

Kabeldon Distribution boards

Modern and simple



**We asked 15 consultants,
installers and users for their honest
views on our products**



"Skogsridån", Lights in Alingsås 2005

The purpose of this brochure is twofold

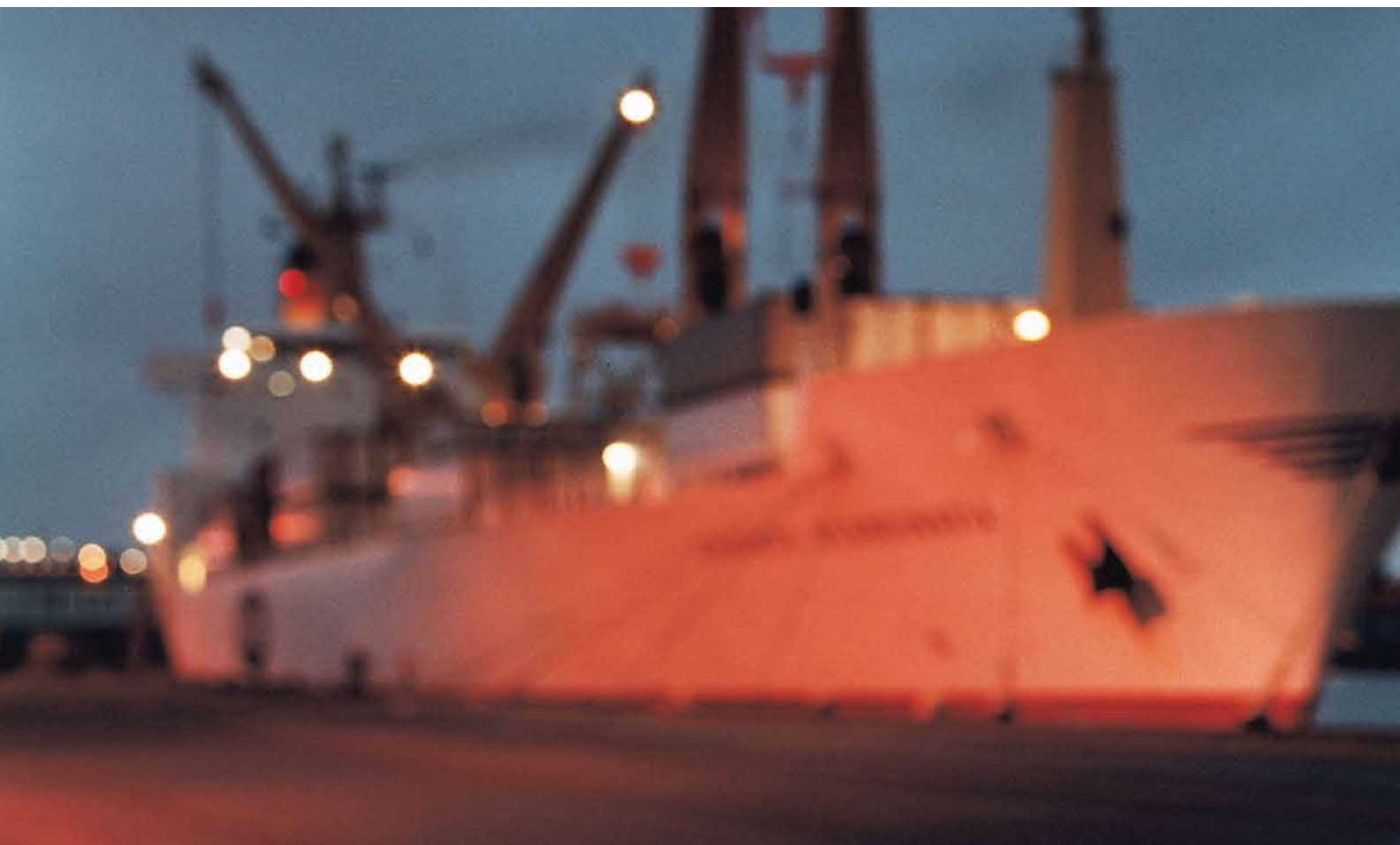
First of all, it tells you about the most important benefits that Kabeldon distribution boards - which are equally suitable for indoor and outdoor use - bring to consultants, installers and users. Secondly, it contains tips on applications for which our products offer big technical and economic benefits.

Lots of consultants and installers who have extensive experience of Kabeldon distribution boards are more than happy to talk about these products and their features. Just as there are countless users who have reaped the benefits of our products.

A small selection of these people appears in this brochure. Welcome to the modern world of Kabeldon!

Benefits to consultants	Benefits to installers	Benefits to users
<ul style="list-style-type: none"> • Simple planning with free Connect IT software.* • Full documentation from Connect IT.* • Logical design. • Robust enclosures allow use in demanding environments. 	<ul style="list-style-type: none"> • Boards supplied complete - ready for connection. • Ingenious design - easy to adapt to different local requirements. • Can be placed outdoors - always accessible. • Fast installation - saves time. • Power need not be disconnected when working on boards. • Scope for unlimited extension. • Fully protected against accidental contact, IP2X. 	<ul style="list-style-type: none"> • Takes up little room. • Can be placed outdoors - frees valuable space. • Fully protected against accidental contact, IP2X. • Range includes robust enclosures - suitable for tough environments. • Scope for unlimited extension. • Power need not be disconnected when working on boards

