

VEHICLES SOLUTIONS



The cold season can truly be fantastic...

Sparkling white vistas, skiing and hot chocolate. Surely winter can be fantastic. Often the snow comes as a nice and bright break from the dark and gruesome autumn.

But everything might not be so nice. Cars that will not start, and windscreens that need to be cleared of ice are only a few things vehicle owners have to put up with.





Relax! With a Calix system, winter doesn't have to be a pain. Our electric engine heater gives you an engine already heated and ready to go.

It is not only good for your car, but for the environment, since a preheated engine produces less exhaust fumes.

With a cabin heater, fingers blue with cold from clearing the windscreen are a thing of the past. They are always ice and snow free.

With a system from Calix, you and your car don't have to freeze, and you can enjoy the winter in full.

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Yes, we know
it sounds unbelievable.



Manufactured in Sweden. In Eskilstuna actually.

From the beginning

We have always been located in Eskilstuna, where all manufacturing still is carried out. We are proud of many things.

We feel that we are part of a larger Swedish industrial tradition, where quality and safety are two words of honour. For about twenty years we have been one of the largest manufacturers of electrical engine heaters in the world.

The company is Swedish owned, and the result of a fusion between the enriched Eskilstuna companies Nickelbolaget i Eskilstuna AB and AB Carl Särenholm.

At first, we produced spittoons, camping stoves and boiling pots. In 1990, two companies that manufactured car accessories were acquired.

Since the start of the 90's we mainly manufacture vehicle heating products, with the world as our clientele.

We don't unnecessarily make things difficult

The core of our work is our electrical heaters, combined with our cable system. With this as our foundation we create heating solutions for various vehicles.

Because our products are developed according to a modular system, you can easily build onto your system with battery chargers and other peripheral equipment.

We have a long tradition of developing practical products of high quality, which are easy to use and understand. Since our employees have been with the company for a long time, we have created experience and competence.

Try to be one step ahead

We feel that it is important to listen to our client's needs. Not only their current needs, but also future requirements.

Together with our clients we are developing better and safer products.

In this way we can always offer the best possible solutions for effective vehicle heating.

