

# AF Series Diesel Generators







AGG Power AF series generator sets offer affordable power generating solutions for construction, residential and retail. This range is ideal for back up power, providing uncomplicated power assurance with the quality excellence you've come to expect from AGG Power. These units are available with enclosures, which ensure you quite and water-proof running environment.

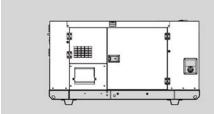
These range of generator sets comprise an engine, alternator and canopy with AGG brand. That is means AGG Power could offers you added value as a vertical manufacturer, enabling superb quality of all generator sets components.

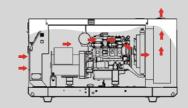


Power Solutions



### Strong power, reliable Performance





### **■** Cooling air flow

Reasonable air intake design ensures sufficient combustion of engine.



### Engines

Excellent engines featured with strong power, high torque, quick start, easy maintenance and operation.



#### Advanced AVM

Advanced AVM device significantly reduce vibration during operation, ensuring stable operation of the genset.



#### Cooling system

Excellent cooling system and  $50^{\circ}\text{C}$  radiator.



### Connection

All movable devices are fixed firmly, and therefore help reduce vibration.

### **Environmental-friendly and enhanced safety**

### ■ Super low noise level

Silencer, muffler pipe system and airproof rubber around the doors dramatically reduce the noise of the generator during operation.

### **■** High insulation

The alternator winding is coated with varnish using dripping impregnation and vacuum impregnation to provide high insulation performance.

### ■ Safe soundproof enclosure device

The gensets are equipped with grounding protection, access door lock, cable outlet, mouse proof device, oil tank leak-proof device, water tank hood and overflow kettle.

### **■** Compact and light-weight

The body is small and light-weight, enabling easy transportation by truck and reducing transportation costs.

### Weather resistant coating

All enclosures are coated by unitraviolet-proof powder, providing the enclosure high resistance to corrosion, which has a service life of 5 years.

### Output terminal

The double protection for the cable connection panel lowers the probability of leakage caused by unintended touch or rain falling. At the same time, the terminal connection lugs (U/V/W/N/E) make connection and wiring much more simple and well-ordered.

### ■ Materials Used on Canopy and Base

Component	Material	Thickness(mm)			
Soundproof Canopy	Cold-rolled plate	2.0			
Bracket	Hot-rolled Plate	6.0			
Main Supporting Column	Hot-rolled Plate	6.0-10.0			
Base	Hot-rolled Plate	4.0-12.0			

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## AF Series Diesel Generator

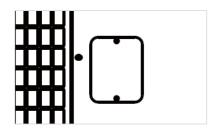
- Control Panel
- Air Inlet
- Canopy
- 4 Alternator
- 6 Air filter
- 6 Base frame
- Radiator
- 8 Fuel filler



### Two-side inspection design

The generator set is complete equipped. The daily maintenance work can be performed on both sides of the machine, and the wide doors allow easy access to all areas of the machine.

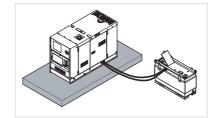
### **Humanized design and easy operation**



The water filling device on top of the canopy makes it convenient to fill water.



The automatic fuel filling device is also optional.



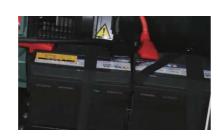
The generator can be easily connected to an external fuel tank for a long period of continuous operation.



The generator is mounted with a vehicle type base frame fuel tank, fuel intake and fuel level monitoring system;



Lubricating oil can be transferred to the outside of the soundproof canopy.



High performance maintenance -free batteries.

### **Easy Maintenance**



### **Lifting Lugs**

Lifting lugs located on top of canopy make it easier to move the machine by crane.



### Flat base frame design

Flat structure design of the base frame under the generator set make it convenient for inside cleaning work of the generator set.



### Outer filling fuel port

The fuel filler is outside of the canopy makes it convenient to fill fuel.



### Inspection and Cleaning Radiator

The inspection of radiator and cleaning radiator can be easily performed by removing both side front covers and dividable fan shrouds.