* The software can easily be downloaded from www.abb.se/kabeldon



**“Our distribution boards have to
withstand knocks and salt water”**

Per Lindeberg, Göteborgs Hamn AB, Port of Gothenburg

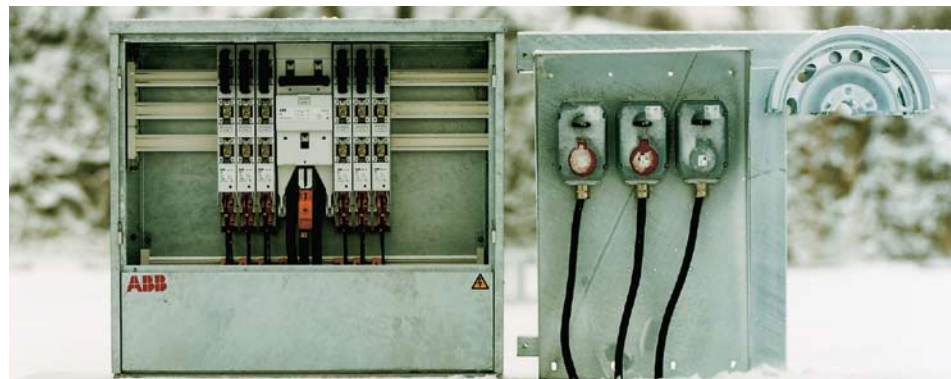


Some 625,000 containers (expressed as 20-ft containers) pass through the Port of Gothenburg every year. The pace of work is brisk and there is always a great risk that the fixed installations will be knocked by vehicles moving around the area. On top of which, the salt-laden air of the waterfront is, of course, very corrosive. The environment, itself, is also very tough, especially in winter.

The Port Authority has been using Kabeldon distribution cabinets for many years to supply power to refrigerated containers in a convenient and flexible way. Fuse switches, load disconnectors and contactors are well protected inside a robust, hot dip galvanised steel casing.

The safety design makes them easy to work with even when live.

Our newest distribution cabinets are mounted on movable concrete bases incorporating collision protection. This arrangement provides maximum flexibility if we have to alter the goods flow. In all, the Port of Gothenburg has around 50 Kabeldon distribution cabinets.



“We never have to cut the power off”

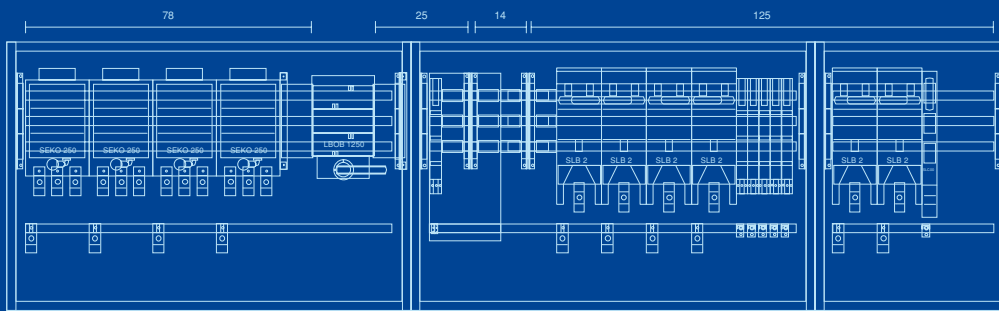
Yngve Nilssons Karosseri specialises in building modified, stretched Volvo cars. Recently we needed more power for a new assembly line for our special version of the Volvo S80.

Our electrical contractors decided to put in a new, modern electricity room while they were at it. They mounted the board directly on the wall, without an enclosure. This made it easy to connect different types of equipment, even

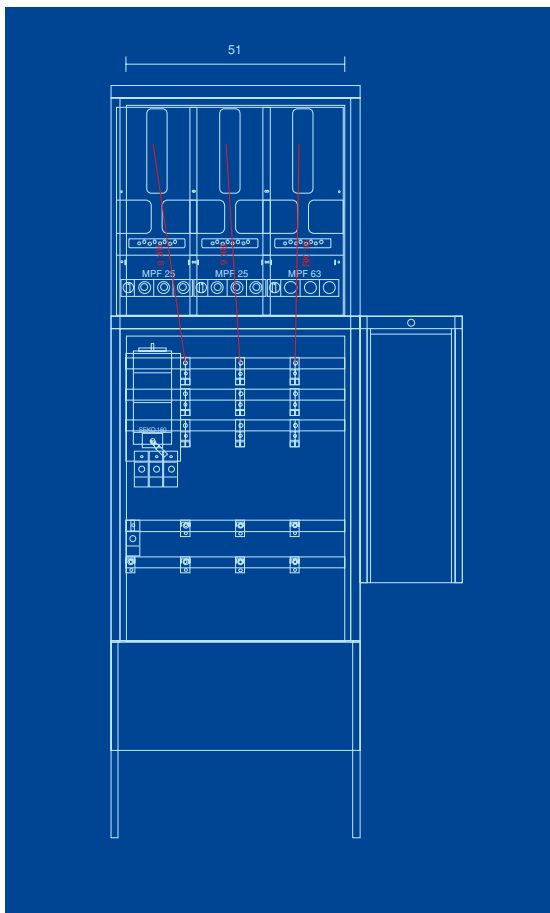
with the power on. So the distribution board requires far less work. And it's easy to extend.

We don't suffer any of the drawbacks of other distribution boards, because we don't have to cut the power off for every little thing that needs doing. And our customer isn't hit by unexpected downtime and power cuts.

Olle Nilsson, Nilssons El



“Fast installation of emergency power system”



Telia is Sweden's biggest telecom company and has a huge number of telecom stations throughout the country. The largest of these are fitted with emergency power equipment. Many of the smaller stations have an external board to which a transportable diesel generator can be connected. The emergency power system was designed by Telia and ABB. Placing the power distribution unit outside the telecom station frees valuable space. It also facilitates meter reading for the power company.

