







**GREENESCO: Official Distributor of SUMEC Group** 8, Omirou str, 10564 Athens GREECE +210 3677744, <u>www.greenesco.gr</u>, info@greenesco.gr





# • Brief Introduction

FIRMAN is a generating equipment brand under SUMEC Group.As an important member of SINOMACH, a Fortune 500 enterprise, SUMEC Group was founded in 1978 and specializes in trade and service, engineering contracting, and investment development.

After 30 years of development, SUMEC has become an international and diversified modern manufacturing service group. For years, FIRMAN brand trademark has been registered in 92 countries and regions all over the world. FIRMAN products are widely applied to many fields such as routine life, industrial production, communications, medical care, finance, energy, and construction. FIRMAN provides professional products and services for customers from more than 100 countries and regions in the world.

We are committed to creating stable, highly-efficient, and clean generating equipment and integrated power solution for customers and help customers obtain reliable power supply, reduce energy consumption, and save operation and maintenance (O&M) costs.

FIRMAN generator sets ranked first for six consecutive years among brands of exported portable Gasoline Generator in China. FIRMAN products have extremely high market share in Southeast Asia and Africa, where the market share in the core sales area exceeds 30%. The brand image has been deeply rooted in local users' hearts.





#### • Brand History

- In 2001, the FIRMAN brand was formally established.
- In 2007, FIRMAN generator sets ranked first among brands of exported portable Gasoline Generator in China.
- In 2010, FIRMAN performed the exclusive agent or oligopoly distribution system, and established long-term strategic partnerships with some world leading distributors in the generator industry.
- In 2011, the 10,000,000th FIRMAN Gasoline Generator went off the production line.
- In 2012, the total export amount of FIRMAN portable Gasoline Generator exceeded USD 100 million.

FIRMAN invested more than USD 1 million for outdoor advertising in markets all over the world.

FIRMAN products were recommended by PUNCH, the most authoritative business newspaper in Nigeria.

FIRMAN participated in Lagos International Trade Exhibition, the most important large exhibition

in Africa, as a mainstream brand manufacture.

• In 2013, the construction of FIRMAN standard retail stores for the terminal market and showrooms in key areas were complete.

The durability of FIRMAN products set a record in Indonesian Museum of Records (Muri).

• In 2014, FIRMAN established a strategic partnership with KOHLER Engines.





#### **R&D** Manufacture

• Manufacturing

High-quality manufacturing is the core step to satisfy needs of customers.

We strengthen the enterprise management and implement "zero defect" of FIRMAN products through advanced equipment and craft, scientific management, and multi-level quality control and guarantee system.

Since 1997, SUMEC Group has established multiple wholly-owned and joint venture plants, with core products covering Gasoline Generators, diesel generating sets (1 KVA-3000 KVA), generating and welding sets, water pump generator sets, marine generator sets, high-voltage generator sets, and heavy oil generator sets, and has been making every effort to provide customers with products with high quality, excellent performance, and perfect user experience.

SUMEC make products be the most reliable guarantee of users' life.







#### • Design and R&D

We insist on innovation with users, and take advantage of the global R&D network, cooperate with partners, and explore the market direction to meet users' requirements in a rapid mode, provide stable and reliable power support for customers, and create new value objectives jointly with users. So far, FIRMAN has the product technology R&D, test, and development capabilities, can complete product test and verification including the whole machine environment, strength and durability, engine performance, vibration noise, electronics, materials and craft, new product trial production, and calculation and analysis.

FIRMAN has obtained a variety of 91 patents.

Meanwhile, FIRMAN widely cooperates with well-known international certification authorities, and has got 79 international safety certificates and vocational certificates including GE and CETL. FIRMAN also gets great breakthroughs in operation stability and durability:

**1. FIRMAN FDG25YDS/FDG25FS** Diesel Generating Set runs uninterruptedly for 1513 hours, which overwrites the latest record (1086 hours) in Indonesian Museum of Records (Muri).

2. Twelve FIRMAN 10 KV plateau high-voltage Diesel Generating Sets have implemented gridconnected generation in Changdu, Tibet with the elevation exceeding 3300 meters. The generator sets has run for accumulative 14706 hours.

3. FIRMAN 10 KW common two-cylinder Gasoline Generator and silent series have continuously run for 1000 hours, far longer than the required running time of 250 hours in the industry.





# **Diesel Generating Set**



SOUNDPROOF POWERED BY FIRMAN



**OPENTYPE POWERED BY PERKINS** 



SOUNDPROOF POWERED BY PERKINS



**OPENTYPE POWERED BY MTU** 







SOUNDPROOF POWERED BY CUMMINS



**OPENTYPE POWERED BY CUMMINS** 





# **Customerized Set**



**CONTAINER GENERATOR SET** 



MILITARY GENERATOR SET



PLATEAU GENERATOR SET



OFFSHORE PLATFORM GENERATORE SET





# **Green Energy Power Generator**



SOLAR-DIESEL HYBRID GENERATOR SET



#### **BIOGAS GENERATOR SET**

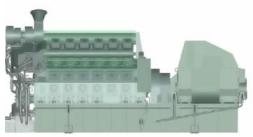


**GAS GENERATOR SET** 





# **Special Units**







**LIGHTING TOWER** 



**HIGH VOLTAGE GENERATOR SET** 

**SDW 400 DCT** 

**MOBILE POWER SUPPLY** 

# FIRMAN®

# DIESEL GENERATING SET

http://www.sumecfirman.com



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SUMEC

www.greenesco.gr

# **TERMAN** will be there

In endless pursuit of integrity and profession with the spirit of innovation and excellence, FIRMAN shows you the best power solution,guides you to new life experience.

# POWER SOLUTIONS



# FIRMAN

#### A Strong Brand for Generators from China

FIRMAN has specialized in the developing, manufacturing and sale of excellent generators, including portable gasoline generator and professional diesel generators supplying, commissioning from 1 to 4000KVA through more than 20 years of experience. FIRMAN shall solidify its leading role in generators through innovation of new products.

#### What makes FIRMAN so significant in generators:

Selecting high quality materials and components Strict manufacturing program Strict quality control program and measures Innovation of new products by professional R&D Strong marketing and sale network Complete service network Complete line of accessories and spare parts with warranties Meeting all relevant safety directives and tests Environmental friendly and meeting relevant exhaust and evaporation emission regulation and noise requirement





CERTIFCATE OF JANGSU FAMOUS EXPORT BRAND

# TRADITION AND HISTORY



 Rigorous selection of raw materials and spare parts, ensuring that all are from first-class suppliers

Strictly controlled manufacturing process and outgoing quality control
 Professional and proficient technical personnel





#### "FIRMAN" is from a big family.

Founded in 1978, SUMEC Group Corporation is a key member of China National Machinery Industry Corporation. It is one of the largest import corporation in China, with more than 30 subsidiaries and annual sales of over 2.8 billion US dollars.

As SUMEC's core subsidiary, SUMEC Machinery & Electric Co., Ltd. is China's largest manufacturing and export enterprise of power machineries, with its products covering 0.5-4000KVA power machineries including tens of series of gasoline and diesel generators, engines, water pumps and welding machines. The products are sold to honorable titles as 'Recommended Export Brand by China Chamber of Commerce for Import and Export of Machinery and Electronic Products' and 'Strongly Supported Export Brand in Jiangsu Province', but also has become a well-known brand parallel to the brands in Europe, America and Japan.

SUMEC Machinery & Electric Co., Ltd. has been committed to building and improving its technology platform, including product design and development, quality control system, intellectual property protection and product certification, etc. It now possesses dozens of patents at home and abroad, with product technology taking a leading role in China and ranking among the best in international market. It also strengthens all-round cooperations with domestic key universities, including the cooperative research program, campus scholarship and professionals co-training plan with Jiangsu University and Southeast University, which create favorable conditions for talents introduction as the knowledge update and development of the technicians.

#### SUMEC Machinery & Electric Co., Ltd. actively accelerates the process of industrialization.

Having established several manufacturing plants successively, it now possesses the most equipment in China, about ten high quality production lines, hundreds of CNC machine centers and a huge technological R&D team, which ensure its daily production capacity of over 5000 pieces.

# PRODUCTS

FIRMAN diesel generating set are designed for outstanding performance under the most challenging conditions, such as tough construction sites with wind, sand, high temperature, high humidity, etc. Also soundproofed and protected on all sides and equipped with high-quality alternators (Class H insulation), FIRMAN soundproof diesel units are silent in noise emission level up to 65 dB(A) at 1 m.

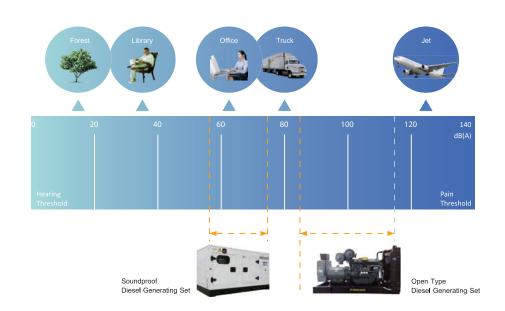
FIRMAN only use high quality industrial engines from Perkins, Cummins, MTU, as well as quality alternators from Stamford, MECC ALTE, Marathon.

FIRMAN always use durable components for generators such as chassis and soundproof cover, all fittings.

FIRMAN always use high quality branded electrical and electronic components such as switches, sockets, connectors, harness, circuit breakers, meters, sensors, relays, batteries, etc.

