



Battery charging and power supply
For vehicles that are always on the move.





The DEFA PlugIn system

A complete solution for 230VAC power supply and battery charging

The vehicle is fast becoming the mobile office of the skilled tradesman. To charge and power tools, computers and electrical systems, there's a growing need for flexible and user-friendly 230VAC power supply solutions. An inverter has become a natural part of the installation in modern commercial vehicles, but many owners are not aware that using inverter quickly drains and degrades the battery. We recommend installing an onboard battery charger to maintain battery performance and longevity. The DEFA PlugIn cable and connector system ensures that our inverters and battery chargers can be easily integrated in your vehicle.

A unique cable system

The DEFA PlugIn system has the best 230V connector on the market, and is designed to facilitate the installation of a complete 230VAC system. Installing and connecting a PlugIn system is very easy, requires no tools and can be done by non-professionals.

All-inclusive kits

Our most popular products are available in kits that also include all the cables and accessories that you need to install the product in your vehicle. To provide added flexibility, the MiniPlug connection cable is ordered separately in the desired length.

Leading manufacturer

We have perfected our PlugIn system over many years and we are now the leading provider of power supply and charging systems for vehicles of all sizes and specifications.

Products of the highest quality

Research, quality control, and close cooperation are all central tenets of our product development philosophy. Research and development take place in our own factories, and our products undergo rigorous testing to ensure that they meet the most stringent requirements in the market. As a result, customers trust our products for the most demanding applications, such as in emergency vehicles.

"You shouldn't have to plan how to charge your phone or battery packs for your tools, and you shouldn't have to worry about draining the battery in your car."

Jon Anders Walle,
Key Account Manager
Würth Norway



The mobile work space

If you are an installer or a skilled tradesman, access to 230VAC power and proper battery maintenance in your vehicle is essential to performing your job. Our solutions provide the reliability and efficiency that you need.

A complete solution:

Battery charging + preheating + 230VAC power supply.

The DEFA PlugIn system is modular, and can be expanded with additional components when the need arises. By adding cabin and engine heaters you can get into a warm car with windows free of ice and snow - every morning, all year round.

Components in DEFA's PlugIn system



CONTROL SYSTEM
Pre-heat, charge and protect your vehicle via your phone



INVERTER & ACCESSORIES
Access to 230VAC in the vehicle



CABIN HEATER & CABLES
Visit defa.com for more information



OUTLETS & ACCESSORIES
Multiple versions



ENGINE HEATER
Visit defa.com for more information



BATTERY CHARGER AND ACCESSORIES
Maintains battery performance and longevity

DEFA MultiChargers - Permanently-installed battery chargers

Get the most out of your battery

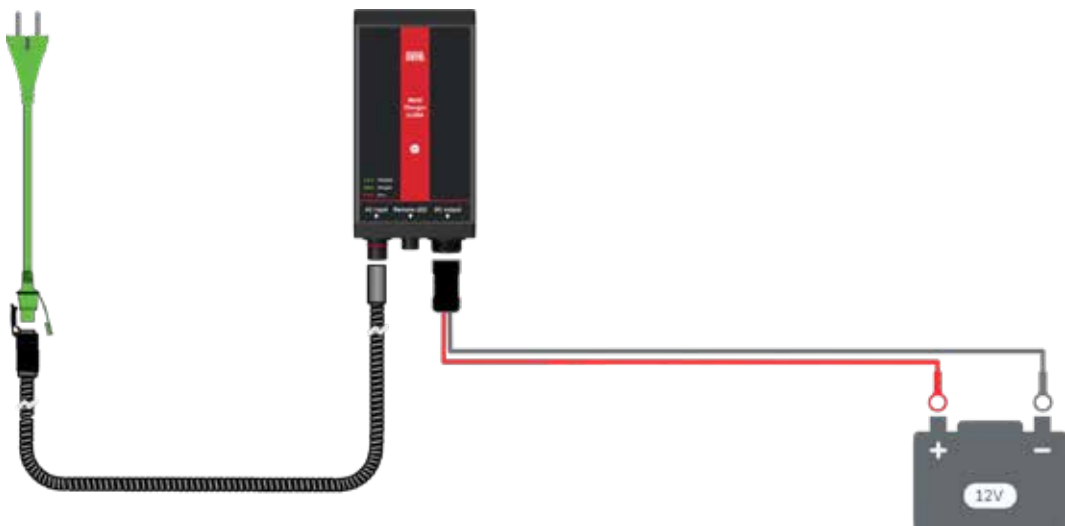
We develop and manufacture a wide range of intelligent battery chargers, that help your customers maintain battery performance and longevity. Our chargers are compact, highly efficient and analyzes each battery to create an optimized, temperature compensated charging curve. We have solutions for vehicles of all types and sizes.

