CC&N Global
Product Catalogue
2026

Charging • Preheating • Workshop • Showroom • Power • E-Mobility



CCN | DEFA®

THE
CATALOGUE
COVERS
PRODUCTS FOR:













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YOUR GLOBAL NETWORK PARTNER

About CC&N Global

Engineering technology. Global supply. Local support.

CC&N Global Ltd develops and supplies engineered products, battery technology and integrated systems for automotive, robotics, industrial and specialist vehicle applications. Based in the UK, we support customers from product selection and technical specification through to supply, integration and aftersales.

Professional charging

Showroom and workshop battery support for dealerships, independent garages and OEM programmes, with application-led product selection and multi-site supply.

Vehicle preheating and onboard power

Electrical preheating, onboard chargers, inverters and connectivity solutions for passenger cars, commercial vehicles, fleets and specialist equipment.

Engineering and battery technology

Custom battery packs, charging solutions and engineering support for robotics, industrial equipment and vehicle integration.

Trade and installer partnerships

We welcome enquiries from workshops, distributors, fleet operators and prospective installation partners across the UK. Contact our team for product guidance, pricing and availability.

This catalogue presents DEFA-manufactured products supplied through CC&N Global. Regional availability, vehicle compatibility and installation requirements should be confirmed before ordering.

Preheating products

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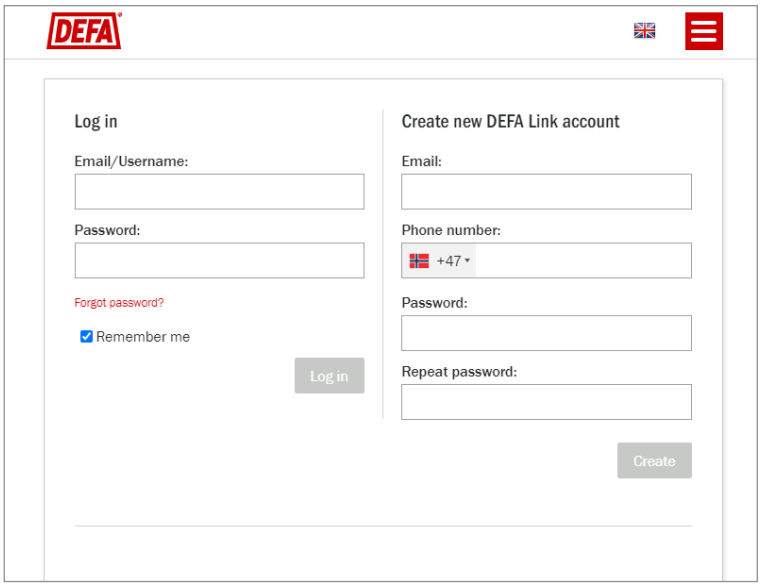
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The DEFA App - installer information

Here is information about how to set up an installer account and add a new device for DEFA Link* or DEFA Bluetooth. On defa.com under Log-in in the top menu you will find the link to the portal where you apply for an installer account, or log-in when you need to set up a new subscription and device for your customers.
www.defa.com

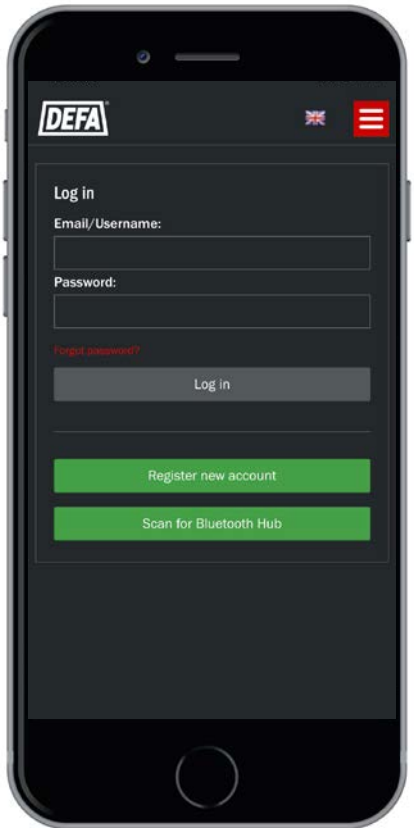
Some guidelines:

- Setting up a device and testing the system can be done on the DEFA App on your smartphone, or on the DEFA website.
- The installer starts the process of registration, and the customers contribute to part of the registration process.
- The customer (car owner) can terminate the subscription.
- The customer (car owner) can transfer the subscription to a new owner.
- Installer can replace a device when repair is needed, or following a complaint.



On the website you can apply for an installer account, and log-in to set up a new device.

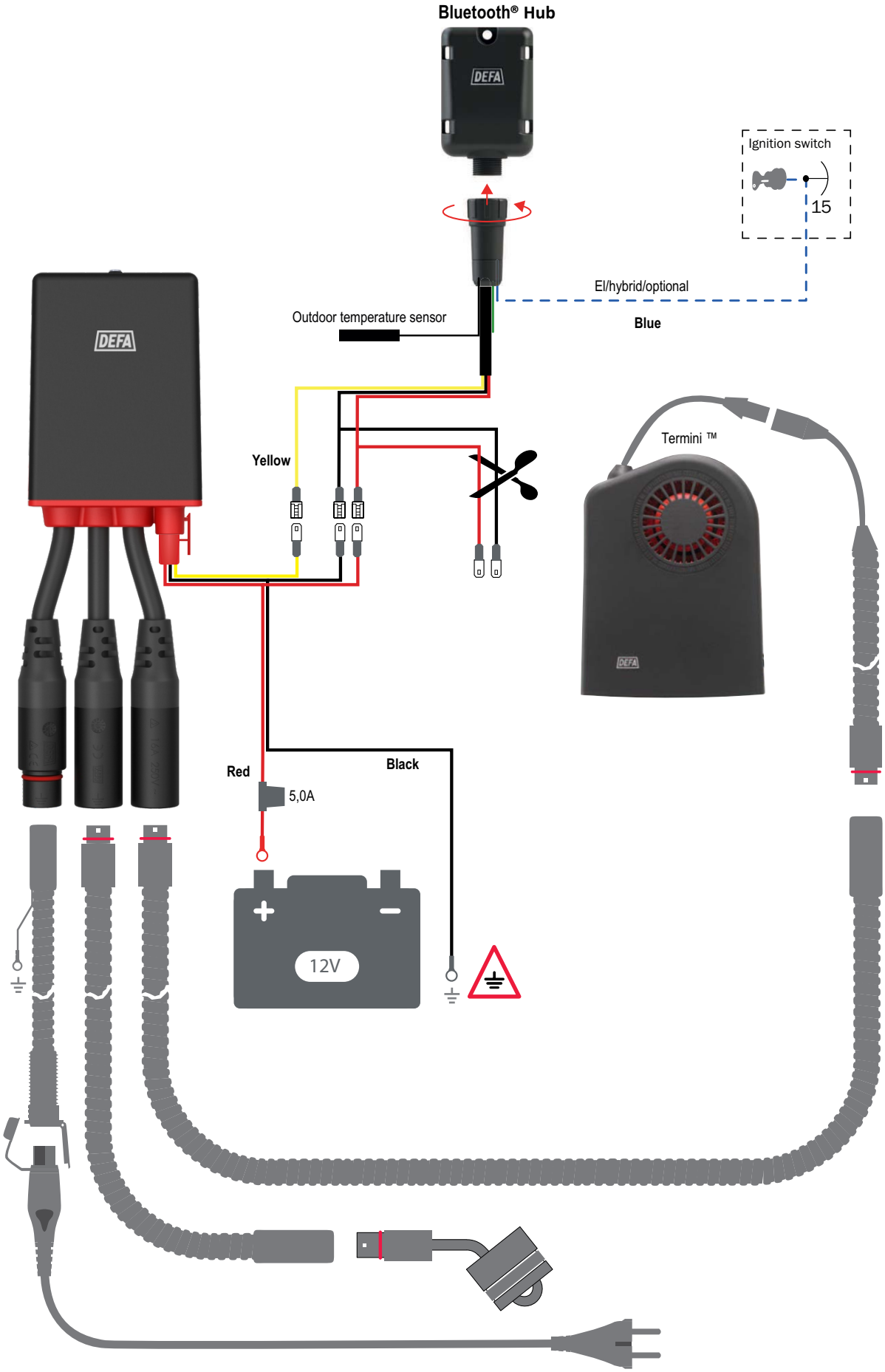
Download the DEFA App in AppStore or GooglePlay Store



Register a new device or log in using the DEFA App on your smartphone.

*) DEFA Link is available in Norway, Sweden, Denmark and Finland.

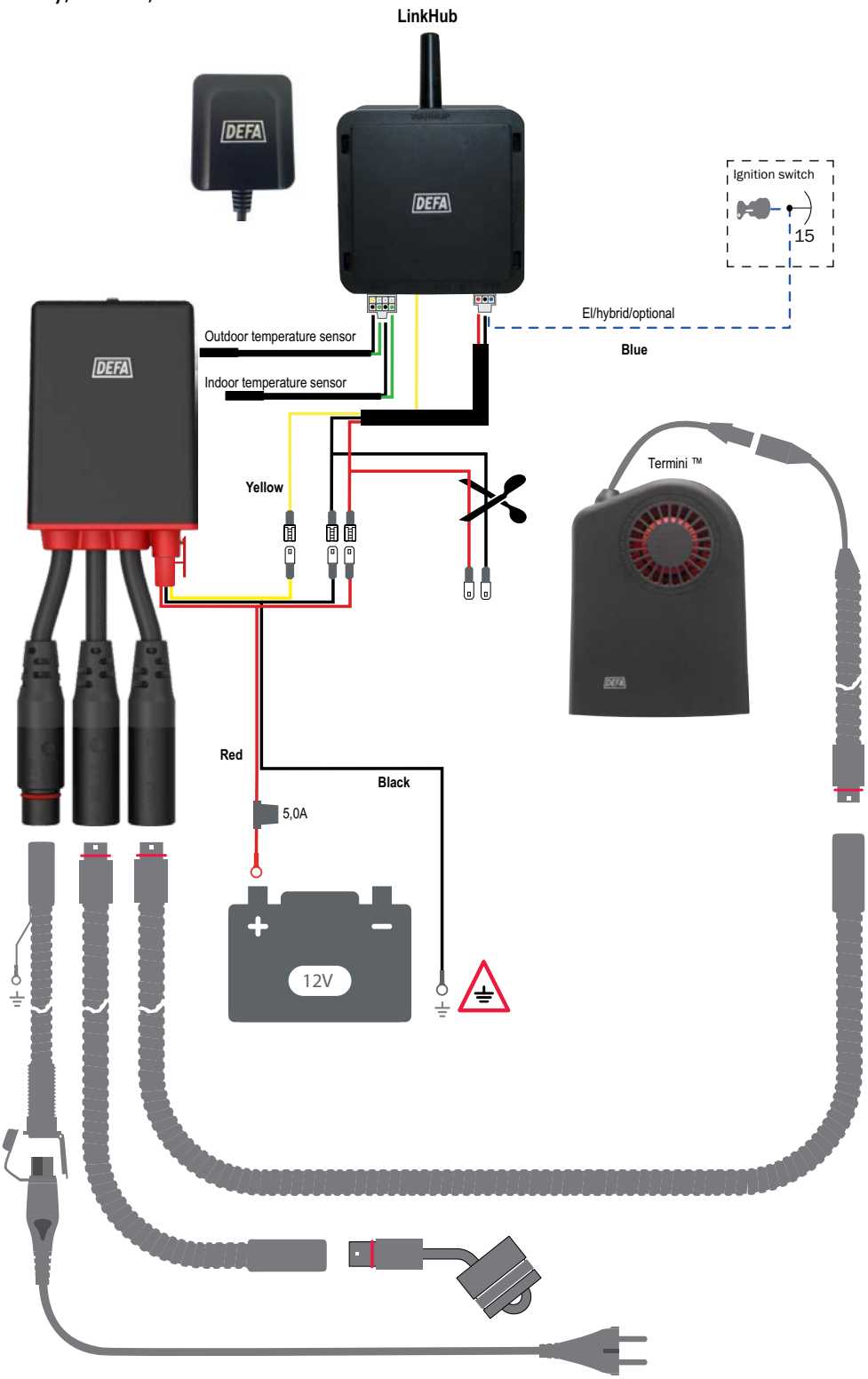
System overview Link



System overview Bluetooth

The circuit diagram illustrates temperature/time control of engine and interior heater through DEFA Link*. The battery charger will charge independently of the heating settings. The overview also includes the GPS Link unit, to control Security and Finder functionalities in WarmUp GPS Link and Finder Link

***Available in Norway, Sweden, Finland and Denmark.**



PTC Contact heater

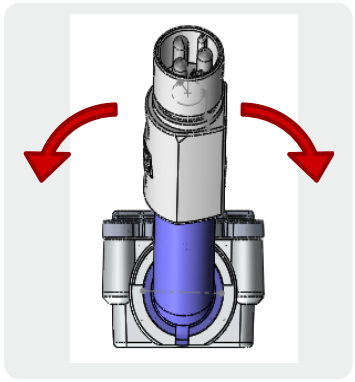
Developed to meet requirements from WLTP and Euro6 engines.

Our new PTC contact heater is developed and patented to meet the requirements of the WLTP. In the WLTP, emissions are measured during actual driving and data are collected from temperature sensors in coolant. Preheating with a hose heater may affect these temperature readings and trigger warnings. For this reason, our new PTC contact heater is the best solution for many new engines. It provides:

- **Good heat distribution in the engine and more complete combustion from when the engine is started.**
- **Proper heating of the oil that reduces its viscosity allows it to better lubricate the engine.**

The quickest way to the market

Our solution is based on combining a universal heating element with adaptor pieces customized for each car model. This allows us to quickly have solutions for new cars on the market.



REVOLVABLE PLUGIN CONTACT
Easier and more flexible installations

PTC TECHNOLOGY
Reduces power consumption during preheating

PATENDED
A unique solution for your car models

SAFE AND EFFICIENT
Self-regulating PTC heating element eliminates burn offs.



ADAPTER PIECES
Customized for each car model

NOTE! IT IS IMPORTANT THAT ONLY RECOMMENDED ENGINE HEATERS ARE USED FOR EACH CAR MODEL. INSTALLATION OF AN ENGINE HEATER NOT RECOMMENDED BY DEFA, OR AN INSTALLATION THAT IS NOT ACCORDING TO GUIDELINES, CAN RESULT IN THE ENGINE HEATER NOT FUNCTIONING AND THE ELECTRONICS OF THE ENGINE BEING AFFECTED. DEFA CAN TAKE NO LIABILITY IF OUR RECOMMENDATION IS NOT FOLLOWED.

In order to find the correct engine heater for the correct car model/engine, go to www.defa.com and 'Find your engine heater'. When correct car model and engine type has been chosen it will be possible to download the last version of the installation guide.





WarmUp GPS Link

WarmUp GPS Link is a complete preheating and security system for your car that can be controlled with your mobile phone. Need subscription.

Maintain total control over your car - wherever you are. WarmUp GPS Link lets you control the preheating in your car and track the car's location on your mobile phone. In addition, you will be alerted if the car is moved, you can track its location in your Link app, and you can set a maximum speed and be alerted if someone is driving too fast while borrowing your car. WarmUp also reduces fuel consumption and harmful emissions. *Available in Norway, Sweden, Denmark and Finland.

- WarmUp GPS Link is available in two different versions depending on the required power of the Termini™ interiorheater.
- WarmUp GPS Link includes everything besides the engine heater, which must be ordered separately and integrated in the system.



WarmUp 1400 GPS Link - 471275	
Termini™ 1400	**430055**
MultiCharger 1205R Flex	**450015**
MiniPlug inlet cable - 1,5m	**460915**
PlugIn extension cable - 1,0m	**460803**
PlugIn extension cable - 0,5m	**460802**
Termini™ extension cable - 1,75m	**460860**
MiniPlug Xtreme connection cable - 2,5m	**460955**
MiniPlug inlet cable - fitting equipment	**418801**
LinkHub	**440030**
LinkHub mounting kit	**440036**
GPS antenna	**440037**

WarmUp 1900 GPS Link - 471276	
Termini™ 1900	**430065**
MultiCharger 1205R Flex	**450015**
MiniPlug inlet cable - 1,5m	**460915**
PlugIn extension cable - 1,0m	**460803**
PlugIn extension cable - 0,5m	**460802**
Termini™ extension cable - 1,75m	**460860**
MiniPlug Xtreme connection cable - 2,5m	**460955**
MiniPlug inlet cable - fitting equipment	**418801**
LinkHub	**440030**
LinkHub mounting kit	**440036**
GPS antenna	**440037**

WarmUp Bluetooth®

WarmUp Bluetooth® is a complete preheating system that can be controlled with the DEFA app and Bluetooth Smart technology. With WarmUp your car will always be warm and comfortable, and your battery will always be fully charged and ready to go. WarmUp also reduces fuel consumption and harmful emissions.

