

Chargers and inverters

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DEFA Charging products



DEFA offers battery chargers for a wide variety of vehicles, the maritime sector, and industrial applications.

DEFA develops and manufactures a series of charging products that allow our customers to get the most out of their batteries.

Emergency vehicles and boats, life-saving equipment and electronic wheelchairs impose the strictest standards both on us and our products, and are just some of the things that drive us to always want to do better.

We continuously strive to meet the highest standards of quality, safety and flexibility, and to keep our customers going - for longer than ever.

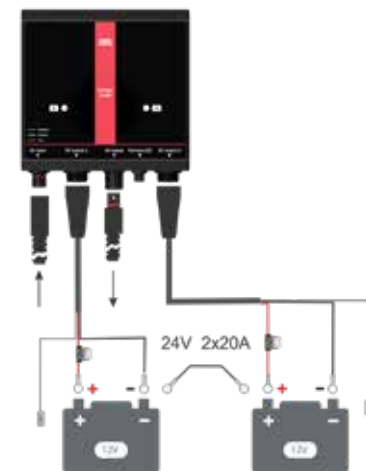
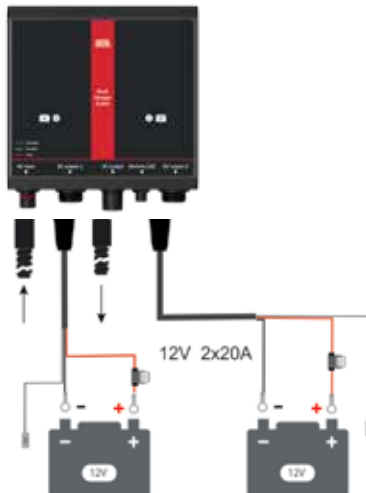
DEFA charging products have been developed for use with our own protected and splash proof cables with PlugIn connectors. The system eases installation of 230VAC in boats, mobile units and military equipment, and 42VAC charging systems for life- and rescue boats. The system is intuitive, reliable and durable, and can be installed without tools or a certified installer.

The 230VAC shore power system for boats includes a distribution box with fuses, a ground leakage circuit breaker, mains connections, outlets, PlugIn battery chargers and galvanic isolators to reduce the risk of galvanic corrosion and ground leakage. The system is module-based, enabling extension with additional components, such as engine heaters and auxiliary equipment.

Our customers are professional and private users in such areas where strict demands are required to meet expectations on functionality and a high degree of readiness. Quality control, knowledge and customer demand is an important part of our development and product philosophy.

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.



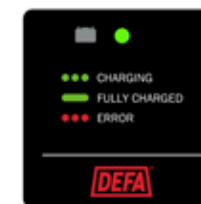
12V 1x35A

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:

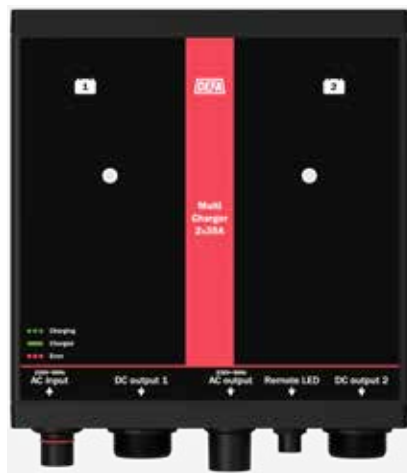
Item No:	
705099	2m Charging cable
705147	4m Charging cable
705159	6m Charging cable
705160	8m Charging cable
705294	5m Remote panel
705295	10m Remote panel
705296	20m Remote panel
705297	25m Remote panel
705463	Connection Schuko - PlugIn



Connection Schuko - PlugIn

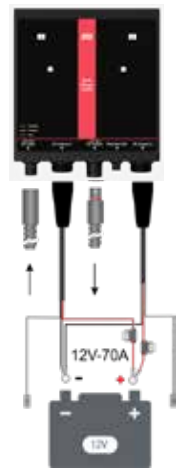
MultiCharger 2x35A

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.

