ENDRESS®

Power Generators

PRODUCT CATALOGUE

GERMANY
since 1914

ENDRESS

Leading in mobile power generators

ENDRESS has specialised in the development, production and distribution of first-class generators since 1914. ENDRESS will continue to safeguard its leading role in the future through technically demanding and trendsetting innovations and new products.

Important principles of the company policy are:

- Performance and reliability through a choice of outstanding components and standardised quality
- Environmental compatibility and futuristic technology through in-house development and production
- ENDRESS know-how at its locations worldwide

Innovation and customised product development as well as application guidance are the action parameters of a service-oriented company philosophy. This will allow ENDRESS to meet the growing demands and internationalisation of commercial companies in the future as well.

For further information:

Click here to go to our **homepage**

Futuristic technology through in-house development and production

ENDRESS is one of Europe's market leaders in the generator sector. Decades of experience in generator development and production guarantee the highest quality and absolute reliability.

With an power range of up to 2000 kVA, ENDRESS meets all requirements. Innovative special equipment for fire brigades, disaster relief and emergency services and the fulfilling of special requirements in the construction, municipal and project businesses are also part of our range of equipment, as are our floodlighting systems and emergency power supply generators.

Excellent engineering by ENDRESS

DUPLEX

DUPLEXplus

ECOtronic

maxdrive

E-RMA System
connected power

Index

DUPLEX

DUPLEX in a nutshell

Yesterday:

As no electronics were used with the units, asynchronous generators were needed to produce so-called “clean” current, and synchronous generators are needed to handle the “hard starts”.

Today:

With Duplex technology, the electronic controller unit regulates itself individually to each drive engine and reacts appropriately before the engine is overstrained. In this way, reserve output can be mobilised and the Duplex generator powers even the heaviest inductive appliances and protects sensitive appliances from damage. Therefore all of the advantages of asynchronous and synchronous generators are combined in the DUPLEX system and this ends the discussion about which technology is the better, synchronous or asynchronous.

Advantages at a glance:

- Combines and strengthens the advantages of asynchronous and synchronous generators
- WCT technology:
  W = wear-free C = contact-free T = trouble-free
- Simultaneous use by electronic and inductive appliances
- Brushless, electronically regulated synchronous generator
- Brushless technology - therefore 20,000 operating hours
- Protection Class IP 54 — protected from dust and spray
- 200% unbalanced load in actual operation
- Voltage stability ±1% with 3~ generators
- Up to 4 times the starting current
- 100% short-circuit-proof
- Distortion factor ≤ 5%

A power generator for every use!

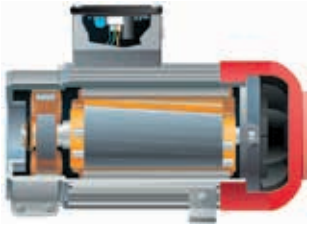
The fine distinction:

The ENDRESS DUPLEX system is an intelligent excitation machine that works where carbon brushes that are traditionally wear-prone are used.

In connection with the power electronics, it represents the pinnacle of modern power generation technology.

Rotor head with wear-prone carbon brush operation

DUPLEX rotor head fitted with an intelligent excitation machine



All DUPLEX generators are built to IP 54 — for your safety

Greater safety with IP 54.
Why is IP 54 so important?

Generators of protection class IP 54 are protected from the smallest dust particles and spray water. This not only lengthens your generator's life, but most of all protects the people who work with it.

Large and heavy was yesterday - small and light is today!

Dimensions: small!
Power: huge!
The same pure power as a large unit!

Where heavy stationary plants of up to 15 kVA had to be used in the past, a 13 kVA DUPLEX power generator is sufficient today. A brushless DUPLEX generator can bypass the starting currents with up to 4 times the rated current.

First in its class — for better mobility.

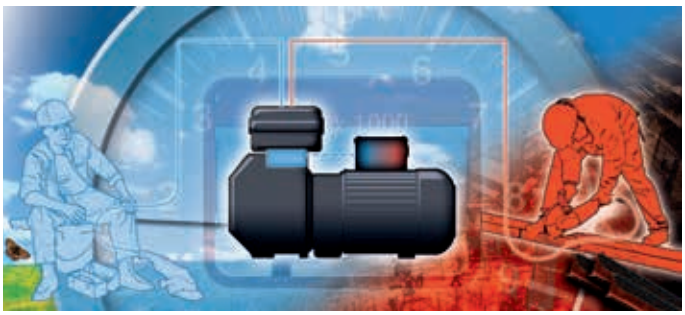
Only DUPLEX generators give you the guarantee that no asymmetric load can occur

Clean power for sensitive consumers.
What is "clean power"?

Electronic appliances, such as welding equipment, computers, TVs, stereos, heating systems or various electronic controls require constant power and a stable frequency.

Our DUPLEX technology protects your appliance by producing a voltage constant of up to ±1% of nominal voltage (230V).

Technology and innovation



What is ECOtronic?

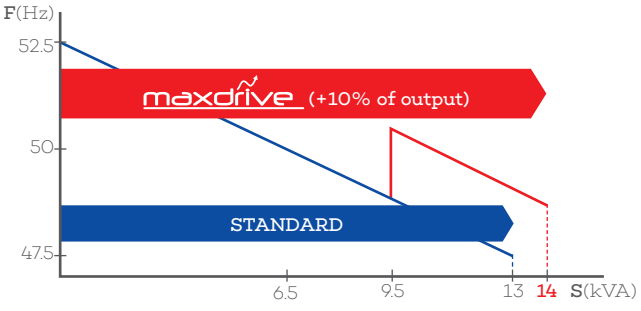
The generation of current with a conventional petrol generator takes place at a high speed range of 3000 rpm. However, according to experience a generator often runs without a load during use. From today's point of view this leads to wasteful use, such as during work with electric tools on construction sites or in repair or emergency use. In order to meet these requirements, the ECOtronic system was developed by ENDRESS and is already used today as standard in the DUPLEXplus line.

Here's how it works:

ECOtronic is an environmentally-friendly alternative to conventional electricity generation. During use, the ECOtronic system recognises whether an output is being used or not. The speed is significantly reduced if no power is being drawn. This happens automatically and the generator keeps running quietly and economically, however it always remains in stand-by. The ECOtronic system immediately provides full power again without delay only when power output becomes necessary, e.g. when using an electric power tool.

Advantages at a glance:

- Up to 30% less fuel consumption
- A longer engine service life
- Operating costs are lowered
- Reduction of the pollutant emissions
- Significantly reduced noise emissions



ENDRESS's new maxdrive power management module allows engines to be used without performance loss.

Here's how it works:

During heavy loads, such as starting current or impact loads, the drive engine's centrifugal governor quickly reaches its limit. Before the power drops, the maxdrive power management module supports the engine regulator. The throttle opens all the way and this ensures that the engine's full power is available.

Advantages at a glance:

- An increase in the power output by 10%
- Rpm remains stable under heavy load
- A constant frequency, also in the upper rpm range

Connected power with E-RMA

ENDRESS Remote Monitoring Application

The E-RMA system was developed in order to also secure its emergency power supply over long distances. It does not matter where you are in the world, with the E-RMA system from ENDRESS, you always have an overview of the most important data.

E-RMA LAN

Using the E-RMA LAN system from ENDRESS will enable your stationary emergency power supply plant to be integrated into the building's computer network. After a few installation steps you can access your device anywhere, naturally even from your smartphone.

E-RMA SIM

Even when you might not have access to a network connection due to regional circumstances, you do not have to dispense with remote monitoring and control of your device.

ENDRESS offers a solution for this over the mobile telephone network with the E-RMA SIM. All you need for this is a GSM card with a data tariff (not included in the package).

After just a short set-up time you can control and regulate your emergency power generator from any location.

E-RMA Web application

Using the E-RMA system's web interface will enable you to view live data from your device and take over control at any time. It does not matter whether this is from a PC or from your smartphone. The most important components of the web application are:

- The control unit with the remote start option
- Alarm list
- Detailed generator information
- Localisation

For further information:

E-RMA flyer can be downloaded as a pdf

Interesting and worth knowing

The drive motor

Types of drive

- **Petrol engines** should be considered when the power generator should be compact for mobile use and when only running for average periods for variable operation is expected.
- **Diesel engines** are heavier and more sturdy and therefore better suited for longer running times. The specific fuel consumption of diesel engines is lower.

Starting system

There are two basic types of starting systems:

- **Recoil starter** to crank the engine manually as opposed to an automatic wind-up rope.
- **Electrical starting** over an ignition switch (a prerequisite being that the battery is present)

When high speed and when low speed?

High speed:

- 3000 rpm petrol or diesel engines
- Engines for daily use: for about 4 - 10 hours
- Life = service time: about 3,000 - 5,000 hours
- Applications: Building sites, skilled trades, road construction.

Slow runners:

- 1500 rpm diesel engines
- Engines for constant operation: 24 hours
- Life = service time: 10,000 - 20,000 hours
- Applications: Current and emergency power supply

Synchronous or asynchronous: a comparison of systems

	Synchronous	Asynchronous
Application	All ohmic and inductive consumers	Only ohmic consumers without any restrictions. Inductive consumer with considerable restrictions.
Starting behaviour	Trouble-free starting, regardless of the consumer. Compound controlled generators with 3-fold start up current. DUPLEX generators with four times the starting current	Problematic starting with the most difficult to start consumers; especially for generators without start amplification. For generators with start amplification, larger generator dimensions are needed.
Load capacity	The generator can handle a 100% load even with inductive consumers and it can therefore have a smaller design.	With inductive consumers, the generator can only be loaded up to 1/3 (without start amplification) and 2/3 (with start amplification).
Regulation	Mechanical regulation IP 23 Electronic regulation IP 54	Usually unregulated, condenser
Protection Class	Design-dependent internal cooling IP 23 Design-dependent external cooling IP 54	Design-dependent IP 54, external cooling.
Protective measures	Safety-separated circuit as personal protection An FI circuit breaker is not necessary	Safety-separated circuit as personal protection - A circuit breaker is not needed

The proper current quality

Asynchronous generator 230 / 400 V with condenser regulation	for appliances with a low starting current, cannot be overloaded
Synchronous 230V generator with condenser controlling	for consumers with starting current, not suitable for electronic consumers
Synchronous 230V generator with AVR controlling [1]	a stable output voltage for simple electronic consumers as well as for appliances with a low starting current, not suitable for electronic consumers with a very high starting current
Synchronous 400V generator with compound controlling [2]	consumers with a very high starting current, not suitable for electronic consumers, never suitable for an asymmetric load [3]
Synchronous 230V generator with inverter controlling	universally usable, a precise output voltage and frequency for sensitive consumers, as well as consumers with a starting current
DUPLEX 230V / 400V generator with electronic controlling	universally usable / suitable for an asymmetric load [3], a precise output voltage and frequency for sensitive consumers as well as consumers with a high starting current [4]

(1) AVR - Automatic Voltage Regulation
(2) Control of the generators voltage takes place through an additional magnetic field (a compound transformer is installed in the stator)
(3) An asymmetric load is understood as being non-uniform loading of a three-phase generator.
(4) The smaller the distortion factor the cleaner the supply voltage

Current types

12 V DC	which can be used for charging batteries.
230 V AC	the most frequently used type of current. Nearly all electric tools, lights and garden and construction machines can be run on it.
400 V three-phase	used at home for appliances like washing machines or cookers, and on construction sites for powerful consumers such as cranes or circular construction / table saws.

Key to abbreviations		
V	volts	Voltage (12 / 230 / 400)
Hz	Hertz	Frequency (50 / 60)
A	Amperes	Current strength
W	Watts (x 1000 = kW)	Active power [2]
VA	Volts Amperes (x 1000 = kW)	Apparent power [1]
Cos φ	Nominal established output factor	Power factor (0.8-1)

(1) Apparent power [3] - data in VA or kVA - is the power the generator can generate
(2) Active power [3] - data in W or kW - the output that can be drawn from the generator, depending on the generator's power factor.
(3) Reactive power - the difference between active and apparent power. This is important for covering the starting current.

For the commissioning of generators fitted with the protective separation measure and without a qualified electrician, additional equipment and measures for personal protection are required when more than one consumer will be connected, depending on the application.

See DIN VDE 0100-551 (HD 60364-5-551:2010/A11:2016), DGUV Information 203-032, DVGW GW 661(M).

Interesting and worth knowing

Electrical safety

All mobile generators are designed as standard in the protection measure with a circuit breaker with potential equalisation.

They fulfil the requirements according to DIN EN 12601.
No earthing is necessary for this protection measure.

IP	_	_	
-	0	Unprotected
-	1	Dripping water, vertical
-	2	Dripping water, diagonal to 15° from the vertical
-	**3**	**Spray water diagonally up to 60° of the vertical**
-	**4**	**Splashed water, from all directions**
-	5	Water jet, from all directions
0	-	Unprotected
1	-	Foreign objects > 50 mm
2	**-**	**Foreign objects > 12 mm**
3	-	Foreign objects > 2.5 mm
4	-	Foreign objects > 1.0 mm
5	**-**	**Dust protected**

The FI protection switch (RCD)

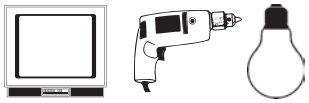
The FI circuit breaker provides further protection against dangerous currents. It shuts off the power supply if there is fault current. This protection measure requires appropriate earthing in which the earthing spike is connected to the generator's earthing screw for potential equalisation by an earthing cable. This is how a potential equalisation is created.

Safety-separated circuit - insulation monitoring with shut-off.

The appliances turn themselves off automatically if the insulation resistance reaches a critical level. The insulation monitoring function is controlled from a test button. Costly earthing with an earthing spike and earthing cable are no longer necessary. This equipment provides a high level of safety, especially in underground construction such as work on gas and water mains (moist environments). It is even obligatory for pipeline construction according to DVGW GW 308.

IP = International Protection according to DIN 40050

The IP code consists of two digits that indicate the specific degree of protection. The first digit indicates the protection class for touch and foreign object protection, and the second indicates water and moisture protection.



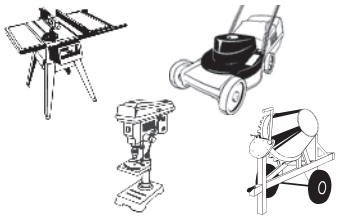
Universal engines, which basically act as active load consumers

Appliances in a nutshell

Ohmic appliances (active load appliances)

These are consumers that convert their power input completely into heat or light and therefore they do not present problems for any generator. The listed output power (watts) is also the input power that is taken from the generator. Such appliances include heating devices and hot plates.

Inductive consumers



These are appliances that are driven by an electric motor. With these inductive devices, friction losses and winding losses result in only about 70% of the input power being available as output power.

Additionally, when the motor is turned on, more power is needed. Depending on the type of device and the motor's quality, this can be 3 to 6 times the input power. Such appliances include compressors, table saws and high-pressure cleaners.

Capacitive appliances

These include critical consumers that, due to their charging function, can be powered safely by specially equipped DUPLEX or synchronous generators. They include flashers or discharge lamps.

The right generator for your application

To determine the right generator for your use more easily, you will find the applications in each model's table. On **pages 40 - 41**, you will find detailed selection assistance on appliances and the generators that go with them.

The starting power of the Endress generator (3 to 4 times the continuous power value) and the corresponding appliance's starting current are already figured in.

That can be helpful!

To determine the appliance power - see the model plate or user manual. Consider reserve power in order to be equipped for future applications.

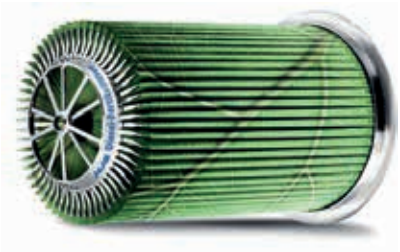
Recommendation: it remains 10% under the continuous power output. That preserves the environment and the generator.

Soot particulate filter

Reduction of diesel pollutants

Diesel engines are powerful, long-lasting and consume little fuel. It is particularly because of this that they are permanently in use for small and large construction sites. However pollutants such as soot particles are created during the fuel combustion process in the engine. The smaller they are, the more easily they find their way through the lungs, into the bloodstream and into other vital human organs. Therefore soot particles from diesel engines are known to represent a significant health hazard. For this reason, numerous measures are coming into force on a step-by-step basis at both European and national levels for reducing pollutant emissions.

These include, for example, the Air Quality Directive (EU Guideline 2008/50/EU) which has been valid throughout the EU since the beginning of 2005. The object of this regulation, its subsidiary directives as well as the respective implementation in the Federal Pollution Control Act, is to considerably improve the air quality, especially in European metropolitan areas. The regulations require that cities and communities take action against increased pollution levels. Previously implemented measures also include the setting up of environmental zones in Germany and further European countries and the so-called filter obligation for construction machines in Switzerland.



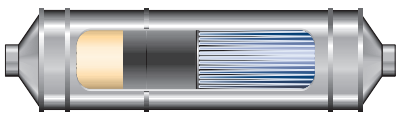
SMF (Sintered Metal Filter) ® - an overview of the benefits

- Reduction of soot and fine particles by more than 99% (based on the number of particles)
- Suitable for OE and retrofitting applications
- A tried and tested system already in use more than 20,000 building machines
- A high ash storage capacity and lower exhaust back pressure
- Low maintenance and economic
- Reliable with high service life
- Easy cleaning

Advantages of automatic monitoring and a maintenance indicator

- Continuous monitoring of the exhaust back pressure and temperature
- Overloading recognition of the particulate filter
- Automatic display of the cleaning requirement
- Reduction of the maintenance costs

Easy cleaning using high pressure cleaner:



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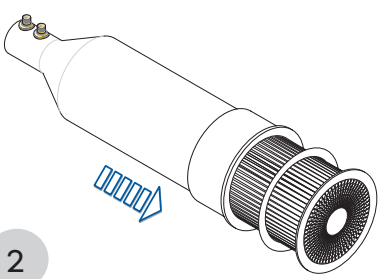


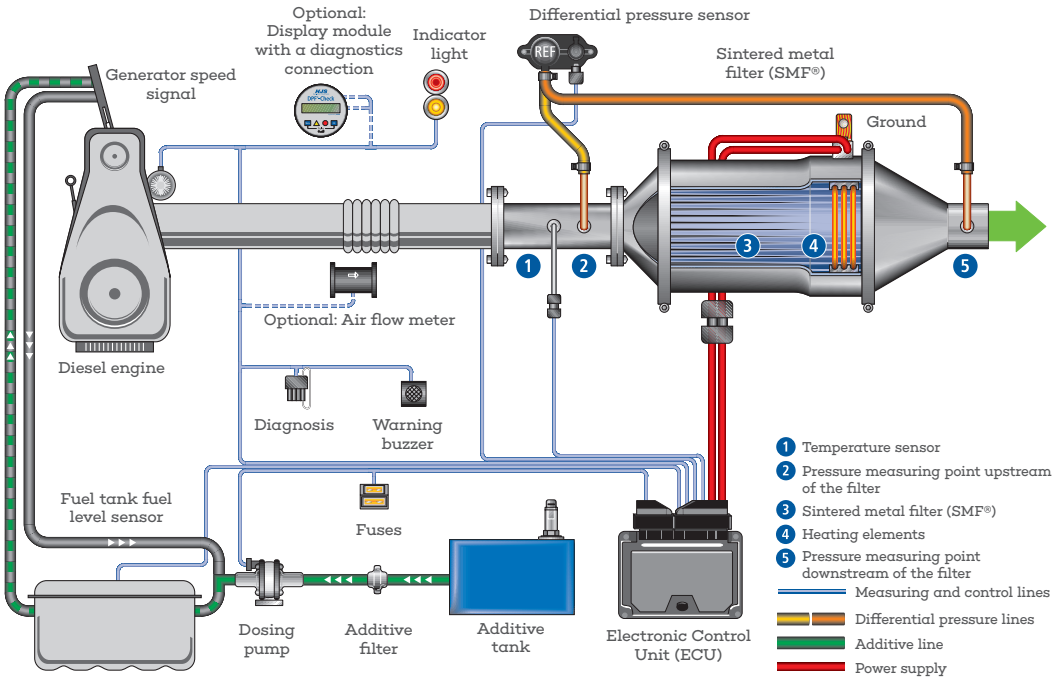
2

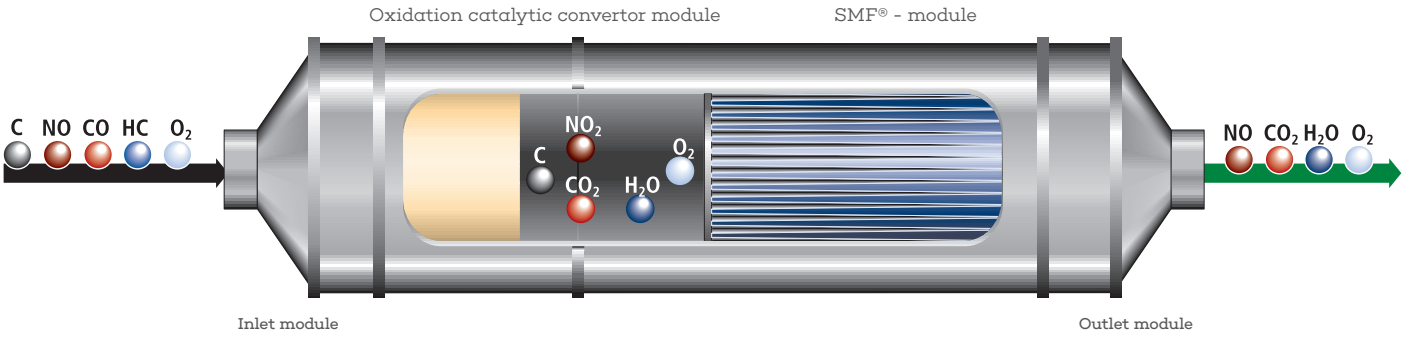
3

Soot particulate filter

Function description

In an SMF® AR System the exhaust gas is filtered until the optimum amount of soot has been gathered on the filter for regeneration.
The system uses the positive active properties of a fuel additive so that on the one hand, it lowers the soot ignition temperature and, on the other hand, it increases the soot combustion speed. The stored soot can then be burnt off by itself at an exhaust gas temperature of about 400°C during a regeneration. If the required temperature is not reached, which is often the case in the low load range, then active regeneration support will be provided by the system's thermo-electric heating.





Active thermo-electric regeneration

The control unit initiates (active) regeneration through the heating elements that are arranged in a circle. The gathered soot is ignited by the radiation energy of the heating elements. The regeneration process proceeds automatically after initial ignition of the soot layer. The soot burning takes place at regular intervals. With the aid of the control unit, not only ignition of the soot is initiated but also the additive is added in an optimal manner, the required filter loading is determined and the most favourable point in time for regeneration is determined. Furthermore, self-learning running cycle recognition ensures that the regeneration is triggered for optimum operating conditions. Due to the high soot storage capacity of the SMF® AR system, the regeneration does not occur just at one "unique", ideal point in time, but rather within a long time window. Therefore a one-time abort of regeneration due to switching off of the engine is not a problem with regard to safe working of the SMF® AR system. Another SMF® plus point is its high ash storage capacity, which allows long maintenance or cleaning intervals.

SMF® AR – An overview of the advantages

- For OE and retrofitting applications
- Reduction of soot and fine particles by more than 99% (based on the number of particles)
- Particularly suitable for low temperature applications
- Fully automatic, active regeneration
- Robust design due to the use of sintered metal (SMF®) => suitable for construction machines
- Operationally safe function
- Low maintenance
- Long service life
- NO_2 - neutral regeneration
- Easy cleaning of the filter with a high pressure cleaner

Endress service portal

Documentation & replacement parts

Do you want to have a quick look at the operating manual?
Then you are in the right place here.
The same applies to registering for contracted workshops.

Support

You are searching for further information about your device and its operation?
Our technical customer service is happy to help you.
Put your questions to us now and allow yourself to be advised first hand.

E-RMA

Checking of parameters and control of the power generator over a smartphone, tablet and PC – E-RMA makes this possible. Discover the optional features and register in order to be able to use advantageous functions such as alarm lists and location localisation in your everyday work.

Maintenance and repairs

Do you need maintenance or repair work to be performed on your power generator? Then put your trust in our specialist engineers. You are taking the first step to fast and smooth processing by registering your device online for the Endress service workshop.

For further information:

Click here to go to the **endressparts homepage**

ENDRESS®
endressparts.com

EU Emissions Stage V

Emission directive for mobile generators

Endress has integrated EU Stage V engines in their generators, all of which comply with the new Emissions Directive for mobile generators

- Endress will be providing a full range of products with Stage V engines in the future
- Planning security for customers when buying generators

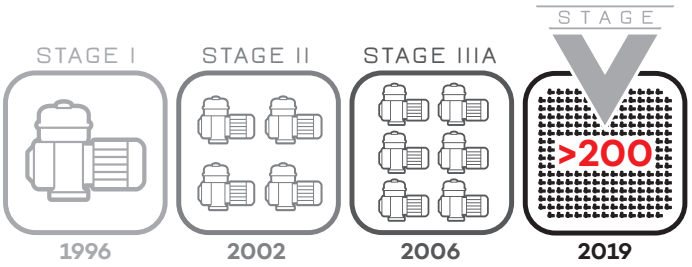
Directive 97/68/EU, which was introduced in Europe in December 1997, has significantly reduced pollutant emissions as a result of the increasing tightening of the emission standards for mobile generators. Stages I, II, IIIA, IIIB and IV of the emission limit values have been introduced on a step-by-step basis since then. Directive 97/68/EU became invalid in January 2017 and it was replaced by Regulation (EU) 2016/1628, which established the Stage IIIA emission standard in Europe.

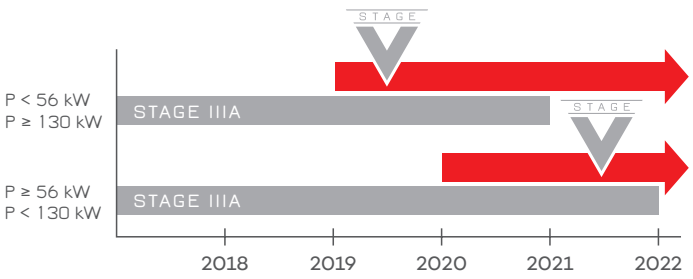
New EU emission standard Stage V valid as from 2019 in Europe

Further tightening of the emission regulations for mobile generators will come into force in 2019 and 2020.

The EU Stage V emissions standard will also apply to mobile generators with engines under 19 and above 560 kW for the first time. These power classes have been unregulated in the EU up to now as opposed to the markets controlled in compliance with the EPA standards.

The new emissions directive will significantly reduce the limit values over the next two years. 200 Stage V compliant generators will generate the same amount of pollutants as a single Stage I generator. This technological advancement presents a major challenge to engine and device manufacturers.





