

Telecom Data Center, Italy 1,6 MW@400 V

SUMMARY

Location: Bologna (Italy)

Power required: 1,6 MW with power factor 0,8 (2000 kVA)

Power installed: 1,6 MW (2000 kVA)

Genset model: PE2050SWD

Version: soundproof shelter

Genset noise level: 55 dB(A)@7 meters

Dimensions: 13600 x 3000 x 5900 mm (L x W x H)

Remote communication: Modbus via TCP/IP port

Configuration: diesel genset installed inside a special soundproof shelter, rated 55 dB(A)@ 7 meters, with low noise remote cooling system and exhaust gas silencers mounted on the roof of the shelter. Both radiator and silencers are hidden by a special metal structure built on top of the DG shelter roof, accessible through caged stairs with landing platform and gate, compliant to local safety regulations.

PURPOSE

The Customer had the need to purchase a new 1600 kW diesel generating set for the emergency power supply line of his facility, taking in consideration the following exigencies:

The new 1600 kW genset was required to operate in standby service to the grid

The existing 1 MW Ausonia genset had to be re-configured to provide backup power to the new genset at site

Maximum noise level 55 db(A)@ 7meters at full load condition

Built-in 2000 liters fuel tank

Hidden exhaust silencers and remote cooling system



SOLUTION

Thanks to the capability of its engineering team and the focus on innovation, Ausonia supplied a 1,6 MW diesel genset installed in a special soundproof shelter, able to guarantee the max noise level of 55 dB(A)@7 meters. Among other specs, the peculiarity of the design of this solution was the provision of an upper floor built on the roof of the shelter, on which the remote radiators and exhaust silencers, both of special type for utmost noise abatement, have been installed and then hidden by an aesthetically pleasing metal structure.

In order to allow easy access to the upper floor for service activities, the solution has been equipped with a caged stairs installed along the DG shelter wall and with a landing platform secured by a proper gate.

The suitable air ventilation to the system has been

guaranteed by installing electro-fans inside the shelter, duly sized for an optimal cooling of the power plant.

Additionally, coping with the additional specific requirements of the Customer, the DG has been equipped with a built-in fuel tank having a 2000 liters capacity to reach an operational autonomy of approximately 6 hours and with a containment pan equipped with liquids detection sensor.

Moreover, a special fuel refilling system, consisting into a double electric pump with automatic exchange, has been added to guarantee redundancy.

The DG has been also provided with an automatic control panel suitable for parallel operation with additional gensets and with a remote monitoring and control system to be integrated with the facility control room.



For further information on our standard and optional features, please contact our sales office at: sales.dept@ausonia.com

Ausonia S.r.l. - Via Favara (SP 62) 452/C, 91025 Marsala (TP), Italy - T +39 0923 722311 - ausonia@ausonia.com - www.ausonia.com