Pre-program your WarmUp system when you are in the vicinity of your car.

- WarmUp Bluetooth® is available in two different versions depending on the required power of the Termini™ interior heater.
- WarmUp Bluetooth® includes everything besides the engine heater, which must be ordered separately and integrated in the system.



WarmUp 1400 Bluetooth® - 471282	
Termini™ 1400	**430055**
MultiCharger 1205R Flex	**450015**
MiniPlug inlet cable - 1,5m	**460915**
PlugIn extension cable - 1,0m	**460803**
PlugIn extension cable - 0,5m	**460802**
Termini™ extension cable - 1,75 m	**460860**
MiniPlug Xtreme connection cable - 2,5m	**460955**
MiniPlug inlet cable - fitting equipment	**418801**
Bluetooth Hub	**440051**



WarmUp 1900 Bluetooth® - 471283	
Termini™ 1900	**430065**
MultiCharger 1205R Flex	**450015**
MiniPlug inlet cable - 1,5m	**460915**
PlugIn extension cable - 1,0m	**460803**
PlugIn extension cable - 0,5m	**460802**
Termini™ extension cable - 1,75 m	**460860**
MiniPlug Xtreme connection cable - 2,5m	**460955**
MiniPlug inlet cable - fitting equipment	**418801**
Bluetooth Hub	**440051**



WarmUp SmartStart™

WarmUp SmartStart™ is a complete preheating system that is controlled with a two-way wireless control unit. With WarmUp your car will always be warm and comfortable, and your battery will always be fully charged and ready to go. WarmUp also reduces fuel consumption and harmful emissions.

- **WarmUp SmartStart™ is a two-way wireless Control Unit to control your car heating system.**
- **WarmUp SmartStart™ is delivered in two versions, the effect on the DEFA Termini™ cabin heater differs. An engine heater can be ordered separately and integrated in the system**



WarmUp 1400 SmartStart™ - 471277	
Termini™ 1400	**430055**
MultiCharger 1205R Flex	**450015**
MiniPlug Inlet Cable - 1,5m	**460915**
PlugIn Extension Cable- 0,5m	**460802**
PlugIn Extension Cable - 1,0m	**460803**
SmartStart™ wireless Control Unit	**440020**
Termini™ Extension Cable - 1,75m	**460860**
MiniPlug Inlet Cable - fitting equipment	**418801**
MiniPlug Xtreme Connection Cable - 2,5m	**460955**

WarmUp 1900 SmartStart™ - 471278	
Termini™ 1900	**430065**
MultiCharger 1205R Flex	**450015**
MiniPlug Inlet Cable- 1,5m	**460915**
PlugIn Extention Cable- 0,5m	**460802**
PlugIn Extension Cable - 1,0m	**460803**
SmartStart™ wireless Control Unit	**440020**
Termini™ Extension Cable - 1,75m	**460860**
MiniPlug Inlet Cable- fitting equipment	**418801**
MiniPlug Xtreme Connection Cable- 2,5m	**460955**

WarmUp Futura

WarmUp Futura is a complete preheating system that is controlled by a timer placed inside the compartment in the car. Futura can be pre-programmed and ensures that the car is preheated when you need it.

Futura can be programmed with set departure times, for which the car will be preheated. This feature is very useful for people who leave for work at the same time every morning. The system can either be programmed to preheat for a set duration, or to automatically determine the required heating period based on the outside temperature.

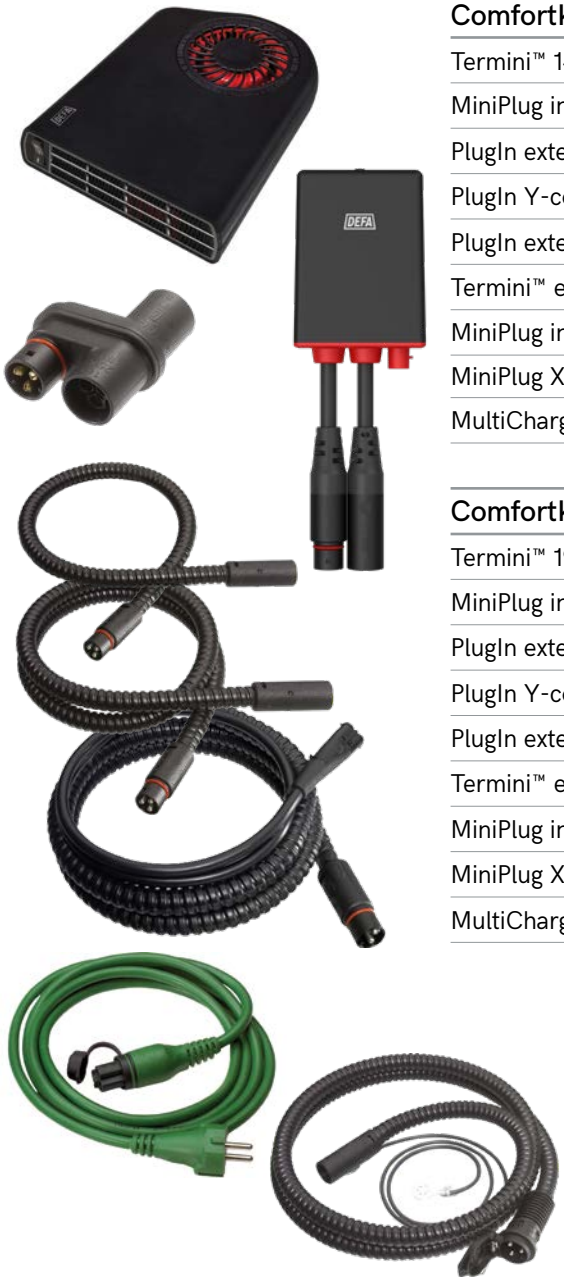


WarmUp 1400 Futura - 471284	
Termini™ 1400	**430055**
MultiCharger 1205R Flex	**450015**
MiniPlug Inlet Cable - 1,5m	**460915**
PlugIn Extension cable - 0,5m	**460802**
PlugIn Extension cable - 1,0m	**460803**
Futura timer	**440010**
Termini™ Extension cable - 1,75m	**460860**
MiniPlug Inlet Cable - fitting equipment	**418801**
MiniPlug Xtreme connection cable - 2,5m	**460955**

WarmUp 1900 Futura - 471285	
Termini™ 1900	**430065**
MultiCharger 1205R Flex	**450015**
MiniPlug Inlet cable - 1,5m	**460915**
PlugIn Extension cable - 0,5m	**460802**
PlugIn Extension cable - 1,0m	**460803**
Futura timer	**440010**
Termini™ Extension cable - 1,75m	**460860**
MiniPlug Inlet Cable - fitting equipment	**418801**
MiniPlug Xtreme connection cable - 2,5m	**460955**

ComfortKit Plus

The ComfortKit Plus is a simple way to ensure a warm and comfortable cabin and windows free of ice. ComfortKit Plus also includes a MultiCharger 1205 Flex and the necessary connection components. The different sets have varying outputs - 1400 or 1900W. The ComfortKit can be expanded with an engine heater and a control unit or app control.



ComfortKit 1400 Plus - 470073	
Termini™ 1400	**430055**
MiniPlug inlet cable - 1,5m	**460915**
PlugIn extension cable - 1,0m	**460803**
PlugIn Y-connector	**460853**
PlugIn extension cable - 0,5m	**460802**
Termini™ extension cable - 1,75m	**460860**
MiniPlug inlet cable - fitting equipment	**418801**
MiniPlug Xtreme connection cable - 2,5m	**460955**
MultiCharger 1205 Flex	**450016**

ComfortKit 1900 Plus - 470074	
Termini™ 1900	**430065**
MiniPlug inlet cable - 1,5m	**460915**
PlugIn extension cable - 1,0m	**460803**
PlugIn Y-connector	**460853**
PlugIn extension cable - 0,5m	**460802**
Termini™ extension cable - 1,75m	**460860**
MiniPlug inlet cable - fitting equipment	**418801**
MiniPlug Xtreme connection cable - 2,5m	**460955**
MultiCharger 1205 Flex	**450016**

ComfortKit

The ComfortKit is a simple way to ensure a warm and comfortable cabin and windows free of ice. The different sets have varying outputs - 1400 or 1900W. The ComfortKit can be expanded with an engine heater, a battery charger and a control unit or app control.



ComfortKit 1400 - 470066	
Termini™ 1400	**430055**
MiniPlug inlet cable - 1,5m	**460915**
PlugIn extension cable - 1,0m	**460803**
PlugIn Y-connector	**460853**
Termini™ extension cable - 1,75m	**460860**
MiniPlug inlet cable - fitting equipment	**418801**
MiniPlug Xtreme connection cable - 2,5m	**460955**

ComfortKit 1900 - 470067	
Termini™ 1900	**430065**
MiniPlug inlet cable - 1,5m	**460915**
PlugIn extension cable - 1,0m	**460803**
PlugIn Y-connector	**460853**
Termini™ extension cable - 1,75m	**460860**
MiniPlug inlet cable - fitting equipment	**418801**
MiniPlug Xtreme connection cable - 2,5m	**460955**

ComfortKit 2100 - 470060	
Termini™ 2100	**430060**
MiniPlug inlet cable - 1,5m	**460915**
PlugIn extension cable - 1,0m	**460803**
PlugIn Y-connector	**460853**
Termini™ extension cable - 1,75m	**460860**
MiniPlug inlet cable - fitting equipment	**418801**
MiniPlug Xtreme connection cable - 2,5m	**460955**

Termini™

The Termini™ II interior heater provides a warm and comfortable cabin and ice-free windows. The output is adjusted in relation to the interior temperature, by the PTC (PTC = Positive Temperature Coefficient) heating element.

A 20°C temperature increase will result in a 10% power reduction and as the interior temperature increases the power will gradually be reduced accordingly. The interior heater is equipped with an automatic over-temperature protection.

All interior heaters are approved by: Safety EN 60335-1 and EN 50408. Termini has IP rate 20.



Termini™ 1000	
Item no. Schuko	**430072**
Collection box - pcs	**10**
Output -25^{0}C - W	**0/1000**
Height/Width/Depth - mm	**32/138/182**
Weight - gr	**595**
Bracket weight - gr	**20**



Termini™ 1200	
Item no. Schuko	**430058**
Collection box - pcs	**12**
Output -25^{0}C - W	**0/1200**
Height/Width/Depth - mm	**32/138/182**
Weight - gr	**595**
Bracket weight - gr	**20**



Termini™ 1400	
Item no. Mini contact	**430055**
Item no. Schuko	**430056**
Collection box - pcs	**12**
Output -25^{0}C - W	**0/1400**
Height/Width/Depth - mm	**32/138/182**
Weight - gr	**595**
Bracket weight - gr	**20**

Termini™



Termini™ 1700

Item no. Schuko	**430068**
Collection box - pcs	**10**
Output -25°C - W	**0/830/1700**
Height/Width/Depth - mm	**38/138/183**
Weight - gr	**665**
Bracket weight - gr	**20**



Termini™ 1900

Item no. Mini contact	**430065**
Item no. Schuko	**430066**
Collection box - pcs	**10**
Output -25°C - W	**0/1150/1900**
Height/Width/Depth - mm	**38/138/183**
Weight - gr	**665**
Bracket weight - gr	**20**



Termini™ 2100

Item no. Mini contact	**430060**
Item no. Schuko	**430061**
Collection box - pcs	**10**
Output -25°C - W	**0/1350/2100**
Height/Width/Depth - mm	**47/141/183**
Weight - gr	**745**
Bracket weight - gr	**20**



Termini™ Stand

Item no.	**430100**
Height/Width/Depth - mm	**145x127x65**
Weight - gr	**112**

Sold separately, and can be used together with all Termini™ interior heaters.





Termini™ Clip

Item no.	**430101**
Height - mm	**145x70**

Sold separately, and can be used together with all Termini™ interior heaters.

PlugIn branch sets

DEFA branch set consists of DEFA PlugIn extension cables in different lengths and DEFA PlugIn Y-connector for connecting engine and interior heaters.

The sets are also suitable for those who have engine heaters and want to upgrade to a complete preheating system combined with an interior heater. If you want to connect DEFA Termini™ with Termini™ Mini Contact, you can use branch set 460750 or 460751. If the interior heater has a Schuko plug, use 760/762/766/768/769. The difference lies in the length of the cables. Different car models require separate sets. See Code Type List column 8.









Branch set - 460750	
PlugIn extension cable - 1,0 m	460803
PlugIn Y-connector	460853
Termini™ extension cable - 1,75 m	460860
Branch set - 460751	
PlugIn extension cable - 1,5 m	460843
PlugIn Y-connector	460853
Termini™ extension cable - 1,75 m	460860
Branch set - 460760	
PlugIn extension cable - 0,5 m	460802
PlugIn extension cable - 1,0 m	460803
PlugIn Y-connector	460853
PlugIn interior heater socket	460829
Branch set - 460762	
PlugIn extension cable x 2 - 1,0 m	460803
PlugIn Y-connector	460853
PlugIn interior heater socket	460829
Branch set - 460765	
PlugIn extension cable - 1,0m	460803
PlugIn extension cable - 2,0m	460804
PlugIn Y-connector	460853
PlugIn interior heater socket	460829
Branch set - 460766	
PlugIn extension cable - 1,0m	460803
PlugIn extension cable - 1,5m	460843
PlugIn Y-connector	460853
PlugIn interior heater socket	460829
Branch set - 460768	
PlugIn extension cable - 0,5m	460802
PlugIn extension cable - 1,5m	460843
PlugIn Y-connector	460853
PlugIn interior heater socket	460829
Branch set - 460769	
PlugIn extension cable - 0,5m	460802
PlugIn extension cable - 2,0m	460804
PlugIn Y-connector	460853
PlugIn interior heater socket	460829

Link*

Control and monitor your preheating and security systems with your mobile phone - wherever you are.
With DEFA Link you never have to get into a cold car again.



*Available in Norway, Sweden, Finland and Denmark.

THE FOLLOWING PROGRAMS CAN BE USED

- Automatic start controlled by the outside temperature
- DEFA WarmUp ON/OFF
- 1 hour preheating time
- 2 hours preheating time
- 3 hours preheating time
- 4 hours preheating time
- Check Battery Status
- Check temperature in the car and outside
- Receive alert if power cable is not connected



LinkHub

Item no.	440030
Height/Width/Depth - mm	78 (114)/78/23
Weight - g	170
Voltage - V	8 - 32V
Current draw, average - mA	19 *)
Operating temperature - ^{0}C	-40 - +85

*) Without GPS module.



Mounting Kit WarmUp Link

Item no.	440036
Weight - g	360



GPS Link

Item no.	440037
Height/Width/Depth - mm	44/38/19
Weight - g	130
Average power consumption - mA	5 *)
Protection class - IP	67

*) with the ignition off.



Link GPS Upgrade

Item no.	440038
LinkHub	440030
WarmUp Link mounting kit	440036
GPS Link	440037
PlugIn Relay contact	460854
PlugIn extension cable - 0,5m	460802
Total weight - g	1000

Bluetooth®

Control DEFA WarmUp with Bluetooth® from your mobile without the need for a subscription. Pre-program the system in the vicinity of the car when Bluetooth is activated, and you never have to get into a cold car again. The Bluetooth Hub control unit can be installed in the engine compartment, without any cables into the interior compartment.



THE FOLLOWING PROGRAMS CAN BE USED

- **Automatic start controlled by the outside temperature**
- **1 hour preheating time**
- **2 hours preheating time**
- **3 hours preheating time**
- **4 hours preheating time**
- **DEFA WarmUp ON**
- **DEFA WarmUp OFF**



Bluetooth® Hub Control Unit

Item no.	**440051**
Operating temperature	**-40 - +80 °C**
Voltage - V	**8 - 32VDC**
Average current consumption - mA	**2mA**
Height/Width/Depth - mm	**112/46/24**
IP rate	**IP6k9k**
Frequency/Radio protocol	**2,4GHz /Bluetooth Smart**
Range	**In and around the car**
Weight, Bluetooth® Hub	**35g**
Weight, cables	**150g**



Bluetooth Upgrade - 440052

Bluetooth Hub Control Unit	**440051**
Power cable with fuse	**418105**
PlugIn Relay connector	**460854**
PlugIn Extension cable 0,5 m	**460802**



Power cable with fuse

Item no.	**418105**

This power cable with fuse must be ordered separately in case of:

- Upgrade of existing pre-heating systems without control unit
- Installation of Bluetooth® Hub and relay

SmartStart™

The control unit DEFA SmartStart™ 12/24V, which is included in the WarmUp SmartStart™ kits, is a two-way wireless control unit that makes sure that the car is preheated when you need it.