Telia no longer owns its properties and is therefore relocating its distribution boards and electricity meters outdoors. Using Kabeldon distribution boards makes our job much easier. And although the board itself costs a bit more, the work involved in drawing the cables and in installation is so much faster that the total cost is, in fact, lower. Not only that, you also get a simple solution when you want to gather the group boards in a property that requires individual metering

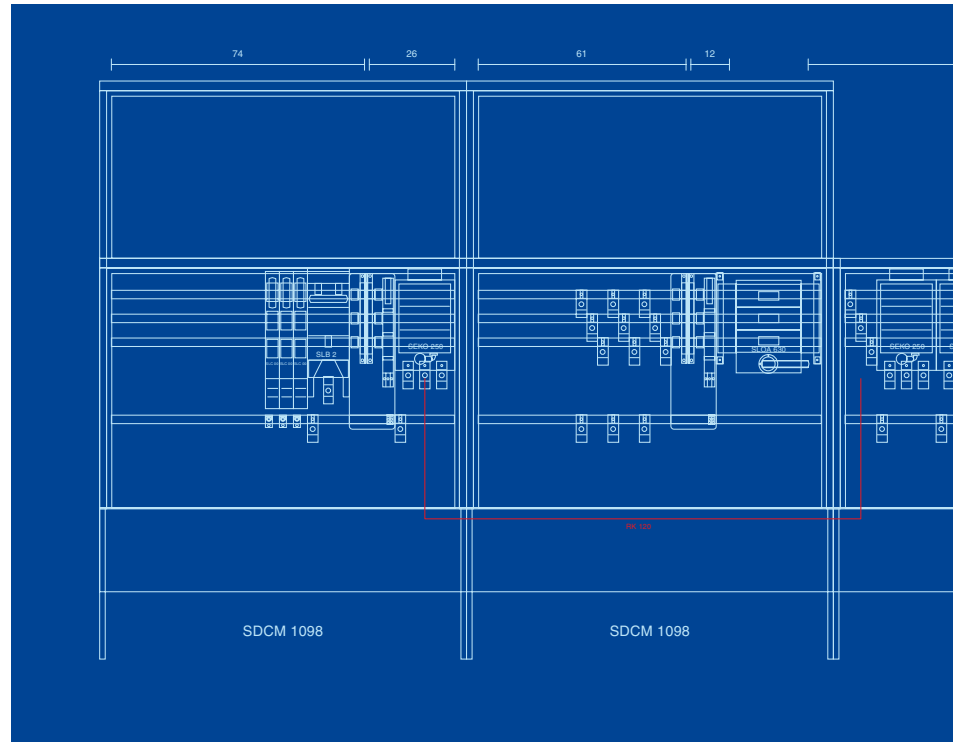
Patrik Lindgren, PH El

“The installers’ favourite for alterations and extensions”

Electricians rarely have sufficient room to work in. In fact, we usually have to work in cramped spaces. In a recent job in an industrial property we had to take out an older type of switchgear and put in a new one. We also had to relocate the distribution board

ABB supplied a Kabeldon distribution board for the required load of 630 A. The new board took up far less room than the old unit. It was virtually ready-built on delivery, so we could connect up in no time at all. And changing over from the old unit to the new one was also very easy

Kjell Westerberg, Lindqvist El



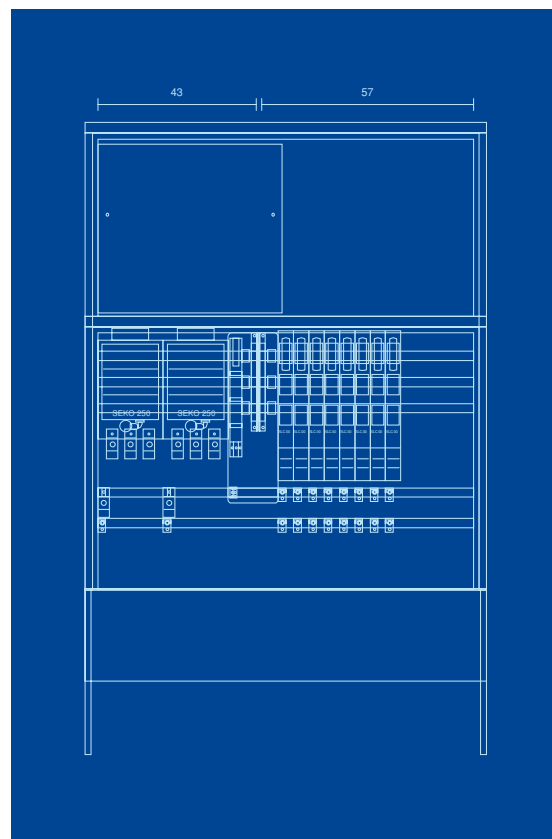
“They come with everything in place. All you do is connect”

The McDonald’s restaurants built in Sweden in the last few years are strictly standardised. Even the electricity distribution board is an integral part of the package and is always located outside. There are two reasons for this. Firstly, any maintenance work can be done away from the kitchen area. Secondly, outdoor distribution boards free valuable space indoors. And because the boards have a very high standard of safety, the electrician can leave the power on when working.

The Connect IT computer program makes it easy for consultants and electricians to design a distribution board. All you have to do is select the functions you want. The program, itself, gives you the specification you need to price the job.

On top of which, the boards can be mounted very quickly. In other words, every bit as rational as the restaurant itself!

Conny Fischer, Fischer El





**“The meters must
always be accessible”**

Bengt Jobansson, Energiverken i Halmstad



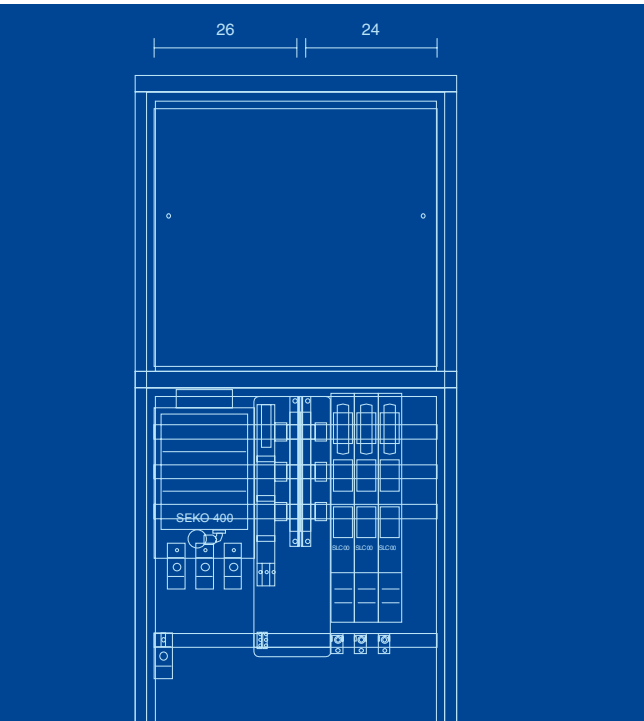
A wind power station consumes electricity at the same time as it supplies it. This is mainly due to safety reasons - if there is a power cut, the station must stop. Otherwise, it would cause reverse voltage on the power network.