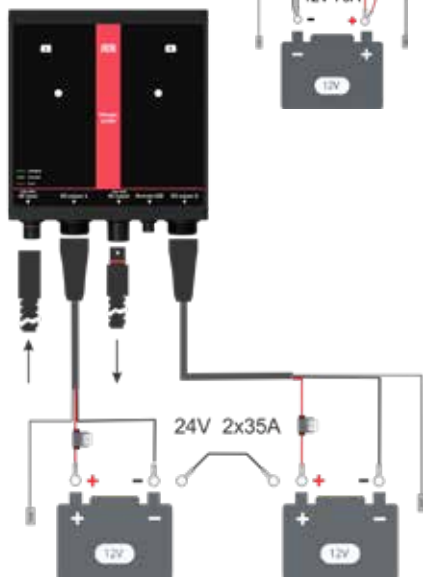


MultiCharger 2x35A	
Item no. with PlugIn 2x35A	708502
Mains voltage - VAC/Hz	220-240/50-60
Ambient temperature [°C]	-35 +50
Max charging voltage [VDC]	14,4
Float voltage [VDC]	13,5
Max charging current [A]	2x35
Recommended battery max[Ah]	2x600
IP rate [IP]	44
Weight [kg]	3,3
2x35A Height/Width/Depth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

12V SYSTEM

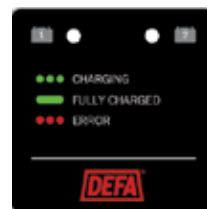


24V SYSTEM



ACCESSORIES:

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

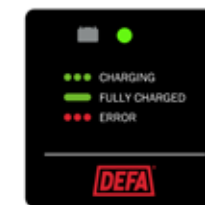
DEFA MultiCharger 40A is a 24V charger for trucks and heavy vehicles. It is compact with high efficiency, and robust for tough environments. To make it even more flexible to mount in tight spaces, remote panels are available as accessory.



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/Width/Depth - mm	282/171/82
Certifications:	EN60335-1, EN60335-2-29, EN55014-1, EN55014-2, EN61003-3/2

ACCESSORIES:

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

ShowroomCharger 32A

DEFA Showroom Charger 32A is based on modern switchmode technology and galvanised 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	220-240VAC, 50-60Hz
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:	
2,5m charging cable with standard clamps	708227
2,5m charging cable with special clamps	711400

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 / Powersupply 13,7 Volt
Rated voltage AC	230VAC
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

NEW! WorkshopCharger_{2.0} | 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 Li-ion. 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 / Powersupply 13,7 Volt
Rated voltage AC	100-230VAC
Charging voltage	14,4V/14,7V
Float charging	13,6V
Minimum battery voltage	2.0V
Max 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 Batteries and Li-ion
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 workshop - 2,5 meter or 5 meter cable available.

Detachable cables as spare parts:
 2,5m cable - Item No: 711940
 5,0m cable - Item No: 711950
 2,5m power cable - Item No: 711533

SmartCharge 4A and 6A

SmartCharge 4A and 6A 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 Powersupply for access to continuous current.



SmartCharge 4A / 6A

Item No. 4A	701515
Item No. 6A	706060
Height/Width/Depth - mm	210/90/54
Weight- gr	620
IP-rate	65



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.



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 NORWEGIAN DESIGN COUNCIL

POWERSUPPLY

Every so often you need access to continuous current, for instance when changing the battery in your car. With PowerSupply you can avoid leaving the car without power and having to reset every setting in the car later. You can also use PowerSupply to power 12V units such as an icebox or a portable sound system. The PowerSupply 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.

NEW! 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.