What needs to be considered now?

Endress is well prepared for this and we will be offering Stage V engines in the entire product range in the future, recognisable by the new Stage V logo. Endress is positioning itself as an ecologically-oriented generator manufacturer. The new generators will be premiered at bauma 2019 in Munich. You will find us at outdoor stand FN.825/1.

The new EU Stage V emissions standard applies to generators in the <56 kW and ≥130 kW power ranges that will be sold after January 1, 2019. However, there will be a transitional period up to December 2020. The transitional period for generators in the 56 kW to 130 kW power range will run until December 2021. Stage 3A exhaust emission generators may still be sold during this period. However, emergency power systems for stationary operation are excluded from the new Stage V regulations.

Information about the emergency power supply

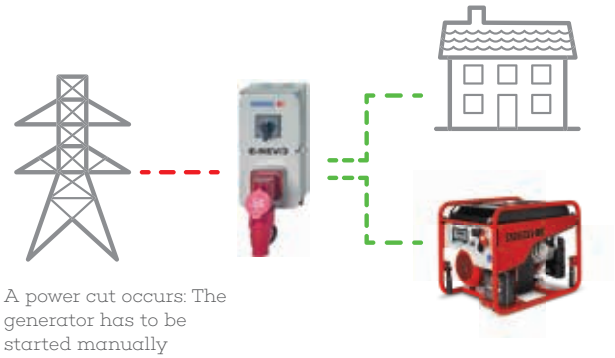
There are several options available for creating a simple but efficient emergency power supply.

We wish to show you some practical tips and ways for you to safeguard your building against a power cut.

Emergency power supply with manual switchover

In this variant a power generator is connected to the supply distributor installed in the house if there is a power failure and is started manually.

- Economically favourable acquisition costs
- Simple installation by an electrician
- Emergency power supply operation can only be guaranteed if the power generator is manually started after a power failure
- Security of supply is not guaranteed



A power cut occurs: The generator has to be started manually

ENDRESS supply distributors E-NEV

- Manual switchover between the public network and the generator
- Installation takes place by electricians between the mains network line and the junction box in the building (or on a special line for power consumers authorised to use emergency power)
- Secure switchover is secured through physical separation of both networks

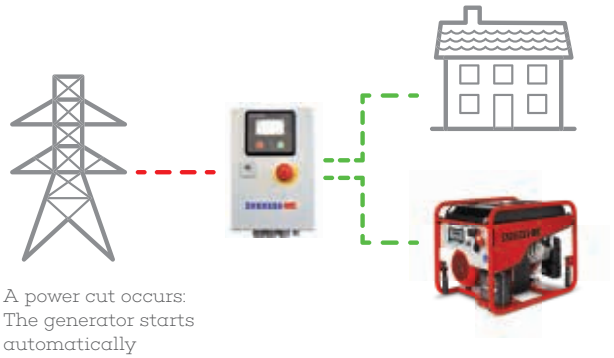
Can be ordered in two versions:

- E-NEV / 1 for feeding 230 V with 16 A or 32 A
- E-NEV / 3 for feeding 400 V with 16 A or 32 A

Emergency power supply with automatic switchover

In this version an installed power generator is started and stopped automatically if there is a power failure. You do not have to be at home in order to protect your house if there is a power failure.

- Automatic Start / Stop operation in the case of a power failure
- Simple installation by an electrician
- Security of supply is guaranteed
- Acquisition costs somewhat higher than for manual operation



A power cut occurs: The generator starts automatically

ENDRESS Emergency Power Automatic E-ATS

- The E-MCS 5.0 automatic control panel for monitoring the public power grid and controlling the attached generator
- Switchover protections integrated in the stable metal housing IP 54
- Connector blocks for 400V or 230V building mains feed
- Charger for charging the battery on the generator
- A firmly cabled control line to the generator, 7 metres long
- Plug-and-Run plug connection for an ENDRESS power generator
- Temperature-dependent choke control system

Double use with plug-and-run from ENDRESS!
Emergency power supply operation or mobile generator - it's your choice. The clever plug-and-run solution from ENDRESS offers you all options.

Important! Home installation and power feed must be handled only by a licensed electrical contractor. This guarantees safe and proper installation. The company will also be glad to advise you when selecting the correct emergency power supply. Tell your energy supplier about your plan and ensure that you are aware of the provisions listed in their General Terms and Conditions. The regulations vary state by state.

Information on the emergency power supply

Petrol, diesel or gas?

What is a suitable emergency power supply?

	Advantages	Disadvantages
Petrol	• Economically favourable acquisition costs • Small, light and mobile power generator due to the design of the engine	• In the case of a power failure the local filling station can also not pump any petrol
Diesel	• Diesel fuel is somewhat more economical to use	• Units are large and heavy due to the model of the engine • Limited mobility • High acquisition costs • The local petrol station won't be able to pump any diesel in the event of a power failure
Gas	• Operation is optionally possible with natural gas or liquefied gas • Residue-free combustion • Very economic fuel costs • No accumulation of resins on the carburettor when unused for longer periods of time	• Limited mobility when using natural gas

Installation location for a generator

Also when its sounds quite tempting - a generator must not be run inside a closed building! The installation location must always be selected in such a way that there is adequate cooling air present and exhaust gases can escape into the open unhindered. Installation inside buildings is only permitted in specially provided rooms. Please ask your district chimney sweep for advise if you have any questions.

When installed outdoors, the generator should be fitted with some form of protection against the weather in order to prevent moisture getting in.

230 V or 400 V - which variant is the correct one for me?

If you need a 400V supply in an emergency (e.g. for a cooker connection, workshop machines, etc.), then a 400V supply is an essential criterion for you. There are some things to take into consideration concerning feed into the power network. 400V networks are only to be supplied by a generator that is fitted with phase compensation or a phase control system in order to avoid any unbalanced loading (overload on one phase).

This could damage attached power consumers (for example televisions, computers).
Our generators from the DUPLEX series have an electronic phase control system fitted as a standard fitting that allows feeding into a household network. All ENDRESS generators can be used for providing a 230 V supply.

The information about a suitable ENDRESS generator can be found on the following pages:

230V automatic / manual supply
power range 1 - 10 kVA
- Petrol unit **Page 20-32**
- Diesel unit **Page 34-36**

400V automatic / manual supply
Power range 6-15 kVA
- Petrol unit **Page 28-32**
- Diesel unit **Page 34-35**

Complete system GAS
Automatic
Power feed 230 V **Page 42**

Stationary
Power supply systems
Power range
10 - 705 kVA **Page 49-70**

The ENDRESS generator profile

The latest technology and the best quality — guaranteed

DUPLEX generators, IP 54, brushless, electronically controlled according to DGUV Information 203-032 are only for unlimited use outdoors

ENDRESS generators meet all required standards and guidelines

Tank level indicator for a safe operation

Large tank for long running times

Automatic low oil shut-off – to protect against engine damage

All generators with a low distortion device for a clean voltage

4 in 1 display for a better overview: V / Hz / h / oil deficit

Synchronous generators, IP 23 / IP 54 with high efficiency

ECOtronic saves on operating costs

Maxdrive guarantees the full engine output

Quality electrical safety sockets

Robust 3000 rpm or 1500 rpm diesel engines

Handgrips for more mobility in daily use

Comprehensive special equipment and accessories

Modern, smooth 4-cycle OHC and OHV engines can be operated without modification, also with the fuel E 10

Generator overload protection – to protect against generator damage

Compound controlled high power 400V generators

Declaration of the model designation

ESE	10	08	S	D	H	S	DC	ES	DI	
										DI = Diesel engine
										ES = Electrical start
										DC = DC welding **AC**= AC welding
										G = DUPLEX generator **S** = Synchronous generator
										H = HONDA **H** = HATZ **S** = SUBARU **B** = BRIGGS & **R** = ROBIN **Y** = YANMAR **L** = LOMBARDINI STRATTON
										D = Three-phase current 400 V
										S = Welding generator
										04 = Model series, frame device without a large tank **06** = Model series, frame device with a large tank **08** = Model series, sound-insulating full enclosure
										10 = Output class
										ESE = ENDRESS GENERATORS

Application factor

	SILENT Line	CLASSIC Power Line	PROFESSIONAL GT Line	DUPLEX plus Line	DUPLEX Silent Line	DUPLEX Silent Line DIESEL	DIESEL Line
Electronic appliances	●●●	●●	●	●●●	●●●	●●●	●
Electric tools	●●●	●●●	●●●	●●●	●●●	●●●	●●●
Gardening or construction equipment	●	●●	●●●	●●●	●●●	●●●	●●●
Welding equipment		●	●●	●●●	●●●	●●●	●●
Emergency power application	●●●	●	●	●●●	●●●	●●●	●
	Page 20	**Page 22**	**Page 24**	**Page 28**	**Page 32**	**Page 34**	**Page 36**

●●●: Particularly suitable

SILENT Line

1.6 - 3.8 kVA

▶ ESE 2000i

The compact, handy format provides for mobile and super silent energy - for all cases.

Parallel connection ability (only ESE 2000i)

Synchronous | IP 23 | inverter regulation | Sound insulated | Petrol

SILENT Line	
Electronic appliances	●●●
Electric tools	●●●
Gardening or construction equipment	●
Welding equipment	
Emergency power application	●●●

SILENT Line

1.6 - 3.0 kVA

For further information:

Click here to go to our **ESE 2000i maintenance video** on YouTube

SILENT Line 1.6 - 3.0 kVA		
Model	ESE 2000i	ESE 3000i
Order No.	**110 005**	**110 006**
Generator	Synchronous	Synchronous
Max. output kVA/kW	2.0 / 2.0	3.3 / 3.3
Continuous output kVA/kW	1.6 / 1.6	3.0 / 3.0
Rated voltage	230 V 1~ / 12 V =	230 V 1~ / 12 V =
Rated current	8,7 A 1~ / 8,3 A =	13,0 A 1~ / 8,3 A =
Power factor cos φ	1	1
Frequency / Protection Class	50 Hz / IP 23	50 Hz / IP 23
Engine type	YAMAHA MZ80 / 3.5 HP	ENDRESS
Construction type	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV
Displacement	79 cm³	171 cm³
Output at 3000 rpm	1.8 kW	4.2 kW
Fuel / tank capacity (litre)	Petrol / 4	Petrol / 6.8
Consumption / running time at 75% load of about (1)	0.7 l / 6 h	1.36 l / 5 h
Starting system	Recoil starter	E-Start incl. battery
Sound power level LWA	89 dB(A)	93 dB(A)
Sound pressure level LPA (7 m)	64 dB(A)	68 dB(A)
Weight (kg)	20	41
Dimensions L × W × H (mm)	540×330×505	588×442×452
Protective contact socket	1 × 230 V / 16 A 1 × 12 V	1 × 230 V / 16 A 1 × 12 V / 8.3 A 1 × USB 5V / 2.1A
Possible areas of application [1]	230 V	230 V
Electronic devices up to	1600 W	3000 W
Electric tools up to	1450 W	2750 W
Garden tools up to	1250 W	2350 W
Building equipment up to	—	—

(1) This data is based on average values as individual cases can vary and therefore they are not binding

- Inverter technology
- High-quality current
- Compact and quiet
- Easy handling

Equipment features:

- Lack of oil automatic switch-off
- Generator overload protection
- Load dependent engine speed
- Connections for a 12V battery charge
- Parallel connection ability (only ESE 2000i)
- USB connection (ESE 3000i only)

Available accessories	Order No.	Suitable for
Maintenance kit	**164 052**	ESE 2000i
	164 053	ESE 3000i
IP 68 socket	**110005.01**	ESE 2000i
	110006.01	ESE 3000i

ESE 2000i with an IP 68 socket

ESE 3000i including folding transport handle

CLASSIC Power Line

2.5 - 7.0 kVA

The compact format ensures high mobility and makes the Classic Power Line into an excellent power source for independent and professional work in the private, commercial or industrial areas.

Synchronous | IP 23 | AVR regulation | Large tank | Petrol

CLASSIC Power Line	
Electronic appliances	●●
Electric tools	●●●
Gardening or construction equipment	●●
Welding equipment	●
Emergency power application	●

CLASSIC Power Line

2.5 - 7.0 kVA

CLASSIC Power Line 2.5 - 7.0 kVA							
Model	ESE 306 HS-GT [2]	ESE 606 HS-GT [2]	ESE 606 HS-GT ES [2]	ESE 606 DHS-GT [2]		ESE 606 DHS-GT ES [2]	
	1~	1~	1~	3~	1~	3~	1~
Order No.	**112 210**	**112 211**	**112 212**	**112 213**		**112 214**	
Generator	Synchronous / AVR	Synchronous / AVR	Synchronous / AVR	Synchronous / AVR		Synchronous / AVR	
Max. output kVA/kW	2.8 / 2.8	6.3 / 6.3	6.3 / 6.3	7.5 / 6.0	4.2 / 4.2	7.5 / 6.0	4.2 / 4.2
Continuous output kVA/kW	2.5 / 2.5	5.8 / 5.8	5.8 / 5.8	7.0 / 5.6	3.7 / 3.7	7.0 / 5.6	3.7 / 3.7
Rated voltage	230 V 1~	230 V 1~	230 V 1~	400 V 3~	230 V 1~	400 V 3~	230 V 1~
Rated current	10.9 A 1~	25.2 A 1~	25.2 A 1~	10.8 A 3~	16.0 A 1~	10.8 A 3~	16.0 A 1~
Power factor cos φ	1	1	1	0.8	1	0.8	1
Frequency / Protection Class	50 Hz / IP23	50 Hz / IP23	50 Hz / IP23	50 Hz / IP23		50 Hz / IP23	
Engine type	HONDA GP 200	HONDA GX 390	HONDA GX 390	HONDA GX 390		HONDA GX 390	
Construction type	1-cylinder 4-stroke OHC,	1-cylinder 4-stroke OHC,	1-cylinder 4-stroke OHC,	1-cylinder 4-stroke OHC,		1-cylinder 4-stroke OHC,	
Displacement	196 cm³	389 cm³	389 cm³	389 cm³		389 cm³	
Output at 3000 rpm	3.3 kW	6.4 kW	6.4 kW	6.4 kW		6.4 kW	
Fuel / tank capacity (litre)	Petrol / 20	Petrol / 30	Petrol / 30	Petrol / 30		Petrol / 30	
Consumption / running time at 75% load of about [1]	1.1 l / 18 h	2.2 l / 13 h	2.2 l / 13 h	2.1 l / 14 h		2.1 l / 14 h	
Starting system	Recoil starter	Recoil starter	E-Start incl. battery	Recoil starter		E-Start incl. battery	
Sound power level LWA	96 dB(A)	97 dB(A)	97 dB(A)	97 dB(A)		97 dB(A)	
Sound pressure level LPA (7 m)	71 dB(A)	72 dB(A)	72 dB(A)	72 dB(A)		72 dB(A)	
Weight (kg)	49	85	92	90		97	
Dimensions L × W × H (mm)	640×475×526	786×570×600	786×570×600	786×570×600		786×570×600	
Protective contact socket	2 × 230 V 16 A	2 × 230 V 16 A 1 x CEE 230V 32A	2 × 230 V 16 A 1 x CEE 230V 32A	1 × 230 V 16 A 1 x CEE 400V 16A		1 × 230 V 16 A 1 x CEE 400V 16A	
Possible areas of application [1]	230 V	230 V	230 V	400 V	230 V	400 V	230 V
Electric tools up to	2100 W	4900 W	4900 W	4900 W	3200 W	4900 W	3200 W
Gardening or construction equipment up to	1500 W	3300 W	3300 W	3300 W	2200 W	3300 W	2200 W
Compressors or pumps up to	1100 W	2500 W	2500 W	2500 W	1600 W	2500 W	1600 W
Inverter welding equipment up to	-	-	-	Ø 2.5 mm		Ø 2.5 mm	

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Non-EU

Available accessories	Order No.	Suitable for
Maintenance kit	**164 029**	Model series ESE 606

Equipment features

- Large tank for long running times
- Generator overload protection
- Tank level indicator
- 4 in 1 display for a better overview
- Folding handles
- AVR Automatic Voltage Regulation
- Lack of oil automatic switch-off
- Including wheelset (model series ESE 606)

Professional GT Line

2.5 - 20.0 kVA

▶ ESE 606 DHS-GT

Professional generators with powerful synchronous generators.

Synchronous | IP 23 | Low distortion device | Large tank | Petrol

Professional GT Line	
Electronic appliances	●
Electric tools	●●●
Gardening or construction equipment	●●●
Welding equipment	●●
Emergency power application	●

Professional GT Line

2.5 - 20.0 kVA

▶ ESE 606 HS-GT

Set of wheels optionally available

Professional GT Line 2.5 - 6.0 kVA						
Model	ESE 206 HS-GT 1~	ESE 306 HS-GT 1~	ESE 406 HS-GT 1~	ESE 506 DHS-GT 3~	ESE 506 DHS-GT 1~	ESE 606 HS-GT 1~
Order No.	**112 300**	**112 301**	**112 302**	**112 304**		**112 303**
Generator	Synchronous	Synchronous	Synchronous	Synchronous		Synchronous
Max. output kVA/kW	2.9 / 2.6	3.4 / 3.1	5.1 / 4.6	6.3 / 5.0	4.2 / 3.7	7.2 / 6.4
Continuous output kVA/kW	2.5 / 2.2	2.9 / 2.6	4.2 / 3.9	5.4 / 4.3	3.1 / 2.8	6.0 / 5.5
Rated voltage	230 V 1~	230 V 1~	230 V 1~	400 V 3~	230 V 1~	230 V 1~
Rated current	10.9 A 1~	12.5 A 1~	18.3 A 1~	7.7 A 3~	13.5 A 1~	26.1 A 1~
Power factor cos φ	0.9	0.9	0.9	0.8	0.9	0.9
Frequency / Protection Class	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23		50 Hz / IP 23
Engine type	HONDA GX 160 / 5 HP	HONDA GX 200 / 5.5 HP	HONDA GX 270 / 8 HP	HONDA GX 270 / 8 HP		HONDA GX 390 / 11 HP
Construction type	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV		1-cylinder 4-stroke OHV
Displacement	163 cm³	196 cm³	270 cm³	270 cm³		389 cm³
Output at 3000 rpm	2.5 kW	3.3 kW	4.6 kW	4.6 kW		6.4 kW
Fuel / tank capacity (litre)	Petrol / 20	Petrol / 20	Petrol / 30	Petrol / 30		Petrol / 30
Consumption / running time at 75% load of about (1)	0.9 l / 22 h	1.1 l / 18 h	1.6 l / 18 h	1.6 l / 18 h		2.2 l / 13 h
Starting system	Recoil starter	Recoil starter	Recoil starter	Recoil starter		Recoil starter
Sound power level LWA	96 dB(A)	96 dB(A)	97 dB(A)	97 dB(A)		97 dB(A)
Sound pressure level LPA (7 m)	71 dB(A)	71 dB(A)	72 dB(A)	72 dB(A)		72 dB(A)
Weight (kg)	41	43	61	69		73
Dimensions L × W × H (mm)	637×473×500	637×473×500	800×538×576	800×538×576		800×538×576
Protective contact socket	2 × 230 V / 16 A	2 × 230 V / 16 A	2 × 230 V / 16 A	1 × 230 V / 16 A 1 × CEE 400 V / 16 A		1 × 230 V / 16 A 1 × CEE 230 V / 32 A
Models with an electric starter (including battery)			ESE 406 HS-GT ES			ESE 606 HS-GT ES
Order No.			**112 306**			**112 307**
Weight (kg)			66			78
Possible areas of application (1)	230 V	230 V	230 V	400 V	230 V	230 V
Electric tools up to	2100 W	2500 W	3800 W	4200 W	2700 W	5400 W
Gardening or construction equipment up to	1500 W	1700 W	2600 W	2900 W	1900 W	3600 W
Compressors or pumps up to	1100 W	1300 W	2000 W	2200 W	1400 W	2800 W
Inverter welding equipment up to	-	-	-	Ø 2.5 mm		

(1) This data is based on average values as individual cases can vary and therefore they are not binding

Equipment features

- Lack of oil automatic switch-off
- Generator overload protection
- HONDA + Briggs & Stratton OHV engines
- Large tank for long running times
- All generators with a low distortion device for a clean voltage
- Compound regulated high power generators for 400 V

Professional GT Line

2.5 - 20.0 kVA

▶ ESE 1006 DBS-GT

▶ ESE 1206 HS-GT ES

Professional GT Line 7.0 - 11.8 kVA

Model	ESE 606 DHS-GT		ESE 1006 DBS-GT		ESE 1206 HS-GT ES	ESE 1206 DHS-GT ES	
	3~	1~	3~	1~	1~	3~	1~
Order No.	**112 305**		**112 023**		**112 021**	**112 022**	
Generator	Synchronous		Synchronous		Synchronous	Synchronous	
Max. output kVA/kW	8.3 / 6.6	4.9 / 4.4	11.0 / 8.8	6.6 / 5.9	11.9 / 10.7	13.9 / 11.1	9.2 / 8.3
Continuous output kVA/kW	7.0 / 5.6	3.5 / 3.2	10.0 / 8.0	6.0 / 5.4	10.0 / 9.1	11.8 / 9.4	6.9 / 6.2
Rated voltage	400 V 3~	230 V 1~	400 V 3~	230 V 1~	230 V 1~	400 V 3~	230 V 1~
Rated current	10.1 A 3~	15.2 A 1~	14.4 A 3~	26.1 A 1~	43.5 A 1~	17.0 A 3~	30.0 A 1~
Power factor cos φ	0.8	0.9	0.8	0.9	0.9	0.8	0.9
Frequency / Protection Class	50 Hz / IP 23		50 Hz / IP 23		50 Hz / IP 23	50 Hz / IP 23	
Engine type	HONDA GX 390 / 11 HP		B&S VANGUARD / 18 HP		HONDA GX 630 / 21 HP	HONDA GX 630 / 21 HP	
Construction type	1-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV	2-cylinder 4-stroke OHV	
Displacement	389 cm³		570 cm³		688 cm³	688 cm³	
Output at 3000 rpm	6.4 kW		11.9 kW		10.5 kW	10.5 kW	
Fuel / tank capacity (litre)	Petrol / 30		Petrol / 16		Petrol / 24	Petrol / 24	
Consumption / running time at 75% load of about (1)	2.1 l / 14 h		2.9 l / 5 h		4.3 l / 5.5 h	4.2 l / 6 h	
Starting system	Recoil starter		Recoil starter		E-Start incl. battery	E-Start incl. battery	
Sound power level LWA	97 dB(A)		97 dB(A)		96 dB(A)	96 dB(A)	
Sound pressure level LPA (7 m)	72 dB(A)		72 dB(A)		71 dB(A)	71 dB(A)	
Weight (kg)	81		119		162	165	
Dimensions L × W × H (mm)	800×538×576		930×560×630		960×641×667	960×641×667	
Protective contact socket	1 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 400 V / 16 A		2 × 230 V / 16 A 1 × CEE 400 V / 16 A		1 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 230 V / 32 A	1 × 230 V / 16 A 2 × CEE 230 V / 16 A 1 × CEE 400 V / 16 A	
Models with electrical starter (3)	ESE 606 DHS-GT ES		ESE 1006 DBS-GT				
Order No.	**112 308**		**112 024**				
Weight (kg)	86		130				
Possible areas of application (1)	400 V	230 V	400 V	230 V	230 V	400 V	230 V
Electric tools up to	5500 W	3100 W	7900 W	5300 W	9000 W	9300 W	6100 W
Gardening or construction equipment up to	3700 W	2100 W	5300 W	3600 W	6000 W	6200 W	4100 W
Compressors or pumps up to	2800 W	1600 W	4000 W	2700 W	4500 W	4700 W	3100 W
Inverter welding equipment up to	Ø 3.25 mm		Ø 4.5 mm			Ø 3.25 mm	

Available accessories	Order No.	Suitable for
Maintenance kit	**164 028**	Model series ESE 206 - 306
Maintenance kit	**164 029**	Model series ESE 406 - 606
Maintenance kit	**164 030**	Model ESE 1006 DBS
Maintenance kit	**164 032**	Model ESE 1206
Wheelset	**161 000**	Models ESE 306, 406, 506, 606
Wheelset	**161 015**	Model ESE 1006
Wheelset	**161 007**	Model ESE 1206
Crane loading device	**161 103**	Model ESE 1206
Exhaust hose (1.5 m)	**163 120**	Model ESE 1006
90° adapter for exhaust hose	**163 130**	Model ESE 1006
Feed distributor E-NEV / 1-32	**162 301**	Models ESE 606, 1206 (230 V)
Fuelling set	**163 110**	For a 3-way fuel valve

Special equipment (2)		Order No.	Suitable for
FI protection switch		**162 009**	All models
Insulation monitoring		**010 043**	Model ESE 1006
Wireless remote control	50 m	**162 006**	Model ESE 1006
	20m	**162 024**	Models ESE 406, 606, 1206 (E-Start 230 V)
Wireless remote control		**162 007**	Model ESE 1006
Emergency Power Supply		**162 332**	Models ESE 406, 606, 1206 (E-Start 230 V)
3-way fuel valve		**163 050**	Model ESE 1006

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Not upgradable
(3) Including battery