Our battery chargers are designed for use with our proprietary waterproof cables (IP44) and plug-in connectors, providing straightforward installation and easy handling. The chargers can be easily integrated or extended with remote panels, inverters and the AutoSwitch priority selector to obtain a complete system. The chargers are suitable for all lead-acid batteries (AGM, GEL, EFB, start-stop).

The battery chargers are purchased separately or in pre-packaged ChargerKits, which contain everything you need for a complete installation.



ChargerKit wiring diagram



DEFA ChargerKits

DEFA's ChargerKits are designed to make ordering and installation as easy as possible. DEFA ChargerKits include all the products and cables required for a complete installation. For specifications of the contents in each ChargerKit, refer to page 9. All products can also be purchased separately.

ChargerKit 1210 Flex | 10A

A complete kit for small vehicles with a compact battery charger and cabling. Flexible connectors allow for quick and easy installation.



ChargerKit 12A & 2x12A

For permanent installation in small vehicles. For batteries up to 2x150Ah. MultiCharger 2x12A must be used when both the starter and main battery need to be charged.



ChargerKit 20A & 2x20A

Powerful and compact battery charger with cabling. Can be easily installed in all types of vehicles. MultiCharger 2x20A must be used when both the starter and main battery need WATERPROOF (IP44) to be charged. For batteries up to 2x250Ah.



MultiCharger 35A & 2x35A (not available as ChargerKit)

Compact and powerful battery charger for use in heavy vehicles. Cables in desired lengths and remote panels are ordered separately, which results in a flexible system that can be adapted to any situation. MultiCharger 2x35A must be used when both the starter and main battery need to be charged. For batteries up to 2x600Ah.



Choosing an ChargerKit:

The size of the batteries and the possible charging time determine which battery charger you should choose. Do you want help determining which charging package suits you best?

Contact us, and we will assist you!



DEFA Inverters

Permanent access to 230VAC power

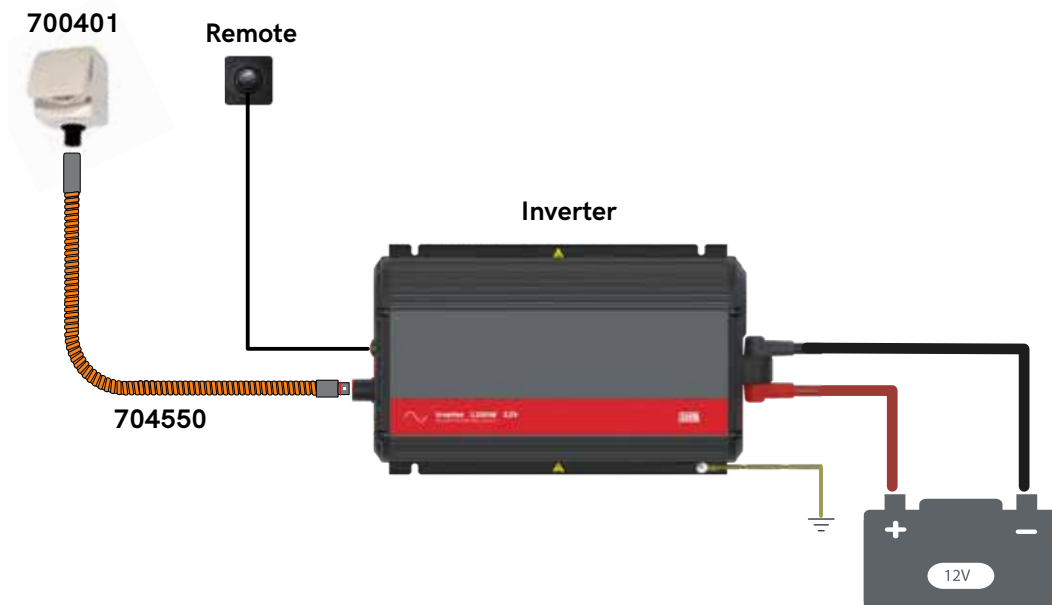
An inverter provides access to 230VAC in the vehicle, making it possible to charge or operate most types of electrical equipment. Our inverters meet the highest standards of quality and safety. They are designed to withstand heavy use and provide the best possible voltage at all times. You can expand the system with additional outlets at any time.

All inverters can be controlled remotely via a control panel. This makes it easier to use inverter when it is placed in a hard-to-reach area.

