

# BGR-400 Generating set

## Technical Data Sheet



**ISO9001:2000**



# STANDART SPECIFICATION

## General features:

- Composed of FMW-STEYR DIESEL ENGINE diesel engine
- and Stamford, Sincro or Stamford copy
- DG series Stamford COPY brushless alternator
- 24V DC start motor and storage battery
- Brushless, Self-excited, IP23, insulation class H
- alternator 50°C radiator as standard
- Key start panel control system as standard, digital auto-start panel is optional
- 527 Lt fuel tank in base frame
- Optional open type or silent type
- All generator sets are gone through rigorous testing before being released to the market place, including 50% load, 75%load, 100% load , 110% load and all protection function (overspeed stop, high water temperature, low oil pr essure, battery charging fail, emergency stop)

## Genset Main Technical Data

3P4W, 50Hz, 230/400V and 480V (Can Be Made According To Customers' Special Requirements)

GENSET MODEL	Genset Specification					Engine Specification				Alternator Model
	ESP	PRP	Cons	dB(A) 7m	Tank (L)	Model	Cyl	Gov.	Asp.	
			100% (L/H)							
BGR-400	400kVA	364kVA	77.3	78	527	W618ZLD	6	M	TCI	BGR400
	320kW	291kW								

- 1) Available in various voltages
- 2) To show BEK Generating Sets Model
- 3) ESP=Standby power standby duty, operation under variable load, without overload.  
PRP=Prime power continuous duty operation, under variable load, 10% overload permissible 1/12hr.
- 4) E=Electronic speed governor;  
M=Mechanical speed governor
- 5) Asp=Aspiration; NA=Naturally  
Asp; TC=Turbocharged;  
TW=Turbocharged after cooled;  
TCI= Turbo charged intercooled
- 6) Technical data is subject to work test conditions

# Reliable Performance

## Voltage regulation

Voltage regulation maintained within  $\pm 1\%$  as follow:

- Power factor Between 0.8~1.0 lag
- From no load to full load, any steady load
- Speed droop variation under 4.5%

## Frequency/Speed undulation

- Change load from 0-100%, Frequency/Speed Droop Ratio within 5%.
- Load from 25-100%, any steady load Frequency/Speed undulation within 0.25%

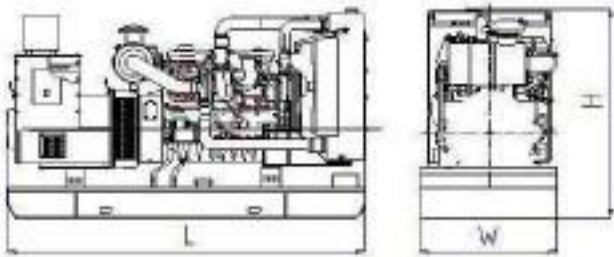
## Effect factor of telecom

- TIF( MA MG1-22) better than 50
- THF( BS EN60034) better than 2%

# Criterion

- ISO8528, GB/T2820
- EN12601:2001, EN60034-22:1997, EN60204-1:2006
- ISO9001:2000 Quality Control System

# Dimension Weight

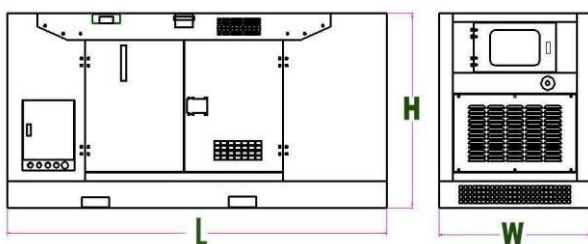


## Open Type

Overall size  
(L\*W\*H)

4050\*1325\*2400

Weight: 3100kg



## Silent Type

Overall size  
(L\*W\*H)

4350\*1600\*2600

Weight: 3480kg

# Engine Specification

## FMW-STEYR Diesel Engine

### Technical Data

Engine Model	FMW-STEYR W618ZLD
Fuel	Diesel
Number of Cylinders	6
Cylinder arrangement	Vertical in-line
Cycle	Four stroke
Aspiration	Turbocharged intercooled
Bore×Stroke (mm×mm)	126*155
Compression Ratio	17:1
Prime Power/Speed (kW/rpm)	308/1500RPM
Standby Power/Speed (kW/rpm)	342/1500RPM
Speed Governor	Mechanical
Cooling System	Water-cooled, 50 °C radiator is standard
Speed Stability (%)	≤1%
Total lubrication system capacity (L)	50
Coolant capacity (without radiator) (L)	30
Fuel Consumption at 100% Load (L/H)	77,3
Fuel Consumption at 50% Load (L/H)	40,2
Start type	Electrical

# Alternator Specification

## Stamford Copy Alternator (Standard)

### Technical Data

Alternator Model	BGR-400/50Hz
Exciter type	Brushless, Self-excited
Power factor	0.8
Standby Power	320kW
Voltage Regulation	±1%
Insulation Grade	H
Protection Grade	IP23
Alternator Effectivity	93,60%
Speed	1500d/d mm

# Control System

1. Standard: Deepsea DSE7320 AMF Digital Controller DATAKOM D300

Providing the standard functions as follows:

(Also can be made according to the customers' special requirements)

- \* Automatic Start/Stop
- \* Settings can be adjustable via key buttons on front panel
- \* 3 start attempts failure and Automatic Crank Disconnect
- \* Parameters display (V/A/Hz/Hour)
- \* Engine monitoring and protection
- \* Charge alter nator exciting and Charge alternator fail alarm
- \* Running hour counting
- \* Emergency stop pushbutton

\* Alarm System: Over speed, High Engine Temperature Low Oil Pressure, Charge Fail

\* Protection System: Over speed, High Engine Temperature, Low Oil Pressure, Emergency Stop. And the other protection function pre-setting

Digital Auto-start Generator controller integrating digital, intelligent and network techniques is used for automatic control system of diese l generator. It can carry out functions including automatic start/stop, data measure and alarming. Optionally assembled with the ATS, it can carry out auto-switching between the outer power and generating set power.(AMF)

2. Option: Harsen GU641B AMF Digital Auto Start

3. Option: ComAp AMF25 Digital Auto Start

4. Option: Deepsea DSE3110 Digital Auto Start



(1) DSE7320



(2) GU641B out auto-switching



(3) AMF25



(4) DSE3110