FRIGOR TEC
Cooling to the point

since 1963
50 YEARS
AGRARTECHNIK
FRIGOR TEC

Genuine for over 50 years!

AGRIFRIGOR™ – Dehumidifiers – Heat pumps for drying hay

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The Control System

A hay drying system can be operated with the AGRIMAT control system. It is addition-ally possible to install humidity and temperature sensors in the system and equip all valves with actuator drives. They operate using spur gear rods, hoists or electric cylinders.




AGRIFRIGOR™	HT 50	HT 60	HT 75	HT 100
DEHUMIDIFIERS - HEAT PUMPS				
Hay box size [m²] [1)]	to 50	to 75	to 100	to 125
Electrical data				
Max. current consumption [A]	24	24	28	32
Electrical connection [kW / A]	12 / 32	12 / 32	15 / 32	18 / 32
Suitable for air volume [1)]				
Dehumidifier operation [m³ / s]	3,0 – 5,5	4,0 – 6,7	5,0 – 8,5	6,5 – 11,0
Outdoor air operation max. [m³/s]	8,0	11,0	13,0	17,0
Dimensions [L x W x H in mm]	2.100 x 1.150 x 1.900	2.100 x 1.150 x 1.900	2.100 x 1.150 x 1.900	2.500 x 1.250 x 2.000
Weight [kg]	800	850	850	900



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 1000 Pa counter-pressure and final hay moisture of 14%

[2)] Higher pressures available on request

Subject to technical changes.

They are also optionally available with a convenient control system: The AGRICONTROL Siemens S7 handles all switching operations and a monitor displays the current status of the system. This is especially useful when there are several drying boxes. The operator can subsequently keep track of everything. Even remote data transmission via modem is possible.







HT 125	HT 150	HT 200	HT 250	HT 300	HT 400	HT 500
to 150	to 200	to 250	to 300	to 350	to 400	to 500
42	55	63	95	110	125	190
25 / 50	30 / 63	40 / 63	45 / 100	60 / 125	80 / 125	90 / 250
8,0 – 14,0	9,5 – 16,5	13,4 – 22,0	14,5 – 25,0	19,0 – 33,0	26,8 – 44,0	29,0 – 50,0
20,0	25,0	33,0	38,0	50,0	64,0	76,0
2.700 x 1.250 x 2.200	2.900 x 1.250 x 2.400	3.600 x 1.250 x 2.400	3.900 x 1.350 x 2.500	5.800 x 1.250 x 2.400	7.200 x 1.250 x 2.400	7.800 x 1.350 x 2.500
1.000	1.200	1.300	1.600	2.400	2.600	3.200




AV15	AV18,5	AV22	AV30	AV30	AV45	AV45	AV55
16,0	17,0	18,5	20,5	25,0	25,0	34,0	36,0
1.800	2.100	2.300	2.840	1.890	2.400	1.800	1.950
27	36	45	55	55	78	78	95
15 / 32	18,5 / 50	22 / 50	30 / 63	30 / 63	45 / 100	45 / 100	55 / 100
1.670 x 1.550 x 2.060		1.670 x 1.600 x 2.570		1.750 x 1.900 x 2.330		1.750 x 1.920 x 2.190	
600	650	650	700	700	800	800	1.000

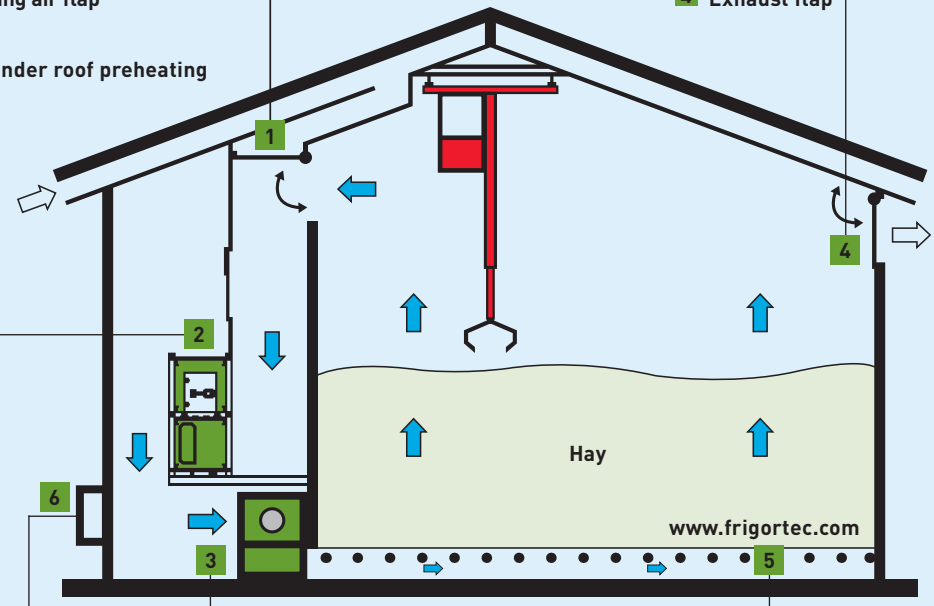
Technical specifications AGRIFRIGOR™:

- Suitable for all ambient conditions (rain, fog, heat and cold)
- Energy-efficient design due to frequency control
- 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 / indicator light
- Environmentally-friendly safety refrigerant without CFC and without HCFC
- Spare tray for cleaning / condensate tray
- Remote monitoring / alarm modem
- Air flap-motor drives
- Pressure indicator
- CE mark

AGRIFRIGOR™- Hay drying

1 Outer / recirculating air flap

4 Exhaust flap



2 AGRIFRIGOR™- dehumidifier with AGRIMAT control

6 AGRICONTROL

3 AGRIVENT™ ventilator

5 Aeration floor

Produce premium quality hay – ecologically and effectively!

The constantly changing weather conditions force companies to provide for weather-independent under roof drying. Drying fodder from meadows, pastures and fields with a heat pump is an extremely 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 produces high quality hay. The energy-efficient heat pump generates low energy costs and high profitability.

The AGRIFRIGOR™ heat pump, combined with a pressure-stabilized fan, ensures that pre-dried fodder grass is quickly and weather-independently dried thereby preserving the valuable plant substances. This technology enables cutting to be done at an optimal time, consequently reducing crumble losses to a minimum.

No storage losses due to residual heat or mold formation occur with homogeneously dried hay. For farmers, healthy hay boosts livestock health, improves feed intake and hygiene.

When animals are fed exclusively with fresh grassland fodder, hay and grain, the milk they produce is referred to as hay milk. Hay milk is the most natural type of milk and essential to produce high-quality cheese products.

The same advantages that apply to hay drying with an AGRIFRIGOR™ heat pump are applicable for drying hops, tea leaves and herbs.

FrigorTec GmbH is certified according to DIN EN ISO 9001 : 2008.
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
- School providing vocational education in Agribusiness Burg Warberg e.V., Warberg / Germany
- Corn exchange, Luzern / Swiss
- 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 80 countries through our worldwide distribution network.

SERVICE (24/7)

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

- Grain cooling GRANIFRIGOR™
- Crane air conditioning CRANEFRIGOR™
- Standard cooling STANDARDFRIGOR
- Special solutions SHELTERFRIGOR
- Insect heat treatment DEBUGGER
- Hay dryer AGRIFRIGOR™

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