0KVA	100KVA	500KVA	1000KVA	2000KVA	3000KVA	4000KVA	10000KVA
	9~250	FIRMAN					
		9~2272		68 Pe	erkins		
			250~3000		mtu 📕		
			450~2000	ے ا			
		225~150	0	<b>£</b>			
	25~250	OCEC					





## SOUNDPROOF DIESEL GENERATING SET **POWERED BY FIRMAN**





- 1 Multifunction panel can be matched with ATS
- 0 IP55 sockets for fast connection
- Top oil level gauge 6
- 4 Hidden handle easily to move
- New design air flow area 6
- 6 Coolant recovery tank protecting environment
- 1 Electronic governor control, more efficiency
- 8 Stable base lower vibration (wheels optional)
- 9 Maintenance-free battery
- 10 High short circuit withstand alternator (H class insulation)
- 1 Import outdoor coating Anti-UV

	Engine sp	ecification
I	Engine Brand	FIRMAN Power
2	Engine Model	FD280DC
3	Governor/Class	Electrical
4	Cylinder No.	2
5	Cycle	Four stroke
6	Cylinder arrangement	V Type
7	Type of injection	Direct injection
8	Aspiration	Narually Aspirated
9	Cooling mode	Water cooled
10	Bore and stroke	80x79mm
11	Compression ratio	23:1
12	Displacement	0.794L
13	Engine Prime Power	12kw
14	Engine Standby Power	14kw
15	Battery capacity	45A/hr
16	Direction of rotation(Facing output end)	Counter clockwise
17	Steady speed regulation	≤5%
18	Fuel consumption (100% prime load /75% prime load)	2.91L/h / 2.23L/h
19	Lubricanting Oil Capacity	2.27L
20	Coolant Capacity	2.9L
21	Fuel Type	0# Diesel (Natural temperature)
22	Filter system	Adopt lubricating oil filter, fuel filter
23	Exhaust system	Adopt industrial high efficiency
24	Weight(dry)	58Kg

Two cylinders of FD280DC diesel engine arrange in a V-shape, which is one of few two cylinder V-shaped diesel engine in market. The whole machine takes lightweight design with aluminum alloy crankcase and the cylinder head and forged crankshaft. So the diesel engine is light, only 58kg.

Advanced electronic control technology is used in FD280DC diesel engine, which contains actuator, speed sensor, electronic throttle, ECU and other compo-nents. ECU, which has simple structure, speed stability, fast response and speed setting according to the different purposes compared with mechanical governor, issues commands to the actuator to control fuel supply of fuel pump according to the input signal and the speed sensor feedback signal of the electronic throttle. When load changes, the speed and output frequency of the diesel engine maintains invariableness, which improves power quality. The electronic control system of diesel engine does not require electronic throttle when the engine connects to alternator.

FD280DC diesel engine has excellent emission performance by using swirl combustion technology. The emission can achieve the national II and current implementation latest EPA Tier IV emission standard of USA.

	Gerne	erator specification	
		IPHASE	3PHASE
1	Set Model	SDG150	OOSE
2	Prime Power	10kV	v
3	Standby Power	11kV	v
4	Phase & Wires	I phase 2 wires	3 phase 4 wires
5	Power Factor	1	0.8
6	Rated Gen-set output	230V 50Hz	400V 50HZ
7	Rated current	43.5	17.3
8	Frequency drop	≤5%	6
9	Steady-state frequency band	≤1.55	%
10	Steady-state voltage deviation	≤±2.5	5%
11	Frequency recovery time	≤3s	5
12	Voltage recovery time	≤4s	5
13	Rated Relative humidity	≤ 60	%
14	Dimension (L×W×H) net	1220mm×680m	nm×770mm
15	Dimension (L×W×H) install wheel	1220mm×680m	nm×905mm
16	Dimension (L×W×H) install bracket	1220mm×680m	nm×830mm
17	Dimension (L×W×H) simple packing	1280mm×740m	nm×830mm
18	Dimension (L×W×H) wooden case packing	I 320mm×780m	nm×870mm
19	Weight net	280K	G
20	Fuel tank capacity	25L	
21	Protection class	IP23	3

	A	Iternator specification						
		IPHASE	3PHASE					
1	Alternator Brand	FIRMAN	N Power					
2	Alternator Model	FG-10SX	FG-10TX					
3	Alternator Type	A.C. Syn	chronous					
4	Rated Voltage	230V	400V					
5	Rated Frequency	50	HZ					
6	Rated Speed	3000	RPM					
7	Poles	4	4					
8	Alternator Voltage Regulation	≤±	≤±1%					
9	Waveform Distortion	no load ≤1.5%; Non-distor	ting balanced linear load≤5%					
10	Telephone Interference	THF	≤2%					
11	Exciting Mode	self ex	cciting					
12	Power Factor	1	0.8					
13	Phase & Wires	I phase 2 wires	3 phase 4 wires					
14	Rated Current	43.5A	17.3A					
15	Efficiency	0.4	89					
16	Insulation Class	F	=					
17	Protection Class	IP	20					
18	Max. Ambient Temperature	40	C					
19	Weight	32	Kg					

# SOUNDPROOF DIESEL GENERATING SET **POWERED BY FIRMAN**



# . . FIRMAN

- High Performance
- Terminal & socket located on canopy,easy to connect
- Double-door design, 2 easy to operate
- Compact design
- Easy moving
- Convenient maintenance

Rating Voltage (V)	400/230	Соѕф	0.8
Frequescy (Hz)	50	Engine Manufacturer	FIRMAN
Speed (rpm)	1500	Cooling Mode	Water Cooled
Phase	3		

Middechanical speed governor:E:Bectronic speed governor
 Iralings are in accordance to 1908528,1903046 and 193514;
 Technical data is subject to work test conditions and we reserve the right to amend spec, and into, without notice and without obligation or itability

Genset Model	Meximum Power [LTP](KW)	Maximum Power [LTP](KVA)	Continuous Poer [COP](KW)	Continuous Poer [COP](KVA)	Rating Current	Sound Level (7m)dB(A)
SDG9FS	8	10	7.2	9	13	68
SDG13FS	11.2	14	10	12.5	18	68
SDG15FS	13.6	17	12	15	21.7	68
SDG18FS	16	20	14.4	18	26	68
SDG25FS	22.4	28	20	25	36.1	69
SDG30FS	26.4	33	24	30	43.3	69
SDG38FS	33	42	30	38	54.1	69
SDG36FS	32	40	28.8	36	52	69
SDG43FS	37.6	47	34.4	43	62.1	69
SDG63FS	56	69	50.4	63	91	69
SDG85FS	75.2	94	68	85	122.7	69
SDG115FS	101	127	92	115	166	70
SDG140FS	123.2	154	112	140	202.1	71
SDG185FS	163.2	204	148	185	267	71
SDG225FS	198.4	248	180	225	324.8	72
SDG250FS	220	275	200	250	360.9	72

Genset Model	Engine Model	Outoput (Engine)(KW)	Gov.	Cyl	Bore*Stroke	Compression ratio	Displace(L)
SDG9FS	FD380DY	10	м	3	80*90	18:1	1.357
SDG13FS	FD480DY	14	М	4	80*90	18:1	1.809
SDG15FS	FD485DY	17	м	- 4	85*95	18:1	2.156
SDG18FS	FD490DY	21	М	4	90*100	18:1	2.54
SDG25FS	FD4100DY	30	м	4	100°118	18:1	3.707
SDG30FS	FD4102DY	33	м	4	102*118	18:1	3.875
SDG38FS	FD4105DY	38	м	4	105*118	18:1	4.1
SDG36FS	FD3105ZDT	36	м	3	105°120	17:1	3.12
SDG43FS	FD4108DT	44	м	4	108*135	17:1	4.95
SDG83FS	FD4108ZDT	62	М	4	108*125	17:1	4.58
SDG85FS	FD4110ZLDT	80	Е	4	110°125	17:1	4.75
SDG115FS	FD6105ZLDT	110	Е	6	105*125	17:1	6.49
SDG140FS	FD6108ZLDT	125	Е	6	108*125	17:1	6.87
SDG185FS	FD6120ZLDT	166	Е	6	120*130	17.5:1	8.82
SDG225FS	FD6126ZLDT	198	Е	6	126*130	16.5:1	9.726
SDG250FS	FD6126ZLD1T	223	Е	6	126*130	17:1	9.726

### SOUNDPROOF DIESEL GENERATING SET POWERED BY PERKINS



Design with many worldwide known research and development institutions, integrate the domestic and foreign advanced diesel engine technology, use CAD/UG three dimensional technology and CAE analysis technology. Use a new stiffness design of the main parts of the body, cylinder cover; perfectly mixed the world-class airway simulation technology and top combustion theory, configurate supercharger which is a well-known band, upgrade spiral air inlet and direct injection combustion, reduce fuel consumption and improve emissions in order to start in low temperature. Small size, light weight, good reliability, and advanced performance index.



 Reliably improve the engine's coolingsystem, reduce the heat load. Experimentreinforced by 720 hours and 2,000 hours of the durability test. Removable-finished cylinder liner, and easy maintenance.

 Environmental protection To meet the non-road diesel engine emission requirements, some products meet the emission standards of the U.S. EPA, the EU E-mark, India CPCB and multinational effluent standard.  Fuel-efficient Low consumption rate and specific oil consumption. Rack test specific oil consumption rate is less than 0.2%. With the advanced level in a small diesel engine industry.

• Comfortable Little vibration and low noise.



Output Diesel Gensents Specification Date Specification Dimension&Weight Prime Standby Standby Bore/Store Displace I \*W\*H Weight (kg) Engine Model Gov. CyL (Kva) (KW) (Kva) (mm\*mm) (L) (mm) 10 FD380DY 80 x 90 1.357 1590\*900\*1100 600 q 8 м 3 12.5 11 14 FD480DY 4 80 x 90 1.809 1800\*900\*1100 650 M 17 FD485DY 2.156 1800\*900\*1100 15 13 85 x 95 700 M 4 18 16 20 FD490DY 4 90 x 100 2.54 1800\*900\*1100 800 FD4100DY 25 22 28 64 4 100 x 105 3.298 2050\*1000\*1255 920 30 26 33 FD4102DY 102 x 118 3.875 2050\*1000\*1255 970 м 4 32 ED31057DT 105 x 120 36 40 Μ 4 312 2412\*1046\*1342 1030 43 38 47 FD4108DT 4 108 x 135 5.18 2412\*1046\*1342 1350 FD4108ZDT 64 56 70 4 108 x 125 4.58 2412\*1046\*1342 1500 85 75 94 FD4110ZLDT 110 x 125 4.75 2412\*1046\*1342 1600 4 FD6105ZLDT 115 101 127 6 105 x 125 6.49 2800\*1106\*1550 1620 E 140 123 154 FD6108ZLDT 108 x 125 6.87 2800\*1106\*1550 1900 E 6 185 163 204 ED61207LDT E 6 120 x 130 8.82 3450\*1350\*1900 2650 225 198 248 FD6126ZLDT E 6 126 x 130 9.726 3450\*1350\*1900 2890 250 220 275 FD6126ZLD1T E 6 126 x 130 9.726 3450\*1350\*1900 2910