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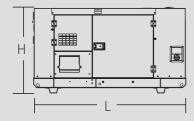


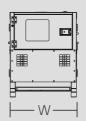


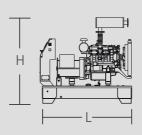
### Features

- Excitation system: self-excited
- ATS ( automatic transfer switch ) receptacle
- Lockable battery isolator switch
- Vibration isolators between the engine/alternator and base frame
- Integrated wiring design
- Base fuel tank for at least 8 hours running

- Engine oil pump
- 50°C radiator
- Top lifting and steel base frame with forklift holes
- Drainage for fuel tank
- Complete protection functions and safety labels
- Engine speeder
- Water jacket preheater, oil heater and double air cleaner, etc.are for option









### Diesel Generator | Three Phase | Single Phase

### Authorized by AGG

### AF Series | 400V\_Diesel 16.5kVA - 66kVA



Model		AF16.5D5	AF22D5	AF33D5	AF44D5	AF55D5	AFGGD5	AF13D5-1P	AF18D5-1P	AF22D5-1P	AF27D5-1P
Generator											
Frequency ( Hz )		50	50	50	50	50	50	50	50	50	50
ESP kVA	kVA	16.5	22	33	44	55	66	13	18	22	27
ESP kW	kW	13	20	26	35	44	53	13	18	22	27
PRP kVA	kVA	15	20	30	40	50	60	11	16	20	24
PRP kW	kW	12	16	24	32	40	48	11	16	20	24
Phase		3	3	3	3	3	3	1	1	1	1
Power factor		0.8	0.8	0.8	0.8	0.8	0.8	1	1	1	1
Insulation		Н	Н	Н	Н	Н	Н	Н	Н	Н	Н
Voltage regulation	%	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0
Excitation system		Brushless									
Alternator model		KI 164D	KI 184E	KI 184G	KI 184J	KI 224D	KI 224E	KI 164D	KI 184F	KI 184G	KI 184H
Engine											
Model		AF2270	AF2540	AF2540	AF3860	AF3860	AF3860	AF2270	AF2540	AF2540	AF2540
No. of Cylinders/Arrange	ement	4L									
Governor Method		Electronic									
Displacement	L	2.156	2.545	2.545	3.86	3.86	3.86	2.156	2.545	2.545	2.545
Compression ratio		18:1	18:1	17.5:1	17.5:1	17.5:1	17.5:1	18:1	18:1	17.5:1	17.5:1
Engine speed rpm	rpm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Cooling Type		Liquid									
Oil system capacity					· ·	4.5		4.5			
including filters	L	7.8	8	8	12.5	13	13	7.8	7.8	8	8
Oil specification		15W40	15W40	15W40 CH	15W40	15W40 CH	15W40 CH	15W40 CF4	15W40 CF4	15W40 CH	15W40 CH
Oil consumption	%	0.04	0.05	0.05	0.06	0.05	0.05	0.04	0.05	0.05	0.05
Air filter type		Dry									
Gas flow at stand by pow	ver m³/min	4.7	5.5	7.1	9.3	11.3	13.8	4.7	5.5	6.4	7.1
Max temperature	℃	550	550	550	550	550	550	550	550	550	550
Max allowable back pres		6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Starter motor power	kW	3.5	3.5	3.5	4.5	4.5	4.5	3.5	3.5	3.5	3.5
Rated voltage	V	12	12	12	24	24	24	12	12	12	12
Sound Attenuated E	nclosures										
Fuel consumption L/h	at 100%	3.6	5.0	7.0	9.3	11.5	13.4	3.6	5.0	6.0	7.3
Fuel consumption L/h	at 75% load	2.7	3.7	5.3	7.0	8.7	10.0	2.7	3.7	4.5	5.5
Fuel tank capacity	L	40	40	70	65	100	100	40	40	40	-
Continuous runing hours	at 75% load	15	11	13	9	11	10	15	11	9	0
Length	mm	2050	2050	2050	2300	2300	2500	2050	2050	2050	2300
Width	mm	850	850	850	1000	1000	950	850	850	850	1000
Height	mm	1236	1236	1236	1296	1296	1296	1236	1236	1236	1296
Approx net weight	kg	774	792	862	1081	1191	1227	790	784	809	-
Open skid sets											
Length	mm	1720	1720	1720	2020	2010	2500	1720	1720	1720	2010
Width	mm	580	580	580	860	836	860	580	580	580	836
Height	mm	1200	1200	1200	1410	1287	1200	1200	1200	1200	1287

The rating is according to ISO 8528-1: + 25°C mASL; 30% relative humidity. The power losses please consultant AGG Power Technical Apartment



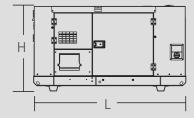


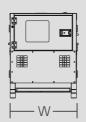


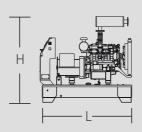
### Features

- Excitation system: self-excited
- ATS ( automatic transfer switch ) receptacle
- Lockable battery isolator switch
- Vibration isolators between the engine/alternator and base frame
- Integrated wiring design
- Base fuel tank for at least 8 hours running