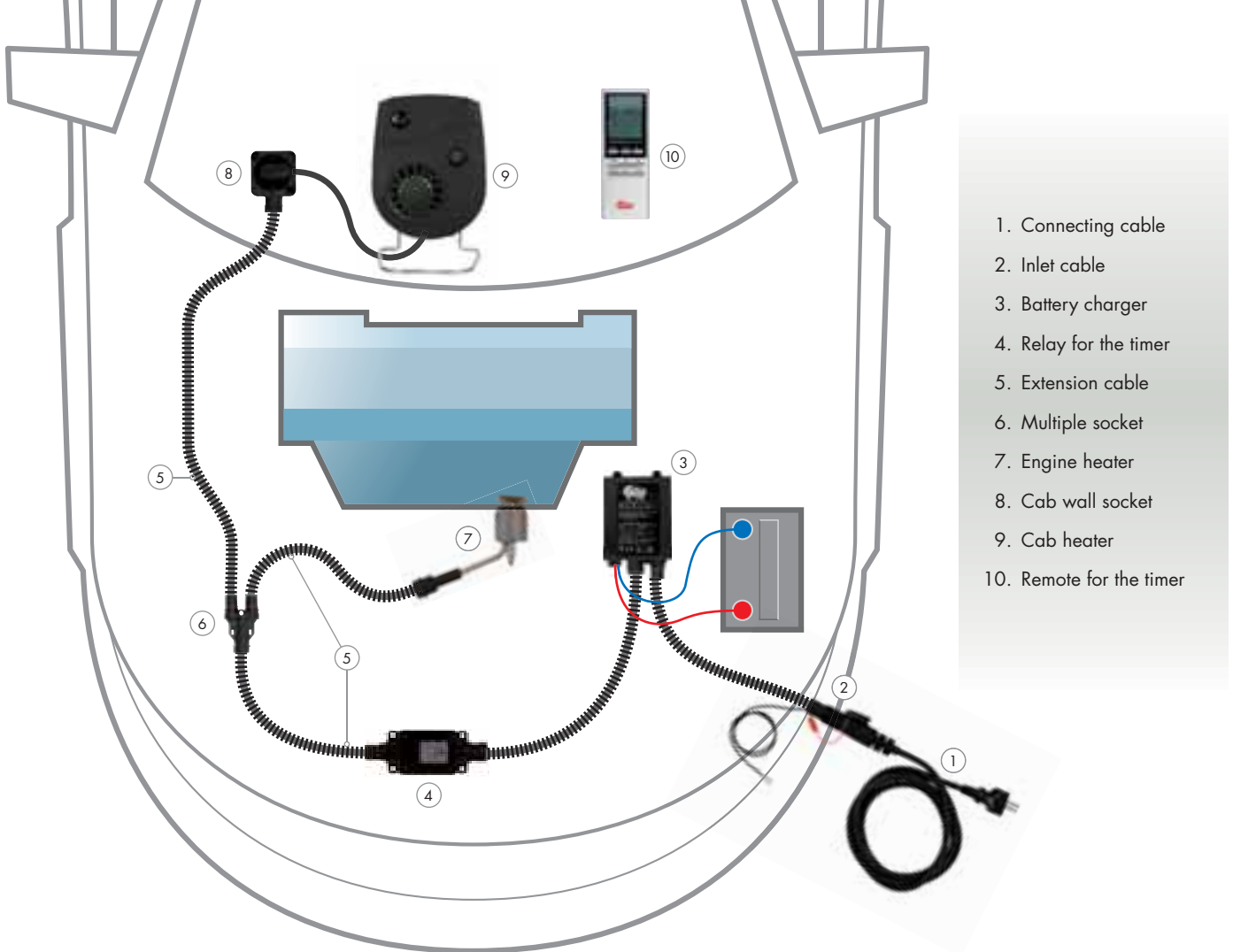
Continuous product development

Our ambition is to continue to develop products based on the circumstances and needs of our clients. Our focal point will perhaps be even more on the environment, but also human comfort.

By simple means, we are improving all the time, inventing clever solutions for all kinds of situations.

Our goal is to be one step ahead of the needs of our clients and the market when it comes to quality and innovative solutions.

This is why Calix will continue to be an obvious partner to leading vehicle manufacturers worldwide in the future.



High quality infuses everything we do.

To us it is obvious that all products with our brand name are safe and of high quality.

Usage of electronic equipment always involves a safety risk. But you can feel secure knowing that all Calix products are tested and approved.

They meet all Swedish and international safety requirements. We take the checks even further and are constantly open to external monitoring. They not only check our products. They guarantee that our inspections are executed correctly. This means we always have the competence required, and that our employees are aware of the demands.

Calix quality control system is certified according to ISO/ TS16949. A system often required by our international vehicle manufacturers worldwide.

All products are tested

It is not about occasional random control. Each product must meet the demands of function, quality and safety that our clients expect.

In this way you can be sure that the products are working and that we always meet our promises.



Third party certifying guarantee the quality

All of our products are certified by a third party. We do this to have independent verification that we are implementing current laws and regulations within the different regions.

Calix is one of the few manufacturers of heating systems approved by Intertek Semko. This is an independent global testing and certification institution. A certification from this institution guarantees that our products meet the highest possible quality.

We are also certified by several leading vehicle manufacturers. This shows that we meet the high requirements that the manufacturers demand from their subcontractors. Amongst these is Ford Q1:2002, a certificate given in accordance with strict controls.

Tough tests in our private laboratory

Our products are tested and approved in our certified laboratory.

Here we simulate the most extreme conditions that our products may be subject to. These tests are further controlled by a field test at our clients.

