

T-dryers T11-T35 range Industrial Tumble Dryers

Product Sales Guide

1. Range

T11 T13 T16 T13/13 T24 T35

Capacity:	11 kg	13 kg	16 kg	26 kg	24 kg	35 kg
Litres:	250	285	345	570	530	680
Ratio:	1/22	1/22	1/21	1/22	1/22	1/20

Full Range:



Electrical Heating



Gas Heating



Steam Heating

2.1 Electrical Heating

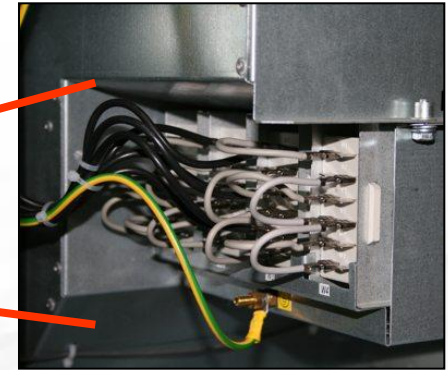
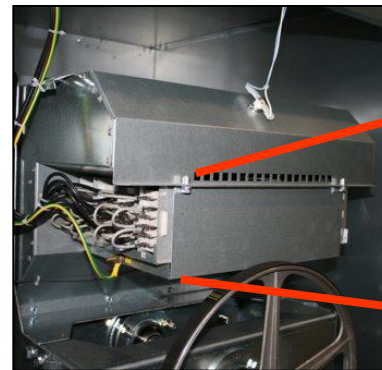
Energy: T11 - 13,5 kW

T13 - 18 kW

T16 - 24 kW

T24 – 30 and 36 kW

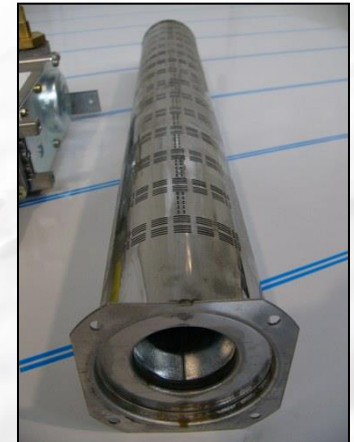
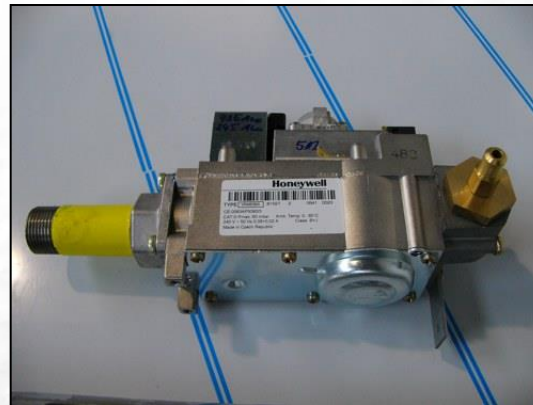
T35 – 36 and 48 kW



- **Battery is at the rear on T11-T16,
On Top on T24-T35: Easy access**
- **Back pannels are perforated for Air Aspiration**

2.2 Gas Heating

- Battery is in the same position as on electrical dryer:
Easy access
- Regulated gas valve: can be regulated according
to the local gas pressure
- Universal Gas burner: can work throughout whole
line of dryers
- Atmospheric gas burner
that is universal



2.3 Steam Heating

- Battery on the same location: Easy access
- Steam pressure: 3 – 6 and 7 - 10 Bar.
- Dust filter: Easy to remove for cleaning



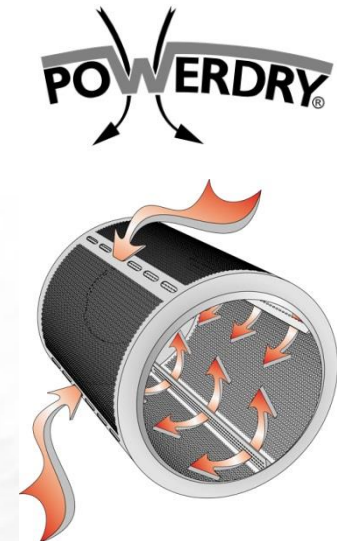
3. RADAX® - Airflow (T11-T16)

