

MARINE SOLUTIONS



Enjoy the summer and water

Lovely summer! One experiences a special feeling when hearing those words? Sunshine, bathing and free time are things that come to mind. Many of you might even think about the lakes, the archipelago and boats. In Sweden we love our waters and willingly spend our free time on or by the water. If you have a boat with a Calix system, your boating holiday will be extra enjoyable.

We at Calix feel that you deserve a calm and peaceful time together with your boat. You should not have to think too much about the technique but be able to enjoy the freedom of the water. With our system you can feel safe that the electrical installations on your boat are safe and approved. They meet all requirements and are tested to withstand the conditions in Sweden. In this way you don't have to worry about surprises that might spoil your holiday planning.

We also know that the scandinavian summer does not always meet your expectations. Rain and cold can be a part of reality. Relax, with our system for water-borne heating it will be warm and dry inside your boat. This makes it possible to extend the summer by a few weeks. For rainy days it might be good to know that our system allows you to connect a TV point, together with points for computer and audio systems. This allows you to enjoy your free time in your boat's warm cabin, regardless of the weather.

With our solution you will have money left over. You charge the battery of your boat in the marina without running the engine to receive heating. Also, you are contributing to a clean environment and enhancing the possibility of enjoying nature in the future.

With a Calix system in your boat, holidays will always be an enjoyable experience without concerns.







The electricity supply in a boat requires high demands

Our land power system has set and sealed connections to a safe, simple and flexible system, that you are able to connect yourself without the help of a qualified fitter. Often the installation is done during manufacturing at the leading boat manufacturers. This means that several thousand boat owners already have our system.

Electricity in connection to water means great danger if the equipment has defects or is installed incorrectly. If installed incorrectly, tensions might occur and at worst, lead to injuries or death. It can also cause serious and expensive harm to your boat and equipment.

A safe shore power system

Our shore power system includes a distribution central, together with a residual current breaker that contains fuses and an earth fault breaker. It minimizes the risk of an electric shock, or fire if an error occurs within the equipment that is connected to the system. All of our distribution boards also have a built-in galvanised insulator that prevents harmful galvanised currents.

To increase safety, you should invest in an insulator transformer that is mounted before the distribution central. The result is a 230 voltage system, fully galvanised, separated from the electricity grid. For boats made of aluminum, this is a requirement.

High IP-class for high security

Electric equipment branded with a so called IP-class or encapsulation class. It will specify how well the equipment is protected against moisture, water and particles.

It is important that you have the correct encapsulation class for the four electrical installations. Equipment for

leisure boats must have an encapsulation class of IP56, or be placed in compartments equal to this. If the material is mounted beneath deck, the encapsulation class may be lower. Our system follows all national standards and regulations required.

The system is easy to connect

All parts of our system is easily fixed and locked with shackles that makes it waterproof and means they are classified according to IP69K. This is more than what is required for electrical installations on boats, regardless if the installation is done above or below deck. So you can feel safe in knowing that our system is safe and meets all requirements.

What is galvanic currents?

Galvanic currents can arise in two ways. One is when different metals are electrically connected and lies in water. The metals galvanic tension send out a current through the water between the metal parts. The least pure metal will emit ions and "rust". The bigger the difference between the purest and the least pure metal, the faster it will be destroyed.

To avoid having the metal cankered, sacrificial anodes are mounted on the hull, oakum, motors and axles to prevent the boat's vitals being ruined.

The other way is for one or more metals under the water to be exposed to electrical tension. If there are current differences between the earth operator and the water, the metal in this case also emits ions and canker. The higher the tension, the faster it goes. In this case the sacrificial anodes will not be of any help.



We have high demands for quality

All of our products bearing our brand name are safe to use and install. In addition, they are of high quality. This is a given for us and our customers expect nothing less.

All of our products are certified by third parties to ensure the right level of quality. You can feel secure, knowing that our products are tested and approved. They meet the standard of EN ISO 13297. All parts of the system are designed to avoid electrical problems, as much as possible.

