

# DUPLEX<sup>plus</sup> LINE –

real power for  
a wide range of  
applications

## Multi-purpose - two generator function types in one for multiple applications

Supply power to resistive and inductive consumers or operate capacitive ones? Clean current or high starting current? Direct supply or backup power? With the ENDRESS DUPLEX Line, you don't have to choose any more. Previous generator types limited the range of applications, but DUPLEX technology does away with these constraints and is the only technology on the market to combine the advantages of synchronous and asynchronous generators.

Sound systems, power tools, PE welding equipment, pumps and computer systems – all these as well as smaller business premises can be powered by the same generator: the DUPLEX<sup>plus</sup> from ENDRESS. Only DUPLEX<sup>plus</sup> technology can generate both clean current and high starting current at the same time. This is because the electronic control component adjusts to the individual drive motor and reacts before the motor is overloaded. With DUPLEX, the wear-prone carbon brushes of the rotor head have been replaced by an intelligent exciter, which in combination with the carefully designed power electronics delivers the desired result: unlimited real power.



THE NEW DUPLEX<sup>plus</sup>

# TECHNICAL DATA

## DUPLEX<sup>PLUS</sup>

### MODEL

	NEW	NEW	NEW			
	ESE 406 HG GT DUPLEX	ESE 506 HG GT DUPLEX*	ESE 606 DHG GT DUPLEX*	ESE 1006 DSG GT ES DUPLEX	ESE 1306 DSG GT ES DUPLEX	ESE 1506 DSG GT ES DUPLEX
<b>Order No.</b>	<b>113 552</b>	<b>113 554</b>	<b>113 556</b>	<b>113 161</b>	<b>113 158</b>	<b>113 159</b>
<b>Max. output kVA/kW</b>	<b>4,4 / 4,4</b>	<b>5,5 / 5,5</b>	<b>6,5 / 5,3</b>	<b>11,0 / 8,8</b>	<b>13,0 / 10,4</b>	<b>16,5 / 13,2</b>
Continuous power kVA/kW	4,0 / 4,0	5,0 / 5,0	6,0 / 4,8	10,0 / 8,0	12,0 / 9,6	15,0 / 12,0
<b>Voltage</b>	<b>230 V</b>	<b>230 V</b>	<b>400 / 230 V</b>	<b>400 / 230 V</b>	<b>400 / 230 V</b>	<b>400 / 230 V</b>
Engine type	HONDA GX 270	HONDA GX 390	HONDA GX 390	SUBARU EH 63	SUBARU EH 65	SUBARU EH 72
<b>Start-up system</b>	<b>Recoil starter</b>	<b>Recoil starter</b>	<b>Recoil starter</b>	<b>E-Start incl. battery</b>	<b>E-Start incl. battery</b>	<b>E-Start incl. battery</b>
Fuel/tank capacity (litres)	Petrol / 30 l	Petrol / 30 l	Petrol / 30 l	Petrol / 30 l	Petrol / 30 l	Petrol / 30 l
<b>Consumption/running time at 75% load</b>	<b>1,6 l / 18,8h</b>	<b>2,2 l / 13,5h</b>	<b>2,1 l / 14h</b>	<b>2,9 l / 10h</b>	<b>3,4 l / 8,5h</b>	<b>4,1 l / 7h</b>
Sound power level LWA	97 dB(A) / 64dB(A)** at 7m	97 dB(A) / 64dB(A)** at 7m	97 dB(A) / 64dB(A)** at 7m	97 dB(A) / 64dB(A)** at 7m	97 dB(A) / 64dB(A)** at 7m	97 dB(A) / 64dB(A)** at 7m
<b>Weight</b>	<b>78 kg</b>	<b>89 kg</b>	<b>92 kg</b>	<b>155 kg</b>	<b>151 kg</b>	<b>160 kg</b>
Dimensions L x W x H in mm	773 x 550 x 595	773 x 550 x 595	773 x 550 x 595	850 x 650 x 575	850 x 650 x 575	850 x 650 x 575
<b>Shockproof socket</b>	<b>2 x 230V/16A 1 x CEE 230V/32A</b>	<b>2 x 230V/16A 1 x CEE 230V/32A</b>	<b>2 x 230V/16A 1 x CEE 400V/16A</b>	<b>2 x 230V/16A 1 x CEE 400V/16A</b>	<b>2 x 230V/16A 1 x CEE 400V/16A</b>	<b>2 x 230V/16A 1 x CEE 400V/16A</b>
				<b>1 X CEE 400V/32A</b>	<b>1 X CEE 400V/32A</b>	<b>1 X CEE 400V/32A</b>

