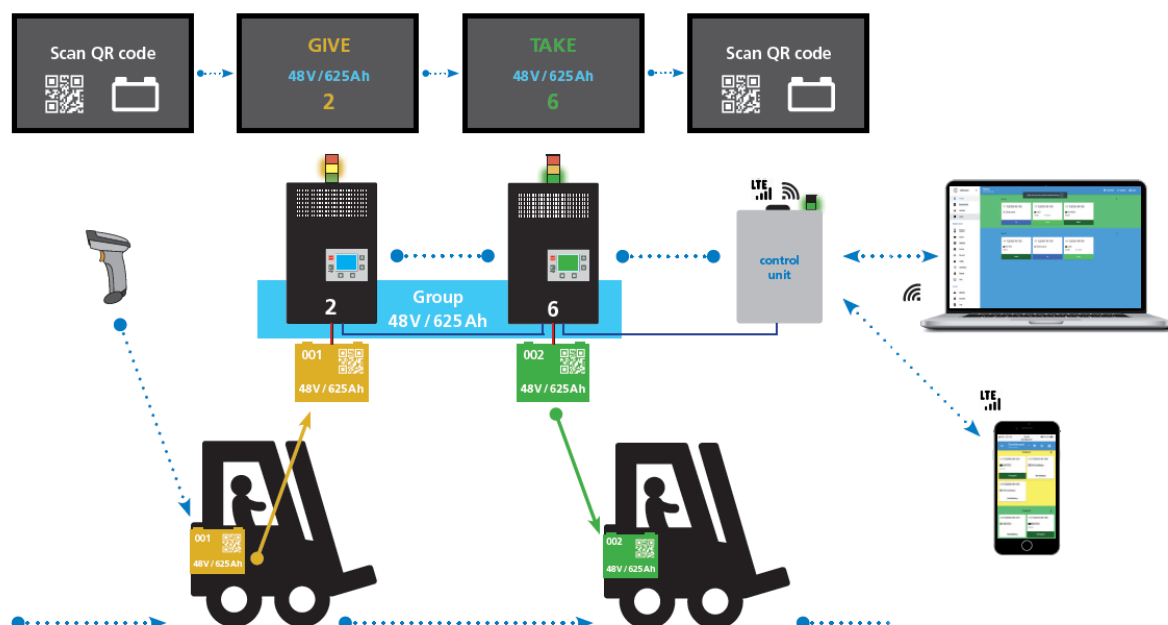
also allows several people to receive an e-mail when a user does something wrong or when a charger or battery gives an error message.

When complete control is required as a management system over your batteries, chargers and users, there is only one answer. EDrive Axinet.

What are the advantages?

There is a constant digital overview of the status of all batteries: which batteries are charging, which still need to be charged, who took which battery and who took the wrong one, when did an error message occur, etc. Detailed reports can also be requested on the use of each battery. For example, how many Ah are used per cycle and how many cycles each battery has done. Because the use of the entire battery fleet becomes very clear, the life span of each individual battery can be greatly extended. This allows one to control and budget for potential costs. Axinet has built in several alarms just like the Take This system. This allows for early detection of possible errors. The system





7 Available in IP54 housing



The EDrive Flexis Pro can also be supplied with an IP54 housing. This degree offers a water protection of up to 10 litres per minute. This allows the charger to be used very safely in humid environments.

The IP54 standard makes the charger not only moisture-proof, but also completely dust-proof. Thanks to this option, the EDrive Flexis Pro also functions perfectly in dusty environments.

8 Temperature sensor ensures a very safe charge

It is possible to connect a temperature sensor via the auxiliary contact that continuously monitors the temperature of the battery. Various actions can be taken. In the event of an acute risk of overheating, the EDrive Flexis Pro will immediately stop charging or reduce the charging

current sharply in order to lower a possible overheating temperature. This prevents dangerous situations and also increases the lifespan of the battery. In addition, possible defects in the battery can be detected at an early stage

