

# **Diesel Generating Set**

## BF-SC450-60

MODEL	BF-SC450-60
Standby Power (60Hz)	368KW/460KVA
Prime Power (60Hz)	348KW/435KVA

# **Standard Features**

General Features:			
Engine (SCANIA DC12 59A 10-33A )			
Radiator 50 <sup>0</sup> C max, fans are driven by belt, with			
safety guard			
24V charge alternator			
Alternator: single bearing alternator IP23, insulation			
class H/H			
Absorber			
Dry type air filter, fuel filter, oil filter, pre-filter			
Main line circuit breaker			
Standard control panel			
Oil drain pump			
Two12V batteries, rack and cable			
Ripple flex exhaust pipe, exhaust siphon, flange,			
muffler			
User manual			



# PHOTO FOR REFERENCE ONLY

# **Generator Ratings**

Voltage	HZ	Phase	P.F (COS¢)	Standby Amps	Standby Ratings (KW/KVA)	Prime Ratings (KW/KVA)
480/277	60	3	0.8	553	368/460	348/435
460/266	60	3	0.8	577	368/460	348/435
440/254	60	3	0.8	603	368/460	348/435
416/240	60	3	0.8	638	368/460	348/435

Prime Power (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97 (eqv ISO8528); A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

Standby Power Rating (ESP): The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

#### Sales Promises

Baifa Power provides a full line of brand new and high quality products. Each and every unit is strictly factory tested.

Warranty is according to our standard conditions: a, 15 months, counted on the day BAIFA sold to the first buyer; b, One year after installation; c, 1000 running hours (accumulated); subject to the earlier one. Service and parts are available from Baifa Power or distributors in your location.



Manufacturer / Model:	SCANIA DC12 59A 10-33A,, 4-cycle				
Air Intake System:	Turbo, Air/Air Cooling				
Fuel System:	Elec. Injection				
Cylinder Arrangement:	6 in line				
Displacement:	11.7L				
Bore and Stroke:	127×154 (mm)				
Compression Ratio:	16:1				
Rated RPM:	1800rpm				
Max. Standby Power at Rated RPM:	406KW				
Governor Type:	EMS				
Exhaust System					
Exhaust Gas Flow:	35Kg/min				
Exhaust Temperature:	<b>508</b> ℃				
Max Back Pressure:	10kPa				
Air Intake S	iystem				
Max Intake Restriction:	5kPa				
Burning Capacity:	34Kg/min				
Air Flow:	468 m <sup>3</sup> /min				
Fuel Sys	tem				
100%(Prime Power) Load:	198 g/KWh				
75%(Prime Power) Load:	206 g/KWh				
50%(Prime Power) Load:	211 g/KWh				
100%(Prime Power) Load:	86.7L/h				
Oil System					
Oil Consumption:	<0.3 g/KWh				
Engine Oil Tank Capacity:	33L				
Oil Pressure at Rated RPM:	300-600kPa				
Cooling System					
Total Coolant Capacity:	63L				
Thermostat:	<b>75</b> ℃				
Max Water Temperature:	<b>105</b> ℃				



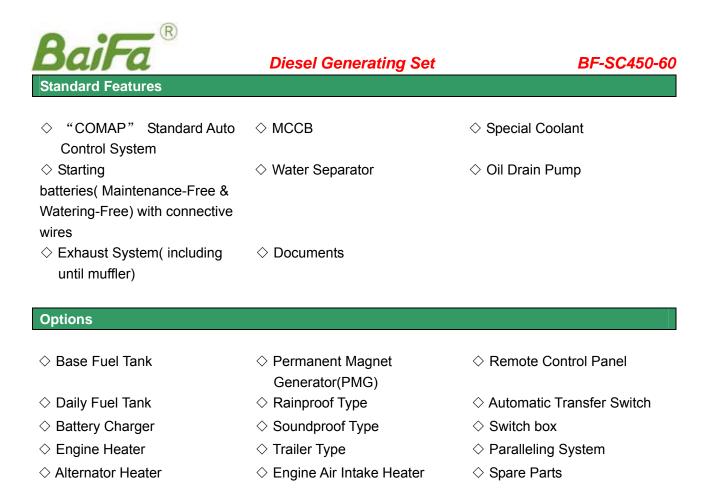
# GENERAL DATA

Compliance with GB755, BS5000, VDE0530, NEMAMG1-22, IED34-1, CSA22.2 and AS1359 standards.

Alternator Data						
Number of Phase:	3					
Connecting Type:	3 Phase and 4 Wires, "Y" type connecting					
Number of Bearing:	1					
Power Factor:	0.8					
Protection Grade:	IP23					
Altitude:	≤1000m					
Exciter Type:	Brushless, self-exciting					
Insulation Class, Temperature Rise:	H/H					
Telephone Influence Factor (TIF):	<50					
THF:	<2%					
Voltage Regulation, Steady State:	≤±1%					
Alternator Capacity:	420KVA					
Alternator Efficiencies:	93.5%					
Air Cooling Flow:	0.99m <sup>3</sup> /s					

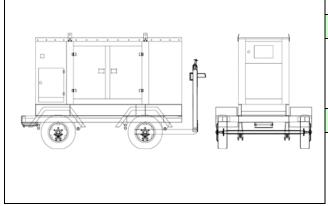
# **GENERATING SET DATA**

Voltage Regulation:	≥±5%
Voltage Regulation, Stead State:	≤±1%
Sudden Voltage Warp (100% Sudden Reduce):	≤+20%
Sudden Voltage Warp (Sudden Increase):	≤-15%
Voltage Stable Time (100% Sudden Reduce):	≤4S
Voltage Stable Time (Sudden Increase)	≤4S
Frequency Regulation, Stead State:	≤5%
Frequency Waving:	≤0.5%
Sudden Frequency Warp (100% Sudden Reduce):	≤+10%
Sudden Frequency Warp (Sudden Increase):	≤-7%
Frequency Recovery Time (100% Sudden Reduce):	≤3S
Frequency Recovery Time (Sudden Increase):	≤3S



# **Dimension & Weight**

# Standard Configuration (Open Type) Overall Size: 3200(mm)×1270(mm)×1930(mm) Weight: 2660kg With Base Fuel Tank Overall Size: 3200(mm)×1270(mm)×1940(mm) Weight: 2690kg



# Soundproof Type

Overall Size: 4630(mm)×1660(mm)×2250(mm) Weight: 3600kg

# Ttailer Type

Overall Size: 5030(mm)×2440(mm)×2980(mm)

Weight: 4950kg





Auto Module Control Panel is the configuration for nobody on duty controlling generators. This kind of panel adopts auto module control system, with large LCD display to show the menu.

Features: MRS10-can receive remote output signal from ATS and realize auto start and stop of generators.

MRS16-can realize all functions of MRS10, add RS232 interface which can communicate with PC to realize remote operation.

AMF25-Auto Mains Failure controller, can realize all functions of MRS16, furthermore can detect ATS and control directly.

### Auto Parallel Control Panel



Automatic Parallel Control Panel This new automatic parallel system adopts intelligent modules, inserted and folded installed, no need the peripheral relay and logic circuit. The main switch adopts electronic breaker or frame breaker, combined together with the generator, which is very reliable. One generator, one panel. The panel can be used both for singly and parallel. It is only need to parallel generator with such panel when the capability needs to be enlarged in the future.