ENDRESS®

Power Generators

PRODUCT CATALOGUE

GERMANY
since 1914

ENDRESS

Leading in mobile power generators

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

Important postulates of the company policy:

- Performance and reliability through a choice of outstanding components and standardized 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 allows ENDRESS to meet the growing demands and internationalization of commercial companies, also in the future.

Futuristic technology through in-house development and production.

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

With a performance range of up to 2000 kVA, ENDRESS meets all requirements. Innovative special machines for firefighting, disaster relief and emergency services, and meeting of special requirements for building, communal and contracting businesses, are also part of the program, as are floodlight systems and generators for emergency power supply.

Excellent engineering by ENDRESS

DUPLEX

DUPLEXplus

ECOtronic

maxdrive

E-RMA System
connected power

Index

DUPLEX

DUPLEX in a nutshell

Yesterday:

When no electronics were used with the units, asynchronous generators were needed to produce so-called “clean” current, and synchronous generators 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 mobilized and the Duplex generator powers even the heaviest inductive appliances and protects sensitive appliances from damage. Thus all advantages of asynchronous and synchronous generators are united in the DUPLEX system and terminate, thereby, 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
- VKS technology:
  W = wear-free C = contact-free T = trouble-free
- Simultaneous use by electronic and inductive appliances
- Brushless, electronically regulated synchronous alternator
- Brushless technology - therefore 20,000 operating hours
- Protection Class IP 54 — protected from dust and spray
- 200% Suitable for asymmetric load in actual operation
- Voltage stability +/- 1% with 3~ alternators
- Up to 4 times the starting current
- 100% short-circuit-proof
- Distortion factor ≤ 5%

A generator for every use!

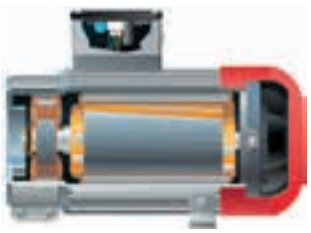
The fine distinction:

Where conventional wear-prone carbon brushes were once used, the ENDRESS DUPLEX system uses an intelligent exciter machine.

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

Rotor head with wear-prone carbon brushes operation

DUPLEX rotor head equipped with an intelligent exciter 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.
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 previously one had to serve a heavy stationary unit of up to 15 kVA, today it sufficient to have a 13 kVA DUPLEX generator. A brushless DUPLEX generator can bypass up to four times the start-up currents.

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 as well as heating systems or various electronic controls require constant power and a stable frequency.

Our DUPLEX technology allows a voltage constant of up to +/- 1% of nominal voltage (230 V), to protect your appliance.

Technology and innovation

What is ECOtronic?

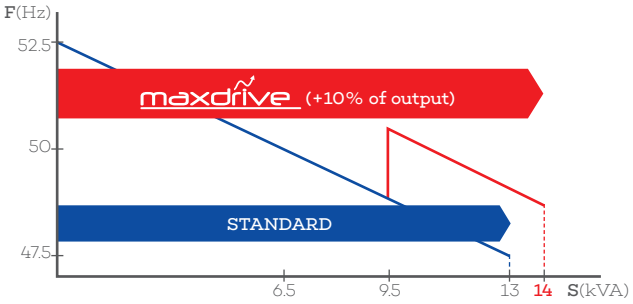
The generation of current with a conventional petrol generator takes place at a high speed range of 3000 rpm. However, according to experience a generator often runs during use without load. From today's point of view this leads to wasteful use, such as during work with electric tools on construction 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 eco-friendly alternative to conventional electricity generation. During use, the ECOtronic system recognizes 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 thereby always remaining in stand-by mode. 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 a starting current or impact loads, the drive engine's centrifugal governor quickly reaches its limits. 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

The new Multifunctional Control Display E-MCS 4.0

An optimally safe, user-friendly system for everyday use.

The completely newly designed E-MCS 4.0 now delivers even more information about data and the status of units than the previous model E-MCS 3.0. The newly designed display makes reading off of data significantly easier since only the information required and relevant for operation can be seen. All other information such as warnings or switched- in systems remains hidden and are only displayed when triggered.
The new EMCS 4.0 is already prepared for the new standard FireCAN, thus this system fulfils all of the requirements placed upon future-oriented equipment operating in the power generator and vehicle sector.

Displays in relevant operation

- Display of voltages for the individual phases 1-3
- Loading for the individual phases 1-3
- Total loading of the unit new
- Fuel level indicator – with warning where there is a reserve
- Frequency indicator
- Operating hours counter

Display of warnings, switched-in systems

- Protective conductor test lamp
- Battery charge checking / charging function (W)
- Insulation error (W)
- Insulation error – optional (A)
- ECOtronic active – optional
- Oil pressure (A)
- Engine temperature (W)
- Fuel temperature (W)
- Generator temp erature (W)
- Ambient temperature (W) new
- Emergency Stop has been actuated

A = switch off, **W** = warning

A light sensor controls the LEDs according to incidence of light so that good visibility is achieved also in the case of direct sunlight

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 your stationary emergency power supply plant can be integrated into the computer network of your building. After a few installation steps you can access your device anywhere, naturally also from your smartphone.

E-RMA SIM

Also when you perhaps do not have access to a network connection due to regional circumstances, you do not have to dispense with remote monitoring and control of your aggregate.

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

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 web user interface of the E-RMA system it is possible for you, at any time, to view live data from your aggregate and to take over control.
It does not matter whether this is from a PC or from your smartphone.
The most significant components of the web application are:

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

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 over 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 appliances without limitation. Inductive appliances with significant limitations.
Starting behaviour	Trouble-free starting, regardless of the consumer. Compound-regulated generators with three times the starting current. DUPLEX generators with four times the starting current.	A problematic starting behaviour for the most difficult to start consumers; particularly 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 appliances and can therefore be designed smaller.	With inductive appliances, the generator can only be loaded up to 1/3 (without start amplification), 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. An FI circuit breaker is not necessary

The proper current quality

Asynchronous generator 230 / 400 V with condenser regulation	for appliances with a low starting current, not overloadable
Synchronous generator 230 V with condenser regulation	for appliances with a starting current, not suitable for electronic consumers
Synchronous generator 230 V with AVR regulation [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 generator 400 V with compound regulation [2]	consumers with a very high starting current, not suitable for electronic consumers, never suitable for an asymmetric load [3]
Synchronous generator 230 V with inverter regulation	universally usable, a precise output voltage and frequency for sensitive consumers, as well as consumers with a starting current
DUPLEX generator 230 / 400 V with electronic regulation	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) Regulation of the generators voltage takes place by means of an additional magnetic field (a compound transformer is installed in the stator)
(3) An asymmetric load is understood as 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 devices like cranes or circular construction or 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 commissioning the electrical generators with the safety measures of protective separation, without an electrician, with more than one current-consuming device connected, depending on the application, additional personal protection equipment and measures are necessary.

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 equalization.

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 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)

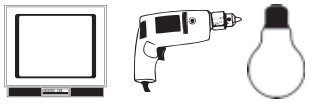
The FI protection switch provides further protection against dangerous shock currents. It shuts off the power supply if there is fault current. This protection measure requires appropriate earthing in which the earthing spike is connected with an earthing cable to the generator's earthing screw for potential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

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

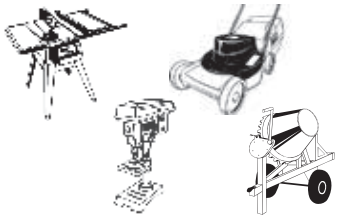
The appliances turn themselves off automatically if the insulation resistance reaches a critical level. The insulation monitoring function is controlled from a test button. Costly earthing with an earthing spike and earthing cable are no longer necessary. This equipment provides a high level of safety, 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 to a large extent act as active load consumers



Appliances in a nutshell

Ohmic appliances (active load appliances)

These are appliances that convert their power input completely into heat and light and therefore are not a problem for any generator.
The listed output power (watts) is always 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 appliances 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 chart. On **pages 38 - 39**, 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 powers 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 combustion process of fuel in the engine. The smaller they are, the more easily they find their way over the lungs into the bloodstream and thereby into other vital organs of people. Therefore soot particles from diesel engines are known to represent a significant health hazard. For this reason, step by step, numerous measures are coming into force on a European and national levels for reduction of the pollutant emissions.

These include, for example, the Air Quality Directive (EU Guideline 2008/50/EEC) which has been valid throughout the EU since the beginning of 2005. The goal of this regulation, its daughter directives as well as the respective implementation in the Federal Pollution Control Act (BImSchG), is to measurably improve the air quality, particularly in the European conurbations. The regulations require that cities and communities take action against increased pollution levels. Previous implemented measures, amongst others, include setting up of environmental zones in Germany and further European countries and the so-called filter obligation for building machines in Switzerland.

