



# PROFESSIONAL FIXED DEHUMIDIFIERS

## **FDK SERIES**

The Fral professional fixed dehumidifiers of the series FDK are high-performance, compact, easy to install appliances and can be used in multiple applications. They feature a high-efficiency filter in polyurethane, washable and easily replaceable, which can be connected to a fixed drain. They are equipped with strong handles for easy handling, rubber feet and an onboard mechanic humidistat.

The Fral industrial dehumidifiers of the series FDK are equipped as standard with a Hot Gas defrosting system, with electronic and thermostatic control, and can work with temperatures close to 0 °C.

#### **FEATURES**

#### **FRAME**

The hot galvanized sheet is epoxy powder coated, ensuring high resistance to atmospheric agents and to the aggressive environments.

#### **COMPRESSOR**

Rotative compressor, mounted on vibration dampers.

#### REFRIGERANT CIRCUIT

**Evaporator and condenser:** the coil is made of copper pipes and aluminium fins.

#### **CONDENSATE COLLECTION TANK**

Not present. The equipment requires a fixed drain.

#### **CONDENSATE LIFTING PUMP**

A condensate lifting pump kit outside the dehumidifier is available. It allows to remove the condensed water up to a height of 3.5 mt with respect to the position of the machine. Equipped with malfunction alarm which stops the machine.

#### FAN

Axial fan, statically and dynamically balanced.

#### **AIR FILTER**

The air filter, supplied as standard with the unit, is washable and easily replaceable.

#### **MICROPROCESSOR**

Controls the defrosting cycles, the compressor timer and the alarm card.

#### MECHANICAL DEHUMIDOSTAT

Located in the front area of the machine.

#### **TESTING**

Tests are performed to check the tightness of the refrigeration circuit. Electrical discharge tests and functional tests are performed as well.

#### **TECHNICAL STANDARDS**

This dehumidifier meets the essential requirements included in the Directives of the European Community 2006/95/EC of 12 December 2006 on the safety of electrical products for use in Low Voltage; 2004/108/EC of 15 December 2004 in the field of electromagnetic compatibility; 2006/42/EC of 17 May 2006 in the fields of machinery safety.

The conformity is declared with reference to the following harmonized technical standards:

CEI-EN 60335-2-40, CEI-EN 55014-1, CEI-EN 55014-2.

We also declare that the product is manufactured in compliance with the RoHS Directive in force, that is 2002/95/EC, transposed with the Legislative Decree of 25 July 2005 no. 151 (article 5).

TECHNICAL SPECIFICATIONS	FDK 44S	FDK 100S
	TUK 443	1 DK 1003
Rated Average power consumption (20 °C - 60% R.H.)	530 W	1200 W
Maximum power consumption (35 °C - 95% U.R.)	780 W	1550 W
Maximum current consumption (35°C - 95% R.H.) F.L.A.	7.2 A	13 A
Start up current L.R.A.	30 A	44 A
Air flow	450 mc/h	1100 mc/h
Sound pressure level (3 meters in open field)	51 db(A)	56 db(A)
Refrigerant	R410a	R410a
Capacity of the condensate water tank	3/4"	3/4"
Operational range (temperatures)	1÷35 ℃	1÷35 ℃
Operating range (relative humidity) T $<$ 30 $^{\circ}$ C	35÷98%	35÷98%
Operating range (relative humidity) T 30÷32 ℃	35÷90%	35÷90%
Operating range (relative humidity) T 32÷35 ℃	35÷70%	35÷70%
Available voltage and frequency	230/1/50	230/1/50

ACCESSORIES	STANDARD	☐ OPTIONAL	
Hot gas defrost			
Timer		×	×
Mechanical humidistat		-	
External condensate lifting pump kit			
Remote electronic humidistat			

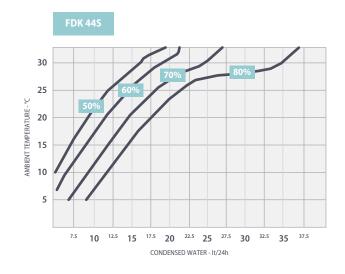
## **DIMENSIONS AND WEIGHTS**

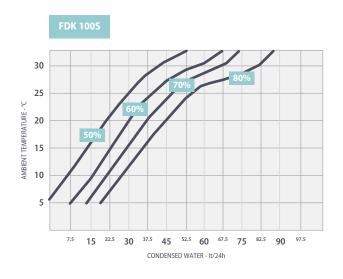
Width	350 mm	516 mm
Height	420 mm	516 mm
Depth	580 mm	656 mm
Weight	34 kg	48 kg

### DIMENSIONS AND WEIGHTS WITH PACKING

Width	400 mm	580 mm
Height	480 mm	580 mm
Depth	620 mm	730 mm
Weight	36 kg	50 kg

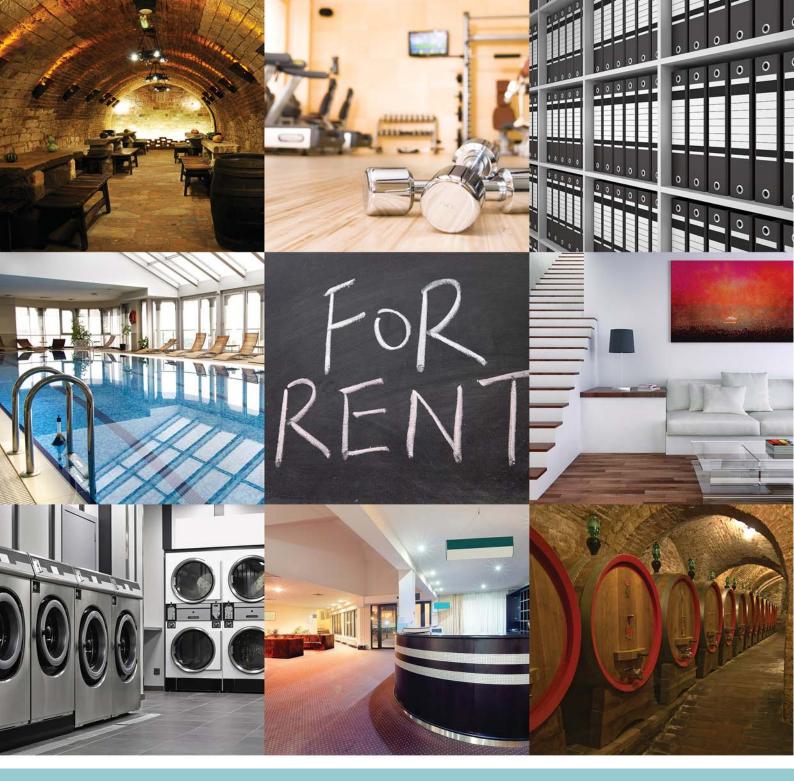
# CONDENSED WATER AT DIFFERENT AMBIENT TEMPERATURE AND HUMIDITY CONDITIONS (lt/24h)





		10 °C 60%	10 °C 80%	15 °C 60%	15 °C 80%	20 °C 60%	20 °C 80%	25 °C 60%	25 °C 80%	26.7 °C 60%	27 °C 80%	30 ℃ 80%	32 °C 90%
FD	K 44S	8	13	10	16	14	18	16	25	21	27	36	44
FD	K 100S	18	26	24	37	30	45	36	52	44	56	80	96

NOTES			



**APPLICATIONS** 

SWIMMING POOLS

ARCHIVES

**GYMS** 

HOUSES

**BASEMENT ROOMS** 

LAUNDRY

RENTAL

HOTELS