

# Portable Transformer

The rules and procedures in force where people are at work may require the person responsible for this equipment to carry out a specific risk assessment.

**It is important to read all of this leaflet**

**BEFORE you use the Transformer**

1. Plan work ahead to ensure safe working at all times.
2. Electricity is dangerous and must always be used with great care.
3. The transformer is designed to reduce mains voltage to a lower, safer value. It can supply electricity safely up to its rated power.
4. Do not use it to do anything else – misuse or damage can cause electric shock or fire.



## BEFORE STARTING WORK

1. Check the transformer case, plug and cable. Do not use if found to be damaged in any way – contact the hire company.
2. The transformer will get warm in use. Air vents in the case must be kept clear at all times. Make sure the heat from the transformer will not damage any floor coverings that it is standing on.
3. Do not use the transformer where there is a danger of explosion. It will ignite fumes from petrol or gas cylinders.
4. The transformer may switch itself off if it gets too hot. Allow the transformer to cool down and reset the trip switch before using again.

*Continued overleaf...*



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## BEFORE STARTING WORK *Continued*

5. Check the transformer's power rating against the power usage of the tools being used.
6. The transformer's rating will be shown on the case. "1kVA" means it can supply approx. 800 watts, "2kVA" means it can supply approx. 1600 watts. Check the labels on the tools to find their power usage.
7. The transformer can supply portable tools in normal use up to this power. The short pauses that are common when using a portable tool will prevent the transformer from getting too hot.
8. Distribution boxes can be used to supply two or three tools together, as long as their total power usage is less than the transformers power rating.
9. Equipment which uses power all the time, eg. Floodlights, may cause problems. The transformer can only safely supply about half its rated power to a continuous load like this.
10. The transformer and any cable connections should be in a dry and safe place. Ensure no vehicles will run over the cable.
11. Only use extension cables on the 110v side when working away from the 230v mains socket. The transformer should stay plugged directly into the 230v mains socket.

**NOTE: When using a portable transformer to power heaters it is advisable to use a more suitable vented continuous transformer.**

## OPERATING QUESTIONS AND ANSWERS

- Q.** Why should I use a transformer at all?
- A.** The transformer reduces the voltage of the electricity supply to a much safer value. A shock from a damaged 110 volt cable or tool will be much less dangerous than one from a 230 volt supply. But the tool used must be made for use on 110 volts.
- Q.** What about residual current device?
- A.** You can use an rcd (residual current device) at the 230v supply to give additional protection on the 230v cable and transformer case (if metal). An rcd will not give protection on the 110v cable

***Keep this leaflet in a safe place until work is finished as it may need to be referred to again.***



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