All parts are of IP-class, so that you know how they are meant to be used. Our systems are built so that only our own products are suitable, which guarantees the right function and high security.

You can feel safe with us

There are many suppliers in the market, and the large selection might be confusing. Therefore it is not easy to make a safe and good choice. By choosing us, you can feel safe. Our products are characterised by high quality and a long lifespan.

They are developed, designed and manufactured in Sweden and guaranteed to manage the conditions here. They are also S-branded and come with two years of warranty.

Our goal is to be always one step ahead of our competitors, both in quality and clever solutions.

Intertek Semko-certified for a higher level of safety

Calix is one of the few manufacturers of heating systems approved by Intertek Semko. Our products are tested and approved in our certified laboratory. Here we simulate the most extreme conditions that our products may be subjected to. These tests are further controlled by a field test at our client's premises. We do not leave anything to chance.

Intertek Semko is an independent global testing and certification institution. A certification from this institution guarantees that our products meet the highest possible standards.

The environment is the core

The environment is important to us at Calix. Therefore we are always working on developing and improving our products in regard to the environment.

We are environmentally certified according to the ISO 14001. Our goal is to affect the environment as little as possible during the entire manufacturing process. We strictly follow all regulations and requirements from the authorities, market and customers.

Quality is always cheaper in the long run

How will you know that the equipment that you buy from us keeps its promises? When you choose us, you can relax.

Our products are characterised by high quality and have a long lifespan.

All Calix products are developed, designed and manufactured in Sweden. It is why we can guarantee the products will withstand the conditions here. With products from Calix you get equipment with high performance and of a quality that helps it last.

It will pay for itself in the long run.

Chosen supplier to leading manufacturers

We supply large and well known vehicle manufacturers all over the world. In addition to our high quality, we are appreciated for our long tradition of great technical knowledge.

A substantial company that works with a Swedish industrial tradition with innovation and new thinking.

Swedish-made products

All Calix products are manufactured in our facility in Eskilstuna. We fully control all manufacturing, and we are flexible in meeting our costumers requirements and needs.

As a customer you can be sure that our employees have a high technical competence and good condition of work.

Economy and environment

With a preheated engine, the fuel consumption is decreased, together

with the pollutant. When using our electrical, maintenance-free heaters you are also increasing the lifespan of your engine.

The gain is as large for the environment as for your finances.

Our factory is environmentally certified and we are constantly working on improving our environmental work.

To know that nearly all of our products are made from recycled material does not make thing any worse, right?

We look after you

Our products are of high quality and meet all demands required. For extra safety we offer generous warranties and other support, so that you get the best out of your Calix product.

Through our customer service and the geographical spread, you will receive rapid service from our able coworkers. We have a high availability level and are always ready to answer your questions.

Effective products

We focus on developing effective and safe products.

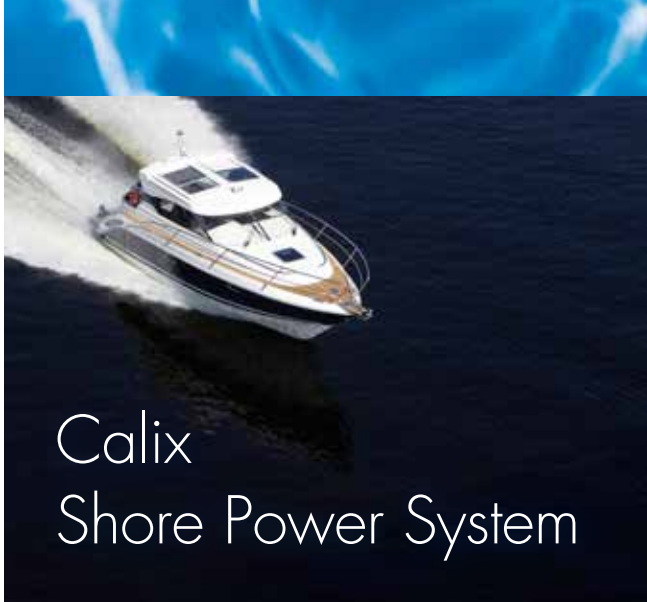
All our shore power systems are tested before delivery.

