

### **Zámkový sál odvlhčování**

Povrchová teplota chladiče: 5 °C

A psychrometric chart for air conditioning process. The chart shows the relationship between dry-bulb temperature ( $t_{db}$ ) and wet-bulb temperature ( $t_{wb}$ ) for air. The x-axis represents dry-bulb temperature ( $t_{db}$ ) in  $^{\circ}\text{C}$ , ranging from 0 to 25. The y-axis represents wet-bulb temperature ( $t_{wb}$ ) in  $^{\circ}\text{C}$ , ranging from -20 to 55. The chart includes a grid of constant wet-bulb temperature lines (labeled 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110) and constant dry-bulb temperature lines (labeled 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110). A saturation curve is shown on the right side. A process line is drawn from point A (16, 26.6) to point B (23, 38.2). Point A is labeled 16,26631598 and point B is labeled 23,38282922. A vertical line is drawn from point A to the saturation curve at point C (26, 35.9). Point C is labeled 26,359322317. The process line is labeled  $\phi=10\%$ . The saturation curve is labeled  $h=0 \text{ kJ/kg s.v.}$ .

			1	2	3	4	5	6	7	8	9	10
Teplota	<b>t</b>	°C	26,0	26,0	26,0	16,0	23,0					
rel.vlhkost	<b>φ</b>	%	55%	60%	57%	79%	51%					
měr. vlhkost	<b>x</b>	g/kg s.v.	11,7	12,8	12,2	9,0	9,0					
entalpie	<b>h</b>	kJ/kg s.v.	56,0	58,9	57,5	39,0	46,2					
hustota	<b>ρ</b>	kg/m <sup>3</sup>	1,16	1,16	1,16	1,20	1,17					
t.vlhkého tepl.	<b>tv</b>	°C	16,5	18,5	17,5	13,9	16,8					
Skut. průtok	<b>Vs</b>	m <sup>3</sup> /h	840	841	1 681	1 617	1 656					
Norm. průtok	<b>Vn</b>	m <sup>3</sup> /h	800	800	1 600	1 600	1 600					
Předaný výkon	<b>P</b>	kW				-9,8	3,8					
Odpařené vody	<b>qw</b>	kg/h			0,0	-6,1	0,0					