SmartStart can be programmed with set departure times, for which the car will be preheated. This feature is very useful for people who leave for work at the same time every morning. The system can either be programmed to preheat for a set duration, or to automatically determine the required heating period based on the outside temperature.

THE FOLLOWING PROGRAMS CAN BE USED:

- **Automatic start adjusted according to the outside temperature**
- **1 hour preheating time**
- **2 hours preheating time**
- **3 hours preheating time**
- **4 hours preheating time**
- **Control of fuel heat (analogue control signal)**
- **DEFA WarmUp ON**
- **DEFA WarmUp OFF**



SmartStart™	
Item no. 12V with car unit	**440020**
Item no. 24V with car unit	**440021**
Operating temperature remote control (RC) - ^{0}C	**-10 - +60**
Operating temperature car unit (VU) - ^{0}C	**-40 - +80**
Battery RC ⚠	**6V Lithium 2CR-1/3N**
Range - m	**up to 400**
Frequency - MHz	**868, 370**
Current consumption RC	<5µA
Height/Width/Depth RC - mm	**78/34/16**
Height/Width/Depth VU - mm	**69/54/23**
Weight RC - gr	**29**
Test and approval	**EN 301 489-1:2005-04, ETSI EN 300 220-1:2000-09 EN 301489-1**



SmartStart™ spare parts	
SmartStart™ remote control RC	**418100**
SmartStart™ VU 12V	**418101**
SmartStart™ VU 24V	**418102**
Lithium battery ⚠	**418103**
Cable harness	**418072**

Futura

DEFA Futura is a control unit included in WarmUp Futura kits and installed in the drivers compartment of the car. It ensures that the car is preheated when you need it.

Futura can be programmed with set departure times, for which the car will be preheated. This feature is very useful for people who leave for work at the same time every morning. The system can either be programmed to preheat for a set duration, or to automatically determine the required heating period based on the outside temperature.



Futura control unit	
Item no. without relay box	**440010**
Best.nr. with relay box	**440011**
Voltage - - VAC/Hz	**12**
Current consumption - mA	**3,5**
Height/Width/Depth - mm	**37/47/13**
Weight - gr	**19**
Test and approval	EN 50081-1, EN 50082-1

Futura spare parts	
Wire harness WarmUp with temperature sensor 12V	**418007**
Wire harness without temperature sensor 12V	**418059**
Temperature sensor	**418071**
Control unit	**418067**

Connection cables

DEFA Connection cables are developed for DEFA MiniPlug and provides a reliable connection from your mains power outlet to the car. The MiniPlug Xtreme is more durable and is suited for cold weather and rough treatment. Xtreme has a black cap to distinguish it from the MiniPlug.



MiniPlug Xtreme Connection cable 1,5mm²	
Item no. - 2,5m	**460955**
Item no. - 5,0m	**460957**
Number of pcs in collection box	**955: 22 957: 12**
Voltage - VAC/Hz	**230**
Current, max. - A	**16**
Weight - gr	**955/309 - 957/535**



MiniPlug Connection cable 1,5mm²	
Item no. - 2,5m	**460920**
Item no. - 2,5m with angle contact	**460933**
Item no. - 3,5m	**460938**
Item no. - 3,5m with angle contact	**460942**
Item no. - 5,0m	**460921**
Number of pcs in collection box	**920: 30 - 933: 22 - 938: 22 - 942: 22 - 921:12**
Voltage - VAC/Hz	**230**
Current, max. - A	**16**
Weight - gr	**920/390 - 933/450 - 938/510 - 942/530 - 921/600**



MiniPlug CableBag	
Item no.	**460945**
Diameter - mm	**280**
Weight - gr	**73**



Power cable LED	
Item no.	**460964**
Height/Width/Depth - mm	**12/18/28**
Weight - gr	**8**

Connection cables and sets

The DEFA MiniPlug Inlet cable is developed to fit all new cars. Flush and bracket mounting is equally simple. DEFA MiniPlug was developed with the goal of creating user friendly design, better safety and total reliability.



Connection set 460785	
MiniPlug Inlet cable - 1,5 m	**460915**
MiniPlug Xtreme Connection cable - 2,5 m	**460955**
MiniPlug Inlet cable - fitting equipment	**418801**

Connection set 460787	
MiniPlug Inlet cable - 1,5 m	**460915**
MiniPlug Xtreme Connection cable - 5,0 m	**460957**
MiniPlug Inlet cable - fitting equipment	**418801**

Connection set 460789	
MiniPlug Inlet cable - 1,5 m	**460915**
MiniPlug Connection cable angle - 2,5 m	**460933**
MiniPlug Inlet cable - fitting equipment	**418801**

Inlet cables

DEFA MiniPlug Inlet cables are tailor-made for all new car models, and are delivered with improved mounting equipment to make the installation easier. The new mounting equipment consists of a set of mounting rings to be used for optimal installation in the car's front, and a bracket to be used behind the license plate.



MiniPlug Inlet cables

Item no. (0,6m)	**460902**
Item no. (1,0m)	**460901**
Item no. (1,5m)	**460915**
Item no. (2,0m)	**460939**
Voltage - VAC/Hz	**230**
Current - A	**16**
Weight (Length/Weight) - m/kg	**0,6/0,23 - 1,0/0,35 - 1,5/0,41 - 2,0/0,57**

The Inlet cable has a MiniPlug 'female-connector' with a cap in one end and a DEFA PlugIn connector in the other. In addition, it has an earth connector for earthing the system.



MiniPlug Mounting Bracket

Item no.	**460996**
Height/Width/Thickness - mm	**160x40x2**
Dimension mounting holes - mm	**6**

The bracket fixed behind the license plate makes it possible to install the inlet in the front of the car - vertically or horizontally, whichever is more suitable for each vehicle.

PlugIn extension cables

The components are easily connected together with DEFA's armored PlugIn extension cables. The system ensures a reliable and tight connection and eliminates incorrect connections.



PlugIn extension cables	
Length - m	**0,5 - 1 - 1,5 - 2 - 3 - 4 - 5 - 8 - 10 - 12**
Voltage - VAC/Hz	**230**
Current - A	**16**
IP rate	**44**

PlugIn extension cables

Item no.	Length - m	Weight - gr	Pcs. in collection box
460802	0,5	145	22
460803	1,0	265	22
460843	1,5	380	22
460804	2,0	497	22
460844	3,0	731	12
460846	4,0	965	12
460809	5,0	1200	1
460847	8,0	1900	1
460851	10,0	2420	1
460850	12,0	2838	1



Termini™ interior heater cable with Mini-contact	
Item no.	**460860**
Length - m	**1,75 (soft part 0,6m - armored part 1,15m)**
Number of pcs in collection box	**Single box or 22**
Voltage - VAC/Hz	**230**
Current, max. - A	**16**
Weight - gr	**250**
IP rate	**44**

PlugIn branches and connectors

The DEFA relay connector is adapted to DEFA PlugIn contacts and used to control the engine and interior heater, together with a DEFA control units. It can also be used for separate control of engine and interior heaters together with DEFA SmartStart. At branching, use H-, T- or Y- connectors.



PlugIn Relay connector

Item no. 12V	**460854**
Item no. 12V - external ground connection	**701445**
Item no. 24V - external ground connection	**460856**
Range of use ^{0}C	**-40 / +80**
Height/Width/Depth - mm	**61/31/67**
Mains voltage - VAC/Hz	**230/12, 230/24**
Current - A	**Max 16**
Weight - gr	**59**
Insulation class - cl	**II**
IP rate	**44**



PlugIn Y-connector

Item no.	**460853**
Height/Width/Depth - mm	**53/48/24**
Mains voltage - VAC/Hz	**230**
Current, max. - A	**16**
Weight - gr	**23**
IP rate	**44**

DEFA Y-connector is an all-welded connector for connecting engine and interior heater or MultiCharger battery charger.



PlugIn H-connector

Item no.	**460857**
Height/Width/Depth - mm	**42/63/21**
Mains voltage - VAC/Hz	**230**
Current. - A	**16**
Weight - gr	**30**
IP rate	**44**

DEFA H-connector is an all-welded connector for more flexible connection of engine and interior heater or MultiCharger battery charger

PlugIn branches and contacts



PlugIn T-connector 90°

Item no.	**460831**
Height/Width/Depth - mm	**42/63/21**
Mains voltage - VAC/Hz	**230**
Current, max. - A	**16**
Weight - gr	**22**
IP rate	**44**

DEFA T-connector is an all-welded connector for connecting the engine and interior heater or the MultiCharger battery charger.



LED Indicator Kit

Item no.	**460881**
Mains voltage - VAC/Hz	**110-240**
Current, max. - A	**16**
IP rate, PlugIn/LED	**44/67**



PlugIn Interior heater socket

Item No.	**460829**
Height/Width/Depth - mm	**70/54/41**
Voltage - VAC/Hz	**250/12**
Current, max. - A	**16**
IP rate	**20**



Termini™ Adapter cable

Item No.	**418069**
Length - m	**0,25**
Voltage - VAC/Hz	**250/12**
Current, max. - A	**10**
Weight - gr	**54**
IP rate	**44**

Special tools

Tools for installation of MiniPlug and of cables through firewalls.



Pullwire kit 866

Item no.	**460866**
No. of pcs.	**1 set**

Tool for simpler installation of PlugIn extension cables with male or female contact through the firewall.



Pullwire kit 868

Item no.	**460868**
No. of pcs.	**2**

Tool for simpler installation of PlugIn extension cables with male or female contact through the firewall. Delivered with 2 extensions of 1m.



Installation tool

Item no.	**460840**
Hole saw Ø24mm	**For MiniPlug inlet cable**
Hole saw Ø20mm	**For Interior heater cable**
File	**For MiniPlug feed track**
Hole saw retainer	**With pilot hole drill**



Tools for feed through bulkhead

Item no.	**460862**

Put the tools on PlugIn male or female contact for simpler installation through the firewall.



Crow foot tool

Item no.	**460867**

Crow foot 27mm.
Mounting- and dismounting tool for simpler installation of the following engine heaters: 241, 277, 292, 299.



Tool for heater 241

Item no.	**460861**

Steering tool for Allen wrench.

Extractor tools

To use these tools, you need the main tools, the extractor and the taper clamping sleeve. The extractor and taper clamping sleeve can be purchased separately in 4 different sizes, depending on the inside diameter of the frost plug you wish to remove.

The tool is suitable for deep frost plugs and functions like an extractor. It is securely tightened around the side walls of the frost plug by tightening the nut. Next, a suitable adapter sleeve is attached. The frost plug is gradually pulled off by tightening the nut. Follow the instructions that come with the tools! These tools come separately or in a complete set.



Complete extractor tools

Item no.	**491012**

Consists of main tools (491011), 4 extractor tools (491006) and 4 taper clamping sleeves (491005).



Main tools

Item no.	**491011**



Extractor

Item no. complete set (4 extractors)	**491006**
Item no. (Ø20mm)	**491001**
Item no. (Ø27mm)	**491002**
Item no. (Ø34mm)	**491003**
Item no. (Ø41mm)	**491004**



Taper clampings

Item no. complete set (4 taper clampings)	**491005**
Item no. (Ø31mm)	**491007**
Item no. (Ø35mm)	**491008**
Item no. (Ø39mm)	**491009**
Item no. (Ø46mm)	**491010**



Extractor hook

Item no. 30,5mm	**460835**
Item no. 37,5mm	**460836**
Item no. 44,5mm	**460837**

Chargers and inverters

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MultiCharger 1x12A

DEFA MultiCharger 1x12A is a battery charger made for permanent installation in all types of vehicles and in any conditions. It is well suited for all lead/acid batteries (AGM, GEL, EFB, Start&Stop) up to 150Ah. With the DEFA Plugin connectors, both input and output, this charger integrates perfectly into the rest of the DEFA system.

The charger is delivered with 2 meter fixed cable including temperature sensor



MultiCharger 1x12A	
Item no	705200
Mains Voltage - VAC/Hz	230/50-60
Operating temperature [°C]	-35 +50
Charging voltage [VDC]	14,4
Float voltage [VDC]	13,5
Charging current [A]	12
Battery size. [Ah]	150
IP-rate	44
Weight [kg]	1
Height/Width/Depth [mm]	138x98x53
Certifications	EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2

* Temperature compensated ca 5,0 mV/°C/celle. Ref. 25 °C



MultiCharger 1x12A with remote LED and starter kill	
Item no	706500
Mains Voltage - VAC/Hz	230/50-60
Operating temperature [°C]	-35 +50
Charging voltage [VDC]	14,4
Float voltage [VDC]	13,5
Charging current [A]	12
Battery size. [Ah]	150
IP-rate	44
Weight [kg]	1
Height/Width/Depth [mm]	138x98x53
Certifications	EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2

* Temperature compensated ca 5,0 mV/°C/celle. Ref. 25 °C

MultiCharger 2x12A

DEFA MultiCharger 2x12A consists of two 12A battery chargers mounted on the same bracket. This combination is made for permanent installation in all types of vehicles and in any conditions. It is well suited for all lead/acid batteries (AGM ,GEL,EFB, Start&Stop) up to 2x150Ah. With the DEFA Plugin connectors, both input and output, this charger integrates perfectly into the rest of the DEFA system.

The charger is delivered with 2 meter fixed cable including temperature sensors.



MultiCharger 2x12A	
Item no	**705300**
Mains Voltage - VAC/Hz	**230/50-60**
Operating temperature [°C]	**-35 +50**
Charging voltage [VDC]	**14,4**
Float voltage [VDC]	**13,5**
Charging current. [A]	**2x12**
Battery size [Ah]	**2x150**
IP-rate	**44**
Wight [kg]	**2**
Height/Width/Depth [mm]	**138x201x53**
Certifications	**EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2**

* Temperature compensated ca 5,0 mV/°C/celle. Ref. 25 °C

LithiumCharger 1x20A

LithiumCharger 1x20 is a powerful and compact charger that is easily installed in all types of vehicles and in any conditions. The lithium chargers can all start up batteries that are below the cut-off threshold. To make the system more flexible, DC cable in the desired length is ordered separately. Cables available in 2, 4 and 6 meters.

Note: Only use with lithium batteries including Battery Management System (BMS) that accept 14,4V charging.





LithiumCharger 1x20A	
Item no	709850
Mains Voltage - VAC/Hz	230/50-60
Charging voltage [VDC]	14,4
Float voltage [VDC]	13,5
Charging current. [A]	20
Battery size, max [Ah]	300
Height/Width/Depth [mm]	183x98x53
Wight [kg]	1,5
IP-rate	44
Operating temperature [°C]	-35/+50
Protection class	1
Certifications	EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2
ACCESSORIES	
Item no	
706483	2m Charging cable
706484	4m Charging cable
706485	6m Charging cable
705294	5m Remote panel
705295	10m Remote panel
705296	20m Remote panel
705297	25m Remote panel
705463	Connection Schuko - PlugIn





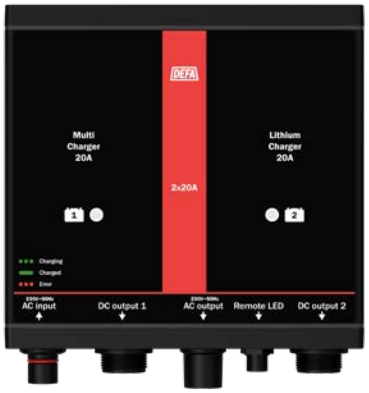
Connection
Schuko - Plugin

LithiumCharger 2x20A

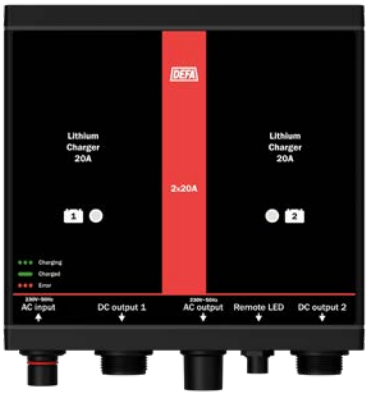
ALL BATTERIES LITHIUM INCLUDED

These chargers are powerful and compact, and are easily installed in all types of vehicles and in any conditions.
The lithium chargers can all start up batteries that are below the cut-off threshold. To make the system more flexible, DC cable in the desired length is ordered separately. Cables available in 2, 4 and 6 meters.

Note: Only use with lithium batteries including Battery Management System (BMS) that accept 14,4V charging.