The wind power station I'm thinking of is connected to the network via a distribution board. But the owners didn't want it positioned next to the wind power station. So we put it next to the power company's own substation.

The owners wanted to be able to read the meters whenever they liked. So, obviously, we located the boards outdoors. And Kabeldon was the obvious choice. I might add that we, ourselves, designed the board with Connect IT, and installed it.



“There’s no comparable option when it comes to outdoor installation”



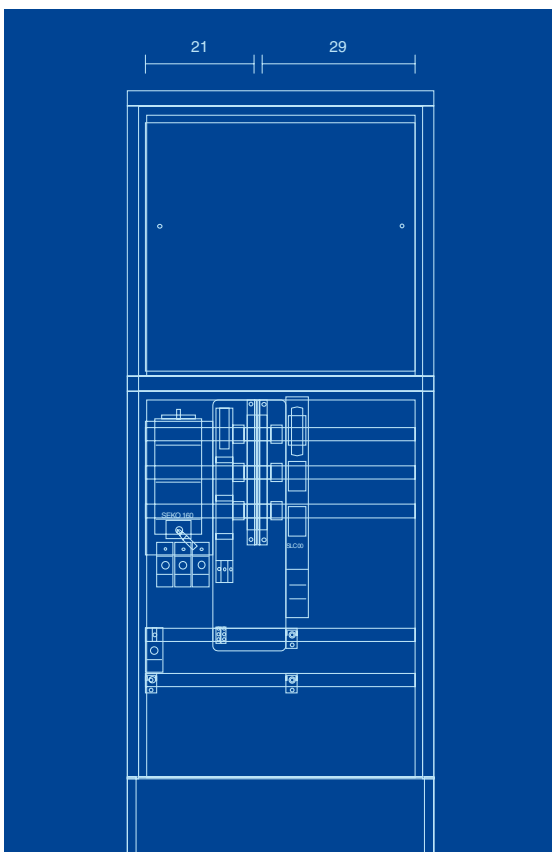
Our job was to lay on electric power for a commercial property with a number of tenants. The electricity supplier had already drawn a 300 A cable, but the regulations permitted no more than 250 A to be supplied to the building.

The simplest solution was to design and build an outdoor distribution board. But it had to meet tough requirements - it had to be able to stand up to snow-clearance, rain, wind and vandalism.

We found only one board that met all these requirements, Kabeldon.

Leif Svensson, Ullareds El

“Maximum accessibility for the power supplier and safety for the electrician”



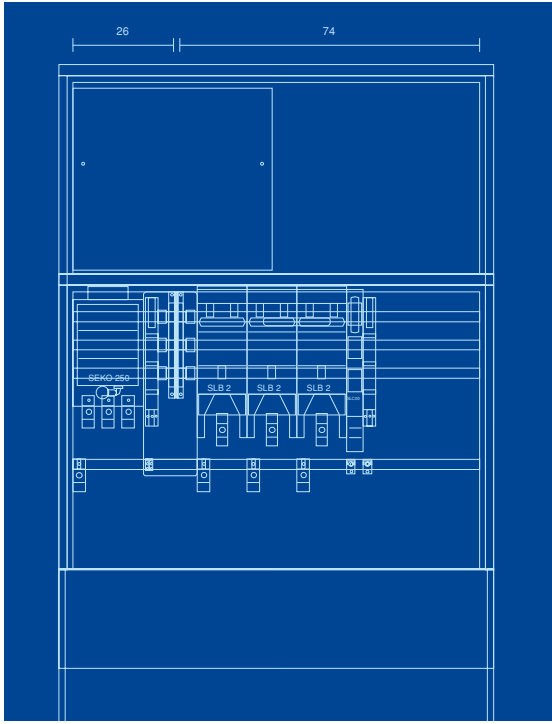
Emtic installed power equipment for Utfors’ broadband network. The main grid has amplifier stations every 70 kilometres or so, and the station connections are for 400/230 V and 250 A. Utfors specified that the power company had to be able to read the meters and service the equipment without accessing the station itself.

When you’re going to connect standardised units for different power companies in different localities, you’ve got to go for equipment that everyone can approve of. Emtic contacted ABB who came back with a proposal for a Kabeldon distribution board based on our specification, and using standard components. These were then mounted outdoors, adjacent to the amplifier stations.

There are currently 31 stations within the Malmö-Oslo-Stockholm triangle. We’ve had no problems at all with any of the power suppliers.

Mats Biveteg, Emtic

“Obviously, every subscriber’s meter must be easily accessible”



Kumla Church's electricity meter and distribution board used to be inside the power company's nearby substation. The board, which was an older model, was due for replacement.

When the power company, Örebro Elverk, decided to modernise the substation, there was no longer sufficient space for the church's equipment. This, in itself, was no problem, since Örebro Elverk wants to increase accessibility by placing the equipment of as many customers as possible outdoors.

So the new Kabeldon distribution board was placed adjacent to the substation. And both the power company and the user were satisfied.