	Genset Model		Output			Diesel Ge	nsents Spe	cification D	Date Specification		Dimension&Weight	
NO.		Prime (KW)	Prime (Kva)	Standby (KW)	Standby (Kva)	Engine Model	Gov.	CyL	Bore/Store (mm*mm)	Displace (L)	L*W*H (mm)	Weight (kg)
1	SDG9FS	8	. 10	. 9	. 11	FD380DY	. м	3	80 x 90	1.357	1590*900*1100	600
2	SDG13FS	10.8	13.5	12	15	FD480DY	м	4	80 x 90	1.809	1800*900*1100	650
3	SDG15FS	14.4	18	16	20	FD485DY	м	4	85 x 95	2.156	1800*900*1100	700
4	SDG18FS	18	22	19	24	FD490DY	м	4	90 x 100	2.54	1800*900*1100	800
5	SDG25FS	22	28	25	31	FD4100DY	м	4	100 x 105	3.298	2050*1000*1255	920
6	SDG30FS	26	33	29	36	FD4102DY	м	4	102 x 118	3.875	2050*1000*1255	970
7	SDG36FS	30	37.5	33	41	FD3105ZDT	м	4	105 x 120	3.12	2412*1046*1342	1030
8	SDG43FS	40	50	44	55	FD4108DT	м	4	108 x 135	5.18	2412*1046*1342	1350
9	SDG63FS	56	70	62	77	FD4108ZDT	м	4	108 x 125	4.58	2412*1046*1342	1500
10	SDG85FS	72	90	79	99	FD4110ZLDT	м	4	110 x 125	4.75	2412*1046*1342	1600
11	SDG115FS	100	125	110	138	FD6105ZLDT	E	6	105 x 125	6.49	2800*1106*1550	1620
12	SDG140FS	120	150	132	165	FD6108ZLDT	E	6	108 x 125	6.87	2800*1106*1550	1900
13	SDG185FS	160	200	176	220	FD6120ZLDT	E	6	120 x 130	8.82	3450*1350*1900	2650
14	SDG225FS	200	250	220	275	FD6126ZLDT	Е	6	126 x 130	9.726	3450*1350*1900	2890
15	SDG250FS	220	275	242	303	FD6126ZLD1T	E	6	126 x 130	9.726	3450*1350*1900	2910

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NO. Genset Model

SDG9FS

SDG15ES

5 SDG25FS

SDG30FS

SDG36FS

SDG115FS

8 SDG43FS

12 SDG140FS

13 SDG185ES

14 SDG225FS

15 SDG250FS

1

2 SDG13FS

3

4 SDG18FS

6

7

9 SDG63ES

10 SDG85FS

11

Prime

(KW)

7.2

10

12

14

20

24

29

34

51

68

92

112

148

180

200

#### SUPER SILENT GENERATOR

# AIR-COOLED GENERATOR



- super silent
- high rigid canopy & base
- New design air dust

Generator	SDG42YMSS
Maximum power[LTP](KVA)	46
Maximum power[LTP](KW)	36.8
Continuous poer[COP](KVA)	42
Continuous poer[COP](KW)	33.6
Rating voltage(V)	400/230
Frequescy/Speed(Hz/rpm)	50/1500
Phase	3
cosφ	0.8
Rating current(A)	60.6
Soundpressure Level @ 7	60db(A)
Engine	
Engine manufacturer	Yanmar
Model	4TNV98T-GGE
Engine outoput[at rate rpm]	37.7 kW
Cylinder No.	4
Bore*Stroke	φ98*110
Compression ratio	18.1
Displacement(L)	3.319L
Aspiration	Turbo charged
Cooling type	Water Cooled
Governor type	Machanical
Coolant capacity(only engine)(L)	4.2
Genset	
Size(LxWxH)(mm)	2265*985*1700+305
Dry weight(kg)	1300



- Tip-up door, easy to maintenance
- Air cooled type-Low maintenance cost
- 1500 hours full load running, No power decrease

Generator	SDG15000KE	SDG15000KTE
AC Frequency	50Hz / 60Hz	50Hz / 60Hz
Rated AC Voltage	220V,230V / 220V,230V,240V	220V/380V,230V/400V
Surge AC Output	11KVA / 12KVA	14KVA / 15KVA
Rated AC Output	9KVA / 10KVA	11.5KVA / 12.5KVA
Alternator Type E	Brush,self exciting, synchronous,2-pole,single phase	Brush,self exciting, synchronous,2-pole,3-phase
Power factor COSΦ	1.0	0.8
Protection type	IF	23
Voltage Regulation	A	VR
Insulation Level		F
Engine		
Engine Model or P/N	KD	477-2
Engine Type	Kohler air-cooled 4-stroke tw	in cylinder in-line diesel engine
Bore x stroke	90	)x75
Displacement	S	954
Maximum Power	21	7HP
Starting System	Elect	ric start
Fuel	di	esel
Fuel Tank Capacity	2	5 L
Oil Capacity	:	3 L
Run Time(appr.) on One Tankful @3	/4 Load 8h /	/ 7.2h
Soundpressure Level @ 7	69db(A)	/ 70db(A)
Genset		
Dimensions (L x W x H)	1313X65	0X878mm
Dry Weight(appr.)	34	l0kg
Gross Weight (appr.)	35	50kg

# SOUNDPROOF DIESEL GENERATING SET **POWERED BY PERKINS**





# 50 🚿

			(	Output		D	iesel Ge	nsets Sj	pedification Dat	e Specificat	ion		Dimension & Weight		
NO.	Genset Model	Prime {KW}	Prime (Icva)	Standby (kW)	Standby (kva)	Engine Model	Gov.	Cyl.	Bone/Stroke (mmxmm)	Displace (L)	Cons.(L/H)	Noise Level (dB(A)@7m)	LatWaH (mm)	Weight (kg)	
1	SDG9PS	7.3	9.1	8	10	403D-11G	м	3L	77/81	1,131	2	66	1980*980*1090	540	
2	SDG13PS	10	12.5	11	14	403D-15G	м	3L	84/90	1,496	5.5	66	1980*980*1090	640	
3	SDG20PS	16	20	18	23	404D-22G	м	4L	84/100	2,216	4	67	1980*960*1090	690	
4	SDG26PS	20	25	22	28	404D-22TG	Е	4L	84/100	2.216	5	67	1980*980*1090	810	
5	SDG30PS	24	30	26	33	1103A-33G	м	3L	105/127	3.300	5.4	68	1980*980*1090	1240	
6	5DG45PS	36	45	40	50	1103A-33TG1	м	3L	105/127	3.300	8.2	68	2280*980*1140	1350	
7	SDG60PS	48	60	53	55	1103A-33TG2	м	3L	105/127	3.300	10.4	68	2280*980*1140	1500	
8	SDG65PS	52	65	57	71	1104A-44TG1	м	4L	105/127	4.400	11.2	68.5	2430*1080*1350	1550	
9	SDG80PS	64	80	70	88	1104A-44TG2	м	4L	105/127	4.400	14	68.5	2430°1080°1350	1650	
10	SDG100PS	80	100	88	110	1104C-44TAG2	E	41.	105/127	4.400	17.1	69	2430*1080*1350	1650	
11	SDG136PS	108	136	119	149	1006TAG	E	6L	100/127	5.990	24.1	71.2	2920*1130*1550	2180	
12	SDG150PS	120	150	132	165	1006TAG2	E	6L	100/127	5.990	31	71.5	2920*1130*1550	2180	
13	SDG185PS	144	180	158	198	1106C-E66TAG4	ECM	6L	105/127	6.600	31	71.8	2920*1130*1550	2180	
14	SDG200PS	160	200	176	220	1306C-E87TAG3	ECM	6L	116.6/135.9	8.700	37	72	3820°1130°1950	2980	
15	SDG230PS	184	230	202	253	1306C-E87TAG4	ECM	6L	116.6/135.9	B.700	39	72.2	3820*1130*1950	2980	
16	SDG250PS	200	250	220	275	1306C-E87TAG6	ECM	6L	116.6/135.9	8.700	43	72.5	3820°1130°1950	2980	
17	SDG350PS	280	350	308	385	2206A-E13TAG2	BCM	6L	130/157	12.500	54	73.2	4820*1380*2350	4620	
18	SDG400PS	320	400	352	440	2206A-E13TAG3	ECM	6L	130/157	12,500	62	73.5	4820*1380*2350	4680	
19	SDG460PS	368	450	400	500	2506A-E15TAG1	ECM	6L	135//171	15.200	72	74,2	5120*1380*2350	5030	
20	SDG500PS	400	500	440	550	2506A-E15TAG2	ECM	6L	137/171	15.200	76	74.8	5120*1380*2350	5080	
21	SDG600PS	480	600	528	660	2806A-E18TAG1A	ECM	6L	145/183	18.130	90	76	5120*1830*2350	5920	
22	SDG650P5	520	650	572	715	2806A-E18TAG2	ECM	6L	145/183	18.130	97	76.5	5120*1830*2350	6020	

1.M:Mechanical speed governor,E:Electronic speed governor,ECU:Electronic Control Unit;

2.All retings are in accordance to ISO8528,ISO3046 and BS5514;

3.All indings are under condition:5018;1500/mh,480V.lagging power factor().3),3-phase, 4-wire(For more information such as HV genesis,plases consult technical department); 4.Technical data is subject to work test conditions and we reserve the right to amend apec. and into. without notice and without obligation or liability