- LOW POWER CONSUMPTION
Eco function reduces power consumption when inverter not in use
- QUIET
Fan with variable speed
- SIMPLE INSTALLATION
Built-in transfer switch (1200 W)
Takes little space
- CAN BE INSTALLED IN HARD-TO-REACH AREAS
Remote panel for ON/OFF
- FOR ALL MODERN GENERATORS
Voltage range 10.5V-16V



Inverter kit wiring diagram



DEFA Inverter kits

DEFA's inverter kits are designed to make ordering and installation as easy as possible. DEFA inverter kits include all the products and cables required for a complete installation. For specifications of the contents in each inverter kit, refer to page 9. All products can also be purchased separately.

Inverterpaket 300W

Inverter 300 W 12V is suitable for the power supply of TVs, computers, etc.



Inverterpaket 600W

Inverter 600W 12V is suitable for the power supply of TVs, computers, etc.



Inverterpaket 1200W

DEFA's latest inverter, 1200 W, has a built-in power save mode, which means that power consumption from the battery is minimal if the inverter is connected, but without load. Two versions of Inverter 1200 W are available, one of which has a built-in transfer switch. We recommend using an additional battery when installing Inverter Kit 1200 W.



Inverterpaket 1500W

Inverter 1500W is suitable for powering products with high output such as tools, coffee makers, etc. We recommend using an additional battery when installing Inverter Kit 1500 W.



Inverterpaket 2000W

Inverter 2000W is suitable for powering products with high output such as tools, coffee makers, etc. We recommend using an additional battery when installing Inverter Kit 2000 W.



Choosing an inverter kit::

What inverter size do you need? The answer depends how much power your equipment needs. A good rule of thumb is to double the equipment output and then choose the nearest inverter above this amount. Refer to the example below..

Calculation example

Product	Output	Recommended inverter size
Tablet	~10W	300W
Computer	~90W	300W
Drill	~850W	2000W
Vacuum cleaner	~1000W	a2000W



DEFA PlugIn system accessories

Accessories that increase value

There's a wide range of accessories available for the DEFA PlugIn system. Go to defa.com see more. To view the full range, visit defa.com..



Inverter Control Panels

All inverters can be remotely controlled from a separate control panel, making it easier to use the equipment when the inverter is installed in a hard-to-reach area. Available in both externally-mounted and recessed versions.



Battery Charger Remote Panel

Fjärrpanelen kan placeras på en lättillgänglig plats för att enkel avläsning av laddstatus.



Electrical socket

Electrical sockets for the DEFA PlugIn system are available in single and double versions for recessed and external mounting.



AutoSwitch

The AutoSwitch makes it possible to supply sockets in the vehicle both from the inverter and from a mains outlet. The transfer switch automatically switches between each power source and ensures that power is not being drawn from the battery when you connect the vehicle to mains. The AutoSwitch also has a safety function that ensures that there is no voltage in the input cable when only the inverter is in use.



Manual summer/winter switch

The summer/winter switch is a manual switch that allows engine and cabin heaters to be disconnected during the summer without affecting the charger.

