



# EU Stage V

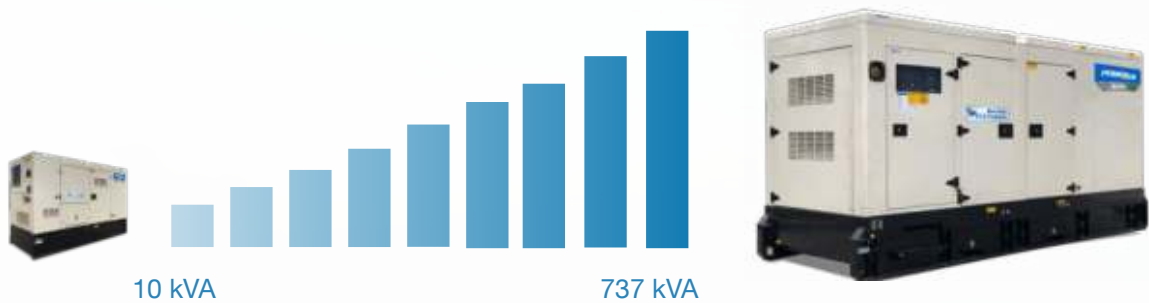


**POWERLINK**  
Power Systems

*Power Link the World*

2022

# SUMMARY OF EU STAGE V PRODUCTS



A specialist in made-to-measure energy equipment manufacturing, Since 2001, PowerLink has used its skills and expertise to help our customers meet very specific requirements in specific market.

Euro Stage V diesel generator set, with power range of 10-737kVA, is a power solution developed for the European market with Euro Stage V Emission Standard. By reducing the emission to lowest, the series are to protect environment well. We adopt reliable engine brands like John Deere, Kubota, Perkins, Cummins, FTP and Volvo, which has integrated advanced technologies with field proven solutions to meet each regulatory tier. A single engine control unit (ECU) manages the engine and entire Integrated Emissions Control system.

EPA-certified generators are designed for fuel efficiency, reduced sound levels and ease of operation with a user-friendly interface. As the power source of the construction site and the emergency power supply in case of emergency, it is needless to say that it is used as the power source of the telecom station, power station, data center, construction sites, outdoor activities and leisure facilities, in places where the power supply cannot reach such as outlying islands and mountains.

From the initial return on investment analysis to the provision of energy equipment, we also provide you with customized product design, and subsequent installation, maintenance, training and other services.

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# FEATURES OF EU STAGE V

## Efficient Operation

Fuel efficiency design of the engine combustion chamber with high-ring pistons helps reduce fuel consumption.

## Low-Idle Capability

Reduces fluid consumption and decreases wear during transport or startup and shutdown checks.

## Low Life Circle Cost

Reliable operation, low maintenance, long engine life, and exceptional fluid economy lead to low cost of operation.

## Long-haul Durability

Heavy-duty, oversized components and wet-type cylinder liners provide long engine life. Selected engines are designed for rugged applications.

## Emissions Reduction

Adopted engine exhaust gases in the SCR catalyst to reduce NOx — converting it to nitrogen and water vapor.

## Easy Integration

EU Stage V, meeting the emission standards of European diesel generator sets.

## Day-to-day Reliability

With robust engines feature top-liner cooling, efficient lubrication, and robust cooling systems for reliable operation.

## Extreme Conditions

Units are built to operate in hot and dry, subzero, and humid climates as well as high altitudes. The engine control unit (ECU) monitors and protects engine components in these extreme conditions.





### EU STAGE V ENGINES

To reach these high standards, a range of EU Stage V engines.



### LOW ACOUSTIC AND CO2 EMISSIONS

All generators manufactured comply with the latest standards for noise and emissions. All gensets in this range are certified for acoustic emissions and have high heat exchange performance.



### STANDARD OR CUSTOMIZED: MAKE YOUR CHOICE

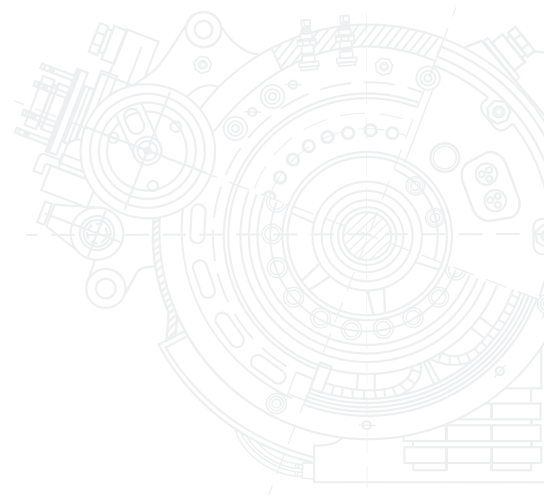
Choosing a customized or standard version is one of the first questions when you look for your genset. Both are excellent choice. Our lean manufacturing approach allows us to optimize our standard production or customization of our products.



