





# AIR DRYERS

IGLOO "OP" type air dryers are highly efficient professional compact appliances for removing moisture and drying air in enclosed spaces, characterized by a very high efficiency, **reaching 97%**, which makes the manufacturer, "IGLOO", a leader in innovative solutions for high-efficiency room dehumidification systems.





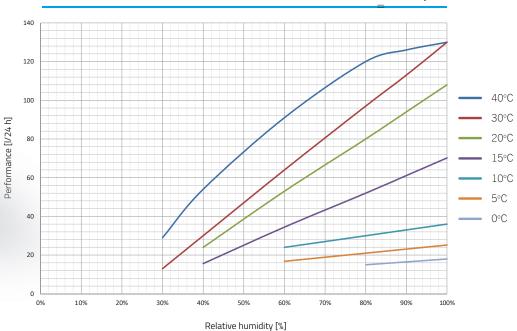
Model	OP-130	OP-50
Intended use	Construction/industrial	Construction/industrial
Volume drained	Up to 1000 m <sup>3</sup>	Up to 250 m³
Type of dryer	Condensing, maintenance-free	Condensing, maintenance-free
Rated capacity [I/24h]	100	43
Maximum capacity [I/24h]	130	50
Airflow [m³/h]	3,000	650
Rated electric power [W]	1,700	490
Power parameters	230 V, 50 Hz	230 V, 50 Hz
Rated current JN [A]	7.3	2.4
Work range [°C]	5-35	5-35
Work range Rh	30%-100%	30%-100%
Automatic overflow switch	Yes	Yes
Water tank [dm³]	15	15
Possibility to connect a water drainage hose	Yes	Yes
Noise level [dBA]	65	55
Net weight [kg]	65	40.5
Type of housing	Metal, impact-resistant	Metal, impact-resistant
Wheels	Fi 160,	Fi 160,
Handle	Yes	Yes
Continuous operation capability	Yes	Yes
Control	Reliable manual	Reliable manual
Compressor type	Rotary paddle	Rotary paddle
Coolant	Eco-friendly R410A	Eco-friendly R290
Fan engine	Enclosed	Enclosed
Fan type	Professional axial	Professional axial
Defrosting	Smart, hot gas	Smart, hot gas
Filter	Durable, does not require replacement, easy to clean	Durable, does not require replacement, easy to clean
Type of exchangers	Dirt-resistant	Dirt-resistant
Tank full signaling	Yes	Yes
Practical power cord handle	Yes	Yes
Water splash resistance	Up to a height of 20 cm	Up to a height of 20 cm
Extra options at an additional charge:		
Hygrostat		
Working time counter		
Power consumption meter		
Built-in auxiliary heaters – for use in unheated rooms in winter		
(Caution! Requires 230/400 V 50 Hz power supply		



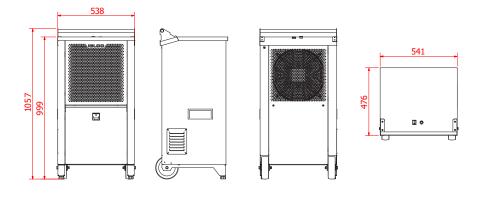


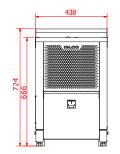


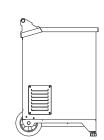
# Performance characteristics of the OP-130 dryer

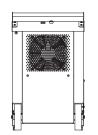


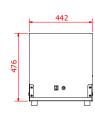
Possibility of connecting a hose to drain the condensate – threaded end ½"











OP-130 OP-50 The "OP" series dryers are equipped with innovative technologies of smart anti-icing control, allowing for continuous operation of the dryer in extreme conditions from +2°C to +40°C, which places them at the forefront of this type of appliances in terms of their work range. The smart anti-icing control system has been designed to detect icing of the exchanger and activate the removal of ice only when it is necessary for the proper operation of the appliance, which, unlike traditional defrosting solutions used in dryers, significantly reduces electricity consumption and increases dehumidification efficiency in low temperatures.

The moisture removed can be stored in the condensate tank inside the appliance or discharged outside the room or to the sewage system using a connected rubber hose. The "OP" series dryers are also adapted to work in difficult dust conditions. They are equipped with high-performance polyurethane filters, durable, requiring no replacement, easy to clean. The robust structure and the highest quality of the components used, combined with the ease of use, ensure the appliance's trouble-free and ergonomic long-term operation. The current operation of the appliance does not require qualified personnel.

## Application of air dryers:

- Removal of the effects of flooding events
- Protecting rooms and materials against the growth of mold and fungi
- Shaping the indoor climate
- Drying out rooms, halls and buildings
- Drying out basements and utility rooms
- Drying in construction: walls, plasters, spouts, varnish coatings
- Drying out museums, libraries, archives and warehouses,
- Maintaining the climate inside religious buildings
- Dehumidification in swimming pools
- Maintaining humidity in production processes

## The operating principle of the dryer

The principle of operation of "OP" condensation air dryers consists in the condensation of moisture from the air by artificially lowering the partial pressure of water vapor in the air stream flowing through the dryer below the vapor saturation pressure at a given temperature. Such pressure changes result in the condensation of the water vapor contained in the air on the lamellar surface of the cooler and the discharge of the condensate to the water tank. The dehumidified dried air is removed from the dryer to the room via the fan. Due to the artificial reduction of the partial pressure of water vapor inside the dryer, the diffusion effect equalizes the partial pressures of water vapor between the elements of the

dried room (air, walls, plaster, other moist coatings and materials) and the exchanger inside the dryer, which creates the effect of "pumping out" moisture from the space and components around the dryer and sucking it into the appliance. This process is extremely efficient and allows for quick drying out of confined spaces. Through the optimal selection of appropriate operating parameters as above.

For demanding customers, it is possible to optionally equip the appliance with a winter operation system, allowing for effective use of the appliance and drying of unheated rooms in winter conditions with outside temperatures well below zero, even down to -25°C, depending on the volume of the room to be dried.











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