LithiumCharger 1x20A + MultiCharger 1x20A	
Item no	**709860**
Mains Voltage - VAC/Hz	**230/50-60**
Charging voltage [VDC]	**14,4**
Float voltage [VDC]	**13,5/13,6**
Charging current. [A]	**2x20**
Battery size, max [Ah]	**2x300**
Height/Width/Depth [mm]	**183x190x53**
Wight [kg]	**3**
IP-rate	**44**
Operating temperature [°C]	**-35/+50**
Protection class	**1**
Certifications	**EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2**



LithiumCharger 2x20A	
Item no	**709870**
Mains Voltage - VAC/Hz	**230/50-60**
Charging voltage [VDC]	**14,4**
Float voltage [VDC]	**13,5**
Charging current. [A]	**2x20**
Battery size, max [Ah]	**2x300**
Height/Width/Depth [mm]	**183x190x53**
Wight [kg]	**3**
IP-rate	**44**
Operating temperature [°C]	**-35/+50**
Protection class	**1**
Certifications	**EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2**

MultiCharger 1x20A

DEFA MultiCharger 1x20A is a powerful and compact charger that is easily installed in all types of vehicles and in any conditions. It is designed to handle any conditions. To make the system more flexible, DC cable in the desired length is ordered separately. Cables available in 2, 4 and 6 meters.



MultiCharger 1x20A	
Item no.	705800
Mains Voltage - VAC/Hz	230/50-60
Operating temperature - °C	-35 +50
Charging Voltage- VDC	14,4
Float voltage- VDC	13,5
Charging Current - A	20
Battery size - Ah	250
IP-rate	44
Weight - kg	2
Height/Width/Depth - mm	182x98x53
Certifications:	EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2



ACCESSORIES:	
Item no:	
706483	2m Charging cable
706484	4m Charging cable
706485	6m Charging cable
705294	5m Remote panel
705295	10m Remote panel
705296	20m Remote panel
705297	25m Remote panel
705463	Connection Schuko - PlugIn



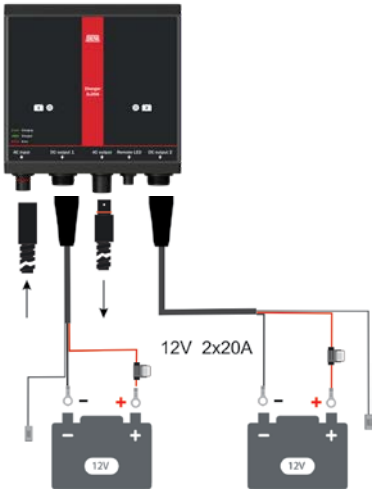


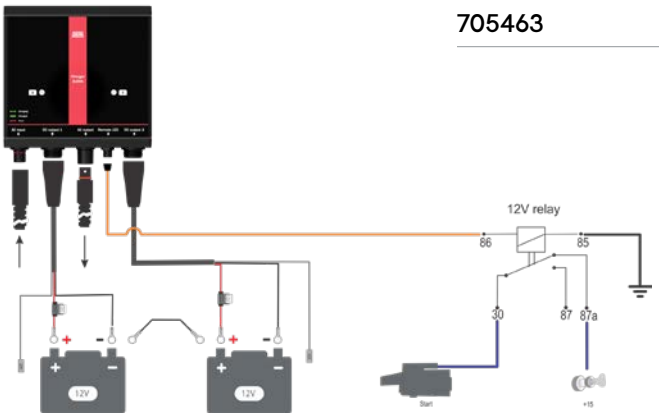
Connection Schuko - Plugin

MultiCharger 2x20A

DEFA MultiCharger 2x20A is a powerful and compact charger that is easily installed in all types of vehicles. It is designed to handle any conditions.
To make the system more flexible DC cables in desired lengths are ordered separately. Cables available in 2, 4 and 6 meters.







MultiCharger 2x20A	
Item.no.	705900
Mains Voltage - VAC/Hz	230/50-60
Operating temperature - °C	-35 +50
Charging Voltage - VDC	14,4
Float voltage - VDC	13,5
Charging Current- A	2x20
Battery size- Ah	2x250
IP-rate	44
Weight - kg	3
Height/Width/Depth- mm	182x190x53
Certifications:	EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2

ACCESSORIES:	
Item no:	
706483	2m Charging cable
706484	4m Charging cable
706485	6m Charging cable
705162	5m Remote panel
705163	10m Remote panel
705164	20m Remote panel
705165	25m Remote panel
705463	Connection Schuko - PlugIn





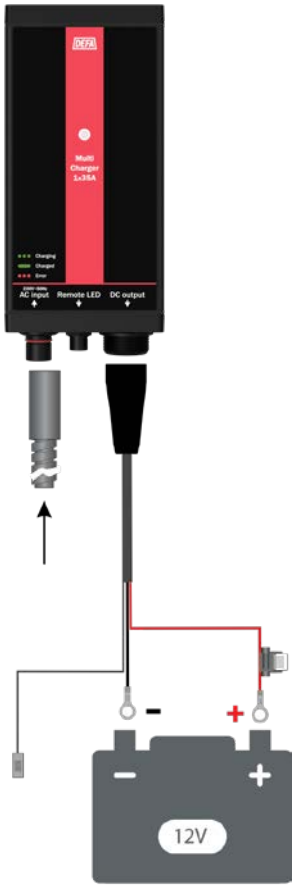
Connection Schuko - Plugin

MultiCharger 1x35A

DEFA MultiCharger 1x35A is a small and powerful charger for use in all types of vehicles and in any conditions. To make the system more flexible, cables are ordered separately in desired lengths.



MultiCharger 1x35A	
Item no. with PlugIn 1x35A	**708501**
Mains voltage - VAC/Hz	**230/50-60**
Ambient temperature [°C]	**-35 +50**
Charging voltage [VDC]	**14,4**
Float voltage [VDC]	**13,5**
Max charging current [A]	**35**
Recommended battery max[Ah]	**600**
IP rate [IP]	**44**
Weight [kg]	**1,6**
1x35A Height/Width/Depth - mm	**200x98x53**
Certifications:	**EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2**



ACCESSORIES:	
Item no:	
705099	**2m Charging cable**
705147	**4m Charging cable**
705159	**6m Charging cable**
705160	**8m Charging cable**
705294	**5m Remote panel**
705295	**10m Remote panel**
705296	**20m Remote panel**
705297	**25m Remote panel**
705463	**Connection Schuko - PlugIn**

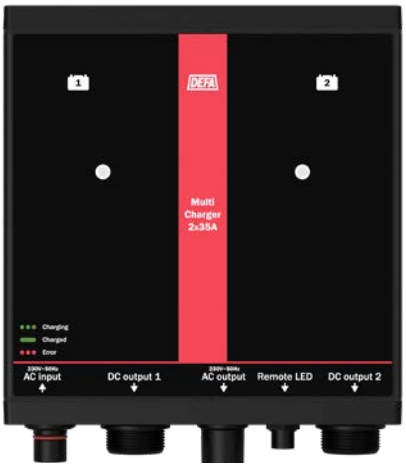




Connection Schuko - Plugin

MultiCharger 2x35A

DEFA MultiCharger 2x35A is a small and powerful charger for use in all types of vehicles and in any conditions. To make the system more flexible, cables are ordered separately in desired lengths.

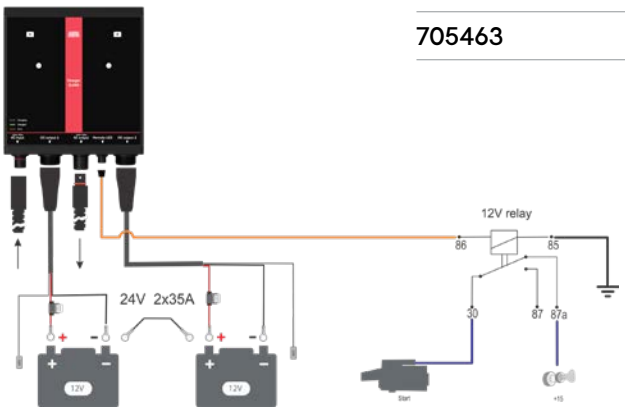


MultiCharger 2x35A	
Item no. with PlugIn 2x35A	708502
Mains voltage - VAC/Hz	220-240/50-60
Ambient temperature [°C]	-35 +50
Max charging voltage [VDC]	14,4
Float voltage [VDC]	13,5
Max charging current [A]	2x35
Recommended battery max [Ah]	2x600
IP rate [IP]	44
Weight [kg]	3,3
2x35A Height/Width/Depth - mm	200x190x53
Certifications:	EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2



24V SYSTEM

ACCESSORIES:	
Item No:	
705099	2m Charging cable
705147	4m Charging cable
705159	6m Charging cable
705160	8m Charging cable
705162	5m Remote panel
705163	10m Remote panel
705164	20m Remote panel
705165	25m Remote panel
705463	Connection Schuko - PlugIn







Connection Schuko - Plugin

MultiCharger 40A - 24V

DEFA MultiCharger 40A is a 24V charger for trucks and heavy vehicles. It is compact with high efficiency, and robuste for tough environments. To make it even more flexible to mount in tight spaces, remote panels are available as accessory.



MultiCharger 40A 24V	
Item no.	708400
Mains voltage - VAC/Hz	230/50-60
Ambient temperature [°C]	-30 +50
Max charging voltage [VDC]	28,8
Float voltage [VDC]	27,2
Max charging current [A]	40
IP rate [IP]	67
Weight [kg]	4
Height x Width x Depth - mm	280 x 175 x 85
Certifications:	EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2

ACCESSORIES:	
Item no:	
705294	5m Remote panel
705295	10m Remote panel
705296	20m Remote panel
705297	25m Remote panel
705480	Connection Schuko - PlugIn





Connection Schuko - Plugin

MultiCharger 1205 Flex

DEFA MultiCharger 1205 Flex is a powerful and compact charger for modern cars It needs 48% less space for installation than its predecessor, and it has flexible cables to allow for easy installation in tight spaces. The bracket allows for easy installation in all cars, and the PlugIn cables integrates it perfectly with the rest of the DEFA system.

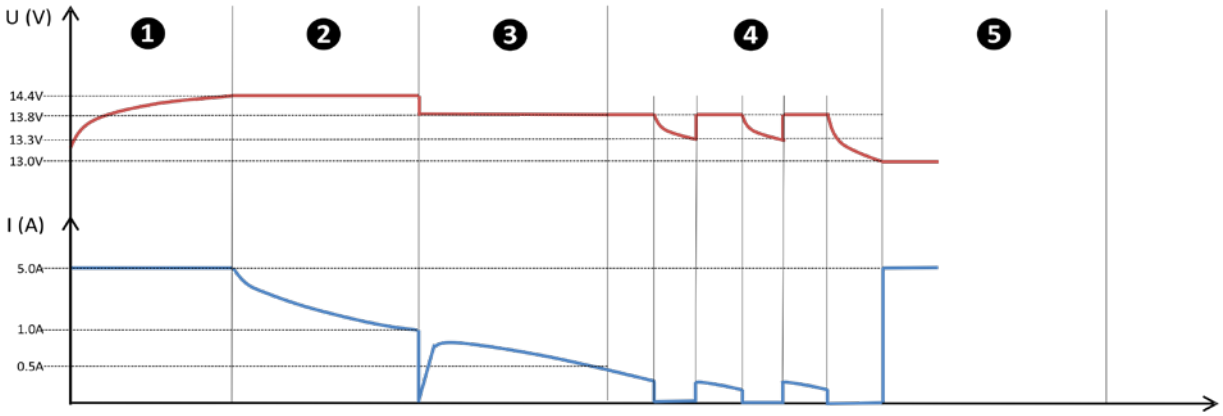


MultiCharger 1205 Flex	
Item no.	**450016**
Charging current - A	**5**
Charging voltage - V	**> 14,4**
Float voltage - VDC	**13,3 - 13,8**
Height/Width/Depth - mm	**95/71/38**
Weight - gr	**369**
Fuse - A	**7,5**
IP rate	**65**



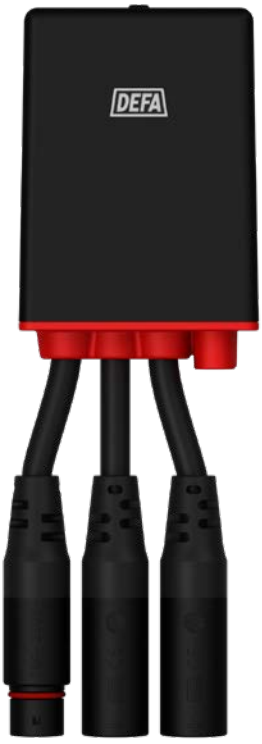
EXTREMELY EASY TO INSTALL
Flexible 230V connections, reduced size and flexible bracket

CHARGING CURVE:



MultiCharger 1205R Flex

DEFA MultiCharger 1205R Flex is a powerful and compact charger with built-in relay and the best option for charging the vehicle when a pre-heating system is installed. It needs 60% less space for installation than its predecessor. With a bracket with more optional installation ways and flexible connection cables it is still 37% smaller than the previous.

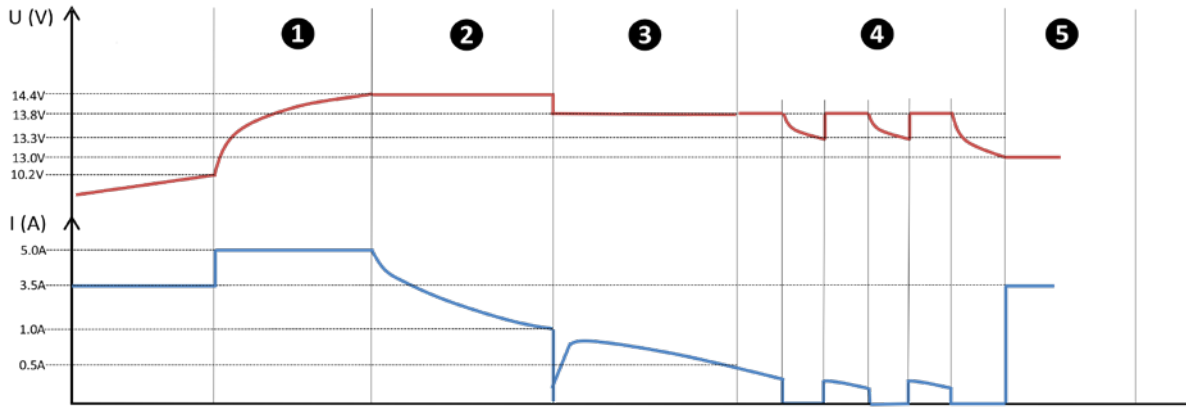


MultiCharger 1205R Flex with relay	
Item no.	**450015**
Charging current - A	**5**
Charging voltage - V	**> 14,4**
Float voltage - VDC	**13,3-13,8**
Height/Width/Depth - mm	**95/71/38**
Weight - gr	**325**
Fuse - A	**7,5**
IP rate	**65**

EXTREMELY EASY TO INSTALL
Flexible 230V connections, reduced size and flexible bracket



CHARGING CURVE:



MultiCharger 1210 Flex

MultiCharger 1210 Flex is a 12V/10A battery charger which is more compact than similar chargers in the category. It needs 89% less space for installation than its predecessor. The new 1210 Flex has more flexible cables making the mounting of the charger easier and faster. The new waterproof 12V connections reduced corrosion risk and improves the durability of the charger. Our most powerful and compact charger for modern cars.

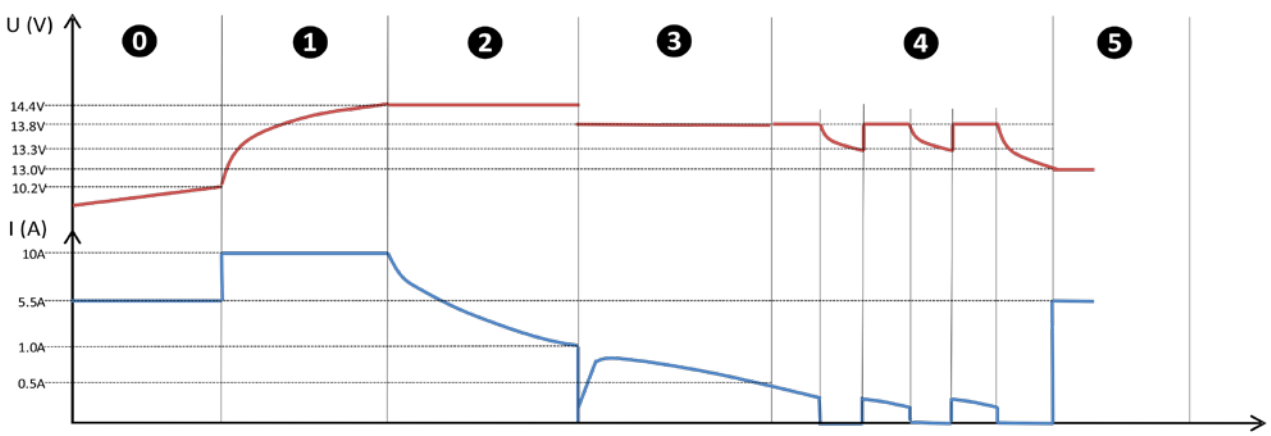


MultiCharger 1210 Flex	
Item no.	**450017**
Item no. Lithium	**450019**
Mains voltage - VAC/Hz	**230/50-60**
Charging voltage - VDC	**14,4**
Maintenance charging - VDC	**13,6**
Max. Charging current - A	**10**
Height/Width/Depth - mm	**105/71/42**
Weight - gr	**384**
IP rate - IP	**65**

EXTREMELY EASY TO INSTALL
The charger is delivered with a bracket for easier mounting



CHARGING CURVE:



ChargerKits 1205 Flex and 1210 Flex

A battery charger keeps your batteries fully charged, extends its lifespan and ensures that your car starts regardless of weather or temperature. DEFA ChargerKit is available with MultiCharger 1205 Flex or MultiCharger 1210 Flex and the kit includes all necessary cables for easier installation. These ChargerKits are particularly suitable for cars with parking heaters. Choose the ChargerKit 1210 Flex if you appreciate faster charging. Because of the charger's advanced and responsive charging cycle, your battery is charged even when other chargers would fail.