## ► GENSETS MODELS ENGINE BRANDS

Genset Model	PRP		ESP		Engine Brand	Genset Dimensions L*W*H	Noise Level @ 75% Load
	kVA	kW	kVA	kW		mm	dBA @ 7m
E9KS	9	7.3	10	8.1	Kubota	1942*877*1290	64.7
E9PS	9	7	10	8	Perkins	1932*830*1309	60
E12KS	12	9.6	13	10.5	Kubota	2042*1026*1353	64
E14KS	14	11.2	15	12.3	Kubota	2042*1026*1353	64.8
E17KS	17	13.2	18	14.5	Kubota	2192*963*1323	65.1
E20PS	20	16	23	18	Perkins	2300*830*1358	60
E28KS	28	22.1	30	24.3	Kubota	2338*1115*1555	66
E41KS	41	32.8	45	36.1	Kubota	2508*1081*1709	66
E41FS	41	33	45	36	FPT	2080*870*1504.5	61
E50FS	50	40	55	44	FPT	2280*1111*1730	63
E53JS	53	43.0	59	47.0	Johndeer	2390*1115*1550	71
E60FS	60	48	66	53	FPT	2300*1115*1733.4	65

Genset Model	PRP		ESP		Engine Brand	Genset Dimensions L*W*H	Noise Level @ 75% Load
	kVA	kW	kVA	kW		mm	dBA @ 7m
E80JS	82	66.0	91	73.0	Johndeer	2788*1165*1700	72
E88FS	88	71	98	78	FPT	3160*1172*1975	61
E100JS	102	81.0	113	90.0	Johndeer	2888*1165*1681	73
E105FS	105	84	-	-	FPT	3160*1172*1762	73
E120PS	120	96	150	120	Perkins	3646*1300*1980	66
E156FS	156	125	167	133	FPT	3646*1300*1980	66
E165JS	165	132.0	182	146.0	Johndeer	3518*1222*1843	74
E200PS	200	160	220	176	FPT	3970*1362*2102	77
E200JS	202	162.0	223	178.0	Johndeer	3840*1322*2302	75
E205FS	205	164	227	181	FPT	3970*1362*2102	77
E271FS	271	217	299	239	FPT	4250*1600*2470	77.4
E270JS	273	218.0	301	241.0	Johndeer	3970*1362*2102	76
E303FS	303	242	334	267	FPT	4260*1604*2470	78.1
E300JS	304	243.0	336	269.0	Johndeer	3970*1362*2102	77
E365FS	364	291	402	322	FPT	4261*1610*2473	79
E420FS	419	335	463	370	FPT	4262*1613*2476	80
E500JS	500	400	550	440	John Deer	4592*1535*2555	80
E670VS	670	536	737	590	Volvo	4692*1763*2516	80



# STANDARD CONFIGURATION OF EU STAGE V



## Diesel oxidant catalys (DOC)

CO and HC are converted into CO<sub>2</sub> and H<sub>2</sub>O by oxidation reaction. So the emission of CO and HC is greatly reduced.



## Exhaust gas re-circulation (EGR)

Reduce the maximum combustion temperature of mixture in cylinder. So reduce NO<sub>x</sub> emission.



## Selective catalytic reduction (SCR)

DEF is injected into engine exhaust to convert NO<sub>x</sub> to N<sub>2</sub> and H<sub>2</sub>O. So the emission of NO<sub>x</sub> is greatly reduced.



## Engine control unit (ECU)

Fuel system is controlled by ECU. The engine can accurately control the injection fuel pressure and quantity according to different working conditions.



## High pressure common rail

High pressure fuel is stored in the rail to restrain pressure fluctuation and enhance fuel atomization ability.



## 4P main circuit breaker

High quality ABB main circuit breaker, breaking quickly, safe and reliable.



## PLC7420 controller

It includes various protection functions and circuit breaker control functions, which can monitor the mains in real time and start the genset automatically when the mains is abnormal.



## Fuel three way valve

Transfer the engine fuel supply system freely between the internal tank and external tank.



### High temperature protective sleeve

Isolate high temperature parts to prevent accidental scalding.



### Oil drain pump

Drain oil from the engine pan manually, easy to operate.



### Battery and negative switch

Maintenance free lead-acid battery has strong starting ability and long service life. The negative switch breaks quickly, safe and reliable.



