

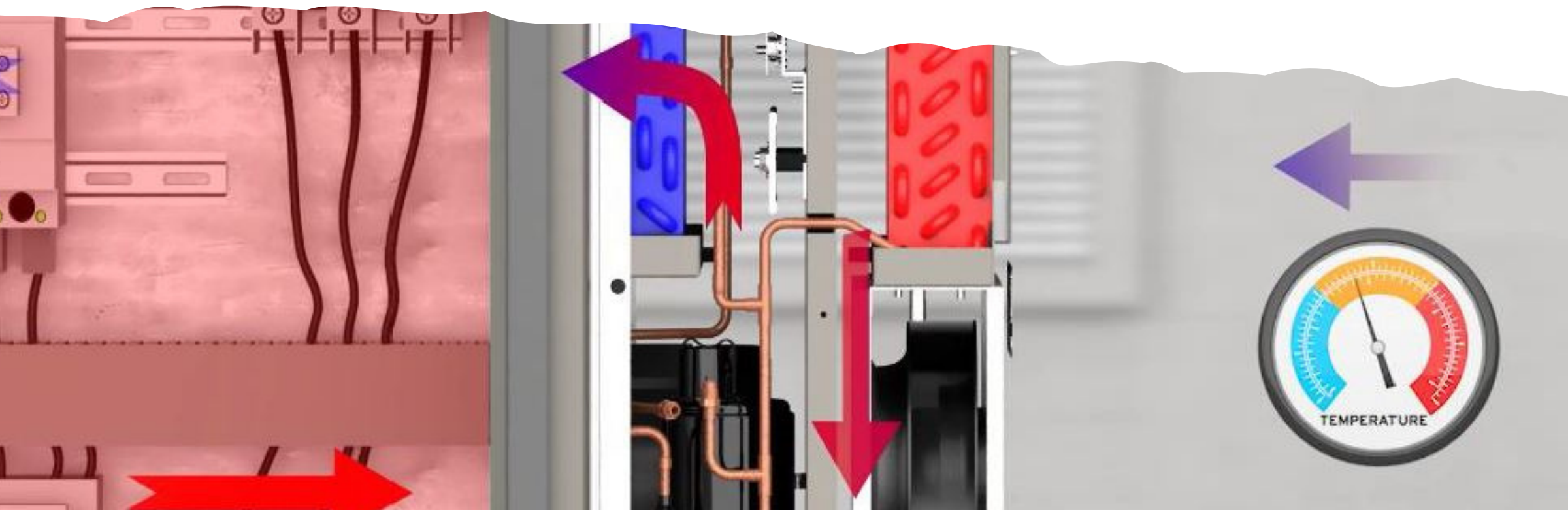
# 10 Enclosure Cooling Considerations



## Early Planning Helps Avoid Problems Later!

To create the optimum environment for the application, an evaluation of the anticipated operating conditions and thermal requirements must be completed.

**Consider these important questions:**



# 10 Enclosure Cooling Considerations



1

Does the entire interior of the enclosure require cooling, or is spot cooling adequate?

**Consider this next important question:**



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2

Are there any components that are particularly sensitive to heat or other adverse conditions?

**Consider this next important question:**



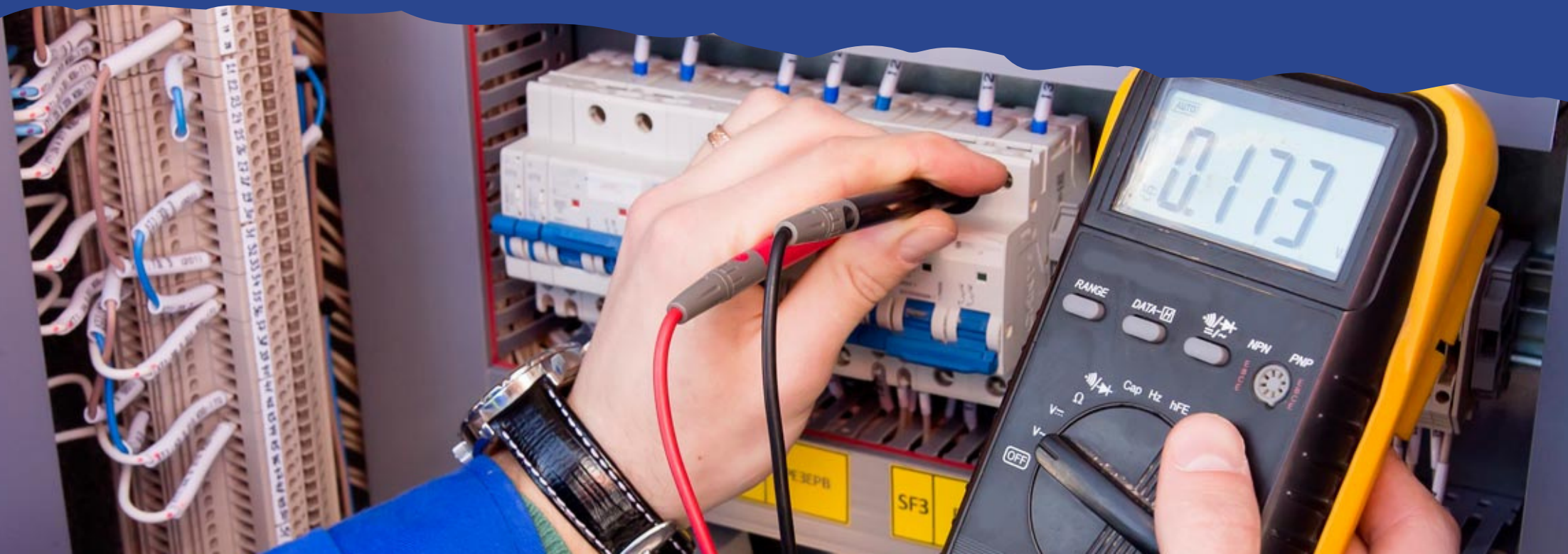
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3

How much heat (in watts) is being produced within the electrical enclosure?

Consider this next important question:



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4

What is the maximum temperature acceptable within the electrical enclosure?

**Consider this next important question:**



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5

What is the maximum temperature range of the ambient air surrounding the enclosure?

**Consider this next important question:**



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6

Is a specifically maintained temperature range required?

**Consider this next important question:**



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7

Is the enclosure located indoors or exposed to outdoor elements?

**Consider this next important question:**





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8

Does the ambient air contain dirt, oil, corrosives, or contaminants harmful to the enclosure contents?

**Consider this next important question:**



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9

Where can a thermal management device be mounted on the enclosure?

Consider this next important question:



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10

Do the contents contained within the enclosure need to be isolated from the ambient air?

**Read summary and next steps:**



# 10 Enclosure Cooling Considerations



After all of the application-specific factors are considered, one can begin to decide which cooling product provides the most appropriate and cost-effective solution.

A little time and effort spent early in the design process to choose the optimum cooling equipment can save a lot of trouble and expense later, as this would prevent the need to retrofit with proper cooling devices in the field.

**Contact an enclosure cooling expert at  
(609) 466-3400 or [kooltronic.com](http://kooltronic.com).**

