



Transformers

Custom Made or Pre-Designed
to suit your application



Let Power On Australia customise a Transformer for your application

Whether you need power transformed by stepping the output voltage up or down from the input voltage, isolating the input circuit, phase shifting, etc, Power On Australia will have the perfect Transformer solution for you. Our expertise and experience are at your service here to guide you to the right Transformer solution for your application.



Transformers to suit your application



What is a Transformer?

A transformer transfers power by stepping voltage up or down, isolating circuits, or phase shifting. It uses a magnetic field to transfer energy, with various designs for different purposes. Power On Australia offers customised transformer solutions to ensure ease of deployment and functionality.

Specialising in Laminated Core, Dry Type Transformers

Power On Australia specialises in laminated core, dry type transformers for power quality improvement, tailored to your specific needs. Our standard models use H class materials, allowing up to 180°C operation.

Common features include:

- Maintenance-free operation
- High durability
- Tolerance to harsh environments
- Long lifespan with no moving parts

Available off the shelf in the following VA sizes and standard voltage ratios - or - as customised solutions to meet your specific requirements.

PRE-DESIGNED TRANSFORMERS (VA) (Available off-the shelf)

1000
2000
3000
5000
10000
12000

STANDARD VOLTAGE RATIOS Single-phase Constant Voltage Transformers, Enclosure IP22 PRIMARY / SECONDARY VOLTAGE

110 / 110V
240 / 110V
240 / 240V
415 / 110V
415 / 240V
690 / 110V
690 / 240V
1000 / 110V

Transformers to suit your application

Understanding Types of Transformers

Isolation Transformer

Benefits:

- Electrical isolation
- Reduces electrical noise and harmonics
- Creates an MEN point

Isolation transformers use magnetic fields to transfer power while electrically isolating the output from the input. They are heavier, larger, and less efficient than ordinary transformers due to their complete separation of cores and windings.

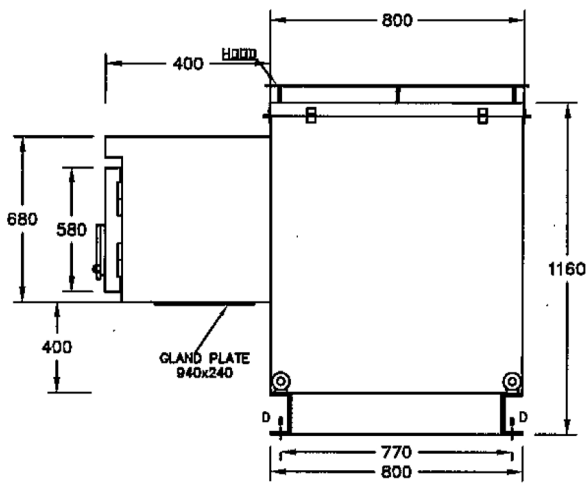
Constant Voltage Transformer (CVT) / Ferroresonant Transformer

Benefits:

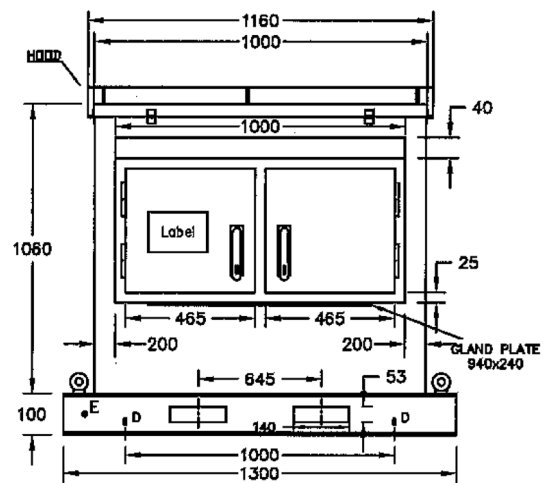
- Integrates with isolation transformers
- Reduces overvoltage's
- Reduces short-duration undervoltage's

CVTs limit voltage variations by using a specifically sized magnetic field and capacitors. They must be correctly sized for effectiveness and run hot, requiring adequate ventilation. They are ideal for constant loads and provide long, maintenance-free operation.

Example Transformer Drawing



END VIEW
(Cable entry cover removed for clarity)



FRONT VIEW
(Cable entry cover removed for clarity)

Step Up / Step Down Transformer

Benefits:

- Integrates with isolation transformers
- Adjusts output voltage as per specifications

These transformers change output voltage by adjusting the ratio of input to output turns. A 1:2 ratio doubles output voltage while halving current, and a 2:1 ratio does the reverse. Commonly used in power grids and electronics, they cannot change power frequency or adapt foreign devices to local power sources alone.

Standards That We Work To

Include:

- AS/NZS 3100:2022
- IEC 61158-2-12
- AS 60076.1 and AS60071.1



Transformers to suit your application

Why Choose a Custom-Made Transformer from Power On Australia?

Tailored Solutions:

We design and manufacture transformers to meet your specific needs, whether it's a CVT or an Iso Transformer.

Expertise and Experience:

Our extensive industry experience ensures high-quality, reliable transformers.

Premium Components: We use top-quality materials and rigorous testing to ensure durability and superior functionality.

Comprehensive Support:

From consultation to installation and maintenance, we provide full support to maximise your transformer's benefits.

Cost-Effective:

Our custom transformers enhance equipment performance, reduce downtime, and extend asset lifespan, offering long-term savings.



Contact Us

Ready to optimise your power solutions with a custom transformer? Contact Power On Australia today to discuss your specific needs and discover how our tailored transformers can enhance the efficiency, safety, and performance of your equipment.

Power On Australia

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