

## PROFESSIONAL TRACKED DEHUMIDIFIER

# Model KT-80



### **Professional tracked dehumidifier KT-80 rated condensation capacity: 96 lt/24h \***

Refrigerating cycle professional air dehumidifiers are planned for professional and semi-professional uses. They are provided with a structure made of epoxy powder painted galvanized steel sheet and four pivoting wheels to ease moving. Dehumidifiers are compact and extremely reliable and they need a very little maintenance. Our refrigerating cycle professional dehumidifiers are entirely assembled in factory, exposed to vacuum cycle tightness test and filled with R410A eco-friendly refrigerant. Our dehumidifiers owe their reliability and une versatility to a specific care in the creation of the refrigerating section, indeed they are exposed to a complete functional trial before the shipment. All the devices comply with European Directives, bear the CE mark and are accompanied by a comprehensive instruction booklet with conformity certifications.

\* at 32°C and with the 90% of relative humidity

## DESCRIPTION

The air dehumidifier in the professional refrigerated cycle series **KT-80** is especially designed for professional uses. It is suitable for heavy duty operations thanks to a sturdy steel epoxy-painted frame and it is mounted on four castors which make it easy to move. This dehumidifier is compact and extremely reliable, needing almost no maintenance. It has a washable air filter, a condensate water collection tank and can be equipped with direct drainage. It features a built-in, high-precision regulating humidistat which enables automatic shutdown of the dehumidifier when the desired humidity is reached. Extremely high performances. Upper handles to ease transports. It is also available with hot gas defrost system (model /S) for operating at low temperatures. It has eco-friendly refrigerant gas **R410A** and low energy consumption.



**RATED CONDENSATION CAPACITY AT 32°C  
WITH THE 90% OF RELATIVE HUMIDITY: 96 lt/24h**

## APPLICATIONS

It is ideal for locations like new or under construction buildings, laundries, basement rooms, holiday houses, warehouses, archives, libraries and museums. It is also suitable for drying new, overflowing or restored rooms and for drying screeds applications for wooden floors. It is employed in food field, for example in places for sugar, coffee, cereals, chocolate and eggs conservation, for cold cuts and cheese aging, wine ageing, grapes drying, corn, wheat and hay exsiccation, but also in barrique cellars. **KT-80** can be used in the industrial field too; it is suitable for: pharmaceutical industry, chemical industry, textile industry, timber industry and yard, marble manufacturing and resining treatment, typography, bookbinderies and glassmaker.

## VERSIONS

- **KT-80 STD:** temperature range: +15/+35 °C
- **KT-80/S:** temperature range: +1/+35 °C

## ACCESSORIES

- Hot gas defrosting
- Condensate drainage pump
- Air filter replacement
- Wall brackets