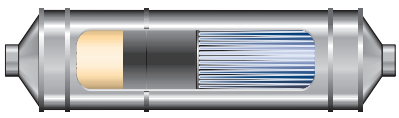
SMF (sintered metal filter) ® - An overview of the advantages

- 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

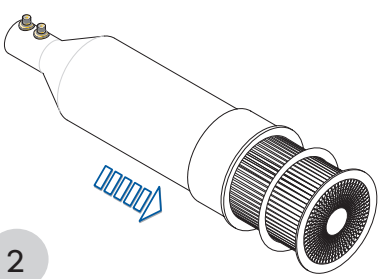
Advantages of automatic monitoring and a maintenance indicator

- 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

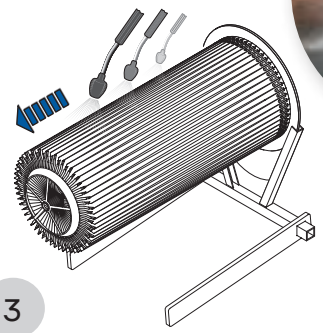
Easy cleaning using high pressure cleaner:



1



2

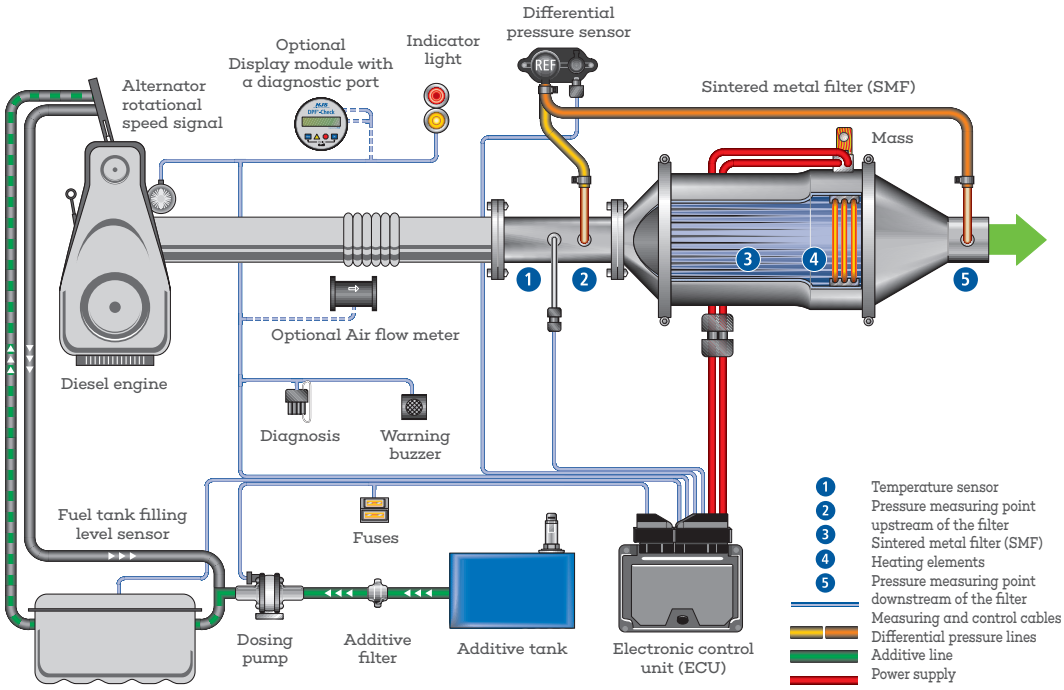


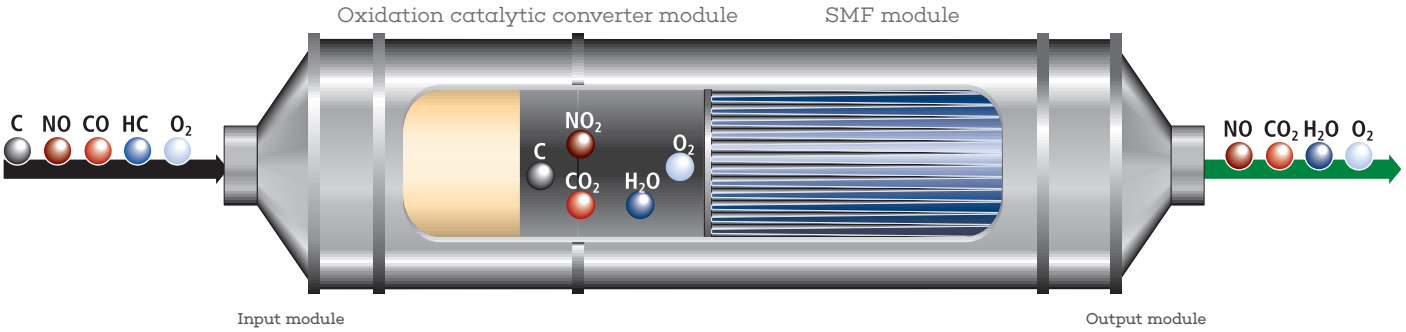
3

Soot particulate filter

Function description

For the SMF® AR System the exhaust gas is filtered until the an optimal amount of soot for regeneration has been gathered on the filter. The system uses the positive active properties of a fuel additive that, on the one hand, lowers the soot ignition temperature and, on the other hand, increases the soot combustion speed. The stored soot can therefore be burnt off by itself at an exhaust gas temperature of about 400°C during a regeneration. If the required temperature is not reached - this is often the case in a low load case - the active regeneration support comes into effect in the form of thermo-electric heating of the system.





Active thermo-electric regeneration

The control unit initiates (active) regeneration over heating elements 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 a self taught-in running cycle recognition ensures that the regeneration is triggered for optimal 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 large time window. Therefore a one-time abort of regeneration due to switching off of the engine is not a problem for secure functioning of the SMF® AR System. One further plus point of the SMF® 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

Information on emergency power supply

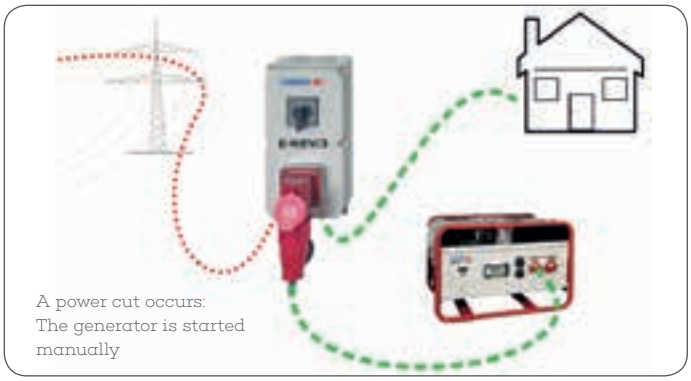
There are a number of options for creating a simple but efficient emergency power supply.

We wish to show you some practical tips and ways for you to secure 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 is only achieved if the power generator is started in response to a power failure
- Security of supply is not guaranteed

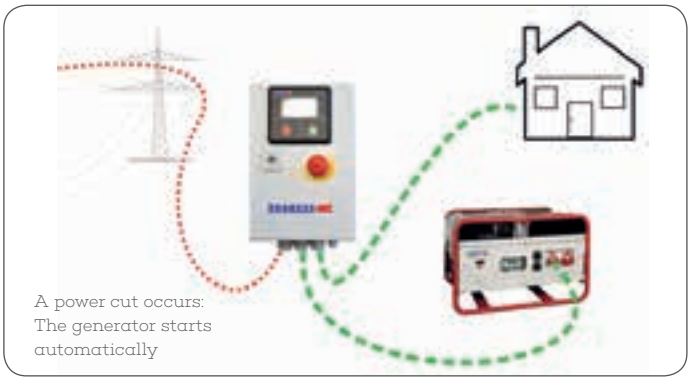


A power cut occurs:
The generator is started manually

Emergency power supply with automatic switchover

In this variant 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 supply distributors E-NEV

- Manual switchover between the mains 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 variants:

- 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

ENDRESS Emergency Power Automatic E-ATS

- The automatic control panel E-MCS 5.0 for monitoring the public power grid and controlling of the attached generator
- Switchover protections integrated in the stable metal housing IP 54
- Connector blocks for 400 V or 230 V building mains feed
- Charger for charging the battery on the generator
- A firmly cabled control line to the alternator, 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 is 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 be sure of your power supplier's terms and conditions in the general terms and conditions document. 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 model 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 • In the case of a power failure, the local filling station can also not pump any diesel
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 within buildings is only permissible in specially provided rooms. Please ask your district chimney sweep for advise if you have any questions.

When installed outside, 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 power feed in an emergency with 400 V (for example a cooker connection, workshop machines, etc), a 400 V supply is a correct criterion for you.
There are some things to take into consideration concerning feed into the power network. 400 V networks may only be supplied by a generator which is fitted with phase correction or a phase checking system in order to avoid any asymmetric load (overload on a phase).

This could damage attached power consumers (for example televisions, computers).
Our generators from the DUPLEX model series are fitted as standard with an electronic phase control system which allows feed into a house 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:

Power feed 230 V
Automatic / Manual
Performance range 1-10 kVA
- Petrol unit **Page 18-30**
- Diesel unit **Page 32-34**

Power feed 400 V
Automatic / Manual
Performance range 6-15 kVA
- Petrol unit **Page 26-30**
- Diesel unit **Page 32-33**

Complete system GAS
Automatic
Power feed 230 V **Page 40**

Stationary
Power supply systems
Performance range
10-705 kVA **Page 47-64**

The latest technology and the best quality guaranteed

Declaration of the model designation

ESE	10	08	S	D	H	S	DC	ES	DI	
										DI = Diesel engine
										ES = Electrical start
										DC = D 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 18	**Page 20**	**Page 22**	**Page 26**	**Page 30**	**Page 32**	**Page 34**

●●●: 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.