Professional GT Line

2.5 - 20.0 kVA

▶ ESE 1306 HS-GT ES
▶ ESE 1306 DHS-GT ES
▶ ESE 1506 DHS-GT ES

▶ ESE 2006 DBS-GT

Professional GT Line 9.0 - 20.0 kVA

Model	ESE 1306 HS-GT ES	ESE 1306 DHS-GT ES		ESE 1506 DHS-GT ES		ESE 2006 DBS-GT	
	1~	3~	1~	3~	1~	3~	1~
Order No.	**230 028**	**230 029**		**230 031**		**230 033**	
Generator	Synchronous	Synchronous		Synchronous		Synchronous	
Max. output kVA/kW	9.9 / 8.9	13.2 / 10.5	7.6 / 6.8	14.5 / 11.7	7.6 / 6.8	22.0 / 19.8	7.6 / 6.8
Continuous output kVA/kW	9.0 / 8.1	12.0 / 9.6	6.9 / 6.2	13.2 / 10.6	6.9 / 6.2	20.0 / 18.0	6.9 / 6.2
Rated voltage	230 V 1~	400 V 3~	230 V 1~	400 V 3~	230 V 1~	400 V 3~	230 V 1~
Rated current	39.1 A 1~	17.3 A 3~	30.0 A 1~	19.1 A 3~	30.0 A 1~	28.9 A 3~	30.0 A 1~
Power factor cos φ	0.9	0.8	0.9	0.8	0.9	0.8	0.9
Frequency / Protection Class	50 Hz / IP 23	50 Hz / IP 23		50 Hz / IP 23		50 Hz / IP 23	
Engine type	HONDA GX 630 / 21 HP	HONDA GX 630 / 21 HP		HONDA GX 690 / 22 HP		BRIGGS & STRATTON / 35 HP	
Construction type	2-cylinder 4-stroke OHV	2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV	
Displacement	688 cm³	688 cm³		688 cm³		993 cm³	
Output at 3000 rpm	10.5 kW	10.5 kW		11.5 kW		21.0 kW	
Fuel / tank capacity (litre)	Petrol / 16	Petrol / 16		Petrol / 16		Petrol / 35	
Consumption / running time at 75% load of about [1]	3.5 l / 4.5 h	3.5 l / 4.5 h		4.2 l / 3.8 h		7.5 l / 4.6 h	
Starting system	E-Start incl. battery	E-Start incl. battery		E-Start incl. battery		E-Start incl. battery	
Sound power level LWA	102 dB(A)[3]	102 dB(A)[3]		103 dB(A)[3]		104 dB(A)[3]	
Sound pressure level LPA (7 m)	77 dB(A)	77 dB(A)		78 dB(A)		79 dB(A)	
Weight (kg)	137	137		140		230	
Dimensions L × W × H (mm)	945×570×645	945×570×645		945×570×645		1100×700×890	
Protective contact socket	1 × 230 V / 16 A 1 × CEE 230 V / 32 A	1 × CEE 230 V / 16 A 1 × CEE 400 V / 16 A		1 × CEE 230 V / 16 A 1 × CEE 400 V / 32 A		1 × CEE 230 V / 16 A 1 × CEE 400 V / 32 A	
Possible areas of application [1]	230 V	400 V	230 V	400 V	230 V	400 V	230 V
Electric tools up to	8000 W	9300 W	6100 W	10500 W	6500 W	15700 W	6500 W
Gardening or construction equipment up to	5400 W	6200 W	4100 W	6200 W	4100 W	6200 W	4100 W
Compressors or pumps up to	4000 W	4700 W	3100 W	5200 W	3100 W	6500 W	3100 W
Inverter welding equipment up to	–	Ø 5.0 mm		Ø 6.0 mm		Ø 6.0 mm	

Available accessories	Order No.	Suitable for
Maintenance kit	**164 032**	Models ESE 1306, 1506
Wheelset	**161 015**	Models ESE 1306, 1506
Wheelset	**161 034**	Model ESE 2006
Feed distributor E-NEV / 1-32	**162 301**	Model ESE 1306 (230 V)
Fuelling set	**163 110**	For a 3-way fuel valve

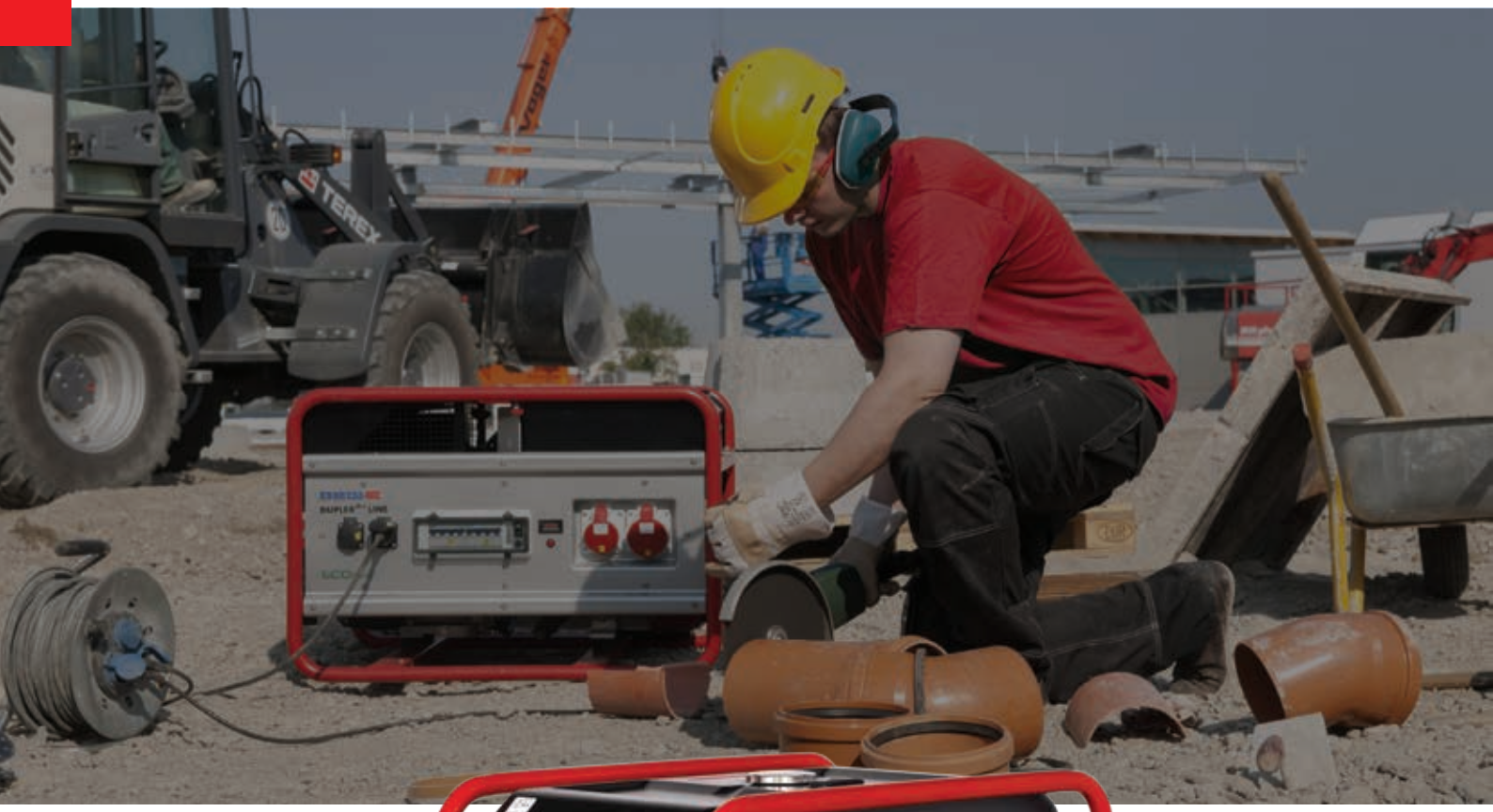
Special equipment [2]	Order No.	Suitable for
FI protection switch	**162 009**	All models
Cable remote control (50 m)	**162 006**	Models ESE 1306, 1506, 2006
Wireless remote control	**162 007**	Models ESE 1306, 1506, 2006
Emergency Power Supply	**162 332**	Model ESE 1306 (E-Start 230 V)
3-way fuel valve	**163 050**	All models

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Not upgradable
(3) Does not conform to EU Noise Guideline 2000/14/EU

DUPLEXPLUS **Line**

4.0 - 15.0 kVA

ENDRESS



A mains supply socket with transfer switching equipment for supplying power according to VDE 0100-551:2017-02 is available as an option

Especially suitable for use at construction and assembly sites according to DGUV information 203 - 032

▶ ESE 606 DHG-GT ES DUPLEX

Mobile power generation with futuristic technology. The **DUPLEX**PLUS line combines performance and economy.

ISO | DUPLEX | IP 54 | Electronic regulation | ECOtronic System | Petrol

DUPLEXPLUS Line	
Electronic appliances	●●●
Electric tools	●●●
Gardening or construction equipment	●●●
Welding equipment	●●●
Emergency power application	●●●

For further information:

Click here to go to our **DUPLEXplus video** on YouTube

DUPLEXPLUS **Line**

4.0 - 6.0 kVA

▶ ESE 406 HG-GT DUPLEX

Set of wheels optionally available

▶ ESE 606 DHG-GT DUPLEX

DUPLEXPLUS Line 4.0 - 5.0 kVA			
Model	ESE 406 HG-GT **ISO** DUPLEX	ESE 406 HG-GT ES **ISO** DUPLEX	ESE 506 HG-GT **ISO** DUPLEX
Order No.	**113 552I**	**113 553I**	**113 554I**
Generator	DUPLEX	DUPLEX	DUPLEX
Max. output kVA/kW	4.4 / 4.4	4.4 / 4.4	5.5 / 5.5
Continuous output kVA/kW	4.0 / 4.0	4.0 / 4.0	5.0 / 5.0
Rated voltage	230 V 1~	230 V 1~	230 V 1~
Rated current	17.4 A 1~	17.4 A 1~	21.7 A 1~
Power factor cos φ	1	1	1
Frequency / Protection Class	50 Hz / IP 54	50 Hz / IP 54	50 Hz / IP 54
Engine type	HONDA GX 270 / 8 HP	HONDA GX 270 / 8 HP	HONDA GX 390 / 11 HP
Construction type	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV
Displacement	270 cm³	270 cm³	389 cm³
Output at 3000 rpm	4.6 kW	4.6 kW	6.4 kW
Fuel / tank capacity (litre)	Petrol / 33	Petrol / 33	Petrol / 33
Consumption / running time at 75% load of about (1)	1.6 l / 20.5 h	1.6 l / 20.5 h	2.2 l / 15 h
Starting system	Recoil starter	E-Start incl. battery	Recoil starter
Sound power level LWA	97 dB(A)	97 dB(A)	97 dB(A)
Sound pressure level LPA (7 m) (2)	64 dB(A)	64 dB(A)	60 dB(A)
Weight (kg)	94	103	102
Dimensions L × W × H (mm)	780×550×595	780×550×595	780×550×595
Protective contact socket	2 × 230 V / 16 A 1 × CEE 230 V / 32 A	2 × 230 V / 16 A 1 × CEE 230 V / 32 A	2 × 230 V / 16 A 1 × CEE 230 V / 32 A
Possible areas of application (1)	230 V	230 V	230 V
Electronic devices up to	4000 W	4000 W	5000 W
Electric tools up to	3900 W	3900 W	4900 W
Gardening or construction equipment up to	2700 W	2700 W	3300 W
Compressors or pumps up to	2000 W	2000 W	2500 W
Inverter welding equipment up to	Ø 2.5 mm	Ø 2.5 mm	Ø 2.5 mm

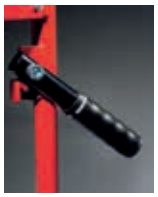
(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) ECOtronic active

DUPLEXPLUS - the advantages at a glance

- Operating costs are lowered *
- Reduction in pollutant emissions *
- Significantly reduced noise emissions *
- Up to 30% less fuel consumption *
- Protection class IP 54 — protected from dust and spray
- Brushless, electronically regulated synchronous generator
- Voltage stability ±1% with 3~ generators
- Brushless technology provides 20,000 operating hours
- 200% Suitable for balanced load in actual operation
- Combines and strengthens the advantages of asynchronous and synchronous generators
- Simultaneous use by electronic and inductive appliances

ECOtronic is not needed with the IT-TN version)

DUPLEXPLUS Line
10.0 kVA



▶ ESE 606 DHG-GT ES DUPLEX

DUPLEXPLUS Line 5.0 - 6.0 kVA						
Model	ESE 506 HG-GT ES **ISO** DUPLEX	ESE 606 DHG-GT **ISO** DUPLEX		ESE 606 DHG-GT ES **ISO** DUPLEX	
	1~	3~	1~	3~	1~
Order No.	**113 555I**	**113 556I**		**113 557I**	
Generator	DUPLEX	DUPLEX		DUPLEX	
Max. output kVA/kW	5.5 / 5.5	6.6 / 5.3	4.4 / 4.0	6.6 / 5.3	4.4 / 4.0
Continuous output kVA/kW	5.0 / 5.0	6.0 / 4.8	4.0 / 3.6	6.0 / 4.8	4.0 / 3.6
Rated voltage	230 V 1~	400 V 3~	230 V 1~	400 V 3~	230 V 1~
Rated current	21.7 A 1~	8.7 A 3~	17.4 A 1~	8.7 A 3~	17.4 A 1~
Power factor cos φ	1	0.8	0.9	0.8	0.9
Frequency / Protection Class	50 Hz / IP 54	50 Hz / IP 54		50 Hz / IP 54	
Engine type	HONDA GX 390 / 11 HP	HONDA GX 390 / 11 HP		HONDA GX 390 / 11 HP	
Construction type	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV		1-cylinder 4-stroke OHV	
Displacement	389 cm³	389 cm³		389 cm³	
Output at 3000 rpm	6.4 kW	6.4 kW		6.4 kW	
Fuel / tank capacity (litre)	Petrol / 33	Petrol / 33		Petrol / 33	
Consumption / running time at 75% load of about (1)	2.2 l / 15 h	2.1 l / 15.5 h		2.1 l / 15.5 h	
Starting system	E-Start incl. battery	Recoil starter		E-Start incl. battery	
Sound power level LWA	97 dB(A)	97 dB(A)		97 dB(A)	
Sound pressure level LPA (7 m) (2)	60 dB(A)	60 dB(A)		60 dB(A)	
Weight (kg)	111	104		113	
Dimensions L × W × H (mm)	780×550×595	780×550×595		780×550×595	
Protective contact socket	2 × 230 V / 16 A 1 × CEE 230 V / 32 A	2 × 230 V / 16 A 1 × CEE 400 V / 16 A		2 × 230 V / 16 A 1 × CEE 400 V / 16 A	
Possible areas of application (1)	230 V	400 V	230 V	400 V	230 V
Electronic devices up to	5000 W	4800 W	3600 W	4800 W	3600 W
Electric tools up to	4900 W	4700 W	3500 W	4700 W	3500 W
Gardening or construction equipment up to	3300 W	3200 W	2400 W	3200 W	2400 W
Compressors or pumps up to	2500 W	2400 W	1800 W	2400 W	1800 W
Inverter welding equipment up to	Ø 2.5 mm	Ø 3.25 mm		Ø 3.25 mm	

Available accessories	Order No.	Suitable for
Maintenance kit	**164 029**	Model series ESE 406, 506, 606
Wheelset	**161 024**	Model series ESE 406, 506, 606
Feed distributor E-NEV / 1-32	**162 301**	Model series ESE 406, 506 (230V)
Feed distributor E-NEV / 3-16	**162 303**	Model series ESE 606

Special equipment (3)	Order No.	Suitable for
FI protection switch	**162 009**	All models
Cable remote control 50 m	**162 006**	Series with electrical starting
Wireless remote control	**162 007**	Series with electrical starting
Emergency Power Supply	**162 330**	Series with electrical starting
Exhaust hose (1.5 m)	**162 333**	All models
IT-TN switchover system with a mains supply socket (5)	**162 045**	All models
60 Hz version	on request	
E-RMA SIM (4)	**342 220**	
E-RMA LAN (4)	**342 221**	
E-RMA web supervisor's annual fee (6)	**342 222**	

Equipment features

- Includes insulation monitoring in accordance with VDE 0100-551 2017.02
- ECOtronic system (nor required for version IT-TN)
- Honda OHV engines
- 3 in 1 display = V / Hz / h
- Tank level indicator
- Lack of oil automatic switch-off
- Generator overload protection
- Folding handles
- A crane mount is integrated as standard in the frame
- A slide compartment for the short operating instructions and a tool is integrated directly under the tank
- Control panel with Protection Class IP 54

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) ECOtronic active
(3) Not upgradable
(4) Only in combination with an automatic emergency power supply
(5) ECOtronic system not needed with IT-TN version
(6) Only in combination with E-RMA

DUPLEXPLUS **Line**

12.0 - 15.0 kVA

▶ ESE 1006-1506 DHG-GT ES DUPLEX

Set of wheels optionally available

DUPLEXPLUS Line 10.0 - 15.0 kVA

Model	ESE 1006 HG-GT ES **ISO** DUPLEX	ESE 1006 DHG-GT ES **ISO** DUPLEX		ESE 1306 DHG-GT ES **ISO** DUPLEX		ESE 1506 DHG-GT ES **ISO** DUPLEX	
	1~	3~	1~	3~	1~	3~	1~
Order No.	**113 260I**	**113 261I**		**113 258I**		**113 259I**	
Generator	DUPLEX	DUPLEX		DUPLEX		DUPLEX	
Max. output kVA/kW	8.8 / 8.0	11.0 / 8.8	6.6 / 5.9	12.2 / 9.8	7.7 / 7.0	13.7 / 11.0	7.7 / 7.0
Continuous output kVA/kW	8.0 / 7.2	10.6 / 8.5	6.0 / 5.4	12.0 / 9.6	7.0 / 6.3	13.0 / 10.4	7.0 / 6.3
Rated voltage	230 V 1~	400 V 3~	230 V 1~	400 V 3~	230 V 1~	400 V 3~	230 V 1~
Rated current	34.8 A 1~	14.4 A 3~	26.1 A 1~	15.8 A 3~	30.4 A 1~	17.8 A 3~	30.4 A 1~
Power factor cos φ	0.9	0.8	0.9	0.8	0.9	0.8	0.9
Frequency / Protection Class	50 Hz / IP 54	50 Hz / IP 54		50 Hz / IP 54		50 Hz / IP 54	
Engine type	HONDA GX 630	HONDA GX 630		HONDA GX 690		HONDA GX 690	
Construction type	2-cylinder 4-stroke OHV	2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV	
Displacement	688 cm³	688 cm³		688 cm³		688 cm³	
Output at 3000 rpm	12.4 kW	12.4 kW		13.2 kW		13.2 kW	
Fuel / tank capacity (litre)	Petrol / 20	Petrol / 20		Petrol / 20		Petrol / 20	
Consumption / running time at 75% load of about (1)	3.6 l / 5.6 h	4.2 l / 4.8 h		4.5 l / 4.4 h		5.2 l / 3.8 h	
Starting system	E-Start incl. battery	E-Start incl. battery		E-Start incl. battery		E-Start incl. battery	
Sound power level LWA	97 dB(A)	97 dB(A)		97 dB(A)		99 dB(A) (5)	
Sound pressure level LPA (7 m) (2)	67 dB(A)	67 dB(A)		65 dB(A)		69 dB(A)	
Weight (kg)	164	165		165		174	
Dimensions L × W × H (mm)	870×580×565	870×580×565		870×580×565		870×580×565	
Protective contact socket	2 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 230 V / 32 A	2 × 230 V / 16 A 2 × CEE 400 V / 16 A		2 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A		2 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A	
Possible areas of application (1)	230 V	400 V	230 V	400 V	230 V	400 V	230 V
Electronic devices up to	7200 W	8000 W	5400 W	9600 W	6300 W	10400 W	6300 W
Electric tools up to	7100 W	7900 W	5300 W	9500 W	6200 W	10300 W	6200 W
Gardening or construction equipment up to	4800 W	5300 W	3600 W	6400 W	4200 W	7000 W	4200 W
Compressors or pumps up to	3600 W	3700 W	2700 W	4800 W	3100 W	5200 W	3100 W
Inverter welding equipment up to	Ø 4.5 mm	Ø 4.5 mm		Ø 6.5 mm		Ø 6.5 mm	

Available accessories	Order No.	Suitable for
Maintenance kit	**164 032**	ESE 1006, 1306, 1506
Wheelset	**161 040**	ESE 1006, 1306, 1506
Exhaust hose (1.5 m)	**163 120**	All models
90° adapter for exhaust hose	**163 130**	All models
Feed distributor E-NEV/1-32	**162 301**	Model ESE 1006 SG-GT ES
Feed distributor E-NEV/3-16	**162 303**	Model ESE 1006 DSG-GT ES
Feed distributor E-NEV/3-32	**162 304**	Model series ESE 1306, 1506

Special equipment (3)	Order No.	Suitable for
FI protection switch	**162 009**	All models
Cable remote control 50 m	**162 006**	All models
Wireless remote control	**162 007**	All models
Emergency Power Supply	**162 330**	All models
IT-TN switchover system with a mains supply socket (6)	**162 045**	All models
60 Hz version	on request	
E-RMA SIM (4)	**342 220**	
E-RMA LAN (4)	**342 221**	
E-RMA web supervisor's annual fee (7)	**342 222**	

Equipment features

- Includes insulation monitoring in accordance with VDE 0100-551 2017.02
- ECOtronic system (not needed with IT-TN version)
- HONDA 2-cylinder OHV engines
- 4 in 1 display = V / Hz / h / oil deficit
- Tank level indicator
- Lack of oil automatic switch-off
- Generator overload protection
- Crane loading lug
- Folding handles

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) ECOtronic active
(3) Not upgradable
(4) Only in combination with an automatic emergency power supply
(5) Does not conform to EU Noise Guideline 2000/14/EU
(6) ECOtronic system not needed with IT-TN version
(7) Only in combination with E-RMA

DUPLEXSILENT **Line**

8.0 - 14.0 kVA

Especially suitable for use at construction and assembly sites according to DGUV information 203 - 032

▶ ESE 1308 DBG ES

The **DUPLEX**SILENT line guarantees maximum performance and reliability. Designed for professional use that demands reduced noise.

ISO | DUPLEX | IP 54 | Electronic regulation | Sound -proofed | Petrol

DUPLEXSILENT Line	
Electronic appliances	●●●
Electric tools	●●●
Gardening or construction equipment	●●●
Welding equipment	●●●
Emergency power application	●●●

DUPLEXSILENT **Line**

9.0 - 14.0 kVA

maxdrive

ESE 1408 DBG ES - the advantages at a glance

- An increase in the power output by 10%
- Rpm remains stable under heavy load
- A constant frequency, also in the upper rpm range

DUPLEXSILENT Line 9,0 - 14,0 kVA

Model	ESE 908 DBG ES **ISO** DUPLEX SILENT		ESE 1308 DBG ES **ISO** DUPLEX SILENT		ESE 1408 DBG ES **ISO** DUPLEX SILENT	
	3~	1~	3~	1~	3~	1~
Order No.	**113 007I**		**113 008I**		**113 022I**	
Generator	DUPLEX		DUPLEX		DUPLEX	
Max. output kVA/kW	9.9 / 7.9	5.5 / 5.0	14.3 / 11.4	7.7 / 6.9	14.5 / 11.6	7.7 / 6.9
Continuous output kVA/kW	9.0 / 7.2	6.0 / 5.4	13.2 / 10.6	7.2 / 6.5	13.7 / 10.9	7.5 / 6.7
Rated voltage	400 V 3~	230 V 1~	400 V 3~	230 V 1~	400 V 3~	230 V 1~
Rated current	12.9 A 3~	26.1 A 1~	19.1 A 3~	31.3 A 1~	19.8 A 3~	32.6 A 1~
Power factor cos φ	0.8	0.9	0.8	0.9	0.8	0.9
Frequency / Protection Class	50 Hz / IP 54		50 Hz / IP 54		50 Hz / IP 54	
Engine type	B&S VANGUARD / 16 HP		B&S VANGUARD / 23 HP		B&S VANGUARD / 23 HP	
Construction type	2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV	
Displacement	479 cm³		627 cm³		627 cm³	
Output at 3000 rpm	9.5 kW		15.0 kW		15.0 kW	
Fuel / tank capacity (litre)	Petrol / 12		Petrol / 12		Petrol / 12	
Consumption / running time at 75% load of about (1)	2.4 l / 5 h		3.4 l / 3.5 h		3.4 l / 3.5 h	
Starting system	E-Start incl. battery		E-Start incl. battery		E-Start incl. battery	
Sound power level LWA	89 dB(A)		93 dB(A)		93 dB(A)	
Sound pressure level LPA (7 m)	64 dB(A)		68 dB(A)		68 dB(A)	
Weight (kg)	132		150		150	
Dimensions L × W × H (mm)	820×440×580		820×440×580		820×440×580	
Protective contact socket	3 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 400 V / 16 A		3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A		3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A	
Possible areas of application (1)	400 V	230 V	400 V	230 V	400 V	230 V
Electronic devices up to	6400 W	4500 W	10400 W	6300 W	11400 W	6300 W
Electric tools up to	6300 W	4400 W	10300 W	6200 W	11300 W	6200 W
Gardening or construction equipment up to	4300 W	3000 W	6900 W	4200 W	7500 W	4200 W
Compressors or pumps up to	3200 W	2200 W	5200 W	3100 W	5600 W	3100 W
Inverter welding equipment up to	Ø 4.0 mm		Ø 6.5 mm		Ø 6.5 mm	

Available accessories	Order No.	Suitable for
Maintenance kit	**164 030**	Model ESE 908
Maintenance kit	**164 031**	Models ESE 1308, 1408
Exhaust hose (1.5 m)	**163 120**	All models
90° adapter for exhaust hose	**163 130**	All models
Feed distributor E-NEV / 3-16	**162 303**	Model ESE 908
Feed distributor E-NEV / 3-32	**162 304**	Model series ESE 1308, 1408
Fuelling set	**163 110**	All models

Special equipment (2)	Order No.	Suitable for
ECOtronic System	**163 020**	All models
Automatic choke	**163 030**	All models
E-MCS 4.0 multi-function control display	**162 314**	All models
FI protection switch	**162 009**	All models
Cable remote control 50 m	**162 006**	All models
Wireless remote control	**162 007**	All models
Emergency Power Supply	**162 330**	All models
60 Hz version	on request	
E-RMA SIM (3)	**342 220**	
E-RMA LAN (3)	**342 221**	
E-RMA web supervisor's annual fee (4)	**342 222**	

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Not upgradable
(3) Only in combination with an automatic emergency power supply
(4) Only in combination with E-RMA

Equipment features

- Includes insulation monitoring in accordance with VDE 0100-551 2017.02
- Noise insulating housing for low operating noises
- A light construction due to use of aluminium components
- Connection for external fuelling
- Operating hours counter
- Lack of oil automatic switch-off
- Generator overload protection
- Folding handles

DUPLEXSILENT **Line Diesel**

6.0 - 14.0 kVA

Especially suitable for use at construction and assembly sites according to DGUV information 203 - 032

▶ ESE 1408 DLG ES DI

The **DUPLEX**Silent line with HATZ and Lombardini diesel engines has proven itself in daily continuous use - it does not matter where, when or how - thanks to its superior and robust quality. A compact construction with innovative generator technology for an indispensable unit for professional independence from a mains network.

