

KTC GENERATOR, which drives the sector in the manufacturing and sales of **GENERATORS** with its experience of more than 40 years, is a brand that has made a name for itself in Turkey with its exemplary know-how and innovative and modern perspective in the way it does business.

# КТС

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# Power Through Continents EXPORT TO MORE THAN 90 COUNTRIES

KTC GENERATOR, one of Europe's leading industrial companies, contributes to Turkey's export targets by delivering its generators to more than 90 countries in the world.

#### About KTC Generator

KTC Generator, which manufactures and sales different kinds of generators, is a brand that has made a name for itself in Turkey with its exemplary innovative and modern perspective.

KTC Generator continues its production in its factories, which have been implemented by making use of all the possibilities of the latest technology. KTC Generator manufactures diesel generators, gas generators, biogas generators, CHP systems, hybrid systems, mobile generators, and crane generators in Turkey and sells to all over the world. KTC Generator, which has the necessary quality and test certificates, continues its activities with all its strength within the framework of its R&D-centered growth target with its expert and administrative staff that attach importance to guality and are open to development.

KTC Generator carries out its production to offer high quality products to its customers, to increase its production capacity and to maximize customer satisfaction with its after-sales service quality, by closely following technological developments.

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Continuing its R&D studies in line with the sector's needs in generator products, KTC Generator also maintains its leadership with its advanced R&D center.

KTC Generator, in 2023 and beyond;

- To complete the R&D, design, and manufacturing processes of instrument generators,

- To complete the investment in the test laboratory for generator tests.

- To complete the necessary R&D center studies, testing, certification, and quality documents for new sales markets, - Will continue to work abroad to increase brand awareness.

#### **KTC** Generator Vision

As KTC Generator, our vision is;

To meet customer expectations by using developing and up-to-date technologies, to develop reliable products and to provide after-sales services.

To this end;

- Documentation, certification, and continuous improvement of our quality management system to meet the requirements of the ISO standard,
- Reaching company and unit targets in a team spirit, based on the Total Quality philosophy,
- Reviewing our business processes with the self-assessment process and determining preventive approaches that will improve our performance,
- Increasing the efficiency of all our processes to a level that can compete at the international level, in line with the continuous improvement approach,
- We are working with all our strength to be an exemplary organization in the energy sector by managing our activities together with Environment, Occupational Health and Safety Management Systems in order to encourage innovative and creative approaches and to carry out trainings that will increase technical and behavioral competencies.



Traceability of our products is ensured and recorded at every stage in accordance with national/international standards and customer needs and expectations.

#### **R & D**

KTC Generator, which was entitled to become an R&D center in 2022, within its R&D center; It continues its activities with more than 100 employees who are competent in their field.

KTC Generator, within the scope of its R&D Centered Growth strategy determined in 2022, increases its product diversity by placing R&D at the center of all its activities.

KTC R&D Center works with very important universities and university faculty members of our country within the framework of university-industry cooperation. In this context, it is aimed to strengthen the infrastructure of competent personnel in R&D, especially by encouraging graduate and doctoral studies.

As a result of the design and analysis programs used in R&D, prototype products are manufactured and verified in the test center. The products that have been verified are included in the manufacturing processes.







Design



The designs are made using computer aided 3D design and analysis programs. Each design is controlled by various simulation software. KTC is a company with a very large and young bench park.

Almost all of the benches used in manufacturing are computercontrolled and manufactured with the latest technology. Especially in welding processes, robots are used to a great extent. Each product produced in KTC company is put into use after being subjected to routine tests in the relevant standard.

### Production

KTC generator sets are manufactured at KTC Generator Factory in Turkey according to ISO standards. Through digitalization and electrification, KTC Generator tries to manufacture generator sets which are clean and smart enough to provide answers for its customers. A generator set is manufactured by passing through the long production line, in which, at different stages engine, alternator, electrical control panel, etc. are manufactured and assembled. An automatic platform is used to transport between the different stages. The manufacturing process is to a large extent taken over by robots and controlled by a computer in real time. Finally, the factory tests of the genset will be done.





#### **KTC** Diesel Engine Brands

#### **KTC** Diesel Engine Features

The below brands are used normally in KTC Generator sets as engine.