### High density sound absorption cotton

The sound absorption performance is strong, reduces the running noise, does not affect the surrounding living environment.



### Sealing and waterproof door

Quality rubber sealing rings to prevent water penetration. The canopy and doors made of galvanized sheet, corrosion-resistant and seamless without water seepage.



### Rainproof and dustproof air inlet

The air intake is sufficient and can prevent the infiltration of rain, dust or sand.



### Base frame with large fuel tank

Double-layer fuel tank, leak proof design, fully enclosed base frame. The tank capacity can meet the requirement of 24hrs continuous running.



### Stainless steel box lock

Reliable performance, corrosion resistance, long service life.



# ENGINE RANGE OVERVIEW

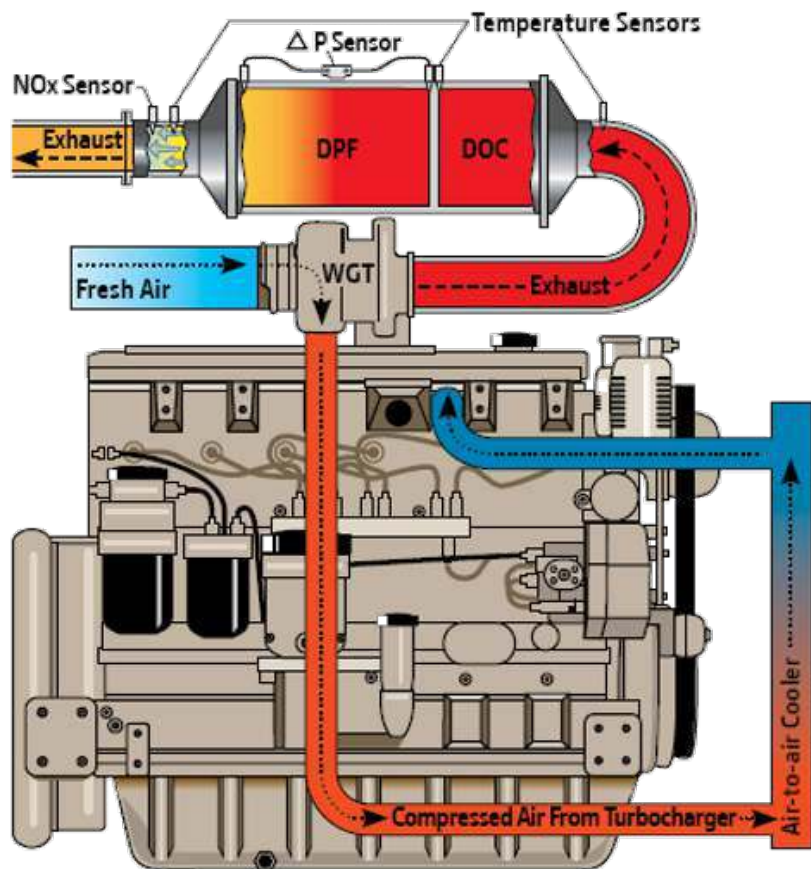
## Technology:

- 2-valve cylinder heads
- High-pressure common rail fuel system
- Full-authority electronic controls
- Wastegate turbocharger: maintain transient response and peak torque in all operating conditions.
- DOC/DPF exhaust filters
- Single fluid engine