ISO | DUPLEX | IP 54 | Electronic regulation | Sound -proofed | Diesel

DUPLEXSILENT Line Diesel	
Electronic appliances	●●●
Electric tools	●●●
Gardening or construction equipment	●●●
Welding equipment	●●●
Emergency power application	●●●

DUPLEXSILENT **Line Diesel**

6.0 - 14.0 kVA

ENDRESS

ESE 608 DHG ES DI

- Connection for external fuelling
- 1-click system incl. fuel pump
- Folding handles

ESE 1008
ESE 1408 DHG ES DI

- Compact dimensions - fits on a Euro pallet
- Large tank 35 litres

DUPLEXSILENT Line Diesel 6.0 - 14.0 kVA					
Model	ESE 608 DHG ES DI **ISO** DUPLEX Silent		ESE 1008 LG ES DI **ISO** DUPLEX Silent	ESE 1408 DLG ES DI **ISO** DUPLEX Silent	
	3~	1~	1~	3~	1~
Order No.	**113 023I**		**113 038I**	**113 037I**	
Generator	DUPLEX		DUPLEX	DUPLEX	
Max. output kVA/kW	6.6 / 5.3	4.4 / 4.0	11.0 / 9.9	15.4 / 12.3	7.7 / 6.9
Continuous output kVA/kW	6.0 / 4.8	4.0 / 3.6	10.0 / 9.0	14.0 / 11.2	7.0 / 6.3
Rated voltage	400 V 3~	230 V 1~	230 V 1~	400 V 3~	230 V 1~
Rated current	8.7 A 3~	17.4 A 1~	43.5 A 1~	20.2 A 3~	30.4 A 1~
Power factor cos φ	0.8	0.9	0.9	0.8	0.9
Frequency / Protection Class	50 Hz / IP 54		50 Hz / IP 54	50 Hz / IP 54	
Engine type	HATZ 1B 50 / 11 HP		LOMBARDINI 12LD477 / 23 HP	LOMBARDINI 12LD477 / 23 HP	
Construction type	1-cylinder 4-stroke		2-cylinder 4-stroke	2-cylinder 4-stroke	
Displacement	517 cm³		954 cm³	954 cm³	
Output at 3000 rpm	7.6 kW		13.8 kW	13.8 kW	
Fuel / tank capacity (litre)	Diesel / 6		Diesel / 35	Diesel / 35	
Consumption / running time at 75% load of about (1)	1.3 l / 4.5 h		2.4 l / 14.5 h	3.0 l / 11.5 h	
Starting system	E-Start incl. battery		E-Start incl. battery	E-Start incl. battery	
Sound power level LWA	94 dB(A)		93 dB(A)	93 dB(A)	
Sound pressure level LPA (7 m)	69 dB(A)		68 dB(A)	68 dB(A)	
Weight (kg)	150		310	320	
Dimensions L × W × H (mm)	700×440×580		1100×700×870	1100×700×870	
Protective contact socket	3 × 230 V / 16 A 1 × CEE 400 V / 16 A		3 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 230 V / 32 A	3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A	
Possible areas of application (1)	400 V	230 V	230 V	400 V	230 V
Electronic devices up to	4800 W	3600 W	9000 W	11400 W	6300 W
Electric tools up to	4700 W	3500 W	8900 W	11300 W	6200 W
Gardening or construction equipment up to	3200 W	2400 W	6000 W	7500 W	4200 W
Compressors or pumps up to	2400 W	1800 W	4500 W	5600 W	3100 W
Inverter welding equipment up to	Ø 3.25 mm		Ø 4.5 mm	Ø 6.5 mm	

Available accessories	Order No.	Suitable for
Maintenance kit	**164 034**	Model ESE 608
Maintenance kit	**164 039**	Models ESE 1008-1408
Exhaust hose (1.5 m)	**163 120**	All models
90° adapter for exhaust hose	**163 130**	All models
Feed distributor E-NEV / 1-32	**162 301**	Model ESE 1008
Feed distributor E-NEV / 3-16	**162 303**	Model ESE 608
Feed distributor E-NEV / 3-32	**162 304**	Model ESE 1408
Fuelling set	**163 110**	Model ESE 608
Wheelset	**161 034**	Models ESE 1008, 1408
Chassis FG 75 ST	**341 116**	Models ESE 1008, 1408
Chassis FG 75 HV	**341 117**	Models ESE 1008, 1408

Special equipment (2)	Order No.	Suitable for
ECOtronic System	**162 201**	Model series ESE 1008, 1408
Connection for external fuelling	**162 025**	Model series ESE 1008, 1408
E-MCS 4.0 multi-function control display	**162 314**	Model ESE 608
FI protection switch	**162 009**	All models
Cable remote control 50 m	**162 016**	All models
Wireless remote control	**162 015**	All models
Emergency Power Supply	**162 320**	All models
60 Hz version	on request	
E-RMA SIM (3)	**342 220**	
E-RMA LAN (3)	**342 221**	
E-RMA web supervisor's annual fee (4)	**342 222**	
EDS 4/2000 Dual Speed, 4.0 kVA [COP] / 4.4 kVA [LTP]	**610 100**	Model ESE 1408
IT-TN switchover system with a mains supply socket	**162 042**	Model ESE 1408

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Not upgradable
(3) Only in combination with an automatic emergency power supply
(4) Only in combination with E-RMA

Equipment features for all models

- Includes insulation monitoring in accordance with VDE 0100-551 2017.02
- Noise insulating housing for low operating noises
- HATZ & Lombardini diesel engines
- Starter battery 12 V
- Generator overload protection
- Crane loading capability

DIESELSILENT **Line**

3.2 - 11.0 kVA

Model series ESE 406

- Insulation monitoring
- Voltmeter
- Large tank 18 litres

▶ ESE 406 YS-GT ISO DI

DIESELSILENT Line 3.2 - 5.6 kVA					
Model	ESE 406 YS-GT **ISO** DI	ESE 606 YS-GT ES **ISO** DI	ESE 608 YS-GT ES DI	ESE 608 DYS-GT ES DI	
	1~	1~	1~	3~	1~
Order No.	**122 001**	**122 009**	**131 009A**	**131 010A**	
Generator	Synchronous	Synchronous	Synchronous	Synchronous	
Max. output kVA/kW	3.8 / 3.4	6.0 / 5.4	5.9 / 5.4	6.9 / 5.5	4.6 / 4.1
Continuous output kVA/kW	3.2 / 2.9	4.9 / 4.4	4.9 / 4.4	5.6 / 4.5	3.3 / 3.0
Rated voltage	230 V 1~	230 V 1~	230 V 1~	400 V 3~	230 V 1~
Rated current	13.9 A 1~	21.3 A 1~	21.3 A 1~	8.2 A 3~	14.3 A 1~
Power factor cos φ	0.9	0.9	0.9	0.8	0.9
Frequency / Protection Class	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23	
Engine type	YANMAR L 70 / 6.7 HP	YANMAR L 100 / 10 HP	YANMAR L 100 / 10 HP	YANMAR L 100 / 10 HP	
Construction type	1-cylinder 4-stroke	1-cylinder 4-stroke	1-cylinder 4-stroke	1-cylinder 4-stroke	
Displacement	296 cm³	435 cm³	435 cm³	435 cm³	
Output at 3000 rpm	4.1 kW	5.7 kW	5.7 kW	5.7 kW	
Fuel / tank capacity (litre)	Diesel / 18	Diesel / 24	Diesel / 19	Diesel / 19	
Consumption / running time at 75% load of about (1)	1.0 l / 18 h	1.3 l / 18.5 h	1.5 l / 13 h	1.5 l / 13 h	
Starting system	Recoil starter	E-Start incl. battery	E-Start incl. battery	E-Start incl. battery	
Sound power level LWA	96 dB(A)	93 dB(A)	84 dB(A)	84 dB(A)	
Sound pressure level LPA (7 m)	71 dB(A)	68 dB(A)	56 dB(A)	56 dB(A)	
Weight (kg)	99	186	203	203	
Dimensions L × W × H (mm)	800×520×660	945×595×825	970×580×927	970×580×927	
Protective contact socket	1 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 230 V / 32 A	1 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 230 V / 32 A	1 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 230 V / 32 A	1 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 400 V / 16 A	
Possible areas of application (1)	230 V	230 V	230 V	400 V	230 V
Electric tools up to	2800 W	4200 W	4200 W	4500 W	2900 W
Gardening or construction equipment up to	1900 W	2800 W	2800 W	3100 W	2000 W
Compressors or pumps up to	1500 W	2200 W	2200 W	2100 W	1500 W
Inverter welding equipment up to	-	-	-	Ø 3.25 mm	

(1) This data is based on average values as individual cases can vary and therefore they are not binding

The quality engines in the DIESEL Line ensure a reliable drive for the high-power synchronous generators. Noise and weather protection hoods ensure that the noise regulations according to the EU noise emission regulations are observed.

DIESELSILENT Line	
Electronic appliances	●
Electric tools	●●●
Gardening or construction equipment	●●●
Welding equipment	●●
Emergency power application	●

DIESELSILENT **Line**

3.2 - 11.0 kVA

ENDRESS

Model series ESE 606, 706, 1006, 1204

- Insulation monitoring
- Voltmeter
- Large tank
- Crane loading lug
- Starter battery 12 V

ESE 1204 DHS-GT ES ISO DI

- Wheelset as standard

▶ ESE 1006 DLS-GT ES ISO DI

▶ ESE 608 DYS-GT ES ISO DI

DIESELSILENT Line 5.7 - 11.0 kVA							
Model	ESE 706 DYS-GT ES **ISO** DI		ESE 1006 LS-GT ES **ISO** DI	ESE 1006 DLS-GT ES **ISO** DI		ESE 1204 DHS-GT ES **ISO** DI	
	3~	1~	1~	3~	1~	3~	1~
Order No.	**122 010**		**122 008**	**122 007**		**122 005**	
Generator	Synchronous		Synchronous	Synchronous		Synchronous	
Max. output kVA/kW	6.9 / 5.5	4.6 / 4.1	8.3 / 7.5	9.8 / 7.9	6.3 / 5.7	15.8 / 12.6	10.4 / 9.4
Continuous output kVA/kW	5.7 / 4.6	3.3 / 3.0	7.1 / 6.4	8.5 / 6.8	5.0 / 4.5	11.0 / 8.8	6.5 / 5.8
Rated voltage	400 V 3~	230 V 1~	230 V 1~	400 V 3~	230 V 1~	400 V 3~	230 V 1~
Rated current	8.2 A 3~	14.3 A 1~	30.9 A 1~	12.3 A 3~	21.7 A 1~	15.9 A 3~	28.3 A 1~
Power factor cos φ	0.8	0.9	0.9	0.8	0.9	0.8	0.9
Frequency / Protection Class	50 Hz / IP 23		50 Hz / IP 23	50 Hz / IP 23		50 Hz / IP 23	
Engine type	YANMAR L 100 / 10 HP		LOMBARDINI 25LD330 / 16 HP	LOMBARDINI 25LD330 / 16 HP		HATZ 2G 40 / 20 HP	
Construction type	1-cylinder 4-stroke		2-cylinder 4-stroke	2-cylinder 4-stroke		2-cylinder 4-stroke	
Displacement	435 cm³		654 cm³	654 cm³		997 cm³	
Output at 3000 rpm	5.7 kW		11.2 kW	11.2 kW		14.7 kW	
Fuel / tank capacity (litre)	Diesel / 24		Diesel / 24	Diesel / 24		Diesel / 17	
Consumption / running time at 75% load of about (1)	1.3 l / 18.5 h		2.0 l / 12 h	2.0 l / 12 h		2.3 l / 7.5 h	
Starting system	E-Start incl. battery		E-Start incl. battery	E-Start incl. battery		E-Start incl. battery	
Sound power level LWA	93 dB(A)		97 dB(A)	97 dB(A)		97 dB(A)	
Sound pressure level LPA (7 m)	68 dB(A)		72 dB(A)	72 dB(A)		72 dB(A)	
Weight (kg)	186		204	207		275	
Dimensions L × W × H (mm)	945×595×825		945×595×825	945×595×825		1270×610×920	
Protective contact socket	1 × 230 V / 16 A 2 × CEE 230 V / 16 A 1 × CEE 400 V / 16 A		1 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 230 V / 32 A	1 × 230 V / 16 A 2 × CEE 230 V / 16 A 1 × CEE 400 V / 16 A		1 × CEE 230 V / 16 A 1 × CEE 230 V / 32 A 1 × CEE 400 V / 16 A	
Possible areas of application (1)	400 V	230 V	230 V	400 V	230 V	400 V	230 V
Electric tools up to	4500 W	2900 W	6300 W	6700 W	4400 W	8700 W	5700 W
Gardening or construction equipment up to	3100 W	2000 W	4300 W	4500 W	3000 W	5800 W	3800 W
Compressors or pumps up to	2100 W	1500 W	3200 W	3400 W	2300 W	4400 W	2900 W
Inverter welding equipment up to	Ø 3.25 mm		-	Ø 4.0 mm		Ø 4.5 mm	

Available accessories	Order No.	Suitable for
Wheelset	**161 000**	Model ESE 406
Wheelset	**161 031**	Model series ESE 606, 706, 1006
Wheelset	**161 035**	Model series ESE 608
Feed distributor E-NEV/1-16	**162 300**	Model ESE 406
Feed distributor E-NEV/1-32	**162 301**	Model series 230V - ESE 606, 608, 1006

Special equipment (2)	Order No.	Suitable for
Cable remote control 20 m	**162 024**	Model series ESE 606, 608, 706, 1006, 1204
Automatic emergency power supply with FI version	**162 332**	Model series 230V - ESE 606, 608, 1006

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Not upgradable

Equipment features for all models

- Noise insulating housing for low operating noises
- Large tank for long running times
- Generator overload protection
- All generators fitted with a low distortion device for a clean voltage
- Compound controlled high-power 400V generators

DIESEL Line

3.3 - 13.6 kVA

Series with electrical starting
ESE 604, ESE 906, ESE 1506

- Starter battery 12 V
- Large tank 24 litres

- ESE 604 DYS ES DI
- ESE 906 LS / DLS ES DI
- ESE 1506 LS / DLS ES DI

DIESEL Line 3.3 - 5.6 kVA					
Model	ESE 404 YS DI	ESE 604 YS DI	ESE 604 YS ES DI	ESE 604 DYS DI	
	1~	1~	1~	3~	1~
Order No.	**121 000**	**121 004**	**121 008**	**121 001**	
Generator	Synchronous	Synchronous	Synchronous	Synchronous	
Max. output kVA/kW	3.9 / 3.5	5.9 / 5.3	5.9 / 5.3	6.9 / 5.5	4.5 / 4.1
Continuous output kVA/kW	3.3 / 3.0	4.8 / 4.4	4.8 / 4.4	5.6 / 4.5	3.3 / 3.0
Rated voltage	230 V 1~	230 V 1~	230 V 1~	400 V 3~	230 V 1~
Rated current	14.3 A 1~	20.9 A 1~	20.9 A 1~	8.2 A 3~	14.3 A 1~
Power factor cos φ	0.9	0.9	0.9	0.8	0.9
Frequency / Protection Class	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23	
Engine type	YANMAR L 70 / 6.7 HP	YANMAR L 100 / 10 HP	YANMAR L 100 / 10 HP	YANMAR L 100 / 10 HP	
Construction type	1-cylinder 4-stroke	1-cylinder 4-stroke	1-cylinder 4-stroke	1-cylinder 4-stroke	
Displacement	296 cm³	435 cm³	435 cm³	435 cm³	
Output at 3000 rpm	4.1 kW	5.7 kW	5.7 kW	5.7 kW	
Fuel / tank capacity (litre)	Diesel / 3.5	Diesel / 5.5	Diesel / 24	Diesel / 5.5	
Consumption / running time at 75% load of about [1]	1.0 l / 3.5 h	1.4 l / 4 h	1.4 l / 17 h	1.4 l / 4 h	
Starting system	Recoil starter	Recoil starter	E-Start incl. battery	Recoil starter	
Sound power level LWA	101 dB(A)[2]	105 dB(A)[2]	105 dB(A)[2]	105 dB(A)[2]	
Sound pressure level LPA (7 m)	76 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)	
Weight (kg)	54	94	114	96	
Dimensions L × W × H (mm)	760×538×560	760×538×560	840×641×696	760×538×560	
Protective contact socket	2 × 230 V / 16 A	1 × 230 V / 16 A 1 × CEE 230 V / 32 A	1 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 230 V / 32 A	1 × 230 V / 16 A 1 × CEE 400 V / 16 A	
Possible areas of application [1]	230 V	230 V	230 V	400 V	230 V
Electric tools up to	2900 W	4300 W	4300 W	4400 W	2900 W
Gardening or construction equipment up to	2000 W	2900 W	2900 W	3000 W	2000 W
Compressors or pumps up to	1500 W	2200 W	2200 W	2300 W	1500 W
Inverter welding equipment up to	-	-	-	Ø 3.25 mm	

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Does not conform to EU Noise Guideline 2000/14/EU

The quality diesel engines in the Diesel line ensure a reliable drive for the high-power synchronous generators.

These models do not comply with EU Noise Directive 2000/14/EU

DIESEL Line

3.3 - 13.6 kVA

▶ ESE 404 YS DI

▶ ESE 604 DYS

DIESEL Line 5.6 - 13.6 kVA

Model	ESE 604 DYS ES DI		ESE 906 LS ES DI	ESE 906 DLS ES DI		ESE 1506 LS ES DI	ESE 1506 DLS ES DI	
	3~	1~	1~	3~	1~	1~	3~	1~
Order No.	**121 002**		**121 009**	**121 010**		**121 011**	**121 012**	
Generator	Synchronous		Synchronous	Synchronous		Synchronous	Synchronous	
Max. output kVA/kW	6.9 / 5.5	4.5 / 4.1	8.8 / 7.9	10.3 / 8.2	6.8 / 6.1	13.6 / 12.2	14.3 / 11.4	5.9 / 5.3
Continuous output kVA/kW	5.6 / 4.5	3.3 / 3.0	7.6 / 6.8	8.8 / 7.0	5.2 / 4.7	12.8 / 11.5	13.6 / 10.9	5.4 / 4.9
Rated voltage	400 V 3~	230 V 1~	230 V 1~	400 V 3~	230 V 1~	230 V 1~	400 V 3~	230 V 1~
Rated current	8.2 A 3~	14.3 A 1~	33.0 A 1~	12.7 A 3~	22.6 A 1~	52.2 A 1~	19.6 A 3~	21.7 A 1~
Power factor cos φ	0.8	0.9	0.9	0.8	0.9	0.9	0.8	0.9
Frequency / Protection Class	50 Hz / IP 23		50 Hz / IP 23	50 Hz / IP 23		50 Hz / IP 23	50 Hz / IP 23	
Engine type	YANMAR L 100 / 10 HP		LOMBARDINI 25LD330 / 16 HP	LOMBARDINI 25LD330 / 16 HP		LOMBARDINI 12LD477 / 23 HP	LOMBARDINI 12LD477 / 23 HP	
Construction type	1-cylinder 4-stroke		2-cylinder 4-stroke	2-cylinder 4-stroke		2-cylinder 4-stroke	2-cylinder 4-stroke	
Displacement	435 cm³		654 cm³	654 cm³		954 cm³	954 cm³	
Output at 3000 rpm	5.7 kW		11.2 kW	11.2 kW		13.8 kW	13.8 kW	
Fuel / tank capacity (litre)	Diesel / 24		Diesel / 24	Diesel / 24		Diesel / 24	Diesel / 24	
Consumption / running time at 75% load of about (1)	1.4 l / 17 h		2.0 l / 12 h	2.0 l / 12 h		2.8 l / 8.5 h	2.8 l / 8.5 h	
Starting system	E-Start incl. battery		E-Start incl. battery	E-Start incl. battery		E-Start incl. battery	E-Start incl. battery	
Sound power level LWA	105 dB(A)(2)		105 dB(A)(2)	105 dB(A)(2)		107 dB(A)(2)	107 dB(A)(2)	
Sound pressure level LPA (7 m)	80 dB(A)		80 dB(A)	80 dB(A)		82 dB(A)	82 dB(A)	
Weight (kg)	108		157	160		193	200	
Dimensions L × W × H (mm)	840×641×696		960×641×667	960×641×667		960×641×667	960×641×667	
Protective contact socket	1 × 230 V / 16 A 2 × CEE 230 V / 16 A 1 × CEE 400 V / 16 A		1 × 230 V / 16 A 1 × CEE 230 V / 32 A	1 × 230 V / 16 A 1 × CEE 400 V / 16 A		1 × 230 V / 16 A 1 × CEE 230 V / 16 A 1 × CEE 230 V / 32 A	1 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A	
Possible areas of application (1)	400 V	230 V	230 V	400 V	230 V	230 V	400 V	230 V
Electric tools up to	4400 W	2900 W	6700 W	6900 W	4600 W	10700 W	10500 W	6500 W
Gardening or construction equipment up to	3000 W	2000 W	4500 W	4700 W	3100 W	7200 W	6200 W	4100 W
Compressors or pumps up to	2300 W	1500 W	3400 W	3500 W	2400 W	5400 W	5200 W	3100 W
Inverter welding equipment up to	Ø 3.25 mm		-	Ø 4.0 mm		-	Ø 6.0 mm	

Available accessories	Order No.	Suitable for
Wheelset	**161 000**	Models ESE 404, 604
Wheelset	**161 007**	Model series ESE 906, 1506
Feed distributor E-NEV / 1-32	**162 301**	Model series 230V - ESE 604, 906, 1506

Special equipment (3)	Order No.	Suitable for
Cable remote control 20 m	**162 024**	Series with electrical starting
Emergency Power Supply	**162 332**	Model series 230 V - with E-Start

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Does not conform to EU Noise Guideline 2000/14/EU
(3) Not upgradable

Equipment features for all models

- Large side panels protect the engine and generator
- Generator overload protection
- All generators fitted with a low distortion device for a clean voltage
- Compound controlled high-power 400V generators

Generator selection assistant

ENDRESS

Generator line			SILENT		CLASSIC power line			Professional GT											
			ESE 2000i	ESE 3000i	ESE 306 HS-GT	ESE 606 HS-GT	ESE 606 DHS-GT	ESE 206 HS-GT	ESE 306 HS-GT	ESE 406 HS-GT	ESE 506 DHS-GT	ESE 606 HS-GT	ESE 606 DHS-GT	ESE 1006 DBS-GT	ESE 1206 HS-GT	ESE 1206 DHS-GT	ESE 1306 HS-GT	ESE 1306 DHS-GT	ESE 1506 DHS-GT
Continuous output		VA	1600	3000	2500	5800	7000	2500	2900	4200	5400	6000	7000	10000	10000	11800	9000	12000	13200
Generator		DUPLEX																	
		Synchronous	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Protection Class		IP 54																	
		IP 23	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Voltage regulation		Electronic	●	●	AVR	AVR	AVR												
		Condenser						●	●	●		●			●				
		Compound									●		●	●		●			
Household	Voltage	Output (VA)																	
Hot plate	230 V	500-2000	<1300	●	<1900	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Baking oven	400 V	1000-2000					●						●	●		●	●	●	●
Fan heater	230 V	500-2000	<1300	●	<1900	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Refrigerator	230 V	100 - 150	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Freezer	230 V	100 - 400	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Air conditioning system	230 V	800-3000		<1900	<1900	<1600	●	<1500	<1800	●	<2100	●	●	●	●	●	●	●	●
Air conditioner	230 V	800-2000		<1900	<1000	●	●	<1800	<1800	●	●	●	●	●	●	●	●	●	●
Wet / dry vacuum cleaner	230 V	150-1500	<1200	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Computer, multimedia	230 V	100-1000	●	●	●	●	●												
Halogen lamp	230 V	200-1500	<1200	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Electric tools																			
Hammer drill / machine	230 V	400-1600	<1000	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hand circular saw	230 V	400-2000	<900	<1900	<1800	●	●	●	<1800	●	●	●	●	●	●	●	●	●	●
Angle grinder	230 V	400-2600	<1000	<2000	<1800	●	●	<2000	<1900	●	●	●	●	●	●	●	●	●	●
Jigsaw	230 V	250 - 700	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Bench grinder	230 V	300 - 900	<600	<1300	●	●	●	●	<1200	●	●	●	●	●	●	●	●	●	●
Garden tools																			
Lawn mower	230 V	750-2000		<1300	<1200	●	●	<1600	<1200	●	●	●	●	●	●	●	●	●	●
Hedge trimmer	230 V	350-1000	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Shredder	230 V	700-2500		<1100	<1200	●	<2200	<1600	<1000	●	<1900	●	●	●	●	●	●	●	●
	400 V	1500-4000					<3300				<3200		●	●		●		●	●
Electric devices																			
Building / circular saws	230 V	1500-3000		<1400	<1000		<1600	<1200	<1300	<1900	<1400	<2800	<1900	<2800	●	●	●	●	●
	400 V	2500-6000					<2500				<2500		<3200	<4600		<5400		<5400	<5400
Compressor	230 V	500-2500		<1100	<1000	<2500	<1600	<1200	<1000	<1900	<1400	<2800	<1900	●	●	●	●	●	●
	400 V	1500-3000					<2500				<2500		●	●		●		●	●
Water pump	230 V	400-2000	<800	<2000	<1000	●	●	<1500	<1900	●	●	●	●	●	●	●	●	●	●
	400 V	1000-5000					<2500				<3600		<4600	●		●		●	●
High pressure cleaner	230 V	1500-4000		<1400	<1000	<2500	<1600	<1200	<1300	<1900	<1400	<2800	<1900	<2800	●	<3200	●	<3200	<3200
	400 V	3000-6000					<2500				<2500		<3200	<4600		<5400		<5400	<5400
Welding equipment (electrode Ø in mm)																			
Inverter welding	230 V up to																4.5		
	400 V up to										2.5		3.25	4.5		5.0		5.0	5.0
Electrical welding	230 V up to						2.5			2.5					5.0		5.0		
	400 V up to										3.25	4.0	4.0	5.0		6.0		6.0	6.0
Plastic welding				●															
Electric motors																			
1.5 kW	230 V					●	●		●	●		●	●	●	●	●	●	●	●
1.5 kW	400 V						●				●		●	●		●		●	●
2.2 kW	230 V					●						●		●	●	●	●	●	●
2.2 kW	400 V						●				●		●	●		●		●	●
3.0 kW	400 V												●	●		●		●	●
4.0 kW	400 V													●		●		●	●
5.0 kW	400 V															●		●	●
6.0 kW	400 V																		
7.5 kW	400 V																		
Emergency power feed																			
	230 V		<1200	<2600	<1800	<4800		<2200	<2400	<3700		<5400			<9000	<3700	<3700	<3700	<3700
	400 V																		

(1) **<1200** shows the appliance's maximum output, in VA, that can be handled by this generator.
(2) The data is based on average values and it is not binding, since individual cases may vary.

