



Mastercool 52246 Calculator Instruction Manual

[Home](#) » [Mastercool](#) » Mastercool 52246 Calculator Instruction Manual


Mastercool 52246 Calculator Instruction Manual



Contents [[hide](#)]

- 1 TO GET SATURATION TEMPERATURE WHEN SATURATION PRESSURE IS KNOWN (PT CHART)
- 2 TO GET SUPERHEAT OR SUBCOOL WHEN THE SATURATION PRESSURE IS KNOWN
- 3 ADDITIONAL FUNCTIONS
 - 3.1 TO UPDATE THE REFRIGERANT LIST
- 4 THERMOCOUPLE CALIBRATION PROCEDURE
- 5 Support
- 6 Documents / Resources
- 7 Related Posts

TO GET SATURATION TEMPERATURE WHEN SATURATION PRESSURE IS KNOWN (PT CHART)


1. Press the POWER () button.
2. Use ▲ and ▼ to display the desired refrigerant.
3. Press ENTER.
4. Press any ARROW button to display the pressure, then use ▲ or ▼ to adjust the saturated pressure.
NOTE: To change the pressure quickly, hold the DOWN ARROW (▼) button.
5. Read the saturated temperature next to the saturated pressure.

NOTE: For refrigerants that have glide, use the SH/SC button to toggle between Bubble (BBL) and Dew Point (DP) temperatures.

TO GET SUPERHEAT OR SUBCOOL WHEN THE SATURATION PRESSURE IS KNOWN

To get superheat, use the low (suction) side saturated pressure and use a tube on the suction side of the compressor for the actual temperature.

To get subcool, use the high side saturated pressure and use a tube close to the outlet side of the condenser for the actual temperature.

1. Press the POWER () button.
2. Use ▲ or ▼ button to display the system's refrigerant.
3. Press ENTER.
4. Press any ARROW button to display the pressure, then use ▲ OR ▼ to adjust the saturated pressure.
NOTE: To change the pressure quickly, hold the DOWN ARROW (▼) button.
5. Insert thermocouple clamp plug into side of unit.
6. Clamp thermocouple onto appropriate tube.
7. Press SH/SC to toggle between superheat or subcool temperature.
8. Once the temperature has stabilized, read the superheat or subcool temperature.

NOTE: The unit will not display a negative superheat or subcool temperature. It will display — instead. Check the side you are reading your pressure on and the location of the thermocouple clamp.

ADDITIONAL FUNCTIONS

Hold Function

To freeze the temperature reading from the thermocouple on the screen, press HOLD.

HOLD will blink under the thermocouple temperature reading. The pressure values can still be changed and the superheat or subcool values will update. The thermocouple can be unplugged from the unit and the temperature reading will remain. Turn the unit off and the temperature reading will be lost. To unfreeze the thermocouple temperature, press HOLD again or turn the unit off.

To Change Units

1. With the Subcool/Superheat Calculator off, press the POWER button.
2. Press and hold the ENTER button for two to three seconds until the current temperature unit is displayed.
3. Use ▲ or ▼ to select the desired temperature unit.
4. Press ENTER to save. The current pressure unit will be displayed.
5. Use ▲ or ▼ to select the desired pressure unit.
6. Press ENTER to save. The unit will return to normal operation.

TO UPDATE THE REFRIGERANT LIST

please visit: www.mastercool.com/pages/software_updates.html for instructions.

THERMOCOUPLE CALIBRATION PROCEDURE

This procedure requires an accurate room temperature and an accurate reference temperature for the thermocouple.

1. Turn the 52246 on. When the "R" starts blinking, press ENTER then one of the arrow buttons.
2. Hold down the POWER button and the UP ARROW (▲) button at the same time. The whole display will be shown.
3. Press ENTER twice until the number 2 is displayed and a temperature reading.
4. This is the circuit board reference temperature. After you are sure the temperatures have stabilized to room temperature, use the arrows to adjust the temperature reading to match your room temperature reference.
5. Press ENTER. The number 3 will be displayed and two temperatures. One will be the previously adjusted room temperature and the other will be the thermocouple reading. With the thermocouple at a known reference temperature (place the thermocouple clamp] in a slush of crushed ice and water or place the clamp on a thick copper tube with a calibrated temperature gauge clamped to it as well.) Adjust the temperature to match the reference temperature.
6. Press ENTER. The unit will shut-off.
7. The next time you press the POWER button, the unit will return to normal operation.

Support

USA (973) 252-9119
Belgium +32 (0) 3 777 28 48
Brasil + 55 (11) 4407 4017



Documents / Resources



[Mastercool 52246 Calculator](#) [pdf] Instruction Manual
52246, Calculator, 52246 Calculator