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 - 3.8 kVA

SILENT Line 1.6 - 3.8 kVA			
Model	ESE 2000i	ESE 3500 T Silent	ESE 4500 T Silent
Item code	**110 005**	**110 001**	**110 002**
Alternator	Synchronous	Synchronous	Synchronous
Max. output kVA/kW	2.0 / 2.0	3.2 / 3.2	4.3 / 4.3
Continuous output kVA/kW	1.6 / 1.6	2.8 / 2.8	3.8 / 3.8
Rated voltage	230 V 1~ / 12 V =	230 V 1~ / 12 V =	230 V 1~ / 12 V =
Rated current	8.7 A 1~ / 8.3 A =	12.1 A 1~ / 8.3 A =	16.5 A 1~ / 8.3 A =
Power factor cos φ	1	1	1
Frequency / Protection Class	50 Hz / IP 23	50 Hz / IP 23	50 Hz / IP 23
Engine type	YAMAHA MZ80 / 3.5 HP	ROBIN EX 21 / 7 HP	ROBIN EX 27 / 9 HP
Design	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHC	1-cylinder 4-stroke OHC
Displacement	79 cm³	211 cm³	265 cm³
Output 3000 rpm	1.8 kW	3.2 kW	4.4 kW
Fuel / tank capacity (litre)	Petrol / 4	Petrol / 10.8	Petrol / 12.8
Consumption / running time at 75% load of about (1)	0.7 l / 6 h	1.4 l / 6.5 h	1.8 l / 7 h
Starting system	Recoil starter	E-Start incl. battery	E-Start incl. battery
Sound power level LWA	89 dB(A)	91 dB(A)	91 dB(A)
Sound pressure level (7 m)	64 dB(A)	66 dB(A)	66 dB(A)
Weight (kg)	20	59	74
Dimensions L × W × H (mm)	540 × 330 × 505	537 × 482 × 583	580 × 527 × 618
Protective contact socket	2 × 230 V / 16 A 1 × 12 V	2 × 230 V / 16 A	2 × 230 V / 16 A
Possible areas of application (1)	230 V	230 V	230 V
Electronic devices up to	1600 W	2800 W	3800 W
Electric tools up to	1450 W	2600 W	3600 W
Garden tools up to	1250 W	1900 W	2500 W
Building equipment up to	—	1400 W	1900 W

(1) These data are based on average values since individual cases may vary and are therefore not binding

Available accessories	Item code	Suitable for
Maintenance kit	**164 001**	ESE 3500 T
	164 002	ESE 4500 T

ESE 2000i with a
IP 68 sockets –
Item code.: **110005.01**

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

Equipment features:

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

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 and industrial area.

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~
Item code	**112 210**	**112 211**	**112 212**	**112 213**		**112 214**	
Alternator	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	
Design	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 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 (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	-	-	-	2.5 mm dia.		2.5 mm dia.	

(1) These data are based on average values since individual cases may vary, and are therefore not binding
(2) Non-EU

Available accessories	Item code	Suitable for
Maintenance kit	**164 029**	Model series ESE 606

Features

- Large tank for long running times
- Alternator 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 alternators.

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	ESE 306 HS-GT	ESE 406 HS-GT	ESE 506 DHS-GT		ESE 606 HS-GT
	1~	1~	1~	3~	1~	1~
Item code	**112 300**	**112 301**	**112 302**	**112 304**		**112 303**
Alternator	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
Design	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 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 (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
Item code			**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	-	-	-	2.5 mm dia.		

(1) These data are based on average values since individual cases may vary, and are therefore not binding

Features

- Lack of oil automatic switch-off
- Alternator 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 performance 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~
Item code	**112 305**		**112 023**		**112 021**	**112 022**	
Alternator	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	
Design	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 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 (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 HS-GT ES		ESE 1006 DBS-GT				
Item code	**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	3.25 mm dia.		4.5 mm dia.			3.25 mm dia.	

Available accessories	Item code	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]		Item code	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	**162 023**	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) These data are based on average values since individual cases may vary and are therefore 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~
Item code	**230 028**	**230 029**		**230 031**		**230 033**	
Alternator	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~	16.0 A 1~	19.0 A 3~	16.0 A 1~	29.0 A 3~	16.0 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	
Design	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 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 (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	–	5.0 mm dia.		6.0 mm dia.		6.0 mm dia.	

Available accessories	Item code	Suitable for
Maintenance kit	**164 032**	Model ESE 1306
Maintenance kit	**164 033**	Model ESE 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)	Item code	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) These data are based on average values since individual cases may vary, and are therefore not binding.
(2) Not upgradable
(3) Does not conform to EU Noise Guideline 2000/14/EC.

DUPLEXPLUS **Line**

4.0 - 15.0 kVA

A mains supply socket with transfer switching equipment for supplying power to a building for a power failure according to VDE 0100-551:2017-02 is optionally available

Specially suitable for use at building and assembly locations according to the DGUV information 203 - 032

▶ ESE 606 DHG-GT ES DUPLEX

Mobile power generation with the technology of the future. The **DUPLEX**plus Line combines performance and economy.

DUPLEX | IP 54 | Electronic regulation | ECOtronic system | Petrol

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

DUPLEXPLUS **Line**

4.0 - 15.0 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 DUPLEX	ESE 406 HG-GT ES DUPLEX	ESE 506 HG-GT DUPLEX
Item code	**113 552**	**113 553**	**113 554**
Alternator	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
Design	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV
Displacement	270 cm³	270 cm³	389 cm³
Output 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 (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	2.5 mm dia.	2.5 mm dia.	2.5 mm dia.

(1) These data are based on average values since individual cases may vary, and are therefore not binding
(2) ECOtronic active

DUPLEXPLUS - the advantages at a glance

- Operating costs are lowered
- Reduction of the 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 alternator
- Voltage stability +/- 1% with 3~ alternators
- 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

DUPLEXPLUS Line
4.0 - 15.0 kVA

▶ ESE 606 DHG-GT ES DUPLEX

DUPLEXPLUS Line 5.0 - 6.0 kVA						
Model	ESE 506 HG-GT ES DUPLEX	ESE 606 DHG-GT DUPLEX		ESE 606 DHG-GT ES DUPLEX	
	1~	3~	1~	3~	1~
Item code	**113 555**	**113 556**		**113 557**	
Alternator	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	
Design	1-cylinder 4-stroke OHV	1-cylinder 4-stroke OHV		1-cylinder 4-stroke OHV	
Displacement	389 cm³	389 cm³		389 cm³	
Output 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	2.5 mm dia.	3.25 mm dia.		3.25 mm dia.	

Available accessories	Item code	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)	Item code	Suitable for
FI protection switch	**162 009**	All models
Insulation monitoring	**010 043**	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	**162 045**	All models
60 Hz version	on request	
E-RMA SIM (4)	**342 220**	
E-RMA LAN (4)	**342 221**	

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) ECOtronic active
(3) Not upgradable
(4) Only in combination with an automatic emergency power supply

Equipment features

- ECOtronic System
- Honda OHV engines.
- 3 in 1 display = V / Hz / h
- Tank level indicator
- Lack of oil automatic switch-off
- Alternator overload protection
- Folding handles
- A crane mount is integrated as standard in the frame
- A slide compartment for the short operating instructions and tool is integrated directly under the tank
- Control panel with Protection Class IP 54

DUPLEXPLUS **Line**

4.0 - 15.0 kVA

▶ ESE 1506 DSG-GT ES DUPLEX

Set of wheels optionally available

DUPLEXPLUS Line 10.0 - 15.0 kVA

Model	ESE 1006 SG-GT ES DUPLEX	ESE 1006 DSG-GT ES DUPLEX		ESE 1306 DSG-GT ES DUPLEX		ESE 1506 DSG-GT ES DUPLEX	
	1~	3~	1~	3~	1~	3~	1~
Item code	**113 160**	**113 161**		**113 158**		**113 159**	
Alternator	DUPLEX	DUPLEX		DUPLEX		DUPLEX	
Max. output kVA/kW	11.0 / 9.9	11.0 / 8.8	6.6 / 5.9	13.0 / 10.4	7.7 / 7.0	16.5 / 13.2	7.7 / 7.0
Continuous output kVA/kW	10.0 / 9.0	10.0 / 8.0	6.0 / 5.4	12.0 / 9.6	7.0 / 6.3	15.0 / 12.0	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	43.5 A 1~	14.4 A 3~	26.1 A 1~	17.3 A 3~	30.4 A 1~	21.6 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	SUBARU EH 63 / 18 HP	SUBARU EH 63 / 18 HP		SUBARU EH 65 / 22 HP		SUBARU EH 72 / 25 HP	
Design	2-cylinder 4-stroke OHV	2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV	
Displacement	653 cm³	653 cm³		653 cm³		720 cm³	
Output 3000 rpm	12.5 kW	12.5 kW		14.5 kW		16.8 kW	
Fuel / tank capacity (litre)	Petrol / 30	Petrol / 30		Petrol / 30		Petrol / 30	
Consumption / running time at 75% load of about [1]	3.2 l / 9 h	2.9 l / 10 h		3.4 l / 8.5 h		4.1 l / 7 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)		97 dB(A)	
Sound pressure level LPA (7 m) [2]	67 dB(A)	67 dB(A)		67 dB(A)		67 dB(A)	
Weight (kg)	162	155		151		160	
Dimensions L × W × H (mm)	850 × 650 × 575	850 × 650 × 575		850 × 650 × 575		850 × 650 × 575	
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	9000 W	8000 W	5400 W	9600 W	6300 W	12000 W	6300 W
Electric tools up to	8900 W	7900 W	5300 W	9500 W	6200 W	11900 W	6200 W
Gardening or construction equipment up to	6000 W	5300 W	3600 W	6400 W	4200 W	8000 W	4200 W
Compressors or pumps up to	4500 W	3700 W	2700 W	4800 W	3100 W	6000 W	3100 W
Inverter welding equipment up to	4.5 mm dia.	4.5 mm dia.		6.5 mm dia.		6.5 mm dia.	