ESE 2006 DHS-GT	ESE 406 HG-GT ISO	ESE 506 HG-GT ISO	ESE 606 DHG-GT ISO	ESE 1006 HG-GT ISO	ESE 1006 DHG-GT ISO	ESE 1306 DHG-GT ISO	ESE 1506 DHG-GT ISO	ESE 908 DBG ISO	ESE 1308 DBG ISO	ESE 1408 DBG ISO	ESE 608 DHG ISO	ESE 1008 LG ISO	ESE 1408 DLG ISO	ESE 404 YS ESE 406 YS-GT ISO	ESE 604 YS-GT ESE 606 YS-GT ISO ESE 608 YS-GT ISO	ESE 604 DYS-GT ESE 606 DYS-GT ISO ESE 608 DYS-GT ISO	ESE 1006 DLS-GT ISO	ESE 906 LS	ESE 906 LS	ESE 1204 DHS-GT	ESE 1506 LS	ESE 1506 LS
	DUPLEXPLUS							**DUPLEX**SILENT						**DIESEL**								
20000	4000	5000	6000	8000	10600	12000	13000	9000	13000	14000	6000	10000	14000	3200	4800	5600	8800	7600	8800	11000	12800	13600
	●	●	●	●	●	●	●	●	●	●	●	●	●									
●														●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●									
●														●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●									
														●	●			●				
																●	●		●	●	●	●
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●			●		●	●	●	●	●	●	●		●			●	●		●	●		●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	<2100	●	<2300	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●									
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
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	2.5	2.5	2.5	4.5								4.5										
6.0			3.25		4.5	6.5	6.5	4.0	6.5	6.5	3.25		6.5			3.25	4.0		4.0	4.0		4.0
	2.5	3.25		5.0								5.0			2.5			4.0				
6.0			4.0		5.0	6.0	6.0	4.0	6.0	6.0	4.0		6.0			3.25	4.0		6.0			6.0
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			<5400		<9000	<10000	<11000	<7200	<1250	<1250	<5400		<1250									

● Generator design The consumers can be driven by this generator
● The consumers can be driven by this generator

Gas generator

Automatic, stationary emergency power supply

One further alternative for an automatic emergency power supply are generators that are fitted with a gas engine. These devices can optionally be run on natural gas (NG) or liquefied gas (LPG).

The ENDRESS gas power generators are already fitted with a built-in automatic emergency power supply which is controlled via the E-MCS 5.0 on-board computer.

Synchronous | IP 23 | Low distortion device | Sound insulated | Gas

Equipment features

- Automatic control panel E-MCS 5.0
- Switchover protection integrated in the housing (no separate installation required)
- FI protection switch
- Generator overload protection
- Lack of oil switch-off
- Starter battery 12 V / 40 Ah
- A standard connection for propane gas bottles or a house connection for a natural gas line

E-MCS 5.0 control unit

For monitoring the engine and generator, frequencies, voltage and operating hours. Warning function and emergency stop in case of an engine malfunction.

Integrated emergency power supply

Gas generator		
Model		ESE 808 GF
Order No.		**8080 103**
Generator		Synchronous / IP 23
Continuous output running on LPG (kW)		8.0
Continuous output running on NG (kW)		7.0
Rated voltage		230 V 1~
Rated current		35 A 1~
Frequency		50 Hz
Engine type		B & S VANGUARD
Construction type		2-cylinder 4-stroke OHV
Displacement		570 cm³
Starting system		E-Start
Sound power level LWA		90 dB(A)
Sound pressure level LPA (7 m)		65 dB(A)
Consumption of LPG	for a 50% load (1)	2.0 kg/h
	for a 100% load (1)	3.9 kg/h
Consumption of NG	for a 50% load (1)	2.5 m³
	for a 100% load (1)	3.25 m³
Weight (kg)		180
Dimensions L × W × H (mm)		1200×630×700

(1) This data is based on average values as individual cases can vary and therefore they are not binding

WELDING Line

30 - 300 A

▶ ESE 704 SHS-AC

Welding generators are an irreplaceable aid for undertaking welding or repair work on construction sites without a power connection.

They can also be used as a power generator when power is needed. ENDRESS welding generators, the multi-faceted source of energy.

Synchronous

IP 23

Welding control

AC / DC current welding

Petrol Diesel

WELDING Line

30 - 300 A

▶ ESE 1006 SDHS-DC ES

WELDING Line				
Model [3]	ESE 404 SHS-AC	ESE 704 SHS-AC	ESE 804 SDHS-DC	ESE 1006 SDHS-DC ES
Order No.	**141 008**	**141 007**	**141 001**	**141 018**
Welding generator				
Welding power control range	30 - 180 A	60 - 200 A	40 - 220 A	30 - 300 A
No-load voltage	50 ÷ 62,5 V	45 ÷ 60,0 V	73.0 V	75.0 V
Min. / Max. welding voltage	22.4 / 27.2 V	22.4 / 28.0 V	21.5 / 28.8 V	21.2 / 32.0 V
Welding operation at 60% period of operation [4]	125 A	180 A	170 A	250 A
Welding regulation	Mechanical	Mechanical	Mechanical	Mechanical
Generator	Synchronous	Synchronous	Synchronous	Synchronous
Max. output kVA/kW	4.4 / 4.0	6.5 / 5.9	6.6 / 5.3 4.4 / 4.0	8.8 / 7.0 3.3 / 3.0
Continuous output kVA/kW	4.0 / 3.6	5.9 / 5.3	6.0 / 4.8 4.0 / 3.6	8.0 / 6.4 3.0 / 2.7
Rated voltage	230 V 1~	230 V 1~	400 V 3~ 230 V 1~	400 V 3~ 230 V 1~
Rated current	17.4 A 1~	25.7 A 1~	8.7 A 3~ 17.4 A 1~	11.5 A 3~ 13.0 A 1~
Power factor cos φ	0.9	0.9	0.8 0.9	0.8 0.9
Frequency / Protection Class	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23
Engine type	HONDA GX270 / 8 HP	HONDA GX390 / 11 HP	HONDA GX390 / 11 HP	HONDA GX630 / 21 HP
Construction type	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV	2-cylinder 4-stroke OHV
Displacement	270 cm³	389 cm³	389 cm³	688 cm³
Output at 3000 rpm	4.3 kW	6.4 kW	6.4 kW	10.5 kW
Fuel / tank capacity (litre)	Petrol / 6	Petrol / 6.5	Petrol / 6.5	Petrol / 16
Consumption / running time at 75% load of about [1]	1.6 l / 3.5 h	2.2 l / 3 h	2.1 l / 3 h	3.5 l / 4.5 h
Starting system	Recoil starter	Recoil starter	Recoil starter	E-Start incl. battery
Sound power level LWA	98 dB(A) [2]	99 dB(A) [2]	100 dB(A) [2]	98 dB(A) [2]
Sound pressure level LPA (7 m)	73 dB(A)	74 dB(A)	75 dB(A)	73 dB(A)
Weight (kg)	75	95	95	145
Dimensions L × W × H (mm)	890×490×570	890×490×570	890×490×570	945×570×640
Protective contact socket	2 × 230 V / 16 A	2 × 230 V / 16 A	1 × 230 V / 16 A 1 × CEE 400 V / 16 A	1 × CEE 230 V / 16 A 1 × CEE 400 V / 16 A
Maximum electrode Ø (mm)				
Rutile	4	4	5	6
Basic	-	-	4	5
Cellulose	-	-	5	6

(1) This data is based on average values as individual cases can vary and therefore they are not binding.
(2) Does not conform to EU Noise Guideline 2000/14/EU.
(3) AC = alternating current welding for simple welding work
DC = DC welding for professional welding operations
(4) The period of operation is determined within a cycle duration of 10 minutes (100%).
Therefore a period of operation of 60% means that the welding time is 6 minutes (60%) and the cooling down time is 4 minutes (40%)

Available accessories	Order No.	Suitable for
Wheelset	**161 000**	Model series ESE 404, 704, 804
Wheelset	**161 015**	Model ESE 1006 SDHS-DC ES
Welding area equipment	**162 012**	Model series ESE 404, 704
Welding area equipment	**162 010**	Model ESE 804 SDHS-AC
Welding area equipment	**162 013**	Model ESE 1006 SDHS-DC ES
Adapter CEE 230V / 16A to the shock-proof 230V / 16A	**162 004**	Model ESE 1006 SDHS-DC ES

Equipment features

- Linear welding control (ESE 1006 model)
- Lack of oil switch-off
- Generator overload protection
- Carrying handle

Original accessories

Wheelset
Simple installation without drilling. For models with full tubular frames.

The design may vary according to the model.

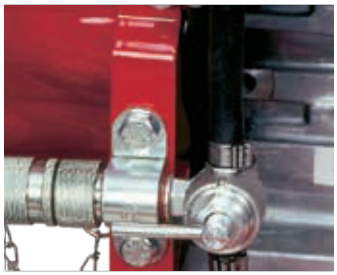
Crane loading device
Makes implementation and loading easier — simple installation.

The design may vary according to the model.

Adapters
90° angle, fits exhaust hose.

Exhaust hose
Flexible metal hose (1.5 m) to conduct away the exhaust gases.

Not suitable for enclosed spaces.



3-way fuel tap
For direct connection to a fuelling system.

Fuelling set
Included in the delivery: 20 l fuel can with a fuel drawing device.

Welding current cable remote control
The welding output can be easily adjusted over the remote controller.

Cable length 15 m.

Welding accessories scope of delivery:
Hand shield, wire brush, ground, electrode cable, chipping hammer, glove.

Maintenance kit for petrol models
Included in the delivery:
Air filter, spark plugs, oil filter, sealing ring.

Included equipment may vary according to engine type.

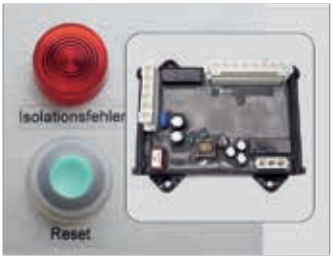
Emergency Power Supply
When the power grid fails, the unit starts and takes over the emergency power supply.

Power distributor
230 V or 400 V versions available.

Multi-function control display E-MCS 4.0
Displays the generator's most important current measurement data.

FI circuit breaker incl. earthing kit
For protection against dangerous body currents. Earthing kit includes: Earthing spike, earthing cable.

(35 mm², 3 m long)



Insulation monitoring
The consumer circuit is automatically disconnected when the insulation resistance reaches a critical value.

Wireless remote control
In response to a radio impulse the engine of the generator is reliably started or stopped.

Range under normal conditions 30-50 m

Cable remote control
The START / STOP button reliably turns the unit on and off.

Cable length 20 or 50 m, depending on model

PTO shaft generators

22.0 - 100.0 kVA

Endress PTO shaft generators provide a cost-effective power supply.

They are simply mounted on existing agricultural tractors — without any investment in an additional drive motor.

Synchronous

IP 23
IP 44

Compound
AVR

Protection Class IP 23				
Model	EZG 24 / 2	EZG 33 / 4	EZG 46 / 4	EZG 66 / 4
Order No.	**511 037**	**511 038**	**511 039**	**511 040**
Generator	Synchronous	Synchronous	Synchronous	Synchronous
Continuous output kVA/kW	22.0 / 17.6	30.0 / 24.0	42.0 / 33.6	60.0 / 48.0
Voltage regulation	Compound	AVR	AVR	AVR
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Rated current	31.8 A 3~	43.3 A 3~	60.7 A 3~	86.7 A 3~
Frequency / Protection Class	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23
Recommended tractor power output approx.	48 hp	61 hp	81 hp	118 hp
Speed of power take-off shaft	430 RPM	430 RPM	430 RPM	430 RPM
Weight (kg)	160	262	300	362
Dimensions L × W × H (mm)	930×800×900	930×800×900	1020×800×900	1020×800×900
Protective contact socket	1 × CEE 230 V / 16 A 1 × CEE 400 V / 32 A	1 × CEE 230 V / 32 A 1 × CEE 400 V / 63 A	1 × CEE 230 V / 32 A 1 × CEE 400 V / 63 A	1 × CEE 230 V / 16 A 1 × CEE 400 V / 125 A

For further information:

Click here to go to the **shaft generators** on our homepage

Standard equipment EZG IP23

- Fusing over a circuit breaker
- Display of frequency, voltage, current
- Operating hours counter (EZG 66 / 4)
- 3-point suspension
- A robust steel frame with forklift pockets
- Development and manufacture in Germany

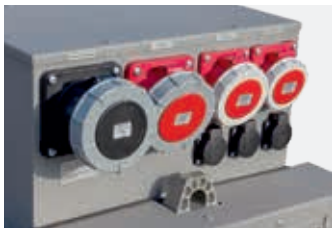
PTO shaft generators

22.0 - 100.0 kVA

Fulfils the requirements of the Agricultural Employer's Liability Insurance Association

ENDRESS

Display seen from the tractor



Switch box for the different versions
Feed into the building IT / TN

IT-TN switch-over version including supply socket with a transfer switching equipment for supplying power to a building after a power failure according to VDE 0100-551:2017-02

▶ EZG 100/4

Protection Class IP 44					
Model	EZG 25/2	EZG 40/4	EZG 60/4	EZG 80/4	EZG 100/4
Generator	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Continuous output kVA/kW	25 / 20	40 / 32	60 / 48	80 / 64	100 / 80
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Frequency / Protection Class	50 Hz / IP 44	50 Hz / IP 44	50 Hz / IP 44	50 Hz / IP 44	50 Hz / IP 44
Recommended tractor power output approx.	50 hp	80 hp	120 hp	160 hp	200 hp
Nominal speed of power take-off shaft	430 RPM	430 RPM	430 RPM	430 RPM	750 RPM
Drive shaft	1"3/8 Z6	1"3/8 Z6	1"3/8 Z6	1"3/8 Z6	1"3/4 Z20
Category 3-point suspension	2	2	2	3	3
Weight (kg)	220	266	392	500	560
Dimensions L × W × H (mm)	1130×740×942	1130×740×942	1130×740×942	1130×740×1007	1130×740×1007
Versions for field operations	EZG 25/2 TN-S	EZG 40/4 TN-S	EZG 60/4 TN-S	EZG 80/4 TN-S	EZG 100/4 TN-S
Order No.	**511 402**	**511 404**	**511 405**	**511 406**	**511 407**
Continuous output kVA/kW	25 / 20	40 / 32	60 / 48	80 / 64	100 / 80
Rated current	36.1 A 3~	57.7 A 3~	86.6 A 3~	115.5 A 3~	144.3 A 3~
Voltage regulation	Compound	AVR	AVR	AVR	AVR
Personal protection	FI protection switch	FI protection switch	FI protection switch	FI protection switch	FI protection switch
Socket combination	3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 63 A	3 × 230 V / 16 A 2 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 63 A	3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 63 A 1 × CEE 400 V / 125 A	3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 63 A 1 × CEE 400 V / 125 A	3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 63 A 1 × CEE 400 V / 125 A
Versions with the IT-TN switchover system	EZG 25/2 II/TN-S	EZG 40/4 II/TN-S	EZG 60/4 II/TN-S	EZG 80/4 II/TN-S	EZG 100/4 II/TN-S
Order No.	**511 502**	**511 504**	**511 505**	**511 506**	**511 507**
Continuous output kVA/kW	22 / 17.6	40 / 32	60 / 48	80 / 64	100 / 80
Rated current	31.7 A 3~	57.7 A 3~	86.6 A 3~	115.5 A 3~	144.3 A 3~
Voltage regulation	AVR	AVR	AVR	AVR	AVR
Personal protection	Insulation monitoring	Insulation monitoring	Insulation monitoring	Insulation monitoring	Insulation monitoring
Socket combination	3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A	3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 63 A	3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 125 A	3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 125 A	3 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 125 A
Mains supply socket	1 × CEE 400 V / 32 A, 1 h	1 × CEE 400 V / 63 A, 1 h	1 × CEE 400 V / 125 A, 1 h	1 × CEE 400 V / 125 A, 1 h	1 × CEE 400 V / 125 A, 1 h
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.
Wheelset	**161 036**	**161 036**	**161 036**	**161 036**	**161 036**
Adapter for Category 2	–	–	–	**162 034**	**162 034**
Adapter for Category 3	**162 048**	**162 048**	**162 048**	–	–
Power distributor E-NEV/3-32	**162 304**	–	–	–	–
Power distributor E-NEV/3-63	**162 305**	**162 305**	–	–	–
Supply connector (for the option IT-TN) CEE 400 V / 32 A, 1 h	**E 135 846**	–	–	–	–
Supply connector (for the option IT-TN) CEE 400 V / 63 A, 1 h	–	**E 135 847**	–	–	–
Supply connector (for the option IT-TN) CEE 400 V / 125 A, 1 h	–	–	**E 135 848**	**E 135 848**	**E 135 848**

Standard equipment: EZG IP 44

- Fuses over an all-phase line circuit breaker
- Operating hours counter
- Monitoring and display of frequency, voltage, current
- Automatic safety switch-off
- Large control lamps simplify adjustment of the power take-off shaft rotational speed (traffic lights function)
- A robust steel frame with forklift pockets
- A suitable supply connector 1h (for the IT-TN versions)
- Development and manufacture in Germany

Switching option operation in the field / feed into a building (IT/TN network)

- 4-pin changeover switch for switching over between operation in the field and power feed operation (emergency power)
- Personal protection. Insulation monitoring during operation in the field - safe mobile operation
- Protection over the building installation in power feed operation (TN network)
- Mains supply socket CEE 5-pin, 1 h designed for the generator's maximum power output
- One suitable mating connector for a building mains feed CEE 400 V, 1 h included in the scope of delivery

Control module E-MCS 6.0

Simple to operate, reliable in use

The digital control module E-MCS 6.0 is extremely versatile in use and very operator friendly at the same time due to the through menu navigation. With its large display screen and operating keys the main focus is on easy and clear operation.

The E-MCS 6.0 includes the following functions

- Manual and automatic control of the power generator (start – stop)
- Monitoring of the oil pressure in the engine with automatic switching off if the oil pressure drops too low
- Monitoring of the battery charge and battery voltage
- Monitoring of the public power grid and switching in or switching off of the generator when the power grid fails
- Monitoring of the voltage / frequency of the generator
- Integrated operating hours counter
- Error memory for the last 100 errors that have occurred incl. actuation of the Emergency-Stop button
- Option to retrofit a remote monitoring system using E-RMA

Connected power with E-RMA

ENDRESS Remote Monitoring Application - global remote maintenance. It does not matter where your generator is, with the two E-RMA SIM and E-RMA LAN options you always have access to the most important functions. Remote starting or stopping also belong to the options available such as remote monitoring and proactive messages which can, for example, warn against a critical condition being reached quite soon.

Your generator can be accessed via any internet connection on your PC, tablet or smartphone. Extensive information about this topic can be found on **Page. 9**

Meaning of the abbreviations used in the tables

PRP - output during continuous operation such as 8528-1:2005.

Defined as the maximum power output that a generator can deliver under the agreed operating conditions during continuous operation, whilst it delivers a variable electrical load for an unlimited number of hours and when the maintenance intervals and procedures stipulated by the manufacturer are adhered to. The permissible average output over a 24 hour operating period must not exceed 70% of the basic output.

LTP - limited power during continuous operation such as 8528-1:2005. Defined as the maximum available power that a generator can provide under the agreed operating conditions for up to 500 operating hours per annum when the maintenance intervals and procedures stipulated by the manufacturer are adhered to. There is no overload capability.

Declaration of the model designation

ESE	110	D	W	A	S	
						S = Acoustic enclosure
						A = Automatic **M** = Manual
						W = Water-cooled
						D = DEUTZ Dalian **V** = VOLVO **Y** = YANMAR **P** = PERKINS
						110 = Output class
						ESE = ENDRESS generators

Power supply systems

10 - 705 kVA

▶ ESE 50 YW-B

Made for tough construction site use, the diesel assemblies come in a sound-insulated design with all-around protection. They are fitted with premium generators that comply with VDE 0530 (Class H insulation) and are designed for the best performance under the toughest conditions.

Synchronous Class H | Electronic | Sound insulated | 1500 RPM | Diesel

Power supply systems	
Building site generators	**Page 50**
RENTAL Line RS	**Page 52**
POWER Line	**Page 57**
POWER Line Open Construction	**Page 65**

Building site generators

10 - 50 kVA

▶ ESE 20 YW-B

Modern water-cooled YANMAR diesel engines are used in the ESE 10 to 50 YW-B series. These are characterised by permanent reliability, high quality and cleanliness.

3A

Construction site generators 10 - 20 kVA

Model	ESE 10 YW-B	ESE 15 YW-B	ESE 20 YW-B (2)
Order No.	**310 014**	**310 011**	**310 012**
Max. output [LTP] kVA / kW 3~	9.3 / 7.4	14.3 / 11.4	19.3 / 15.4
Continuous power output [PRP] kVA / kW 3~	8.5 / 6.8	13.0 / 10.4	17.6 / 14.0
Generator model	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	12.2 A 3~ / 0.8	18.8 A 3~ / 0.8	25.4 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	YANMAR 3TNV76	YANMAR 3TNV88	YANMAR 4TNV88
Construction type	3-cylinder 4-stroke	3-cylinder 4-stroke	4-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled
Displacement	1116 cm³	1642 cm³	2190 cm³
Engine output (PRP)	8.4 kW	12.7 kW	16.9 kW
Rotational speed (rpm) / regulation	1500 / Mechanical	1500 / Mechanical	1500 / Mechanical
Fuel / tank capacity (litre)	Diesel / 51	Diesel / 51	Diesel / 51
Consumption / running time at 75% approx. (1)	2.0 l / 25 h	2.8 l / 17.9 h	3.7 l / 13.7 h
Starting system / battery	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V
Sound power level LWA	93 dB(A)	93 dB(A)	93 dB(A)
Sound pressure level LPA (7 m)	68 dB(A)	68 dB(A)	68 dB(A)
Weight (kg)	418	480	560
Dimensions L × W × H (mm)	1646×885×1061	1646×885×1061	1646×885×1061
Available accessories	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request
Chassis ST rigid	**341 100 / FG 75**	**341 100 / FG 75**	**341 102 / FG 135**
Chassis HV height adjustable	**341 101 / FG 75**	**341 101 / FG 75**	**341 103 / FG 135**
Changeover contactors designed for LTP power output (3)	**343 012 / E-US 20**	**343 000 / E-US 32**	**343 000 / E-US 32**
Galvanized base frame	(5)	(5)	(5)
Earthing kit	**162 008**	**162 008**	**162 008**
Special equipment (4)	Order No.	Order No.	Order No.
Emergency Power Supply	**310 014A**	**310 011A**	**310 012A**
Universal current sensitive FI circuit breaker Type B	**342 012**	**342 012**	**342 012**
Insulation monitoring	**163 076**	**163 076**	**163 076**
Special colour	on request	on request	on request
Large tank 48h at a 75% load	(5)	(5)	(5)
Wireless / cable remote control	on request	on request	on request

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) All generators that are marked with 3A fulfil emissions Stage 3A
(3) Only for the version of the automatic emergency power supply **(4)** Not upgradable **(5)** Not available

Building site generators

10 - 50 kVA

▶ ESE 50 YW-B

3A

A description of the instrument panel and Socket combination can be found on **page 69**

3A

Construction site generators 30 - 50 kVA

Model	ESE 35 YW-B (2)	ESE 45 YW-B	ESE 50 YW-B (2)
Order No.	**310 027**	**310 028**	**310 029**
Max. output [LTP] kVA / kW 3~	32.5 / 26.0	46.0 / 36.8	46.0 / 36.8
Continuous power output [PRP] kVA / kW 3~	30.5 / 24.4	42.0 / 33.6	44.0 / 35.2
Generator model	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	44.0 A 3~ / 0.8	60.6 A 3~ / 0.8	63.5 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	YANMAR 4TNV98	YANMAR 4TNV98T	YANMAR 4TNV98T
Construction type	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled
Displacement	3319 cm³	3319 cm³	3319 cm³
Engine output (PRP)	31.2 kW	38.3 kW	40.2 kW
Rotational speed (rpm) / regulation	1500 / Mechanical	1500 / Mechanical	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 100	Diesel / 100	Diesel / 100
Consumption / running time at 75% approx. (1)	5.8 l / 17.2 h	7.9 l / 12.7 h	8.3 l / 12.0 h
Starting system / battery	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V
Sound power level LWA	95 dB(A)	95 dB(A)	95 dB(A)
Sound pressure level LPA (7 m)	70 dB(A)	70 dB(A)	70 dB(A)
Weight (kg)	808	874	917
Dimensions L × W × H (mm)	2005×948×1308	2005×948×1308	2005×948×1308
Available accessories	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request
Chassis ST rigid	**341 102 / FG 135**	**341 102 / FG 135**	**341 102 / FG 135**
Chassis HV height adjustable	**341 103 / FG 135**	**341 103 / FG 135**	**341 103 / FG 135**
Changeover contactors designed for LTP power output (3)	(5)	(5)	(5)
Galvanized base frame	**342 111**	**342 111**	**342 111**
Earthing kit	**162 008**	**162 008**	**162 008**
Special equipment (4)	Order No.	Order No.	Order No.
Emergency Power Supply	(5)	(5)	(5)
Universal current sensitive FI circuit breaker Type B	**342 013**	**342 013**	**342 013**
Insulation monitoring	**163 076**	**163 076**	**163 076**
CEE 400V / 16A socket (6)	**342 710**	**342 710**	**342 710**
Special colour	on request	on request	on request
Large tank 48h at a 75% load	**342 307**	**342 307**	**342 307**
Wireless / cable remote control	on request	on request	on request
Electronic engine control	**342 708**	–	–

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) All generators that are marked with 3A fulfil emissions Stage 3A
(3) Only for automatic emergency power supply version **(4)** Not upgradable **(5)** Not available **(6)** 2 x CEE 230V / 16A sockets are not needed

Option: Large tank for a running time of 48 h

Equipment features

- Clean and quietly running TNV engines
- Good starting characteristics, also at low temperatures
- Electronically regulated generators
- A brush-less design with a high voltage constancy
- Lockable instrument panel (models ESE 35-50 YW-B)
- Internal tank
- Large 100 litre steel tank for longer running times (ESE 35-50 YW-B model)

Synchronous Class H | Electronic | Sound insulated | 1500 RPM | YANMAR John Deere

The ENDRESS Rental Line RS generators combine all of the most important features concerning handling, simplified maintenance, a robust construction and a long running time.

Thought-through and inspired by exchanges made with partners of many years' standing, it is the innovative and economic solution which supports your success and keeps your projects optimally supplied.