30 kVA  
Prime

40 kVA  
Prime

55 kVA  
Prime



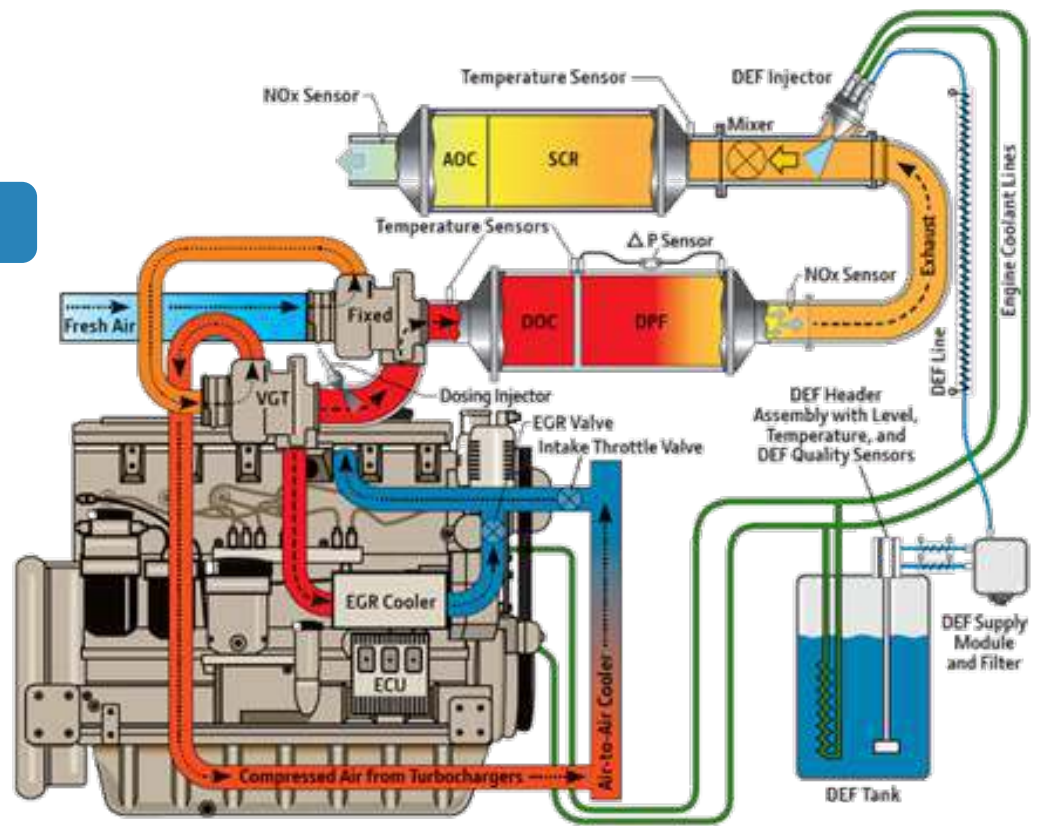
## PowerTech EWX 2.9L

Power nodes: 30, 40 & 55 kVA prime

# PowerTech PSS 6.8L

Power nodes: 200 kVA prime

200 kVA  
Prime



## Technology:

- 4-valve cylinder heads
- High-pressure common rail fuel system
- Full-authority electronic controls
- Series turbochargers for improved transient response, low-speed torque & altitude capability
- DOC/DPF exhaust filters
- Optimized SCR system

# OPTIONAL CONFIGURATION OF EU STAGE V



## Remote controller

PLC890 controller has three remote control functions of telemetry, remote signaling and remote control, which can be used for remote maintenance and fault diagnosis. Support online and offline service system, or use mobile app program control.



## Parallel / grid connected controller

PLC500 controller is used for paralleling multiple gensets, and the control system automatically distributes the output according to the total load power. It can also control a single genset connected to the grid.



## Voltage change-over switch

Rotary switch with lock, output voltage can be switched between three gears: 208V/240V/480V.



## Convenient output socket

Provide convenient and rapid power output. Each output has independent circuit breaker and leakage protector. American Standard or European standard socket can be selected.



## Permanent magnet generator (PMG)

PMG can provide stable and reliable power supply for AVR with timely response. It can provide 300% rated current in case of short circuit and maintain for 5-10 seconds.



## Three times insulation dip painting of generator winding

It is suitable for high humidity and salt spray corrosion environment with high insulation and reliability.



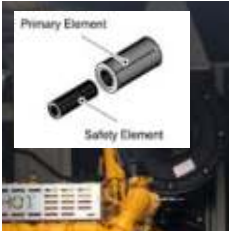
## Jacket water preheater

The engine can start up quickly under low temperature environment to ensure normal operation of the genset.



## Automatic oil filling system

Equipped with daily oil tank and oil level switch, it can automatically fill the oil for the engine, ensure long-term continuous operation, and do not need to stop the engine to replenish oil.



## Heavy duty air filter

Double filter elements are adopted to enhance air purification ability and remove dust, particles and other solid impurities.



## Galvanized base frame

High strength base frame with hot galvanizing process is adopted to enhance corrosion resistance and is suitable for salt spray corrosive atmosphere.



## Anti salt spray radiator

The radiator core is made of special material and technology, which has strong corrosion resistance and ensures no leakage of coolant. It is suitable for salt spray corrosive atmosphere such as port or seaside.