500

88-917 kVA

60-1000 kVA

0

Perkins

Doosan

Mitsubishi

Baudouin

SEDEC

Rated Power (kVA)

9-2500 kVA

1000 1500 2000

500-2750 kVA

11-2792 kVA

2500

3000

Some features of diesel engines produced according to international standards are as follows:

	Cylinder Joining Types		• In-line			
	Ignition type		Compres			
	Fuel injection system		• Direct or			
	Air intake type		• Naturally			
	Timing System		• 4-stroke			
	Number of Cylinders		• Multi-cyl			
	Cooling System		• Water co			
	International production standard of e					
	According to the fuel typ	ec	of engines			

Special Engines can be designed and manufactured according to the customer request.

Note: It is possible to manufacture generators using brands such as Caterpillar, MTU, and MWM. However, due to the economic situation in the world, the customers lead us to the other brands.







#### **KTC** Alternator Brands, and Working Regimes

#### **KTC** Alternator Features

In KTC Generator, the following brands can be used as alternator. It must be mentioned that it is possible for us to use other brands as alternator in request of customer. Some of the technical specifications of the alternators are as follows:



Working regimes of KTC Generator sets are as follows:

- Standby (Emergency) Power: It is the power available during a variable electrical power sequence. The genset is able to deliver power in the event of utility power outage or under test conditions for up to 200 hours of operation per year under average load of 70%. Overloading is not permissible.
- Prime Power: It is approximately 1.1 times of alternator's maximum power to supply a variable load. In other words, it means that the generators can be overloaded by 10% for 1 hour in 6 or 12 hours according to the design. Average load should be 70%.
- □ Continuous Power: It is the alternator's maximum power to work continuously and uninterruptedly at constant load. Average load can be 100%. The generator must not be overloaded.





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#### **KTC** Control Panel

There should be control panels that make measurements and perform operation, protection and command functions in the control systems of generator sets.

Control panels are divided into three as Automatic, Manual or Synchronous according to their usage.



#### Automatic Transfer Switch (ATS)

KTC ATS is designed to transfer electrical energy from the mains or generator to the system in a safe manner, it consists of 2 electrically locked contactors or motorized switches and connection terminals.

Contactor/motor switch are the breaking elements in the transfer panel. The duties of these elements are to provide the power flow from the circuit in the closed state, and to prevent the power flow in the open state. It performs the first of these two tasks electrically by creating a good contact between the contact elements and the second by separating the contact elements.

#### MANUAL CONTROL PANEL

 It is designed to be used in situations where there is no mains ener or the generator set is required to be activated and deactivated by the user.

#### AUTOMATIC CONTROL PANEL

 It is designed to automatically activate and deactivate the generate sets to be used as a backup of the mains energy, and to fulfill the command, protection and control functions. These functions are performed by the microprocessor control module.

#### SYNCHRONIZATION APPLICATIONS

 Command, protection and control functions are performed by the microprocessor control module. Circuit breakers (motor switches) suitable for the power of each generator can also be supplied with these panels.





#### Chassis

Coupled diesel engine and alternator are mounted on the generator chassis.

The inside of the generator chassis can also be used as a daily fuel tank. It is made of steel material; Its body is welded.

Diesel engine, radiator, alternator and control panel can be mounted on the chassis.

The same chassis is used for cabin and non-cabinet models of each generator.



Front view



Top view



#### Fuel Tank

There are two types of fuel tank, which are used based on their performances and customer need in KTC Generator; Internal Fuel Tank and External Fuel Tank.

The internal fuel tank is located under KTC generator set and inside the chassis.

As standard, there are fuel filler pipe, fuel gauge (manual), couplings welded in the tank to enable the fuel suction return, and welded couplings on the lower side surface of the tank for cleaning the fuel tank. The fuel tank is inside the chassis in this type of chassis.

As standard on the tank, the fuel filler pipe, the fuel gauge (manual), the couplings welded in the tank to enable the fuel suction return, the sleeves welded on the lower side surface of the tank for cleaning the fuel tank, the external tank carrying eyebolts and the air vent to take the fuel air and the external tank. It has feet for fixing to the ground.









#### Exhaust

Proper design of the exhaust system is very important for the performance of the generator.

In order not to exceed the back pressure limits allowed by the engine manufacturers, diameter and length of the exhaust pipes, the exhaust muffler must be properly designed.

 $\succ$  An 'exhaust muffler' is used to reduce the exhaust sound of the engine.

> Exhaust silencer is shipped separately in generator sets without cabin.

 $\succ$  In generator sets with cabin, the exhaust silencer is located inside the cabin.

