

**A FEW PRACTICAL BENEFITS:**

Development, Design, Production:  
100 % Trotec

High dehumidification performance  
even at low temperatures

Maximum dust and dampness protec-  
tion for all electrical components

Compressor overheating protection  
with automatic switch-off function

Very easy to maintain construction

Portable and easily stored anywhere  
thanks to its rotary compressor

Practical stacking groove for stable,  
space-saving storage and transport

Stackable with equally dimensioned  
models

MID-compliant<sup>4</sup> dual counter for  
operating and kilowatt hours  
optionally available

Practice-optimized German industrial  
design – protected design patent

# Commercial dehumidifiers of the TTK-S series

## The standard class – top of the class



Whether for use in a workshop, in construction, in storage or in a laboratory – the portable, commercial dehumidifiers of the TTK-S series are the perfect industrial condenser dryers for changing applications, even in rough conditions.

- Robust metal housings
- Powerful rotary compressors
- Low-maintenance construction
- High air flow rate and dehumidification performance
- Large operating range
- Integrated compressor heating protection with automatic switch-off function

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## TTK-S – the standard for modern, mobile commercial dehumidifiers used in rough operating environments

With the pioneering TTK-S commercial dehumidifiers, you can benefit from a variety of detailed solutions which save you time, enhance your performance and secure value retention – attractively combined in the practice-optimized German industrial design – protected design patent.

Also protected – from dust and dampness, that is – are all electrical components of the devices.

A special enclosure improves the protection of the electronic equipment from anything dangerous which may enter and impair the functionality and durability. This enclosure makes the commercial dehumidifier predestined for use in harsh conditions.

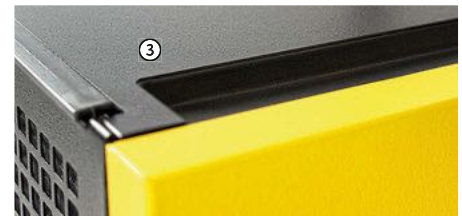
Due to its extremely low-maintenance construction, this advanced dehumidifier generation is easier to clean than ever before and due to its favourable power to weight ratio and its clever mobility features, it is easy to transport.

Nevertheless, in terms of dehumidification capacity, these dryers are no lightweight:

The entire heat exchange system from high-quality components was designed to work in harmony and guarantees the maximum drying efficiency of the devices in all temperature ranges – for example, even under 15 °C in unheated rooms.

As well as this, compared with other defrost systems, the high-quality hot gas automatic defrost guarantees a much more efficient dehumidification performance without defrost pauses on a time interval during which no defrosting occurs!

Even in storage, these commercial dehumidifiers make a good impression – while taking up surprisingly little space. Because they are equipped with two practical stacking grooves on their tops, equally sized TTK-S devices can be safely stacked to save space during transport and storage.



③ Two stacking grooves make it possible to stack equally sized TTK-S devices stably to save space.



- ① A special enclosure protects the dehumidifier electronics from anything dangerous which may enter.
- ② The height of the transport bar handle can be flexibly adjusted.



Trotec

Dehumidification

Humidification

Heating

Ventilation

Air conditioning

Air cleaning

Disinfection and Odour neutralization

Accessories





**Well-arranged operating panel:**

- ① Bars protecting the operating elements
- ② Operating hours counter integrated as standard
- ③ Optionally also available as dual counter for operating hours and energy consumption (MID-compliant<sup>4</sup>)
- ④ Dehumidification performance selection switch
- ⑤ Compressor overheating protection indicator
- ⑥ Filling level warning light (except TTK 655 S)



Their compact construction that is both easy-to-transport and robust as well as their high dehumidification performance turn the commercial dehumidifiers of the TTK-S series into the universal standard solution for virtually all commercial drying applications.

And in between two applications, the suitable protective covers available as practical accessories prevent soiling of the devices during storage.



**Active value retention thanks to integrated compressor heating protection with automatic switch-off function**

In drying applications with extremely high humidity levels and simultaneously high temperatures – for instance during water damage restoration – refrigerant dryers are quickly brought to the limits of their capacity (red range). This is where the catchy “rule of 35” applies: drying water damages with more than 35 degrees reduces the lifetime of the dryer to less than 35 %!

This is however not a question of component quality, but pure physics, which applies to all refrigerant dryers on the market regardless of the manufacturer.

Whilst at a moderate humidity level of about 70 % RH most professional condenser dryers can operate in temperatures of up to 35 °C without difficulty, very high humidity values at a simultaneously high room temperature cause considerably more energy to be fed to the humid room air, which then also has to be “worked off” by the refrigerant.

Consequently, the refrigerant pressure in the system is increased enormously leading to destructive load on the compressor.

To be sure, the dehumidifiers will at first continue to operate, but noticeably above their limit “deep in the dark red range”, resulting in an extremely shortened remaining lifetime.