	C	Output			Diese	Gense	ts Specifi	ication Date Spec		Dimension&Weight			
NO.	Genset Model	Prime (kW)	Prime (icva)	Standby {kW}	Standby (icva)	Engine Model	Gov.	Cyl.	Bore/Stroke (mmamm)	Displace (L)	Noise Level (dB(A)@7m)	LxWxH (mm)	Weigh (lug)
1	SDG11PS	9	11	10	12	403D-11G	м	3L	77/81	1.313	66	1980*980*1090	540
2	5DG16PS	13	16	14	18	403D-15G	М	3L	84/90	1.496	66	1980*980*1090	640
3	SDG24PS	19	24	21	26	404D-22G	м	4L	84/100	2,216	67	1980*980*1090	690
4	SDG32PS	25.5	32	28	35	404D-22TG	м	4L	B4/100	2.216	67	1980*980*1090	810
5	SDG35PS	28	35	31	39	1103A-33G	М	3L	105/127	3300	68	1980*980*1090	1240
6	SDG53PS	43	53	47	58	1103A-33TG1	м	3L	105/127	3.300	68	2280*980*1140	1350
7	SDG68PS	55	68	60	75	1103A-33TG2	м	3L	105/127	3.300	68	2280*980*1140	1500
8	SDG76PS	61	76	67	84	1104A-44TG1	м	4L	105/127	4.400	68.5	2430*1080*1350	1550
9	SDG91PS	73	91	80	100	1104A-44TG2	E	4L	105/127	4.400	68.5	2430*1080*1350	1650
10	SDG112P	90	91	100	100	1104C-44TAG2	м	4L	105/127	4.400	69	2920*1130*1550	2180
11	SDG135P	108	155	120	171	1106A-70TAG1	м	6L	105/127	7.000	69	2920*1130*1550	2180
12	SDG150P	120	159	132	178	1106A-70TAG2	м	6L	105/127	7.000	69	2920*1130*1550	2180
13	SDG180P	144	170	158	190	1106A-70TAG3	м	6L	105/127	7.000	70	2920*1130*1550	2180
14	SDG230PS	185	230	202	253	1306C-E87TAG3	ECU	6L	116.6/135.9	8.700	70	3820°1130°1950	2980
15	SDG245PS	196	245	216	270	1306C-E87TAG4	ECU	6L	116.6/135.9	8.700	70	3820*1130*1950	2980
16	SDG400P5	320	400	350	438	2206A-E13TAG5	ECU	6L	130/157	12.500	72	4820°1380°2350	4620
17	SDG438PS	350	438	385	480	2206A-E13TAG6	ECU	6L	130/157	12.500	72	4820*1380*2350	4620
18	SDG500PS	400	500	440	550	2506D-E15TAG1	ECU	6L	135/171	15.200	72.5	5120*1380*2350	5030
19	SDG569P5	455	569	500	624	2506C-E15TAG3	ECU	6L	135/171	15.200	72.5	5120*1380*2350	5080
20	SDG625PS	500	625	550	687	2806A-E18TAG14	ECU	6L	145/183	18.130	74	5120*1830*2350	5920
21	SDG681PS	545	681	600	750	2806A-E18TAG3	ECU	6L	145/183	18.130	74	5120*1830*2350	6020

1.M:Machanical speed governor,E:Electronic speed governor,ECU:Electronic Control Unit; 2.All ratings are in accordance to ISO8528,ISO3046 and B65514;

3.All reings are under condition:50Hz.1800r/min.480V.lagging power faotor(0.8),3-phase, 4-wire(For more information such as HV genesits,please consult technical dap 4.Technical data is subject to work teat conditions and we means the right to amend spec, and info, without notice and without obligation or lability

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# **OPEN TYPE DIESEL GENERATING SET POWERED BY PERKINS**



Perkins is one of the three largest engine manufacturer in the world with more than 4,000 business outlets, provide power to 5000 different applications from more than 1000 equipment manufactures with advanced technology. Perkins 4-2,000 KW diesel engines are widely used in industry, construction, agriculture, marine and power generation equipment market with its performance, quality and reliability.

This series provides qualified and efficient service to customer, through SUMEC and Perkins worldwide service network.

				Output		Diesel Gene	iets Specif	cation Da	te Specification	-	Dimension&Wa	elght
VO.	Genset Model	Prime (kW)	Prime (kva)	Standby (kW)	Standby (leva)	Engine Model	Gov.	Cyl.	Bore/Stroke (mmxmm)	Displace (L)	LxWxH (mm)	Weigh (kg)
1	SDG11P	9	11	10	12	403D-11G	м	3L	77/81	1.313	1130x500x720	320
2	SDG16P	13	16	14	18	403D-15G	м	3L	84/90	1.496	1230x500x720	360
3	SDG24P	19	24	21	26	404D-22G	м	4L	84/100	2.216	1330x500x750	450
4	SDG32P	25.5	32	28	35	404D-22TG	E	4L	84/100	2,216	1360x630x750	620
5	SDG35P	28	35	31	39	1103A-33G	м	3L	105/127	3.300	1490x680x1090	636
6	SDG53P	43	53	47	58	1103A-33TG1	м	3L	105/127	3.300	1600x680x1090	720
7	SDG68P	55	68	60	75	1103A-33TG2	м	3L	105/127	3.300	1720x660x1100	757
8	SDG76P	61	76	67	84	1104A-44TG1	м	4L	105/127	4.400	1900x700x1200	850
9	SDG91P	73	91	80	100	1104A-44TG2	м	4L	105/127	4.400	1900x700x1200	875
10	SDG112P	90	91	100	100	1104C-44TAG2	м	4L	105/127	4.400	1900x700x1200	900
11	SDG135P	108	155	120	171	1106A-70TAG1	м	6L	105/127	7.000	2140x780x1290	1100
12	SDG150P	120	159	132	178	1106A-70TAG2	м	6L	105/127	7.000	2140x780x1290	1100
13	SDG180P	144	170	158	190	1106A-70TAG3	м	6L	105/127	7,000	2140x780x1290	1100
14	SDG230P	185	230	202	253	1306C-E87TAG3	ECU	6L	116.6/135.9	8.700	2600x950x1620	1584
15	SDG245P	196	245	216	270	1306C-E87TAG4	ECU	6L	116.6/135.9	8.700	2600x950x1620	1590
16	SDG400P	320	400	350	438	2206A-E13TAG5	BCU	6L	130/157	12.500	3100x1120x1725	2440
17	SDG438P	350	438	385	480	2206A-E13TAG6	ECU	6L	130/157	12.500	3100x1120x1725	2440
18	SDG500P	400	500	440	550	2506D-E15TAG1	ECU	6L	135/171	15,200	3280x1150x1918	3120
19	SDG569P	455	569	500	624	2506C-E15TAG3	ECU	6L	135/171	15.200	3280x1150x1918	3190
20	SDG625P	500	625	550	687	2806A-E16TAG1A	ECU	6L	145/163	18.130	3300x1150x1918	4400
21	5DG681P	545	681	600	750	2806A-E18TAG3	ECU	6L	145/183	18.130	3650x1500x1900	4690
22	SDG750P	600	750	660	825	4006-23TAG2A	E	6L	160/190	22.921	4250x1720x2210	5120
23	SDG846P	676	846	745	931	4008TAG	E	8L	160/190	30.561	4950x2050x2450	6900
24	SDG900P	720	900	800	1000	4008TAG1A	E	8L	160/190	30.561	4950x2050x2460	6900
25	SDG995P	796	995	878	1097	4008TAG2A	E	8L	160/190	30.561	5100x2050x2460	702
26	SDG1253P	1002	1253	1102	1378	4012-46TWG2A	E	12V	160/190	45.482	4880x1990x2350	8980
27	SDG1364P	1091	1364	1200	1500	4012-46TWG3A	E	12V	160/190	45.482	4880x1990x2506	9630
28	SDG1510P	1208	1510	1329	1669	4012-46TAG2A	E	12V	160/190	45.842	5150x2112x2560	1018
29	SDG1710P	1368	1710	1500	1880	4012-46TAG3A	E	12V	160/190	45.842	5150x2112x2560	1018

1.M:Mechanical speed governor,E:Electronic speed governor,ECU:Electronic Control Unit;

2.All ratings are in accordance to 1806528.1803046 and 835514; 3.All ratings are under confidence014.1800/Heging power factor(0.8),3-phase, 4-wire(For more information such as HV genesis,please consult technical department); 4.Technical data is subject to work test conditions and we reserve the right to amend epoc, and into, without notice and without citigation or labitity

	4		(	Dutput		Diese	Diesel Gensets Specification Date Specification						
NO.	Genset Model	Prime (kW)	Prime (kva)	Standby (kW)	Standby (kva)	Engine Model	Gov.	суі.	Bore/Stroke (mmxmm)	Displace (L)	Cons.(L/H)	LxWxdH (mm)	Weight {kg}
1	SDG9P	73	9.1	8	10	403D-11G	M	3L	77/81	1.131	2	1130x500x720	320
2	5DG13P	10	12.5	11	14	403D-15G	M	3L	84/90	1,496	5.5	1230x500x720	360
3	SDG20P	16	20	18	23	404D-22G	м	4L	84/100	2,216	4	1330x500x750	450
4	5DG26P	20	25	22	28	404D-22TG	E	4L	84/100	2,216	5	1360x630x750	620
5	SDG30P	24	30	26	33	1103A-33G	м	3L	105/127	3.300	5.4	1490x680x1090	636
6	SDG45P	36	45	40	50	1103A-33TG1	M	3L	105/127	3.300	8.2	1600x680x1090	720
7	SDG60P	48	60	53	55	1103A-33TG2	м	3L	105/127	3.300	10,4	1720x660x1100	757
8	SDG65P	52	65	57	71	1104A-44TG1	M	4L	105/127	4,400	11.2	1900x700x1200	860
9	SDG80P	64	60	70	88	1104A-44TG2	м	4L	105/127	4,400	14	1900x700x1200	875
10	SDG100P	80	100	88	110	1104C-44TAG2	E	4L	105/127	4.400	17.1	1980x700x1200	918
11	SDG136P	108	136	119	149	1006TAG	Е	6L	100/127	5.990	24.1	2140x780x1290	1100
12	SDG150P	120	150	132	165	1006TAG2	E	6L	100/127	5.990	31	2170x780x1290	1275
13	SDG185P	144	180	158	198	1106C-E66TAG4	ECM	6L	105/127	6.600	31	2280x780x1320	1310
14	SDG200P	160	200	176	220	1306C-E87TAG3	ECM	6L	116.6/135.9	8.700	37	2450x915x1620	1480
15	SDG230P	184	230	202	253	1306C-E87TAG4	ECM	6L	116.6/135.9	8,700	39	2600x950x1620	1584
16	SDG250P	200	250	220	275	1306C-E87TAG6	ECM	6L	116.6/135.9	8.700	43	2600x950x1620	1590
17	SDG350P	280	350	308	385	2206A-E13TAG2	ECM	6L	130/157	12.500	54	3100x1120x1725	2440
18	SDG400P	320	400	352	440	2206A-E13TAG3	ECM	6L	130/157	12.500	62	3100x1120x1720	2440
19	SDG460P	368	460	400	500	2506A-E15TAG1	ECM	6L	135//171	15,200	72	3280x1150x1918	3120
20	SDG500P	400	500	440	550	2506A-E15TAG2	ECM	6L	137/171	15,200	76	3300x1150x1918	3190
21	SDG600P	480	600	528	660	2806A-E18TAG1A	ECM	6L	145/183	18.130	90	3300x1500x1900	4400
22	SDG650P	520	650	572	715	2806A-E18TAG2	ECM	6L	145/183	18.130	97	3650x1500x1900	4690
23	SDG750P	600	750	660	825	4006-23TAG2A	E	6L	160/190	22,921	122	4200x1720x2210	4900
24	SDGB00P	640	800	704	880	4006-23TAG3A	E	6L	160/190	22.921	130	4250x1720x2210	5120
25	SDG900P	720	900	800	1000	4008TAG1A	Е	8L	160/190	30.561	143	4950x2050x2460	6900
26	SDG1022P	818	1022	899	1124	4008TAG2A	E	8L	160/190	30.561	163	5100x2050x2460	7025
27	SDG1250P	1000	1250	1100	1375	4012-46TWG2A	Е	12V	160/190	45,482	196	4880x1990x2350	8980
28	5DG1364P	1091	1364	1200	1500	4012-46TWG3A	E	12V	160/190	45.482	212	4880x1990x2506	9630
29	SDG1505P	1204	1505	1324	1655	4012-46TAG2A	E	12∀	160/190	45.842	237	5150x2112x2560	10180
30	SDG1705P	1364	1705	1500	1875	4012-46TAG3A	E	127	160/190	45.842	275	5340x2180x2925	10740
31	SDG1850P	1480	1850	1628	2035	4016TAG1A	Е	16V	160/190	61,123	277	6630x2780x3360	12300
32	SDG2058P	1646	2058	1811	2264	4016TAG2A	E	16V	160/190	61.123	316	6800x2780x3360	12500
33	SDG2250P	1800	2250	1980	2475	4016-61TRG3A	E	16V	160/190	61.123	346	6830x2780x3360	12800