- RADAX® - Airflow: Combination of axial and radial airflow
- Less thermal losses
- The hot air has better access to the linnen
- Lower energy consumption
- Shorter drying times
- Regulating valve on the exhaust for ideal airflow
- Temperature sensor at the outlet

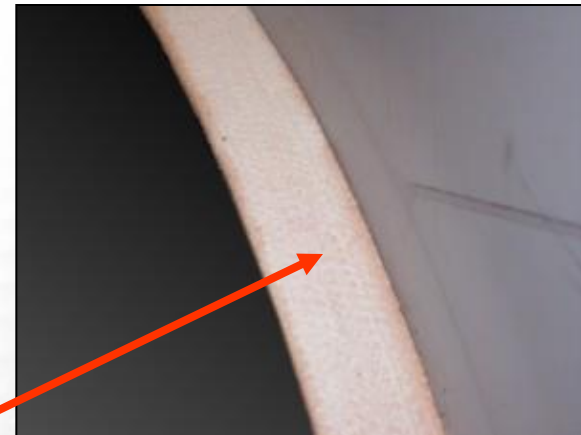
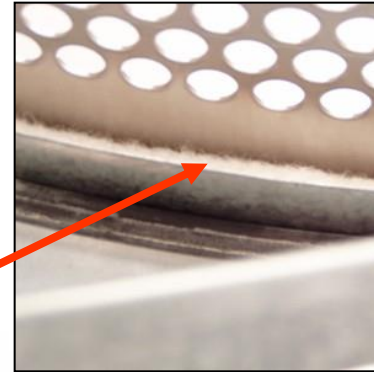


3. PowerDry® - Airflow (T24-T35)

- Lifting ribs are perforated for optimized airflow
- On T24-35 only
- Less thermal losses
- Lower energy consumption
- Shorter drying times
- Regulating valve on the exhaust for ideal airflow
- Temperature sensor at the outlet



- **NOMEX**
- **Optimizes drying process**
- **Ideal airflow guider**
- **Not for T24-35**



- **Stainless steel execution AISI 430**
- **1 mm thickness: guaranteed strenght**
- **Stainless steel lifting ribs**



6. Shaft + Bearing house

- **Steel shaft - longer life span**
- **Overdimensioned welded cross that fixes the shaft to the drum**
- **Two bearings**

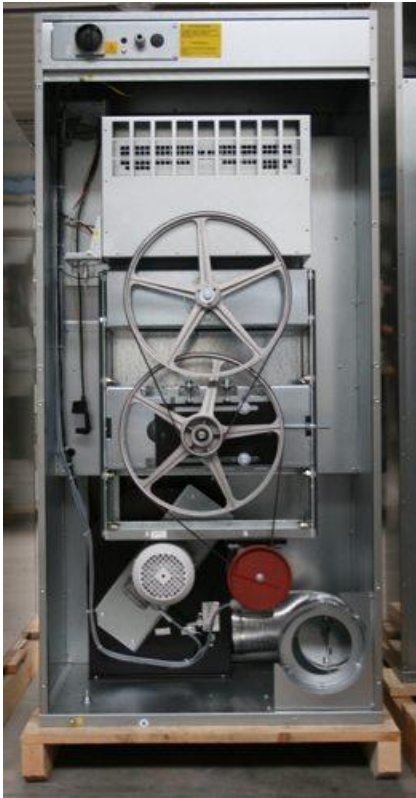


Reversing on all dryers (as standard on T13/13)

- Two separated motors: 1st for ventilation and 2nd for driving of the drum
- If the machine is without reversing - the factory settings and programmes correspond with that (so the user doesnot have to program anything)
- No ball - forming of the linnen