ChargerKit 1205 Flex	
Item no.	**450034**
Collection box - pcs	**12**
MultiCharger 1205 Flex	**450016**
Cable set 12V	**418109**
MiniPlug inlet cable 1,5 m	**460915**
MiniPlug Xtreme connection cable 2,5 m	**460955**
MiniPlug inlet cable - fitting equipment	**418801**



ChargerKit 1210 Flex	
Item no.	**450033**
MultiCharger 1210 Flex	**450017**
Cable set 12V	**418107**
MiniPlug inlet cable 1,5 m	**460915**
MiniPlug Xtreme connection cable 2,5 m	**460955**
MiniPlug inlet cable - fitting equipment	**418801**

QUALITIES

- **A highly efficient switch mode and advanced charging profiles prevent damage to the battery**
- **The charger can therefore be continuously connected**
- **Temperature compensated charging voltage ensures that the battery is fully charged regardless of the condition of the battery. No risk for overcharging.**
- **Light indication of charging mode**
- **The chargers are protected against short circuits and reverse polarity**
- **Does not harm advanced electronics**
- **Small dimensions**
- **Protects the battery from breaking down (sulphating) and extends the batteries lifetime.**
- **DEFA's chargers are all approved by; EN 60335-2-29 + A2:210, EN 60335-1 + A11, EN 62233, EN 550141 + A1 + A2, EN 61000-3-3, EN 610003-2, EN 55014-2**

ChargerKits 12A

Chargerkits includes the battery charger and necessary cables. Easily install the DEFA ChargerKit by connecting the DEFA MiniPlug inlet into the front of the vehicle and the connection cable to the nearest mains outlet.







ChargerKit cables of different lengths

ChargerKit 1x12A - 706910

MultiCharger 1x12A	**705200**
MiniPlug Inlet Cable - 1,5m	**460915**
MiniPlug Xtreme Connection Cable - 2,5m	**460955**
MiniPlug Inlet cable - fitting equipment	**418801**

ChargerKit 1x12A - 706252

MultiCharger 1x12A	**705200**
MiniPlug Inlet Cable - 2,0m	**460939**
MiniPlug Xtreme Connection Cable - 5,0m	**460957**
MiniPlug Inlet cable - fitting equipment	**418801**



ChargerKit 2x12A - 706253

MultiCharger 2x12A	**705300**
MiniPlug Inlet Cable- 2,0m	**460939**
MiniPlug Xtreme Connection Cable - 5,0m	**460957**
MiniPlug Inlet cable - fitting equipment	**418801**





ChargerKit cables of different lengths

ChargerKits 20A and 40A

Chargerkits includes the battery charger and necessary cables.
Easily install the DEFA ChargerKit by connecting the DEFA MiniPlug inlet into the front of the vehicle and the connection cable to the nearest mains outlet.



ChargerKit 1x20A - 706930	
MultiCharger 1x20A	**705800**
MiniPlug Inlet Cable - 2,0m	**460939**
MiniPlug Extreme Connection Cable - 5,0m	**460957**
Detachable charging cable - 2,0m	**706483**
MiniPlug Inlet cable - fitting equipment	**418801**



ChargerKit 2x20A - 706931	
MultiCharger 2x20A	**705900**
MiniPlug Inlet Cable- 2,0m	**460939**
MiniPlug Xtreme Connection Cable - 5,0m	**460957**
2 x detachable charging cable -2,0m	**706483**
MiniPlug Inlet cable - fitting equipment	**418801**



ChargerKit 40A 24V - 711152	
MultiCharger 40A 24V	**708400**
MiniPlug Inlet Cable- 2,0m	**460939**
MiniPlug Xtreme Connection Cable - 5,0m	**460957**

ShowroomCharger 32A

DEFA Showroom Charger 32A is based on modern switch mode technology and galvanized divisions, and represents the latest technology within battery charging. It is well suited to maintenance charge the battery for an unlimited time, and will always keep your cars in the showroom ready for demonstration.
The detachable cables and compact size, makes it easy to move from car to car, and will hardly be noticeable under the car.



ShowroomCharger 32A	
Item no. Standard clamps	**707000**
Item no. Special clamps	**708800**
Volt	**12V Charging**
Rated voltage AC - VAC/Hz	**220-240/50-60**
Charging voltage	**14.4V**
Float charging	**13,6V**
Min battery voltage	**2.0V**
Max charging current	**32A**
Back current drain	**<1Ah/month**
Ambient temperature	**-20°C ~ +40°C**
Charging types	**7 step, fully automatic charging cycle (Analyze/main charge/top charge/ analyze/float/sleep/wake Up)**
Battery types	**All 12V lead-acid batteries (WET, MF, Ca/Ca, AGM, EFB and GEL) Start-Stop Batteries**
Battery Capacity	**30-600Ah**
Dimensions L/B/H	**219/125/62**
IP rate	**IP40**
Weight	**1,7 kg**





Standard clamps



Special clamps,
Suitable for Mercedes-Benz



Detachable cables:

708227 2,5m charging cable with standard clamps
711440 2,5m charging cable with special clamps

ShowroomCharger 50A

The new ShowroomCharger 50A is a new premium charger in the Showroom range. It is compatible with all types of automotive batteries - both lead/acid and Lithium, and has a 14.7 button so you can change the voltage according to the battery type in the vehicle. A power supply function is also available, which delivers 13,7V without the presence of a battery. It is based on modern switch mode technology and galvanized divisions, and represents the latest technology within battery charging. as previous chargers, and has detachable cables.



714931
711440

ShowroomCharger 50A	
Item no. Standard clamps	**709800**
Item no. Special clamps	**715030**
Volt	**12V Charging**
Rated voltage AC - VAC/Hz	**100-240/50-60**
Charging voltage	**14.4V/14.7V**
Float charging	**13.5V/13.6V**
Min battery voltage	**2.0V**
Max charging current	**50A**
Back current drain	**<1Ah/month**
Ambient temperature	**-20°C ~ +40°C**
Charging types	**7 step, fully automatic charging cycle (Analyze/main charge/top charge/ analyze/float/sleep/wake Up)**
Battery types	**All 12V lead-acid batteries (WET, MF, Ca/Ca, AGM, EFB and GEL) Start-Stop and Lithium batteries**
Battery Capacity	**30-600Ah**
Dimensions L/B/H	**280/175/85**
IP rate	**5K3**
Weight	**3.8 kg**



Special clamps,
Suitable for Mercedes-Benz



Standard clamps



Detachable cables:

714931 2,5m charging cable with standard clamps

711440 2,5m charging cable with special clamps

WorkshopCharger 25A

The new WorkShopCharger 25A from DEFA is a battery charger as well as 13,7V power supply. Its unique display makes every function available with one button access, and allows for easy monitoring of the charging process. It provides continuous current when you need stable voltage to avoid lost data during ECU programming or battery change. It is delivered with cable, a wall bracket and isolated hood for easy storage and use.



WorkShopCharger 25A	
Item no.	**706900**
Volt	**12V Charging / Power supply 13,7 Volt**
Rated voltage AC - VAC/Hz	**230/50-60**
Charging voltage	**14.4V/14,7V**
Float charging	**13,6V**
Min battery voltage	**2.0V**
Max charging current	**25A**
Back current drain	**<1Ah/month**
Ambient temperature	**-20°C ~ +50°C**
Charging types	**7 step, fully automatic charging cycle (Analyze/main charge/top charge/analyze/float/sleep/wake Up)**
Battery types	**All types of 12V lead-acid batteries (WET, MF, Ca/Ca, AGM, EFB and GEL) Start-Stop Batteries**
Battery capacity	**30-500Ah**
Dimensions L/W/H	**202x96x53**
IP rate	**IP20**
Weight	**2 kg**

WorkshopCharger$_{2.0}$ I 35A

The 35A WorkshopCharger 2.0 is a versatile and efficient battery charger and power supply that helps you save time in the workshop. It is delivered with a detachable charging cable, a wall bracket and an isolated hook that makes it easy to place wherever you need. The new WorkshopCharger is compatible with all types of automotive batteries - both lead/acid and Lithium. It has no fan and produces no noise. The power supply function provides continuous current and stable volt and helps you avoid lost data during ECU programming or a battery change.



WorkshopCharger 2.0 35A	
Item no. with 2,5m cable	**707700**
Item no. with 5m cable	**709100**
Volt	**12V Charging / Power supply 13,7 Volt**
Rated voltage AC - VAC/Hz	**100-230/50-60**
Charging voltage	**14.4V/14,7V**
Float charging	**13,6V**
Minimum battery voltage	**2.0V**
Mac charging current	**35A**
Back current drain	**<1Ah/month**
Ambient temperature	**-20°C ~ +50°C**
Charging types	**7 step, fully automatic charging cycle (Analyze/main charge/top charge/analyze/float/sleep/wake Up)**
Battery types	**All types of 12V lead-acid batteries (WET, MF, Ca/Ca, AGM, EFB and GEL), Start-Stop and Lithium batteries**
Battery capacity	**30-600Ah**
Size L/W/H	**227x125x62 mm**
Insulation class	**IP40**
Weight	**1,8 kg**

The detachable cables can easily be connected and disconnected to improve the user friendliness of the charger at the workshhop - 2,5 meter or 5 meter cable available.



Spare parts:

711940 2,5m charging cable
711950 5,0m charging cable
712510 2,5m power cable

WorkshopCharger I 50A

The WorkshopCharger 50A is a versatile and efficient battery charger and power supply that helps you save time in the workshop. It is delivered with a detachable charging cable, a wall bracket and hook that makes it easy to place near your workstation. The new WorkshopCharger is compatible with all types of automotive batteries - both lead/acid and Lithium. It has no fan and produces no noise. The power supply function provides continuous current and stable volt and helps you avoid lost data during ECU programming or a battery change.



WorkshopCharger 50A	
Item no with 2,5m cable	**713000**
Item no with 5m cable	**713200**
Volt	**12V Charging / Power supply 13,7 Volt**
Rated voltage AC - VAC/Hz	**100-240/50-60**
Charging voltage	**14.4V/14,7V**
Float charging	**13,5V/13,6V**
Min battery voltage	**2.0V**
Max charging current	**50A**
Back current drain	**<1Ah/month**
Ambient temperature	**-20°C ~ +40°C**
Charging types	**7 step, fully automatic charging cycle (Analyze/main charge/top charge/analyze/float/sleep/wake Up)**
Battery types	**All types of 12V lead-acid batteries (WET, MF, Ca/Ca, AGM, EFB and GEL) Start-Stop and Lithium batteries**
Battery capacity	**30-600Ah**
Size L/W/H	**280 x 175 x 85 mm**
IP rate	**IP5K3**
Weight	**3,8 kg**

The charger is delivered with detachable cables that can be replaced if needed. This increases the lifetime of the product.



Spare parts:

711940 2,5m charging cable
711950 5,0m charging cable
711533 2,5m power cable

WorkshopCharger 125A

DEFA ShowroomCharger 125A is based on modern switch-mode technology, and will help maintain the batteries optimal performance and durability. The charger is delivered with detachable and replaceable cables. It can be mounted permanently on the wall or a workstation, or you can use the wall bracket included for a more portable solution. It is compatible with all types of automotive batteries, including WET, AGM, EFB, GEL and Lithium. With its capability to provide continuous output power of 125A the WorkshopCharger 125A is perfect for all ECU programming and diagnostic jobs.





WorkshopCharger 125A	
Item no. with 5m cable	**709000**
Item no. with 10m cable	**718090**
Volt	**12V/24V Charging / Adjustable power supply 13,7 Volt**
Rated Voltage AC - VAC/Hz	**100-240/50-60**
Output voltage range	**2V-32V**
Min battery voltage	**2.0V**
Charging current	**125A@230V, 65@120V**
Back current drain	**<1Ah/month**
Ambient temperature	**-20°C ~ +40°C**
Charging types	**7 step, fully automatic charging cycle (Analyze/main charge/top charge/ analyze/float/sleep/wake Up)**
Battery types	**All types of 12V lead-acid batteries (WET, MF, Ca/Ca, AGM, EFB and GEL) Start-Stop and Lithium batteries**
Battery capacity	**30-600Ah**
Size L/W/H	**373 x 206 x 104 mm**
IP rate	**IP20**
Weight	**7,2 kg**

Spare parts:	
Battery Clamp H500 set	714552
DC cable 3m, 25mm^2, with clamps	716980
DC cable 5m, 25mm^2, with clamps	714554
DC cable 7,5m, 25mm^2, with clamps	716982
DC cable 10m, 25mm^2, with clamps	716983
Mounting Bracket	714556
Air filter accessory	714557
Power cable 5m, with lock	714558

SmartCharge

SmartCharge are intelligent chargers which makes it easy and safe to charge your batteries. All you have to do is connect the charger to an outlet, connect the clips to your battery, and then press "On". SmartCharge recognizes which type of battery it is connected to, and charges it accordingly. When you are done, wind it up, click the parts in place and keep it handy. SmartCharge has power supply for access to continuous current.

SmartCharge that also charges Lithium batteries are also available



EASY TO USE

- On/off button
- Backlit user-friendly interface and display.
- Adapts automatically to the size (Ah) of your battery.
- A display to easily read the actual power level of your battery.
- Integrated cable storage solution.
- It will never over-charge your battery. Ever.
- Temperature compensated charging cycle.

POWERSUPPLY

Every so often you need access to continuous current, for instance when changing the battery in your car. With power supply you can avoid leaving the car without power and having to reset every setting in the car later. You can also use power supply to power 12V units such as an cooling box or a portable sound system. The power supply function is now available with all SmartCharge versions.

It is activated by pressing and holding the ON button for 5 seconds. The charger will then generate 13,6V, indicated by 5 LED segments lighting from bottom to top.

We offer a wide range of accessories for DEFA SmartCharge. These accessories address your everyday need to charge your various devices. Our range of accessories consists of cables, connectors, battery status indicators, and outlets which can be adapted to your every need. For more information, visit www.defa.com

SMARTCHARGE TEST WINNER PUBLICATION: KM

SMARTCHARGE TEST WINNER PUBLICATION: MOOITORI

AWARD FOR DESIGN EXCELLENCE
NORWEGIAN DESIGN COUNCIL

SmartCharge		Item no.	Dimensions	Weight	IP -rate
SmartCharge 6A	10-150 Ah	706060	210×90×54	620 g	IP65
SmartCharge 6A Li (Lithium)	10-150 Ah	712006	210×90×54	620 g	IP65
SmartCharge 10A	30-250 Ah	706161	235×90×54	750 g	IP65

SmartCharge accessories



12V Battery status indicator

Item no.	701758
Length - mm	48
Cross section - mm^2	28
IP rate	65



12V Charging cable, with ring terminals

Item no.	701762
Cable length - m	1,3
Cross section - mm^2	1,3
IP rate	65



12V Charging cable, with clamps

Item no.	701764
Cable length - m	1,3
Cross section - mm^2	1,3
IP rate	65



12V Charging kit

Item no.	701759

Includes item no. 701759 and 701760



12V Charging kit

Item no.	701760

Includes item no. 701759 and 701760



12V Charging kit

Item no.	701761

Includes item no. 701759 and 701760



SmartCharge display:

Item no.	706782

Fits 8 chargers of any version

Inverter 1200W 12V

The Inverter 1200W 12V is 20% smaller than previous inverters. The inverter is available with or without transfer switch*. Due to the DEFA PlugIn connectors the inverter fits perfectly into a DEFA charging system.

The inverters will provide access to 230VAC mains voltage. They deliver pure sinus and are therefore excellent for TV and DVD-equipment as well as laptop computers.

TRANSFER SWITCH*:
Integrated transfer switch automatically ensures that 230V power is supplied from a connected mains outlet when possible. This prevents the inverter from drawing power from the battery, allowing it to recharge. When mains power is disconnected power supply is switched back to the inverter.