Available accessories	Item code	Suitable for
Maintenance kit	**164 007**	All models
Wheelset	**161 023**	All models
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
Power distributor E-NEV/3-16	**162 303**	Model ESE 1006 DSG-GT ES
Power distributor E-NEV/3-32	**162 304**	Model series ESE 1306, 1506

Special equipment[3]	Item code	Suitable for
FI protection switch	**162 009**	All models
Insulation monitoring	**010 043**	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 [4]	**342 220**	
E-RMA LAN [4]	**342 221**	

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) ECOtronic active
(3) Not upgradable
(4) Only in combination with an automatic emergency power supply

Equipment features

- ECOtronic System
- SUBARU 2-cylinder OHV engines
- 4 in 1 display = V / Hz / h / oil deficit
- Tank level indicator
- Lack of oil automatic switch-off
- Alternator overload protection
- Crane loading lug
- Folding handles

DUPLEXSILENT **Line**

8.0 - 14.0 kVA

Specially suitable for use at building and assembly locations according to the 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.

DUPLEX | IP 54 | Electronic regulation | Sound insulated | Petrol

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

DUPLEXSILENT **Line**

9.0 - 14.0 kVA

ENDRESS

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

DUPLEXSilentLine 9.0 – 14.0 kVA

Model	ESE 908 DBG ES DUPLEX SILENT		ESE 1308 DBG ES DUPLEX SILENT		ESE 1408 DBG ES DUPLEX SILENT	
	3~	1~	3~	1~	3~	1~
Item code	**113 007**		**113 008**		**113 022**	
Alternator	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	
Design	2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV		2-cylinder 4-stroke OHV	
Displacement	479 cm³		627 cm³		627 cm³	
Output 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 (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	4.0 mm dia.		6.5 mm dia.		6.5 mm dia.	

Available accessories	Item code	Suitable for
Maintenance kit	**164 030**	Model ESE 808
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 808
Feed distributor E-NEV / 3-32	**162 304**	Model series ESE 1308, 1408
Fuelling set	**163 110**	All models

Special equipment [2]	Item code	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
Insulation monitoring	**010 043**	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**	

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) Not upgradable
(3) Only in combination with an automatic emergency power supply

Equipment features

- 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
- Alternator overload protection
- Folding handles

DUPLEXSILENT **Line Diesel**

6.0 - 14.0 kVA

Specially suitable for use at building and assembly locations according to the DGUV information 203 - 032

▶ ESE 1408 DLG ES DI

The **DUPLEX**Silent Line with HATZ and Lombardini diesel engines have proven themselves in daily continuous use - it does not matter where, when and how - and their superior and robust quality. A compact construction with innovative alternator technology for an indispensable unit for professional independence from a mains network.

DUPLEX | IP 54 | Electronic regulation | Sound insulated | 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 DLG ES DI

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

DUPLEXSILENT Line Diesel 6.0 - 14.0 kVA

Model	ESE 608 DHG ES DI DUPLEX Silent		ESE 1008 LG ES DI DUPLEX Silent	ESE 1408 DLG ES DI DUPLEX Silent	
	3~	1~	1~	3~	1~
Item code	**113 023**		**113 035**	**113 032**	
Alternator	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	
Design	1-cylinder 4-stroke		2-cylinder 4-stroke	2-cylinder 4-stroke	
Displacement	517 cm³		954 cm³	954 cm³	
Output 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)		96 dB(A)	96 dB(A)	
Sound pressure level (7 m)	69 dB(A)		71 dB(A)	71 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	3.25 mm dia.		4.5 mm dia.	6.5 mm dia.	

Available accessories	Item code	Suitable for
Maintenance kit	**164 034**	Model ESE 608
Maintenance kit	**164 035**	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]	Item code	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**	All models
FI protection switch	**162 009**	All models
Insulation monitoring	**010 043**	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**	
EDS 4/2000 Dual Speed, 4.0 kVA [COP] / 4.4 kVA [LTP]	**610 100**	Model ESE 1408
Version IT-TN	**162 042**	Model ESE 1408

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) Not upgradable
(3) Only in combination with an automatic emergency power supply

Equipment features for all models

- Noise insulating housing for low operating noises
- HATZ & Lombardini diesel engines
- Starter battery 12 V
- Alternator 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~
Item code	**122 001**	**122 009**	**131 009A**	**131 010A**	
Alternator	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	
Design	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 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 (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	-	-	-	3.25 mm dia.	

(1) These data are based on average values since individual cases can vary and are therefore not binding

The quality engines in the DIESEL Line ensure a reliable drive for the high performance synchronous alternators. 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~
Item code	**122 010**		**122 008**	**122 007**		**122 005**	
Alternator	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	
Design	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 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 (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	3.25 mm dia.		-	4.0 mm dia.		4.5 mm dia.	

Available accessories	Item code	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**	Series 230 V - ESE 606, 608, 1006

Special equipment [2]	Item code	Suitable for
Cable remote control 20 m	**162 023**	Model series ESE 606, 608, 706, 1006, 1204
Automatic emergency power supply with FI version	**162 332**	Series 230 V - ESE 606, 608, 1006

(1) These data are based on average values since individual cases can vary, and are therefore not binding

(2) Not upgradable

Equipment features for all models

- Noise insulating housing for low operating noises
- Large tank for long running times
- Alternator overload protection
- All alternators with a Low Distortion Device for a clean voltage
- Compound regulated high performance alternators for 400 V

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~
Item code	**121 000**	**121 004**	**121 008**	**121 001**	
Alternator	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	
Design	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 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 (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	-	-	-	3.25 mm dia.	

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) Does not conform to EU Noise Guideline 2000/14/EC

The quality engines in the DIESEL Line ensure a reliable drive for the high performance synchronous alternators.

Due to the open construction this model does not confirm with the standards of the EU Noise Guideline 2000 / 14 EEC.

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~
Item code	**121 002**		**121 009**	**121 010**		**121 011**	**121 012**	
Alternator	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	
Design	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 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 (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	3.25 mm dia.		-	4.0 mm dia.		-	6.0 mm dia.	

Available accessories	Item code	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 230 V - ESE 604, 906, 1506

Special equipment [3]	Item code	Suitable for
Cable remote control 20 m	**162 023**	Series with electrical starting
Emergency Power Supply	**162 332**	Model series 230 V - with E-Start

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) Does not conform to EU Noise Guideline 2000/14/EC
(3) Not upgradable

Equipment features for all models

- Large side panels protect the engine and alternator
- Alternator overload protection
- All alternators with a Low Distortion Device - for a clean voltage
- Compound regulated high performance alternators for 400 V

Generator selection assistant

ENDRESS

Generator			SILENT Line			CLASSIC Power Line			Professional GT Line											
			ESE 2000i	ESE 3500 T	ESE 4500 T	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
Continuous output		VA	1600	2800	3800	2500	5800	7000	2500	2900	4200	5400	6000	7000	10000	10000	11800	9000	12000
Alternator		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		<1800	<2500	<1900	<1600	●	<1500	<1800	●	<2100	●	●	●	●	●	●	●
Air conditioner	230 V	800-2000		<1800	●	<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	<1800	●	<1800	●	●	●	<1800	●	●	●	●	●	●	●	●	●
Angle grinder	230 V	400-2600	<1000	<1900	●	<1800	●	●	<2000	<1900	●	●	●	●	●	●	●	●	●
Jigsaw	230 V	250 - 700	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Bench grinder	230 V	300 - 900	<600	<1200	●	●	●	●	●	<1200	●	●	●	●	●	●	●	●	●
Garden tools																			
Lawn mower	230 V	750-2000		<1200	●	<1200	●	●	<1600	<1200	●	●	●	●	●	●	●	●	●
Hedge trimmer	230 V	350-1000	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Shredder	230 V	700-2500		<1000	<1900	<1200	●	<2200	<1600	<1000	●	<1900	●	●	●	●	●	●	●
	400 V	1500-4000						<3300				<3200		●	●		●		●
Electric devices																			
Building / circular saws	230 V	1500-3000		<1300	<1800	<1000		<1600	<1200	<1300	<1900	<1400	<2800	<1900	<2800	●	●	●	●
	400 V	2500-6000						<2500				<2500		<3200	<4600		<5400		<5400
Compressor	230 V	500-2500		<1000	<1400	<1000	<2500	<1600	<1200	<1000	<1900	<1400	<2800	<1900	●	●	●	●	●
	400 V	1500-3000						<2500				<2500		●	●		●		●
Water pump	230 V	400-2000	<800	<1900	●	<1000	●	●	<1500	<1900	●	●	●	●	●	●	●	●	●
	400 V	1000-5000						<2500				<3600		<4600	●		●		●
High pressure cleaner	230 V	1500-4000		<1300	<1800	<1000	<2500	<1600	<1200	<1300	<1900	<1400	<2800	<1900	<2800	●	<3200	●	<3200
	400 V	3000-6000						<2500				<2500		<3200	<4600		<5400		<5400
Welding equipment (electrodes with a mm dia.)																			
Inverter welding	230 V up to																	4.5	
	400 V up to											2.5		3.25	4.5		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
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	<2500	<3400	<1800	<4800		<2200	<2400	<3700		<5400			<9000	<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 are based on average values and are not binding, since individual cases may vary