1.M:Machanical speed governor,E:Electronic speed governor,ECU:Electronic Control Unit;

2.All ratings are in accordance to ISO8528.ISO3046 and BS5514;

3.Ail ratings are under condition: 50Hz,1500r/min.400V.legging power factor(0.8),3-phase, 4-wire(For more information such as HV genesats,please consult technical department); 4. Technical data is subject to work tost conditions and we resorve the right to amend apoc. and into, without notice and without obligation or liability

### **OPEN TYPE DIESEL GENERATING SET POWERED BY MTU**

# FIRMAN

# SOUNDPROOF DIESEL GENERATING SET

MTU, as the diesel engine propulsion system Division of Benz-Chister, is the world's top manufacturer of overloaded diesel engines. Its products are widely used in railway vehicles, off-road vehicles, marine vessels and power plants, including non-stop backup power plant.

The main products of MTU is overload diesel engines with the power range from 35kw to 7400kw, gas turbine engines, electronic management system of generators, electronic monitoring system and overload transmission. These products are manufactured with the quality standard of MTU and can provide high grade and efficient service with worldwide service network of SUMEC and MTU.

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				Output		Die	sel Gens	iets Spi	ecification Data	Specificatio	m	Dimension&Weight		
NO.	Genset Model	Prime (KW)	Prime (kVA)	Standby (KW)	Standby (kVA)	Engine Model	Gov.	Cyl.	Bore/Stroke (mmxmm)	Displace (L)	Cons.(L/H)	LxWxH (mm)	Weight (log)	
1	SDG250M	200	250	220	275	6R1600G10F	E	6L	122/150	10.5	38.76462387	2800°1150°1650	2500	
2	SDG280M	224	280	248	310	6R1600G20F	E	6L	122/150	10.5	55.73953488	2900°1150°1650	2620	
3	5DG350M	280	350	308	385	8V1600G10F	E	6V	122/150	14	70.65116279	2980°1350°1760	3450	
4	SDG380M	304	380	336	420	8V1600G20F	E	8V	122/150	14	68.57674419	3040*1350*1760	3580	
5	SDG440M	352	440	387	484	10V1600G10F	E	10V	122/150	17.5	80.63255814	3220°1350°1850	3880	
6	SDG500M	400	500	440	550	10V1600G20F	E	10V	122/150	17.5	88,8372093	3320°1350°1850	4000	
7	SDG580M	464	580	510	638	12V1600G10F	E	12V	122/150	21	106.2883721	3500°1580°1850	4350	
8	SDG650M	520	650	572	715	12V1600G20F	E	12V	122/150	21	116.0930233	3930°1580°2080	4890	
9	SDG650M	520	650	572	715	12V2000G25	E	12V	130/150	23.88	124.5581395	4500°2100°2080	4900	
10	SDG800M	640	800	704	880	12V2000G65	E	12V	130/150	23.88	151.0697674	4500°2100°2080	5350	
11	SDG938M	750	938	825	1031	16V2000G25	E	16V	130/150	31.84	172.6744186	4500°2100°2080	6210	
12	5DG1025M	820	1025	902	1128	16V2000G65	E	16V	130/150	31.84	186.8837209	4500°2100°2080	6580	
13	5DG1135M	908	1135	1000	1250	18V2000G65	E	18V	130/150	35.82	211.1627907	4600°2100°2300	7090	
14	5DG1250M	1000	1250	1100	1375	12V4000G21R	E	12∀	170/210	57.2	226.744186	3960*1835*2260	7680	
15	5DG1400M	1120	1400	1232	1540	12V4000G23R	E	12V	170/210	57.2	272.0930233	3960°1835°2260	11760	
16	SDG1650M	1320	1650	1452	1815	12/4000523	E	12V	170/210	57.2	299.3023256	3960*1835*2260	11760	
17	SDG1875M	1500	1875	1650	2063	12V4000G63	E	12∀	170/210	57,2	338.372093	3980°1845°2270	12035	
18	SDG2063M	1650	2063	1815	2269	16V4000G23	E	16V	170/210	76.3	374.127907	4790*1845*2270	12560	
19	SDG2275M	1820	2275	2002	2503	16V4000G63	E	16V	170/210	76.3	408.4418605	5450°1845°2560	13400	
20	SDG2500M	2000	2500	2200	2750	20V4000G23	E	20V	170/210	95.4	462.7906977	5650*1900*2650	15890	
21	SDG2750M	2200	2750	2420	3025	20V4000G63	E	20V	170/210	95.4	503.9534884	5700*1950*2700	16400	
22	SDG3000M	2400	3000	2640	3300	20V4000G63L	E	20V	170/210	95.4	549.7674419	5750°1980°2750	16910	

1.M:Mechanical speed governor,E:Electronic speed governor,ECU:Electronic Control Unit;

2.All ratings are in accordance to ISO8528, ISO3046 and BS5514;

All nitings are under condition: 50Hz, 1500/min.400V.legging power fector(0.8),3-phase, 4-wire(For more information such as HV geneets,plasse consult tachnical department); 4.Technical data is subject to work test conditions and we reserve the right to amend spec. and into. without notice and without obligation or liability

	4		(	Output		D	lesel Gen	sets Spe	dification Date :	Specification		Dimension
NO.	Genset Model	Príme (KW)	Prime (kVA)	Standby (KW)	Standby (kVA)	Engine Model	Gov.	Cyl.	Bore/Stroke (mmxmm)	Displace (L)	Cons.(L/H)	LxWxH (mm)
1	SDG250MS	200	250	220	275	6R1600G10F	E	6L	122/150	10.5	38.76462387	
2	SDG280MS	224	280	248	310	6R1600G20F	E	6L	122/150	10.5	55.73953488	
3	SDG350MS	280	350	308	385	8V1600G10F	E	8V	122/150	14	70.65116279	
4	SDG380MS	304	380	336	420	8V1600G20F	E	84	122/150	14	68.57674419	ТВА
5	SDG440MS	352	440	387	484	10V1600G10F	E	10V	122/150	17.5	80.63255814	IDA
6	SDG500MS	400	500	440	550	10V1600G20F	E	10V	122/150	17.5	88.8372093	
7	SDG580MS	464	580	510	638	12V1600G10F	E	12V	122/150	21	106.2883721	
8	SDG650M5	520	650	572	715	12V1600G20F	E	12V	122/150	21	116.0930233	
9	SDG6S0M5	520	650	572	715	12V2000G25	E	12V	130/150	23.88	124.5581395	6058°2438°2590
10	SDG800M5	640	800	704	880	12V2000G65	E	12V	130/150	23.88	151.0697674	6058°2438°2590
11	SDG938MS	750	938	825	1031	16V2000G25	E	16V	130/150	31.84	172.6744186	6058*2438*2590
12	SDG1025MS	820	1025	902	1128	16V2000G65	E	16V	130/150	31.84	186.8837209	6058*2438*2590
13	SDG1135M5	908	1135	1000	1250	18V2000G65	E	16V	130/150	35,82	211.1627907	12192*2438*289
14	SDG1250M5	1000	1250	1100	1375	12V4000G21R	E	12V	170/210	57.2	226,744186	12192*2438*289
15	SDG1400MS	1120	1400	1232	1540	12V4000G23R	E	12V	170/210	57.2	272.0930233	12192*2438*289
16	SDG1650MS	1320	1650	1452	1815	12V4000G23	E	12V	170/210	57.2	299.3023256	12192*2438*289
17	SDG1875MS	1500	1875	1650	2063	12V4000G63	E	127	170/210	57.2	338.372093	12192*2438*289
18	SDG2063MS	1650	2063	1815	2269	16V4000G23	E	16V	170/210	76.3	374.127907	12192*2438*289
19	SDG2275MS	1820	2275	2002	2503	16V4000G63	E	16V	170/210	76.3	408.4418605	12192*2438*289
20	5DG2500MS	2000	2500	2200	2750	20V4000G23	Е	20V	170/210	95.4	462.7906977	
21	SDG2750MS	2200	2750	2420	3025	20V4000G63	Е	20V	170/210	95.4	503.9534884	NA
22	SDG3000MS	2400	3000	2640	3300	20V4000G63L	E	20V	170/210	95.4	549,7674419	

1.M:Mechanical speed governor,E:Electronic speed governor,ECU:Electronic Control Unit; 2.All ratings are in accordance to ISO8528,ISO3046 and BS5514;

3.4. Instance are under condition-60Hz1,800/r/imi,480V.igging wer factor(0.8),3-phase, 4-wire(For more information such as HV geneate,piezee consult technical department); 4. Technical data is subject to work test conditions and we reserve the right to amend spac, and info, without notice and without obligation or liability