All the same, there is no way around the application of a condenser dryer for such drying tasks – desiccant dehumidifiers need considerably more energy to achieve the same level of drying performance and are therefore not a viable alternative, especially in terms of economics.

**This is why the commercial dehumidifiers of the TTK-S series have an integrated compressor heating protection ensuring active value retention of your devices:**

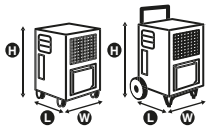


Sensors permanently monitor the thermal load of the compressor. If the temperature is within the defined operating range, the integrated heating protection indicator emits long pulses to indicate that the dehumidifier is operating ideally.

As soon as the temperature exceed the critical threshold of 35 °C, the automatic function

switches the compressor off in order to protect it while the fan keeps on running. The compressor is automatically activated again once the temperature falls below the 35 °C threshold.

This protection not only significantly extends the lifetime of your dehumidifiers, it also prevents thermal damages to materials located in the room and the building structure.



Technical data		TTK 125 S	TTK 175 S	TTK 355 S	TTK 655 S
Article number		1.120.000.124	1.120.000.157	1.120.000.163	1.120.000.174
Dehumidification performance / 24 h [litres]	At 30 °C / 80 % RH	28	40	55	91
	Max.	32	50	70	150
Air volume [m³/h]		250	580	1,000	1,000
Operating range	Temperature [°C]	5 to 32	5 to 32	5 to 32	5 to 32
	Humidity [% RH]	50 to 90	50 to 90	50 to 90	50 to 90
Input voltage [V/Hz]		220-240 / 50	220-240 / 50	220-240 / 50	220-240 / 50
Max. power input [kW]		0.5	0.6	1.3	1.9
Refrigerant* Type / Amount [g]		R-290 / 150	R-290 / 150	R-454C / 650	R-454C / 1,050
GWP factor* / CO <sub>2</sub> equivalent* [t]		3 / 0.00045	3 / 0.00045	146 / 0.09490	146 / 0.15
Water tank [litres]		6 <sup>1</sup>	6 <sup>1</sup>	6 <sup>1</sup>	–
Sound level [dB(A)]		52	52	54	56
Length [mm]		375	390	390	620
Width [mm]		345	380	380	515
Height [mm]		603	643	725	858
Weight [kg]		26	35	39	55
					
Equipment and functions		TTK 125 S	TTK 175 S	TTK 355 S	TTK 655 S
Hot gas automatic defrosting		■	■	■	■
Automatic dehumidification	Adjustable analogue hygrostat	■	■	■	■
	Electronic hygrostat with digital display	–	–	–	EH <sup>2</sup>
Filling level warning light to indicate a full water tank		■	■	■	–
Overflow protection with automatic switch-off		■	■	■	–
Washable air filter		■	■	■	■
Operating hours counter		■	■	■	■
Dual counter for operating and kilowatt hours <sup>3</sup> (MID-compliant <sup>4</sup> )		7.140.000.903	7.140.000.903	7.140.000.903	7.140.000.903
Compressor overheating protection with automatic switch-off function		■	■	■	■
Protective bars for the control panel		■	■	■	■
Carry / transport handle(s)		■	■	■	■
Non-marking full-rubber wheels		■	■	■	■
Swivel casters with wheel lock		■	–	–	–
Carriage design		–	■	■	■
Vertically adjustable transport handle		–	■	■	■
Stackable		■	■	■	■
Connection for external condensate drain		■	■	■	■
Accessories (consumables)		TTK 125 S	TTK 175 S	TTK 355 S	TTK 655 S
Air filter (article number)		7.160.000.006	7.160.000.007	7.160.000.008	7.160.000.009
Available accessories		TTK 125 S	TTK 175 S	TTK 355 S	TTK 655 S
Condensate pump with automatic switch-off function, max. pump height 4.3 m		Art. no. 6.100.003.030	Art. no. 6.100.003.030	Art. no. 6.100.003.030	Art. no. 6.100.003.030
		Art. no. 6.100.003.101	Art. no. 6.100.003.105	Art. no. 6.100.003.110	Art. no. 6.100.003.115

■ Standard equipment

<sup>1</sup> This is the "switch-off value", generally the containers hold approx. 7 to 8 litres of water to avoid spilling when transporting a full tank.

<sup>2</sup> Available as the model TTK 655 S EH, Art. no. 1.120.000.175

<sup>3</sup> Optional accessories

<sup>4</sup> **What does MID compliant mean?** The European Measuring Instruments Directive (MID) has replaced the existing rules of national approval and subsequent calibration in some areas. As a result, all power meters, which are used for energy consumption billing, must be MID compliant in the future.

\* Functionally, this device contains a hermetic system with fluorinated greenhouse gas as a refrigerant in the specified specifications and with a greenhouse gas potential corresponding to the indicated GWP factor.

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