Emergency & Black Start Diesel Generator

OPTIMIZED, RELIABLE, PROVEN SOLUTION FOR EDG & BSDG

HYUNDAI engine is designed to provide backup power generation for unexpected incidents. This solution requires sophisticated engineering and the ability to model complicated logic, which HYUNDAI is very capable of.

Why EDG?

In loss of all internal and external power source, the emergency diesel generators supplies emergency power for safe shutdown and maintain hot standby conditions for quick restarting of main power resources. For safe shutdown, EDG supply power for essential auxiliary equipment.

Why BSDG?

If all of the station's own generators are shut down, station service power should be provided from the grid. However, in the absence of grid power, black start needs to be performed to start immediately at any time.

Who Is It For?

Where emergency power is required such as Combined Cycle Power Plant and other Factories.

Why Are They Good?

1. PROVEN SOLUTION AND HIGH PERFORMANCE

HYUNDAI has been supplying EDG & BSDG for more than 130MW in total. We have not only gained a wealth of experience and expertise, but also gained reputation for products that deliver outstanding reliability and performance.

2. OPTIMIZED, RELIABLE, SOLUTION

HYUNDAI offers optimized and reliable solution that will meet your requirements no matter what steam turbine, gas turbine manufacturer, size or system(single steam turbine, gas turbine or with cogeneration).
HYUNDAI offers a complete turnkey and customized solution based on a modular design and the highest quality standards in the industry.

3. OPTIMIZED LOGIC FOR EACH CUSTOMER

Every project has different requirements. With HYUNDAI's highly experienced engineers, we are capable of matching any customer's complicated needs and analyze the site condition for more suitable solutions.

Scope of Supply

1. **Diesel Generator set**
2. **Mech. Aux. equipment**
3. **Elec. Aux. equipment**
4. **I&C Aux. equipment**
5. **Basic & Detail Engineering**
6. **Construction**
7. **Supervision of installation & commissioning**

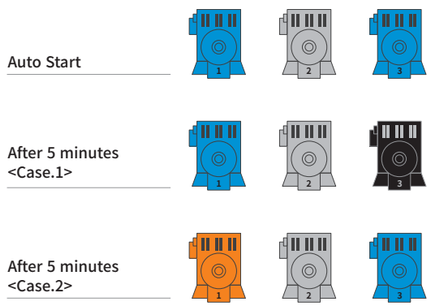
Case ① EDG for Thermal Power Plant

Jeddah South Thermal Power Plant EDG **Saudi Arabia**

Customized Emergency Power Solution

D/G room

Jeddah South Thermal Power Plant Stage-I



Total Output	26MW
Customer	Saudi Electricity Company
Operating Mode	Emergency
Gensets	20H32/40V x 3sets
Fuel	DO
Scope	Genset + Equipment supply + Engineering
Delivered	2016

Client's special requirements we carried out

When unit #1 or #2 Steam turbine is shutdown, EDG #1(main) and #3 (stand-by) start and synchronize with parallel operation automatically.
<Case. 1> After 5 minute, If EDG #1 has no alarm, EDG #3 will stop automatically.
<Case.2> If there are any alarms in EDG #1 for 5 minutes, EDG #3 will keep running condition.

Reference List

Total Quantity of **23units**

Total Deliver of **138.6MW**

As of Dec. 2018

NO.	Project Name	Engine	Quantity	Country	Capacity(MW)	Year
1	DUBA 24MW BSEDG	18H32/40V	3	Saudi Arabia	24	2017
2	UHP 16MW BSEDG	9H32/40	4	Qatar	16	2016
3	QURAYAT III 6.3MW BSDG	16H32/40V	1	Saudi Arabia	6.3	2015
4	ARAR IV 6.3MW BSDG	16H32/40V	1	Saudi Arabia	6.3	2015
5	JEDDAH SOUTH 26MW EDG	20H32/40V	3	Saudi Arabia	26	2014
6	AZ-ZOUR North 15MW BSEDG	20H32/40V	2	Kuwait	15	2014
7	QURAYAT II 5MW EDG	12H32/40V	1	Saudi Arabia	5	2013
8	WADJH 5MW EDG	12H32/40V	1	Saudi Arabia	5	2013
9	SHAROURAH 4MW EDG	12H32/40V	1	Saudi Arabia	4	2012
10	AZZOUR WDC II 12MW EDG	14H32/40V	2	Kuwait	12	2012
11	RAFHA 5MW EDG	12H32/40V	1	Saudi Arabia	5	2012
12	HAIL 4MW EDG	12H32/40V	1	Saudi Arabia	4	2012
13	HYOSUNG 10MW EDG	14H32/40V	2	Iran	10	2011