

# DPA series

*Compressed Air Dryers*

*Compact and energy efficient*

## **Benefits:**

- Double optimisation of the consumptions in line with the production type
- Self-adaptation of the working parameters
- Dew Point values down to  $-40^{\circ}\text{C}$
- Control of correct dehumidification
- Open Material Database
- Maximum possibility of inspection



The new Piovan Dryers of the DPA Series use compressed air for the treatment of hygroscopic polymers. The range consists of 6 models, with a drying capacity ranging from 0.2 to 25 kg/h. The average Dew Point value is of  $-25^{\circ}\text{C}$ , which can be extended

up to  $-40^{\circ}\text{C}$  in the configuration with desiccant towers. The DPA units are ideally suited for application on injection moulding and blow moulding machines, with small-medium throughputs

# Piovan

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### Energy use optimisation

The control permits to manage the airflow on 7 levels, self-adjusting the dryer's functioning according to the quantity of material present. The system thus avoids wastage of energy as well as of compressed air. The DPA dryers can be equipped with the energy saving device Intelligent Material Drying (IMD): it ensures optimal management of the drying process avoiding material over-heating or thermal degradation. It carries out a management of the set point, based on granule consumption and it automatically reduces the airflow in the drying hopper, and consequently the consumption of energy required (Plus function).

### Self-adaptation of the working parameters.

Thanks to the Material Database included in the standard configuration, the control automatically regulates the process conditions once the material has been selected and the hourly throughput has been set. The open Material Database, containing 50 materials complete with pre-defined

set values for optimal processing, can be modified, customised and integrated with new data in line with the customer's production.

**Control of correct dehumidification.** The electronic system of the DPA dryers includes the Drying Control function. It continuously checks the loading times of the drying hopper and the drying times, and it signals critical events.

### Maximum possibility of inspection.

The drying hopper is equipped with removable diffusing cone, for cleaning operations for simple and rapid material changes.

### Dew Point values up to -40°C

thanks to the desiccant towers (optional), which permit to extend the unit's application range. The regeneration process is carried out without heat, by means of compressed air supply.



991D077 - Disclaimer: data in this document may be out of date. Please consult technical data sheet

TECHNICAL DATA		DPA 1	DPA 3	DPA 6	DPA 10	DPA 20	DPA 30
Process airflow	m <sup>3</sup> /h	0.2÷1	0.9÷2	1.5÷3	3÷5	5÷10	6÷15
Hourly production	kg/h	from 0.2 to 25 *					
Heating power (process)	kW	0.6		0.9		1.2	
Noise Level	db	<80					
Max drying volume of hopper	dm <sup>3</sup>	1	3	6	10	20	30
Temperature range	°C	40-150					
Dew Point**	°C	-25					
Dimensions (L)	mm	350			494	528	
Dimensions (W)	mm	338			496	608	
Dimensions (H)	mm	467	467	678	640	730	724
Weight	kg	13.5	14.5	16	25	28	29

Voltage/Frequency 230/1/50-220/1/60 - \* depending on the type of material and drying parameters\*\* oil-free, filtered air, 6 bar pressure, inlet Dew Point of 6°C