7. Reversing

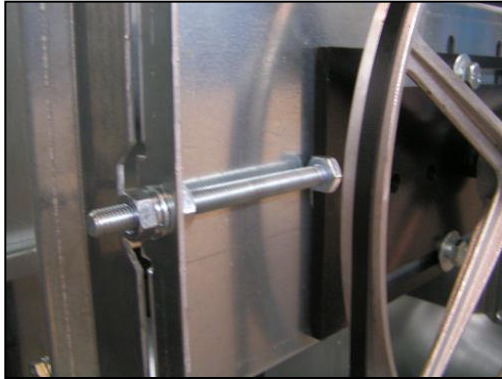


With reversing



Without reversing

8. Pulleys



- **Light Alu cast iron pulleys: quality**
- **Micro V-belt with teeth: for a maximum grip**
- **Easy replacement of the V-belts: access at the rear**
- **Easy tensioning of the belts: 1 central tensioning system**



- **Pre painted steel plates (SKINPLATE)**
- **0,2 mm thickness coat: insulation of noise and heat**
- **0,8 mm thickness of the panels**
- **Different front panel colours available:**
 - **standard INOX imitation**
 - **stainless steel optional**



- Huge door opening for easy loading and unloading
- Huge door diameter 600 mm for T11-16, 810 mm for T24-T35
- Black powder painted steel
- Hardened glued door glass: resist to high temperatures
- Rubber seal: EPDM quality resistant to extreme conditions
- Door can be mounted left or right: flexible placing



New door hinges

- Extra strenght
- Opening 270°

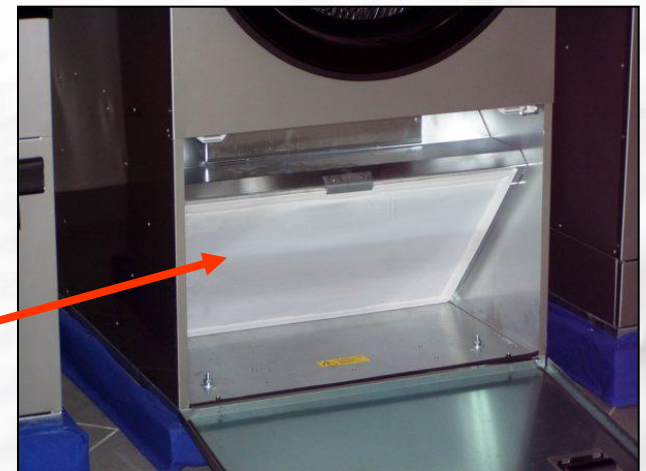


New door rubber

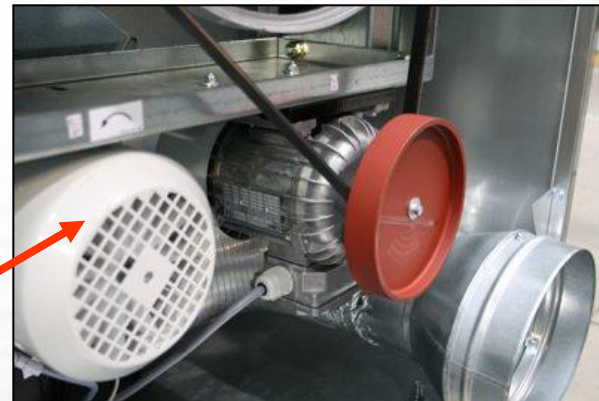
- No condensation
- No marking on front panel
- No dust between the rubber



- Strong resistant synthetical filter
- Auto cleaning lint screen
- Easy accesable through a overdimensional filter door
- Can easily be removed for cleaning
- Filter door easy to open