ENDRESS®

ESE 1506 DHS-GT	ESE 2006 DHS-GT	ESE 406 HG-GT	ESE 506 HG-GT	ESE 606 HG-GT	ESE 1006 SG-GT	ESE 1006 DSG-GT	ESE 1306 DSG-GT	ESE 1506 DSG-GT	ESE 908 DBG	ESE 1308 DBG	ESE 1408 DBG	ESE 608 DHG	ESE 1008 LG	ESE 1408 DLG	ESE 404 YS ESE 406 YS-GT	ESE 604 YS-GT ESE 606 YS-GT ESE 608 YS-GT	ESE 604 DYS-GT ESE 606 DYS-GT ESE 608 DYS-GT	ESE 1000 DLG-GT	ESE 906 LS	ESE 906 DLS	ESE 1204 DHS-GT	ESE 1506 LS	ESE 1506 LS
		DUPLEXPLUS Line							**DUPLEX**SILENT Line						**DIESEL** Line								
13200	20000	4000	5000	6000	10000	10000	12000	15000	9000	13000	14000	6000	10000	14000	3200	4800	5600	8800	7600	8800	11000	12800	13600
		●	●	●	●	●	●	●	●	●	●	●	●	●									
●	●														●	●	●	●	●	●	●	●	●
		●	●	●	●	●	●	●	●	●	●	●	●	●									
●	●														●	●	●	●	●	●	●	●	●
		●	●	●	●	●	●	●	●	●	●	●	●	●									
															●	●			●				
																	●	●		●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●			●		●	●	●	●	●	●	●		●			●	●		●	●		●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	<2100	●	<2300	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		●	●	●	●	●	●	●	●	●	●	●	●	●									
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	<2100	●	<2000	●	●	●	●	●	●
●	●			●		●	●	●	●	●	●	●		●			<3700	●		●	●		●
●	●	<1800	<2300	<1800	●	●	●	●	<2300	●	●	<2000	●	●	<1500	<2200	<1500	<2400	●	<2400	●	<2400	●
<5400	●			<2800		<4600	<5500	●	<3700	●	●	<2800		●			<2600	<4100		<4100	<4100		<4100
●	●	<1800	<2300	<1800	●	●	●	●	<2300	●	●	<1800	●	●	<1500	<2200	<1500	<2400	●	<2400	●	<2400	●
●	●			<2800		●	●	●	●	●	●	<2800		●			<2600	●		●	●		●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●			<4000		●	●	●	●	●	●	<4000		●			<3000	●		●	●		●
<3200	●	<1800	<2300	<1800	●	<2800	<3200	<3200	<2300	<3200	<3200	<1800	●	<3200	<1500	<2200	<1500	<2400	<3500	<2400	<2400	<2400	<2800
<5400	●			<2800		<4600	<5500	●	<3700	●	●	<2800		●			<2600	<4100		<4100	<4100		<4100
		2.5	2.5	2.5	4.5								4.5										
5.0	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	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
		●	●	●	●	●	●	●	●	●	●	●	●	●							6.0		
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●			●		●	●	●	●	●	●	●		●			●	●		●	●		●
●	●		●		●	●	●	●	●	●	●		●	●		●		●	●	●	●	●	●
●	●			●		●	●	●	●	●	●	●		●			●	●		●	●		●
●	●			●		●	●	●	●	●	●	●		●				●		●	●		●
●	●					●	●	●		●	●			●				●		●	●		●
●	●						●	●		●	●			●									
								●		●	●			●									
								●		●	●			●									
<3700	<6000	<3600	<4500		<9000										<2900	<4300			<6800		<7300	<7300	
				<5400		<9000	<11000	<13500	<7200	<1250	<1250	<5400		<1250									

● (blue) Alternator design The consumers can be driven by this generator
● (red) 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 the generators which are fitted with a gas engine. These devices can optionally be run on natural gas (NG) or liquefied gas (LPG).

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

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
- Alternator 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

To monitor the engine and alternator, frequency, voltage and operating hours.
Warning function and emergency stop in case of an engine malfunction.

Integral emergency power supply

Gas generator		
Model		ESE 808 GF
Item code		**8080 103**
Alternator		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
Design		2-cylinder 4-stroke OHV
Displacement		570 cm³
Starting system		E-Start
Sound power level LWA		90 dB(A)
Sound pressure level (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) These data are based on average values since individual cases can vary, and are therefore not binding

WELDING Line

30 - 300 A

▶ ESE 704 SHS-AC

Welding generators are an irreplaceable aid for performing welding or repair work on construction sites with a power connection.

And also when power is needed, they can also be used as a power generator. 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
Item code	**141 008**	**141 007**	**141 001**	**141 018**
Welding alternator				
Welding performance 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
Alternator	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
Design	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 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 (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
Max. dia. of the electrodes (mm)				
Rutile	4	4	5	6
Basic	-	-	4	5
Cellulose	-	-	5	6

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) Does not conform to EU Noise Guideline 2000/14/EC
(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	Item code	Suitable for
Wheelset	**161 000**	Model series ESE 404, 704, 804
Wheelset	**161 015**	Model ESE 1006 SDHS-DC ES
Welding area equipment	**162 011**	Model ESE 404 SHS-AC
Welding area equipment	**162 012**	Model ESE 704 SHS-AC
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

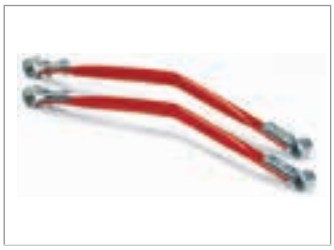
Equipment features

- Continuous welding regulation
- Lack of oil switch-off
- Alternator 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, suitable for the 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
Version with 230 V or 400 V versions available.

Multi-function control display E-MCS 4.0
Shows the generator's most important measurement data in real time.

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 appliances turn themselves off automatically if the insulation resistance reaches a critical level.

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 alternators

22.0 - 100.0 kVA

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

These are mounted to existing agricultural tractors — with no 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
Item code	**511 037**	**511 038**	**511 039**	**511 040**
Alternator	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

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

ENDRESS

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

Display seen from the tractor

Switch box for variants
Feed into the building IT / TN

▶ EZG 100/4

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

Protection class IP 44					
Model	EZG 25/2	EZG 40/4	EZG 60/4	EZG 80/4	EZG 100/4
Alternator	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
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
Variants for operation in the field	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
Item code	**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
Variants 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
Item code	**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	Item code	Item code	Item code	Item code	Item code
Wheelset	**161 036**	**161 036**	**161 036**	**161 036**	**161 036**
Adapter for Category 2	**162 034**	**162 034**	**162 034**	**162 034**	**162 034**
Power distributor E-NEV/3-32	**162 304**	–	–	–	–
Power distributor E-NEV/3-63	**162 305**	**162 305**	–	–	–
Power distributor E-NEV/3-125	–	–	**162 306**	**162 306**	**162 306**
Supply connector (for the option IT-TN) CEE 400 V / 32 A, 1 h	**162 035**	–	–	–	–
Supply connector (for the option IT-TN) CEE 400 V / 63 A, 1 h	**162 029**	**162 029**	**162 029**	**162 029**	**162 029**

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)
- 3-point suspension Category 3
- A robust steel frame with forklift pockets
- One suitable supply connector 1 h (for the variants IT-TN)
- Development and manufacture in Germany

Switching option operation in the field / Feed into the 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 maximum power output of the alternator
- 1 suitable mating connector for the 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 emphasis has been laid upon simple 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 when the oil pressure is 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 options E-RMA SIM and E-RMA LAN one always has 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.

Access to your generator can be achieved over every internet connection on your PC, tablet or smartphone. Extensive information on this topic can be obtained 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 which a generator can deliver under the agreed operating conditions during continuous operation, while it delivers a variable electrical load for an unlimited number of hours, when the maintenance intervals and procedures prescribed by the manufacturer are observed. The permissible average output over a 24 hour period of operation must not exceed 70% of the basic output.

LTP - limited output during continuous operation such as 8528.1:2005. Defined as the maximum power output which a generator can deliver under the agreed operating conditions for up to 500 operating hours per annum (for not more than 300 hours of continuous operation), when the maintenance intervals and procedures prescribed by the manufacturer are observed. 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 that is protected all around. They are equipped with premium generators that comply with VDE 0530 (Class H insulation) and are designed for the highest performance under the roughest conditions.

