Example of Warming

Starting Point
In the container normal room air is at a temperature J of 20°C with a relative humidity j of 50%.Effectively 8.65 g/m³ of water vapor is present, p at a partial pressure of 1,169 Pa.

Warming 10°C.
The temperature is now 30°C, the quantity of water vapor partial pressure and p remain unchanged. Since the air can now absorb max. 30.4 g/m³ of water vapor, the relative humidity decreases to 27.6% j

Warming 20°C.
Even at 40°C, 8.65 g/m³ of water vapor is still present. J, the relative humidity is only 15.8%, p 1,169 Pa remains the same.

Warming 40°C.
Even at 60°C , 8.85 g / m³ of water vapor is still present
.j = 5.9%
P = 1169 Pa

Heating the air only results in a reduction of j relative humidity from 50% down to 6%.