Håkan Nyblom, Sydskraft Elnät Mälardalen AB

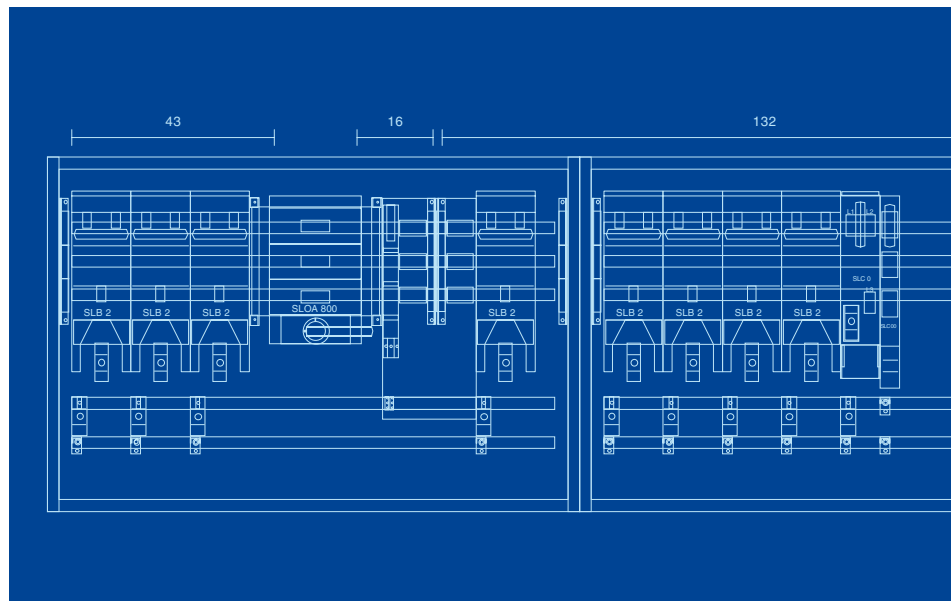
“At long last, a distribution board with room to work”

After forty years in the business I have installed most types of equipment. And with some of it you almost have to be a contortionist to get the job done.

The offices and industrial premises I work in used to have big switchgear units. Some of them have now been replaced with three boards, which feed the offices, shops and property.

Kabeldon distribution boards are easy to work and they're safe, even with the juice on.

Sune Eriksson, Elmontörerna Forsberg & Co AB





**“A distribution board that
welcomes you to Sweden”**

Bengt Ströjby, Kommunteknik Malmö



On the Swedish side of the Öresund Bridge, close to the abutment, there's a twelve-metre high stainless steel sculpture. On top of the sculpture there's a lantern, so we had to put in an electric cable and make a really safe connection.

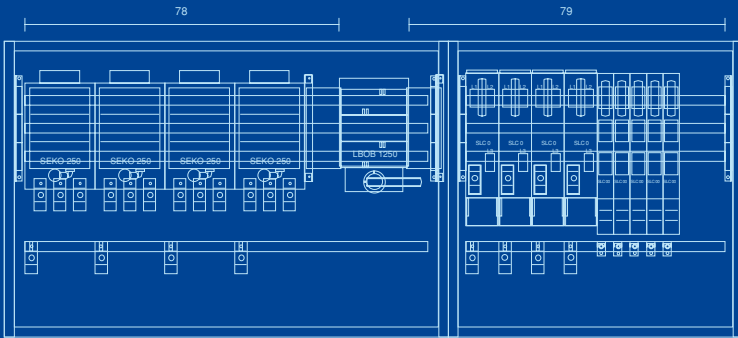
This is a very exposed site with lots of people about, which meant that the installation had to be vandal-proof. In addition, we had to contend with the same conditions that apply along the whole Swedish coast - hard, salty winds, icy cold winters and burning hot summers.

Also, we didn't want the board to be obtrusive and spoil the setting of the sculpture. So it had to be very compact.

We chose Kabeldon. We value the flexibility and safety and we've always been satisfied with them on previous occasions.



“Perfect for growing companies”



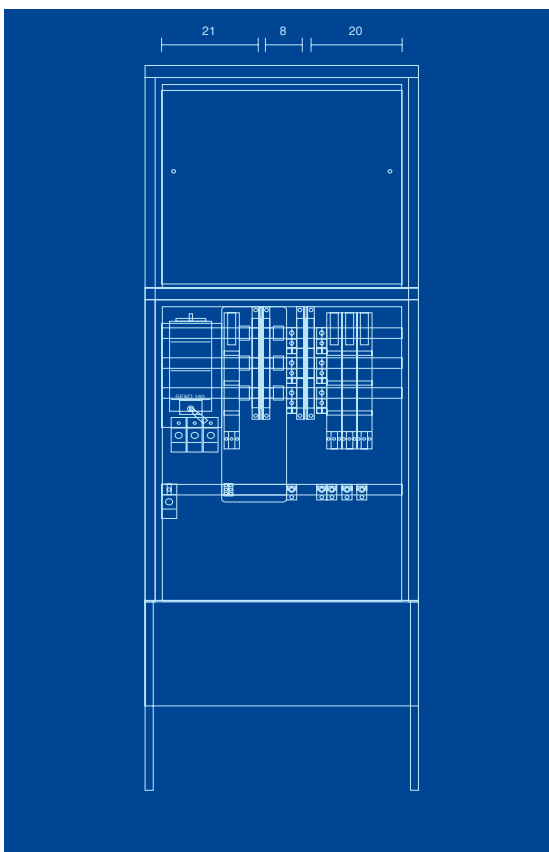
Ge-Kås' outlet in Ullared just seems to keep on growing - more sales area, better ventilation, more distribution boards, etc. And it's all very energy-demanding. Every new board is dimensioned for twice the consumption requirement as a matter of routine. Yet, a year or so later the board is still too small. And so it goes on.

As installers we find it simplest to work with Kabeldon. We just specify the functions required, and the distribution board comes to us ready assembled. All we have to do is put it in place and connect.

And every time Ge-Kås gets bigger, we just connect an extra fuse group. We don't even have to cut the power. It couldn't be easier.

Leif Svensson, Ullareds El

“First the board, then the train”



With trains running at 200 kilometres and more an hour, safety must have top priority. With this in mind, Banverket (Swedish National Rail Administration) has installed points heaters and marshalling yard lighting as part of its safety package and also to improve working conditions.