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

Power supply systems	
Building site generators	**Page 48**
RENTAL Line RS	**Page 50**
POWER Line	**Page 53**
POWER Line Open Construction	**Page 61**

Building site generators

10 - 50 kVA

▶ ESE 20 YW-B

Modern water-cooled YANMAR diesel engines are used in the model series ESE 10 to 50 YW-B. 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)
Item code	**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
Alternator model	MeccAlte	MeccAlte	MeccAlte
Design	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
Design	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% load of about. (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 (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	Item code	Item code	Item code
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)	Item code	Item code	Item code
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
Soot particulate filter	(5)	(5)	**342 400**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) All generators which are marked with this symbol 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

A description of the instrument panel and Socket combination can be found on **page 65**

3A 3A 3A

Construction site generators 30 - 50 kVA

Model	ESE 30 YW-B [2]	ESE 35 YW-B [2]	ESE 45 YW-B	ESE 50 YW-B [2]
Item code	**310 016**	**310 025**	**310 017**	**310 026**
Max. output [LTP] kVA / kW 3~	32.5 / 26.0	32.5 / 26.0	46.0 / 36.8	46.0 / 36.8
Continuous power output [PRP] kVA / kW 3~	30.5 / 24.4	30.5 / 24.4	42.0 / 33.6	44.0 / 35.2
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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	44.0 A 3~ / 0.8	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	50 Hz / electronic
Engine type	YANMAR 4TNV98	YANMAR 4TNV98	YANMAR 4TNV98T	YANMAR 4TNV98T
Design	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
Displacement	3319 cm³	3319 cm³	3319 cm³	3319 cm³
Engine output (PRP)	31.2 kW	32.9 kW	38.3 kW	40.2 kW
Rotational speed (rpm) / regulation	1500 / Mechanical	1500 / Electronic	1500 / Mechanical	1500 / Electronic
Fuel / tank capacity (litre)	Diesel / 68	Diesel / 68	Diesel / 68	Diesel / 68
Consumption / running time at 75% load of about. [1]	5.8 l / 11.7 h	5.9 l / 11.5 h	7.9 l / 8.6 h	8.3 l / 8 h
Starting system / battery	E-Start / 12 V	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)	95 dB(A)
Sound pressure level (7 m)	70 dB(A)	70 dB(A)	70 dB(A)	70 dB(A)
Weight (kg)	773	773	839	882
Dimensions L × W × H (mm)	2005 × 948 × 1308	2005 × 948 × 1308	2005 × 948 × 1308	2005 × 948 × 1308
Available accessories	Item code	Item code	Item code	Item code
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]	[5]	[5]	[5]	[5]
Galvanized base frame	**342 111**	**342 111**	**342 111**	**342 111**
Earthing kit	**162 008**	**162 008**	**162 008**	**162 008**
Special equipment [4]	Item code	Item code	Item code	Item code
Emergency Power Supply	[5]	[5]	[5]	[5]
Universal current sensitive FI circuit breaker Type B	**342 013**	**342 013**	**342 013**	**342 013**
Insulation monitoring	**163 076**	**163 076**	**163 076**	**163 076**
Special colour	on request	on request	on request	on request
Large tank 48h at a 75% load	**342 307**	**342 307**	**342 307**	**342 307**
Wireless / cable remote control	on request	on request	on request	on request
Soot particulate filter	–	**342 400**	–	**342 400**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) All generators which are marked with this symbol fulfil emissions stage 3A
(3) Only for the version of the automatic emergency power supply **(4)** Not upgradable **(5)** Not available

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 alternators
- A brush-less design with a high voltage constancy
- Lockable instrument panel (models ESE 30-50 YW-B)
- Internal tank

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.

RENTAL Line RS

20- 225 kVA

▶ ESE 20 YW/RS

3A

A description of the instrument panel and socket combination can be found on **pages 65**

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]
Item code	**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
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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
Design	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 (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	Item code	Item code	Item code	Item code	Item code
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 000R / E-US 32**	**343 002R / E-US 60**	**343 002R / E-US 60**	**343 003R / E-US 90**	**343 003R / E-US 90**
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**
Maintenance package 500 h [2]	**164 023**	**164 024**	**164 026**	**164 025**	**164 027**
Special equipment [3]	Item code	Item code	Item code	Item code	Item code
FI circuit breaker - sensitive to universal current	**342 012**	**342 013**	**342 013**	**342 013**	**342 013**
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	**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 control panel [6]	**E135 961**	**E135 961**	**E135 961**	**E135 961**	**E135 961**
Removable doors	**342 600**	**342 600**	**342 600**	**342 600**	**342 600**

(1) Dispensing with the base frame
(2) Maintenance package consisting of oil filter, fuel filter, air filter
(3) Not upgradable
(4) All generators which are marked with this symbol fulfil emissions stage 3A
(5) These data are based on average values since individual cases can vary, and are therefore not binding
(6) Control and monitoring unit including a second control panel, 2 communication modules and 10m data cable

RENTAL Line RS

20- 225 kVA

▶ ESE 180 JW/RS

Chassis optionally available

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

RENTAL Line						
Model	ESE 67 JW/RS [4]	ESE 95 JW/RS [4]	ESE 115 JW/RS [4]	ESE 145 JW/RS [4]	ESE 180 JW/RS [4]	ESE 225 JW/RS [4]
Item code	**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
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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
Design	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 [6]	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 (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	Item code	Item code	Item code	Item code	Item code	Item code
Chassis ST rigid [1]	**341 131**	**341 133**	**341 135**	**341 135**	[5]	[5]
Chassis HV height adjustable [1]	**341 132**	**341 134**	**341 136**	**341 136**	**341 137**	**341 137**
Float switch (start/stop) 10m	**342 033**	**342 033**	**342 033**	**342 033**	**342 033**	**342 033**
Changeover contactors	**343 004 / E-US 110**	**343 013 / E-US 140**	**343 014 / E-US 200**	**343 005 / E-US 250**	**343 005 / E-US 250**	**343 007 / 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**
Maintenance package 500 h [2]	on request	on request	on request	on request	on request	on request
Special equipment [3]	Item code	Item code	Item code	Item code	Item code	Item code
FI circuit breaker - sensitive to universal current	on request	on request	on request	on request	on request	on request
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**	**342 402**	**342 402**	**342 403**	**342 403**	**342 403**
Remote control panel [7]	**E135 961**	**E135 961**	**E135 961**	**E135 961**	**E135 961**	**E135 961**
Removable doors	**342 601**	**342 601**	**342 601**	**342 601**	**342 601**	**342 601**
Powerlock connector	**342 034**	**342 034**	**342 034**	**342 034**	**342 034**	**342 034**

(1) Dispensing with the base frame **(2)** Maintenance package consisting of oil filter, fuel filter, air filter **(3)** Not upgradable
(4) All generators which are marked with this symbol fulfil emissions stage 3A **(5)** Not available
(6) These data are based on average values since individual cases can vary, and are therefore not binding
(7) Control and monitoring unit including a second control panel, 2 communication modules and 10 m data cable

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 incl. a three-way fuel tap
- Liquid collecting tray 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
- 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 × 230 V / 16 A

POWER Line

15 - 705 kVA

▶ ESE 95 PW / MS

Galvanised base frame not included in the scope of delivery

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

AS: Automatic instrument panel, cooling agent preheating system, liquid collecting tray, crane lifting eyes

3A 3A 3A

POWER Line MS / AS 15 - 45 kVA

Modell - manual version	ESE 15 YW / MS	ESE 20 YW / MS (2)	ESE 30 YW / MS (2)	ESE 35 YW / MS (2)	ESE 45 YW / MS
Item code	**333 221**	**333 222**	**333 227**	**333 248**	**333 228**
Modell - automatic version	ESE 15 YW / AS	ESE 20 YW / AS (2)	ESE 30 YW / AS (2)	ESE 35 YW / AS (2)	ESE 45 YW / AS
Item code	**331 221**	**331 222**	**331 227**	**331 248**	**331 228**
Max. output [LTP] kVA / kW	14.5 / 11.6	19.6 / 15.6	32.5 / 26.0	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	30.5 / 24.4	42.0 / 33.6
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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	19.0 A 3~ / 0.8	25.8 A 3~ / 0.8	44.0 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	50 Hz / electronic
Engine type	YANMAR 3TNV88	YANMAR 4TNV88	YANMAR 4TNV98	YANMAR 4TNV98	YANMAR 4TNV98T
Design	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	3319 cm³
Engine output (PRP)	12.7 kW	16.9 kW	31.2 kW	32.9 kW	38.3 kW
Rotational speed (rpm) / regulation	1500 / Mechanical	1500 / Mechanical	1500 / Mechanical	1500 / Electronic	1500 / Mechanical
Fuel / tank capacity (litre)	Diesel / 68	Diesel / 68	Diesel / 68	Diesel / 68	Diesel / 68
Consumption / running time at 75% load of about (1)	2.85 l / 23.8 h	3.7 l / 18.3 h	5.8 l / 11.7 h	5.9 l / 11.5 h	7.9 l / 8.6 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	94 dB(A)	92 dB(A)	95 dB(A)	95 dB(A)	95 dB(A)
Sound pressure level (7 m)	69 dB(A)	67 dB(A)	70 dB(A)	70 dB(A)	70 dB(A)
Weight (kg)	580	670	773	773	839
Dimensions L × W × H (mm)	1805 × 884 × 1261	1805 × 884 × 1261	2005 × 948 × 1308	2005 × 948 × 1308	2005 × 948 × 1308
Available accessories	Item code	Item code	Item code	Item code	Item code
Maintenance kit	on request	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**	**341 102 / FG 135**
Chassis HV height adjustable	**341 103 / FG 135**	**341 103 / FG 135**	**341 103 / FG 135**	**341 103 / FG 135**	**341 103 / FG 135**
Changeover contactors designed for LTP power output (3)	**343 000 / E-US 32**	**343 000 / E-US 32**	**343 002 / E-US 60**	**343 002 / E-US 60**	**343 003 / E-US 90**
Galvanized base frame	**342 110**	**342 110**	**342 111**	**342 111**	**342 111**
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**
Special equipment (4)	Item code	Item code	Item code	Item code	Item code
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**	**163 076**	**163 076**
Universal current sensitive FI circuit breaker Type B	**342 012**	**342 012**	**342 013**	**342 013**	**342 013**
Large tank 48h at a 75% load	**343 306 / 210 L**	**343 306 / 210 L**	**343 307 / 450 L**	**343 307 / 450 L**	**343 307 / 450 L**
Socket combination	(5)	(5)	(5)	(5)	(5)
Soot particulate filter	(5)	**342 400**	–	**342 400**	–