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				Output			Diesel	Gensel	s Specification	Date Specifi	cation		Dimension#Weight		
NQ.	Genset Model	Prime (KW)	Prime (kVA)	Standby (KW)	Standby (kVA)	Engine Model	Gov.	Cyl.	Bore/Stroke (mmmm)	Displace (L)	Cons.(L/H)	Nolse Level (dB(A)@7m)	LxWxH (mm)	Weight (kg)	
1	SDG25DCS	20	25	22	28	483.9-G1	M	4L	102/120	3.9	5.2	71	2330*1080*1550	1200	
2	SDG40DCS	32	40	35	44	48T3.9-G1	E	4L	102/120	3.9	7.3	71.8	2330*1080*1550	1310	
3	SDG55DCS	44	55	48	60	48TA3.9-G2	м	4L	102/120	3.9	10	72	2330°1080°1550	1350	
4	SDG100DCS	80	100	88	110	68T5.9-G1	E	4L	102/120	5.9	16.1	73.5	2920*1140*1600	1480	
5	SDG110DCS	96	120	106	132	68TA5.9-G2	Е	4L	102/120	5.9	21.1	74	2920°1140°1600	1480	
6	SDG135DC5	108	135	120	150	6BTAA5.9-G2	M	6L	102/120	5.9	23	74.6	2920*1140*1600	1480	
7	SDG180DCS	144	180	158	198	6CTA8.3-G2	E	6L	114/135	8.3	31	74.8	3520°1330°1850	2350	
8	SDG200DCS	160	200	176	220	6CTAA8.3-G2	E	6L	114/135	8.3	34	75.3	3520°1330°1850	2490	
9	SDG250DCS	200	250	220	275	6LTAA8.9-G2	Е	6L	114/145	8.9	39	76.6	3520*1330*1850	2990	
10	SDG300CCS	220	275	242	303	NTA855-G1A	Е	6L	140/152	14	47	77.6	4820*1380*2350	3600	
11	SDG325CCS	250	313	275	344	MTAA11-G3	E	6L	125/147	10.8	44.8	78.2	4820°1380°2350	3650	
12	SDG350CCS	275	344	303	379	NTA855-G2A	Е	6L	140/152	14	58	78.8	4820*1380*2350	3700	
13	SDG380CCS	300	375	330	413	NTAA855-G7	Е	6L	140/152	14		79.4	4820*1380*2350	4950	
14	SDG450CCS	360	450	396	495	KTA19-G3	E	6L	159/159	18.9	73	82.4	5120*1830*2350	4980	
15	SDG500CCS	400	500	440	550	KTA19-G4	Е	6L	159/159	18.9	82	82.B	5120*1830*2350	5020	
16	SDG550CCS	420	525	462	578	KTAA19-G5	E	6L	159/159	18.9	91	83	5120*1830*2350	5750	
17	SDG625CCS	500	625	550	688	KTAA19-G6A	E	6L	159/159	37.8	100	83.3	5120*1830*2350	5750	

1.M:Mechanical speed governor,E:Electronic speed governor,ECU/Electronic Control Unit;

2.All ratings are in accordance to ISO6528,ISO3046 and BS5514;

3.41 mings are under condition:50/bt;1500/min,400/legging power flotor(0.8)3-phase, 4-why/For more information such as HV geneta,pieses consult technical department); 4.Technical data is subject to work test conditions and we meaners the right to amend spac. and info. without notice and without obligation or liability

				Output		Dk	esel Gense	ets Speci	fication Date Sp	ecification		Dimension&Weight	
	Genset Model	Prime (KW)	Prime (kVA)	Standby (KW)	Standby (kVA)	Engine Model	Gov.	Cyl.	Bore/Stroke (mmxmm)	Displace (L)	Noise Level (dB(A)@7m)	LxWxH (mm)	Weigh (kg)
1	SDG28DCS	23	28	25	31	483.9-G2	E	4L	102/120	3.9	71	2330#1080#1550	1200
2	SDG43DCS	35	43	38	48	48T3.9-G2	E	4L	102/120	3.9	71	2330*1080*1550	1310
3	SDG68DCS	55	68	60	75	48TA3.9-G2	E	4L	102/120	3.9	71	2330*1080*1550	1350
4	SDG114DCS	91	114	100	125	68T5.9-G2	E	4L	102/120	5.9	71.5	2920*1140*1600	1480
5	SDG138DCS	110	138	121	152	6BTAA5.9-G2	E	6L	102/120	5.9	71.5	2920*1140*1600	1460
6	SDG199DCS	160	200	176	220	6CTA8.3-G2	F	6L	114/135	8.3	72	3530#1340#1850	2350
7	SDG227DCS	182	227	200	250	6CTAA8.3-G2	E	6L	114/135	8.3	72	3530*1340*1850	2490
8	SDG275DCS	220	275	275	303	6LTAA8.9-G2	Ē	6L	114/145	8.9	72	3530*1340*1850	2990
9	SDG275CCS	220	275	275	303	NTA855-G1	_	6L	140/152	14	72.5	4280*1420*2150	3600
10	SDG350CCS	280	350	308	385	NTA855-G1B	E	6L	140/152	14	72.5	4280*1420*2150	3650
11	SDG398CCS	320	400	352	440	NTA855-G3	E	6L	140/152	14	72.5	4280*1420*2150	3700
12	SDG438CCS	350	438	385	481	KTA19-G2	E	6L	159/159	18.9	73	4580*1620*2340	4950
13	SDG513CCS	410	513	451	565	KTA19-G3	E	6L	159/159	18.9	73	4580*1620*2340	4950
14	SDG563CCS	450	563	500	620	KTA19-G4	E	6L	159/159	18.9	73	4580#1620#2341	4950
15	SDG625CCS	500	625	550	688	KTAA19-G5	E	6L	159/159	18.9	74	4680*1620*2390	5020

1.M:Machanical speed governor,E:Electronic speed governor,ECU:Electronic Control Unit;

2.All ratings are in accordance to ISO5528,ISO3046 and BS5514;

A.1 mitings are under conditions (GHz1300/pinin (800/legging power futor(0.8),3-phase, 4-wire(For more information such as HV geneets,piesse consult technical department); 4.Technical data is subject to work test conditions and we reserve the right to amend spac, and hito, without notice and without obligation or liability

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Cummins has distributors in 137 countries and regions, 5000 service networks spread all over the world. As largest foreign investor of Chinese enigne manufacturing industry, Cummins own Chongqing Cummins facility/producing M,N and K series diesel engine) and Dongfeng Cummins facility/producing B,C and L series diesel engine).

This series provides qualified and afficient service to customer through SUMEC and Cummins worldwide service network,

	-		Du	tput		Diesel Ger	nsets Speci	fication D	ate Specification		Dimension	/elght
NO.	Genset Model	Prime (KW)	Prime (KVA)	Standby (KW)	Standby (kVA)	Engine Model	Gov.	Cyl.	Bore/Stroke (mmxmm)	Displace {L)	LxWXdH (mm)	Weigh (kg)
1	SDG28DC	23	28	25	31	483.9-G2	E	4L	102/120	3.9	1650x720x1440	700
2	SDG43DC	35	43	38	48	48T3.9-G2	E	4L	102/120	3.9	1650x720x1440	790
3	SDG68DC	55	69	60	75	48TA3.9-G2	E	4L	102/120	3.9	1750x820x1350	690
4	SDG114DC	91	114	100	125	66T5.9-G2	E	4L	102/120	5.9	2300x850x1500	1000
5	SDG138DC	110	138	121	152	6BTAA5.9-G2	Е	6L	102/120	5.9	2450x850x1500	1200
6	SDG200DC	160	200	176	220	6CTA8.3-G2	E	6L	114/135	8.3	2400x810x1500	1600
7	5DG227DC	182	227	200	250	6CTAA8.3-G2	E	6L	114/135	8.3	2470x960x1500	1850
8	SDG275DC	220	275	275	BOB	6LTAA8.9-G2	E	6L	114/145	8.9	2750x1120x1550	2000
9	SDG275CC	220	275	275	303	NTA855-G1	Е	6L	140/152	14	2910x1120x1740	2100
10	SDG350CC	280	350	308	385	NTA855-G1B	E	6L	140/152	14	2950x1150x1770	2200
11	5DG400CC	320	400	352	440	NTA855-G3	E	6L	140/152	14	2950x1150x1710	2650
12	SDG438CC	350	438	385	481	KTA19-G2	E	6L	159/159	18.9	3150x1150x1750	2800
13	SDG513CC	410	513	451	565	KTA19-G3	Е	6L	159/159	18.9	3250x1270x1950	3500
14	SDG563CC	450	563	500	620	KTA19-G4	E	6L	159/159	18.9	3250x1270x1950	3600
15	SDG62SCC	500	625	550	688	KTAA19-GS	E	6L	159/159	18.9	3540x1280x2000	4000
16	SDG775CC	620	775	682	880	KT38-G	E	6L	159/159	37.8	3700x1545x2000	4300
17	SDG925CC	740	925	814	1018	KTA38-G2	Е	12V	159/159	38	4450x1500x2280	5850
18	5DG1000CC	800	1000	880	1100	KTA38-G2A	E	12V	159/159	38	4520x1600x2280	7200
19	SDG1125CC	900	1125	1000	1238	KTA38-G4	E	12V	159/159	37.8	4650x1840x2380	7800
20	SDG1250CC	-	-	1100	1375	KTA38-G9	E	12V	159/159	37.5	4850x2000x2590	8500
21	5DG1438C	1150	1438	1265	1581	KTA50-G3	Е	16V	159/159	50.3	5100x2070x2590	1000
22	SDG1563C	1250	1563	1500	1875	KTA50-G9	E	16V	159/159	50.3	5100x2070x2590	1100

1.M:Mechanical speed governor,E:Electronic speed governor,ECU:Electronic Control Unit;

2.All ratings are in accordance to ISO8528.ISO3046 and BS5514;

3.All ratings are under conditionsGHL1800r/min.480V.lagging power factor(0.8).3-phase, 4-wire(For more information such as HV genetic.piesas consult technical department); 4.Technical data is subject to work test conditions and we reserve the right to amend spac. and into. without notice and without obligation or liability