For further information:

Click here to go to the **RS rental line flyer** on our homepage

RENTAL Line RS

20- 225 kVA

▶ ESE 20 YW/RS

A description of the instrument panel and socket combination can be found on **pages 69**

For further information:

Click here to go to our **RS rental line video** on YouTube

3A 3A 3A

RENTAL Line					
Model	ESE 20 YW/RS [4]	ESE 30 YW/RS	ESE 35 YW/RS [4]	ESE 45 YW/RS	ESE 50 YW/RS [4]
Order No.	**333 271**	**333 272**	**333 273**	**333 274**	**333 275**
Max. output [LTP] kVA/kW 3~	19.6 / 15.7	32.5 / 26.0	32.5 / 26.0	46.0 / 36.8	46.0 / 36.8
Continuous power output [PRP] kVA/kW 3~	17.9 / 14.3	30.5 / 24.4	30.5 / 24.4	42.0 / 33.6	42.0 / 33.6
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H	Class H
Rated voltage	400 V 3 ~ / 230 V 1 ~	400 V 3 ~ / 230 V 1 ~	400 V 3 ~ / 230 V 1 ~	400 V 3 ~ / 230 V 1 ~	400 V 3 ~ / 230 V 1 ~
Nominal current / Cos φ	25.8 A 3~ / 0.8	44.0 A 3~ / 0.8	44.0 A 3~ / 0.8	60.6 A 3~ / 0.8	60.6 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	YANMAR 4TNV88	YANMAR 4TNV98	YANMAR 4TNV98	YANMAR 4TNV98T	YANMAR 4TNV98T
Construction type	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	2190 cm³	3319 cm³	3319 cm³	3319 cm³	3319 cm³
Engine output (PRP)	16.4 kW	30.7 kW	30.7 kW	37.9 kW	37.9 kW
Rotational speed (rpm) / regulation	1500 / Mechanical	1500 / Mechanical	1500 / Electronic	1500 / Mechanical	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 200	Diesel / 200	Diesel / 200	Diesel / 200	Diesel / 200
Consumption / running time at 75% load of about [5]	3.8 l / 52 h	5.8 l / 34 h	5.8 l / 34 h	8.2 l / 24 h	8.3 l / 24 h
Starting system / battery	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V
Sound power level LWA	92 dB(A)	93 dB(A)	93 dB(A)	91 dB(A)	89 dB(A)
Sound pressure level LPA (7 m)	67 dB(A)	68 dB(A)	68 dB(A)	66 dB(A)	64 dB(A)
Weight (kg)	949	1054	1074	1129	1146
Dimensions L × W × H (mm)	2300×950×1500	2300×950×1500	2300×950×1500	2300×950×1500	2300×950×1500
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.
Chassis ST rigid [1]	**341 127 / FG 20-50 ST**	**341 127 / FG 20-50 ST**	**341 127 / FG 20-50 ST**	**341 127 / FG 20-50 ST**	**341 127 / FG 20-50 ST**
Chassis HV height adjustable [1]	**341 125 / FG 20-50 HV**	**341 125 / FG 20-50 HV**	**341 125 / FG 20-50 HV**	**341 125 / FG 20-50 HV**	**341 125 / FG 20-50 HV**
Float switch (start/stop) 10m	**342 033**	**342 033**	**342 033**	**342 033**	**342 033**
Changeover contactors	**343 016R / E-US 32**	**343 017R / E-US 63**	**343 017R / E-US 63**	**343 018R / E-US 80**	**343 018R / E-US 80**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**
Maintenance package 500 h [2]	**164 023**	**164 024**	**164 026**	**164 025**	**164 027**
Special equipment [3]	Order No.	Order No.	Order No.	Order No.	Order No.
FI - sensitive to universal currents - RCD [Type B]	**342 035**	**342 036**	**342 036**	**342 036**	**342 036**
Version B as per DGUV information 203-032	**342 711**	–	**342 711**	–	**342 711**
Supplying power to a building IT/TN	**342 232**	–	**342 232**	–	**342 232**
Insulation monitoring	**163 076**	**163 076**	**163 076**	**163 076**	**163 076**
Potential-free contact	**342 030**	**342 030**	**342 030**	**342 030**	**342 030**
External battery charging [7]	**342 031**	**342 031**	**342 031**	**342 031**	**342 031**
Twilight switch	**342 032**	**342 032**	**342 032**	**342 032**	**342 032**
Soot particulate filter	**342 400**	–	**342 400**	–	**342 400**
ENDRESS Hybrid System EHS 4/11-R	**342 231**	**342 231**	**342 231**	**342 231**	**342 231**
Remote display [6]	**E135 961**	**E135 961**	**E135 961**	**E135 961**	**E135 961**

(1) Dispensing with the base frame
(2) Maintenance package consisting of oil filter, fuel filter, air filter
(3) Not upgradable
(4) All generators that are marked with 3A fulfil emissions Stage 3A
(5) This data is based on average values since individual cases can vary, and it is not binding
(6) Control and monitoring unit consisting of a second display, 2 communications modules and a 10 m data cable
(7) The CEE 230V 16A socket is not needed

RENTAL Line RS

20- 225 kVA

Chassis optionally available

As from Q3 2019
Converted to FPT engines - for more information:

Click here to go to the **FPT press release** on our homepage

▶ ESE 180 JW/RS

3A 3A 3A 3A 3A 3A

RENTAL Line						
Model	ESE 67 JW/RS [3]	ESE 95 JW/RS [3]	ESE 115 JW/RS [3]	ESE 145 JW/RS [3]	ESE 180 JW/RS [3]	ESE 225 JW/RS [3]
Order No.	**333 276**	**333 277**	**333 278**	**333 279**	**333 280**	**333 288**
Max. output [LTP] kVA/kW 3~	66 / 52.8	94 / 75.2	116 / 92.8	140 / 112	176 / 140.8	220 / 176
Continuous power output [PRP] kVA/kW 3~	60 / 48	85 / 68	105 / 84	128 / 102.4	160 / 128	200 / 160
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H	Class H	Class H
Rated voltage	400 V 3 ~ / 230 V 1 ~	400 V 3 ~ / 230 V 1 ~	400 V 3 ~ / 230 V 1 ~	400 V 3 ~ / 230 V 1 ~	400 V 3 ~ / 230 V 1 ~	400 V 3 ~ / 230 V 1 ~
Nominal current / Cos φ	86.6 A 3~ / 0.8	122.7 A 3~ / 0.8	151.6 A 3~ / 0.8	184.8 A 3~ / 0.8	230.9 A 3~ / 0.8	288.7 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	JohnDeere 4045HFG81	JohnDeere 4045HFG82	JohnDeere 4045HFG82	JohnDeere 4045HFG82	JohnDeere 6068HFG82	JohnDeere 6068HFG82
Construction type	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	4500 cm³	4500 cm³	4500 cm³	4500 cm³	6800 cm³	6800 cm³
Engine output (PRP)	56 kW	76 kW	94 kW	112 kW	139 kW	184 kW
Rotational speed (rpm) / regulation	1500 / Mechanical	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 400	Diesel / 400	Diesel / 650	Diesel / 650	Diesel / 960	Diesel / 960
Consumption / running time at 75% load of about [5]	11.9 l / 33.6 h	16.1 l / 24.8 h	19.6 l / 33.2 h	23.4 l / 27.8 h	27.8 l / 34.5 h	37.6 l / 25.5 h
Starting system / battery	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V
Sound power level LWA	91 dB(A)	94 dB(A)	93 dB(A)	93 dB(A)	96 dB(A)	96 dB(A)
Sound pressure level LPA (7 m)	66 dB(A)	69 dB(A)	68 dB(A)	68 dB(A)	71 dB(A)	71 dB(A)
Weight (kg)	1796	1876	2128	2188	2588	2664
Dimensions L × W × H (mm)	2900×1090×1925	2900×1090×1925	3370×1090×1995	3370×1090×1995	3560×1190×2180	3560×1190×2180
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.
Chassis ST rigid	**341 131 / FG 2502 ST**	**341 133 / FG 3002 ST**	**341 135 / FG 3502 ST**	**341 135 / FG 3502 ST**	[4]	[4]
Chassis HV height adjustable	**341 132 / FG 2502 HV**	**341 134 / FG 3002 HV**	**341 136 / FG 3502 HV**	**341 136 / FG 3502 HV**	**341 137 / FG 6502 HV**	**341 137 / FG 6502 HV**
Float switch (start/stop) 10m	**342 033**	**342 033**	**342 033**	**342 033**	**342 033**	**342 033**
Changeover contactors	**343 019R / E-US 100**	**343 020R / E-US 125**	**343 021R / E-US 160**	**343 022R / E-US 200**	**343 023R / E-US 250**	**343 025R / E-US 400**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**
Maintenance package 500 h [1]	on request	on request	on request	on request	on request	on request
Special equipment [2]	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.
FI - sensitive to universal currents - RCD [Type B]	**342 037**	**342 037**	**342 037**	**342 037**	**342 037**	**342 037**
Version B as per DGUV information 203-032	**342 712**	**342 712**	**342 712**	**342 713**	**342 713**	**342 713**
Supplying power to a building IT/TN	**342 234**	**342 234**	[4]	[4]	[4]	[4]
Insulation monitoring	**163 076**	**163 076**	**163 076**	**163 076**	**163 076**	**163 076**
Potential-free contact	**342 030**	**342 030**	**342 030**	**342 030**	**342 030**	**342 030**
External battery charging	**342 031**	**342 031**	**342 031**	**342 031**	**342 031**	**342 031**
Twilight switch	**342 032**	**342 032**	**342 032**	**342 032**	**342 032**	**342 032**
Soot particulate filter	**342 401**	[4]	[4]	[4]	[4]	[4]
Remote display [6]	**E135 961**	**E135 961**	**E135 961**	**E135 961**	**E135 961**	**E135 961**
Powerlock plug connector	**342 034**	**342 034**	**342 034**	**342 034**	**342 034**	**342 034**
125A socket	**342 709**	**342 709**	**342 709**	**342 709**	**342 709**	**342 709**

(1) Maintenance package consisting of oil filter, fuel filter, air filter **(2)** Not upgradable **(3)** All generators marked with 3A fulfil emission Stage 3A **(4)** Not available **(5)** This data is based on average values as individual cases can vary and therefore they are not binding **(6)** Control and monitoring unit consists of a second display, 2 communication modules and 10 m data cable **(7)** Not as per StawaR

Equipment features for all models

- Sound-insulated hood – extra quiet – only LWA 89 db (A) (dependent on the model)
- Engine according to Emissions Stage 3A
- Manual/Automatic instrument panel in IP 54
- Base frame with continuous fork-lift plates and ram protection
- Galvanised hood for increased corrosion protection
- Large steel tank for running times of 24 - 50 hours (dependent on the model)
- Outlet for external refuelling includes a three-way fuel tap
- Liquid collecting tray [7] to protect the environment
- Problem-free use, also in winter through use of a standard engine and coolant prewarming
- Prepared for access to the aggregate via smartphone, PC & tablet
- The main battery switch
- Manual oil scavenger pump
- Remote start connection
- Diesel filter with water trap
- Socket combination 1 × CEE 400V / 63A, 1 × CEE 400V / 32A, 1 × CEE 400V / 16A, 1 × CEE 230V / 16A, 1 × 230V / 16 A

Energy storage system

12 -24 kVA

The network-independent solution with the new energy storage system - increased efficiency, reduced noise emissions and optimised generator utilisation for use on construction sites, bridge renovations or tunnel construction sites are just some of the results achieved with the new energy storage system.

The energy storage system absorbs the load peaks and allows generators to operate in the optimum power range. The diesel generators can also be designed to be smaller and more cost-efficient. If a load decrease returns, the generator will be stopped automatically and the energy storage system will then silently feed the consumers that have to be supplied from its batteries. Consumers with a lower load decrease will be supplied solely by the energy storage system. If consumers with a high load decrease, e.g. a crane system, are being used, then the energy storage system will restart the generator automatically and also synchronise it to the grid automatically. The two devices will now work together and their power will be added together.

For further information:

Click here to go to the **energy storage system** on our homepage

Energy storage system

12 -24 kVA

▶ EES D 12/12

ENDRESS energy storage system			
Model	EES D 12/12	EES D 20/20	EES D 24/24
Order No.	**610 014**	**610 015**	**610 016**
Technical specifications			
Power section			
Continuous output at 25°C kVA/kW	10.5	15	21
Power (1) at 25°C kVA/kW	12	18	24
Peak power (2) at 25°C kVA/kW	31.5	45	63
Rated voltage	400 / 230 V	400 / 230 V	400 / 230 V
Nominal output current in independent operation	17 A	26 A	35 A
Nominal output current in combined operation	32 A	63 A	63 A
Protection Class	IP 54	IP 54	IP 54
Protective measures	RCD (residual-current-operated protective device)	RCD (residual-current-operated protective device)	RCD (residual-current-operated protective device)
Design according to DGUV 203-032	B (Protective separation with residual-current operated protective device)	B (Protective separation with residual-current operated protective device)	B (Protective separation with residual-current operated protective device)
Battery system			
Rated capacity	12 kWh	20 kWh	24 kWh
Rated nominal capacity (optionally available)	16, 20, 24 kWh	24 kWh	–
Battery cycles	1400	1400	1400
Operating temperature range	-20°C – 55°C	-20°C – 55°C	-20°C – 55°C
Charging time, approx.	2.5 h	2.5 h	2.5 h
Assembly			
Weight approx.	800 kg	1300 kg	1500 kg
Dimensions L x W x H	1200 x 800 x 1700 mm	1200 x 800 x 1700 mm	1200 x 800 x 1700 mm
Input sockets	1x CEE 400 V / 32A 1x 230 V / 16A device plug	1x CEE 400 V / 63A 1x 230 V / 16A device plug	1x CEE 400 V / 63A 1x 230 V / 16A device plug
sockets	1x 230 V / 16 A (3) 1x CEE 400 V / 16 A 1x CEE 400 V / 32 A	1x 230 V / 16 A (3) 1x CEE 400 V / 16 A 1x CEE 400 V / 32 A 1x CEE 400 V / 63 A	1x 230 V / 16 A (3) 1x CEE 400 V / 16 A 1x CEE 400 V / 32 A 1x CEE 400 V / 63 A
Monitoring LCD display	AC voltage, AC current for each phase, battery capacity, discharging current, charging current	AC voltage, AC current for each phase, battery capacity, discharging current, charging current	AC voltage, AC current for each phase, battery capacity, discharging current, charging current
Remote start input	2 conductors	2 conductors	2 conductors

Options

- Remote monitoring
- Timer function for energy saving system
- Timer function for the remote starting of a generator
- Socket with load shedding of secondary consumers
- Version C according to DGUV Information 203-032 as an IT system with residual current protection device (includes an earthing stake) and insulation monitoring with status signalling
- Version C according to DGUV Information 203-032 as an IT system with residual current protection device (includes an earthing stake)
- Insulation monitoring with IT system switching off or Version B as per DGUV Information 203-032

(1) approx. 30 min.
(2) approx. 3 sec.
(2) Socket also used for maintaining the battery charge

Ideal for:
Tunnel and nigh construction sites, events, power supply for residential containers, tools and electrical equipment.

Recharging time:
approx. 2.5 h (recharging time varies as it depends on the recharging method)

Ecological:
No CO_2 emissions, reduced noise emissions

Economical:
Lower generator running times for less fuel consumption, an optimised generator utilisation rate for lower signs of wear

Safety:
Overload, over-temperature and short-circuit protection, deep-discharge protection

POWER Line

15 - 705 kVA

▶ ESE 95 PW / MS

Galvanised base frame is not included in the package

MS: Manual instrument panel, liquid collecting tray [7], crane lifting eyes

AS: Automatic instrument panel, coolant preheating system, liquid collecting tray [7], crane lifting eyes

3A 3A

POWER Line MS / AS 15 - 45 kVA

Modell - manual version	ESE 15 YW / MS	ESE 20 YW / MS [2]	ESE 35 YW / MS [2]	ESE 45 YW / MS
Order No.	**333 221**	**335 222**	**335 248**	**335 228**
Modell - automatic version	ESE 15 YW / AS	ESE 20 YW / AS [2]	ESE 35 YW / AS [2]	ESE 45 YW / AS
Order No.	**331 221**	**331 222**	**329 248**	**329 228**
Max. output [LTP] kVA / kW	14.5 / 11.6	19.6 / 15.6	32.5 / 26.0	46.0 / 36.8
Continuous power output [PRP] kVA / kW	13.2 / 10.5	17.9 / 14.3	30.5 / 24.4	42.0 / 33.6
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	19.0 A 3~ / 0.8	25.8 A 3~ / 0.8	44.0 A 3~ / 0.8	60.6 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	YANMAR 3TNV88	YANMAR 4TNV88	YANMAR 4TNV98	YANMAR 4TNV98T
Construction type	3-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	1642 cm³	2190 cm³	3319 cm³	3319 cm³
Engine output (PRP)	12.7 kW	16.9 kW	31.2 kW	38.3 kW
Rotational speed (rpm) / regulation	1500 / Mechanical	1500 / Mechanical	1500 / Mechanical	1500 / Mechanical
Fuel / tank capacity (litre)	Diesel / 68	Diesel / 68	Diesel / 100	Diesel / 100
Consumption / running time at 75% load of about [1]	2.85 l / 23.8 h	3.7 l / 18.3 h	5.8 l / 17.2 h	7.9 l / 12.7 h
Starting system / battery	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V
Sound power level LWA	94 dB(A)	92 dB(A)	95 dB(A)	95 dB(A)
Sound pressure level LPA (7 m)	69 dB(A)	67 dB(A)	70 dB(A)	70 dB(A)
Weight (kg)	580	670	808	874
Dimensions L × W × H (mm)	1805×884×1261	1805×884×1261	2005×948×1308	2005×948×1308
Available accessories	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request
Chassis ST rigid	**341 102 / FG 135**	**341 102 / FG 135**	**341 102 / FG 135**	**341 102 / FG 135**
Chassis HV height adjustable	**341 103 / FG 135**	**341 103 / FG 135**	**341 103 / FG 135**	**341 103 / FG 135**
Changeover contactors designed for LTP power output [3]	**343 016 / E-US 32**	**343 016 / E-US 32**	**343 017 / E-US 63**	**343 018 / E-US 80**
Galvanized base frame	**342 110**	**342 110**	**342 111**	**342 111**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment [4]	Order No.	Order No.	Order No.	Order No.
Optional Package Rental 1 [6]	**342 140**	**342 140**	**342 140**	**342 140**
Automatic fuel pump [3]	**342 006**	**342 006**	**342 006**	**342 006**
Insulation monitoring	**163 076**	**163 076**	**163 076**	**163 076**
Universal current sensitive FI circuit breaker Type B	**342 035**	**342 035**	**342 036**	**342 036**
Large tank 48h at a 75% load	**343 306 / 210 L**	**343 306 / 210 L**	**343 307 / 450 L**	**343 307 / 450 L**
Socket combination	[5]	[5]	[5]	[5]
Soot particulate filter	[5]	**342 400**	–	–
Large tank 100 litres	**343 031**	**343 031**	Standard	Standard
Terminal strip	**343 030**	MS standard version / AS version 343 030	MS standard version / AS version 343 030	MS standard version / AS version 343 030

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) All generators that are marked with 3A fulfil emissions Stage 3A
(3) AS series only **(4)** Not upgradable **(5)** Not available
(6) Description of Optional Package Rental 1 on **page 70**
(7) Not as per StawaR

POWER Line

15 - 705 kVA

Prepared for the remote monitoring system E-RMA

A description of the instrument panel can be found on **page 69**

3A 3A 3A

POWER Line MS / AS 50 – 95 kVA					
Modell - manual version	ESE 50 YW / MS [2]	ESE 65 PW / MS	ESE 67 PW / MS [2]	ESE 80 PW / MS	ESE 95 PW / MS [2]
Order No.	**335 249**	**333 250**	**333 251**	**333 252**	**333 253**
Modell - automatic version	ESE 50 YW / AS [2]	ESE 65 PW / AS	ESE 67 PW / AS [2]	ESE 80 PW / AS	ESE 95 PW / AS [2]
Order No.	**329 249**	**331 250**	**331 251**	**331 252**	**331 253**
Max. output [LTP] kVA / kW	46.0 / 36.8	66.7 / 53.4	66.6 / 53.3	83.0 / 66.0	92.4 / 73.9
Continuous power output [PRP] kVA / kW	44.0 / 35.2	60.5 / 48.4	60.1 / 48.8	78.0 / 62.4	83.7 / 67.0
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	63.5 A 3~ / 0.8	87.6 A 3~ / 0.8	86.7 A 3~ / 0.8	112.6 A 3~ / 0.8	120.8 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	YANMAR 4TNV98T	PERKINS 1103A-33TG2	PERKINS 1104D-44TG3	PERKINS 1104A-44TG2	PERKINS 1104D-E44TAG1
Construction type	4-cylinder 4-stroke	3-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	3319 cm³	3300 cm³	4400 cm³	4400 cm³	4400 cm³
Engine output (PRP)	40.2 kW	55.0 kW	56.6 kW	73.4 kW	76.6 kW
Rotational speed (rpm) / regulation	1500 / Electronic	1500 / Mechanical	1500 / Mechanical	1500 / Mechanical	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 100	Diesel / 209	Diesel / 209	Diesel / 209	Diesel / 209
Consumption / running time at 75% load of about [1]	8.3 l / 12 h	10.4 l / 20 h	12.0 l / 17 h	13.4 l / 15.5 h	16.9 l / 12.4 h
Starting system / battery	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V
Sound power level LWA	95 dB(A)	96 dB(A)	92 dB(A)	96 dB(A)	96 dB(A)
Sound pressure level LPA (7 m)	70 dB(A)	71 dB(A)	67 dB(A)	71 dB(A)	71 dB(A)
Weight (kg)	874	1085	1150	1144	1490
Dimensions L × W × H (mm)	2005×948×1308	2294×1007×1465	2294×1007×1465	2294×1107×1465	2414×1087×1683
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request	on request
Chassis ST rigid	**341 102 / FG 135**	**341 106 / FG 180**	**341 106 / FG 180**	**341 106 / FG 180**	**341 110 / FG 2500**
Chassis HV height adjustable	**341 103 / FG 135**	**341 107 / FG 180**	**341 107 / FG 180**	**341 107 / FG 180**	**341 111 / FG 2500**
Changeover contactors designed for LTP power output [3]	**343 018 / E-US 80**	**343 019 / E-US 100**	**343 019 / E-US 100**	**343 020 / E-US 125**	**343 020 / E-US 125**
Galvanized base frame	**342 111**	**342 112**	**342 112**	**342 112**	**342 113**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment [4]	Order No.	Order No.	Order No.	Order No.	Order No.
Optional Package Rental 1 [6]	**342 140**	**342 140**	**342 140**	**342 140**	**342 140**
Automatic fuel pump [3]	**342 006**	**342 006**	**342 006**	**342 006**	**342 006**
Insulation monitoring	**163 076**	**163 076**	**163 076**	on request	on request
Universal current sensitive FI circuit breaker Type B	**342 036**	**342 037**	**342 037**	**342 037**	**342 037**
Large tank 48h at a 75% load	**343 307 / 450 L**	**343 308 / 730 L**	**343 308 / 730 L**	**343 308 / 730 L**	**343 309 / 890 L**
Socket combination	[5]	**342 054**	**342 054**	**342 054**	**342 054**
Soot particulate filter	**342 400**	–	**342 401**	–	**342 402**
Large tank 100 litres	Standard	[5]	[5]	[5]	[5]
Terminal strip	MS standard version / AS version 343 030	MS standard version / AS version 343 030	MS standard version / AS version 343 030	MS standard version / AS version 343 030	MS standard version / AS version 343 030

(1) This data is based on average values as individual cases can vary and therefore it is not binding
(2) All generators that are marked with 3A fulfil emissions Stage 3A
(3) Only for model series AS
(4) Not upgradable
(5) Not available
(6) Description of Optional Package Rental 1 on **page 70**
(7) Not as per StawaR

- Modern, water-cooled industrial engines from YANMAR and PERKINS
- A galvanised and powder-coated noise absorption hood
- Internal, lockable tank
- Self-explanatory and simple to operate digital control system
- Prepared for the remote monitoring system E-RMA
- Brush-less, electronically controlled generators
- Coolant pre-warming standard in the model series AS
- Liquid collecting tray [7] to protect the environment
- Large 100 litre steel tank for longer running times (ESE 20-50 model)

POWER Line

15 - 705 kVA

MS: Manual instrument panel, liquid collecting tray [6], crane lifting eyes

AS: Automatic instrument panel, coolant preheating system, liquid collecting tray [6], crane lifting eyes

▶ ESE 220 VW / AS

3A 3A 3A

POWER Line MS / AS 110 – 165 kVA

Modell - manual version	ESE 110 PW / MS	ESE 115 PW / MS [2]	ESE 145 VW / MS [2]	ESE 150 VW / MS	ESE 165 VW / MS [2]
Order No.	**333 254**	**333 255**	**333 256**	**333 257**	**333 258**
Modell - automatic version	ESE 110 PW / AS	ESE 115 PW / AS [2]	ESE 145 VW / AS [2]	ESE 150 VW / AS	ESE 165 VW / AS [2]
Order No.	**331 254**	**331 255**	**331 256**	**331 257**	**331 258**
Max. output [LTP] kVA / kW	114.7 / 91.7	116.0 / 92.8	143.0 / 114.4	145.1 / 116.1	164.0 / 131.2
Continuous power output [PRP] kVA / kW	103.8 / 83.0	106.2 / 84.9	132.1 / 105.7	130.1 / 104.1	153.8 / 123.0
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	149.9 A 3~ / 0.8	153.2 A 3~ / 0.8	190.7 A 3~ / 0.8	187.0 A 3~ / 0.8	222.0 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	PERKINS 1104C-44TAG2	PERKINS 1104D-E44TAG2	VOLVO TAD750GE	VOLVO TAD532GE	VOLVO TAD751GE
Construction type	4-cylinder 4-stroke	4-cylinder 4-stroke	6-cylinder 4-stroke	4-cylinder 4-stroke	6-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	4410 cm³	4400 cm³	7150 cm³	4760 cm³	7150 cm³
Engine output (PRP)	93.6 kW	95.5 kW	119.0 kW	116.0 kW	137.0 kW
Rotational speed (rpm) / regulation	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 209	Diesel / 209	Diesel / 350	Diesel / 350	Diesel / 350
Consumption / running time at 75% load of about [1]	18.0 l / 11.6 h	17.0 l / 12.3 h	25.5 l / 13.7 h	21.9 l / 16 h	29.1 l / 12 h
Starting system / battery	E-Start / 12 V	E-Start / 12 V	E-Start / 24 V	E-Start / 12 V	E-Start / 24 V
Sound power level LWA	96 dB(A)	96 dB(A)	97 dB(A)	97 dB(A)	97 dB(A)
Sound pressure level LPA (7 m)	71 dB(A)	71 dB(A)	72 dB(A)	72 dB(A)	72 dB(A)
Weight (kg)	1400	1500	2224	1811	2224
Dimensions L × W × H (mm)	2414×1087×1529	2414×1087×1683	3414×1338×1978	3000×1150×1720	3414×1338×1978
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request	on request
Chassis ST rigid	**341 110 / FG 2500**	**341 110 / FG 2500**	**341 112 / FG 3500**	**341 108 / FG 3000**	**341 112 / FG 3500**
Chassis HV height adjustable	**341 111 / FG 2500**	**341 111 / FG 2500**	**341 113 / FG 3500**	**341 109 / FG 3000**	**341 113 / FG 3500**
Changeover contactors designed for LTP power output [3]	**343 021 / E-US 160**	**343 021 / E-US 160**	**343 022 / E-US 200**	**343 022 / E-US 200**	**343 023 / E-US 250**
Galvanized base frame	**342 113**	**342 113**	**342 115**	**342 114**	**342 115**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment [4]	Order No.	Order No.	Order No.	Order No.	Order No.
Optional Package Rental 1 [5]	**342 140**	**342 140**	**342 140**	**342 140**	**342 140**
Automatic fuel pump [3]	**342 006**	**342 006**	**342 006**	**342 006**	**342 006**
Insulation monitoring	on request	on request	on request	on request	on request
Universal current sensitive FI circuit breaker Type B	**342 037**	**342 037**	**342 037**	**342 037**	**342 037**
Large tank 48h at a 75% load	**343 309 / 890 L**	**343 309 / 890 L**	**343 310 / 1,750 L**	**343 310 / 1,750 L**	**343 310 / 1,750 L**
Socket combination	**342 054**	**342 054**	**342 054**	**342 054**	**342 054**
Soot particulate filter	–	**342 402**	**342 403**	–	**342 403**
Terminal strip	MS standard version / AS version 343 030	MS standard version / AS version 343 030	MS standard version / AS version 343 030	MS standard version / AS version 343 030	MS standard version / AS version 343 030