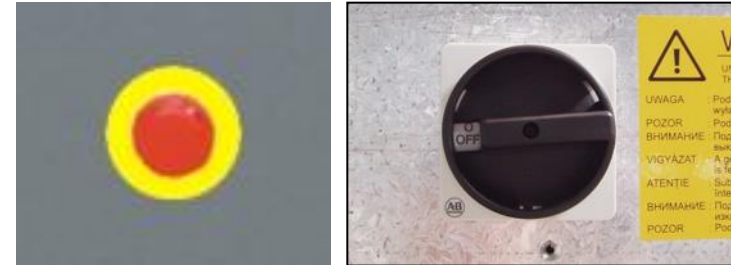


- **Overdimensioned: long piping in instalation is possible**
- **Radial ventilator of galvanized steel: stable during working conditions**
- **Balanced before mounting**



13. Safety

- **Emergency button on the front**
- **Main switch at the rear**
- **The dryer stops:**
 - 1 safety switch when opening the door
 - 1 safety switch when opening the filter door
 - 1 under pressure switch when the pressure drops considerably
- **Controls the airflow conditions in the dryer**
- **Two safety thermostats:**
 - 1 in the heating battery
 - 1 below the drum at T24-T35



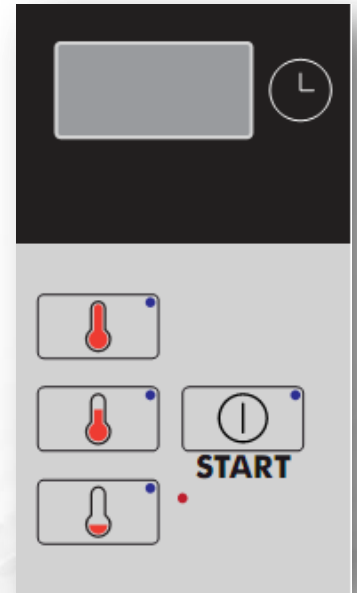
14. Noise level

- According to CE regulations
- Below 70 dB
- User friendly



15.1 Easy Control

- 3 standard programmes available
- Both coin and OPL applications
- For coin: 3 programmes
- For OPL: 3 programmes
- °C or °F: temperature freely programmable
- Minimum cool down is standard: Safety software
- Blue display color

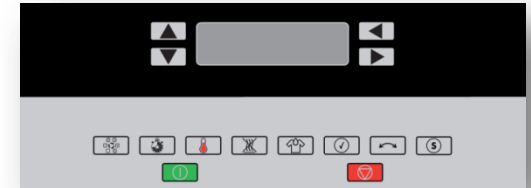


15.1 Easy Control

- **Error messages: on display**
- **Can be upgraded by a Full Control microprocessor (exchangeable)**
- **Time and cool down time freely programmable**
- **There is no Central STOP button on coin machines**

15.2 Full Control

- Up to 20 programmes
- 9 factory programmes (that can be changed)
- Temperature freely programmable both in °C and °F
- Drying time freely programmable
- Cool down time freely programmable
- Safety cool down time: 3-5 min.
- Reversing action time and pause can be programmed
- Silver/gray display color



15.2 Full Control

- **Display:**
 - two times 16 character
 - multi - lingual: 8 (west version)
10 (east version)
 - indicates the status of the programm
 - by pressing the service button: additional information will appear
- **Error messages on display**
- **Diagnostic system: full test programm runs through all the functions**

15.2 Full Control – SensoDry®

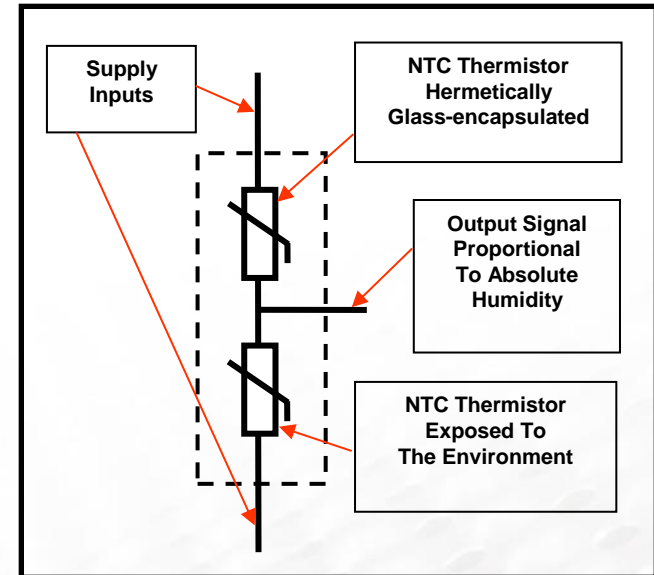
- **Optional:**
 - humidity control (sensor is at the outlet)
 - residual moisture control can be programmed per % humidity