Calix fully automatic battery chargers are developed to handle tough conditions and climate. They have a high IP-class and works with advanced switch technique.

Our highly effective engine heaters, heat the cooling liquid up to the right temperature. Our cab heaters are compact, effective and S-branded for your safety.

Why you should choose
Calix products!





Calix Shore Power System

Our shore power system is safe, simple and flexible to install and use. The system is approved for installation by persons not qualified as electricians.

Which makes it possible for you to install the system in your own boat without having to contact an expert.

Our system gives you security and relief by the jetty and also the opportunity to charge the batteries with grid power. One end of the cable is connected to the distribution board on land and the other end to the boats input.

This will also give you 230 voltage on board and can be used for several functions and different equipment. Our system can be extended with several components and modules according to your own needs.

The Calix Shore Power System is approved for 16A, which makes it possible to have about 3600W in total output.

Calix has, for many years been supplying the shore power system to leading boat manufacturers, which makes it simple to add more functions to the system. If the grid power system is missing, you can easily install the system on your own without having to contact an expert.

Since we are using fixed and sealed cable connections you can do the installation yourself in order to use the system. No electrician required.


All parts of the system are put together and locked with a safety lock and protected from particles and water.

This makes our level of safety higher than required, inside and outside of the boat.

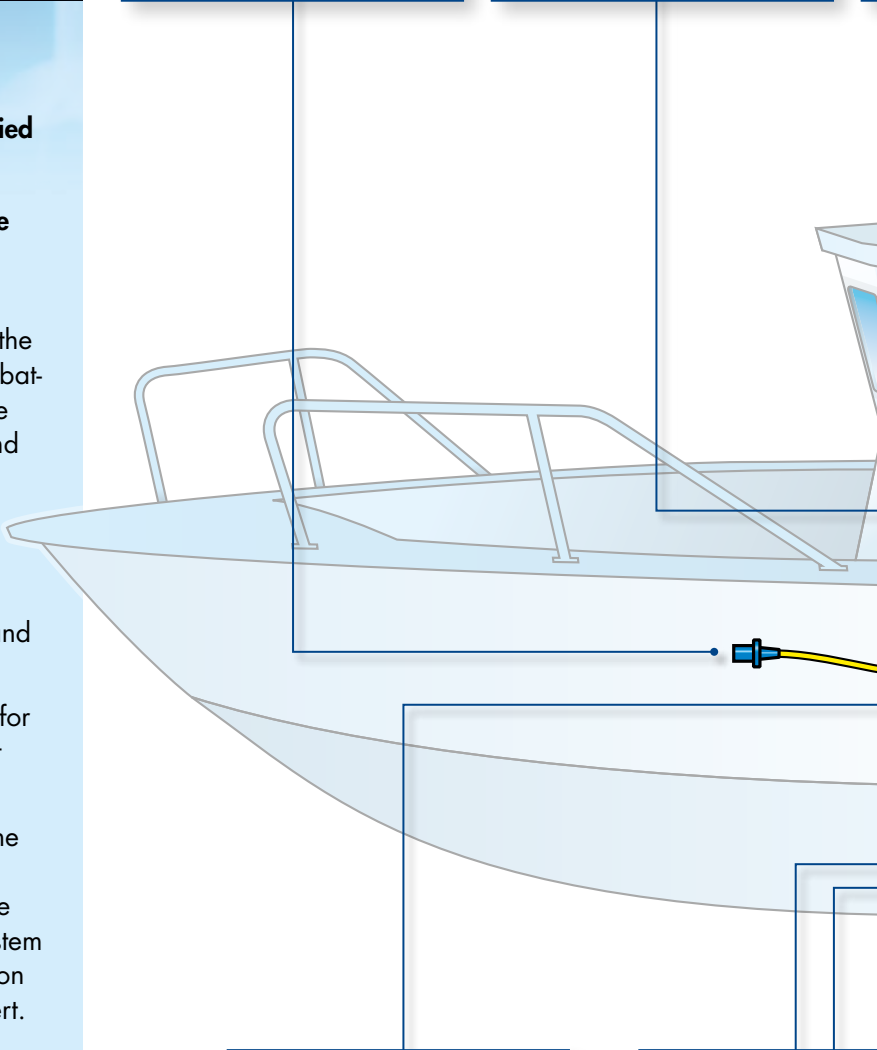
You can feel safe knowing that the system is secure and meets all requirements.