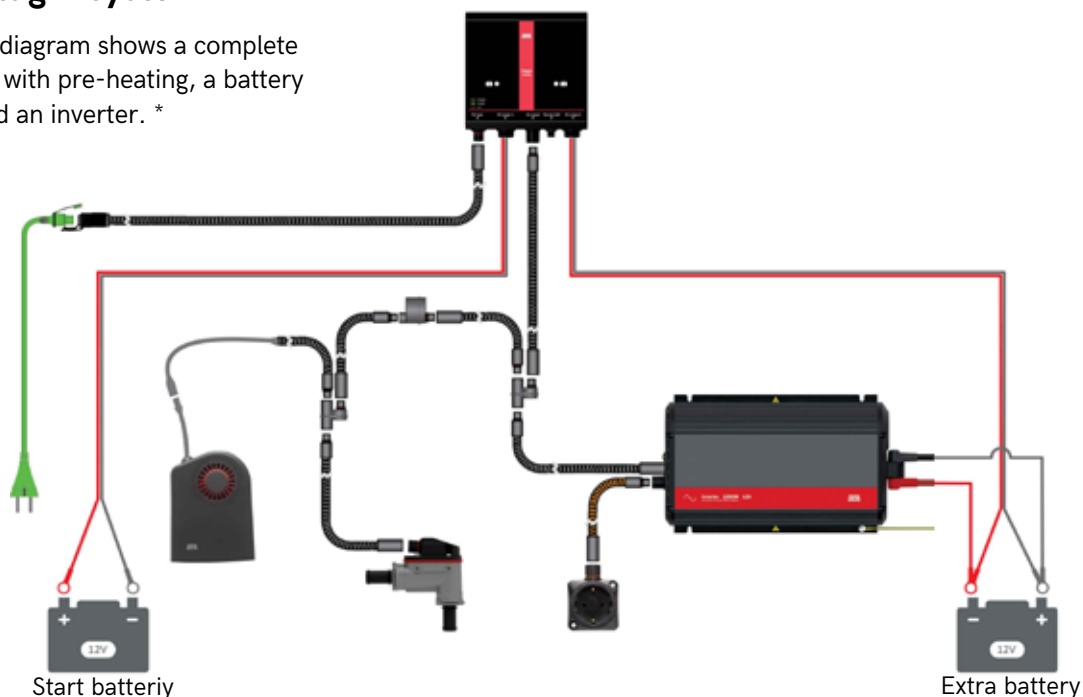


MiniPlug & MiniPlug Xtreme connection cable & input cable

DEFA's MiniPlug cables allow for simple installation and first-rate safety and reliability. The MiniPlug Xtreme connection cable is designed to withstand extreme weather conditions such as very low temperatures.

DEFA PlugIn system

The wiring diagram shows a complete installation with pre-heating, a battery charger and an inverter. *



*This is just an illustration. The installer is responsible for ensuring that the installation complies with current regulations and standards

DEFA PlugIn system

Article number and technical specifications

ChargerKits - Battery charger kits

Art.no.	Name	Batter charger	Charge current	Input cable	Connection cable	Charging cable
450033	ChargerKit 1210 Flex	MultiCharger 1210 Flex	10A	1,5 m	2,5 m	2 m, lös
706252	ChargerKit 1x12A	MultiCharger 1x12A	1x12A	2,0 m	5,0 m	2 m, permanently installed
706910	ChargerKit 1x12A	MultiCharger 1x12A	1x12A	1,5 m	2,5 m	2 m, permanently installed
706253	ChargerKit 2x12A	MultiCharger 2x12A	2x12A	2,0 m	5,0 m	2 m, permanently installed
706930	ChargerKit 1x20A	MultiCharger 1x20A	1x20A	2,0 m	5,0 m	2 m, loose
706931	ChargerKit 2x20A	MultiCharger 2x20A	2x20A	2,0 m	5,0 m	2 m, loose

Battery charger

Art.no.	Name	Charging voltage [VDC]	Maintenance [VDC]	Current [A]	Battery size max. [Ah]	Enclosure rating [IP]	Dimensions H/W/D [mm]	Weight [Kg]
450017	MultiCharger 1210 Flex	14,4	13,5	10		65	105x71x42	0,384
705200	MultiCharger 1x12A			12	150		138x98x53	1
705300	MultiCharger 2x12A			2x12	2x150		138x201x53	2
705800	MultiCharger 1x20A			20	250		183x98x53	1,5
709850	LithiumCharger 1x20A			20	250		183x98x53	1,5
705900	MultiCharger 2x20A			2x20	2x250		182x190x53	3
709860	Lithium + Multi 2x20A			2x20	2x250		182x190x53	3
709870	LithiumCharger 2x20A			2x20	2x250		182x190x53	3
704600	MultiCharger 1x35A			35	600		200x98x53	2
704700	MultiCharger 2x35A			2x35	2x600		200x190x53	4,7









Inverter kit

Art.no.	Name	Inverter	Input VDC	Cabel	Electrical socket	Control panel, recessed
715967	Inverter kit 300W	702935	12V	2 m (704550)	Singel wall mountet (700401)	6 m (702912)
715968	Inverter kit 600W	702937				6 m (709340)
715969	Inverter kit 1200W	709191				6 m (702913)
715970	Inverter kit 1500W	702941				
715971	Inverter kit 2000W	702943				























Inverters

Art.no.	Name	Input (VDC)	Output (VAC)	Continuous - W	Weight - kg	Dimensions - mm
702935	Inverter 300 W	12V	230V	300	2,6	230x151x64
702937	Inverter 600 W			600	3,5	324x170x68
702939	Inverter 1000 W			1000	5,2	390x223x101
709191	Inverter 1200 W			1200	4,7	360x225x98
709090	Inverter 1200 W + Autoswitch			1500	6,2	420x223x101
702941	Inverter 1500 W			2000	6,5	420x289x100
702943	Inverter 2000 W					