- Engine oil pump
- 50°C radiator
- Top lifting and steel base frame with forklift holes
- Drainage for fuel tank
- Complete protection functions and safety labels
- Engine speeder
- Water jacket preheater, oil heater and double air cleaner, etc.are for option









### Diesel Generator | Three Phase | Single Phase

### Authorized by AGG

### AF Series | 220V\_Diesel 22kVA - 75kVA



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Model		AF22D6	AF33D6	AF44D6	AF55D6	AF66D6	AF75D6	AF17D6-1P	AF26D6-1P	AF35D6-1P	AF44D6-1P
Generator											
Frequency (Hz)		60	60	60	60	60	60	60	60	60	60
ESP kVA	kVA	22	33	44	55	66	75	17	26	35	44
ESP kW	kW	18	26	35	44	53	60	17	26	35	44
PRP kVA	kVA	20	30	40	50	60	67.5	16	24	32	40
PRP kW	kW	16	24	32	40	48	54	16	24	32	40
Phase		3	3	3	3	3	3	1	1	1	1
Power factor		0.8	0.8	0.8	0.8	0.8	0.8	1	1	1	1
Insulation		Н	Н	Н	Н	Н	Н	Н	Н	Н	Н
Voltage regulation	%	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0
Excitation system		Brushless									
Alternator model		KI 164DA	KI 184FS	KI 184HS	KI 224C	KI 224D	KI 224ES	KI 164DA	KI 184F	KI 184HS	KI 224C
Engine											
Model		AF2270	AF2540	AF3860	AF3860	AF3860	AF3860	AF2270	AF2540	AF3860	AF3860
No. of Cylinders/Arrange	ement	4L									
Governor Method		Electronic									
Displacement	L	2.156	2.545	3.86	3.86	3.86	3.86	2.156	2.545	3.86	3.86
Compression ratio		18:1	18:1	17.5:1	17.5:1	17.5:1	17.5:1	18:1	18:1	17.5:1	17.5:1
Engine speed rpm	rpm	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Cooling Type		Liquid									
Oil system capacity			-	4		4	4	4		4	4
including filters	L	7.8	8	12.5	12.5	13	13	7.8	8	12.5	12.5
Oil specification		15W40	15W40	15W40	15W40	15W40 CH	15W40 CH	15W40	15W40	15W40	15W40
Oil consumption	%	0.04	0.05	0.06	0.06	0.05	0.05	0.04	0.05	0.06	0.06
Air filter type		Dry									
Gas flow at stand by pow	er m³/min	5.6	6.6	10.1	11.8	13	16.3	5.6	6.6	10.1	11.8
Max temperature	$^{\circ}\mathbb{C}$	550	550	550	550	550	550	550	550	550	550
Max allowable back pres		6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Starter motor power	kW	3.5	3.5	4.5	4.5	4.5	4.5	3.5	3.5	4.5	4.5
Rated voltage	V	12	12	24	24	24	24	12	12	24	24
Sound Attenuated E	inclosures		.=					15	15	<u>-4</u>	<u> </u>
Fuel consumption L/h	at 100%	4.64	6.5	8	9.8	12	14.4	4.64	6.5	8	9.8
Fuel consumption L/h	at 75% load	3.48	4.87	6.26	7.5	9.2	11	3.48	4.87	6.26	7.5
Fuel tank capacity	L	40	40	-	100	100	100	145	40	65	65
Continuous runing hours		11	8	0	13	11	9	42	8	10	9
Length	mm	2050	2050	2300	2300	2500	2500	2050	2050	2300	2300
Width	mm	850	850	1000	1000	950	950	850	850	1000	1000
Height	mm	1196	1196	1296	1281	1286	1286	1196	1236	1296	1296
Approx net weight	kg	774	794	-	875	1227	1222	839	813	1059	1138
Open skid sets											
Length	mm	1615	1615	1745	2020	2020	2500	1615	1655	1745	2020
Width	mm	550	550	550	860	860	860	580	550	550	836
Height	mm	1180	1180	1180	1410	1410	1410	1180	1180	1180	1410

The rating is according to ISO 8528-1: + 25°C mASL; 30% relative humidity. The power losses please consultant AGG Power Technical Apartment.

Further voltage rating are available under request: 60HZ\_208V/240V/380V/440V/480V.

PRP-1508528: prime power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during at 24 hours period shall not exceed 80% of the prime power. 10% overload available for governing purposes only.

ESP-IS08528: It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 h of operation per year (of which no more than 300 h for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.





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