## DUPLEX<sup>SILENT</sup> PETROL/DIESEL

### MODEL

		NEW			
	ESE 808 DBG ES DUPLEX Silent	ESE 1308 DBG ES DUPLEX Silent	ESE 1408 DBG ES DUPLEX Silent	ESE 608 DHG ES DI DUPLEX	ESE 1408 DLG ES DI DUPLEX
<b>Order No.</b>	<b>113 007</b>	<b>113 008</b>	<b>156 519</b>	<b>113 023</b>	<b>113 032</b>
<b>Max. output kVA/kW</b>	<b>8,8 / 7,0</b>	<b>14,3 / 11,4</b>	<b>15,1 / 10,9</b>	<b>6,5 / 5,3</b>	<b>15,4 / 12,4</b>
Continuous power kVA/kW	8,0 / 6,4	13,0 / 10,4	13,7 / 12,0	6,0 / 4,8	14,0 / 11,2
<b>Engine type</b>	<b>400 / 230 V</b>	<b>400 / 230 V</b>	<b>400 / 230 V</b>	<b>400 / 230 V</b>	<b>400 / 230 V</b>
Engine type	B & S VANGUARD	B & S VANGUARD	B & S VANGUARD	HATZ 1B 50	LOMBARDINI 12 LD
<b>Start-up system</b>	<b>E-Start incl. battery</b>	<b>E-Start incl. battery</b>	<b>E-Start incl. battery</b>	<b>E-Start incl. battery</b>	<b>E-Start incl. battery</b>
Fuel/tank capacity (litres)	Petrol / 12 l	Petrol / 12 l	Petrol / 12 l	Diesel / 6 l	Diesel / 35 l
<b>Consumption/running time at 75%</b>	<b>2,4 l / 5h</b>	<b>3,4 l / 3,5h</b>	<b>3,4 l / 3,5h</b>	<b>1,3 l / 4,5h</b>	<b>3,0 l / 11,5h</b>
Sound power level LWA	89 dB(A) / 64dB(A) at 7m	93 dB(A) / 68dB(A) at 7m	96 dB(A) / 58dB(A)** at 7m	94 dB(A) / 69dB(A) at 7m	96 dB(A) / 71dB(A) at 7m
<b>Weight</b>	<b>132 kg</b>	<b>150 kg</b>	<b>144 kg</b>	<b>150 kg</b>	<b>320 kg</b>
Dimensions L x W x H in mm	820 x 440 x 580	820 x 440 x 580	820 x 440 x 580	700 x 440 x 580	1100 x 700 x 870
<b>Shockproof socket</b>	<b>3 x 230V/16A 1 x CEE 230V/16A 1 x CEE 400V/16A</b>	<b>3 x 230V/16A 1 x CEE 400V/16A 1 x CEE 400V/32A</b>	<b>3 x 230V/16A 2 x CEE 400V/16A 1 x CEE 400V/32A</b>	<b>3 x 230V/16A 1 x CEE 400V/16A 1 x CEE 400V/32A</b>	<b>3 x 230V/16A 1 x CEE 400V/16A 1 x CEE 400V/32A</b>

\*available with E-start

\*\*In ECOtronic mode



**DUPLEX<sup>PLUS</sup>**  
**LINE**  
REAL  
POWER  
FOR A WIDE  
RANGE OF  
APPLI-  
CATIONS



**ENDRESS** 

# THIS IS **ENDRESS**

## **ENDRESS – the real power**

With production and development in Germany, ENDRESS has been delivering real power to international markets since 1914.