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) All generators which are marked with this symbol 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 66**

POWER Line

15- 705 kVA

Prepared for the remote monitoring system E-RMA

A description of the instrument panel can be found on **page 65**

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]
Item code	**333 249**	**333 250**	**333 251**	**333 252**	**333 253**
Modell - automatic version	ESE 50 YW / AS [2]	ESE 65 PW / MS	ESE 67 PW / AS [2]	ESE 80 PW / MS	ESE 95 PW / AS [2]
Item code	**331 249**	**331 250**	**331 251**	**331 252**	**331 253**
Max. output [LTP] kVA / kW	46.0 / 36.8	66.9 / 53.5	66.6 / 53.3	83.0 / 66.0	92.4 / 73.9
Continuous power output [PRP] kVA / kW	44.0 / 35.2	60.7 / 48.6	60.1 / 48.8	78.0 / 62.4	83.7 / 67.0
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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-33TG	PERKINS 1104D-44TG3	PERKINS 1104A-44TG2	PERKINS 1104D-E44TAG1
Design	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	3110 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 / 68	Diesel / 209	Diesel / 209	Diesel / 209	Diesel / 209
Consumption / running time at 75% load of about [1]	8.3 l / 8 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 (7 m)	70 dB(A)	71 dB(A)	67 dB(A)	71 dB(A)	71 dB(A)
Weight (kg)	839	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	Item code	Item code	Item code	Item code	Item code
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]	**343 003 / E-US 90**	**343 004 / E-US 110**	**343 004 / E-US 110**	**343 013 / E-US 140**	**343 013 / E-US 140**
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**
Special equipment [4]	Item code	Item code	Item code	Item code	Item code
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	**342 013**	**342 014**	**342 014**	**342 014**	**342 014**
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**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) All generators which are marked with this symbol 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 66**

- 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 regulated alternators
- Coolant pre-warming standard in the model series AS
- Liquid collecting tray to protect the environment

POWER Line

15- 705 kVA

▶ ESE 220 VW / AS

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

AS: Automatic instrument panel,
cooling agent preheating system,
liquid collecting tray, crane lifting eyes

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]
Item code	**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]
Item code	**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 / 93.8	106.2 / 84.9	132.1 / 105.7	130.1 / 104.1	153.8 / 123.0
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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
Design	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 (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	Item code	Item code	Item code	Item code	Item code
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]	**343 014 / E-US 200**	**343 014 / E-US 200**	**343 005 / E-US 250**	**343 005 / E-US 250**	**343 005 / 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**
Special equipment [4]	Item code	Item code	Item code	Item code	Item code
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	**342 014**	**342 014**	**342 014**	**342 014**	**342 014**
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**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) All generators which are marked with this symbol fulfil emissions stage 3A
(3) Only for model series AS
(4) Not upgradable
(5) Description of Optional Package Rental 1 on **page 66**

POWER Line

15- 705 kVA

Prepared for the remote monitoring system E-RMA

A description of the instrument panel can be found on **page 65**

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]
Item code	**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]
Item code	**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
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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
Design	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 (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	Item code	Item code	Item code	Item code
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]	**343 005 / E-US 250**	**343 006 / E-US 315**	**343 007 / E-US 400**	**343 007 / 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**
Special equipment [4]	Item code	Item code	Item code	Item code
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	**342 014**	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**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) All generators which are marked with this symbol fulfil emissions stage 3A
(3) Only for model series AS
(4) Not upgradable
(5) Description of Optional Package Rental 1 on **page 66**

- 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 regulated alternators
- Coolant pre-warming standard in the model series AS
- Liquid collecting tray to protect the environment

POWER Line

15- 705 kVA

AS: Automatic instrument panel, cooling agent preheating system, crane lifting eyes

▶ ESE 330 VW / AS

The socket combination can be obtained as special equipment

3A 3A

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
Item code	**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
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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
Design	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	12,780 cm³	12,780 cm³	12,780 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 (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	Item code	Item code	Item code	Item code	Item code
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 007 / E-US 400**	**343 007 / E-US 400**	**343 008 / E-US 630**	**343 008 / E-US 630**	**343 008 / 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**
Special equipment [3]	Item code	Item code	Item code	Item code	Item code
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	**342 130**	**342 130**	**342 130**	**342 130**	**342 130**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) All generators which are marked with this symbol fulfil emissions stage 3A
(3) Not upgradable
(4) Not available
(5) Description of Optional Package Rental 2 on **page 66**

POWER Line
15- 705 kVA

A description of the instrument panel can be found on **page 65**

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]
Item code	**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
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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
Design	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	12,780 cm³	12,780 cm³	12,780 cm³	12,780 cm³	16,120 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 (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	Item code	Item code	Item code	Item code	Item code
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 008 / E-US 630**	**343 008 / E-US 630**	**343 009 / E-US 800**	**343 009 / E-US 800**	**343 009 / 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**
Special equipment [3]	Item code	Item code	Item code	Item code	Item code
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	**342 130**	**342 130**	**342 130**	**342 130**	**342 130**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) All generators which are marked with this symbol fulfil emissions stage 3A
(3) Not upgradable
(4) Not available
(5) Description of Optional Package Rental 2 on **page 66**

- 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 regulated alternators
- Coolant pre-warming standard in the model series AS

POWER Line
15 - 705 kVA

A description of the instrument panel can be found on **page 65**

AS: Automatic instrument panel, cooling agent preheating system, crane lifting eyes

▶ ESE 550 VW / AS

3A

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
Item code	**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
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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
Design	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	12,780 cm³	16,120 cm³	16,120 cm³	16,120 cm³	16,120 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 (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	Item code	Item code	Item code	Item code	Item code
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 009 / E-US 800**	**343 010 / E-US 1000**	**343 009 / E-US 800**	**343 010 / E-US 1000**	**343 011 / 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**
Special equipment (3)	Item code	Item code	Item code	Item code	Item code
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	**342 130**	**342 130**	**342 130**	**342 130**	**342 130**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) All generators which are marked with this symbol fulfil emissions stage 3A
(3) Not upgradable
(4) Not available
(5) Description of Optional Package Rental 2 on **page 66**

Chassis, StVZO-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 or 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]
Item code	**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]
Item code	**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

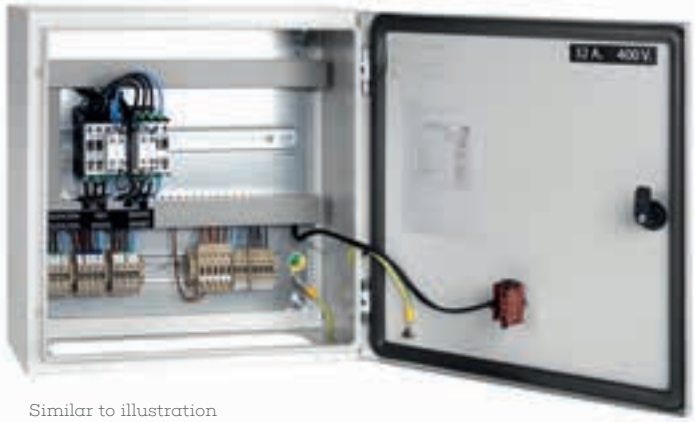
HV = height adjustable trailer drawbar

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



Similar to illustration

Switching contactor (Load Transfer Switch Panel)

The ENDRESS switching contactors are to be considered as 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 to a terminal strip integrated into the cabinet in the factory.
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 30 YW [4]	ESE 45 YW	ESE 65 PW
Item code	**330 221**	**330 222**	**330 213**	**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	66.9 / 53.5
Continuous power output [PRP] kVA / kW	13.0 / 11.2	17.6 / 14.0	30.5 / 24.4	42.0 / 33.6	60.7 / 48.6
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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-TG2
Design	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	Item code	Item code	Item code	Item code	Item code
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 000 / E-US 32**	**343 000 / E-US 32**	**343 002 / E-US 60**	**343 003 / E-US 90**	**343 004 / E-US 110**
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**
Special equipment [3]	Item code	Item code	Item code	Item code	Item code
Automatic fuel pump	[2]	[2]	[2]	[2]	**342 006**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) Not available
(3) Not upgradable
(4) All generators which are marked with this symbol fulfil emissions stage 3A

POWER Line Open Construction

15 - 705 kVA

A description of the instrument panel can be found on **page 65**

Prepared for the remote monitoring system E-RMA

POWER Line Open Construction 80 - 220 kVA

Model	ESE 80 PW	ESE 110 PW	ESE 150 VW	ESE 170 VW	ESE 220 VW
Item code	**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
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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 1104A-44TG2	VOLVO TAD532GE	VOLVO TAD731GE	VOLVO TAD733GE
Design	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	Item code	Item code	Item code	Item code	Item code
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 013 / E-US 140**	**343 014 / E-US 200**	**343 005 / E-US 250**	**343 005 / E-US 250**	**343 007 / 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**
Special equipment[(2)]	Item code	Item code	Item code	Item code	Item code
Automatic fuel pump	**342 006**	**342 006**	**342 006**	**342 006**	**342 006**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) Not upgradable

Equipment features

- Automatic instrument panel
- Cooling agent preheating system
- Fuel tank
- Modern, water-cooled industrial engines from YANMAR, PERKINS and VOLVO
- Automatic instrument panel for operation as an emergency power generator
- Cooling agent 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
Item code	**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
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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
Design	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	7,150 cm³	12,780 cm³	12,780 cm³	12,780 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	Item code	Item code	Item code	Item code
Maintenance kit	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 007 / E-US 400**	**343 008 / E-US 630**	**343 008 / E-US 630**	**343 008 / 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**
Special equipment (2)	Item code	Item code	Item code	Item code
Automatic fuel pump	**342 006**	**342 006**	**342 006**	**342 006**
Liquid collecting tray	**342 130**	**342 130**	**342 130**	**342 130**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) Not upgradable

POWER Line Open Construction

15 - 705 kVA

Water-cooled VOLVO 4-stroke 6-cylinder in-line engines with turbochargers / charge air cooling secure 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 andare characterised by low waste gas emissions and economic efficiency.

