

CDW÷CDK

Condensation dehumidifiers
for industrial environments

CDW16 / CDK44÷100



TET
DRY AIR SOLUTIONS

GENERAL DESCRIPTION

The DH series wall dehumidifiers are high quality appliances, characterized by an elegant design and a strong robustness. Suitable for dehumidification of domestic environments, small cellars, taverns, garages, houses, shops. They are equipped with manual humidity control and are ready for connection to a fixed condensate drain. They have a high efficiency, washable and easily replaceable polyurethane air filter and a large size condensate collection tank with the possibility of direct discharge. The main feature of all the wall mounted models of the CDW series is the evaporation battery made up of smooth aluminium tubes. This particular arrangement, derived from professional dehumidifiers, allows a lower energy consumption of the appliance, with a very high performance even at low relative humidity. The electronic defrosting management and the protection from early restarts guarantee a longer life of the machine. CDK series professional fixed dehumidifiers are high performance, compact, easy to install and can be used in many applications. They are equipped with a high efficiency, washable and easily replaceable polyurethane filter, which can be connected to a fixed drain. They are equipped with sturdy handles for easy handling, rubber feet and a mechanical humidistat on board. The industrial dehumidifiers of the CDK series are equipped as standard with a hot gas defrosting system, with electronic and thermostatic control, and can work at temperatures close to 0°C.

TECHNICAL CHARACTERISTICS

| MODEL | CD | W16 | K44 | K100 |
|--|-------------------|----------|----------|----------|
| Performance | | | | |
| Dehumidification capacity at 32°C 90% ⁽⁴⁾ | L/24h | 15,2 | 44 | 96 |
| Dehumidification capacity at 30°C 80% ⁽⁴⁾ | L/24h | 12 | 36 | 80 |
| Dehumidification capacity at 27°C 80% ⁽⁴⁾ | L/24h | 9,6 | 27 | 56 |
| Dehumidification capacity at 27°C 60% ⁽⁴⁾ | L/24h | 6,4 | 21 | 44 |
| Dehumidification capacity at 25°C 80% ⁽⁴⁾ | L/24h | 8 | 25 | 52 |
| Dehumidification capacity at 25°C 60% ⁽⁴⁾ | L/24h | 5,6 | 16 | 36 |
| Dehumidification capacity at 20°C 80% ⁽⁴⁾ | L/24h | 5,6 | 18 | 45 |
| Dehumidification capacity at 20°C 60% ⁽⁴⁾ | L/24h | 4 | 14 | 30 |
| Dehumidification capacity at 15°C 80% ⁽⁴⁾ | L/24h | 4,8 | 16 | 37 |
| Dehumidification capacity at 15°C 60% ⁽⁴⁾ | L/24h | 2,4 | 10 | 24 |
| Dehumidification capacity at 10°C 80% ⁽⁴⁾ | L/24h | 4, | 13 | 26 |
| Dehumidification capacity at 10°C 60% ⁽⁴⁾ | L/24h | 1,6 | 8 | 18 |
| Fans | | | | |
| Air Flow | m ³ /h | 160 | 450 | 1100 |
| Available static pressure | Pa | 0 | 0 | 0 |
| Refrigerant | | | | |
| Type | | R134a | R410a | R410a |
| Refrigerant charge | Kg | | | |
| Global Warming Potential (GWP) | | 1430 | 2088 | 2088 |
| Load equivalent CO ₂ | t | | | |
| Electrical characteristics | | | | |
| Power Supply | Volt/Ph/Hz | 230/1/50 | 230/1/50 | 230/1/50 |
| Total absorbed power at 20°C 60% | KW | 0,2 | 0,57 | 1,05 |
| Maximum absorbed power ⁽¹⁾ | KW | 0,26 | 0,71 | 1,48 |
| Maximum absorbed current ⁽¹⁾ | A | 1,52 | 3,9 | 7,2 |
| Starting current ⁽¹⁾ | A | 6,5 | 16 | 28 |
| Noise | | | | |
| Sound pressure level ⁽³⁾ | dB (A) | 39 | 51 | 56 |
| Sound power level ⁽³⁾ | dB (A) | 58 | 70 | 75 |

(1) With ambient conditions 35°C 70% without electrical heater

(2) Ambient temperature 27°C, water temperature 70°/60°C, compressor off

(3) Sound pressure level calculated in a free field, 3 metres from the unit, directionality factor Q=2, according to ISO9614

(4) Operating temperature limits 7°+35°C, relative humidity 30%+99%

FRAME

CDW: Bearing structure in galvanized steel sheet, epoxy powder coated, which guarantees high resistance and durability over time. The plastic cover is sturdy and impact-resistant.