The exhaust silencer is located on the top of the cabin in the containers.

#### Canopy

In order to **isolate the noise** generated during the operation of the generator and at the same time **protect the generator from environmental effects**, optionally, generators can be supplied in a cabinet.

 $\succ$  It protects the generators to be installed outdoors from ambient conditions.

 $\succ$  Decreases the sound level.

 $\succ$  It is made of **steel material**. It is painted with electrostatic powder paint.

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#### Main Features of KTC Diesel Generator Sets

Main Features	Robust
of KTC Diesel	Providing maximum power at site condition
Generator Sets	Excellent load acceptance

Minimum noise level

Optimal fuel consumption

Wide power range

Easy to use control and monitoring systems

Considering all derate factors including insulation class, temp. rise class, site temp., site altitude, IP, ...

Providing requested IP protections form IP23 to IP55

#### **Cogeneration System (CHP)**

KTC cogeneration (Combined Heat and Power or CHP) is typically designed for power station and large-scale industrial applications to produce simultaneous electricity and heat.

Main features of KTC Cogeneration (CHP) systems:

- Increased efficiency of energy conversion
- Lowering emission to the environment
- Saving large costs
- Offering affordable heat
- Long planned maintenance interval
- Responsive load following
- Extraordinary durability & reliability
- Low noise, and low vibration
- Remote monitoring and control system





#### **Gas Generators**

#### **Bio-gas Generators**

The powerful output of KTC Gas Generators can meet all the customer's needs.



Renewable energy sources like biogas are used in KTC Biogas Generators to offer the best solutions to its valuable customers.

The biogas is normally produced from the breakdown of organic waste. In this process, food scraps, animal waste, or other organic waste will be broken down in an environment, in which there is no oxygen. Then, some gases like methane, which has lower flammability that of natural gas will be released to run the generator set.

These types of generators will be very helpful to the environment, which prevent wastes to harm the nature. Moreover, they can be very cost-effective for producing energy.









#### Hybrid Systems

KTC hybrid systems is a complete electrical power supply system that can be easily configured to provide a wide range of power demand. Each KTC hybrid system is included but not limited to the following items:

- Diesel Generator: To maximize the reliability and improve efficiency,
- Energy Storage Systems: To operate autonomously,
- *Energy Management System*: To tune the produced power of each source, control power usage, etc.

#### **Mobile Generators**

KTC mobile generator sets are specialized by their no complication, effective performance, and comfort, facilitating work for all types of installations. KTC mobile generator sets can be used in lighting tower, rental power, military, construction etc. applications.







#### **Crane Generators**

#### **KTC** Road Map

KTC Crane Generators can be used as an electricity source for special vehicles used to move and stack containers.

The main features of KTC Crane Generators are:

- Compact Design
- Powerful Battery Pack
- Remote Online System
- Intelligent Control System



#### Data

 Investigating the customer documents including Datasheet, Spec, MR, etc.

#### Calculation

 Calculating/Designing the power of gen set considering the derates

#### Offer

Preparing/sending Technical and Commercial offers

#### Order

 Ordering the equipment including Engine, Alternator, Control Panel, ATS, Canopy, etc.

#### Coupling

- Coupling the whole gen set at our factory/Turkey Transportation
  - Transport the coupled gen set to customer's site
- Install and Commission
  - Install and commission the gen set at site.

#### **After Sales Services**

Providing after sales services





#### **KTC** Diesel Generator Series - Specification

KTC Energy is a leading company in its sector with its after-sales services. With over 40 years of production experience and knowledge, to all its customers.

- All type of generators including diesel generators, gas generators, hybrid generators, etc.
- It provides all services related to installation, field tests, commissioning, and maintenance service in the following years of generators' production in the best way.

Our Customer Service Department for this service; Equipped with experienced technical staff and state-of-the-art testing equipment and assembly equipment.



Our experienced and expert staff, who have received first aid and occupational safety training for all kinds of maintenance and repair needs, are at the service of our customers 24/7.

#### FIELD SERVICE AND TEST SERVICES

In the location where the generators are present; We provide the service needed for all stages such as assembly, testing and on-site periodic maintenance with high quality and state-of-the-art machinery and equipment.