All Calix products are CE branded. By that symbol we verify that the products meet the safety demands required by the EU.

Security comes first

We do not leave anything to chance. All our products are S and ETL branded. The S branding is an optional certification and means that an independent institution tests and verifies that we meet the requirements of the CE branding regulations and demands.

ETL is a North American branding and means that their requirements and regulations are met.





Environmental responsibility

The environment is important to us and our clients.

A good environment is something everybody cherishes. We at Calix do so too. Therefore we are always working on the development and improvement of our products in regard to the environment.

Starting a preheated engine is better than starting a cold engine. If the engine is preheated when started the emission of harmful greenhouse gas is decreased.

This is the foundation of our environmental work. To preheat the engine is a good step towards a lasting environmental ideal. In addition, our products are made from recyclable material.

You as a consumer can thereby feel that you are making an effort to protect the environment. We are environmentally certified, according to the ISO 14001, and also members of the international database IMDS. In this database you may search and look for the products we manufacture and find out what they are made of. This encourages us to work towards as small and environmental effect as possible during the entire manufacturing process.

How we work

The way we handle the environment issue is a very important part of our daily work. Our goal is to affect the environment as little as possible in all parts of our work.

We are constantly working to develop and improve our products from an environmental perspective.

We strictly comply with the regulations and demands that the authorities, markets and customers require from us.

Together with the vehicle industry, we run a number of development projects regarding the recycling of material.

Manufacturers are forced to comply with directions to increase the number of recycling material in cars.

Our contribution is that our products are made of almost 99 percent recyclable material.

What does this mean to you?

As a vehicle owner there are several advantages to using Calix products.

You own a vehicle that not only emits less exhaust gas, and it does not use as much fuel. Furthermore, the lifespan of your vehicle will increase, since it is exposed to less stress caused by our often harsh climate.

By using our products you are not only helping the environment but also saving money.



Quality is always an investment in the long run

How will you know that the equipment for the vehicle heating that you buy from us keeps its promises? If 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. That is why we can guarantee that the products will stand the conditions here. Sure, it will cost you to invest in a good and effective vehicle heater. On the other hand you will have effective equipment, with quality that makes it last.

It will pay for itself in the long run.

Chosen supplier to leading vehicle 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. It makes our production more flexible and able to take on work of all sizes.

As a customer you can be sure that our employees have a high technical competence and enjoy good working conditions.

Economy and environment

With a preheated engine, the fuel consumption is decreased together with the pollutant. When using our products you are also increasing the lifespan of your vehicle.

The gain is as much for the environment as for your economy.

Our factory is environmentally certified and we are constantly working with 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 requirements. For extra safety we offer generous warranties and other support, so that you will gain the best from your Calix product.

Through our customer service you will receive prompt service from our able co-workers. We have a high availability level and are always ready to answer your questions.

Effective products


We focus on developing effective plug-in heaters that warm from the inside out. This makes it possible to warm the engines faster and to the right temperature.

Several manufacturers are producing external contact heaters, since they are cheaper to manufacture and quicker to install.

Calix can offer contact heaters when a customer requires, but our first hand recommendation will always be plug-in heaters.

You can compare a plug-in heater to a house that is being heated from the inside. Using the contact heater would be like installing the radiators on the outside of a house. It does not give the same effect, even if this would warm the house a little bit.

You can complement this with a Calix cabin heater. They are designed to blow the warmth directly towards the wind screen. This defrosts the wind screen faster, even if you use a heater with less power.



Why you should choose
Calix products!