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			Outp	out		Dies	el Gensets	Specific	ation Date Spec	fication		Dimension&Weight		
NO.	Genset Model	Prime (KW)	Prime (KVA)	Standby (KW)	Standby (ICVA)	Engine Model	Gov.	Cyl.	Bore/Stroke (mmxmm)	Displace (L)	Cons.(L/H)	LxWxH (mm)	Weight (kg)	
1	SDG25DC	20	25	22	28	483.9-G1		4L	102/120	3.9	5.2	1650x720x1440	700	
2	SDG40DC	32	40	35	44	48T3.9-G1	E	4L	102/120	3.9	7.3	1650x720x1440	790	
3	SDG55DC	44	55	48	60	48TA3.9-G2	м	41.	102/120	3.9	10	1750x820x1350	890	
4	SDG100DC	80	100	88	110	68T5.9-G1	E	4L	102/120	5.9	16.1	2300x850x1500	1000	
5	SDG120DC	96	120	106	132	68TA5.9-G2	E	41.	102/120	5.9	21.1	2300x850x1500	1000	
6	SDG13SDC	106	135	120	150	68TAA5.9-G2	м	6L	102/120	5.9	23	2450x850x1500	1200	
7	\$DG180DC	144	180	158	198	6CTA8.3-G2	E	6L	114/135	8.3	31	2400x810x1500	1600	
8	SDG200DC	160	200	176	220	6CTAA8.3-G2	E	6L	114/135	8.3	34	2470x960x1500	1850	
9	SDG250DC	200	250	220	275	6LTAA8.9-G2	E	6L	114/145	8.9	39	2750x1120x1550	2000	
10	SDG275CC	220	275	242	303	NTA855-G1A	E	6L	140/152	14	47	2910x1120x1740	2100	
11	SDG313CC	250	313	275	344	MTAA11-G3	E	6L	125/147	10.8	44.8	2950x1150x1570	2200	
12	SDG344CC	275	344	303	379	NTA855-G2A	E	6L	140/152	14	58	2950x1150x1710	2650	
13	SDG375CC	300	375	330	413	NTAA855-G7	E	6L	140/152	14	74.4	3150x1150x1750	2800	
14	SDG4S0CC	360	450	396	495	KTA19-G3	E	6L	159/159	18.9	73	3250x1270x1950	3500	
15	SDG500CC	400	500	440	550	KTA19-G4	E	6L	159/159	18.9	82	3250x1270x1950	3800	
16	SDG525CC	420	525	462	578	KTAA19-G5	E	6L	159/159	18.9	91	3540x1280x2000	4000	
17	SDG625CC	500	625	550	688	KTAA19-G6A	E	6L	159/159	37.8	100	3700x1545x2000	4300	
18	SDG7S0CC	600	750	660	825	KTA38-G2	E	12V	159/159	38	128	4450x1600x2280	6850	
19	SDG800CC	640	800	704	880	KTA38-G2B	E	12V	159/159	37.B	132	4520x1600x2280	7100	
20	SDG910CC	728	910	800	1000	KTA38-G2A	E	12V	159/159	38	147	4520x1600x2280	7200	
21	SDG1000CC	800	1000	880	1100	KTA38-G5	E	12V	159/159	37.8	161	4650x1840x2380	7800	
22	SDG1125CC	900	1125	1000	1250	KTA38-G9	E	12V	159/159	37.5	196	4850x2000x2590	8500	
23	SDG1250CC	1000	1250	1100	1375	KTA50-G3	E	16V	159/159	50.3	199	5100x2070x2590	10000	
24	SDG1375CC	1100	1375	1210	1513	KTA50-G8	E	16V	159/159	50.3	218	5300x2210x2590	10550	
25	SDG1500CC	1200	1500	1320	1650	KTA50-GS8	E	16V	159/159	50.3	238	5300x2210x2590	10550	
26	SDG500C	400	500	440	550	QSX15G8	E	6L	137/169	15	78.7	3250x1270x1950	3800	
27	SDG625C	500	625	550	688	VTA28G5	E	12V	140/152	28	104	3700x1545x2000	4300	
28	SDG750C	600	750	660	825	VTA28G6	E	12V	140/152	28	133	4450x1600x2280	6850	
29	SDG813C	650	813	715	894	Q5K23G3	E	6L	170/170	23	121	4520x1600x2280	7100	
30	SDG900C	720	900	800	1000	QST30G3	E	12V	140/165	30.4	140	4520x1600x2280	7200	
31	SDG1000C	800	1000	980	1100	QST30G4	E	12V	140/165	30,4	151	4650x1840x2380	7800	
32	SDG1250C	1000	1250	1100	1375	KTA50G3	E	16V	159/159	50.3	199	4850x2000x2590	8500	
33	SDG1500C	1200	1500	1320	1650	KTA50GS8	E	16V	159/159	50.3	238	5300x2210x2590	10550	
34	SDG1875C	1500	1875	1650	2063	QSK60-G3	E	16V	159/190	60.2	270	6000x2400x2600	15000	
35	SDG2080C	1664	2080	1830	2288	QSK60-G4	E	16V	159/190	60.2	291	6000x2400x2600	15210	

1.M:Mechanical speed governor,E:Electronic speed governor,ECU:Electronic Control Unit; 2.All retings are in accordance to ISO8528,ISO3046 and BS5514;

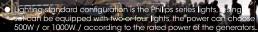
All ninks are under conditions (DHz.1300/hm.400/legging power fictor(1.8),3-phase, 4-wingFor more information such as HV genetactieses consult technical department): 4.Technical date is subject to work test conditions and we resurve the right to amend space and info. without notice and without obligation or liability

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#### LIGHTING TOWER

- Equipped with the SUMEC series diesel generators as generating power, the power quality is stable and reliable;
- Generator models, light pole models and lighting models can be equipped with, it is applicability.
- Diesel Generators can equip with SDG2500 series, SDG3500 series and SDG5000 series of open type or silent type generators, the power range is wide and the use of the environment is flexible.
- Pole height can equip with standard configuration of 2.7 m, 3.2 m, 4 m, 5.5 m type, and can be customized a variety of lengthened light pole according to specific customer use of the environment.





- For the high-end configuration customers, it can use two 50W-LED lighting, LED lighting is energy saving, longevity, low heat, strong vibration resistance. The energy-saving effect can be more than 70%; it can be adapted to any optional power segment unit, and can effectively develop the power output of the power supply.
- The chute-type motor can suppress harmonics effectively, low distortion rate, good lighting effects.
- The user-friendly design, simple structure, removable packaging, light poles can be lie down to place when it is not in use, easy to transport and storage.



- Lift system uses a pneumatic system, easy to use, beautiful appearance, safe and reliable.
- Electrical circuits' design of light poles and lighting systems is individually, it can be used alone or with the mains.
- Chassis design is firm, strong wind resistance.
- Equipped with large-diameter directional and universal casters, transportation is convenient.
- Removable telescopic arm increases the lighting car resistance to wind.

	EVOCOT.	_	DIFCEL	CONTRACTOR COT
POWER SOLUTION	EXPERT		DIESEL	GENERALING SEL

SDG5LT	
Generator set model	SDG5000SE
Rated Frequency(Hz)	50
Rated Voltage(V)	220
Rated Power(KW)	4.2
Max.Power(KW)	4.6
Fuel consumption(g/KW-h)	≦275.I
Fuel tank capacity(L)	16
Lamp power(W)-No.of lamp	1000-4
Tatal power of the lamps(W)	4000
Luminous fux(Im)	440000
Mast	3 stages lifting mast
Lift limiting of the mast(mm)	5500
Inclination	10 degrees
Windproof ability	6-8 grade

#### **VERTICAL MAST ALLOWS:**

SINGLE MOVEMENT TO RAISE AND LOWER MAST IN SECONDS

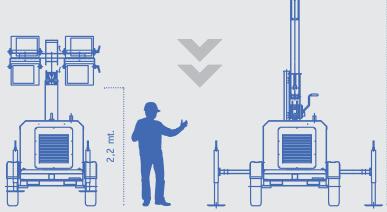


EASIER TO ADJUST LIGHT DIRECTION

CONSIDERABLY LESS STRAIN ON CABLES

VERTICAL MAST REDUCES DRASTICALLY THE LIGHT TOWER DIMENSIONS

**BIG SAVING IN TERMS OF** TRANSPORT COSTS FOR MOVING THE LIGHT TOWERS



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#### **LIGHTING TOWER**



#### Best illuminating Solution!

SDG9PLT lighting tower consists of a generator set, a telescopic mast, a lighting kit and a trailer. The generator set is featured by large access door for convenient maintenance and large fuel tank for long time work. The telescopic mast can reach 8.5 meters' height at maximum with strong wind resistant performance, and can rotate 360 degree, allowing illumination in all directions. And the trailer makes the machine easy to move. The machine is designed compact and easy to use. It can meet requirements of various applications.







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	Model	SDG80LTF	SDG80LTP		
	Frequency	50Hz	50Hz		
	Model	380 (FIRMAN Engine)	PERKINS, 403D-11G or other		
	Туре	Diesel	Diesel		
e	Number of cylinders	3	3		
Engine	Power output	14.96kw	13.32kw		
ш	Displacement	1.318L	1.131L		
	Cooling	Water cooled	Water cooled		
	Engine shut protection	Low oil pressure	Low oil pressure		
	Engine speed	1500rpm	1500rpm		
	Manual telescopic mast w	ith safety block, carrying	four metal halide spotlights		
	Watts per lamp	1000	1000		
	Lumens per lamp	90000	90000		
	Total watts	4000	4000		
Mast	Total lumens	360000	360000		
2	Manual mast rotation	360°	360°		
	Raise mast to height	Manual	Manual		
	Lower mast to travel position	Manual	Manual		
	Working temperature	-20°C to 50°C	-20 °C to 50 °C		
	Туре	Diesel	Diesel		
Fuel	Fuel tank capacity	100L	100L		
Ŀ	Fuel consumption	1.47L/h	1.47L/h		
	Running time for full tank	68hrs	68hrs		
e	Total Voltage	230V	230V		
Voltage	Sockets 230V	1x16amps	1x16amps		
Š	Maximum output	7.4kVA	7.4kVA		
L.	Number of axles	1	I		
Trailer	Tire size	13	13		
F	Hintch	Combo - 2" ball h	intch & 2.5" pintle ring		
¥	Max. height of tower	9.14meter	9.14meter		
Size & Weight	Length with mast stowed	4.32meter	4.32meter		
>	Width	0.9meter	0.9meter		
ze	Width with outriggers	2.44meter	2.44meter		
S	Dry weight	740kg	740kg		

#### Stable Performance and Safety

The generator set of the lighting tower is powered by Perkins engine and coupled with Stamford alternator. The superior performance of the generator set ensures stable and reliable lighting. The audible warning system equipped with the lighting tower will be activated when the mast is being rised or lowered so as to make the operators and people nearby keep in safety distance.