ASGP Series 10-50 kVA						
Model	ASGP10	ASGP15	ASGP22	ASGP33	ASGP50	
Standby Power (kVA)	10	15	22	33	50	
Prime Power (kVA)	9	13	20	30	45	

Diesel Engine					
Brand	Perkins				
Model	403A-11G1	403A-15G1	404A-22G1	1103A-33G	1103A-33TG1
Engine Power – Standby (kW)	9.2	13.2	20.3	31	46.5
Engine Power – Prime (kW)	8.4	12	18.4	28.2	42
Engine Speed (rpm)	1500	1500	1500	1500	1500
Number of Cylinder	4 - In Line	4 - In Line	4 - In Line	4 - In Line	4 - In Line
Displacement (lt)	1.13	1.49	2.21	3.62	4.33
Bore x Stroke (mm)	77x81	84x90	84x100	105x127	105x125
Compression Rate	23:1	22.5:1	23.3:1	18:01	17:01
Governor Type	Mechanic	Mechanic	Mechanic	Mechanic	Mechanic
Induction	Natural	Natural	Natural	Natural	TurboCharged
Combustion System	Indirect	Indirect	Indirect	Direct Injection	Direct Injection
Cooling System	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled
Lubrication Oil Capacity (lt)	4.4	6	10.6	8.3	8.3
Coolant Capacity (lt)	5.2	6	7	10.2	10.2
Fuel Tank Capacity (lt)	92	92	92	138	138

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star



ASGP Series 66-150 kVA									
Model ASGP66 ASGP72 ASGP88 ASGP110 ASGP150									
Standby Power (kVA)	66	72	88	110	150				
Prime Power (kVA)	Prime Power (kVA) 60 65.5 80 102 135								

		ASG	P Series 1	165-275 k	VA	
SGP150	Model	ASGP165	ASGP200	ASGP220	ASGP250	ASGP275
150	Standby Power (kVA)	165	200	220	250	275
135	Prime Power (kVA)	150	181.9	200	230	250

Brand	Perkins					
Model	1103A-33TG2	1104A-44TG1	1104A-44TG2	1104C-44TAG2	1160A-70TG1	
Engine Power – Standby (kW)	60.5	65.6	80.7	103	137	
Engine Power – Prime (kW)	55	59.6	73.4	90.3	124.5	
Engine Speed (rpm)	1500	1500	1500	1500	1500	
Number of Cylinder	3 - In Line	4 - In Line	4 - In Line	4 - In Line	6 - In Line	
Displacement (lt)	3.3	4.4	4.4	4.4	7.01	
Bore x Stroke (mm)	105x127	105x127	105x127	105x127	105*135	
Compression Rate	17.25:1	17.25:1	17.25:1	18.2:1	18.2:1	
Governor Type	Mechanic	Mechanic	Mechanic	Electronic	Mechanic	
Induction	TurboCharge d	TurboCharge d	TurboCharge d	TurboCharged- Intercooler	TurboCharge d	
Combustion System	Direct Injection	Direct Injection	Direct Injection	Direct Injection	Direct Injection	
Cooling System	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled	
Lubrication Oil Capacity (lt)	8.3	8	8	8	16.5	
Coolant Capacity (lt)	10.2	13	13	13	21	
Fuel Tank Capacity (lt)	175	175	175	175	250	

Diesel Engine								
Brand		Perkins						
Model	1106A-70TAG2	1106A-70TAG3	1106A-70TAG4	1206A-E70TAG2	1206A-E70TAG3			
Engine Power – Standby (kW)	149	177	196	226	249			
Engine Power – Prime (kW)	135.5	161	178.2	205.5	226			
Engine Speed (rpm)	1500	1500	1500	1500	1500			
Number of Cylinder	6 - In Line							
Displacement (lt)	7.01	7.01	7.01	7.01	7.01			
Bore x Stroke (mm)	105x135	105x135	105×135	105x127	112x149			
Compression Rate	18.2:1	16:01	16:01	15.8:1	16.1:1			
Governor Type	Electronic	Electronic	Electronic	Electronic	Electronic			
Induction	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler			
Combustion System	Direct Injection							
Cooling System	Water Cooled							
Lubrication Oil	16.5	16.5	16.5	16	16			
Coolant Capacity (lt)	21	21	21	25	25			
Fuel Tank Capacity	250	250	350	350	350			

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star



	ASGP Series 300-500 kVA							
Moo	ModelASGP165ASGP200ASGP220ASGP250ASGP275							
Standby (kVA)	Power	300	330	400	450	500		
Prime (kVA)	Power	272.7	300	363.6	409	455		

