

## Program Termo:

### ***Introduction:***

This program was designed to give you the thermodynamics properties of a fluid (*Saturated water, saturated R12, saturated R13*), under a certain range, range that depends on the nature of the fluid itself. The reason why the overheated estates are not included is because the tables of the overheated estates are very easy to read (Also to use). *This program will do the interpolation for you*, all you have to do is select the type of fluid then the know property then input the value, then just wait and see the values.

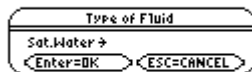
This program is an extension of the program for the ti-89 “Catts” (ticalc.org) . Catts was only able to show the thermodynamics properties of the saturated water. Termo in addition is capable of give you the properties of R12 and R13, its important to mention that *the values that Termo can give you* are the same that you could get from the thermodynamics tables of the book **Thermodynamics** second edition written by Yunus A. Cengel and Michael Boles, published by McGraw Hill.

This program is capable to run under any tios version, was developed under the version 2.08 and extensively tested under the version 2.05.

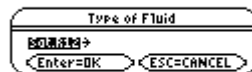
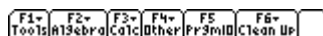
### ***Use of termo:***

From the var- link menu select the folder term then the program named termo, press enter. From the home menu just close the parenthesis and press enter.

It will display a popup menu that ask you the type of fluid you are dealing with, lets say saturated refrigerant 12 (R12). Then press enter.

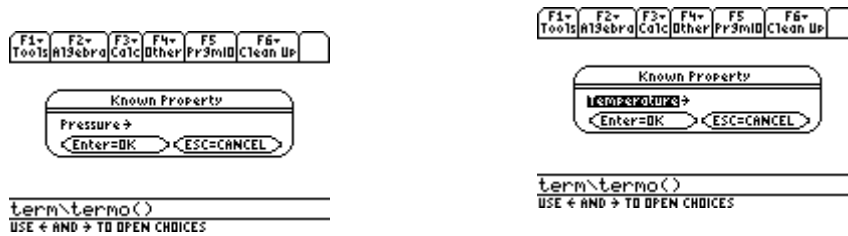


term\termo()  
USE ← AND → TO OPEN CHOICES



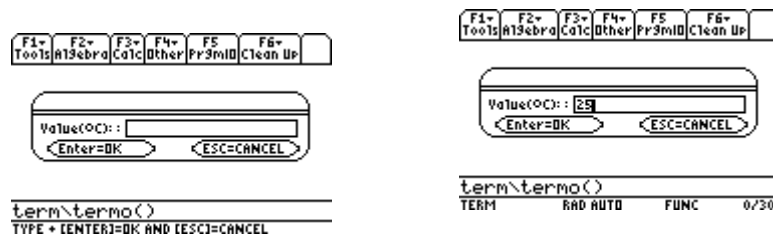
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USE ← AND → TO OPEN CHOICES

Then another window will ask you the known property that you have.



Lets say temperature (to select just press the right arrow of the cursor then the down arrow then enter)

When the selection is done press enter. A window will ask you for the value of the known property in this case temperature in Celsius degrees (Yep only S. I. units kpa and C). Iest say 25 degrees. Then enter



In a few seconds the properties are show:

Its important to notice that the values are in S. I. Units (v is in  $m^3/kg$ ; u and h in kJ/kg and so on).



When you are done press enter and you are back to the home screen and in the folder main. The other programs in the folder term are sub functions of the program termo so if you mess with those it wont work.

As you have seen it is easy to use. I hope you find it usefull in your thermodynamics course.

Question or comments send it to:  
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