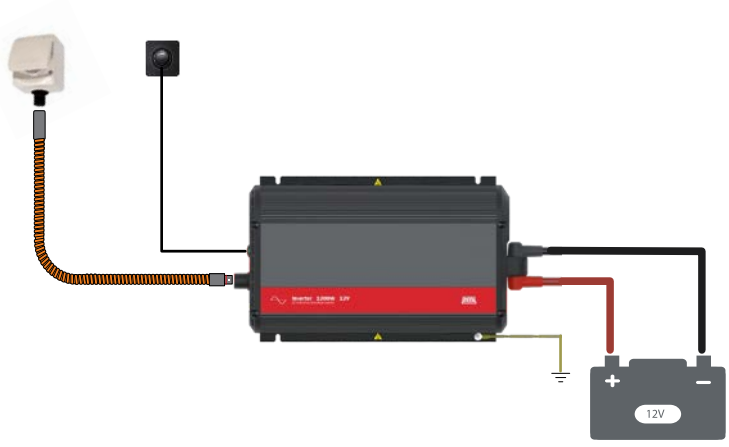
Inverter 1200W	
Item no. w/Transfer switch	**709090**
Item no. wo/Transfer switch*	**709191**
Item no. Remote panel	**709340**
Height/Width/Depth (mm)	**360x225x98***
Weight (kg)	**4,7***

Remote panel

For Inverter 1200W 12V

The inverter can be installed in hard-to-reach areas, and be operated with a remote panel. With 6 meter cable
Item no: 709340





Inverter 2500W 24V

The new Inverter 2500W 24V is 20% smaller than previous inverters. The inverter is available with or without transfer switch*. Due to the DEFA PlugIn connectors the inverter fits perfectly into a DEFA charging system.

The inverters will provide access to 230VAC mains voltage. They deliver pure sinus and are therefore excellent for TV and DVD-equipment as well as laptop computers.



TRANSFER SWITCH*:
Integrated transfer switch automatically ensures that 230V power is supplied from a connected mains outlet when possible. This prevents the inverter from drawing power from the battery, allowing it to recharge. When mains power is disconnected power supply is switched back to the inverter.

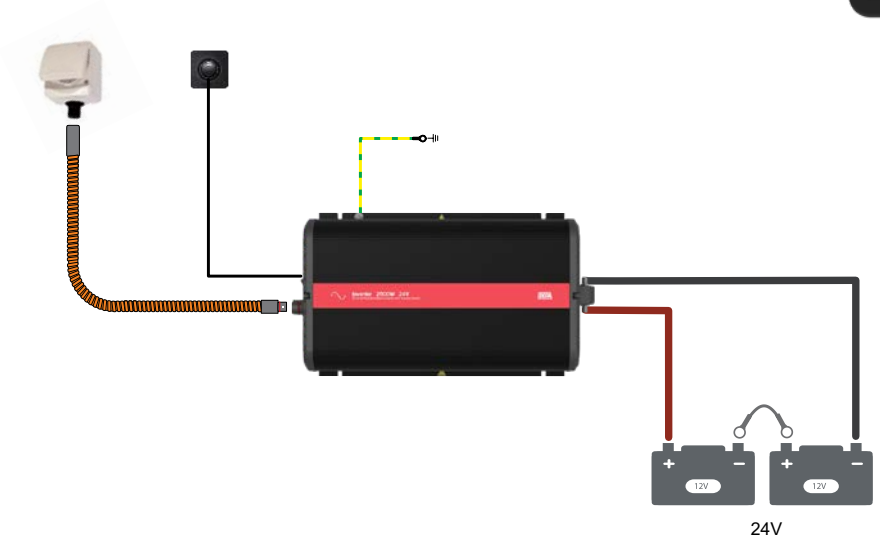
Inverter 2500W - 24V	
Item no. with Transfer switch	**709595**
Item no. without Transfer switch	**709797**
Item no. Remote panel	**709340**
Height/width/depth (mm)	**412x254x88,5**
Weight (kg)	**6,3**

Remote panel

For Inverter 2500W 24V

The inverter can be installed in hard-to-reach areas, and be operated with a remote panel. With 6 meter cable
Item no: 709340





Inverters - PlugIn / Schuko

Our high-quality inverters are safe to use and make it possible to use electrical equipment in boats and vehicles.



Item no	Connection	Input - VDC	Output - VAC	Output Power - W	Weight - kg	Size - mm
702935	PlugIn	12	230	300	2,6	230x151x64
702937	PlugIn			600	3,5	324x170x68
709090	PlugIn			1200	4,7	360x225x98
709191	PlugIn			1200	4,7	360x225x98
702941	PlugIn			1500	6,2	420x223x101
702943	PlugIn			2000	6,5	420x289x100
702949	PlugIn	24		1000	5,2	390x223x101
702951	PlugIn			1500	6,2	420x223x101
702953	PlugIn			2000	6,5	420x289x100
709797	PlugIn			2500	8,0	480x289x100
702950	Schuko	24	250	1000	5,2	390x223x101

Inverter control panels

All inverters can be remotely controlled from a separate control panel. This makes it easier to use the inverter when it is not easily accessible.



Remote control	Flush mounted
Item no. 702912	Remote Control for 300/600W inverter, 6 m cable.
Item no. 702913	Remote Control for 1000/1500/2000/2500/3000W inverter, 6m cable
Item no. 704030	Remote Control for 1000/1500/2000/2500/3000W inverter, 10m cable.



Remote control	Surface mounted
Item no. 705115	Remote Control for 300/600W inverter, 6m cable
Item no. 705116	Remote Control for 1000/1500/2000/2500/3000W inverter, 6m cable
Item no. 705117	Remote Control for 1000/1500/2000/2500/3000W inverter, 10m cable

InverterKit

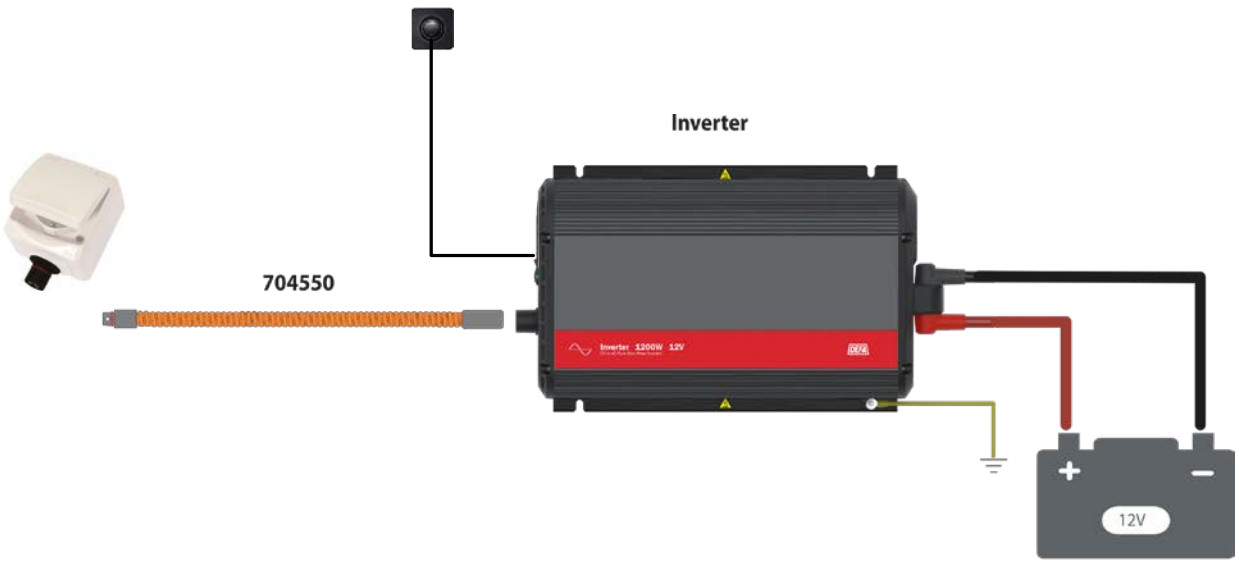
DEFA inverter kits consist of the inverter, a 2m orange extension cable and a double power outlet. It can easily be expanded, as it is based on the DEFA PlugIn system.



The new inverter in the InverterKit 1200W is 20% smaller than the predecessor.

InverterKit

Item no:	Item name:	Inverter:	Cable:	Outlet:	**Remote:**
715967	Inverter Pack 300W/12V Single socket outlet	**702935**	**704550**	**700401**	**702912**
715968	Inverter Pack 600W/12V Single socket outlet	**702937**	**704550**	**700401**	**702912**
715969	Inverter Pack 1200W/12V Single socket outlet	**709191**	**704550**	**700401**	**709340**
715970	Inverter Pack 1500W/12V Single socket outlet	**702941**	**704550**	**700401**	**702913**
715971	Inverter Pack 2000W/12V Single socket outlet	**702943**	**704550**	**700401**	**702913**
715972	Inverter Pack 1000W/24V Single socket outlet	**702949**	**704550**	**700401**	**702913**
715973	Inverter Pack 1500W/24V Single socket outlet	**702951**	**704550**	**700401**	**702913**
715974	Inverter Pack 2000W/24V Single socket outlet	**702953**	**704550**	**700401**	**702913**
715975	Inverter Pack 2500W/24V Single socket outlet	**709797**	**704550**	**700401**	**709340**

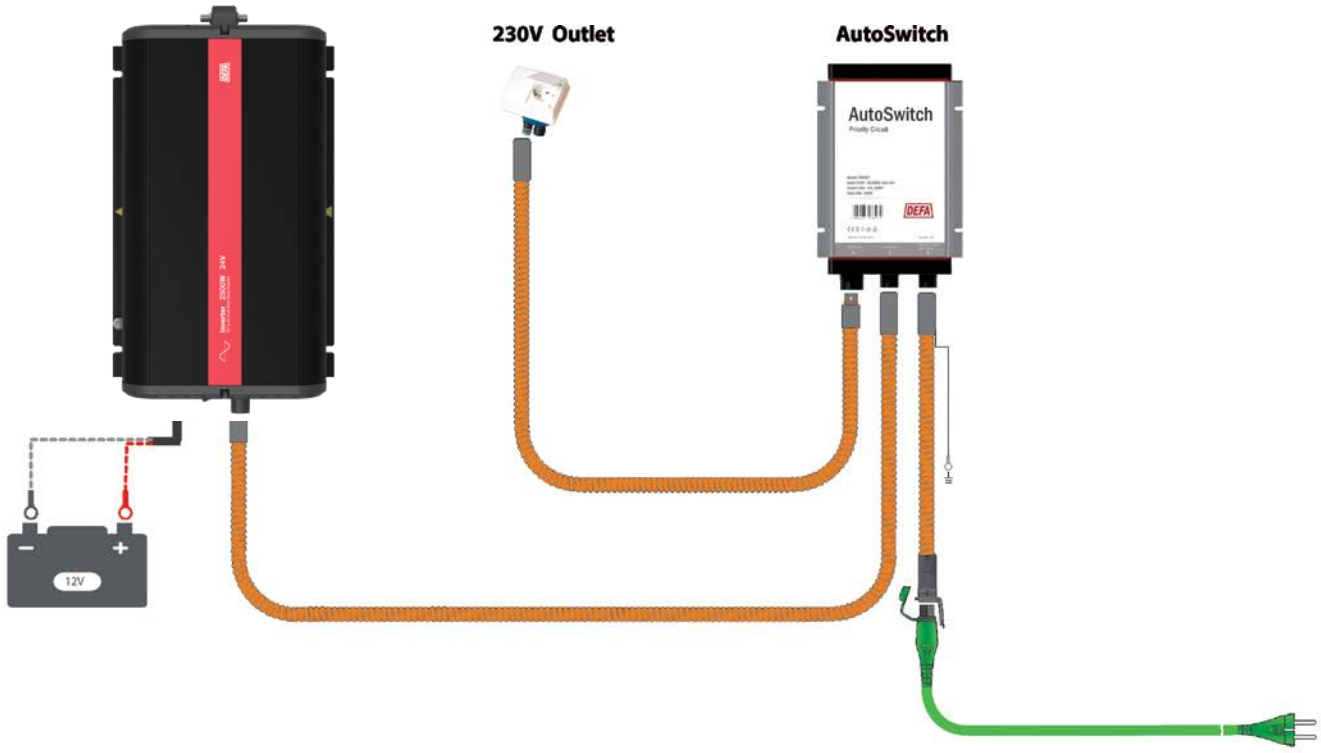


AutoSwitch

AutoSwich makes sure that the mains power always has priority when both it and the inverter are connected to the same outlets. This ensures that the batteries are not used to power the outlets when the vehicle is plugged into mains. The AutoSwitch also makes sure that there is no power in the mains inlet when the inverter is in use.



AutoSwitch	
Item no	703697
Input voltage - VAC/Hz	230/50-60
Output voltage (VAC)	230
Max current (A)	16
Max power (W)	3680
Fuse (A/V)	16/T250
Height/Width/Depth- mm	58/132/205
IP rate	44



NEW! DEFA ProPlug System



For decades, DEFA has offered a complete range of high-quality products featuring unique PlugIn connectors that are easy to customize, install, and maintain. These are connected to the grid using a MiniPlug connector.

Over the years, we have perfected our solutions and are now the leading provider of flexible and reliable vehicle systems across all sizes and specifications. To meet the increasing demands of vehicles requiring more than standard preheating, we are introducing a new and upgraded version.

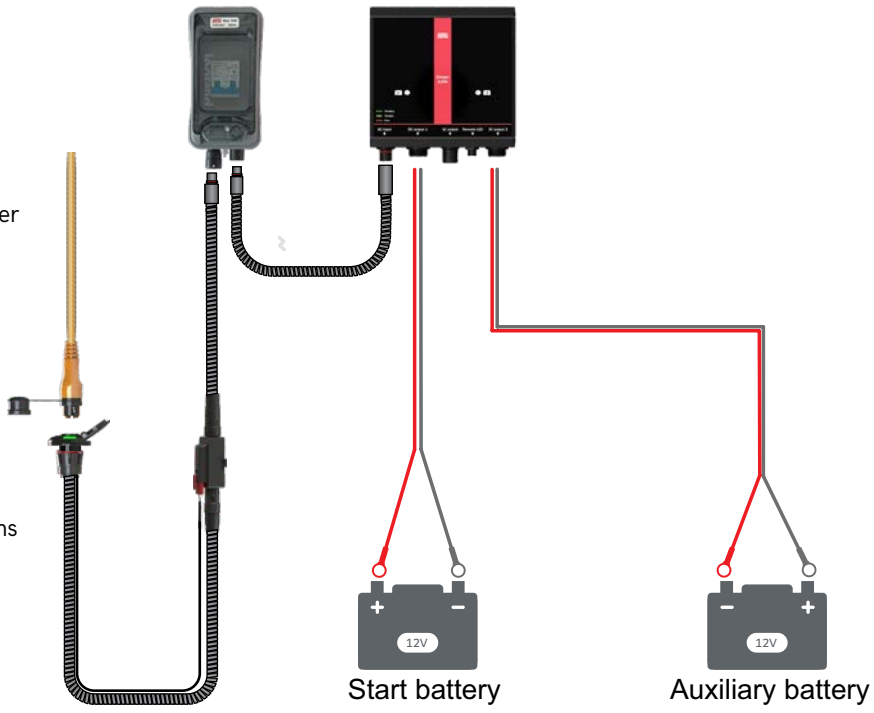
DEFA ProPlug and PlugIn HP – Built for Demanding Conditions

ProPlug Features:

- Tested for 50,000 cycles under load
- Lid opening and closing tested for 35,000 cycles
- IP55 rated (both mated and unmated) – reliably protected against dust and water
- Durable and built to last
- 2,5mm² cables – In accordance with IEC 60364-7-717 ED3

PlugIn HP Features:

- Dual locking mechanism for a safer connection
- IP6K9K rated – resists high-pressure water jets and enables flexible installations
- 2,5mm² cables – In accordance with IEC 60364-7-717 ED3
- Metal armoring – prevent demages to cables



DEFA ProPlug and PlugIn HP

The new DEFA ProPlug and PlugIn HP cable system is specifically developed for rescue vehicles and enables installations that meet the latest standards. The LED ring indicates the presence of power and makes it easier to monitor battery status. The built-in starter-kill function operates even when the ProPlug cable is not powered. It is designed to endure much harsher use than the standard MiniPlug and PlugIn systems.