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) All generators that are marked with 3A fulfil emissions Stage 3A
(3) Only for model series AS
(4) Not upgradable
(5) Description of Optional Package Rental 1 on **page 70**
(6) Not as per StawaR

POWER Line

15 - 705 kVA

Prepared for the remote monitoring system E-RMA

A description of the instrument panel can be found on **page 69**

POWER Line MS / AS 170 – 225 kVA				
Modell - manual version	ESE 170 VW / MS	ESE 200 VW / MS (2)	ESE 220 VW / MS	ESE 225 VW / MS (2)
Order No.	**333 259**	**333 260**	**333 261**	**333 268**
Modell - automatic version	ESE 170 VW / AS	ESE 200 VW / AS (2)	ESE 220 VW / AS	ESE 225 VW / AS (2)
Order No.	**331 259**	**331 260**	**331 261**	**331 268**
Max. output [LTP] kVA / kW	164.0 / 131.2	196.0 / 156.8	220.0 / 176.0	220.0 / 176.0
Continuous power output [PRP] kVA / kW	154.9 / 124.0	179.0 / 143.2	202.7 / 162.1	200.5 / 160.4
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	223.0 A 3~ / 0.8	258.4 A 3~ / 0.8	292.0 A 3~ / 0.8	289.4 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	VOLVO TAD731GE	VOLVO TAD752GE	VOLVO TAD733GE	VOLVO TAD753GE
Construction type	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	7150 cm³	7150 cm³	7150 cm³	7150 cm³
Engine output (PRP)	138.0 kW	166.0 kW	181.0 kW	184.0 kW
Rotational speed (rpm) / regulation	1500 / Mechanical	1500 / Electronic	1500 / Electronic	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 350	Diesel / 350	Diesel / 350	Diesel / 350
Consumption / running time at 75% load of about (1)	26.9 l / 13 h	33.0 l / 10.5 h	35.0 l / 10 h	35.6 l / 9.8 h
Starting system / battery	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V
Sound power level LWA	97 dB(A)	94 dB(A)	94 dB(A)	94 dB(A)
Sound pressure level LPA (7 m)	72 dB(A)	69 dB(A)	69 dB(A)	69 dB(A)
Weight (kg)	2224	2224	2540	2540
Dimensions L × W × H (mm)	3414×1338×1768	3414×1338×1978	3414×1338×1978	3414×1338×1978
Available accessories	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request
Chassis ST rigid	**341 112 / FG 3500**	on request	on request	on request
Chassis HV height adjustable	**341 113 / FG 3500**	on request	on request	on request
Changeover contactors designed for LTP power output (3)	**343 023 / E-US 250**	**343 024 / E-US 315**	**343 025 / E-US 400**	**343 025 / E-US 400**
Galvanized base frame	**342 115**	**342 115**	**342 115**	**342 115**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment (4)	Order No.	Order No.	Order No.	Order No.
Optional Package Rental 1 (5)	**342 140**	**342 140**	**342 140**	**342 140**
Automatic fuel pump (3)	**342 006**	**342 006**	**342 006**	**342 006**
Insulation monitoring	on request	on request	on request	on request
Universal current sensitive FI circuit breaker Type B	**342 037**	on request	on request	on request
Large tank 48h at a 75% load	**343 310 / 1,750 L**	**343 310 / 1,750 L**	**343 310 / 1,750 L**	**343 310 / 1,750 L**
Socket combination	**342 054**	**342 054**	**342 054**	**342 054**
Soot particulate filter	–	**342 403**	–	**342 403**
Terminal strip	MS standard version / AS version 343 030	MS standard version / AS version 343 030	MS standard version / AS version 343 030	MS standard version / AS version 343 030

(1) This data is based on average values as individual cases can vary and therefore it is not binding
(2) All generators that are marked with 3A fulfil emissions Stage 3A
(3) Only for model series AS
(4) Not upgradable
(5) Description of Optional Package Rental 1 on **page 70**
(6) Not as per StawaR

- Modern, water-cooled industrial engines from PERKINS and VOLVO
- A galvanised and powder-coated noise absorption hood
- Internal, lockable tank
- Self-explanatory and simple to operate digital control system
- Prepared for the remote monitoring system E-RMA
- Brush-less, electronically controlled generators
- Coolant pre-warming standard in the model series AS
- Liquid collecting tray (6) to protect the environment

POWER Line

15 - 705 kVA

AS: Automatic instrument panel, coolant preheating system, crane lifting eyes

▶ ESE 330 VW / AS

The socket combination can be obtained as special equipment

POWER Line AS 275 – 370 kVA

Modell - automatic version	ESE 275 VW / AS	ESE 280 VW / AS [2]	ESE 330 VW / AS	ESE 360 VW / AS [2]	ESE 370 VW / AS
Order No.	**331 224**	**331 238**	**331 215**	**331 269**	**331 236**
Max. output [LTP] kVA / kW	275.0 / 220.0	275.0 / 220.0	330.0 / 264.0	357.6 / 286.1	370.0 / 296.0
Continuous power output [PRP] kVA / kW	248.7 / 198.9	253.0 / 202.0	315.0 / 252.0	326.1 / 260.9	354.1 / 283.2
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	359.0 A 3~ / 0.8	365.1 A 3~ / 0.8	454.7 A 3~ / 0.8	470.7 A 3~ / 0.8	511.0 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	VOLVO TAD734GE	VOLVO TAD754GE	VOLVO TAD1342GE	VOLVO TAD1351GE	VOLVO TAD1342GE
Construction type	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	7150 cm³	7150 cm³	12780 cm³	12780 cm³	12780 cm³
Engine output (PRP)	227.0 kW	228.0 kW	313.0 kW	286.0 kW	313.0 kW
Rotational speed (rpm) / regulation	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 636	Diesel / 636	Diesel / 636	Diesel / 636	Diesel / 636
Consumption / running time at 75% load of about [1]	44.6 l / 14.3 h	46.4 l / 13.7 h	48.5 l / 13.1 h	52.4 l / 12.1 h	54.4 l / 11.6 h
Starting system / battery	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V
Sound power level LWA	97 dB(A)	97 dB(A)	97 dB(A)	97 dB(A)	97 dB(A)
Sound pressure level LPA (7 m)	72 dB(A)	72 dB(A)	72 dB(A)	72 dB(A)	72 dB(A)
Weight (kg)	2990	2990	3671	3671	3671
Dimensions L × W × H (mm)	3951×1438×2085	3951×1438×2085	3951×1438×2085	3951×1438×2085	3951×1438×2085
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 025 / E-US 400**	**343 025 / E-US 400**	**343 026 / E-US 630**	**343 026 / E-US 630**	**343 026 / E-US 630**
Galvanized base frame	**342 116**	**342 116**	**342 116**	**342 116**	**342 116**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment [3]	Order No.	Order No.	Order No.	Order No.	Order No.
Optional Package Rental 2 [5]	**342 141**	**342 141**	**342 141**	**342 141**	**342 141**
Automatic fuel pump	**342 006**	**342 006**	**342 006**	**342 006**	**342 006**
Insulation monitoring	on request	on request	on request	on request	on request
Large tank 48h at a 75% load	on request	on request	on request	on request	on request
Socket combination	**342 052 / 342 053**	**342 052 / 342 053**	**342 052 / 342 053**	**342 052 / 342 053**	**342 052 / 342 053**
Liquid collecting tray [6]	**342 130**	**342 130**	**342 130**	**342 130**	**342 130**
Universal current sensitive FI circuit breaker Type B	on request	on request	on request	on request	on request

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) All generators that are marked with 3A fulfil emissions Stage 3A
(3) Not upgradable
(4) Not available
(5) Description of Optional Package Rental 2 on **page 70**
(6) Not as per StawaR

POWER Line

15 - 705 kVA

A description of the instrument panel can be found on **page 69**

Prepared for the remote monitoring system E-RMA

POWER Line AS 415 – 505 kVA

Modell - automatic version	ESE 415 VW / AS	ESE 420 VW / AS (2)	ESE 455 VW / AS (2)	ESE 460 VW / AS	ESE 505 VW / AS (2)
Order No.	**331 216**	**331 270**	**331 271**	**331 217**	**331 272**
Max. output [LTP] kVA / kW	416.1 / 332.9	421.9 / 337.5	456.8 / 365.4	455.6 / 364.5	508.2 / 406.6
Continuous power output [PRP] kVA / kW	380.0 / 303.9	383.4 / 306.7	415.8 / 332.6	414.6 / 331.7	416.3 / 369.0
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	548.3 A 3~ / 0.8	553.4 A 3~ / 0.8	600.2 A 3~ / 0.8	598.4 A 3~ / 0.8	665.8 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	VOLVO TAD1343GE	VOLVO TAD1354GE	VOLVO TAD1355GE	VOLVO TAD1344GE	VOLVO TAD1650GE
Construction type	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	12780 cm³	12780 cm³	12780 cm³	12780 cm³	16120 cm³
Engine output (PRP)	335.0 kW	339.0 kW	369.0 kW	364.0 kW	402.0 kW
Rotational speed (rpm) / regulation	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 636	Diesel / 636	Diesel / 636	Diesel / 636	Diesel / 636
Consumption / running time at 75% load of about (1)	58.1 l / 10.9 h	62.2 l / 10.2 h	68.2 l / 9.3 h	64.4 l / 9.9 h	73.5 l / 8.6 h
Starting system / battery	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V
Sound power level LWA	97 dB(A)	97 dB(A)	97 dB(A)	98 dB(A)	105 dB(A)
Sound pressure level LPA (7 m)	72 dB(A)	72 dB(A)	72 dB(A)	73 dB(A)	80 dB(A)
Weight (kg)	3671	3671	3671	3671	4888
Dimensions L × W × H (mm)	3951×1438×2085	3951×1438×2085	3951×1438×2085	3951×1438×2085	4400×1560×2250
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 026 / E-US 630**	**343 026 / E-US 630**	**343 027 / E-US 800**	**343 027 / E-US 800**	**343 027 / E-US 800**
Galvanized base frame	**342 116**	**342 116**	**342 116**	**342 116**	(4)
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment (3)	Order No.	Order No.	Order No.	Order No.	Order No.
Optional Package Rental 2 (5)	**342 141**	**342 141**	**342 141**	**342 141**	**342 141**
Automatic fuel pump	**342 006**	**342 006**	**342 006**	**342 006**	**342 006**
Insulation monitoring	on request	on request	on request	on request	on request
Large tank 48h at a 75% load	on request	on request	on request	on request	on request
Socket combination	**342 052 / 342 053**	**342 052 / 342 053**	**342 052 / 342 053**	**342 052 / 342 053**	**342 052 / 342 053**
Liquid collecting tray (6)	**342 130**	**342 130**	**342 130**	**342 130**	**342 130**
Universal current sensitive FI circuit breaker Type B	on request	on request	on request	on request	on request

(1) This data is based on average values as individual cases can vary and therefore it is not binding
(2) All generators that are marked with 3A fulfil emissions Stage 3A
(3) Not upgradable
(4) Not available
(5) Description of Optional Package Rental 2 on **page 70**
(6) Not as per StawaR

- Modern, water-cooled industrial engines from VOLVO
- A galvanised and powder-coated noise absorption hood
- Internal, lockable tank
- Self-explanatory and simple to operate digital control system
- Prepared for the remote monitoring system E-RMA
- Brush-less, electronically controlled generators
- Coolant pre-warming standard in the model series AS

POWER Line

15 - 705 kVA

3A

A description of the instrument panel can be found on **page 69**

AS: Automatic instrument panel, coolant preheating system, crane lifting eyes

▶ ESE 550 VW / AS

POWER Line AS 510 – 705 kVA

Modell - automatic version	ESE 510 VW / AS	ESE 555 VW / AS (2)	ESE 560 VW / AS	ESE 590 VW / AS	ESE 705 VW / AS
Order No.	**331 218**	**331 273**	**331 219**	**331 220**	**331 237**
Max. output [LTP] kVA / kW	505.9 / 404.7	557.9 / 445.6	546.0 / 436.8	601.0 / 480.8	702.0 / 561.6
Continuous power output [PRP] kVA / kW	455.4 / 364.3	506.3 / 405.0	504.7 / 403.8	567.0 / 453.6	631.8 / 505.4
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	657.3 A 3~ / 0.8	730.8 A 3~ / 0.8	728.5 A 3~ / 0.8	818.4 A 3~ / 0.8	911.9 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	VOLVO TAD1345GE	VOLVO TAD1651GE	VOLVO TAD1641GE	VOLVO TAD1642GE	VOLVO TWD1643GE
Construction type	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	12780 cm³	16120 cm³	16120 cm³	16120 cm³	16120 cm³
Engine output (PRP)	398.0 kW	441.0 kW	441.0 kW	514.0 kW	553.0 kW
Rotational speed (rpm) / regulation	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 636	Diesel / 636	Diesel / 636	Diesel / 636	Diesel / 636
Consumption / running time at 75% load of about (1)	70.4 l / 9 h	81.5 l / 7.8 h	77.6 l / 8.2 h	85.5 l / 7.4 h	97.4 l / 6.5 h
Starting system / battery	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V
Sound power level LWA	98 dB(A)	105 dB(A)	105 dB(A)	105 dB(A)	105 dB(A)
Sound pressure level LPA (7 m)	73 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)
Weight (kg)	4100	4888	4495	4888	5490
Dimensions L × W × H (mm)	3951×1438×2085	4400×1560×2250	4400×1560×2250	4400×1560×2250	4700×1757×2510
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 027 / E-US 800**	**343 028 / E-US 1000**	**343 027 / E-US 800**	**343 028 / E-US 1000**	**343 029 / E-US 1250**
Galvanized base frame	**342 116**	(4)	(4)	(4)	(4)
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment (3)	Order No.	Order No.	Order No.	Order No.	Order No.
Optional Package Rental 2 (5)	**342 141**	**342 141**	**342 141**	**342 141**	**342 141**
Automatic fuel pump	**342 006**	**342 006**	**342 006**	**342 006**	**342 006**
Insulation monitoring	on request	on request	on request	on request	on request
Large tank 48h at a 75% load	on request	on request	on request	on request	on request
Socket combination	**342 052 / 342 053**	**342 052 / 342 053**	**342 052 / 342 053**	**342 052 / 342 053**	**342 052 / 342 053**
Liquid collecting tray (6)	**342 130**	**342 130**	**342 130**	**342 130**	**342 130**
Universal current sensitive FI circuit breaker Type B	on request	on request	on request	on request	on request

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) All generators that are marked with 3A fulfil emissions Stage 3A
(3) Not upgradable
(4) Not available
(5) Description of Optional Package Rental 2 on **page 70**
(6) Not as per StawaR

Chassis is German Road Traffic Registration Act compliant

All chassis including drawbar are fully galvanised. Single-axle and tandem trailers are available with rigid or adjustable hitches and towing lugs for cars / lorries.

▶ ESE 50 YW / MS with chassis

Chassis						
Model (single axle)	FG 75 ST (1)	FG 75 HV(1)(2)	FG 135 ST	FG 135 HV (2)	FG 180 ST	FG 180 HV (2)
Order No.	**341 100**	**341 101**	**341 102**	**341 103**	**341 106**	**341 107**
Permissible total weight (kg)	750	750	1350	1350	1800	1800
Single axle / tandem	Single axle	Single axle	Single axle	Single axle	Single axle	Single axle
Trailer drawbar	Rigid	Height adjustable	Rigid	Height adjustable	Rigid	Height adjustable
Inertial brake	Non-braked	Non-braked	Yes	Yes	Yes	Yes
Dimension L × W (mm)	3180 × 1590	3610 × 1590	3450 × 1560	4100 × 1560	3760 × 1560	4570 × 1560
Model (Tandem)	FG 2500 ST	FG 2500 HV(2)	FG 3000 ST	FG 3000 HV(2)	FG 3500 ST	FG 3500 HV(2)
Order No.	**341 110**	**341 111**	**341 108**	**341 109**	**341 112**	**341 113**
Permissible total weight (kg)	2500	2500	3000	3000	3500	3500
Single axle / tandem	Tandem	Tandem	Tandem	Tandem	Tandem	Tandem
Trailer drawbar	Rigid	Height adjustable	Rigid	Height adjustable	Rigid	Height adjustable
Inertial brake	Yes	Yes	Yes	Yes	Yes	Yes
Dimension L × W (mm)	4100 × 1630	4630 × 1630	4705 × 1720	5410 × 1720	5110 × 1850	4750 × 1850

(1) Standard front stabilizer wheel with clamp
(2) Additional DIN towing lug 40 mm included in the delivery:

Equipment features

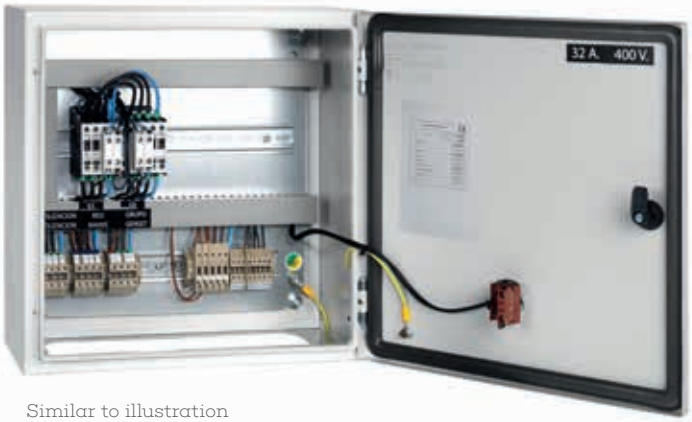
HV = height adjustable trailer drawbar

- DIN towing lug 40 mm for a lorry
- Parking supports at the rear (1 pair)
- Fully automatic stabiliser wheel (reinforced) (except FG 75)

Equipment features

ST = rigid trailer drawbar

- Ball coupling for a passenger car
- Parking supports at the rear (1 pair)
- Fully automatic stabiliser wheel (reinforced) (except FG 75)



Similar to illustration

Switching contactor (Load Transfer Switch Panel)

The ENDRESS switching contactors are an option for the automatic mains system. In order to ensure easy connection to the automatic mains system on the generator, all cables have already been installed in the factory up to a terminal strip integrated in the cabinet. The protection class of the steel cabinet is IP 45. Including Emergency Stop button and a 5 m control cable.

POWER Line Open Construction

15 - 705 kVA

▶ ESE 110 PW

POWER Line Open Construction 15 - 65 kVA

Model	ESE 15 YW	ESE 20 YW	ESE 35 YW (4)	ESE 45 YW	ESE 65 PW
Order No.	**330 221**	**330 222**	**330 248**	**330 228**	**330 250**
Max. output [LTP] kVA / kW	14.3 / 11.4	19.3 / 15.4	32.5 / 26.0	46.0 / 36.8	66.7 / 53.4
Continuous power output [PRP] kVA / kW	13.0 / 11.2	17.6 / 14.0	30.5 / 24.4	42.0 / 33.6	60.5 / 48.4
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	18.7 A 3~ / 0.8	25.4 A 3~ / 0.8	44.0 A 3~ / 0.8	60.6 A 3~ / 0.8	87.6 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	YANMAR 3TNV88	YANMAR 4TNV88	YANMAR 4TNV98	YANMAR 4TNV98T	PERKINS 1103A-33TG2
Construction type	3-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	1642 cm³	2190 cm³	3319 cm³	3319 cm³	3300 cm³
Engine output (PRP)	12.7 kW	16.9 kW	31.2 kW	38.3 kW	55.0 kW
Rotational speed (rpm) / regulation	1500 / Mechanical	1500 / Mechanical	1500 / Mechanical	1500 / Mechanical	1500 / Mechanical
Fuel / tank capacity (litre)	Diesel / 51	Diesel / 51	Diesel / 51	Diesel / 51	Diesel / 209
Consumption / running time at 75% load of about (1)	2.8 l / 17.9 h	3.7 l / 13.7 h	5.8 l / 8.7 h	7.9 l / 6.4 h	10.4 l / 20 h
Starting system / battery	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V
Weight (kg)	390	507	560	580	909
Dimensions L × W × H (mm)	1600×870×1000	1600×870×1000	2000×920×1100	2000×920×1100	2200×1000×1743
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 016 / E-US 32**	**343 016 / E-US 32**	**343 017 / E-US 63**	**343 018 / E-US 80**	**343 019 / E-US 100**
Exhaust gas expansion joint	**342 022**	**342 022**	**342 022**	**342 022**	**342 022**
Additional sound absorber	**342 009**	**342 009**	**342 009**	**342 009**	**342 009**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment (3)	Order No.	Order No.	Order No.	Order No.	Order No.
Automatic fuel pump	(2)	(2)	(2)	(2)	**342 006**

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Not available
(3) Not upgradable
(4) All generators that are marked with 3A fulfil emissions Stage 3A

POWER Line Open Construction

15 - 705 kVA

Now available
with FPT engines - for more information:

Click here to go to the **FPT press release** on our homepage

Prepared for the remote monitoring system E-RMA

A description of the instrument panel can be found on **page 69**

Power supply systems

POWER Line Open Construction 80 - 220 kVA

Model	ESE 80 PW	ESE 110 PW	ESE 150 VW	ESE 170 VW	ESE 220 VW
Order No.	**330 252**	**330 254**	**330 257**	**330 259**	**330 261**
Max. output [LTP] kVA / kW	83.0 / 66.4	114.7 / 91.7	143.0 / 114.4	164.0 / 131.2	220.0 / 176.0
Continuous power output [PRP] kVA / kW	78.0 / 62.4	103.8 / 83.0	129.8 / 103.8	154.9 / 124.0	202.7 / 162.1
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	112.6 A 3~ / 0.8	149.8 A 3~ / 0.8	187.3 A 3~ / 0.8	223.6 A 3~ / 0.8	292.5 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	PERKINS 1104A-44TG2	PERKINS 1104C-44TAG2	VOLVO TAD532GE	VOLVO TAD731GE	VOLVO TAD733GE
Construction type	4-cylinder 4-stroke	4-cylinder 4-stroke	4-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	4400 cm³	4410 cm³	4760 cm³	7150 cm³	7150 cm³
Engine output (PRP)	73.4 kW	93.6 kW	116.0 kW	138.0 kW	181.0 kW
Rotational speed (rpm) / regulation	1500 / Mechanical	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 243	Diesel / 240	Diesel / 340	Diesel / 340	Diesel / 340
Consumption / running time at 75% load of about (1)	13.4 l / 18.1 h	18.0 l / 13.3 h	21.9 l / 15.5 h	26.9 l / 12.7 h	35.0 l / 9.7 h
Starting system / battery	E-Start / 12 V	E-Start / 12 V	E-Start / 12 V	E-Start / 24 V	E-Start / 24 V
Weight (kg)	964	1170	1491	1796	2238
Dimensions L × W × H (mm)	2200×1000×1734	2200×1000×1620	2200×1000×1743	2650×1100×1965	2650×1100×1965
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 020 / E-US 125**	**343 021 / E-US 160**	**343 022 / E-US 200**	**343 023 / E-US 250**	**343 025 / E-US 400**
Exhaust gas expansion joint	**342 022**	**342 022**	**342 022**	**342 022**	**342 022**
Additional sound absorber	**342 009**	**342 009**	**342 009**	**342 009**	**342 009**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment (2)	Order No.	Order No.	Order No.	Order No.	Order No.
Automatic fuel pump	**342 006**	**342 006**	**342 006**	**342 006**	**342 006**

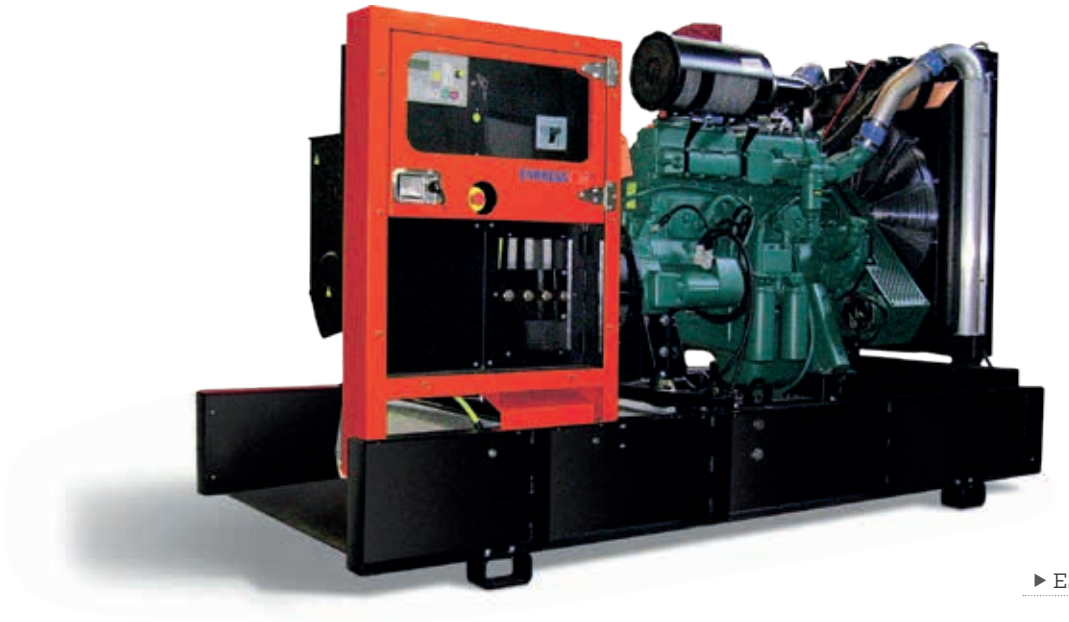
(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Not upgradable

Equipment features

- Automatic instrument panel
- Coolant preheating system
- Fuel tank
- Modern, water-cooled industrial engines from YANMAR, PERKINS and VOLVO
- Automatic instrument panel for operation as an emergency power generator
- Coolant preheating as standard for all sizes
- Brushless MeccAlte generators with electronic control behaviour for sensitive consumers
- Prepared for the remote monitoring system E-RMA
- Optional: Changeover contactors for an emergency power installation

POWER Line Open Construction

15 - 705 kVA



▶ ESE 415 VW

POWER Line Open Construction 275 - 415 kVA

Model	ESE 275 VW	ESE 330 VW	ESE 370 VW	ESE 415 VW
Order No.	**330 224**	**330 215**	**330 236**	**330 216**
Max. output [LTP] kVA / kW	275.0 / 220.0	330.0 / 264.0	370.0 / 296.0	416.1 / 332.9
Continuous power output [PRP] kVA / kW	248.7 / 198.9	315.0 / 252.0	354.1 / 283.3	379.8 / 303.9
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	359.0 A 3~ / 0.8	454.7 A 3~ / 0.8	511.1 A 3~ / 0.8	548.2 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	VOLVO TAD734GE	VOLVO TAD1342GE	VOLVO TAD1342GE	VOLVO TAD1343GE
Construction type	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	7150 cm³	12780 cm³	12780 cm³	12780 cm³
Engine output (PRP)	227.0 kW	313.0 kW	313.0 kW	335.0 kW
Rotational speed (rpm) / regulation	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 400	Diesel / 636	Diesel / 636	Diesel / 636
Consumption / running time at 75% load of about (1)	41.5 l / 19.6 h	48.8 l / 12.1 h	54.4 l / 11.7 h	58.1 l / 10.9 h
Starting system / battery	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V
Weight (kg)	2177	3160	3160	3050
Dimensions L × W × H (mm)	2672×1181×1844	3300×1460×1965	3300×1460×1965	3300×1400×1917
Available accessories	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 025 / E-US 400**	**343 026 / E-US 630**	**343 026 / E-US 630**	**343 026 / E-US 630**
Exhaust gas expansion joint	**342 022**	**342 022**	**342 022**	**342 022**
Additional sound absorber	**342 010**	**342 010**	**342 010**	**342 010**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment (2)	Order No.	Order No.	Order No.	Order No.
Automatic fuel pump	**342 006**	**342 006**	**342 006**	**342 006**
Liquid collecting tray (3)	**342 130**	**342 130**	**342 130**	**342 130**

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Not upgradable
(3) Not as per StawaR

POWER Line Open Construction

15 - 705 kVA

Water-cooled VOLVO 4-stroke 6-cylinder in-line engines with turbochargers / charge air cooling ensure a qualitative drive for these emergency power generators.