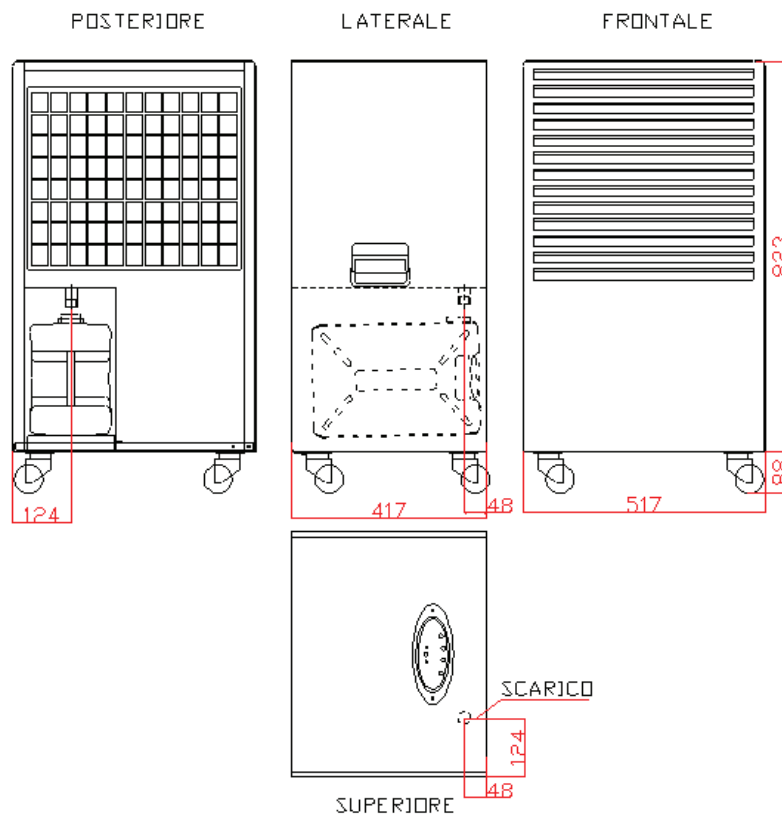
## TECHNICAL DATA

Voltage	230 V 50 Hz
Related average power consumption (at 20°C, 60% R.H.)	1050 W
Power consumption (at 26,7°C, 60% R.H.)	1280 W
Max power consumption (at 35°C, 70% R.H.)	1480 W
Max absorbed current (at 35°C, 70% R.H.) F.L.A.	7,2 A
Locked rotor current L.R.A.	28 A
Air flow	1000 mc/h
Sound pressure level (at 3 mts in free field)	52db(A)
Refrigerant	R410a
Refrigerant quantity	820 gr

Defrosting control system	electr.+thermost.
Defrosting kind	Hot Gas
Condensed water tank capacity	about 14 lt
Condensed water draining pipe connection	3/4"
Functioning temperature range hot gas defrosting version (model /S)	+1 / +35°C
Functioning relative humidity range for <30°C temperatures	35-98%
Functioning relative humidity range for 30-35°C temperatures	35-90%
Functioning relative humidity range for 32-35°C temperatures	35-70%
Rated condensation capacity (at 30°C, 80% R.H.)	80 lt/24h
Rated condensation capacity (at 32°C, 90% R.H.)	96 lt/24h
Net weight	56 Kg
Dimensions L x D x H mm	520 X 420 X 920
Compressor	PA160

## DIMENSIONAL

The KT series dehumidifier is a refrigerated cycle machine which operates on the physical principle for which when the air touches a cold surface it spills the latter transferring humidity in the form of condensation. Basically, the refrigeration unit maintains cold a coil which contains air that grows cold, then heats up and it is issued in the room dehumidified.



