

FRIGOR TEC
Drying to the point

FrigorTec GmbH • Germany



AGRIFRIGOR™ – Air dehumidifiers – Heat pumps for drying hay

frigortec.com

For business customers only. This offer is not available to consumers.



The Control System

A hay drying system can be operated with the AGRIMAT control system. To ensure efficient operation, the system automatically switches between outdoor air and recirculation modes, ensuring that the most appropriate operating mode is selected.

AGRIFRIGOR™				
HT 50		HT 100		HT 150
AIR DEHUMIDIFIERS - HEAT PUMPS				
Hay box size [m ²] ¹⁾		to 50	to 100	to 140
Electrical data				
Max. current consumption [A]		24	32	55
Electrical connection [kW / A]		12 / 32	18 / 32	30 / 63
Suitable for air volume ¹⁾				
Dehumidifier operation [m ³ / s]		3.0 – 5.5	6.5 – 11.0	9.5 – 16.5
Outdoor air operation max. [m ³ / s]		8.0	17.0	25.0
Dimensions [L x W x H in mm]		2,100 x 1,150 x 1,900	2,500 x 1,250 x 2,000	2,900 x 1,250 x 2,400
Weight [kg]		800	900	1,200

						
AGRIVENT™	AV5,5	AV7,5	AV9	AV11	AV11	AV15
VENTILATOR						
Air volume [m³/s]	7.0	7.5	9.5	9.0	11.5	13.1
Pressure [Pa] maximum ²⁾	1,390	1,850	1,850	2,300	1,700	2,350
Electrical data						
Max. current consumption [A]	11	14	17	21	21	27
Electrical connection [kW / A]	5.5 / 16	7.5 / 16	9.0 / 32	11 / 32	11 / 32	15 / 32
Dimensions [L x W x H in mm]	1,100 x 1,030 x 1,420		1,250 x 1,080 x 1,570		1,570 x 1,210 x 1,910	
Weight [kg]	220	230	260	270	450	450

All figures are valid for 400 V-3 Ph-50 Hz

¹⁾ At an average initial hay moisture content of 35%, at 1,000 Pa counter-pressure and final hay moisture of 14%

²⁾ Higher pressures available on request

Subject to technical changes.

A convenient control system is optionally available: The AGRICONTROL Siemens S7 handles all switching operations and a monitor displays the current status of the system. The control system thus helps the operator to monitor several drying boxes. The FrigorTec app allows remote control via a mobile phone or computer.



HT 200

to 180

63

40 / 63

13.4 – 22.0

33.0

3,600 x 1,250 x 2,400

1,300

HT 250

to 220

95

45 / 100

14.5 – 25.0

38.0

3,900 x 1,250 x 2,500

1,600

HT 300

bis 270

110

60 / 125

19.0 – 33.0

50.0

5,800 x 1,250 x 2,400

2,400

HT 400

to 350

125

80 / 125

26.8 – 44.0

64.0

7,200 x 1,250 x 2,400

2,600

HT 500

to 400

190

90 / 250

29.0 – 50.0

76.0

7,800 x 1,350 x 2,500

3,200



AV15 AV18.5

16.0 17.0

1,800 2,100

27 36

15 / 32 18.5 / 50

1,670 x 1,550 x 2,060

600 650

AV22 AV30

18.5 20.5

2,300 2,840

45 55

22 / 50 30 / 63

1,670 x 1,600 x 2,570

650 700

AV30 AV45

25.0 25.0

1,890 2,400

55 78

30 / 63 45 / 100

1,750 x 1,900 x 2,330

700 800

AV45 AV55

34.0 36.0

1,800 1,950

78 95

45 / 100 55 / 100

1,750 x 1,920 x 2,190

800 1,000

Technical specifications AGRIFRIGOR Air Dehumidifier:

- Weather-independent drying (rain, fog, heat and cold)
- Sound-optimized fans and compressors
- Effective large surface area coarse dust air filter – easy to clean
- Sturdy industrial design
- Full enclosure with quick-release fasteners
- Hay box with differential pressure sensor
- Quality control through factory test run
- Fully automatic control
- Temperature and humidity sensors
- Vibration decoupling
- Coated heat exchanger as corrosion protection
- Operating hour meter
- Fully welded condensate tray
- Remote control via app
- Air flap-motor drives
- Pressure indicator
- CE marking
- Made in Germany

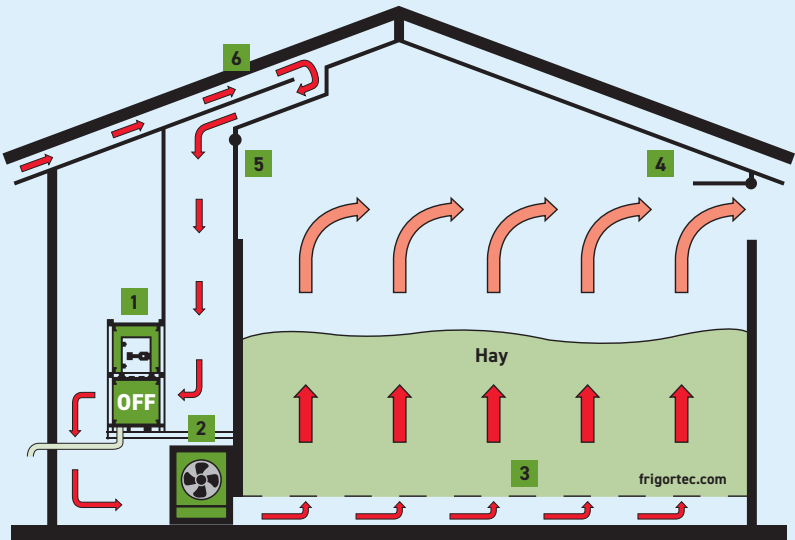
AGRIFRIGOR™- Hay drying process

Outer Air Operation with Under-Roof Pre-Warming



sunny and warm
outer air warming in the solar panel,
air humidity drops

- 1 AGRIFRIGOR air dehumidifier
- 2 AGRIVENT radial fan
- 3 Aeration floor
- 4 Exhaust flap
- 5 Outer-/Recirculation flap
- 6 Solar panel

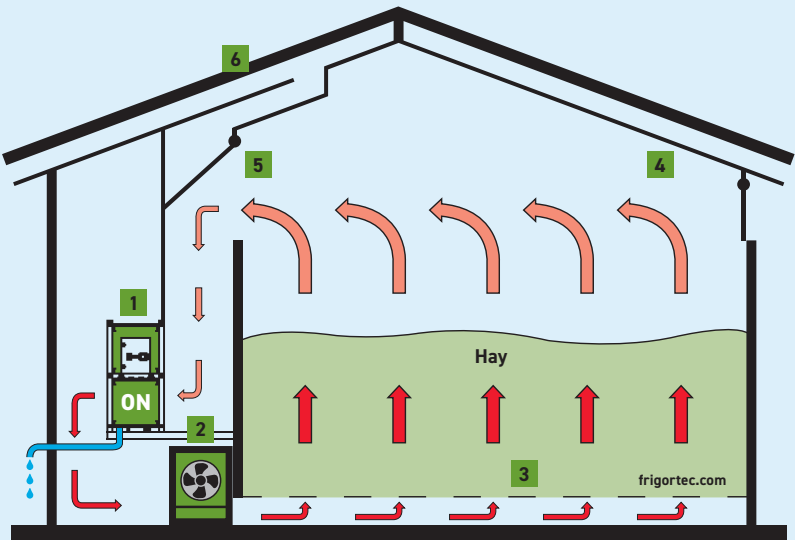


Recirculation Mode with Air Dehumidifier



cold + rainy / night / cloudy:
air circulation inside of the storage,
AGRIFRIGOR air dehumidification
and warming

- 1 AGRIFRIGOR air dehumidifier
- 2 AGRIVENT radial fan
- 3 Aeration floor
- 4 Exhaust flap
- 5 Outer-/Recirculation flap
- 6 Solar panel



Produce premium quality hay – dried under controlled conditions!