 **senso.dry®**

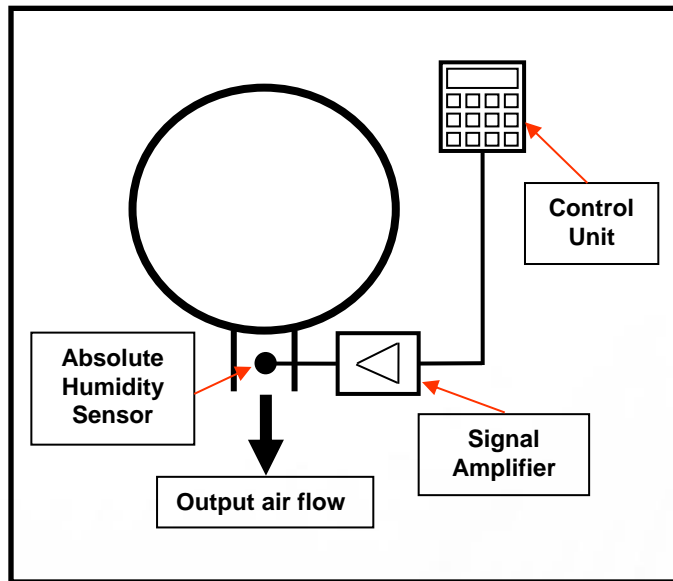
17. Absolute Humidity Sensor

- **Basic Sensor Characteristics:**

- The sensor makes use of thermal conductivity to measure the air moisture level
- Range: 0 - 130 g/M³ (0-100% RH)
- Operation to 200° C.
- Immune to most physical & chemical contaminants
- Operation in fully saturated environments
- Dust cap protects sensor against dust and also avoids that the air flow in the dryer affects the measurement