Calix Engine Heaters



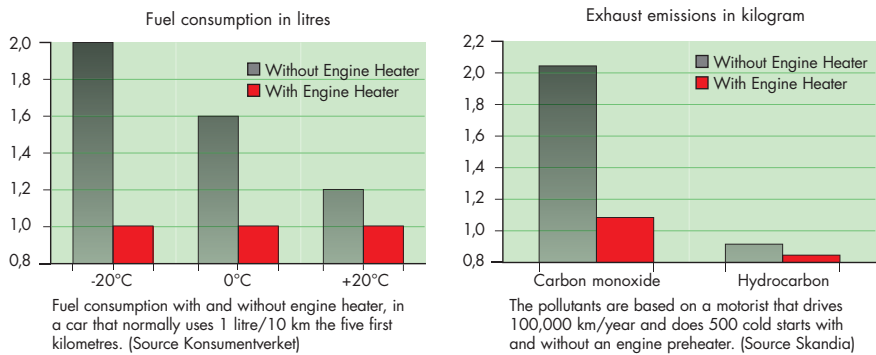
A warm engine uses less fuel.

Everybody knows the impact vehicles and traffic have on the environment. An engine that is started cold is the source to a greater amount of carbon dioxide, than a preheated engine. With an engine heater from us you are driving environmentally aware and economically.

Neither humans nor vehicles feel good from physical strain without warming up first. The colder it is, the more you will gain from using an engine heater. Is it not true that we associate engine heaters with winter and cold?

But did you know that it is a cold start already when the temperature in the engine is below 85 C°? You can benefit from using an engine heater during the warmer months. The engine wear will not be as hard if warmed up before start, regardless of the season. By avoiding cold starts you will also decrease the fuel consumption.

This leads to a substantial decrease of pollutants in the first kilometres, com-



pared to when you cold-start your car.

An engine heater is a long term investment that will quickly pay for itself. There are several of thousands to be saved with an effective system for vehicle heaters. We offer a complete programme of engine heaters in different models to cover all needs.

With an engine heater from Calix, both you and your car will have a better start. It is good for the environment, for your car, for you and your finances.

CVH – a new generation of engine heaters

The Calix Continuously Variable Heater (CVH) is a self-adjusting heater. The power is gradually decreased as the temperature of the cooling liquid is increased. This means that you are saving both energy and money, since a traditional heater uses the same effect for as long as it is connected.

Calix CVH has an power of 500 watts. With a pumping system, this can be increased to 750 watts. The heater is developed for engines with a cooling system from four up to sixteen litres.

Calix Cab Heaters



Faster de-icing with a unique base support

To have an ice-free wind screen, together with a warm and comfortable cabin, you should invest in an effective cab heater. During cold winter days you will appreciate it, we are sure of it. All our cabin heaters are Swedish-made and of high quality

Our cab heaters are made to automatically adjust to the surrounding temperature. They are delivered with a unique base support and wall bracket. The new unique support facilitates more options in directing the air flow towards the windscreen.

They are small, compact and easy to install. The cabin heaters come with four different outputs and in two sizes. All to make it easier for you to find what is most suitable for your vehicle.



Slimline – high power with a small profile

Calix Slimline is a series of thin cab heaters with a high performance. They are easy to install and are available with outputs from 800 to 1800 watts. All new Slimline heaters are delivered with our unique base support.

You will also have a safety strap for mounting which gives you the opportunity to install the cabin heater in a crash-proof manner. There is no need to worry that the heater will come loose in an accident.

Naturally, all the Slimline heaters meet the electricity safety requirements and, to make you feel extra safe they are S branded.



Calix Battery charger



Modern vehicles demands a great deal of power

Today's modern vehicles consist of a great deal of electrical equipment that continuously uses a small amount of power, even when the vehicle is turned off. This means the battery is always working.

With an automatic charger with a so-called switch- technique from Calix, you will always have a fully charged battery.

If a power source is turned off because of the battery being totally discharged, important settings in the vehicle might be gone. This is something that often leads to expensive visits to the garage.

Calix battery chargers can manage parallel loads. It means that if there is a consumer (light, radio etc.) during the charging the charger will take this into account and will supply the consumer with power at the same time as charging the battery.

Our battery chargers are approved for a set installation and naturally S branded. They meet all requirements and standards. They are available with 12 and 24 volts.