DEFA ProPlug connection cable 2,5mm²

Item no. - 2,5m - Schuko	**465010**	**8pr assembly box**
Item no. - 5,0m - Schuko	**465011**	**8pr assembly box**
Item no. - 10,0m - Schuko	**465012**	**12pr assembly box**
Item no. - 15,0m - Schuko	**465013**	**12pr assembly box**
Item no. - 2,5m - Swiss	**465060**	**8pr assembly box**
Item no. - 5,0m - Swiss	**465061**	**8pr assembly box**
Item no. - 10,0m - Swiss	**465062**	**12pr assembly box**
Item no. - 15,0m - Swiss	**465063**	**12pr assembly box**
Item no. - 2,5m - UK	**465064**	**8pr assembly box**
Item no. - 5,0m - UK	**465065**	**8pr assembly box**
Item no. - 10,0m - UK	**465066**	**12pr assembly box**
Item no. - 15,0m - UK	**465067**	**12pr assembly box**
Voltage - VAC/Hz	**250/50**	
Current, max. - A	**16A**	
ProPlug IP rating	**55**	



DEFA ProPlug inlet cable

Item no. - 0,6m	**465001**	**14pr assembly box**
Item no. - 1,0m	**465002**	**14pr assembly box**
Item no. - 1,5m	**465003**	**14pr assembly box**
Item no. - 2,0m	**465004**	**14pr assembly box**
Voltage - VAC/Hz	**250/50**	
Current, max. - A	**20**	
ProPlug IP rating	**55**	
PlugIn HP IP rating	**6K9K**	

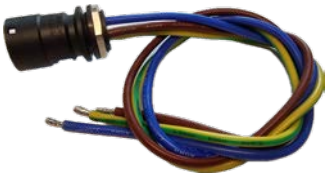
DEFA ProPlug and PlugIn HP



DEFA ProPlug HP extention cables	
Item no. - 0,6m	**465010**
Item no. - 1,0m	**465011**
Item no. - 2,0m	**465012**
Item no. - 3,0m	**465013**
Item no. - 4,0m	**465013**
Item no. - 5,0m	**465011**
Item no. - 8,0m	**465012**
Item no. - 10,0m	**465013**
Item no. - 12,0m	**465013**
Voltage - VAC/Hz	**250/50**
Current, max. - A	**20A**
ProPlug HP IP rating	**6K9K**



PlugIn HP H-Connector (1 PlugIn HP in, 3 PlugIn out)	
Item no.	**465019**
Voltage - VAC/Hz	**250/50**



PlugIn HP Panel Connector	
Item no.- In	**717585**
Item no. - Out	**717801**
Length of cables - mm	**500**



PlugIn HP Fuse Box	
Item no.	**719316**
Height/Width/Depth - mm	**174/93/109**
Weight - gr	**600**

DEFA ProPlug and PlugIn HP



DEFA ProPlug bridge cable

Item no. - 2,5m	**465014**
Voltage - VAC/Hz	**250/50**
Current, max. - A	**16**



ProPlug LED Indicator Kit

Item no.	**465015**
Voltage - VAC/Hz	**250/50**
IP rating	**IP55**



ProPlug Connection Kit (Connection cable + Inlet cable + LED kit)

Item no. - 2,5m - Schuko	**465020**
Item no. - 5,0m - Schuko	**465021**
Item no. - 2,5m - Swiss	**465022**
Item no. - 5,0m - Swiss	**465023**
Item no. - 2,5m - UK	**465024**
Item no. - 5,0m - UK	**465025**
Voltage - VAC/Hz	**250/50**
IP rating	**IP55**

Connection cables

DEFA Connection cables are developed for DEFA MiniPlug and provides a reliable connection from your mains power outlet to the car. The MiniPlug Xtreme is more durable and is suited for cold weather and rough treatment. Xtreme has a black cap to distinguish it from the MiniPlug.



MiniPlug Connection cable 2,5mm²	
Item no. - 2,5m	**460960**
Item no. - 5,0m	**460961**
Item no. - 10,0m	**460962**
Item no. - 15m	**460963**
Number of pcs in collection box	**960/22 - 961/12 - 962/1**
Voltage - - VAC/Hz	**230/50-60**
Current, max. - A	**16**
Weight - gr	**530/915/1520 (2,5/5,0/10,0m)**

DEFA Connection cable 2,5 mm² is used for vehicles with special requirements for connection cables, such as ambulances and fire engines with special equipment. Even if the cable is available with a 2,5mm□ core cross-section, the maximum power consumption is 16A.

Connection cables and sets

The DEFA MiniPlug Inlet cable is developed to fit all new cars. Flush and bracket mounting is equally simple. DEFA MiniPlug was developed with the goal of creating user friendly design, better safety and total reliability.



Connection set 460785	
MiniPlug Inlet cable - 1,5 m	**460915**
MiniPlug Xtreme Connection cable - 2,5 m	**460955**
MiniPlug Inlet cable - fitting equipment	**418801**
Connection set 460787	
MiniPlug Inlet cable - 1,5 m	**460915**
MiniPlug Xtreme Connection cable - 5,0 m	**460957**
MiniPlug Inlet cable - fitting equipment	**418801**
Connection set 460789	
MiniPlug Inlet cable - 1,5 m	**460915**
MiniPlug Connection cable angle - 2,5 m	**460933**
MiniPlug Inlet cable - fitting equipment	**418801**

PlugIn extension cables

The components are easily connected together with DEFA's armored PlugIn extension cables. The system ensures a reliable and tight connection and eliminates incorrect connections. Orange cables are recommended for use with inverters.



PlugIn extension cables

Item no. black	Item no. orange	Length
460802	704547	0,5 m
460803	704548	1,0 m
460843	704549	1,5 m
460804	704550	2,0 m
460844	704551	3,0 m
460846	704552	4,0 m
460809	704553	5,0 m
460847	704554	8,0 m
460851	704555	10,0 m
460850	704556	12,0 m

Voltage 230 VAC, max. current 164, IP 44.
Test and approval EN 50066 -, EN 60309-1

Inlet cables

DEFA MiniPlug Inlet Cable is adjusted to all new cars. Both flush mounted and bracket mounted versions are equally functional and easy to install. During the development of DEFA MiniPlug we have focused on user friendly design, safety, and ease of installation.



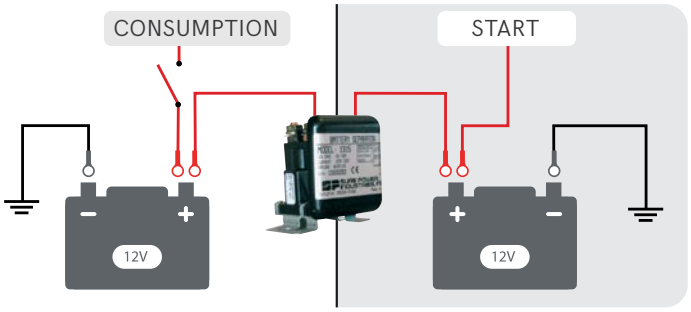
MiniPlug Inlet cable	Item no. Black	Item no.Orange
ItemItem no (0,6m)	**460902**	**704557**
Item no. (1,0m)	**460901**	**704558**
Item no. (1,5m)	**460915**	**704559**
Item no. (2,0m)	**460939**	**704561**
Voltage - VAC/Hz	**230/50-60**	**230/50-60**
Current - A	**16**	**16**
Weight (Length/Weight) - m/kg	0,6/0,23 - 1,0/0,35 - 1,5/0,41 - 2,0/0,57	0,6/0,23 - 1,0/0,35 -1,5/0,41 - 2,0/0,57

The Inlet Plug has MiniPlug with lid in one end and DEFA PlugIn contact in the other end. In addition, it has a ground conductor with cable clip for grounding the system.

Battery separators

The battery separator connects two separate battery groups, for instance the start and consumption battery during charging. If the charging is interrupted, the batteries are separated again. The battery separators measure voltage on both battery groups and are activated automatically.

Installation of the separator is simple, and it is an optimal solution for a 2-circuit system that does not require changing the original set-up.





Battery separator 12V 100A

Item no.	**700595**
Function	**Separator**
Continuous current - A	**100**
Max output - A	**400**
On function (typical) - V	**13,2**
Off function (typical) - V	**12,8**
Height/Width/Depth - mm	**76/83/64**

Special characteristics: Both batteries will activate the separator.



Battery separator 12V 200A

Item no.	**700596**
Function	**Separator**
Continuous current - A	**200**
Max output - A	**1000**
On function (typical) - V	**13,2**
Off function (typical) - V	**12,8**
Height/Width/Depth - mm	**76/83/64**

Special characteristics: Both batteries will activate the separator.



CEE / PlugIn Contact

Item no.	**701150**
Voltage - VAC/Hz	**230/50-60**
Current - A	**16**
Weight	**0,158**



DEFA Rettbox®

Rettbox® 12V without air - Item no.	**707175**
Rettbox® 24V without air - Item no.	**706411**
Rettbox® cable without air 4m - Item no.	**706412**
Rettbox® 12V with air - Item no	**707174**
Rettbox® 24V with air - Item no	**706413**
Rettbox® cable with air 4m - Item no	**706414**

The RETTBOX® is an electromagnetic self-eject system comprising coupler socket and an inlet mounted in a box. The self-ejection of the coupler socket is activated electrically via the vehicle's ignition system. The release mechanism is housed in a compact enclosure fitted into the vehicle. On ignition, a solenoid plunger lifts the socket release latch thus ejecting it from the inlet. Rettbox® is available with DEFA PlugIn for easy installation in a DEFA system.

Outlets and frames

All 230VAC Schuko outlets have DEFA PlugIn connections.
The connections are available in both flush mounted and wall mounted versions.



Wall outlet - on-wall mounted single

Item no.	**718877**
Mains voltage - VAC/Hz	**230/50-60**
Weight - kg	**0,100**
IP rate - IP	**44**



Wall outlet - on-wall mounted double

Item no.	**718878**
Mains voltage - VAC/Hz	**230/50-60**
Weight - kg	**0,200**
IP rate - IP	**44**



Wall outlet - on-wall mounted double with PlugIn, in- and outlet

Item no.	**718879**
Mains voltage - VAC/Hz	**230/50-60**
Weight - kg	**0,058**
IP rate - IP	**44**



PlugIn wall outlet Main outlet double 16A

Item no recessed with cover - white	**700405**
Mains voltage - VAC/Hz	**230/50-60**



Wall outlet - flush mounted single

Item no. Single main outlet, 230VAC/16A, recessed - white	**701317**
Item no. Single main outlet, 230VAC/16A, recessed - grey	**701315**



Frames for wall outlets

Item no. Single frame for wall outlet - white	**701307**
Item no. Single frame for wall outlet - grey	**701305**
Item no. Double frame for wall outlet – white	**701310**
Item no. Double frame for wall outlet - grey	**701308**



Manual summer and winter switch

Item no.	**701123**
Height/Width/Depth - mm	**67/135/76**
Weight - kg	**0,200**

The summer/winter switch is a manual switch which makes it possible for an engine heater/interior heater to be disconnected during the summer without the battery charger being disconnected.

El-centrals

The system can be installed without the need for tools or a certified installer.



El-central

Main inlet cabinet 230VAC/16A, 1 DEFA PlugIn inlet, 1 DEFA PlugIn outlet, for use with TN-grid inverters or mains power.

Item no. 719315



El-central

Main inlet cabinet 230VAC/16A, 1 DEFA PlugIn inlet, 1 DEFA PlugIn outlet, with PE-N connection. Only for use with DEFA IT-grid inverters.

Item no. 719314



El-central

Main inlet cabinet 230VAC/16A, 2 DEFA PlugIn inlet, 2 DEFA PlugIn outlet, for use with IT-grid inverters and mains power.

Item no. 719313



El-central

Main cabinet with two inlets (mains and inverter) and integrated priority switch. Four outputs: one mains-only, three priority-switched. Integrated IMD for IT-grid inverters and RCBO for mains supply.

El-central with PlugIn (1,5 mm^2)	**Item no. 719138**
El-central with PlugInHP (2,5 mm^2)	**Item no. 719139**

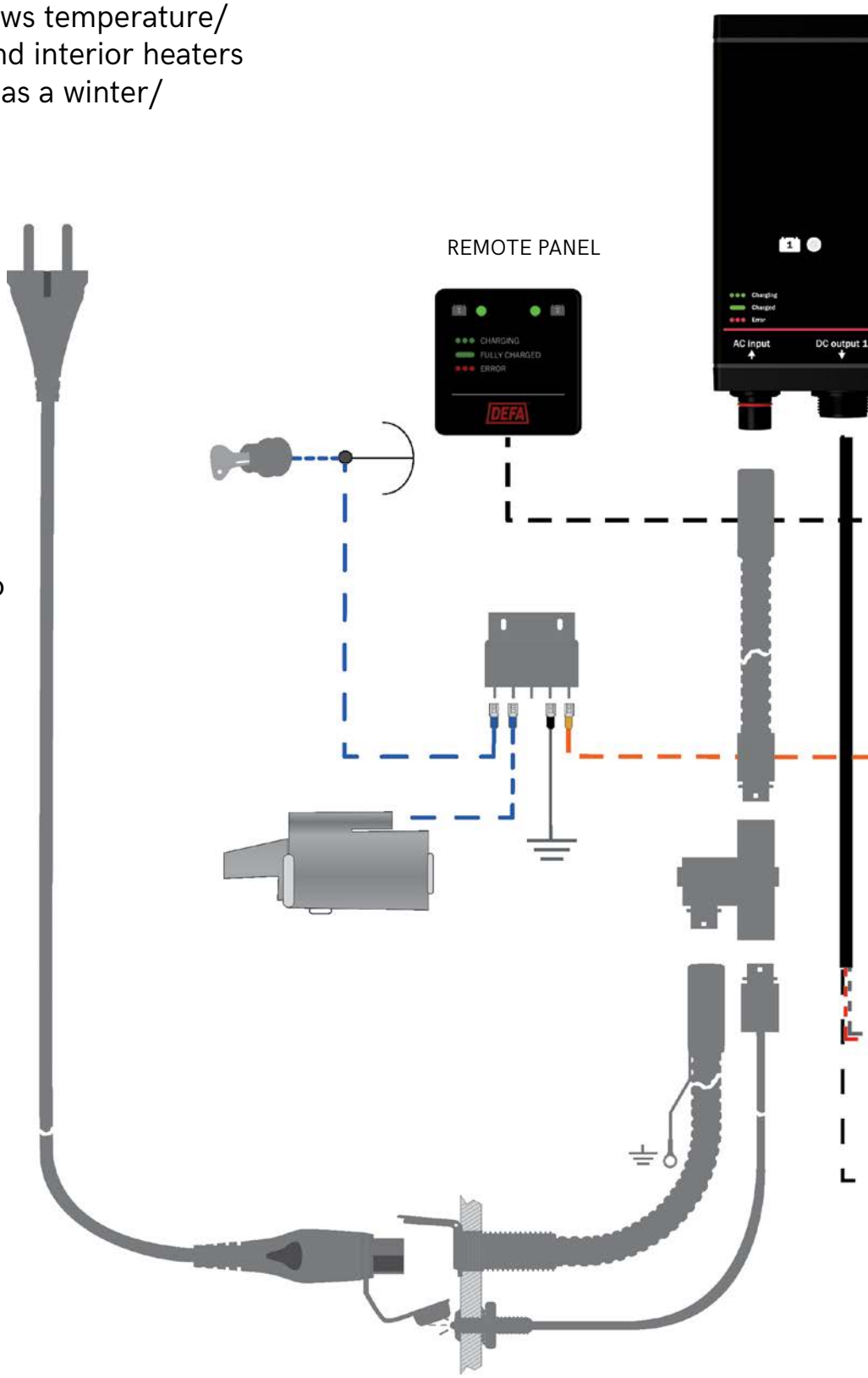
System overview

The circuit schematic shows temperature/ time control of engine- and interior heaters by using DEFA Bluetooth as a winter/ summer switch.

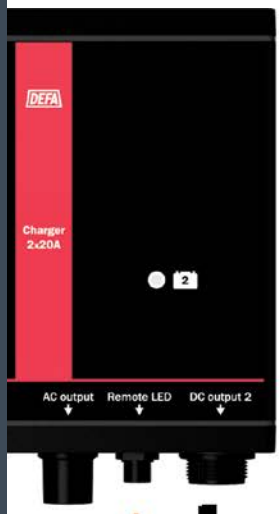
The battery charger will charge independent of winter/summer settings.

In addition, the diagram shows the ”starter kill” device function through a separate relay.

Remote LED shows the charging status of two batteries with red, yellow or green LED light.



