

Re: °K to °C conversion: hardware or software?

Source: <http://sci.tech--archive.net/Archive/sci.electronics.design/2005-11/msg00665.html>

- *From:* "slebetman@xxxxxxxx" <slebetman@xxxxxxxx>
 - *Date:* 6 Nov 2005 09:18:41 -0800
-

John Woodgate wrote:

> I read in sci.electronics.design that John Devereux
> <jdREMOVE@xxxxxxxxxxxxxxxxxxxx> wrote (in
> <8764r5c1f4.fsf@xxxxxxxxxxxxxxxxxxxxxxxx>) about 'Re: °K to °C
> conversion: hardware or software?', on Sun, 6 Nov 2005:
>
>>I still seems backwards to me.
>
> I sympathise, without agreeing.
>
>>Kelvin is special because it is zero-based, such that Kelvins *are*
>>units. You can, for example, take the ratio of two Kelvin temperatures.
>
> You are confusing the scale and the unit still. I don't find it easy to
> explain. The kelvin is certainly a unit. The ratio of two temperature
> differences is potentially just as meaningful, in an appropriate
> context, as the ratio of two Kelvin temperatures.
>
>>So I don't see the distinction between a scale and a unit in this case.
>>The other temperature "scales" are not zero based, so are always
>>expressed relative to a base temperature, e.g. that of triple point of
>>water.
>
> I don't know of any scale based on that, but that's a side issue.
>
> You can look at the matter like this. Any temperature difference can be
> expressed in kelvins. But a temperature difference from absolute zero is
> distinguished by having the ° sign included.
> --
> Regards, John Woodgate, OOO – Own Opinions Only.
> If everything has been designed, a god designed evolution by natural selection.
> <http://www.jmwa.demon.co.uk> Also see <http://www.isce.org.uk>

OK but I've certainly never seen or heard of Celsius without the 'degrees' before. Even when talking about temperature differentials its always been degrees Celsius. But I have seen Kelvins without degrees.

Wikipedia seems to refer to Celsius as "degree Celsius":

Re: °K to °C conversion: hardware or software?

<http://en.wikipedia.org/wiki/Celsius>

I don't think Celsius alone, without the 'degree' is a unit. But there is a difference between degrees Celsius and Celsius degrees which unfortunately has the same SI notation. See:

<http://www.islandnet.com/~see/weather/whys/tempconv.htm>

• **References:**

- ◆ **[°K to °C conversion: hardware or software?](#)**
 ◇ From: __frank__
- ◆ **[Re: °K to °C conversion: hardware or software?](#)**
 ◇ From: slebetman@xxxxxxxxxx
- ◆ **[Re: °K to °C conversion: hardware or software?](#)**
 ◇ From: John Devereux

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