The boards in use are Kabeldon distribution boards. Their power comes from our own network. Emergency power comes from the local grid. The boards include meters, fuse apparatus and feed lines to the heaters and lighting units. Separate Kabeldon cabinets are used for signalling equipment.

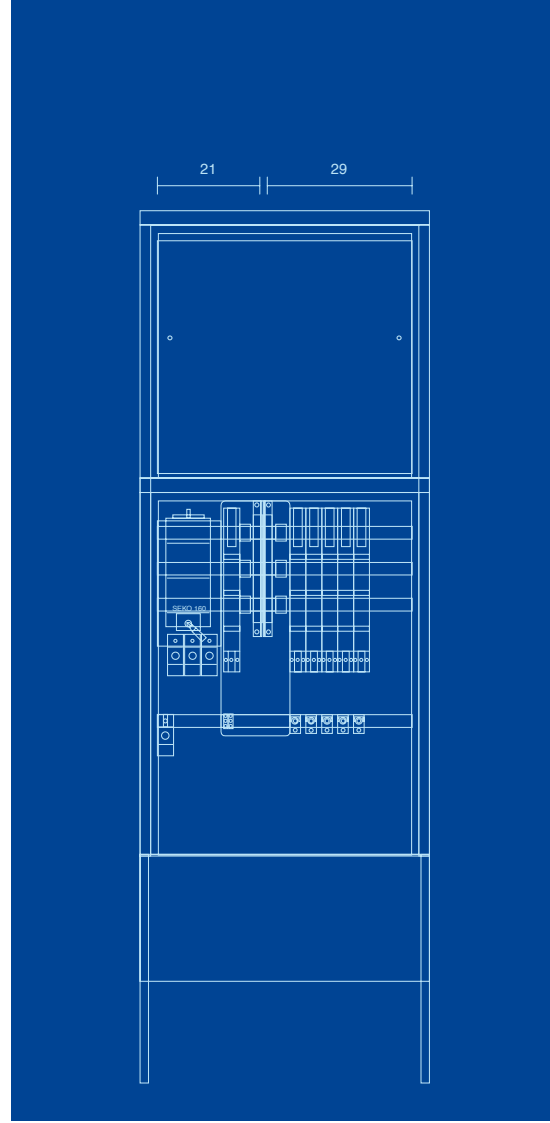
Mats Wiredal, Banverket Projektering, Alvesta

“A fantastic box that does the whole job”

Our company sold a movable school to the Municipality of Ale. The school was made up of thirteen modules. Each module measures 9,6 x 3 metres. The modules are standardised and every fifth module contains a built-in internal distribution board dimensioned for max. 35 A.

Unfortunately, there was only an 80 A cable from the local power company. The solution to the problem was a Kabeldon distribution board. So the incoming cable could be connected to the board, and separate cables drawn to each block of five modules.