Shore power cable
Our shore power cable is available with several features and lengths to meet your requirements.



Shore power input
The part of the system that is fixed to boats and the one the land power cable is connected to.




Distribution central
Our distribution centrals give a professional installation. The different front panels with embedded frames make the board easily fitted to the interior.



Battery charger
Our range of battery chargers of high capacity makes sure the batteries are always fully charged.



Wall points (externally lying)

When it is only possible to mount an externally lying point.



Cab heater

Our well known self-adjusting cab heater. It is effective, small and easy to install. Delivered with floor stand and bracket for wall mounting.



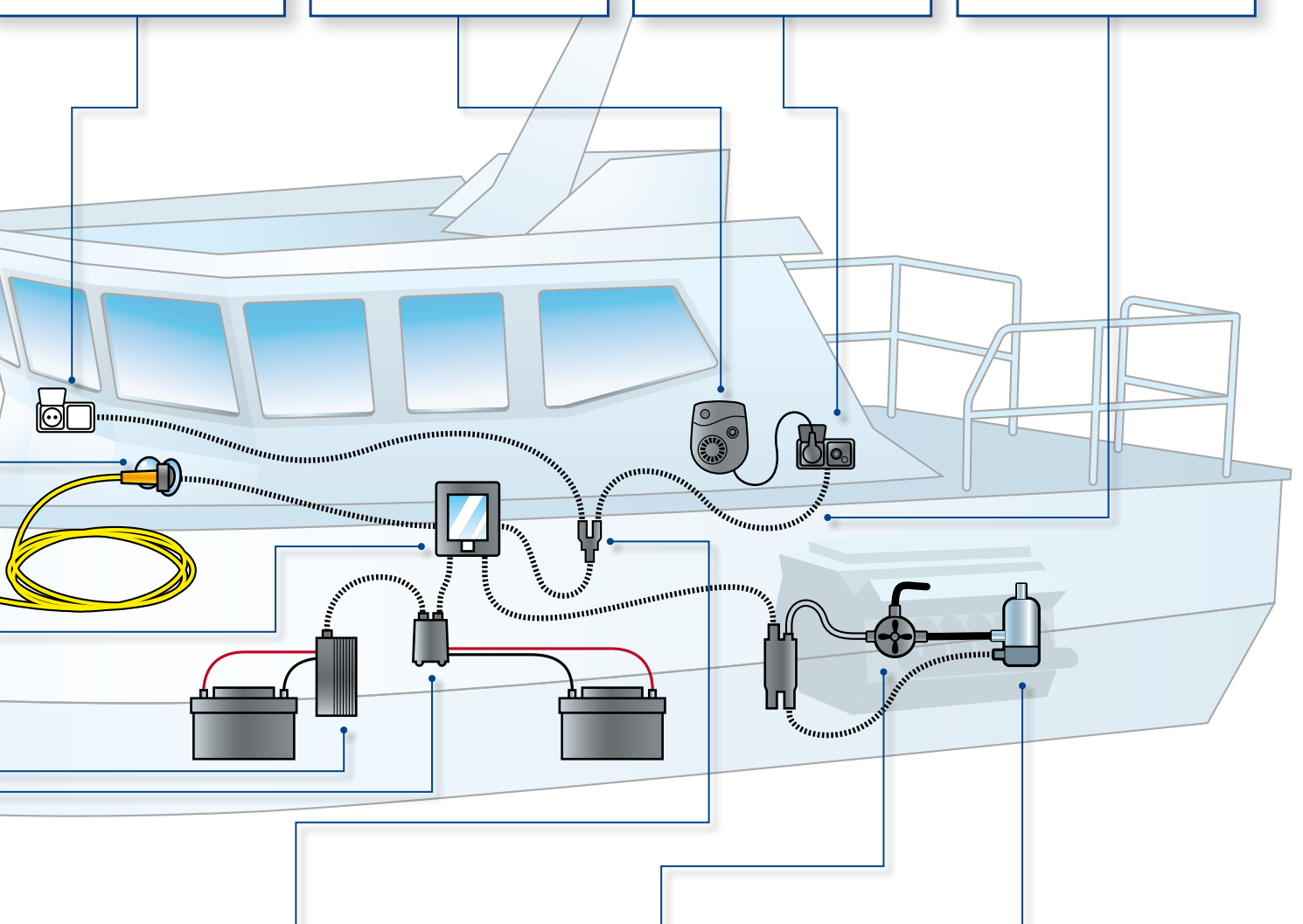
Wall point (embedded)