Remote panel

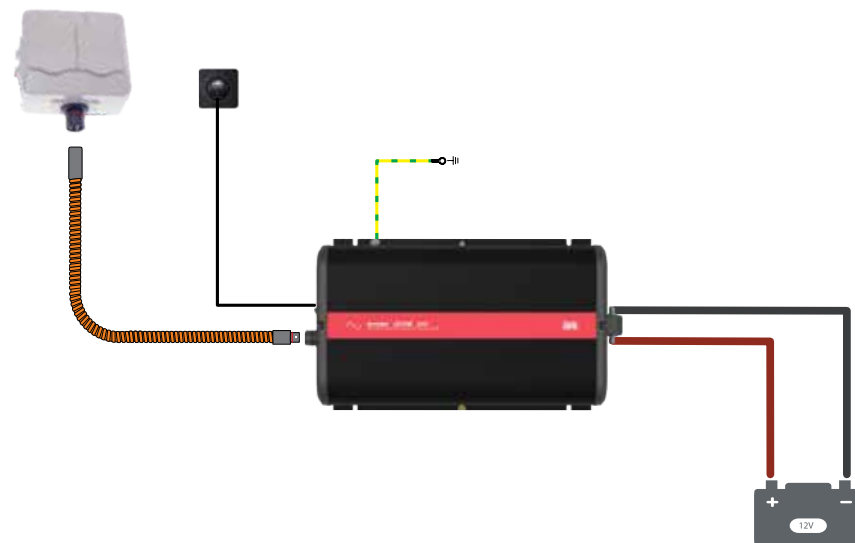
For Inverter 2500W 24V

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



Inverter 2500W - 24V

Item No. with Transfer switch	709595
Item No. without Transfer switch	709597
Item No. Remote panel	709340
Height/width/depth (mm)	412x254x88,5
Weight (kg)	6,3



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
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
703254	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

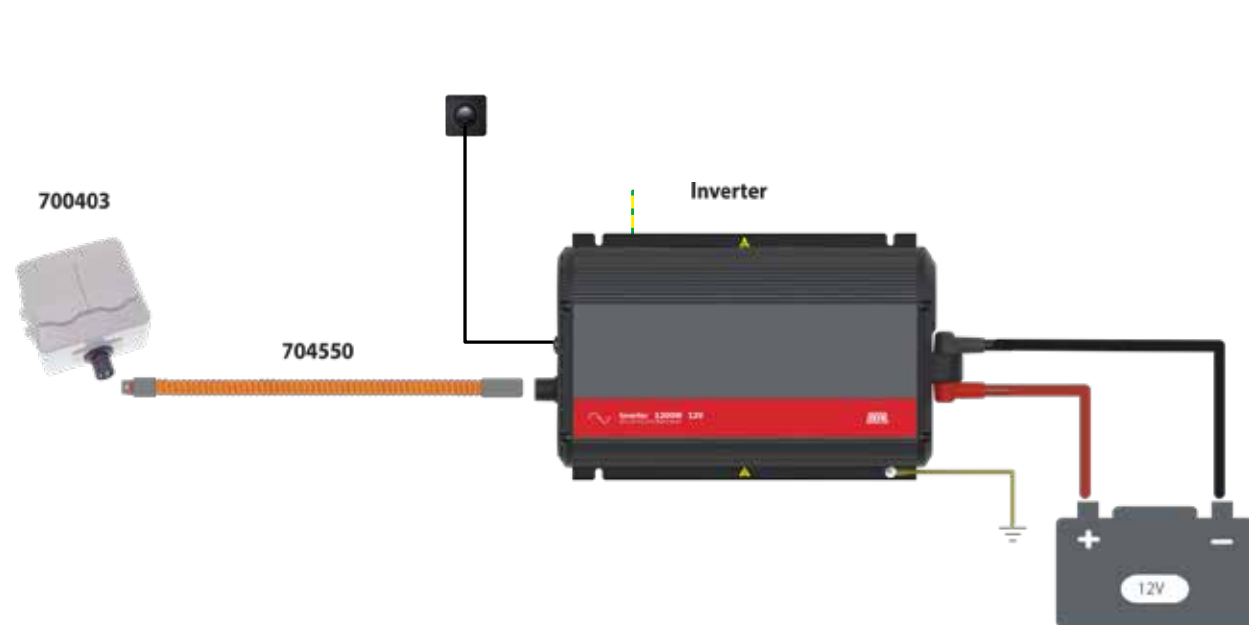
InverterKit

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:
704070	Inverter Kit 1 - 300W/12V	702935	704550	700403	702912
704071	Inverter Kit 2 - 600W/12V	702937	704550	700403	702912
711997	InverterKit 1200W - 12V	709191	704550	700403	709340
704073	Inverter Kit 4 - 1500W/12V	702941	704550	700403	702913
704074	Inverter Kit 5 - 2000W/12V	702943	704550	700403	702913
704075	Inverter Kit 6 - 1000W/24V	702949	704550	700403	702913
704076	Inverter Kit 7 - 1500W/24V	702951	704550	700403	702913
704077	Inverter Kit 8 - 2000W/24V	702953	704550	700403	702913
704078	Inverter Kit 9 - 2500W/24V	703254	704550	700403	702913
712001	NEW! InverterKit 2500W - 24V	709597	704550	700403	709340