18. Measuring principle



Absolute Humidity Sensor

Output signal is proportional to the absolute humidity in air flow

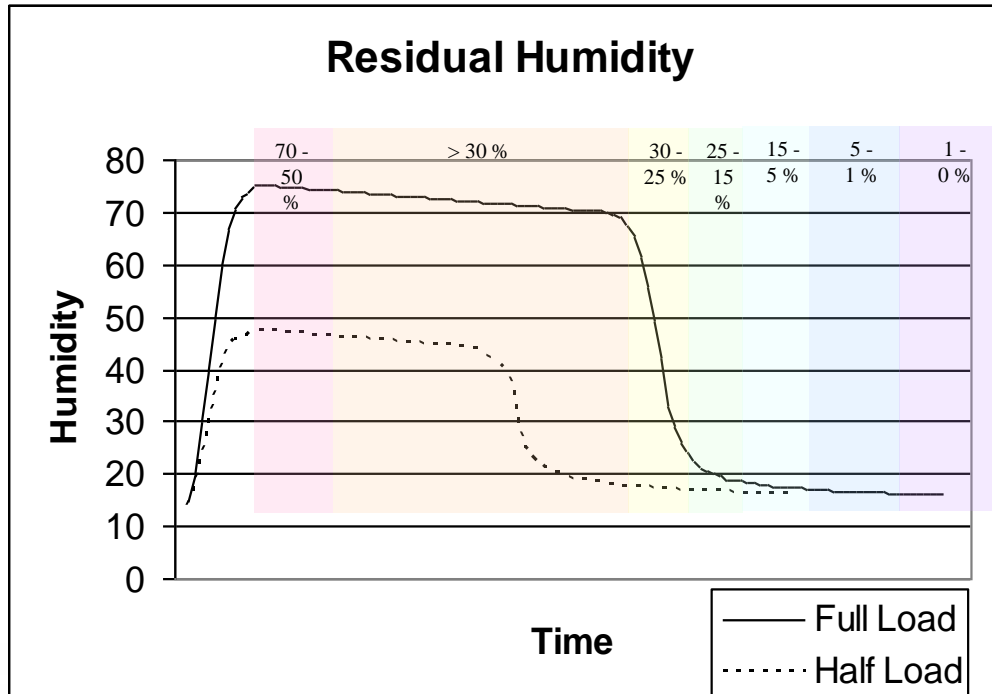
Signal Amplifier

Output signal from humidity sensor (range in millivolts) is connected to amplifier that makes stronger signal resistant again electrical noise in machine.

Control Unit

signal from humidity sensor is evaluated and used for controlling drying process

19. Evaluation principle



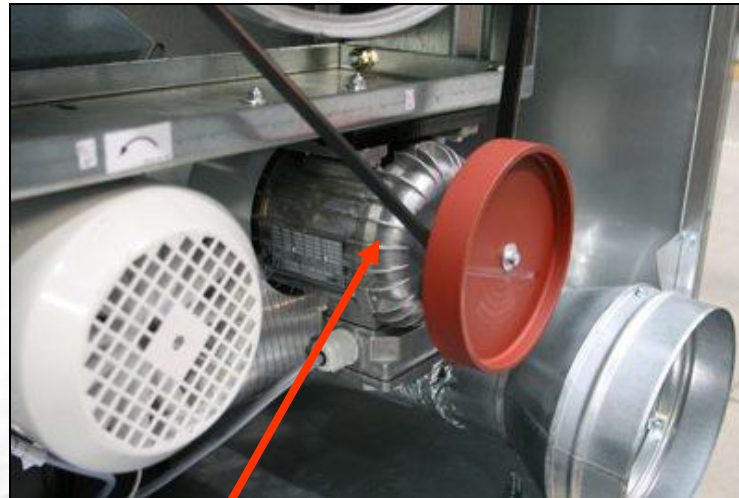
First area: drying process is started -The residual humidity of the linen can't be determined yet.

Second area: >30% - the drying process reaches target temperature - The residual humidity of the linen can't be determined yet.

Third-seventh area 30-0% - The range to program the residual humidity value is between 30 and 0%

- Two main systems for measuring the residual humidity of the linen.
- **Measuring by the ribs in the drum => direct method**
- **Measuring the air humidity => indirect method**
 - The measurement system is quite simple.
 - The kind and amount of fabrics doesn't matter as we measure the humidity of the air.
 - The special shape of the moisture curve makes that we can determine in an accurate way the residual humidity of the fabrics.
- Wet cleaning – use short drying times where humidity sensor is not applicable

- 3 phase or 1 phase has to be specified
- Voltage needs to be specified
- 50 or 60 Hz needs to be specified



22. Dimensions

- Small width for easy transport and installation
- Compact: Space saving



23. Uniformity

- Uniform look throughout the Primus range
- Consistency in the Micro-processor



T9 (HP)



T 11, 13, 16 (HP)



T24, 35

24. Easy service

- Easy access to all parts
- Lots of standardized parts throughout the range

25. Think Big – Full range



1. Heating

- ✓ Electric, gas, steam heating

2. RADAX® - Airflow

- ✓ Combination of axial and radial airflow => Shorter drying times
- ✓ Less thermal losses

3. PowerDry® - Airflow

- ✓ Lifting ribs are perforated for optimized airflow, Temperature sensor at the outlet
- ✓ On T24-35 only
- ✓ Lower energy consumption
- ✓ Optimizes drying process

4. Full Control: SENSO - DRY®

- ✓ residual moisture control can be programmed per % humidity

5. Ergonomic design for user & operator

- ✓ 180° door opening, Strong hinges, door diameter 600 mm for T9, Easy access to all parts

6. Full Control

- ✓ Up to 20 programmes, Drying time freely programmable

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