

INSTALLATION GUIDELINES

Checklist

1	INSTALL SURGE PROTECTION	
2	BOND GENERATOR AND ATS TO MAIN INCOMING EARTH FROM MAINS SUPPLIER	
3	CHECK VOLTAGE BETWEEN NEUTRAL AND EARTH. (SHOULD BE NO RESIDUAL VOLTAGE)	
4	CABLE SHOULD BE SIZED TO CARRY THE FULL LOAD OF THE GENERATOR	
5	CHECK ALL NUTS ARE TIGHT ON MAINS AND GENERATOR CONNECTORS IN ATS OR MANUAL CHANGE OVER.	
6	CERTIFICATE OF COMPLIANCE (COC) TO BE ISSUED BY THE INSTALLING ELECTRICIAN.	
7	GENERATOR PLACED ON LEVEL CONCRETE SURFACE	
8	150mm THICK PLINTH WITH WIRE MESH REINFORCING	
9	EXHAUST AND HOT AIR TO BE DIRECTED OUTSIDE IF INSTALLED IN A ROOM	
10	IF INSTALLED OUTSIDE: IT IS RECOMMENDED THAT THE GENERATOR IS PLACED UNDER A ROOF	
11	IF INSTALLED IN A ROOM: ADEQUATE AIRFLOW AND EXHAUST EXTENSION OUT OF THE ROOM	
12	1m SPACE AROUND THE GENERATOR FOR SERVICE ACCESS	

The above checklist is provided in order to standardize the installation of your generator set. If the above checklist and following explanations are adhered to this will reduce the possibility of any issues arising in the future.

Always use qualified personnel for the installation of your generator. Qualified electricians are required by law to do the installation of your generator. Please insist on an ECBSA certified electrician.

Checklist explained

- Surge protection should be installed on the mains incoming feed to avoid over voltage which could harm your electrical equipment. In addition to protecting your equipment the generator is set up to sense voltage fluctuations within a specific range and turn on and off accordingly (If in automatic mode with an ATS).
- As per the electrical regulation of South Africa. (Bonded neutral earth).
- Any residual voltage found between the neutral and earth will increase the voltage supplied which will eventually have adverse effects on electrical items.
- Cable should be sized to carry the full load of the generator.
 - BPD SERIES** - The communications cable should be 1.5mm (Up to 40m). 3-phase generators need a 6-core communications cable. 1-phase requires a 4-core communication cable.

- The connections inside the ATS or manual change over switch should all be double checked and tightened by the electrician prior to signing off. Transportation of the ATS and generator can often cause these nuts and bolts to become loose.
- A Certificate of Compliance (COC) is required by law to be issued by the installing electrician. This certificate will be needed for your insurance as well as by Bundu Power should there be an issue with the installation of the generator at a later date.
- The generator operates optimally when on a level surface. The fuel tank and oil are designed to be used on a level surface.
- The concrete slab is required to ensure a solid and level surface for the generator. In some instances, placing the generator on solid paving will also suffice. The reason for the concrete plinth is to avoid any subsidence in the future.
- Should the generator be installed in a room or garage it is imperative that the exhaust gases and hot air are vented out of the room. The generator produces toxic gases which must be expelled from the area. In addition, the room should be well ventilated so that the generator has cool air to cool it down when in operation.
- Installing the generator under a roof is optional but is recommended to avoid any adverse weather damaging the generator. Due to the generator being outside and often in direct sunlight for parts of the day the paint is prone to fade over time.

In addition to this the possibility of water damage from cloud bursts or hail damage is greatly reduced by installing the roof over the generator.

We recommended at least 1m clearance above the generator for the roof.

- Installation in a room is not recommended due to airflow restriction and overheating. If the generator is installed in a room, a 1m space around the generator is required as well as ventilation and ducting on the 2 ends of the generator. The ends of the generator should be ducted in and out of the room. The cool-air intake side should be double the size of the outlet side for adequate airflow. The exhaust must be extended out of the room completely. Inadequate airflow will lead to overheating and will void the warranty.
- 1-meter space around the generator is required for maintenance. The technician will require access to both sides of the generator when servicing and inspecting the generator. A service should be performed every 12 months or at the required intervals as per the user manual.

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FAQ

Q: Do I need to anchor the generator?

A: No, the generator once placed on the plinth will not move. The only possible reason to need to anchor the unit is for theft.

Q: Do I need anti-vibration mountings or a rubber mat?

A: No, the engine is mounted on anti-vibration mountings already so the generator will not move once placed on the plinth. You can place a rubber mat under the generator but it is not necessary.

Q: I don't have space for 1m around the whole unit?

A: Each model is different, chat with your sales consultant who can advise the optimal position of the generator within a confined space. Alternatively have a steel framed trolley made to move the generator around easily.

Q: Will my generator start automatically when the power fails?

A: If you have installed an automatic transfer switch (ATS) and it has been installed correctly, then yes provided the generator and ATS are in automatic mode.

Q: The screen stays on all the time?

A: When the generator is in automatic mode, the screen and indicator lights remain illuminated for 60 mins. This can be adjusted in settings.

Q: Do I need to do anything once the generator is installed and operational?

A: You should check that everything on the generator is working at least once a month. Start the generator and check that it is automatically switching over if you have no mains electricity. You should keep maintenance records (In the back of the user manual).

Q: Does the generator include cabling and installation?

A: No, we do not do installations. The generator is supplied without cables.

Q: Does the generator battery stay charged?

A: The BPD series and Gas generators have battery chargers built-in. They need to be connected to the mains electricity to keep the generator charged. Please ask your sales consultant if your generator includes a battery charger.

Q: Can I install the generator in a room?

A: It is only possible to install a generator in a room if there is unrestricted air-flow into and out of the generator. Ventilation needs to be installed on both ends of the generator and ducted out of the room, in addition, the exhaust needs to be extended out of the room too. Installing a generator in a room without adequate ventilation will cause the generator to overheat and this will void the warranty.