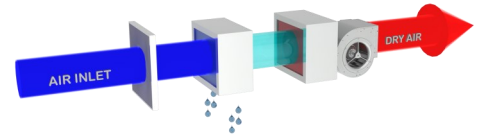
CDK: The hot-dip galvanised sheet metal is epoxy powder coated, guaranteeing high resistance to atmospheric agents and aggressive environments.

REFRIGERANT CIRCUIT

CDW evaporator: the evaporation battery consists of smooth aluminium tubes. The smooth tubes ensure a high performance of the dehumidifier, significantly reducing energy consumption, even at low relative humidity.

CDW condenser: the battery consists of copper tubes and aluminum fins, the large size of the fins of the condenser ensures dust resistance, long life and easy maintenance of the machine.

Evaporator and Condenser CDK: the battery consists of copper tubes and aluminum fins, the large size of the fins of the condenser and evaporator ensures dust resistance, long life and easy maintenance of the machine.



COMPRESSOR

CDW: Reciprocating compressor, mounted on vibration dampers.

CDK: Rotary compressor, mounted on vibration dampers.

FAN

Axial fan, statically and dynamically balanced, durable and resistant.

AIR FILTER

The air filter, supplied as standard with the unit, is washable and easy to replace. High efficiency filter.

MICROPROCESSORS

Controls hot gas defrost cycles, compressor timer and alarm board.

ELECTRIC PANEL

Located at the top of the machine. Execution according to the European standards in force.

CONDENSATE COLLECTION TRAY

The machine is also designed for connection to a fixed condensate drain.

CONDENSATE LIFTING PUMP

A condensate lifting pump kit is available on the outside of the dehumidifier (only for CDK version). It allows to remove the condensate water up to a height of 3,5 mt with respect to the position of the machine. Equipped with a malfunction alarm that stops the machine.

TEST

The tests are carried out to verify the tightness of the cooling circuit. Electrical discharge tests and functional tests are also carried out.

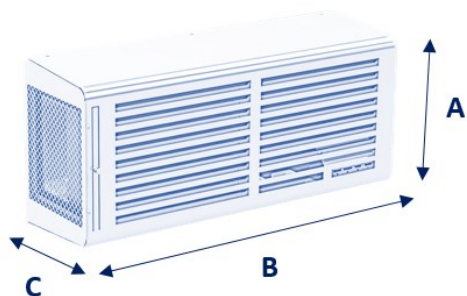
VERSION

CDW... Standard wall version
 CDK... Standard version from floor

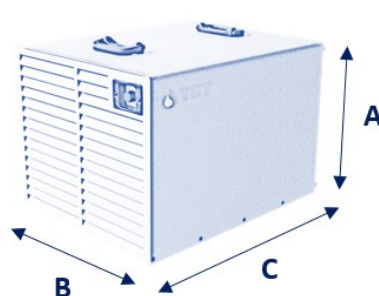
| Model CD | Code | W16 | K44 | K100 |
|--|------|-----|-----|------|
| Hot gas defrost | HGAS | - | ● | ● |
| Built-in mechanical humidistat | HYGR | ● | ● | ● |
| Timer Hour Meter | THR | - | - | - |
| Remote electronic wall humidistat | RGRU | - | ○ | ○ |
| Condensate drain pump with kit for external installation | PRCE | - | ○ | ○ |

● standard, ○ optional, – not available

Dimensions model CDW16



Dimensions model CDK44÷100



| Model | CD | W16 | K44 | K100 |
|--------------|----|------|-----|------|
| A | mm | 315 | 420 | 520 |
| B | mm | 695 | 350 | 520 |
| C | mm | 220 | 580 | 660 |
| Empty weight | Kg | 22,5 | 34 | 48 |