

Description

The fan permanently records the absolute humidity, the water content in the air, and forms a moving average of this. This forms the background reference, the value that can be achieved by ventilation. For this, it is necessary that the fan is permanently supplied with voltage via L and N.

The basis for the following considerations is the h,x diagram on page 2 and the DIP switch settings listed on page 3.

Comfort limit

If the absolute humidity is below the comfort limit, the fan automatically switches, if activated (DIP 3), to interval operation at the set basic ventilation level (DIP 1). This is only used to remove odours. If no interval operation is activated, the fan goes into sniffing operation, i.e. to 0m³/h with hourly start-up for sensor updating. The comfort limit is referenced via the average room temperature and is intended to prevent excessively dry room air, especially during the cold seasons.

Normal operation

If the absolute humidity is between the comfort limit and the limit for humidity protection, the fan runs permanently at the set basic ventilation level.

Humidity protection

If the absolute humidity exceeds the limit for humidity protection, the fan goes into sniffing mode. Every hour, the basic ventilation is activated for a short time to update the sensor value. The humidity protection is referenced to the coldest point in the room or cellar (DIP 7). If this is protected against moisture damage and mould formation, the same applies to the rest of the cellar.

Abrupt increase in relative humidity

In the event of a sudden increase in relative humidity of 5%, the fan automatically switches to humidity-controlled extract air mode. In this case, the fan tries to remove the temporarily accumulated humidity (drying laundry, showering, etc.) in a degressive manner, i.e. as quickly as possible. For this purpose, the fan goes directly to the set demand ventilation level (DIP 2) in order to reduce the volume flow to the basic ventilation level as the humidity falls. If the humidity cannot be reduced within one hour, the fan returns to operation according to absolute humidity.

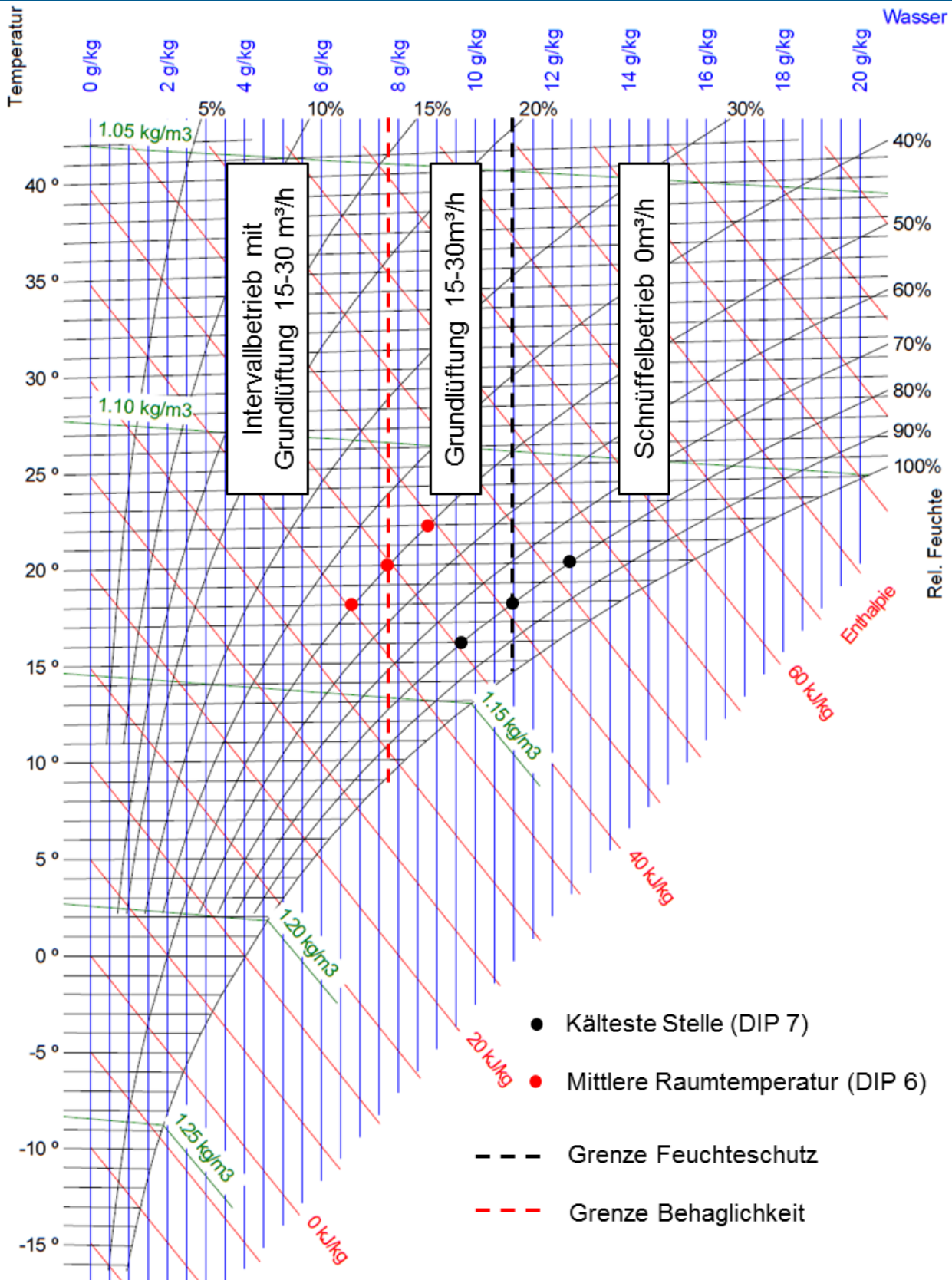
Demand ventilation switchable

The fan can be manually switched to the demand ventilation stage via L1. In addition, a switch-on delay and a run-on time can be programmed via DIP 4 and 5.

Deactivation of automatic humidity control

The automatic humidity control can be deactivated manually via L2. The fan behaves as described under the item Comfort limit.

h,x - Diagram



DIP switch settings

	Grundlüftung 15m ³ /h *		Einschaltverzögerung 45 Sekunden *
	Grundlüftung 30m ³ /h		Einschaltverzögerung 120 Sekunden
	Grundlüftung 0m ³ /h		Einschaltverzögerung AUS
	Bedarfslüftung 45m ³ /h *		Mittlere Raumtemperatur 20°C *
	Bedarfslüftung 60m ³ /h		Mittlere Raumtemperatur 22°C
	Bedarfslüftung 30m ³ /h		Mittlere Raumtemperatur 18°C
	Intervall 4 Std. 30 Minuten *		Kälteste Stelle 18 °C *
	Intervall 2 Std. 15 Minuten		Kälteste Stelle 20°C
	Intervall AUS		Kälteste Stelle 16°C
	Nachlaufzeit 15 Minuten *		
	Nachlaufzeit 30 Minuten		
	Nachlaufzeit AUS		

The items marked with * correspond to the factory settings.

Ask us directly if any questions arise.
We will be happy to help.

Your LUNOS team