

RATING & DIMENSION

A C G E N E R A T O R	MODEL			SGE300	SGE400	SGE500	
	OUTPUT RATING (KVA)	50 HZ	380V	PRIME	300	400	500
				STANDBY	330	425	550
		60 HZ	440V	PRIME	325	415	505
				STANDBY	357	455	555
	RATED CURRENT (A)	50 HZ	380V	PRIME	456.6	608.8	761.1
				STANDBY	502.2	669.7	837.1
		60 HZ	440V	PRIME	426.5	544.6	662.7
				STANDBY	468.5	597.1	728.9
	RATED FREQUENCY / RATED SPEED	50 HZ			1500 RPM		
	60 HZ			1800 RPM			
NO. OF POLES	4 POLES						
PHASE AND WIRE	3-PHASE - 4-WIRE						
POWER FACTOR	0.8 (LAGGING)						
VOLTAGE REGULATION	WHITIN +/- 1.5%						
EXCITATION	BRUSHLESS, ROTATING EXCITER (WITH AVR)						
INSULATION	CLASS H						
E N G I N E	MODEL			DC9 72A	DC13 072A	DC16 43A	
	TYPE OF COMBUSTION CHAMBER			DIRECT INJECTED			
	AIR INTAKE SYSTEM			TURBOCHARGED			
	OUTPUT RATING (KW)	1500 RPM (50 HZ)		267	365	439	
		1800 RPM (60 HZ)		292	410	438	
	RATED SPEED (50/60 HZ, RPM)			1500/1800 RPM			
	BORE (MM) X STROKE (MM)			130 X 140	130 X 160	127 X 154	
	PISTON DISPLACEMENT (LT)			9.3	12.7	15.6	
	NO. OF CYLINDERS			5 IN LINE	6 IN LINE	8 V	
	GOVERNOR TYPE			EMS - EUI			
	FUEL CONSUMPTION (L/HR) AT 100% LOAD	50 HZ		56.2	73.9	91.4	
		60 HZ		57.4	76.9	91.9	
	LUBRICATION OIL CAPACITY (LT)			23	30	28	
	COOLANT CAPACITY, EXCL. RADIATOR (LT)			20	22	50	
	FUEL TANK CAPACITY (LT)	OPEN TYPE			750		
		SOUNDPROOF TYPE			1000	1200	
	STARTING MOTOR			24 DC-5.5 KW	24 DC - 6.7 KW		
	CHARGING GENERATOR (V-A)			28-100			
	BATTERY CAPACITY (V-AH)			DC 12 - 150 X 2			
STARTING SYSTEM			ELECTRIC STARTING MOTOR				
COOLING SYSTEM			RADIATOR WITH FAN - AIR TO AIR CHARGE AIR COOLER				
LUBRICATION SYSTEM			FORCED LUBRICATION TROCHOID PUMP				
OPEN TYPE DIMENSION	LENGTH	MM	3650	3650	3650		
	WIDTH	MM	1170	1180	1180		
	HEIGHT	MM	1950	2150	2150		
	WEIGHT	KG	3000	3500	4000		
SOUNDPROOF TYPE DIMENSION	LENGTH	MM	4200	5320			
	WIDTH	MM	1500	1600			
	HEIGHT	MM	2150	2100			
	WEIGHT	KG	4000	4500	5000		

* Due to our continuous improvement efforts, this specification is subject to change without further notice.

Note :

PRIME OUTPUT RATING : SUPPLIES ELECTRIC POWER CONTINUOUSLY AT VARIABLE LOAD
NO LIMITATION TO THE ANNUAL HOURS OF OPERATION AND CAN SUPPLY 10% OVERLOAD POWER FOR 1 HOUR IN 12 HOURS
CONFORMS WITH SAE J816B CONTINUOUS, DIN 6270, BS 6270, BS 5514 OR 649 CONTINUOUS & ISO 3046/1 CONTINUOUS POWER

STANDBY OUTPUT RATING : SUPPLIES ELECTRICITY DURING NORMAL UTILITY POWER FAILURE AT VARIABLE LOAD
NO OVERLOAD IS PERMITTED ON THIS RATING
CONFORMS WITH SAE J816B INTERMITTENT, DIN 6270, BS 5514 OR 649 ONE HOURS & ISO 3046 / 1 FUEL STOP POWER

ENGINE OUTPUT REPRESENTS AT ISO 3046, STANDARD CONDITIONS :

AIR TEMPERATURE : 25C
RELATIVE HUMIDITY: 30%
BAROMETRIC PRESSURE: 750MMHG

DEALER

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GENERATOR SET

SCANGEN

SGE300
SGE400
SGE500





Scania's engine for power generation are found in operation throughout the world, and they are suitable for prime power as for stand-by power. Their renowned reliability, durability and service friendliness are major assets, especially in prime power applications in remote locations where considerable emphasis is placed on a secure supply of electrical power. Or in leasing units, where the genset is constantly moved around between different operators. "Powered by Scania" certainly makes a major contribution to high total quality irrespective of the application.