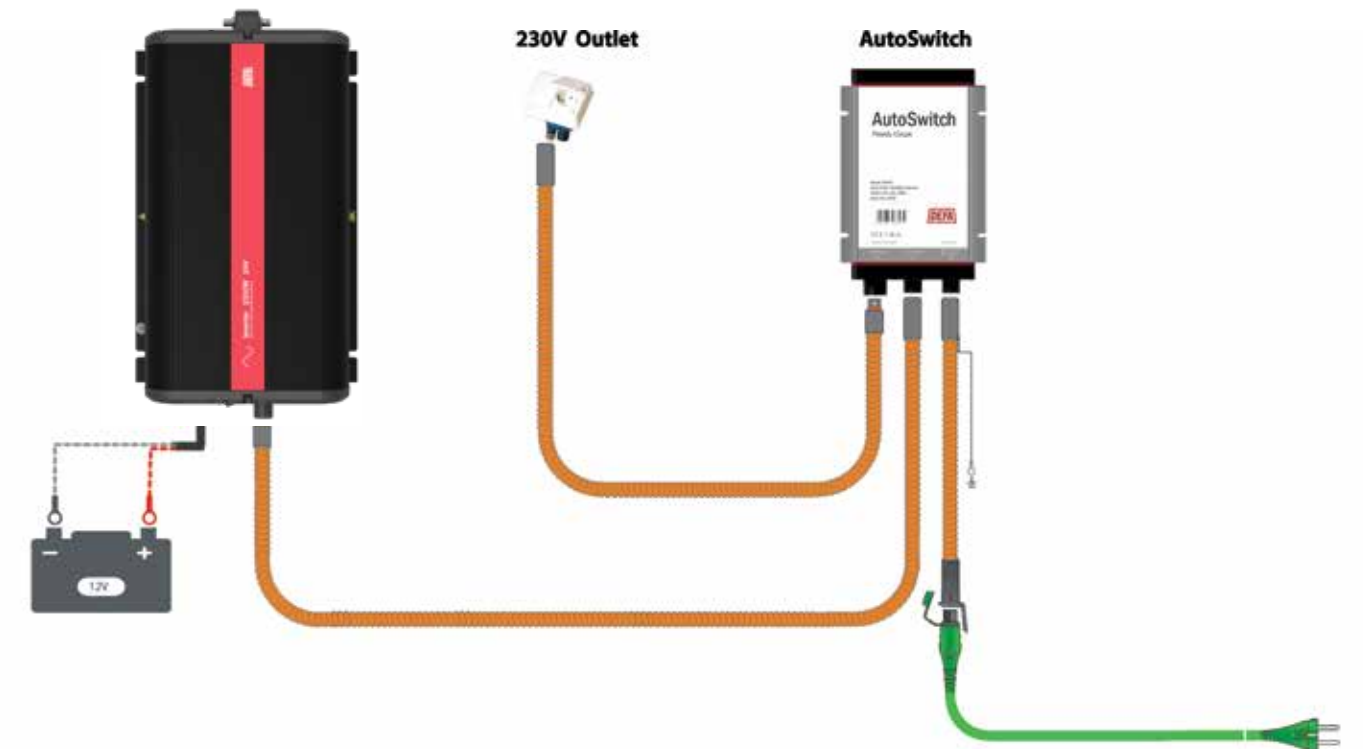


AutoSwitch

AutoSwitch 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 (V/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



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	Black
Item No (0,6m)	460902
Item No. (1,0m)	460901
Item No. (1,5m)	460915
Item No. (2,0m)	460939
Voltage - VAC	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 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.