ASGP Series 550-825 kVA							
Moo	ModelASGP165ASGP200ASGP220ASGP250ASGP275						
Standby (kVA)	Power	550	660	700	785	825	
Prime (kVA)	Power	500	600	636	713.6	750	

Diesel Engine							
Brand	Perkins						
Model	1506A-E88TAG4	1506A-E88TAG5	2206A-E13TAG2	2206A-E13TAG3	2506A-E15TAG1		
Engine Power – Standby (kW)	281	307	368	412	451		
Engine Power – Prime (kW)	255.5	279	334	374	410		
Engine Speed (rpm)	1500	1500	1500	1500	1500		
Number of Cylinder	6 - In Line						
Displacement (lt)	8.8	8.8	12.5	12.5	15.2		
Bore x Stroke (mm)	112x149	112x149	130x157	130x157	137×171		
Compression Rate	16.1:1	16.1:1	16.3:1	16.3:1	16.0:1		
Governor Type	Electronic	Electronic	Electronic	Electronic	Electronic		
Induction	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler		
Combustion System	Direct Injection						
Cooling System	Water Cooled						
Lubrication Oil Capacity (lt)	41	41	40	40	62		
Coolant Capacity (lt)	33.2	33.2	51.4	51.4	58		
Fuel Tank Capacity (lt)	450	550	550	550	970		

Aller	nator
put	Voltage

Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star

Diesel Engine							
Brand	Perkins						
Model	2506A-E15TAG2	2806A-E18TAG1A	2806A-E18TAG2	2806A-E18TAG4	2806A-E18TAG5		
Engine Power – Standby (kW)	495	593	628	685	695		
Engine Power – Prime (kW)	450	539	571	623	632		
Engine Speed (rpm)	1500	1500	1500	1500	1500		
Number of Cylinder	6 - In Line						
Displacement (lt)	15.2	18.1	18.1	18.1	18.1		
Bore x Stroke (mm)	137*171	145*183	145*183	145*183	145*183		
Compression Rate	16.0:1	14.5:1	14.5:1	14.5:1	14:1		
Governor Type	Electronic	Electronic	Electronic	Electronic	Electronic		
Induction	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler		
Combustion System	Direct Injection						
Cooling System	Water Cooled						
Lubrication Oil Capacity (lt)	62	62	62	68	68		
Coolant Capacity (lt)	58	61	61	109.5	109.5		
Fuel Tank Capacity (lt)	450	550	970	970	1100		

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage	±%0.5
Regulation	
Connection Type	Star

ASGP Series 900-1380 kVA								
Moo	ModelASGP900ASGP1000ASGP1125ASGP1250ASGP1380							
Standby (kVA)	Power	900	1000	1125	1250	1380		
Prime (kVA)	Power	800	909	1022.7	1136	1250		

ASGP Series 1500-1875 kVA									
Model	ASGP1500	ASGP1650	ASGP1875						
Standby Power (kVA)	1500	1650	1875						
Prime Power (kVA)	rime Power (kVA) 1363.6 1506 1740.5								

Diesel Engine							
Brand	Perkins						
Model	4006-23TAG3A	4008TAG1A	4008TAG2A	4008-30TAG3	4012-46TWG2A		
Engine Power – Standby (kW)	760	882	973	1105	1166		
Engine Power – Prime (kW)	679	802	885	1005	1055		
Engine Speed (rpm)	1500	1500	1500	1500	1500		
Number of Cylinder	6 - In Line	8- In Line	8- In Line	8 - In Line	12-60° V		
Displacement (lt)	22.92	30.56	30.56	30.56	45.84		
Bore x Stroke (mm)	160x190	160x190	160x190	160x190	160x190		
Compression Rate	13.6:1	13.6:1	13.6:1	13.6:1	13.6:1		
Governor Type	Electronic	Electronic	Electronic	Electronic	Electronic		
Induction	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler	TurboCharged- Intercooler		
Combustion System	Direct Injection						
Cooling System	Water Cooled						
Lubrication Oil Capacity (lt)	113.4	165.6	127	155	177		
Coolant Capacity (lt)	105	149	162	140	201		
Fuel Tank Capacity (lt)	1500	1500	1500	2500	2500		