A SYSTEM WITH MANY BENEFITS



Scania's 12 and 16 litre engines feature the latest generation engine management system (EMS). This sophisticated electronic system has been developed for tough applications and is designed to withstand harsh conditions, making it an

utterly dependable unit. It offers a variety of functions and benefits:

- Control and monitors the injection process to ensure optimum combustion and fuel economy.
- Communication via a CAN bus, which reduces wiring requirements and connection points.
- Communicate engine data via SAE protocol J1939 to the vehicle's other systems, such as the transmission, PTO and warning system.
- Integrated diagnostic system with built in fault tracing functions and engine diagnostics.

INDIVIDUAL CYLINDER HEADS SIMPLIFY SERVICE AND REPAIRS

All the engines feature individual cylinder heads, which means that dismantling and reassembly can be carried out by one single technician. This brings many benefits, not least in terms of availability, since parts maintenance is simpler, which in turn ensures that standstill times are the shortest possible.



DUAL OIL FILTRATION SYSTEM



One reason for the engine's good overall economy is Scania's unique oil filtration system. The combination of a full flow paper filter which takes care of the larger particles and a centrifugal cleaner that removes the smaller particles, result in maximum oil filtration and minimum wear.



THE UNIQUE SAVER RING



Scania diesels are clean. The unique Saver Ring, seated at top of the cylinder liner, removes all deposits from the piston top land on piston's upward stroke. Thereby permitting high and continuous load without any risk of coke built up and harmful bore polishing. The Saver Ring and the keystone type top piston are complementary in keeping the lube oil consumption as low as 0.3g/kWh. Few, if any, other engines can match that.

UNIT INJECTOR

The electronic unit injectors (UI) fitted to our engine's fuel systems provide a very high injection pressure, at the same time as injection quantity and timing are controlled with exceptional precision, from cold start to idling and throughout the entire power range. The result is higher power output, lower fuel consumption and fewer emissions, along with less exhaust smoke.



SCANGEN

STRIVE TO PROVIDE OUR CUSTOMERS AND THEIR POWER GENERATION NEEDS WITH MARK OF EXCELLENCE

- Long Operation life
- Good Investment Value
- Low Use Cost
- High Operating Efficiency
- Good Range Of Power Rating & Specification

SCANGEN

SCANIA diesel engine, four stroke, direct injection (DC9) and electronic unit injection (DC-12 and DC-16), turbocharged, fan and radiator cooling system, rated speed 1500 rpm, 24 VDC starter system, compact construction, excellent overload capacity, speed adjustment precision accuracy, complete air/diesel oil/ lube oil filter, low exhaust emission standard.

TAIYO AC alternator, brushless, self field excitation, automatic voltage regulation, single bearing, insulation F class, IP 21 protection grade, conforms to UK BS5000 part 3 standard, radio interference suppression meets BS800, VDE0875-N and GB2820 institute, designed for continuous operation.

Complete generator set baseskid is robustly built. It is optimally designed to handle both static and dynamic weight of the genset. All wight bearing members are strengthened to reduce local stress build up. The set are carefully aligned and are resiliently mounted to reduce transmission of structure born noise.

SCANGEN generator set conforms to ISO3046, IEC34, ISO8528, DIN6280, BS4999, VDE0875, DIN6271, BS5000, SAEJ1349, VDE0530, GE4712 international standard. Diesel engine's exhaust standard conforms to ISO08178-4 international standard and environmental protection exhaust standard.

OPEN TYPE



CONTROLLING MODULE

The Controlling module is designed to provide total control for stand alone unit applications in isolated or mains parallel operations. The ATS and controlling module for multiple unit applications also available as option.



No	Description
1	Voltmeter 0-500V
2	Frequency meter 45-65 Hz
3	Ammeter 0-800
4	Autostart control unit
5	Voltmeter Selector switch
6	Hour Run Meter
7	Ammeter Selector Switch
8	Temperature gauge
9	DC Voltmeter
10	Lube Oil Pressure Gauge
11	Buzzer
12	Emergency Stop
13	MCCB ABB



SILENT TYPE

PUMP APPLICATION



RENTAL TYPE



SCOPE OF SUPPLY

Description	Scope of Supply	
	Standard	optional
Basic engine	✓	
Combustion air system	✓	
Electrical starting system	✓	
Fuel system	✓	
Lube oil system	✓	
Cooling equipment	Set mounted radiator	✓
	Remote radiator complete with fan & motor	✓
	Electric fuel injection (EMS) (SGE300 - 500)	✓
Speed governor		
Electrical control and Monitoring system	Autostart	✓
	AMF	✓
	ATS	✓
Alternator	✓	
Base frame	✓	
Exhaust system c/w below, bolt & nuts, counter flange, gasket	Industrial [15db (A)]	✓
	Residential [25db (A)]	✓
Standard Daily Tank 8 to 12 hours operation	✓	
Engine tools		✓
Anti condensation heater for generator		✓
Equipment for parallel operation (CT droop kit)		✓
Automatic electric pre-heating device	✓	✓
Anti vibration mounting + metal plate cover	✓	
Water separation filter	✓	
Standard documentation	✓	

SCANGEN generating sets are widely used in numerous applications and situations. These include national defense, civil aviation, irrigation, railway, mining, telecommunication system and light industry.

SCANGEN generating sets have an excellent service performance, very long life cycle period and provide the most reliable power to customers, either as standby power supply or in prime power duty. It meets all the demanding requirements of the customers.