MiniPlug Inlet cable	Orange
Item No (0,6m)	704557
Item No. (1,0m)	704558
Item No. (1,5m)	704559
Item No. (2,0m)	704561
Voltage - VAC	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



CEE / PlugIn Contact	
Item No.	701150
Voltage - VAC	230
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 - flush mounted single stainless steel

Item No.	700399
Mains voltage - VAC	230
Weight - kg	0,200
IP rate - IP	44



Wall outlet - on-wall mounted single

Item No.	700401
Mains voltage - VAC	230
Weight - kg	0,100
IP rate - IP	44



Wall outlet - on-wall mounted double

Item No.	700403
Mains voltage - VAC	230
Weight - kg	0,200
IP rate - IP	44



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

Item No.	702779
Mains voltage - VAC	230
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	230

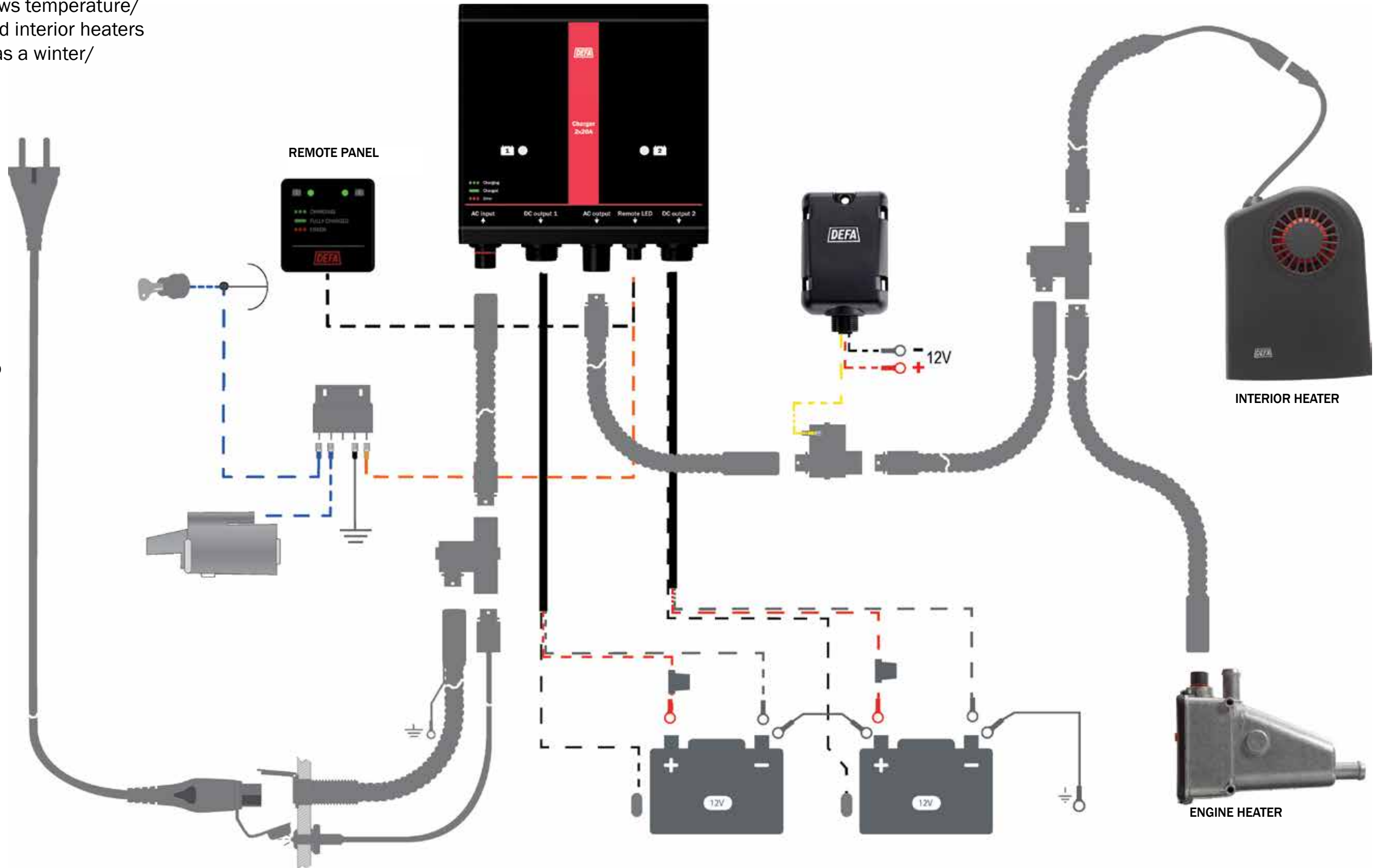
System overview

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.

