



# PROFESSIONAL PORTABLE DEHUMIDIFIERS

# FDNP – SUPERDRYER SERIES

The Fraal portable professional dehumidifiers of the series FDNP are high-performance appliances, equipped with robust galvanized steel frame coated with epoxy resins and mounted on 2 big wheels that make it easy to move even in yard environments or in case of obstacles. They have a high efficiency air filter in polyurethane, washable and easily replaceable, and a very large condensate collection tank with the possibility of direct drain. It is possible to install a condensate lifting pump instead of the collection tank, allowing condensate pumping up to a height of 3.5 meters from the machine positioning level.

## FEATURES

### FRAME

The frame and the sheets are hot galvanised, epoxy powder coated, ensuring high strength and durability.

### COMPRESSOR

Rotative compressor, mounted on vibration dampers.

### REFRIGERANT CIRCUIT

**Evaporator:** the evaporation coil consists of smooth tubes in aluminium. The smooth tubes ensure a high yield of the dehumidifier, significantly reducing energy consumption, even at low relative humidity.

**Condenser:** the coil is made of copper pipes and aluminium fins, the wide size of the condenser fins ensures resistance to dust, long life and easy maintenance of the machine.

### CONDENSATE COLLECTION TANK

The condensate collection tank, installed as standard, is very large and can be easily removed. The machine is also ready for connection to a fixed condensate drain.

### CONDENSATE LIFTING PUMP

Optional in all versions, it replaces the condensate collection tank and allows to remove the condensed water up to a height of 3.5 mt with respect to the position of the machine. Equipped with an alarm for dehumidifier stop in the case of pump failure.

Alternatively, it is available a condensate lifting pump kit, easily applicable outside the dehumidifier, provided with malfunction alarm that switches off the machine.

### FAN

Axial fan, statically and dynamically balanced, long-lasting and durable.

### AIR FILTER

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

### MICROPROCESSOR

Controls the defrosting cycles with hot gas, the timer of the compressor and the alarm card.

### CONTROL PANEL

Located at the top of the machine.

Executed according to the European standards in force.

### 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

	FDNP 33	FDNP 44	SUPERDRYER 62	FDNP 96
Average rated power consumption (20 °C - 60% R.H.)	410 W	570 W	720 W	1050 W
Average rated power consumption (26.7 °C - 60% R.H.)	520 W	710 W	800 W	1280 W
Maximum power consumption (35 °C - 70% R.H.)	590 W	810 W	920 W	1480 W
Maximum current consumption (35 °C - 70% R.H.) F.L.A.	3.2 A	3.9 A	4.2 A	7.2 A
Start up current L.R.A.	10 A	18 A	20 A	29 A
Air flow	<b>380 mc/h</b>	<b>450 mc/h</b>	<b>550 mc/h</b>	<b>1000 mc/h</b>
Sound pressure level (3 meters in open field)	43 db (A)	43 db (A)	51 db (A)	52 db (A)
Refrigerant	R410a	R410a	R410a	R410a
Capacity of the condensate water tank	8 kg	8 kg	14 kg	14 kg
Fitting on the machine for condensate drain	3/4"	3/4"	3/4"	3/4"
Operational range (temperatures)	1÷35 °C	1÷35 °C	1÷35 °C	1÷35 °C
Operating range (relative humidity) T < 30 °C	30÷98%	30÷98%	30÷98%	30÷98%
Operating range (relative humidity) T 30÷32 °C	30÷90%	30÷90%	30÷90%	30÷90%
Operating range (relative humidity) T 32÷35 °C	30÷70%	30÷70%	30÷70%	30÷70%

## ACCESSORIES

■ STANDARD

□ OPTIONAL

⊗ NOT AVAILABLE

Hot gas defrost	■	■	■	■
Timer	■	■	■	■
Mechanical humidistat	■	■	■	■
Internal condensate lifting pump	□	□	□	□
External condensate lifting pump kit	□	□	□	□

