

BGR-175 Generating set

Technical Data Sheet



ISO9001:2000



STANDART SPECIFICATION

General features:

- Composed of RICARDO diesel engine and Stamford, Sincro or 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
- 304 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, 220/380V (Can Be Made According To Customers' Special Requirements)

GENSET MODEL	Genset Specification					Engine Specification				Alternator Model
	kVA/kW		Cons							
	ESP	PRP								
BGR-175	175/140	160/127	42	78	304	R6105IZLD	6	E	TCA	BGR-175

- 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;

TCA= Turboc harged air-air after cooled

- 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%

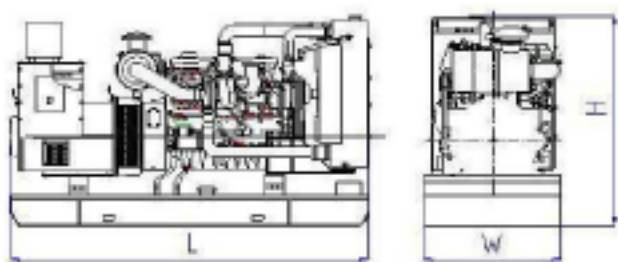
Effect factor of telecom

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

Criterion

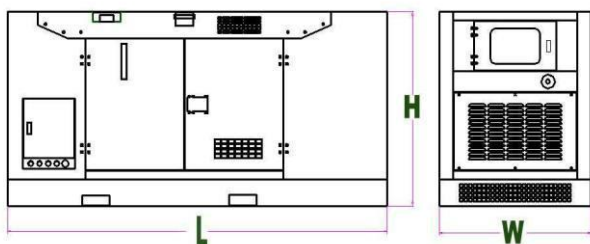
- ISO8528, GB/T2820
- EN12601:2001, EN60034-22:1997, EN60204-1:2006
- ISO9001:2000 Quality Control System

Dimension Weight



Open Type

Overall size
(L*W*H)
2770*1100*1600
Weight: 1350kg



Silent Type

Overall size
(L*W*H)
3070*1100*2000
Weight: 1850kg

Engine Specification

RICARDO Diesel Engine Technical Data

Engine Model	R6105IZLD
Number of Cylinders	6
Cylinder arrangement	in-line
Cycle	4 stroke
Aspiration	Turbocharged Air-Air Aftercooled
Bore×Stroke (mm×mm)	105*130
Displacement (Liter)	6,99
Compression Ratio	16:1
Prime Power/Speed (kW/rpm)	127/1500RPM
Standby Power/Speed (kW/rpm)	140/1500RPM
Speed Governor	Electronic
Cooling System	Water-cooled, 50°C radiator is standard
Speed Stability (%)	≤1%
Total lubrication system capacity (L)	18
Coolant capacity (without radiator) (L)	27
Fuel Consumption at 100% Load (L/H)	42
Fuel Consumption at 50% Load (L/H)	21
Starter Motor	DC24V
Start type	Electrical

Alternator Specification

BEK ALTERNATOR (Standard) Technical Data

Alternator Model	BGR-175
Exciter type	Brushless, Self-excited
Power factor	0.8
Voltage Adjust range	≥5%
Voltage Regulation NL-FL	±1%
Insulation Grade	H
Protection Grade	IP23
Short Circuit Current	300%
Effectivity	92%

Control System

1. Standard: Deepsea DSE7320 AMF Digital Controller 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 alternator exciting and Charge alternator fail alarm
- *Running hour counting (1) DSE7320
- *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 diesel generator. It can carry out functions including automatic start/stop, data

measure and alarming. Optionally assembled with the ATS, it can carry (2) GU641B 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

Specifications may change without Notice