The constantly changing weather conditions are prompting companies to install for weather-independent under roof drying.

Drying fodder from meadows, pastures and fields with a heat pump is an energy-efficient, natural conservation process.

Cut fodder grass is initially pre-dried in the sun. Subsequently the fodder is dried homogenously and controlled to the desired degree of dryness with an AGRIFRIGOR heat pump.

This controlled drying process helps to produce hay of consistent high quality. The high coefficient of performance of the dehumidifier heat pump contributes to low energy costs and good cost-effectiveness.

The AGRIFRIGOR heat pump, combined with a pressure-stabilized fan, ensures that pre-dried fodder grass is dried regardless of weather conditions and helps to preserve valuable nutrients. This technology enables cutting to be done at an optimal time, consequently reducing crumble losses.

With uniformly dry hay, the risk of storage losses due to reheating or mould growth is significantly reduced. High-quality hay can contribute to better animal health, increased feed intake and hygiene, thereby supporting forage performance.

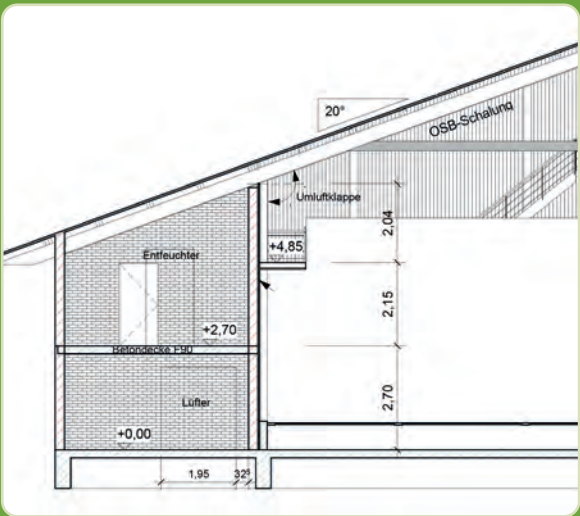
When drying hops, tea leaves, herbs and nuts, comparable benefits can be achieved using an AGRIFRIGOR.



FrigorTec planning support

We would be delighted to offer you comprehensive advice and collaborate with you to create the optimal customised solution. Take advantage of our extensive experience!

- Dimensioning of your drying system
- Arrangement of boxes, air ducts and technology
- Design of the roof suction system
- Coordination with your architect and hall constructor
- Comprehensive documentation as free assistance



FrigorTec GmbH is certified according to DIN EN ISO 9001 : 2015.

FrigorTec GmbH is member of:

- Society for the Support of the German Milling School Braunschweig e.V., Bonn / Germany
- Rationalisation Curatorship for Agriculture, Rendsburg / Germany
- Federal educational institution in Agribusiness Burg Warberg e.V., Warberg / Germany
- ALB, Stuttgart / Germany
- AGF, Detmold / Germany

TÜV acceptance testing in our factory.

An additional test at the installation site is usually not necessary for the AGRIFRIGOR™.



We pass on only what we have produced by our own hands.
Made in Germany.



In the parent plant in Amtzell, Germany all products made by FrigorTec GmbH are developed, constructed and produced. Every device passes a quality inspection with test runs before delivery. We sell the FrigorTec solutions in over 100 countries through our worldwide distribution network.

SERVICE
(24 / 7)



Our service keeps the units maintained and ensures the spare parts supply - worldwide.
service@frigortec.com

Grain cooling
GRANIFRIGOR™

Crane air conditioning
CRANEFRIGOR™

Standard cooling
STANDARDFRIGOR

FrigorTec
SERVICES

Insect heat treatment
DEBUGGER

Hay dryer
AGRIFRIGOR™

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Drying to the point

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