The embedded points are available in several features such as 230V, TV and 12V points.



Cable system

The easy to install cable system is only 14 mm in diameter. The copper parts are protected by a case made of steel and covered with flexible PVC plastic.



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Multiple socket

The multiple socket divides the system in a safe manner, so that several connections may be made.



Circulation pump

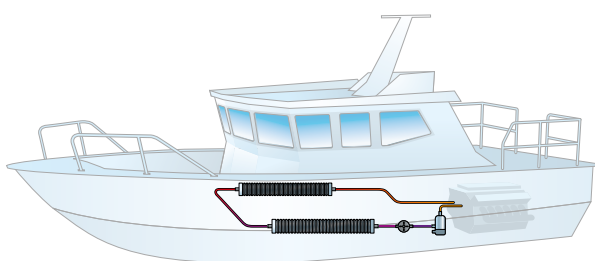
A high output pump used to circulate the heated cooler liquid within the system. Transformer included.



PH-heater

An easily placed and effective engine warmer with hose connection. Based on the self circulating principle.

Calix solutions for water-borne heating



For a long time we have been working with vehicle pre-heating for passenger cars, trucks, tractors, buses and entrepreneurial machines. The experience we have gathered over the years is also implemented in the marine applications.

Our solutions for water-borne heating are ideal for the boats with an pre-built-in heating system.

The system basically consists of two components, the PH-heater and the circulating pump. The heating system heats up the cooling liquid and the pump circulates it around the system. During spring and autumn it might be a bit damp inside the boat, which can be avoided with the help of the Calix heating system.

Previously, this was the reason for leaving the engine running, or using a petrol heater when in the marina. With our system, this is no longer required, it can be dry and warm inside your boat at all times. In this way, our system is a very economical alternative that minimises the risk of fire and toxic pollutant, and is as good for your private finances as it is for the environment.



Photo: Henrik Trygg



PH-heater


The heater comes with several features, depending on the amount of cooling liquid. The PH-heater is very powerful and is available with output of 500 watts up to 2000 watts. It has a built-in thermostat as an overheating protection. Because of its size, it is very easy to install in narrow engine compartments.





Circulation pump


A highly effective and well tested pump, that circulates the heated liquid in the heating elements. Our circulation pump is nearly maintenance-free and runs very quiet. Together with the PH-heater it makes up our system for water-borne heating of boats in the marina. When purchasing a circulation pump, a transformer to run the pump is included in the package.