BATTERY CHARGER



CONTROL UNIT



INTERIOR HEATER

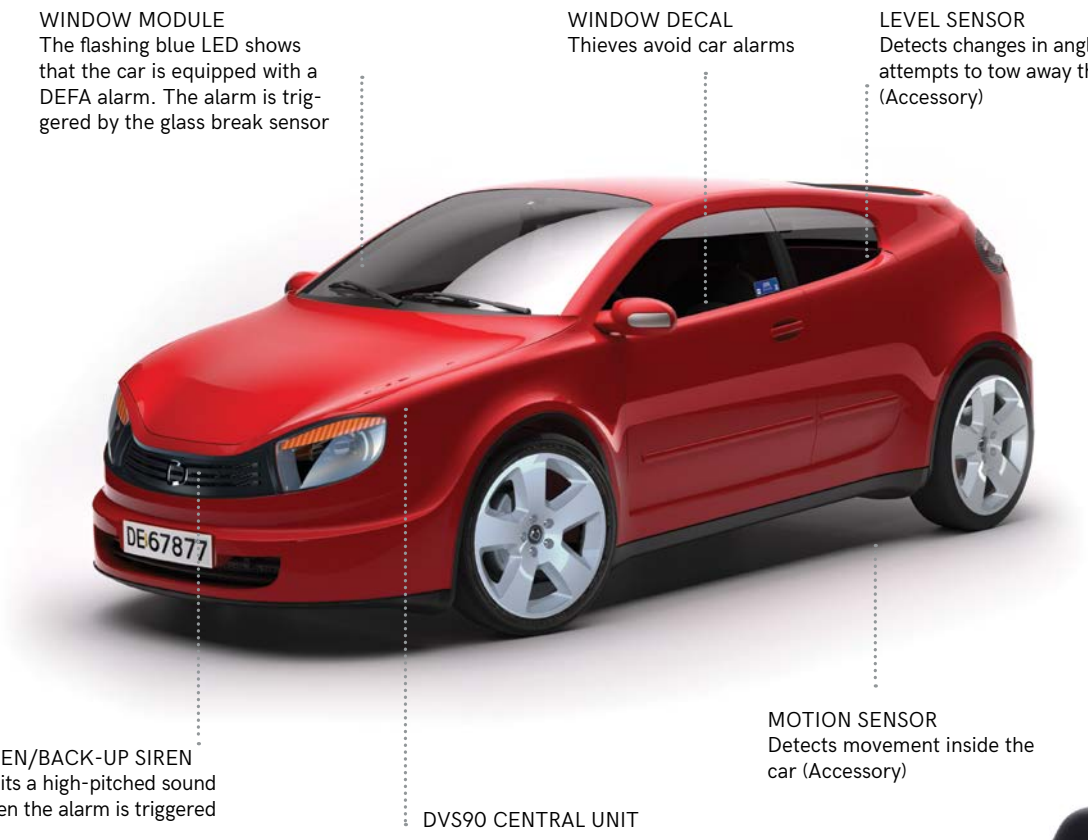
ENGINE HEATER

Security products

Car alarm:
- Security 73
- Finder Link 74
- Security combined with Link 75
- Accessory and tools 76

Security

DVS90 is a modern alarm system designed on a flexible electronic platform that ensures a very easy set up and installation. The alarm can be installed in all vehicles regardless of electrical supply and electronic systems. To raise the security level further, additional plug and play sensors and Second Authorization remote control are available.



SECOND AUTHORIZATION

Protect your car against the most advanced methods of car theft:
Original alarm and original start-up protection without any other authorization functionality can easily be turned off by stealing the signals from the car's keyless system. PC programs can activate and deactivate the keyless system and start the car. DEFA DVS90 and Second Authorization as an extra remote control makes it impossible to open the door and start the car, because of the rolling "anti-grabbing" code that protects the system.



Car specific installation drawings and dedicated support from DEFA makes DSV90 a number one in rapid installation and reliability. DVS90 has digital interfaces for all types of CAN buses found in modern cars. It also provides interfaces for analogue and semi-digital inputs with corresponding functionality, for support of older vehicles or boats. The alarm can be installed in all vehicles using 12V or 24V battery systems. www.defa.com



Security DVS90 - Car Alarm Kit	
Item no.	**600900**

Finder Link

Finder Link alerts you if your car is stolen, and helps you track its location on your mobile. You will receive an alert to your phone if the car is started - even with the original key - or if the car is moved in any way. Then you can easily track its location and share the coordinates. To get started, install Finder Link in your car, and sign up on defa.com. The App can be downloaded free of charge.

FINDER AND SECURITY
Finder Link includes our Security and Finder solutions, and consists of a GPS/GSM unit that is installed in your car, and connected with the DEFA App.

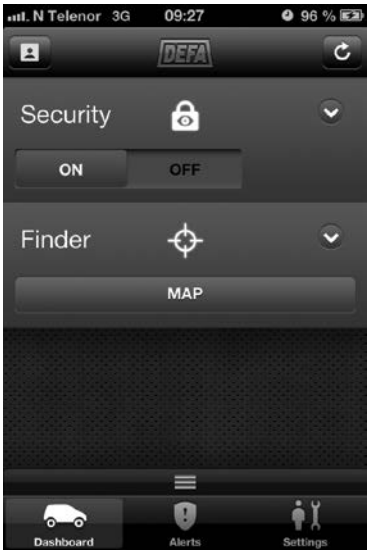
Security
Security protects your car from theft, with a visible sticker in the window.

- Alerts you if the car is moved or started - even with original keys.
- Let you set a maximum speed, and alerts if this speed is exceeded.

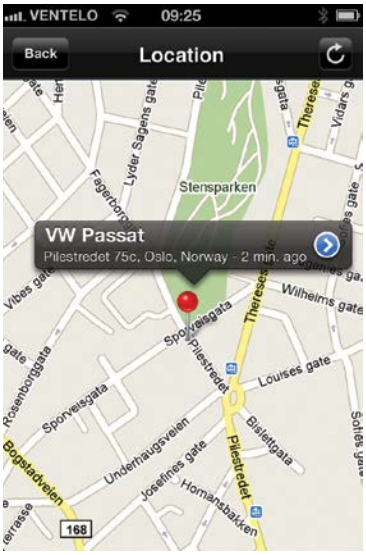
Finder

- Helps you track and locate your car in the app
- Let's you share the coordinates of your car's location with the police and insurance company.

Tip: Do not forget to ask your insurance company for better terms after installing Finder Link!



Receive theft alert



Locate and follow your car's movements



Finder Link - 440034	
Link Hub module	**440030**
GPS Link module	**440037**

Security combined with Link

With the combination of the DEFA Car Alarm Kit (DVS90) and Finder Link, the car owner will receive a bulgar alarm on the mobile phone if the car is broken into, moved or started. Then the functionality Finder will locate the car on a map on the mobile App. Further increase the security with sensors and the remote control Second Authorization.

DEFA ALARM SYSTEM COMBINATIONS:

Alarm system with burglar alarm notification on the mobile:

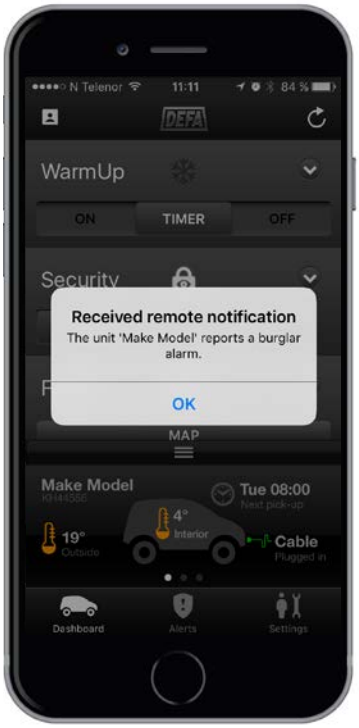
Vehicles with no alarm installed:
- DVS90 Alarm Kit — Item no. 600900
- Finder Link — Item no. 440034
- Input wire for Link Hub — Item no. 440060

Vehicles with DVS90 (600900), for upgrade to Link:
- Finder Link — Item no. 440034
- Input wire for Link Hub — Item no. 440060

Vehicles with Finder Link (440034) for increased security with DVS90 Alarm kit:
- DVS9 Alarm Kit — Item no. 600900
- Input wire for Link Hub — Item no. 440060

Vehicles with WarmUp GPS Link for increased security with DVS90 Alarm kit:
- DVS90 Alarm Kit — Item no. 600900
- Input wire for Link Hub — Item no. 440060

For increased security, DVS90 (Item No. 600900) can be supplemented with:
- Motion sensor — Item no. 600914
- Level sensor — Item no. 600922
- Second Authorization — Item no. 600678
- 2-circuit immobilizer — Item no. 600890



Accessories and tools for Security



Motion sensor

2,5 m cable	**Item no. 600914**
5 m cable	**Item no. 600916**



Level sensor

	Item no. 600915



Sirens

Standard Siren	**Item no. 600911**
Back-up Siren	**Item no. 600912**



2-circuit immobilizer

	Item no. 600890



Remote control

	Item no. 600677



Second Authorization

Second Authorization remote control	**Item no. 600676**
2 Second Authorization remote control and user manual	**Item no. 600678**



Accessories and tools

1. Extractor tools for P2	**Item no 600525**
2. Splitter kit	**Item no. 600913**
3. Hood switch	**Item no. 600523**
4. Central locking module	**Item no. 600295**
5. Extractor tools for P4, P5, P6 and P7	**Item no. 600930**



Input wire - upgrade to Finder Link

	Item no. 440060

e-mobility

eConnect™
Charging cables 78
Smart accessories 78

eMove®
Portable charger 79

DEFA Power™
Charging station 80

DEFA Solid™
Charging station 81

eConnect™ charging cables - Mode 3

eConnect charging cables have been developed and tested for long term use in harsh environments. They are lightweight and durable, they remain flexible even in severe cold and have smart features and accessories that help make them the most user-friendly EV charging cables on the market. To validate the quality of our cables, we have conducted a wide variety of extensive material and usability tests.



Tested in all weather conditions
Resistant materials
Withstands UV radiation, chemicals and wear

ECONNECT - PRODUCT RANGE:

Item no: RED	Item no: BLACK	Ampere (A)	kW	Phase	Length (m)
711304	500904	20	4,6	1	5,0
711305	500905	20	4,6	1	7,5
711308	500908	32	7,4	1	5,0
711309	500909	32	7,4	1	7,5
711306	500906	20	13,8	3	5,0
711307	500907	20	13,8	3	7,5
711310	500910	32	22,0	3	5,0
711311	500911	32	22,0	3	7,5

eConnect™ -smart accessories

Smart accessories make eConnect cables even more user-friendly. With the docking station unit on the wall, your cable can be secured with a lock and protected from theft. It also makes it easier to coil and protect the cable from dirt and moisture. The cable bags makes it easier to store and transport the cable when it's not in use.



Item no: 712268
eConnect Docking



Item no: 712593
eConnect Basic Bag



Item no: 712594
eConnect Premium Bag

eMove® EV portable charger - Mode 2

eMove Mode 2 is a portable charger for electric vehicles that has been made with the user in mind. Unique features, unmatched user-friendliness, and extreme durability for safe charging on the move.

Efficient cable management: Cable clips and guides keep the cable tidy and convenient to bring with you
Robust and durable: Aluminum housing ensures a long product life, even in rough conditions
Easy to wind: The markets most flexible cable, even in temperatures down to -40°C
Flexible mounting options: Use wall bracket included with the product or hang from hook
Safe power connection: It checks temperature in domestic plug and control box and charging will stop if temperature becomes too high
User-friendly: Intuitive interface
Power Adjustment: User can reduce charging current to protect the infrastructure where the cable is connected
High mode: High mode provides faster charging for the first 120 minutes (see table)

eMove - made with the user in mind.



Item no.*	Normal rating A]	High rating for 120 min [A]	Pre-set low rating [A]	Total length[m]	Country*	Domestic plug (with protective earth)
502001	16	-	10	6	Germany, Austria, Netherlands	CEE 7/7 Type E / Type F
502002	13	15	8	6	Sweden	
502003	10	15	8	6	Norway, Sweden and most of Europe	
502004	8	12	6	6	France, Finland, Estonia Latvia, Lithuania	
502005	6	9	6	6	Denmark**	
502103	10	13	8	6	UK, Ireland	UK plug BS1363 & S.I. 1768 Type G
502117	8	10	6	6	Switzerland	Swiss plug SN441011 Type 13
502125	6	9	6	6	Denmark**	Danish plug DS 60884-2-D1 DK2-1a, Type K

* Check national regulations, your fuse size and defa.com for which product to be used in your country.
** See different domestic plugs

DEFA Power™ - More power to you

The smartest way to control your power, allowing you to charge at the lowest cost with the maximum output. DEFA Power has an intuitive display and 6 meter integrated charging cable that simplifies your daily use and gives you full control of your charging. DEFA Power optimizes available power, and with PowerSmart you can avoid peak periods and charging when power is most expensive.

Made for maximum power
True 22kW charging. DEFA Power is designed through advanced simulations ensuring fastest possible charging.

PowerSmart™ with the Power App
The power to set your charge when the prices are low, based on daily prices from Nord Pool. You can also avoid extra tariffs on peak periods. Can be used with any energy company and all cars.

Best in Test
DEFA Power has won several tests, been recommended by experts, and has been named the Charging Station of the Year.

User-friendly
Intuitive high quality display with step by step charging experience.



Future ready
Connectivity: WiFi, 4/5G*, LAN
Configuration: Bluetooth
Open standard: OCPP 2.0.1 and ISO15118
**Mobile network subscription needed*

Easy access
Effective access steering.
- Access control via QR-code
- RFID / NFC, and SMS

Integrated charging cable
Robust 6 meter charging cable made for extreme condition provides flexibility for daily use. Includes a smart vehicle plug cap to protect the connector.

One device fits all
Can handle all power and phase needs in all European markets.

Technical spesifications			
Item number	715000	**RDC-DD**	6mA DC in acc. IEC 62955
Dimension	L: 350 x W: 167 x D: 113	**IP**	IP55 (Wall bracket IP44)
Weight unit / cable	2,5 kg / 3,5 kg	**IK**	10
Operating temperature	-40°C to +50°C *	**Fire classification**	UL94 V0
Storage temperature	-50°C to +85°C	**Isolation class**	I
Material charging unit	Polycarbonate	**Overvoltage category**	III
Charging power	Up to 22kW	**Overheat protection**	Internal sensor
Charging current	6–32A (adjustable)	**Standard & certification**	CE, IEC61851, IEC62955, IEC61439-7, IEC60947-2, EN50470-1, EN50470-3
Rated voltage three phase	230/400 V (1/3-phase, 50-60Hz)	**Grid**	TN / IT / TT
Rated voltage single phase	220-240 Vac (50-60 Hz)	**Fuse size**	32A
Charging mode	Mode3	**RCD**	RCCB Type A and MCB or RCBO
Connection to vehicle	Type 2 C	**Maximum cable size**	16 mm^2
Charging cable	Included, 6 m	**Torque value**	2,5Nm
Integrated display	Size: 69 mm x 69 mm. Brightness: Automatically adjusted	**Stripping length**	20 mm +/-2

*Charging unit can be used within temperature range -40 to +50 when MID metering is not required

DEFA Solid™ - Solid simplicity

A solid and convenient EV charger giving you the power you need. DEFA Solid has a robust design made for extreme conditions. The premium charging cable and intuitive interface with energy saving simplifies your daily use and lowers your energy costs. Can easily be connected utilizing available power infra-structure, such as a domestic socket.



Robust charging solution: The EV charger has a robust design made for extreme conditions. The premium integrated charging cable keeps flexible even in severe cold. Up to 4.6 kW.

Easy to use: DEFA Solid has an intuitive interface, with an on/off button that is also used for energy saving, that helps you lower your energy costs. Connection is easier with an integrated cable, and you can wrap the cable around the charger when it's not in use.

Energy saving: You can easily control the charging power with the intuitive Select button on the display.
Choose between 4.6kW, 3.6kW or 2.3kW if the charging station is set to 20A.

Upgrade your existing domestic plug or industrial outlet with DEFA Solid: A quick and easy installation - giving you a convenient charging solution, - and a no brainer for your installer.

Integrated charging cable: DEFA Solid has a 6 meter charging cable which provides flexibility for daily use and when connecting to the car.

The vehicle plug cap is fastened with an adjustable strap that lets you pull it away from the car during charging.
The strap is fastened on the back of the cap so that it is left hanging upside down and doesn't collect water, snow and dirt.
This smart solution also prevents scratches on your car.

Easy and flexible installation: Your electrician can easily install DEFA Solid with the included wall bracket and quick connectors.

Technical spesifications	
Item number	712800
Rated voltage	230 VAC (1-phase, 50-60Hz)
Rated current	6A-20A
Charger type	Mode 3
Connection to vehicle	Type 2
RCD	30mA AC & 6mA DC
GRID	TN- and IT-power grid
Overheat protection	Internal sensor
Operating protection	-40 °C to 50 °C
Storage temperature	-50 °C to +85 °C
Size (L x W x D)	312 x 85 x 70 mm
Material charging unit	Aluminum with double protected plastic end caps
IK rating	IK 10
IP rating	IP 45
Weight	2,5 kg
Certification	CE, IEC61851, IEC62955
Recycling	EE-waste

CC&N GLOBAL LTD

Let’s talk.

Product advice, technical support, trade pricing and supply partnerships.

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