We have a broad selection of chargers with models suitable for most needs.

They are made to handle most climates and work perfectly at temperatures of -40 C° to $+60\text{ C}^{\circ}$.

They are approved for outdoor usage and handle dust and rain. They are also excellent for professional vehicles and machines.

Calix Timers

When you are going to use your vehicle it is good to have it warmed up and ready to start. Let our timers help you with that.

We have several different types of timers; from simple timing devices to very advanced timers for remote controlling of your Calix system.

The latest addition to the timer family is delivered with two remotes. With one of them you can make extra settings for the most choosy user and store up to 12 separate timer intervals.

The other one is simpler and only handles the starting and stopping of your Calix system. It is so small you can put it on your key ring.

Regardless of which timer you need, we have the solution for you.



Calix Cabling



Together with our heaters, the cabling is the heart of our products.

Calix cabling system is made with a focus on high levels of safety and quality.

Calix standard cables are approved for 240 voltage systems and consist of a connection cord, one input and one extension cord.

For this basic system you can connect an engine heater, electrical point for the cabin and a battery charger.


It gives you a complete system with everything needed in a vehicle.


Our cables are made from different material, depending on the requirements of the specific cable.


For example, the outer jacket of the connecting cable is made of a rubber mix, especially developed to be flexible in cold weather and to withstand years of it. This is the reason why we don't add colour to the outer jacket, because that will make the cable stiff in cold weather and give it a shorter service life.


The cables for set mounting are made of a plastic-covered metal shell, especially made to withstand the stress in the engine compartment, including wear, temperature fluctuation, dirt and liquids.


Calix Product Range


Inlet cable		
	Description	Item no
	MK0.5 (0.5 m)	17 62505
	MK0.8 (0.8 m)	17 62508
	MK1.0 (1.0 m)	17 62510
	MK1.2 (1.2 m)	17 62512
	MK1.5 (1.5 m)	17 62515
	MK2.0 (2.0 m)	17 62520


Connecting cable		
	Description	Item no
	MS2.5 (2.5 m)	17 62625
	MS2.5 (2.5 m) angled	17 62640
	MS3.5 (3.5 m)	17 62690
	MS5.0 (5.0 m)	17 62650
	MS5.7 (5.7 m) Orange spiral	15 56508
	MS10.0 (10.0 m)	17 62670
	MS15.0 (15.0 m)	17 62680
	MS25.0 (25.0 m)	15 56488
	MS25.0 (25.0 m) CEE Marin	15 56504


Kabelset		
	Description	Item no
	MKMS1025 (MK1.0 + MS2.5)	17 62460
	MKMS1525 (MK1.5 + MS2.5)	17 62461
	MKMS1550 (MK1.5 + MS5.0)	17 62610
	MKMS2025 (MK2.0 + MS2.5)	17 62462


Retainer clamp, expander and plastic nut		
	Description	Item no
	Retainer clamp	13 54606
	Expander	14 54401
	Plastic nut MK	17 62440


Extension cable		
	Description	Item no
	K0.5 (0.5 m)	17 62105
	SK1.0 (1.0 m)	17 62110
	SK1.5 (1.5 m)	17 62115
	SK2.0 (2.0 m)	17 62120
	SK5.0 (5.0 m)	17 62150
	SK8.0 (8.0 m)	17 62160
	SK12.0 (12.0 m)	17 62165

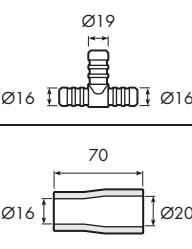
Branching cable kit		
	Description	Item no
	GL1.5 Compl kit 0.5 + 1.0 m	17 60015
	GL2.0 Compl kit 0.5 + 1.5 m	17 60020
	GL2.5 Compl kit 1.0 + 1.5 m	17 60025
	The kits contains two extension cables one cab wall socket and one multiple socket.	