Battery charger accessories

Art.no.	Name	Cable length	Suitable for
 705294	Battery charger remote reader	5 m	1x20A/ 1x35A
 705162	Battery charger remote reader	5 m	2X20A/ 2X35A
 705295	Battery charger remote reader	10 m	1x20A/ 1x35A
 705163	Battery charger remote reader	10 m	2X20A/ 2X35A
 705296	Battery charger remote reader	20 m	1x20A/ 1x35A
 705164	Battery charger remote reader	20 m	2X20A/ 2X35A
 705297	Battery charger remote reader	25 m	1x20A/ 1x35A
 705165	Battery charger remote reader	25 m	2X20A/ 2X35A






Inverter accessories

Art.no.	Name	Info	Suitable for Inverter
 702912	Control panel, recessed	Cable length 6 m	300W/ 600W
 702913	Control panel, recessed	Cable length 6 m	1000W/ 1500W /2000W
 704030	Control panel, recessed	Cable length 10 m	1000W/ 1500W /2000W
 705115	Control panel, external	Cable length 6 m	300W/ 600W
 705116	Control panel, external	Cable length 6 m	1000W/ 1500W /2000W
 705117	Control panel, external	Cable length 10 m	1000W/ 1500W /2000W
 709340	Control panel, recessed	Cable length 6 m	1200W
 703697	AutoSwitch priority selector		
 700595	Battery separator	100A	
 700596	Battery separator	200A	
 700399	Electrical socket, recessed	Stainless steel	
 700401	Electrical socket, external	Single	
 700403	Electrical socket, external	Double	
 702779	Electrical socket, external	Double with PlugIn in and out	
 700405	Electrical socket, external	Main socket double 16 A	
 701317	Electrical socket, recessed	Single, white	
 701315	Electrical socket, recessed	Single, grey	
 701307	Frames for outlet	Single, white	
 701305	Frames for outlet	Single, grey	
 701310	Frames for outlet	Double, white	
 701308	Frames for outlet	Double, grey	
 701123	Summer/winter switch	Manual	



Connection cables

Art.no.	Name	Length	Cable area per cord	Info
 460955	MiniPlug Xtreme	2,5 m	1,5 mm	
 460957	MiniPlug Xtreme	5,0 m	1,5 mm	
 460920	MiniPlug anslutningskabel	2,5 m	1,5 mm	
 460938	MiniPlug anslutningskabel	3,5 m	1,5 mm	
 460921	MiniPlug anslutningskabel	5,0 m	1,5 mm	
 460960	MiniPlug anslutningskabel	2,5 m	2,5 mm	For connection to power
 460961	MiniPlug anslutningskabel	5,0 m	2,5 mm	For connection to power
 460962	MiniPlug anslutningskabel	10,0 m	2,5 mm	For connection to power

Input cables

Art.no.	Name	Length	Info
 460901	MiniPlug intagskabel	1,0 m	
 460915	MiniPlug intagskabel	1,5 m	
 460939	MiniPlug intagskabel	2,0 m	
 704558	MiniPlug intagskabel	1,0 m	For the location of 230V.
 704559	MiniPlug intagskabel	1,5 m	For the location of 230V.
 704561	MiniPlug intagskabel	2,0 m	For the location of 230V.

Extension cables

Name	Art.no. Black	Art.no Orange	Length	Info
MiniPlug extension cable	460802	704547	0,5 m	
	460803	704548	1,0 m	
	460843	704549	1,5 m	
	460804	704550	2,0 m	For the location of 230V.
	460844	704551	3,0 m	For the location of 230V.
	460846	704552	4,0 m	For the location of 230V.
	460809	704553	5,0 m	
	460847	704554	8,0 m	
	460851	704555	10,0 m	
	460850	704556	12,0 m	

Need something else??

Visit defa.com to view the full range or feel free to contact us for assistance!

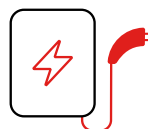
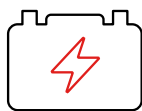
Om DEFA

Our goal is to make people's lives easier, more efficient and more environmentally friendly. We provide products and services that improve the way people charge, preheat and secure their vehicles, light up their buildings and roads, control their cabins and vehicles. We are dedicated to creating great products and services through continuous improvement and innovation.

EFA is a family-owned Norwegian technology company established in 1946, with employees in seven countries on three continents. For more than 75 years, we have evolved from a local family business to an international charging company, driven by the search for new connections between technology and people.

LCV - E00 HG 06092023

Chargers & inverters



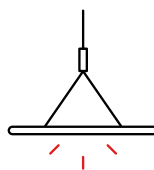
EV charging

Security & tracking



Electrical preheating

Cabin heating & security



Lighting

Mobile services



För mer information, besök defa.com