The industrial engines with direct injection and optimised combustion, stand for a fast response time in cold weather and are characterised by low waste gas emissions and economic efficiency.

We use brushless MeccAlte generators with electronic control processes for sensitive consumers

The generators conform with insulation class H according to VDE 0530. In combination with our E-RMA Remote Monitoring Application, you will have an overview of your emergency power supply at all times.

A description of the instrument panel can be found on **page 69**

Prepared for the remote monitoring system E-RMA

POWER Line Open Construction 460 - 705 kVA					
Model	ESE 460 VW	ESE 510 VW	ESE 560 VW	ESE 590 VW	ESE 705 VW
Order No.	**330 217**	**330 218**	**330 219**	**330 220**	**330 237**
Max. output [LTP] kVA / kW	455.6 / 364.5	505.9 / 404.7	546.0 / 436.8	601.0 / 480.8	702.0 / 561.6
Continuous power output [PRP] kVA / kW	414.6 / 331.7	455.4 / 364.3	504.7 / 403.8	567.0 / 453.6	631.8 / 505.4
Generator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Construction type	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Insulation	Class H	Class H	Class H	Class H	Class H
Rated voltage	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~	400V 3~ / 230V 1~
Nominal current / Cos φ	598.4 A 3~ / 0.8	657.3 A 3~ / 0.8	728.5 A 3~ / 0.8	818.4 A 3~ / 0.8	911.9 A 3~ / 0.8
Frequency / Regulation	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic	50 Hz / electronic
Engine type	VOLVO TAD1344GE	VOLVO TAD1345GE	VOLVO TAD1641GE	VOLVO TAD1642GE	VOLVO TWD1643GE
Construction type	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke	6-cylinder 4-stroke
Cooling system	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Displacement	12780 cm³	12780 cm³	16120 cm³	16120 cm³	16120 cm³
Engine output (PRP)	364.0 kW	398.0 kW	398.0 kW	514.0 kW	553.0 kW
Rotational speed (rpm) / regulation	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 636	Diesel / 636	Diesel / 636	Diesel / 636	Diesel / 636
Consumption / running time at 75% load of about (1)	64.4 l / 9.9 h	70.4 l / 9 h	72.6 l / 8.8 h	86.0 l / 17.4 h	97.4 l / 6.5 h
Starting system / battery	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V	E-Start / 24 V
Weight (kg)	3370	3180	3467	3620	4590
Dimensions L × W × H (mm)	3300×1460×1965	3300×1400×1917	3500×1500×2120	3500×1500×2120	3800×1670×2320
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 027 / E-US 800**	**343 027 / E-US 800**	**343 027 / E-US 800**	**343 028 / E-US 1000**	**343 029 / E-US 1250**
Exhaust gas expansion joint	**342 022**	**342 022**	**342 022**	**342 022**	**342 022**
Additional sound absorber	**342 010**	**342 010**	**342 010**	**342 010**	**342 010**
E-RMA SIM	**342 220**	**342 220**	**342 220**	**342 220**	**342 220**
E-RMA LAN	**342 221**	**342 221**	**342 221**	**342 221**	**342 221**
E-RMA web supervisor annual fee	**342 222**	**342 222**	**342 222**	**342 222**	**342 222**
Special equipment (2)	Order No.	Order No.	Order No.	Order No.	Order No.
Automatic fuel pump	**342 006**	**342 006**	**342 006**	**342 006**	**342 006**
Liquid collecting tray (3)	**342 130**	**342 130**	**342 130**	**342 130**	**342 130**

(1) This data is based on average values as individual cases can vary and therefore they are not binding
(2) Not upgradable
(3) Not as per StawaR

Equipment features

- Automatic instrument panel
- Coolant preheating system
- Fuel tank

Instrument panel





Instrument panel	Construction site generators		RENTAL Line	POWER Line									
				Manual instrument panel			Automatic instrument panel					Open construction	
Displays	Analogue		Digital	Digital			Digital					Digital	
Operating mode	Manual		Auto / manual	Manual			Auto / manual					Auto / manual	
Display - operation													
Start / Stop	Key		Auto / buttons	Buttons			Auto / buttons					Auto / buttons	
Monitoring the mains voltage	–		✓	–			✓					✓	
Generator voltage 3~	–		✓	✓			✓					✓	
Generator voltage 1~	–		✓	✓			✓					✓	
Current strength 3~	–		✓	✓			✓					✓	
Current strength 1~	✓		✓	✓			✓					✓	
Frequency meter	✓		✓	✓			✓					✓	
Operating hours counter	✓		✓	✓			✓					✓	
Output	–		✓	✓			✓					✓	
Fuel indicator	–		✓	✓			✓					✓	
Engine temperature	–		✓	✓			✓					✓	
Oil pressure	–		✓	✓			✓					✓	
Engine speed	–		✓	✓			✓					✓	
Warning messages – switching off													
Generator over / undervoltage	–		**A**	**A**			**A**					**A**	
Generator over / under-frequency	–		**A**	**A**			**A**					**A**	
Battery over-/undervoltage	–		**W**	**W**			**W**					**W**	
Engine temperature too high	**A**		**A**	**A**			**A**					**A**	
Engine over / under rotational speed	**A**		**A**	**A**			**A**					**A**	
Overload	**A**		**A**	**A**			**A**					**A**	
Battery charger fault	**A**		**W**	**W**			**W**					**W**	
Low fuel level	–		**W / A**	**W / A**			**W / A**					**W / A**	
Low oil pressure	**A**		**A**	**A**			**A**					**A**	
Start attempt failed	–		**W**	**W**			**W**					**W**	
Leakage warning	–		**A**	**A**			**A**					–	
Collective fault acoustic	–		**W**	**W**			**W**					**W**	
Fuses													
3-pole line circuit breaker	✓		on request	✓			✓					✓	
4-pole line circuit breaker	on request		✓	on request			on request					on request	
FI circuit breaker	✓		✓	✓			–					–	
Insulation monitoring	on request		on request	on request			on request					on request	
EMERGENCY-STOP button	✓		✓	✓			✓					✓	
Further equipment features													
Connection on main switch	–		–	–			ESE 65 - 225					ESE 65 - 225	
Terminal strip	–		✓	starting from ESE 65 - 225			starting from ESE 275					starting from ESE 275	
E-RMA SIM	–		Option	Option			Option					Option	
E-RMA LAN	–		Option	Option			Option					Option	
External starting option	Option		Option	Option			Option					Option	
Sockets (model ESE)	10 - 20	30 - 50	20 - 225	15 - 20	30 - 50	65 - 225	15 - 20	30 - 50	65 - 225	275 - 705		15 - 20	30 - 50	65 - 705
Item Code.						342 054			342 054	342 052	342 053			
CEE 400 V / 125 A	–	–	–	–	–	–	–	–	–	–	1	–	–	–
CEE 400 V / 63 A	–	1	1	–	1	1	–	1	1	1	1	–	1	–
CEE 400 V / 32 A	1	1	1	1	1	1	1	–	1	1	1	1	–	–
CEE 400 V / 16 A	1	–	1	1	1	1	–	–	1	1	–	–	–	–
CEE 230 V / 16 A	2	2	1	1	–	–	–	–	–	–	–	–	–	–
230 V / 16 A shockproof socket	1	1	1	1	1	1	–	–	1	1	1	–	–	–

✓: Yes | **W**: Warning | **A**: Switching off

POWER Line model series
AS + open construction

The instrument panels for automatic models ESE 15 to ESE 50 are fitted with a digital control for fully automatic network monitoring.

Furthermore the functions of the power supply system are securely monitored. A CEE 400V socket matched to the generating set capacity serves as a connection point for the power.

sockets		
Model	ESE 15 - 20	ESE 30 - 50
CEE 400 V / 63 A	–	1
CEE 400 V / 32 A	1	–

No switching off or warning for a low fuel level for the models ESE 10-20 YW / B-A

Optional Package Rental 1

- The main battery switch
- Filter with water trap
- 3-way fuel tap
- Earthing kit

The main battery switch separates the battery from all components of the generator

Diesel filter large dimensioned, with a water separator and drain screw

A 3-way fuel tap for direct connecting up of an external fuel tank

Optional: Galvanized base frame for safe transport on the building site

Optional Package Rental 2

- The main battery switch
- 3-way fuel tap
- Earthing kit

The main battery switch separates the battery from all components of the generator

A 3-way fuel tap for direct connecting up of an external fuel tank

Option: Socket combination			
Model	ESE 65 - 225	ESE 275 - 705	ESE 275 - 705
Order No.	**342 054**	**342 052**	**342 053**
Protection Class	IP 67	IP 67	IP 67
Socket combinations (consisting of)	1 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 63 A	1 × 230 V / 16 A 1 × CEE 400 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 63 A	1 × 230 V / 16 A 1 × CEE 400 V / 32 A 1 × CEE 400 V / 63 A 1 × CEE 400 V / 125 A

Mobile floodlight installations

For further information:

Click here to go to the **mobile floodlight systems** on our homepage

Floodlight system and mobile power supply in one!

ENDRESS offers compact mobile light masts. They are uncomplicated and can be positioned precisely and they enable efficient work to be done at every location.

It does not matter one is dealing with a rescue incident, on motorway and airport building sites, in building construction and civil engineering or for mining: A reliable supply of light is decisive.

Mobile floodlight installations

▶ EFA 830 S4

▶ EFA 900 S4

▶ EFA 900C S4
with ESE 1408 DHG ES Diesel DUPLEX
Compact transport dimensions

Floodlight installations

Model	EFA 830 S4	EFA 830 S6	EFA 900 S4	EFA 900 C S4	EFA 900 C S6
Order No.	**716 260**	**716 280**	**716 274**	**716 266**	**716 267**
Light output	6000 W	9000 W	1200 W	6000 W	9000 W
Lamps	Halogen	Halogen	LED	Halogen	Halogen
Luminous flux (Lumen) approximately	132,000 lm	198,000 lm	146,800 lm	132,000 lm	198,000 lm
Lamps	4 × 1500 W	6 × 1500 W	4 × 300 W	4 × 1500 W	6 × 1500 W
Max. light spot height (m)	8.3	8.3	9.0	9.0	9.0
Min. transport height (m)	2.7	2.7	2.54	2.4	2.4
Light masts					
Mast	Continuously rotational through 360°	Continuously rotational through 360°	Rotational through 340°	Continuously rotational through 360°	Continuously rotational through 360°
Version	Aluminium telescopic mast	Aluminium telescopic mast	Aluminium telescopic mast	Aluminium telescopic mast	Aluminium telescopic mast
Function	Mechanical / hand crank	Mechanical / hand crank	Hydraulic	Mechanical / hand crank	Mechanical / hand crank
Chassis	FG 100 LM	FG 160 LM	Yes	FG 100 TM HV	FG 100 TM HV
Dimension L × W (mm)	4040 × 1600	4900 × 1600	3820 × 1570	2350 × 1600	2350 × 1600
Tyres	13“	13“		13“	13“
Trailer drawbar	Height adjustable	Height adjustable	Height adjustable	Height adjustable	Height adjustable
Inertial brake	Yes	Yes	Yes	Yes	Yes
Permissible total weight (kg)	1000	1600	1600	1000	1000
Permissible drawbar load (kg)	75	75	100	75	75
Generator recommendation	ESE 15 YW-B	ESE 20 YW-B, ESE 30 YW-B, ESE 35 YW-B, ESE 45 YW-B, ESE 50 YW-B	ESE 20 YW-MS	ESE 1408 DLG ES DI	ESE 1408 DLG ES DI

Available accessories	Order No.
HMI halogen metal vapour lamps - white light	**E 130 589**
HPS high-pressure sodium vapour lamp- yellow light	**E 131 605**

Illumination options.	Halogen floodlight standard	Halogen HML metal vapour lamps	HPS high-pressure sodium vapour lamps
Turn-on time	immediate	approx. 3 – 4 min.	approx. 1min.
Restarting time	immediate	approx. 10 min.	approx. 1min.
Service life (hours) approx.	2,000 hours	6,000 hours	10,000 hours
Output (Watts)	1500 W	400 W	400 W
Luminous flux (Lumen) approximately	33,000 lm	44,000 lm	55,000 lm

- Maintenance-free aluminium telescopic mast with easy operation via a hand crank
- Self-locking cranking winch
- 360° continuous rotary disk
- Swivelling special halogen floodlight
- Fully galvanized, StVZO-compliant chassis
- Height-adjustable trailer drawbar
- Telescopic support for a secure stance

Above: Fully galvanized, 360° continuous rotary disk
Below: Fast and easy alignment

Mobile floodlight installations

For further information:

Click here to go to our **mobile floodlight video** on YouTube

▶ EFA 840 S4 320 & 320 PLUG-IN
▶ EFA 840 S4 150 hybrid

▶ EFA 850 S4 320 ST hybrid
▶ EFA 850 S4 150 ST hybrid

▶ EFA 630 S4 185

▶ EFA 630 UFO 400

Floodlight installations			Hybrid		Plug-in		
Model	EFA 840 S4 320	EFA 850 S4 320 ST[1]	EFA 840 S4 150	EFA 850 S4 150 ST	EFA 630 S4 185	EFA 630 UFO 400	EFA 840 S4 320
Order No.	**716 275**	**716 277**	**716 272**	**716 273**	**716 271**	**716 302**	**716 276**
Light spot height (m)	8.4	8.5	8.4	8.5	6.3	6.3	8.4
Lamps	4 × 320W LED	4 × 320W LED	4 × 150W LED	4 × 150W LED	4 × 185W LED	1 × 400W LED	4 × 320W LED
LED voltage (V)	48	48	48	48	48	48	48
Light flux approx. [lm]	167300	167300	76500	76500	93000	50000	167300
Illumination range (m²)	4500	4500	2500	2500	2700	1000	4500
Light service life (hours)	> 50000	> 50000	> 50000	> 50000	> 50000	> 50000	> 50000
Mast's hub system	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Manual	Manual	Hydraulic
Mast rotation (°)	340	340	340	340	340	340	340
Maximum wind speed (km/h)	110	110	80	110	80	80	80
Operating temperature range (°C)	-5 / +40	-5 / +40	-5 / +40	-5 / +40	-	-	-
Engine	Kubota Z482	Kubota Z482	Yanmar L70N	Yanmar L70N	-	-	-
Construction type	2-cylinder, 4-stroke	2-cylinder, 4-stroke	1-cylinder, 4-stroke	1-cylinder, 4-stroke	-	-	-
Speed (rpm)	1500	1500	3000	3000	-	-	-
Engine output (PRP)	3.5 kW	3.5 kW	4.1 kW	4.1 kW	-	-	-
Cooling system	Water-cooled	Water-cooled	Air-cooled	Air-cooled	-	-	-
Fuel / tank capacity (l)	Diesel / 170	Diesel / 100	Diesel / 170	Diesel / 160	-	-	-
Running time (h)	283	180	707	665	-	-	-
Max. output kVA	3.8 / 3.5	3.8 / 3.5	5.0 / 4.0	5.0 / 4.0	-	-	-
Nominal voltage / Nominal current	230 V 1~ / 16 A 1~	230 V 1~ / 16 A 1~	230 V 1~ / 16 A 1~	230 V 1~ / 16 A 1~	-	-	-
Recharging time / Battery running time (h)	-	-	5 / 8	5 / 8	-	-	-
Insulation / Housing protection	IP23	IP23	IP23	IP23	IP23	IP23	IP23
Maximum supported load (kg)	-	100	-	100	-	-	-
Permitted total weight (kg)	-	1300	-	1300	-	-	-
Sound power level LWA dB(A)	83	83	0-90	0-92	-	-	-
Sound pressure level LPA (7 m) db(A)	58	58	0-65	0-67	-	-	-
Dimensions L × W × H (mm)	1790 × 1740 × 2420	2200×1400×2440	1790 × 1740 × 2420	3250×1400×2440	1230 × 780 × 2110	1230 × 780 × 2420	1790 × 1740 × 2420
Weight (kg)	980	980	1180	1230	248	220	996
Output socket	1 × CEE 230V / 16A	1 × CEE 230V / 16A	1 × CEE 230V / 16A	1 × CEE 230V / 16A	1 × CEE 230V / 16A	1 × CEE 230V / 16A	1 × CEE 230V / 16A
Towbar versions	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.
Height-adjustable towbar	–	**716 279**	–	–	–	–	–
Available accessories	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.
Astro timer	–	–	–	–	**341 506**	**341 506**	–
Digital timer	–	–	–	–	**341 507**	**341 507**	–
50 mm DIN towing eye	–	**341 505**	–	–	–	–	–
Preheating system	**341 508**	**341 508**	–	–	–	–	–
Insulation monitoring	**341 509**	**341 509**	–	–	–	–	–

(1) A short towbar is the standard fitting, also available with long and height-adjustable towbars.

Engine pumps

520 - 1000 l / min

▶ EMP 305

ENDRESS engine pumps do their work reliably and economically wherever power is not available.

YAMAHA | Fresh water pumps | Wastewater pumps | Petrol

All Endress engine pumps are self-feeding suction pumps based on the centrifugal pump principle.

- High flow rates
- Premium seals
- Lack of oil automatic switch-off

Engine pumps

500 - 1250 l / min

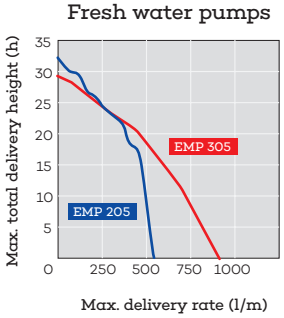
Engine pumps	Fresh water pumps		Wastewater pumps	
Model	EMP 205	EMP 305	EMP 305 ST	EMP 405 ST
Order No.	**411 009**	**411 010**	**411 011**	**411 012**
Max. delivery rate	500 l/min - 30 m³/h	883 l/min - 53 m³/h	933 l/min - 56 m³/h	1250 l/min - 75 m³/h
Max. suction lift (m)	7	7	7	7
Max. total delivery height (h)	30	30	25	35
Solids Ø (mm)	6	7	30	30
Connection S / D	2" / 2"	3" / 3"	3" / 3"	4" / 4"
Ash seal	Carbon ceramic	Carbon ceramic	Silicone carbide	Silicone carbide
Engine type	YAMAHA MZ 175	YAMAHA MZ 175	YAMAHA MZ 175	YAMAHA MZ 300
Construction type	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV
Displacement	171 cm³	171 cm³	192 cm³	296 cm³
Output at 3600 rpm	3.5 kW	3.5 kW	4.2 kW	7.0 kW
Fuel / tank capacity (litre)	Petrol / 4.5	Petrol / 4.5	Petrol / 4.5	Petrol / 5.8
Consumption / running time [1]	1.7 l / 2.7 h	1.9 l / 2.3 h	2.3 l / 2 h	3.3 l / 1.7 h
Starting system	Recoil starter	Recoil starter	Recoil starter	Recoil starter
Sound power level LWA	99 dB(A)	99 dB(A)	99 dB(A)	106 dB(A)
Sound pressure level (LPA)	74 dB(A)	74 dB(A)	74 dB(A)	81 dB(A)
Weight (kg)	24	25	36	55
Dimensions L × W × H (mm)	510×405×450	510×405×450	560×450×465	600×490×555
Possible areas of application	Pumping of clear or slightly dirty water		Pumping of waste water and other foreign matter up to a Ø of 30 mm	
Available accessories [2]	Order No.	Order No.	Order No.	Order No.
Suction hose (8 m)	**38 410**	**38 407**	**38 407**	**38 412**
Pressure hose (15 m)	**38 411**	**38 408**	**38 408**	**38 415**
Pressure hose extension (10 m)	**38 414**	**38 409**	**38 409**	**38 416**
Reducer coupling 3" to 2"	–	**38 483**	**38 483**	–

(1) Consumption/litres per hour, running time in hours. This data is based on approximate values at 75% load and therefore it is not binding
(2) Suction hose, pressure hose and pressure hose extension are equipped with quick-release couplings.

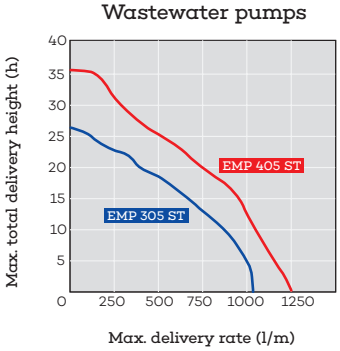
Comprehensive equipment

- 3 hose clips
- 2 hose couplings
- 1 strainer
- 1 spark plug socket
- 1 × seal

Fresh water pumps



Wastewater pumps



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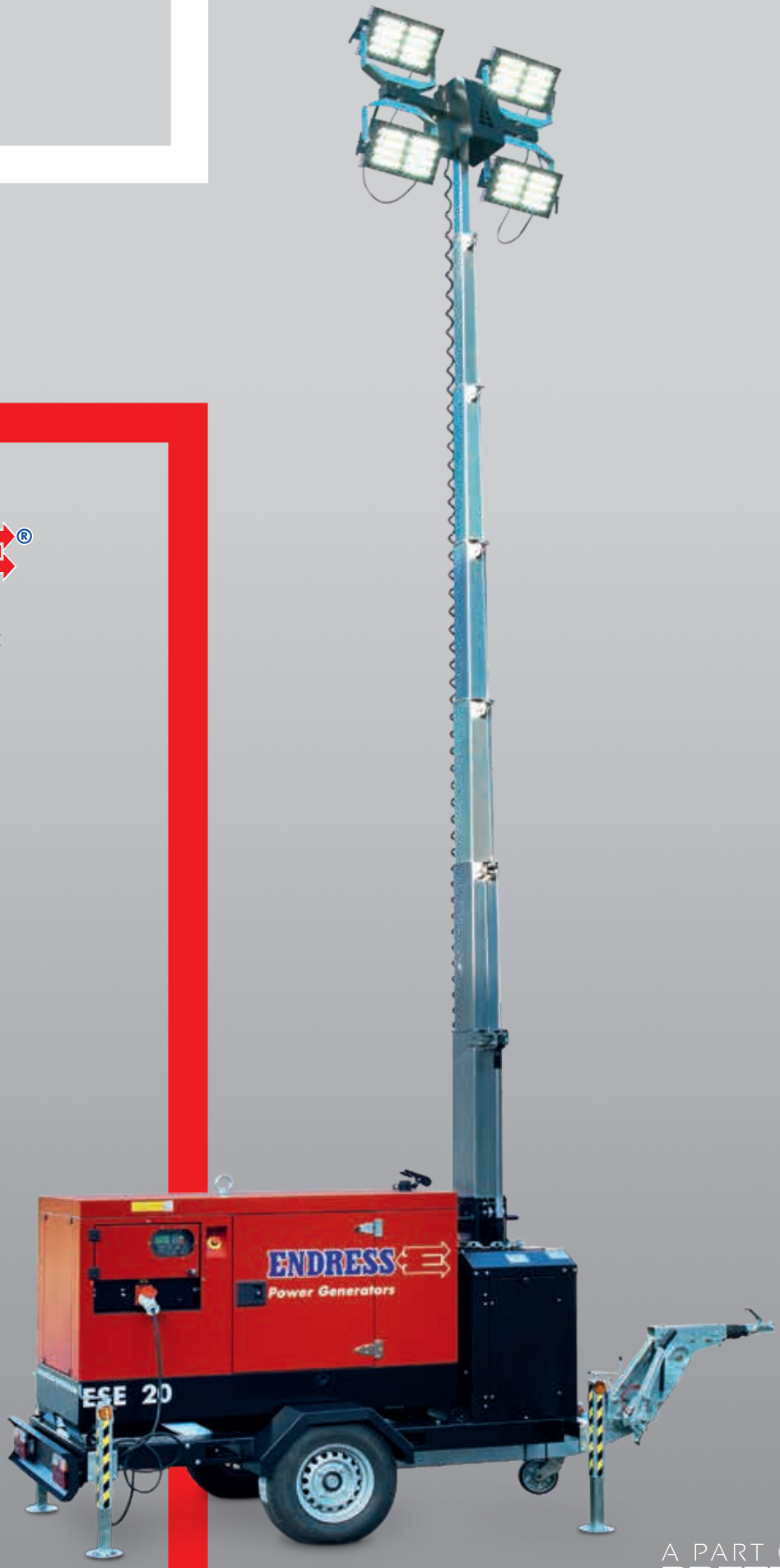

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