#### Energy–efficient Metal halide Lamps

Metal halide lamp can provide enough brightness with little energy, which is one of the most efficient ways to convert electrical energy into light. Compared with other lamps, their light is closer to natural light. Featured by longer service life, compact structrure and lower energy consumption, it is widely used in various industries.



POWER SOLUTION EXPERT • DIESEL GENERATING SET

# WELDER GENERATOR



**LIGHTING TOWER** 

- 9m mast, extends to full height and provides 360,000 lumens for all night working
- Mast rotates 360° providing light wherever it's required, with four stabilizing legs for safe working on uneven ground
- Heavy-duty and road-towable for maximum transportability, with integrated road signal light
- Soundproof generating set
- Fork pockets and single point lift for easy loading and off-loading
- Large, removable doors and external fuel filling point provide good service and refueling access

Genset	SDG9FS-LT	SDG13FS-LT		
Maximum power[LTP](KW)	8	11		
Continuous poer[COP](KW)	7.2	10		
Rating voltage(V)	230	230		
Frequescy/Speed/coso(Hz/rpm)	50/1500/1	50/1500/1		
Phase	1	1		
Rating current(A)	31.3	43		
Sound Level(4m)dB(A)	76	76		
Dry weight(kg)	1120	1200		
Engine				
Engine manufacturer	FIRMAN	FIRMAN		
Model	FD380DY	FD480DY		
Cylinder No.	3	4		
Bore*Stroke(mm)	80*90	80*90		
Compression ratio	18:1	18:1		
Displacement(L)	1.357	1.809		
Coolant capacity	4	6.5		
Light mest&Light				
Total height(m)	9	9		
Rotary table	360"	360°		
Power&Qty	1000W*4	1000W*4		
Luminous Flux(Lm)	110000	110000		
Lamp votage(V)	263	263		
Protection grade	IP65	IP65		
Avg .Life(Hr)	3000	3000		
Wind-resistance	8 grade (20m/s)	8 grade (20m/s)		



#### Specification: DONGFENG CUMMINS 4BT3.9G1 ENGINE + FIRMAN ALTERNATOR

- 1. New design concept: welding machine joint with generator-smaller, bigger current and more stably.
- FIRMAN welder is SMAW(shielded metal arc welding)machine, with high-performance, which can also joint special welder to satisfy different welding environment(gas shielded welding etc.).
- 3. FIRMAN welding machine max current is 400A, which can be up to 500A max as request.
- Imported internal plastic terminal block can meet higher vibration, and maintain more easier.
- FIRMAN welding machine equipped with standard 40KVA(32KW) generator, which can be used for generating and welding. While welding use, it also
  can load lamp and small electric tool too and output 32kw without welding use.
- 6. FIRMAN welding machine can be driven by 1500rpm power, which is less fuel consumption, longer lifetime, higher safety, lower noise than 3000rpm machine.
- 7. Module in control cabinet is more optimal design, more reliable performance, smaller space and easier to operating.
- 8. Swing-up door design is easy to maintenance.



# FIRMAN welding machine can be installed on the trailer, which performance is as follows:

- Underframe of trailer is equipped with torsion bar damper, which can reach good damping effect while machine running.
- 2. Lower underpan can reach higher stability.
- 3. The optional cable holst and industrial plug is easy to use at site.
- 4. The optional hydraulic type or manual supporter is more stable while stopping use
- 5. Conformance to export standard.

	Connet	Output Diesel Gensets Specification and Date Sheet							Dimension & We	eight			
No.	Genset Model	Prime (KW)	Prime (kVA)	Standby (KW)	Standby (kVA)	Engine Model	Gov.	Cyl.	Bore/Stroke (mm/mm)	Displace	Fuel Cons. (g/Kw.h)/(L/h)	LXWXH (mm)	Weight (kg)
1	SDW400DCT	32	40	35	44	48T3.9-G1	M	4	102 x 120	3.9	252/2.6	3220*1340*2040	1350

#### **ALTERNATOR**





#### What advantage of alternator

#### used on FIRMAN Diesel Generating Set?

- 4 pole, brushless, self-excited, IP21 or IP23 (can supply higher IP 45 or IP54 on request), Insulation class H, temperature resistance 180°C. Providing enough guarantee for FIRMAN diesel Genet running in harsh environment
- . The windings have a 2/3 pitch in order to reduce the harmonic content by elimination of 3rd order current harmonics reduce overall voltage distortion levels
- · Rotors are balance tested before installation. The damper cage can help reduce voltage distortion and additional heat under non-linear load conditon:
- The power produced by exciter supplies to the main rotor through a three phase full-wave rectifier. This rectifier is protected by a surge suppressor and prevent the impact damage caused by wrong phase under parallel condition and short circuit condition
- . The voltage accuracy is +1% in static condition with any power factor and with speed variation between -5% and +30% with reference to the rated speed;
- Radio Interference Coefficient TIF <50, Radio harmonic coefficient THF <2%. Brushless device and high quality AVR can ensure superior low radio interference.



#### 10.75KVA-2250KVA

FIRMAN have been awarded Certificate for ISO9001-2000. FIRMAN alternator have meet the GB755, IEC34, BS5000, VDE0530, NEMA, MG1-22, C22.2-100, CSA, AS1359 standards.

Product developed upon digestion and absorption of introduced technologies from European company. Co-develop with world's leading companies from western country follow optimized engineering development process for reliability research and development. In addition, FIRMAN generators are exported far to USA, Canada, South-East of Asia, Europe, The Middle East, Africa, etc.



# mecc alte

#### 7.8KVA-2500KVA

MECC ALTE S.P. A is headquartered in Italy, from its inception in 1947, has been in the generator field 60 years of experience, is the world's four leading generator brands. In the generator industry has been among the world leading level, the company has always focused on generating technology implementation and development, manufacturing and application. The product has CE and CSA certificate. Production base locate in the UK, India and China. Marine generators have passed the British Lloyd's (Lloyds), Det Norske Veritas (DNV), the French classification society (Bureau Veritas) American Bureau of Shipping (ABS) and the Italian classification society (RINA) recognition.

#### STAMFORD

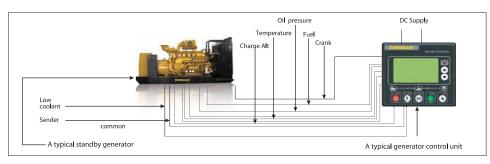
#### 7.5KVA-2200KVA

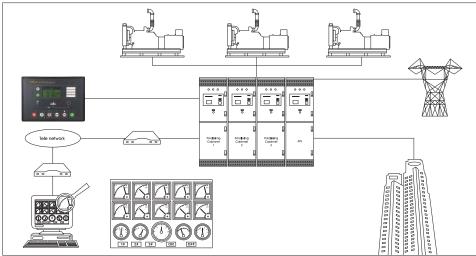
Stamford AC 4 pole 12.5KVA-2200KVA generator share more than 30% of the world's market. Manufactories locate in the United Kingdom. India, the United States, Indonesia and Wuxi in China. Stamford AC generator is the international standard ISO9001 requirements and it also completed by a variety of internationally recognized standard.

#### **ADVANCED INTELLIGENT CONTROL SYSTEM**

FI MAN series genset controllers integrate digiti ation, intelligenti ation and network technology which are used for genset automation and monitor control system of single unit to achieve automatic start stop, data measurement, alarm protection and three remote (remote control, remote measuring and remote communication It fit with CD display, optional languages interface (Chinese, English, Spanish and ussian), and it is reliable and easy to use. FI MAN series genset controllers adopt micro-processor technology with precision parameters measuring, fixed value ad ustment, time setting and set value ad usting and etc. All parameters can be configured from front panel or through programmable interface (US to IN , S 2 adaptor is recommended) via PC. It can be widely used in all types of automatic genset control system with compact structure, advanced circuits, simple connections and high reliability.









Mainly used for main power and emergency power supply automatic switching, with self-starting up the diesel generator can compose automatic emergency power system, which can automatically switch the load from lighting, security, power supply, fire equipment to the generator. An essential power supply facility for a hospital, banks, telecommunications, airports, stations, hotels, factories and fire equipment.

Mode <b>l</b> No.	Rated Current (A)	Max Generating Set Output (Prime) (KVA,50HZ,230V/400V)	Max Generating Set Output (Prime) (KVA,60HZ,254V/440V)
ATyS M3s-40A/4P	40	25.1	27.7
ATyS M3s-63A/4P	63	39.5	43.6
ATyS M3s-80A/4P	80	50.2	55.4
ATyS M3s-100A/4P	100	62.7	69.3
ATyS M3s-125A/4P	125	78.4	86.6
ATyS M3s-160A/4P	160	100.4	110.8
ATyS 3s-250A/4P	250	156.8	173.2
ATyS 3s-400A/4P	400	250.9	277.1
ATyS 3s-630A/4P	630	395.2	436.4
ATyS 3s-800A/4P	800	501.8	554.2
ATyS 3s-1000A/4P	1000	627.3	692.7
ATyS 3s-1250A/4P	1250	784.1	865.9
ATyS 3s-1600A/4P	1600	1003.6	1108.4
ATyS 3s-1800A/4P	1800	1129.1	1246.9
ATyS 3s-2000A/4P	2000	1254.5	1385.5
ATyS 3s-2500A/4P	2500	1568.2	1731.8
ATyS 3s-3200A/4P	3200	2007.3	2216.7





#### ATyS M

40 to 160 A

The ATyS M 3s (RTSE) is the remotecontrolled version, through volt free contacts from an external automatism, in the 3 positions (0, I and II), following a pulse logic or maintained contactor.

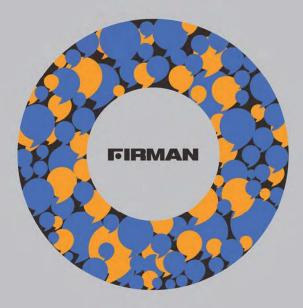
#### ATyS

125 to 3200 A

The ATyS 3 is the remotecontrolled version, through volt free contacts from an external automatism, in the 3 positions (0, I and II).



**BETTER POWER** 



**BETTER LIFE**