The Bempflingen-based company is a leading manufacturer of mobile and stationary generators. In its product ranges, technical performance, ambitious ongoing development and a passion for quality are channelled into mature, sophisticated solutions whose user-friendliness proves itself day after day.

## **real power for every application**

The company's experience and expertise are put to good use in a wide range of applications. From projects in industry, construction and agriculture to backup power supplies and rescue and emergency applications where every second counts, ENDRESS delivers real power – and has the right solution in its mature product mix. When real power is your core competency, it's not limited to a single user group and your expertise is in demand all over the globe.



**The new  
DUPLEX<sup>plus</sup>** – simply  
more compact,  
simply more versatile.  
Simply more real power.



When outstanding technology is further optimised to meet the customer's needs, that's when very good gets even better.

### **More compact**

For the first time the DUPLEX<sup>plus</sup> control panel with digital ECDO2 display showing frequency, voltage, operating hours and oil indicator light is located on the front end, which makes the frame narrower and the unit more compact overall.

### **More convenient – thanks to accessories too**

The optional wheel set makes the DUPLEX<sup>plus</sup> easier to move around at the site of use and also simpler to transport. The folding handles make loading simple and the unit more mobile.



# There are plenty of reasons to choose DUPLEX...

## Safety first

With the short-circuit-proof DUPLEX Line safety comes first, because all models satisfy protection class IP54 in accordance with BGI 867. The generator is protected against the smallest dust particles and spray water to extend its lifetime and also protect the people using it.

## Small on size, big on performance

With up to four times the starting current, an ideally dimensioned DUPLEX<sup>plus</sup> generator can give large units a run for their money, delivering power when it's needed.

## 100% is not the limit

The 3-phase DUPLEX<sup>plus</sup> generators have an unbalanced load capacity of 200% in real operation, so you can access the full output of your generator even on one side. There is no risk of overload and the associated damage to consumers.



THE NEW DUPLEX<sup>plus</sup>



## Like power from the socket

With a voltage stability of +/- 1% in 3-phase generators, you get the same clean current you are used to from domestic power sockets

## Wear-free, contactless, fault-free

The brushless technology minimises the need for maintenance. The brushless, electronically controlled synchronous generator is maintenance-free for up to 20 000 operating hours.

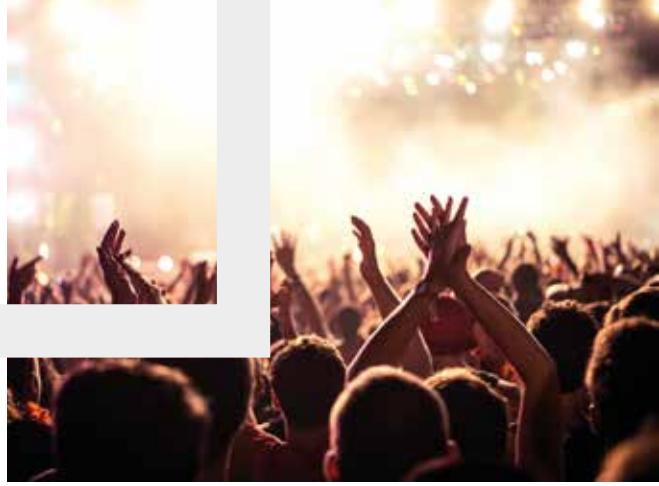
## ECOtronic – the added plus with DUPLEX

ECOtronic rounds off the DUPLEX technology to perfection. It reduces fuel consumption, noise, emissions and wear by automatically reducing generator speed when less power is required, as often happens in day-to-day use. Crucially, the generator runs at reduced consumption with lower emissions without completely switching off, so it is instantly ready when power is needed again – with no delays.



... but only one constant factor: **real power**

# REAL POWER...



...for event technology



...for emergency power supply



...for motor-driven pumps



...for small and large projects



...for sensitive appliances, like computers or IT systems