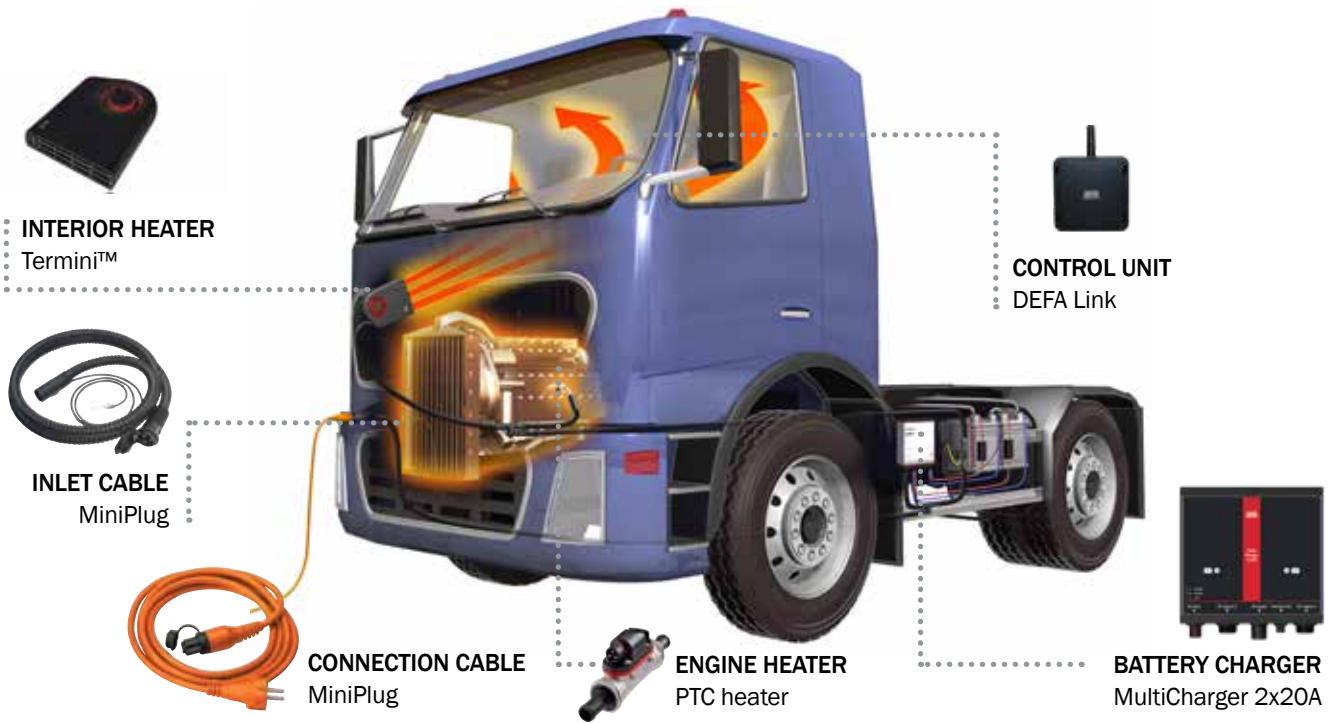
Remote LED shows the charging status of two batteries with red, yellow or green LED light.



Trucks and GenSet

The DEFA Charging system is developed with the intention of simplifying installations of battery chargers in cars, trucks, buses, tractors and construction equipment.

The system eases and enables connections with DEFA PlugIn cables, and eliminates the need for tools, and can be installed without assistance from a certified installer.



Agriculture and Construction

The DEFA charging system is simple, reliable and durable.

All cables and connectors are waterproof. DEFA PowerSystems is a module based system which makes it easy to to expand the system with additional components, such as engine and interior heaters.