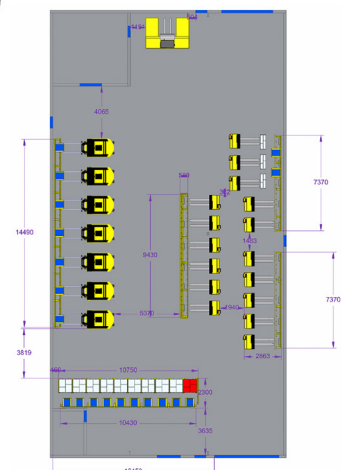
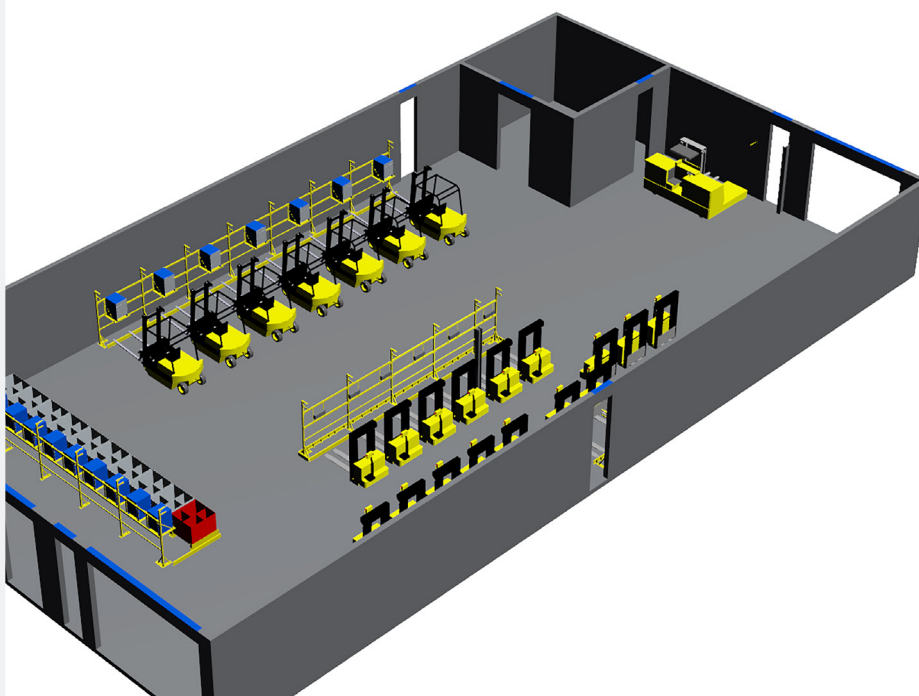
9 Ideal charger for equipping charging stations



The EDrive Flexis Pro chargers are easy to mount without additional tools. This makes them, in addition to their technical capacities, extremely suitable for equipping charging stations. The large colour display and the signal light option allow you to see from a distance which batteries are ready for charging. If you also opt for the integration of a FIFO system EDrive Take This or EDrive

Axinett, the service life of the batteries is also greatly extended.

Ecobat will always advise you the most efficient solution for your charging room. Do you want to use exchange systems, roller tables, suspension constructions for your loaders, ... We realize it for you!



10 Possibility of CAN communication, crucial for lithium batteries

CAN communication is an ICT language that allows different devices to communicate with each other. In this case, for example, the battery and the charger. The battery and charger tell each other what to do and when to do it.

This is particularly applicable for lithium batteries, as these are usually equipped with CAN communication.

11 Suitable for very high voltages, up to 600V

The EDrive Flexis Pro is available for all battery voltages, including batteries up to 600V. This makes the charger a perfect solution for a modern environment with lithium batteries at high voltages.

12 Custom made solutions

Are you looking for a charger that has to meet specific requirements? Contact us and we will work out a customised solution for you. When it comes to customisation, the possibilities are endless and we are happy to take on any challenge!



EDrive Flexis Pro

An overview of all the options.

In addition to the standard version of the EDrive Flexis Pro, there are numerous options available. Below you can find an overview:

- Signal light (different versions possible)
- Pump for acid circulation
- ARB charging curve
- CAN communication
- IP54 housing (resistant to moisture and dust)
- Extra modules (higher charging currents)
- Temperature sensor
- Automatic water filling
- Identification modules
- EDrive Take System integration
- EDrive Axinet integration

EDrive Flexis Pro with EDrive Endurance and acid circulation. The ultimate package.

Do you want all the benefits in one energy package? Then we have for you the EDrive Endurance with acid circulation in combination with the EDrive Flexis Pro. The EDrive Endurance can run for longer shifts than an ordinary traction battery. When you make use of opportunity charging of the EDrive Flexis Pro, the battery lasts another 30% longer. The acid circulation also ensures optimal mixing of the acid during opportunity charging. So all the advantages come perfectly together in one package!



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