Calix Product Range


Shore power cable		
	Description	Item no
	Calix Shore. 5m. 3x2,5mm	19 00013
	Calix Shore. 15m. 3x2,5mm	19 00011
	Calix Shore. 25m. 3x2,5mm	19 00010
	Cable when using Shore power inlet.	


Shore power inlet		
	Description	Item no
	0,3m. IP67	19 00020


Connecting cable Calix		
	Description	Item no
	MS10 Calix 3x1,5 Black	19 00019
	MS15 Calix 3x1,5 Black	19 00018
	MS25 Calix 3x1,5 Black	19 00017
	Equipped with marine seal	

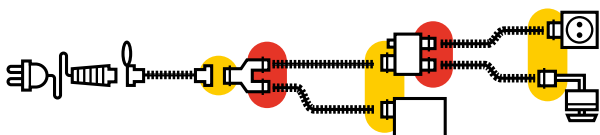
Shore power cable CEE		
	Description	Item no
	MS25 CEE 3x1,5mm. Orange	19 00015
	MS25 CEE 3x1,5mm. Svart	19 00016
	19 00015 in the photo	


Adapter cable		
	Description	Item no
	Adapter cable. 0,5m. 1,5mm ²	19 00070


Inlet cable		
	Description	Item no
	Calix MK1,0 Marine	19 00022
	Calix MK2,0 Marine	19 00023
	Calix MK3,0 Marine	19 00024


Extension cable		
	Description	Item no
	SK0,55	19 01005
	SK1,0	19 01010
	SK1,5	19 01015
	SK2,0	19 01020
	SK5,0	19 01050
	SK8,0	19 01080


Safety-lock		
	Description	Item no
	● For incoming connection	15 56341
	● For outgoing connections	15 55190





Distribution central		
	Description	Item no
	Distribution central model 28	19 00028
	One input, one input and one wall plug point. Distribution board with earth fault breaker together with indicating lights. The distribution board also has an embedded galvanic insulator that protect from low voltage differences between earth connection and lake water.	

Distribution central		
	Description	Item no
	Distribution central model 30	19 00030
	One input and three outputs. Distribution board with earth fault breaker together with indicating lights. Outputs normally for battery charging and water heater. The distribution board also has an embedded galvanic insulator that protect from low voltage differences between earth connection and lake water.	


Distribution central		
	Description	Item no
	Distribution central model 35	19 00035
	Two input and three outputs. Distribution board with earth fault breaker together with indicating lights. An extra input for usage of transducer from 12V to 230V via expendable batteries. Outputs usually for battery charging and water heater. The distribution board also has an embedded galvanic insulator that protect from low voltage differences between earth connection and lake water.	


Distribution central		
	Description	Item no
	Distribution central modell 37	19 00037
	Equal to model 35 but with automatic change-over between land power and the inverter together with automatic decoupling of two outputs usually for the water heater and the battery charging.	


Front panel		
	Description	Item no
	Front panel.	19 00040
	White.	
	Front panel for installation of the distribution central model 30 or 35 Screws are included with model 30, 35 & 37	


Front panel		
	Description	Item no
	Front panel.	19 00041
	Black.	
	Front panel for installation of the distribution central model 30 or 35 Screws are included with model 30, 35 & 37	


Calix Product Range


Wall point Embedded		
	Description	Item no
	Embedded point. IP 44	19 00080
	Grey	


Embedded wall point 230V/12V/TV		
	Description	Item no
	Embedded wall point with frame	19 00090
	Grey	


Wall point Embedded		
	Description	Item no
	Embedded point with transfer. IP 44.	19 00081
	Grey	


Embedded wall point 230V/12V/TV		
	Description	Item no
	Embedded wall point with frame	19 00091
	White	


Frame for embedded wall points		
	Description	Item no
	Frame for points 1900080/81	19 00082
	White	


Embedded wall point 230V/12V/TV		
	Description	Item no
	Embedded wall point with frame	19 00092
	Brown	


Frame for embedded wall points		
	Description	Item no
	Frame for points 1900080/81	19 00083
	Glossy chrome	