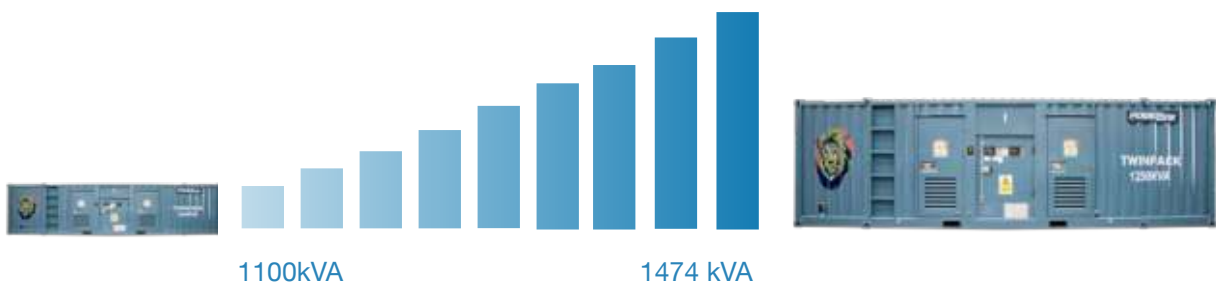


# TWINPACK INTRODUCTION



The TWIN PACK series is specifically designed for CONTAINER customization. It can be packed with Double-twins and Tri-twins from 1110kVA-1474kVA, based on your project's needs. Suitable both for the emergency power supply and for primary energy source in continuous service, it can be used in many different sectors, such as constructions and building sites, industry, temporary installations for exhibitions, events and entertainment in general, or even during any emergency situations powering

field hospitals, civil protection actions, and so on. All generating sets are developed complying with the strict European current directives and regulations, particularly focusing on the lowest noise and exhaust emissions. All generators in this range are designed for the acoustic emissions and high performance. To reach these high emission standards, the TWIN PACK range is equipped with Euro Stage V engines, which can reduce the pollutant emissions in the atmosphere.





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# SALES AND SERVICE SUPPORT

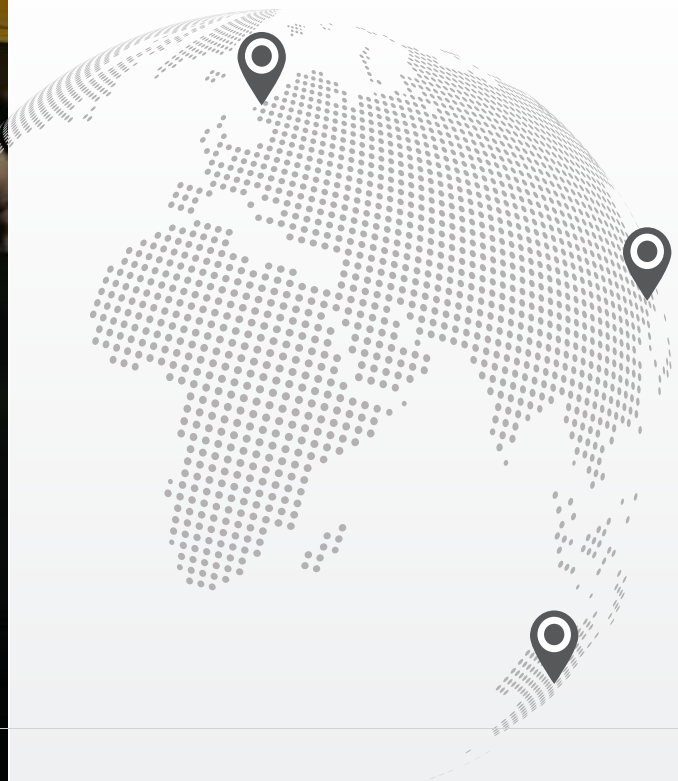


We successfully delivered 125000 units to worldwide users in 98 countries.

PowerLink provides customers with sufficient, fast and high quality product supply and service.

## THINK GLOBALLY, ACT LOCALLY ALWAYS AT YOUR SIDE

Every product in every region has a professional team to serve our distributors. With the help of the global distributor network, PowerLink can provide energy services for users all over the world.



# ► TECHNICAL SUPPORT AND HIGH-QUALITY CONTINUOUS AFTER SALES SERVICE

We are confident enough to get the job done and capable enough to move quickly

At PowerLink, the success of the customer is of importance. We deliver service solutions and utilize our full expertise to help you reach your goals.

PowerLink, ensures optimum performance and longevity for every generating set through its after-sales service department.

A first-class support system is provided by its experienced and highly-qualified technical team, along with a wide array of spare parts, always available in stock, guarantee 100% customer satisfaction.

**OUR SERVICE -  
AS A PART OF  
YOUR BUSINESS**

WE OFFER AFTER-SALES ASSISTANCE AND A COMPLETE RANGE OF GENUINE SPARE-PARTS THROUGHOUT THE WORLD





Blue Tech  
ECO Products

**POWERink**  
Power Systems

**STAGE III CERTIFIED**  
Common Rail Fuel System





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