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star

Diesel Engine								
Brand	Perkins							
Model	4012-46TAG1A	4012-46TAG2A	4012-46TAG3A					
Engine Power – Standby (kW)	1224	1459	1643					
Engine Power – Prime (kW)	1112.7	1326	1493					
Engine Speed (rpm)	1500	1500	1500					
Number of Cylinder	12-60 <sup>°</sup> V	12-60 <sup>°</sup> V	12-60 <sup>°</sup> V					
Displacement (lt)	45.84	45.84	45.84					
Bore x Stroke (mm)	160x190	160x190	160x190					
Compression Rate	13.6:1	13.6:1	13.6:1					
Governor Type	Electronic	Electronic	Electronic					
Induction	TurboCharged-Intercooler	TurboCharged-Intercooler	TurboCharged-Intercooler					
Combustion System	Direct Injection	Direct Injection	Direct Injection					
Cooling System	Water Cooled	Water Cooled	Water Cooled					
Lubrication Oil Capacity (lt)	tion Oil 177 177   t Capacity (lt) 201 201		177					
Coolant Capacity (lt)			201					
Fuel Tank Capacity (lt)	2500	2500	3000					

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star



ASGP Series 2000-2500 kVA								
Model ASGP1500 ASGP1650 ASGP1875								
Standby Power (kVA)	2000	2250	2500					
Prime Power (kVA)	1818.2	2045.5	2250					

#### Diesel Engine

Brand	Perkins						
Model	4016-61TRG1	4016-61TRG2	4016-61TRG3				
Engine Power – Standby (kW)	1774	1984	2183				
Engine Power – Prime (kW)	1612.7	1803.6	1985				
Engine Speed (rpm)	1500	1500	1500				
Number of Cylinder	16-60 <sup>°</sup> V	16-60 <sup>°</sup> V	16-60 <sup>°</sup> V				
Displacement (lt)	61.12	61.12	61.12				
Bore x Stroke (mm)	160x190	160x190	160x190				
Compression Rate	13.6:1	13.6:1	13.6:1				
Governor Type	Electronic	Electronic	Electronic				
Induction	TurboCharged-Intercooler	TurboCharged-Intercooler	TurboCharged-Intercooler				
Combustion System	Direct Injection	Direct Injection	Direct Injection				
Cooling System	Water Cooled	Water Cooled	Water Cooled				
Lubrication Oil Capacity (lt)	213	213	213				
Coolant Capacity (lt)	316	316	316				
Fuel Tank Capacity (lt)	3000	3500	4000				

#### Alternator

Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star

ASGB Series 20-50 kVA						
ModelASGB20ASGB22ASGB35ASGB44ASGB50						
Standby Power (kVA)	20	22	35	44	50	
Prime Power (kVA)	18.2	20	31.8	40	45.4	

Diesel Engine							
Brand	Baudouin						
Model	4M06G20/5	4M06G25/5	4M06G33/5	4M06G44/5	4M06G50/5		
Engine Power – Standby (kW)	20	25	33	41	48		
Engine Power – Prime (kW)	18	23	30	37	44		
Engine Speed (rpm)	1500	1500	1500	1500	1500		
Number of Cylinder	4 - In Line						
Displacement (lt)	2.3	2.3	2.3	2.3	2.3		
Bore x Stroke (mm)	89x92	89x92	89x92	89x92	89x92		
Compression Rate	17.5:1	17.5:1	17.5:1	17.5:1	17.5:1		
Governor Type	Electronic	Electronic	Electronic	Electronic	ECU		
Induction	Natural	Natural	TurboCharged	TurboCharged	TurboCharged- Aftercooler		
Combustion System	Direct Injection	Direct Injection	Direct Injection	Direct Injection	Direct Injection		
Cooling System	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled		
Lubrication Oil Capacity (lt)	9.5	9.5	9.5	9.5	9.5		
Coolant Capacity (lt)	16	16	16	16	12.9		
Fuel Tank Capacity (lt)	92	92	132	132	132		

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star

ASGB Series 55-90 kVA							
ModelASGB55ASGB70ASGB72ASGB88ASGB90							
Standby Power (kVA)	55	70	72	88	90		
Prime Power (kVA)	50	63.6	65.5	80	81.8		

ASGB Series 120-250 kVA								
Model	Model ASGB120 ASGB150 ASGB165 ASGB220 ASGB250							
Standby Power (kVA)	120	150	165	220	250			
Prime Power (kVA)	109	135	150	200	227.2			

