

Top design considerations for power resistor enclosures

When designing an enclosure for a power resistor, research should be undertaken alongside the initial specification. To facilitate this process, it is the enclosure manufacturers' responsibility to ask these important questions.

1



What environment will it be located in?

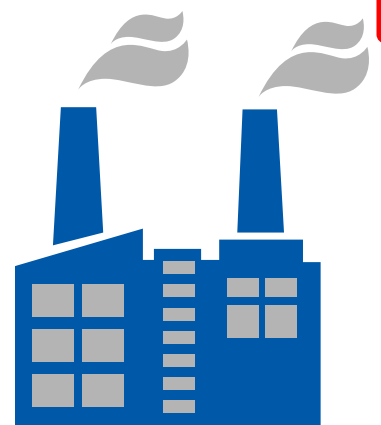
Enclosure location affects material choice. Corrosion is a large concern, particularly in humid climates, or offshore.

For these environments, Cressall often uses unpainted stainless steel, which has a good long-term corrosion resistance.

Which industry is it being designed for?

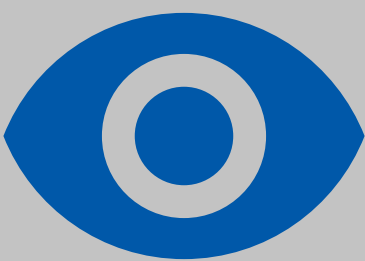
In addition to playing a role in environmental considerations, various industries may have extra requirements.

For example, food processing plants require high ingress protection ratings. Regulations [BS EN 60529](#) and [IEC 60529](#) define the sealing effectiveness level for enclosures against intrusion from foreign matter and moisture.



2

3



Will it be located in public view?

Enclosures are often entirely visible. If it's easily viewed by the public, there may be additional aesthetic considerations to ensure the enclosure blends into its surroundings.

Can it be easily accessed?

If the enclosure isn't accessible for maintenance, it must be able to withstand environmental conditions including heavy rain and high temperatures.

As power resistors dissipate excess energy as heat, enclosures can become incredibly hot, which could be dangerous to the public. This is overcome with additional heat shields, enhanced ventilation, or even clear labelling.



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How will it be installed?

Installing a resistor enclosure brings about its own set of considerations and questions. A two-way conversation must be had to ensure the resistor is installed correctly so that it can function at optimum efficiency.

For more information about Cressall's range of resistors and bespoke enclosures, or to find out more about its work overseas, visit www.cressall.com or call +44 (0) 116273 3633.

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