Embedded wall point 230V/230V		
	Description	Item no
	Embedded wall point with frame	19 00093
	Grey	


Frame for embedded wall points		
	Description	Item no
	Frame for points 1900080/81	19 00084
	Flat chrome	


Embedded wall point 230V/230V		
	Description	Item no
	Embedded wall point with frame	19 00094
	White	


Frame for embedded wall points		
	Description	Item no
	Frame for points 1900080/81	19 00085
	Flat brown	

Embedded wall point 230V/230V		
	Description	Item no
	Embedded wall point with frame	19 00095
	Brown	


Frame for embedded wall points		
	Description	Item no
	Frame for points 1900080/81	19 00086
	Flat black	


Wall points Externally lying		
	Description	Item no
	Single externally lying. IP 44	19 00050
	Double externally lying. IP 44	19 00051
	White	


Frame for embedded wall points		
	Description	Item no
	Frame for points 1900080/81	19 00087
	Grey	


Wall points Embedded		
	Description	Item no
	Double point with top. IP 44	19 00060
	White	


Calix Product Range


Cab heater		
	Description	Item no
	SlimLine 800W	17 68000
	196x140x35 mm. Weight: 0,8 kg Power: 800W @ -25°	

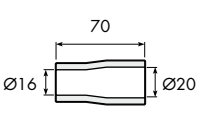
Cab heater		
	Description	Item no
	SlimLine 1400W	17 68030
	196x140x35 mm. Weight: 0,8 kg Power: 1400W @ -25°	


Cab heater		
	Description	Item no
	SlimLine 800/1600W	17 68050
	196x140x47 mm. Weight: 0,95 kg Power: 800W alt. 1600W @ -25°	


Cab heater		
	Description	Item no
	SlimLine 1100/1800W	17 68060
	196x140x47 mm. Weight: 0,95 kg Power: 1100W alt. 1800W @ -25°	


Pumpkit		
	Description	Item no
	Pumpkit inkl. transformator.	17 62010


Professional Heater		
	Description	Item no
	PH 2000H kit	18 32000
	PH 2000L kit	18 32002
	Professional Heater has an adjustment range of 60-80° C, low temperature version (l) has an adjustment range of 25-50° C. Delivered with MKMS 1025. Several variations of power via www.calix.se	


Connections to PH		
	Description	Item no
	16-20 mm	15 57614
All Professional heaters have connection pipe with 20 mm diameter.		


Summer/winter-switch		
	Description	Item no
	Summer/winter-switch	17 56500
	Summer: one exit active. Winter: 3 exits active.	

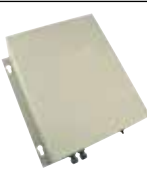
Battery charger		
	Description	Item no
	Battery charger BC1205, IP44	17 53980
	155x90x40 mm. Weight: 0,5 kg Equipped with by pass connection (230V) and suitable for the starter battery. Fully automatic charger with advanced switch- technique.	

Battery charger		
	Description	Item no
	Battery charger BC1207, IP65	17 53910
	160x78x42 mm. Weight: 0,9 kg Fully automatic charger with advanced switch- technique.	

Battery charger		
	Description	Item no
	Battery charger BC1217, IP65	17 53930
	192x96x47 mm. Weight: 1,5 kg Equipped with temperature sensor. Fully automatic charger with advanced switch- technique.	

Battery charger		
	Description	Item no
	Battery charger BC1217 XC, IP65	24 00289
	192x96x47 mm. Weight: 1,5 kg Equipped with by pass connection (230V) and with temperature sensor. Fully automatic with advance switch-technique.	

Battery charger		
	Description	Item no
	Battery charger BC2412, IP65	17 53280
	192x96x47 mm. Weight: 1,5 kg Fully automatic charger with advanced switch- technique.	

Insulation transformer		
	Description	Item no
	Insulation transformer	19 00025
	LxBxH: 400x368x130 mm. Weight: 24 kg	



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