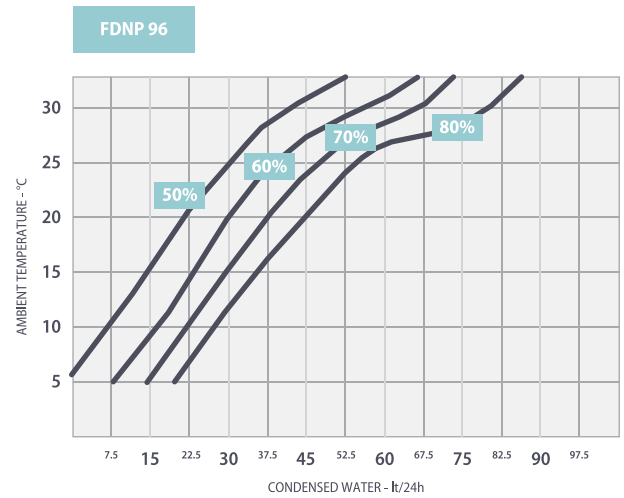
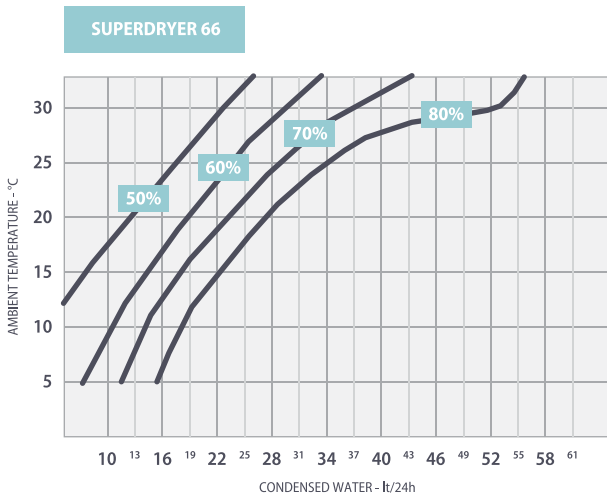
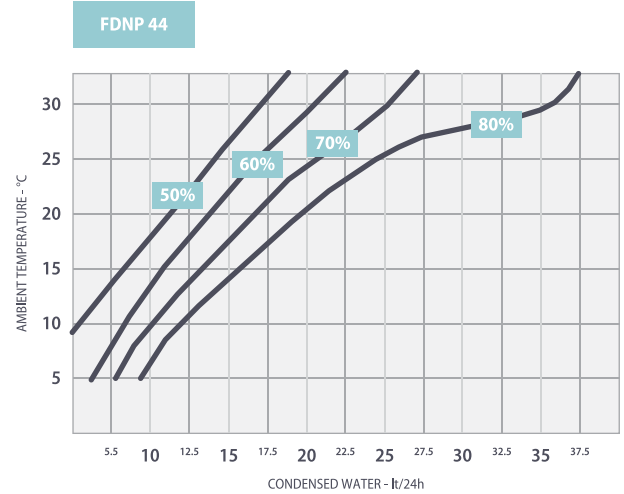
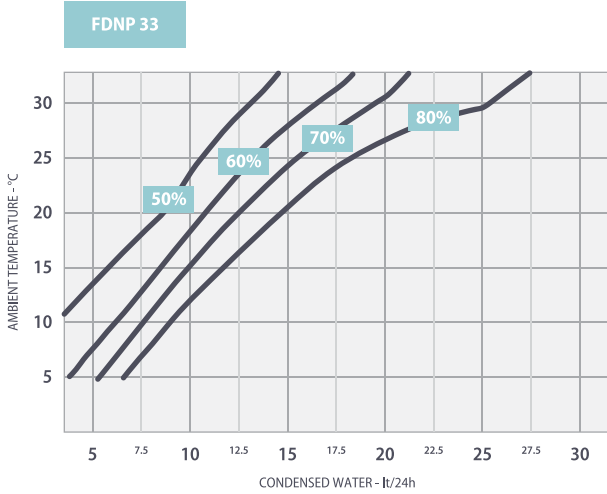
## DIMENSIONS AND WEIGHTS

Width	480 mm	480 mm	560 mm	560 mm
Height	750 mm	960 mm	930 mm	895 mm
Depth	730 mm	450 mm	720 mm	670 mm
Weight	35 kg	39 kg	45 kg	57 kg

## DIMENSIONS AND WEIGHTS WITH PACKING

Width	440 mm	430 mm	590 mm	450 mm
Height	820 mm	840 mm	860 mm	1040 mm
Depth	430 mm	440 mm	590 mm	580 mm
Weight	37 kg	41 kg	48 kg	59 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 °C 80%	32 °C 90%
<b>FDNP 33</b>	5,5	8	8	11	10	13,5	12	17	13	18	26	33
<b>FDNP 44</b>	8	11,5	11	16	14	19	17	25	18	26	36	44
<b>SUPERDRYER 62</b>	10	17	14	22	19	27	23	34	27	36	52	62
<b>FDNP 96</b>	18	26	24	37	30	45	36	52	44	56	80	96



APPLICATIONS

GYMS

MATURING

WAREHOUSES

ARCHIVES

PUMP ROOMS

SECOND HOMES

LAUNDRY

RENTAL

YARDS

POST FLOODING