Anders Månsson, Flexator Komponent AB

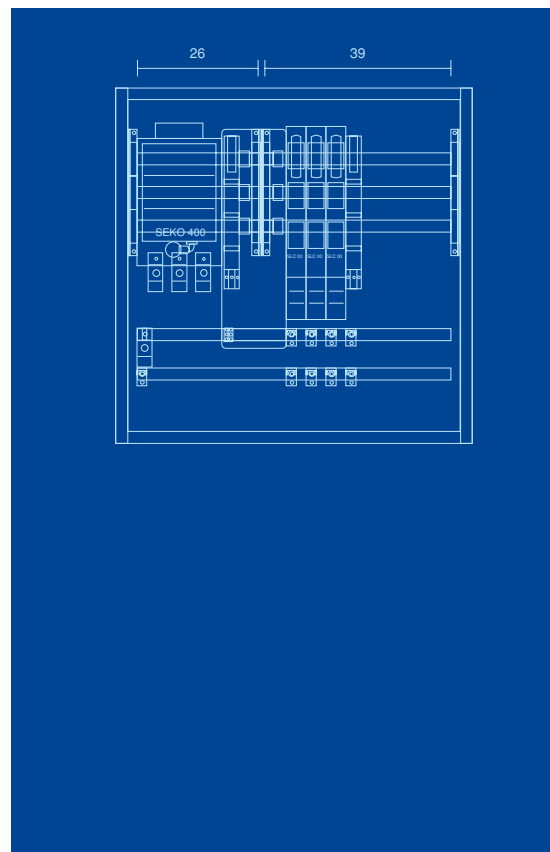


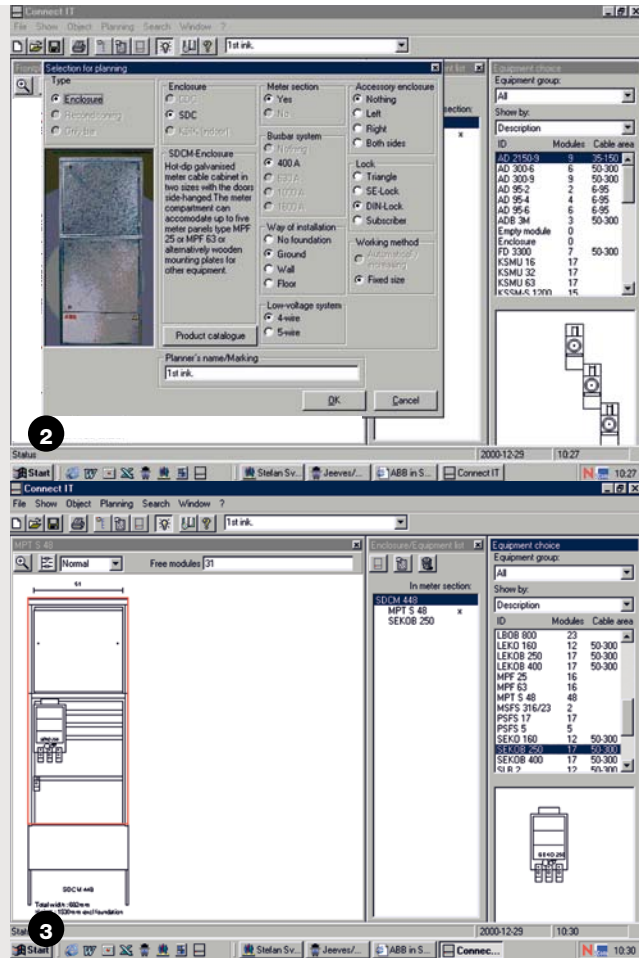
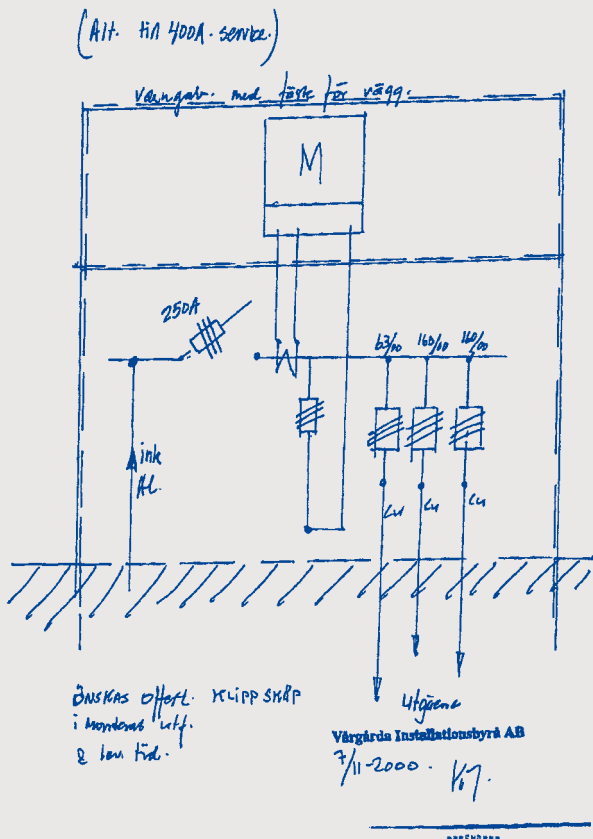
“Unbeatable when space is at a premium”

A well-known gluten-free bakery in Gothenburg was due to be rebuilt and extended. There was already an electricity room in the basement, but the available space was very limited. The extension would have required costly rebuilding, pulling down walls, etc., to gain enough space for the installations.

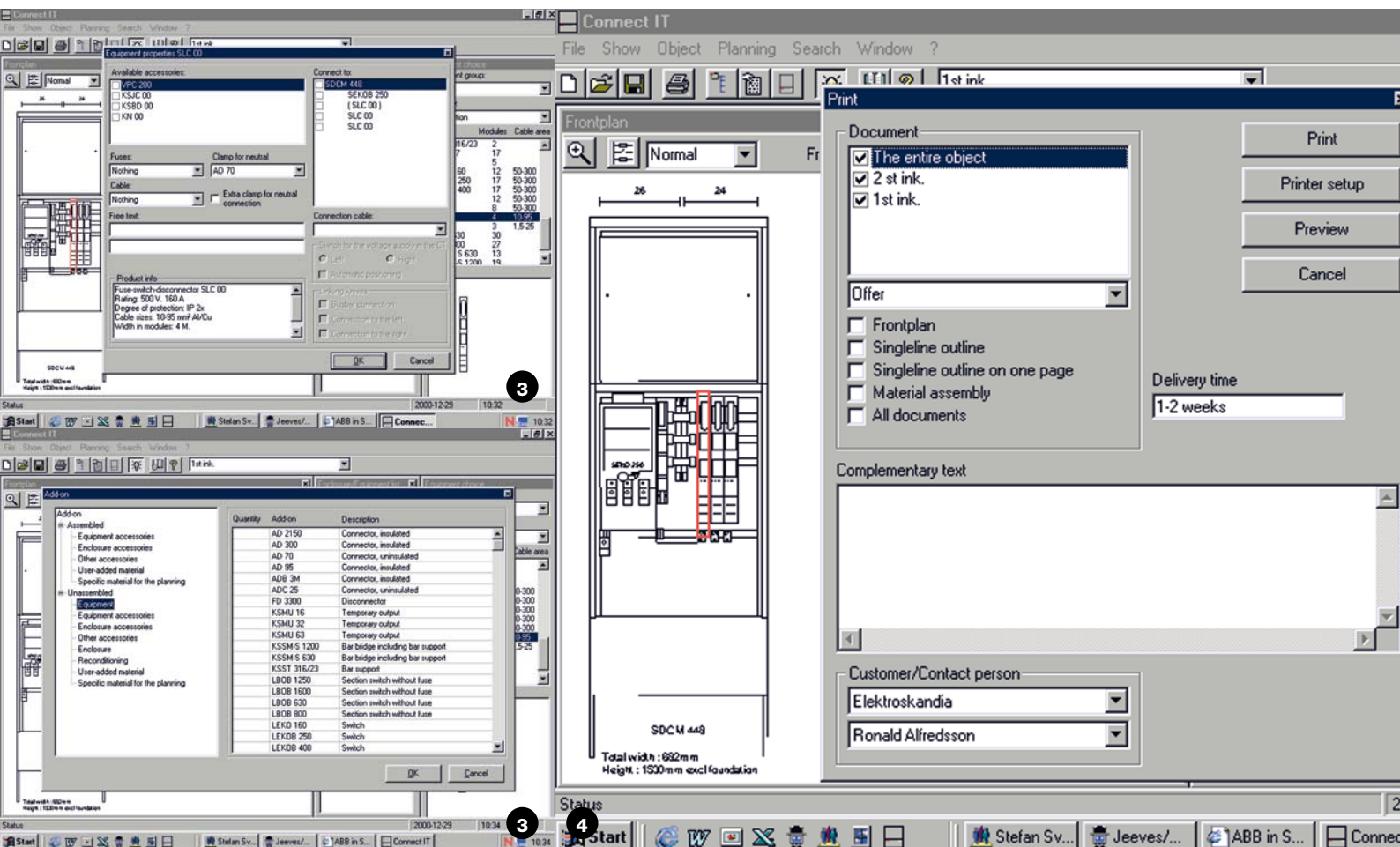
The answer was to design a brand new distribution board with room for the existing connections and the new ones. A Kabeldon board was installed. And although it had lots of spare space, it still fitted into the existing electricity room without any problem. This in turn, eliminated the cost for rebuilding the electricity room.