## MAIN PARTS



Hours counter



Mechanical hygostat

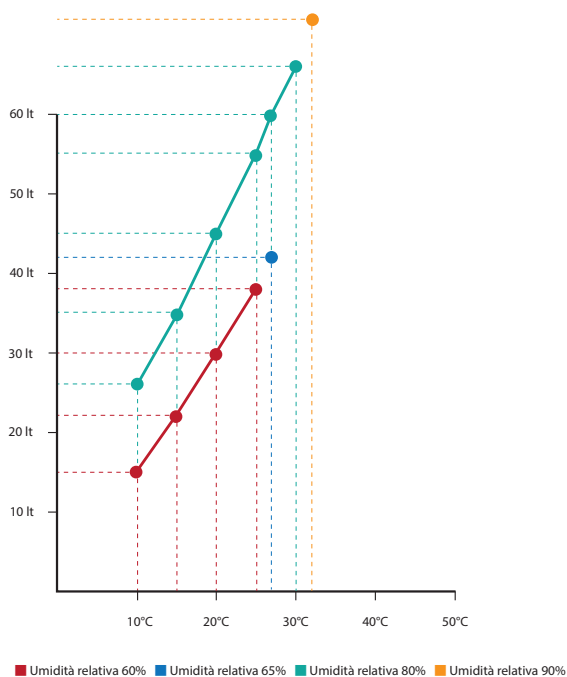


Condensed water tank



Dust-free air filter

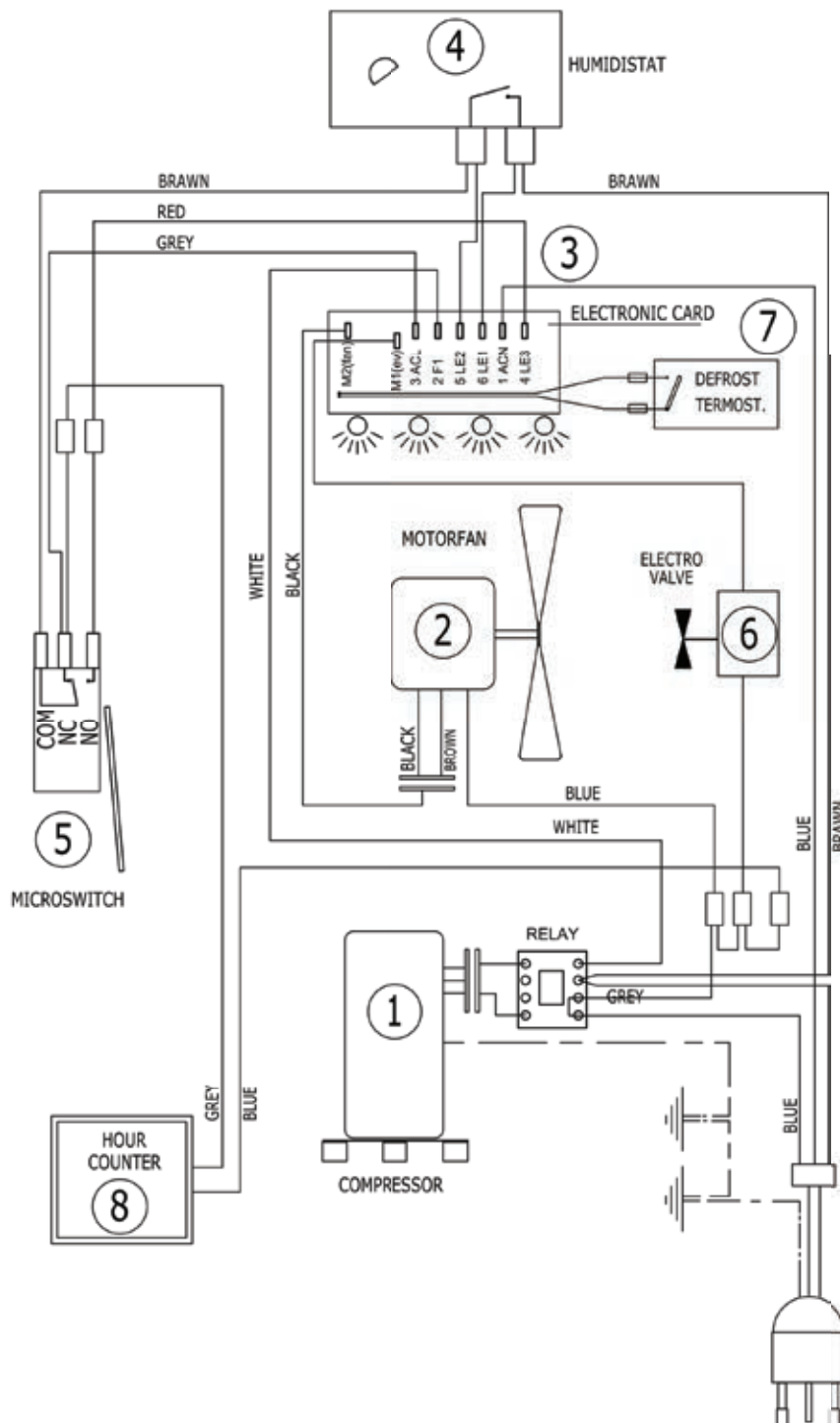
## PERFORMANCE



CONDENSED WATER AT DIFFERENT AMBIENT TEMPERATURE AND HUMIDITY CONDITIONS	
Room conditions	Condensed water
10°C - 60%	15 lt/24h
10°C - 80%	26 lt/24h
15°C - 60%	22 lt/24h
15°C - 80%	35 lt/24h
20°C - 60%	30 lt/24h
20°C - 80%	45 lt/24h
25°C - 60%	38 lt/24h
25°C - 80%	55 lt/24h
27°C - 65%	42 lt/24h
27°C - 80%	60 lt/24h
30°C - 80%	80 lt/24h
32°C - 90%	96 lt/24h

## WORKING DIAGRAM

Referring to the drawing, the air is inhaled in the back side of the machine and crosses the dust-free air filter [1], the aluminium cold coil (evaporator) [2] and the condenser [3]. Then, the fan [4] dismiss the air through the front grill releasing it in the room. The condensed water is collected in the tank [5]. A microswitch [6] shuts down the dehumidifier when the water in the tank reaches the level which makes the float spring up. In some series instead of the tank with the float the switch is activated by the tank weight while filling. The humidistat [7] allows the dehumidifier operation when the room humidity is higher than the set level. The humidistat activates and disables the unit operation depending on the set relative humidity value. The dehumidifier automatically turns on again when the relative humidity grows beyond the set. An electronic card [8] manages the defrosting periods and prevents compressor [9] close starts. An electronic card [8] manages the defrosting periods and prevents compressor [9] close starts.



# PROFESSIONAL TRACKED DEHUMIDIFIER

## Model KT-80

**Rated condensation capacity at 32°C  
with the 90% of relative humidity: 96 lt/24h**

Tecnoklima series dehumidifiers must always be placed inside ambiances and are designed to treat clear air, without dust, chemical fumes, oily fogs, strong materials and explosives. All the devices are carefully tested before shipment and comply with European Directives. They bear the CE mark and are accompanied by a comprehensive instruction booklet with conformity certifications. They have a standard installation procedure which is extremely simple requiring no masonry work except for the simple cleaning of the dust free air filter.