Dieset Engline					
Brand			Baudouin		
Model	4M06G55/5	4M10G70/5	4M11G70/5	4M10G88/5	4M11G90/5
Engine Power – Standby (kW)	53	63	66	77	81
Engine Power – Prime (kW)	48	57	60	69	74
Engine Speed (rpm)	1500	1500	1500	1500	1500
Number of Cylinder	4 - In Line	4 - In Line	4 - In Line	4 - In Line	4 - In Line
Displacement (lt)	2.3	4.087	4.5	4.087	4.5
Bore x Stroke (mm)	89x92	105x118	105x130	105x118	105x130
Compression Rate	17.5:1	17.5:1	18:1	17.5:1	18:1
Governor Type	ECU	Electronic	Electronic	Electronic	Electronic
Induction	TurboCharged- Aftercooler	TurboCharged	TurboCharged	TurboCharged	TurboCharged
Combustion System	Direct Injection	Direct Injection	Direct Injection	Direct Injection	Direct Injection
Cooling System	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled
Lubrication Oil Capacity (lt)	7.3	11	11	11	11
Coolant Capacity (lt)	12.9	17	17	17	17
Fuel Tank Capacity (lt)	132	180	180	180	180

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star

Diesel Engine					
Brand			Baudouin		
Model	4M11G120/5	6M11G150/5	6M11G165/5	6M16G220/5	6M16G250/5
Engine Power – Standby (kW)	108	140	152	200	238
Engine Power – Prime (kW)	98	128	138	182	216
Engine Speed (rpm)	1500	1500	1500	1500	1500
Number of Cylinder	6 - In Line				
Displacement (lt)	4.5	6.75	6.75	9.726	9.726
Bore x Stroke (mm)	105x130	105x130	105x130	126x1320	126x130
Compression Rate	18:1	18:1	18:1	17:1	17:1
Governor Type	Electronic	Electronic	Electronic	Electronic	Electronic
Induction	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler
Combustion System	Direct Injection				
Cooling System	Water Cooled				
Lubrication Oil Capacity (lt)	11	17	17	24	26
Coolant Capacity (lt)	13.3	17	17	44	44
Fuel Tank Capacity (lt)	280	280	280	585	585

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star



ASGB Series 275-440 kVA					
Model	ASGB275	ASGB300	ASGB350	ASGB400	ASGB440
Standby Power (kVA)	275	300	350	400	440
Prime Power (kVA)	250	273	318.2	363.6	400

ASGB Series 500-750 kVA					
Model	ASGB500	ASGB550	ASGB660	ASGB715	ASGB750
Standby Power (kVA)	500	550	660	715	750
Prime Power (kVA)	454.5	500	600	650	681.8

Dieset Engine							
Brand		Baudouin					
Model	6M16G275/5	6M16G300/5	6M16G350/5	6M21G400/5	6M21G440/5		
Engine Power – Standby (kW)	264	280	320	385	405		
Engine Power – Prime (kW)	240	255	291	350	368		
Engine Speed (rpm)	1500	1500	1500	1500	1500		
Number of Cylinder	6 - In Line						
Displacement (lt)	9.726	9.726	9.726	12.54	12.54		
Bore x Stroke (mm)	126x130	126x130	126x130	127x165	127x165		
Compression Rate	17:1	17:1	17:1	16:1	16:1		
Governor Type	Electronic	Electronic	ECU	Electronic	Electronic		
Induction	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler		
Combustion System	Direct Injection						
Cooling System	Water Cooled						
Lubrication Oil Capacity (lt)	26	26	26	30	30		
Coolant Capacity (lt)	44	44	50	55	55		
Fuel Tank Capacity (lt)	585	585	585	890	890		

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star

Diesel Engine							
Brand		Baudouin					
Model	6M21G500/5	6M26G550/5	6M33G660/5	6M33G715/5	6M33G750/5		
Engine Power – Standby (kW)	450	490	587	633	670		
Engine Power – Prime (kW)	409	448	536	575	610		
Engine Speed (rpm)	1500	1500	1500	1500	1500		
Number of Cylinder	6 - In Line						
Displacement (lt)	12.54	15.90	19.60	19.60	19.60		
Bore x Stroke (mm)	127x165	150*150	150*185	150*185	150*185		
Compression Rate	16:1	15.9:1	15:1	15:1	15:1		
Governor Type	ECU	Electronic	Electronic	Electronic	Electronic		
Induction	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler		
Combustion System	Direct Injection						
Cooling System	Water Cooled						
Lubrication Oil Capacity (lt)	30	52	52	61	61		
Coolant Capacity (lt)	55	108.7	108.7	129	159		
Fuel Tank Capacity (It)	1145	1145	1530	1530	1530		