To do this we use brushless MeccAlte generators with electronic control behaviour for sensitive consumers

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

A description of the instrument panel can be found on **page 65**

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
Item code	**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
Alternator model	MeccAlte	MeccAlte	MeccAlte	MeccAlte	MeccAlte
Design	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
Design	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	12,780 cm³	12,780 cm³	16,120 cm³	16,120 cm³	16,120 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	Item code	Item code	Item code	Item code	Item code
Maintenance kit	on request	on request	on request	on request	on request
Changeover contactors designed for LTP power output	**343 009 / E-US 800**	**343 009 / E-US 800**	**343 009 / E-US 800**	**343 010 / E-US 1000**	**343 011 / 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**
Special equipment (2)	Item code	Item code	Item code	Item code	Item code
Automatic fuel pump	**342 006**	**342 006**	**342 006**	**342 006**	**342 006**
Liquid collecting tray	**342 130**	**342 130**	**342 130**	**342 130**	**342 130**

(1) These data are based on average values since individual cases can vary, and are therefore not binding
(2) Not upgradable

Equipment features

- Automatic instrument panel
- Cooling agent 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	–		✓	–			✓					✓		
Alternator voltage 3~	–		✓	✓			✓					✓		
Alternator 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														
Alternator over/undervoltage	–		**A**	**A**			**A**					**A**		
Alternator over/underfrequency	–		**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 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	1	–	–	–	–
CEE 230 V / 16 A	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 panel of the 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 400 V-socket matched to the generating set capacity serves as a connection point for power take-off.

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

- 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 connection 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 connection of an external fuel tank

Option: Socket combination

Model	ESE 65 - 225	ESE 275 - 705	ESE 275 - 705
Item code	**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

Floodlight system and mobile power supply in one!

ENDRESS offers compact mobile light masts. They are uncomplicated and precisely placeable and therefore allow efficient work to be done at every desired location.

It does not matter whether 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
Item code	**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 telescope mast	Aluminium telescope mast	Aluminium telescope mast	Aluminium telescope mast	Aluminium telescope mast
Operation	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 DHG ES DI	ESE 1408 DHG ES DI

Available accessories	Item code
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 halogen metal vapour lamps	HPS high-pressure sodium vapour lamp
Turn-on time	immediate	approx. 3 – 4 min.	approx. 1 min.
Restarting time	immediate	approx. 10 min.	approx. 1 min.
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 telescoping mast with easy operation over 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

▶ EFA 700 S4

▶ EFA 820 S4

▶ EFA 850 S4

	Plug-In Line	Hybrid Line	
Model	EFA 700 S4	EFA 820 S4	EFA 850 S4
Item code	**716 271**	**716 272**	**716 273**
Lifting system	Manual	Hydraulic	Hydraulic
Max. light spot height (m)	7.0	8.2	8.5
Min. transport height (m)	2.33	2.33	2.40
Dimension L × W (mm)	1200 × 800	1330 × 1220	3250 × 1400
Weight (kg)	239	1180	1230
Lamps	4 × 150 W	4 × 150 W	4 × 150 W
Lamps	LED	LED	LED
Illumination range (5 lux min.)	2000 m²	2300 m²	2500 m²
Luminous flux (Lumen) approximately	61000	61000	61000
Light mast	–	Rotational through 340°	Rotational through 340°
Battery running time (hours)	–	9 h	9 h
Battery charging time (hours)	–	5 h	5 h
Sockets	230 V / 16 A	230 V / 16 A	230 V / 16 A
Mains supply socket	230 V / 16 A	–	–
Alternator model	–	230 V - 5 kVA	230 V - 5 kVA
Engine type	–	KOHLER KD350	KOHLER KD350
Design	–	Single-cylinder, 3000 rpm	Single-cylinder, 3000 rpm
Cooling system	–	Air-cooled	Air-cooled
Fuel / tank capacity (l)	–	Diesel / 170	Diesel / 160
Running time (hours)	–	700 h	715 h
Sound power level LWA	–	0-90 dB(A)	0-92 dB(A)
Chassis	Wheelset	–	Yes
Trailer drawbar	–	–	Rigid
Inertial brake	–	–	Yes
Permissible total weight (kg)	–	–	1300
Permissible drawbar load (kg)	–	–	100

Equipment features:

- The most modern technology (LED / hydraulic / HYBRID)

Engine pumps

520 - 1000 l / min

▶ EMP 205

Wherever power is not available, ENDRESS motor pumps do their work reliably and economically.

SUBARU | Fresh water pumps | Wastewater pumps | Petrol

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

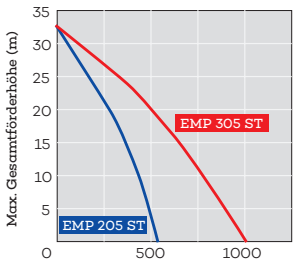
- High flow rates
- Premium seals
- Lack of oil automatic switch-off

Engine pumps

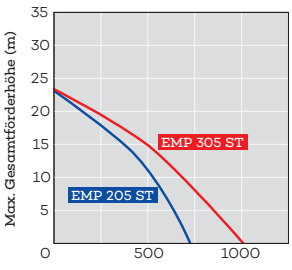
520 - 1000 l / min

Motor pumps	Fresh water pumps		Wastewater pumps	
Model	EMP 205	EMP 305	EMP 205 ST	EMP 305 ST
Item code	**411 005**	**411 006**	**411 007**	**411 008**
Max. delivery rate	520 l / min (31.2 m³ / h)	1000 l / min (60 m³ / h)	700 l / min (42 m³ / h)	1000 l / min (60 m³ / h)
Max. suction lift (m)	8	8	7.6	7.6
Max. total delivery height (h)	32	32	23	23
Solids dia. (mm)	6	7	20	20
Connection S / D	2" / 2"	3" / 3"	2" / 2"	3" / 3"
Ash seal	Carbon ceramic	Carbon ceramic	Silicone carbide	Silicone carbide
Engine type	SUBARU EX 16	SUBARU EX 17	SUBARU EX 16	SUBARU EX 17
Design	1-cylinder 4-stroke OHC	1-cylinder 4-stroke OHC	1-cylinder 4-stroke OHC	1-cylinder 4-stroke OHC
Displacement	126 cm³	169 cm³	126 cm³	169 cm³
Output at 3600 rpm	2.9 kW	4.0 kW	2.9 kW	4.0 kW
Fuel / tank capacity (litre)	Petrol / 2.7	Petrol / 3.6	Petrol / 2.7	Petrol / 3.6
Consumption / running time [1]	1.4 l / 2 h	1.9 l / 2 h	1.4 l / 2 h	1.9 l / 2 h
Starting system	Recoil starter	Recoil starter	Recoil starter	Recoil starter
Sound power level LWA	101 dB(A)	103 dB(A)	101 dB(A)	105 dB(A)
Sound pressure level (LPA)	76 dB(A)	78 dB(A)	76 dB(A)	80 dB(A)
Weight (kg)	25	26	25	26
Dimensions L × W × H (mm)	527 × 368 × 417	527 × 368 × 417	527 × 368 × 417	527 × 368 × 417
Possible areas of application	Pumping of clear or just moderately dirty water		Pumping of waste water and other foreign matter up to a diameter of 20 mm	

Frischwasserpumpen



Schmutzwasserpumpen



Available accessories[2]	Item code	Suitable for
Suction hose 2" 8 m	**38 410**	Model series EMP 205
Suction hose 3" 8 m	**38 407**	Model series EMP 305
Pressure hose 2" 15 m	**38 411**	Model series EMP 205
Pressure hose 3" 15 m	**38 408**	Model series EMP 305
Pressure hose extension 2" 10 m	**38 414**	Model series EMP 205
Pressure hose extension 3" 10 m	**38 409**	Model series EMP 305
Reducer coupling 3" to 2"	**38 483**	

Comprehensive equipment

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

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

ENDRESS®

Power Generators

Endress Elektrogerätebau GmbH
Neckartenzlinger Straße 39
D-72658 Bempflingen

Telefon +49 (0) 7123-9737-0
Telefax +49 (0) 7123-9737-50

www.endress-stromerzeuger.de

A PART OF
PRETTL

2017.02.EN