Multiple socket		
	Description	Item no
	GU403	17 62413


Cab wall socket		
	Description	Item no
	KVU303	17 62313

Engine heater		
	Description	Item no
	See Calix recommendation chart to find the correct engine heater for your vehicle. At www.calix.se you will find our complete range. The website is updated continuously.	


Professional Heater Kit		
	Description	Item no
	PH500 (500W) 4-12 l*	18 30500
	PH750 (750W) 12-18 l*	18 30750
	PH1000 (1000W) 16-25 l*	18 31000
	PH1500 (1500W) 25-30 l*	18 31500
	PH2000 (2000W) >30 l*	18 32000
	PH500L (500W) 4-12 l*	18 30502
	PH750L (750W) 12-18 l*	18 30752
	PH1000L (1000W) 16-25 l*	18 31002
	PH1500L (1500W) 25-30 l*	18 31502
	PH2000L (2000W) >30 l*	18 32002
	* = Cooling system	
Professional heater have an adjustment area of 60-80° C, low temperature version (l) have an adjustment area of 25-50° C. Delivered with MKMS1025.		

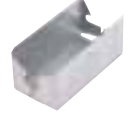
Connections to PH		
	Description	Item no
	T-pipe	14 52173
	16-20 mm	15 57614
Connection pipe Ø 20mm.		


Tank heater		
	Description	Item no
	Tank heating plate (260W)	17 69100
	Tank heating kit (260W)	17 69101
	Tank heating kit (2x260W)	17 69102
	Tank heating kit (3x260W)	17 69103
	included in the kits in excess of tank plate/ or also extension cords, multiple sockets and safety-lock.	


Battery charger		
	Description	Item no
	BC 1205	17 53980
	BC 1217	17 53930
	BC 2412	17 53280


Calix Product Range


Pump kit		
	Description	Item no
	Pump kit incl. transformer	17 62010

Heating protection		
	Description	Item no
	Sleeve 200 mm	17 69090
	Single heating coil	17 69001
	Double heating coil	13 53730


CEE-sockets		
	Description	Item no
	CEE-sockets	15 57389


Tool kit		
	Description	Item no
	Tool kit Ø20 mm resp. Ø29 mm	17 69040
	Tool kit Ø25 mm resp. Ø29 mm	17 69045
	The tool kit contains of a hole saw, rasp and tools for the expander.	


Kupévärmare		
	Description	Item no
	Slim Line 800	17 68000
	Slim Line 1400	17 68030
	Slim Line 800/1600	17 68050
	Slim Line 1100/1800	17 68060


Tool kit		
	Description	Item no
	Mounting tools cabling	17 69050
	Used at the end of the cabling for easy mounting.	

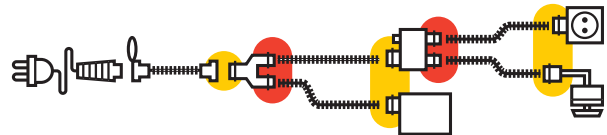
Combo		
	Description	Item no
	Comfort kit E85 SL 1400 (Slim Line 1400 och GL 2,5)	17 68085
	Comfort kit A SL 1400 (Slim Line 1400, MK 2,0 och SK 1,0)	17 68075
	Comfort kit B SL 1400 (Slim Line 1400, MK 1,5 och GL 2,5)	17 68080


Plug-out		
	Description	Item no
	Plug-out Ø24/26	17 69016
	Plug-out Ø27/29	17 69015
	Plug-out Ø30/33	17 69011
	Plug-out Ø34/37	17 69012
	Plug-out Ø38/42	17 69013
	Plug-out Ø45	17 69014

Timer/relay set		
	Description	Item no
	Remote timer	17 56600

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

Timer		
	Description	Item no
	Outdoor timer	17 56400



Summer/winter-switch		
	Description	Item no
	Summer/winter-switch	17 56500

SOLUTIONS VEHICLES



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