Patrick Svensson, ASAP Göteborg





The easy way to build a modern distribution board on your computer



Connect IT, our Windows-based planning program, enables you to design a complete distribution board quickly and easily. The program is available free of charge.

Step by step

Your starting point when making up a distribution board is to think about the required functions of the board, the relevant loads and other local conditions.

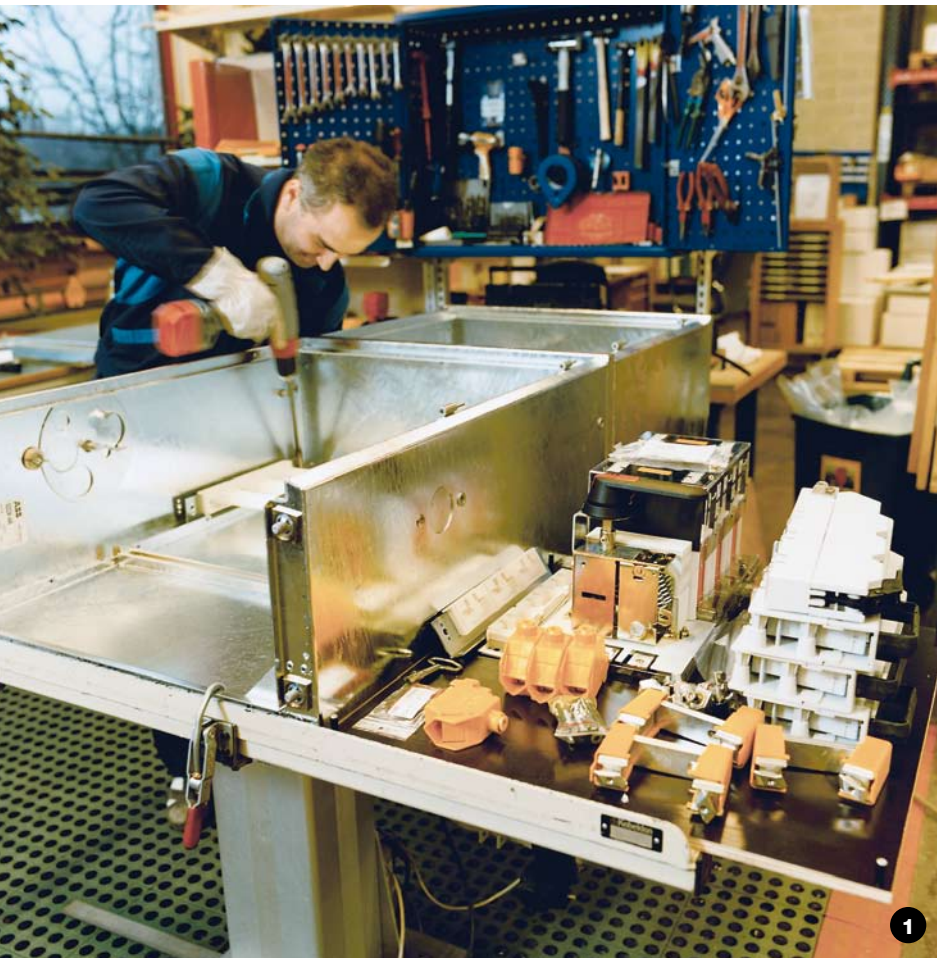
You collect the necessary basic data and article designations from a data base included in the program. You then set to work and methodically design your distribution board on screen. The whole task is logical and easy to follow at a glance. Once you have designed the board, you

pick out an enclosure with room for the equipment you have selected, preferably one that will have enough space for later extensions.

Complete documentation

When you have made your design, it will be documented in the form of a Single-Line Diagram, Front Plan and Material Assembly. Then all you have to do is place your order!

- 1 A distribution board can start off as a simple sketch on a piece of paper or a traditional drawing.
- 2 The Connect IT program data base enables you to build the distribution board step by step.
- 3 Finally, you equip the board with the required switches, accessories, etc.
- 4 Connect IT gives you all the necessary documentation, both on screen and on paper.



Beneath the skin of a modern distribution board



Building a distribution board used to be easy enough. All you had to do was to find a suitable wall, then mount the required IP Class cabinets against it, in accordance with the principle of one cabinet per function.

Unfortunately, a board of this type requires a lot of room, takes time to install and is difficult to extend. And every time you want to do any work on it, you have to cut the power off for safety reasons. The total cost is therefore very high.

A new era

Our modern boards are designed right on your computer screen, assembled in the factory and delivered complete and ready to install. They take up a minimum of space, can be extended

as required and can be placed outdoors or indoors. They are so safe that installers do not need to cut the power when working on them. And all the connections can be made in seconds, thanks to the insulated phase bars.

Factor in the above and you will find that the total cost is very competitive.

- 1 Easy, quick and safe installation.
- 2 The cabinet is fitted with the switches required for the distribution.
- 3 The quality system includes meticulous performance tests prior to delivery.
- 4 The distribution board is packed and ready to be delivered anywhere in the world.
- 5 The board is lifted into place in one single step. Here it is located outdoors to save valuable space indoors.
- 6 Connecting to the power network is fast and simple. The board can be used straight away.

Contact us

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The free software "Connect IT" for planning distribution boards, can easily be downloaded from www.abb.se/kabeldon

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