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star



ASGB Series 825-1250 kVA					
Model	ASGB825	ASGB900	ASGB1000	ASGB1100	ASGB1250
Standby Power (kVA)	825	900	1000	1100	1250
Prime Power (kVA)	750	818.2	909	1000	1136.3

Diesel Engine							
Brand		Baudouin					
Model	6M33G825/5	12M26G900/5	12M26G1000/5	12M26G1100/5	12M33G1250/5		
Engine Power – Standby (kW)	725	793	902	973	1108		
Engine Power – Prime (kW)	659	725	820	889	1007		
Engine Speed (rpm)	1500	1500	1500	1500	1500		
Number of Cylinder	6 - In Line	12 - V Type	12 - V Type	6 - In Line	12 - V Type		
Displacement (lt)	19.60	31.80	31.80	31.80	39.2		
Bore x Stroke (mm)	150x185	150x150	150x150	150x150	150x185		
Compression Rate	15.0:1	15.7:1	15.7:1	15.7:1	15:1		
Governor Type	Electronic	Electronic	Electronic	Electronic	Electronic		
Induction	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler		
Combustion System	Direct Injection						
Cooling System	Water Cooled						
Lubrication Oil Capacity (lt)	61	109	109	109	155		
Coolant Capacity (lt)	159	148	148	148	188		
Fuel Tank Capacity	2000	2000	2000	2000	2000		

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star

ASGB Series 1400-1900 kVA					
Model	ASGB1400	ASGB1500	ASGB1650	ASGB1700	ASGB1900
Standby Power (kVA)	1400	1500	1650	1700	1900
Prime Power (kVA)	1250	1363.6	1500	1545.5	1727.2

Diesel Engine					
Brand	Baudouin				
Model	12M33G1400/5	12M33G1500/5	12M33G1650/5	16M33G1700/5	16M33G1900/5
Engine Power – Standby (kW)	1210	1320	1450	1530	1650
Engine Power – Prime (kW)	1100	1200	1318	1390	1530
Engine Speed (rpm)	1500	1500	1500	1500	1500
Number of Cylinder	12 - V Type	12 - V Type	12 - V Type	16 - V Type	16 - V Type
Displacement (lt)	39.2	39.2	39.2	52.3	12.54
Bore x Stroke (mm)	150x185	150x185	150x185	150x185	150x185
Compression Rate	15:1	15:1	15:1	15:1	15:1
Governor Type	Electronic	Electronic	ECU	ECU	ECU
Induction	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler
Combustion System	Direct Injection				
Cooling System	Water Cooled				
Lubrication Oil Capacity (lt)	155	155	155	171	171
Coolant Capacity (lt)	188	188	303	400	400
Fuel Tank Capacity (lt)	2000	-	-	-	-

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star

ASGB Series 2000-2750 kVA				
Model	ASGB2000	ASGB1500	ASGB1650	ASGB2750
Standby Power (kVA)	2000	2250	2550	2750
Prime Power (kVA)	1818.2	2045.4	2318.5	2500

Diesel Engine				
Brand	Baudouin			
Model	16M33G2000 /5	16M33G2250/5	12M55G2550/5	12M55G2750/5
Engine Power – Standby (kW)	1800	1980	2210	2450
Engine Power – Prime (kW)	1620	1800	1985	2200
Engine Speed (rpm)	1500	1500	1500	1500
Number of Cylinder	16 - V Type	16 - V Type	12 - V Type	12 - V Type
Displacement (lt)	52.3	52.3	65.65	65.65
Bore x Stroke (mm)	150x185	150x185	180x215	180x215
Compression Rate	15:1	14:1	16.5:1	16.5:1
Governor Type	ECU	ECU	ECU	ECU
Induction	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler	TurboCharged- Aftercooler
Combustion System	Direct Injection	Direct Injection	Direct Injection	Direct Injection
Cooling System	Water Cooled	Water Cooled	Water Cooled	Water Cooled
Lubrication Oil Capacity (lt)	171	171	560	560
Coolant Capacity (lt)	400	412	306	306
Fuel Tank Capacity (lt)	-	-	-	-

Alternator	
Output Voltage (V)	400/230
Power Factor	0.8
Number of Poles	4
Frequency (Hz)	50
Voltage Regulation	±%0.5
Connection Type	Star



Factory

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