

# Air Dehumidifier "DA" 500 ÷ 2000



DA/AIR 500 ÷ 2000



DA/WATER 1000 ÷ 2000

## Air dehumidifier for moulds of the "DA" 500 - 1000 - 1500 - 2000

The air Dehumidifier for FRIGOSYSTEM moulds is a completely independent system with cooling cycle for the cooling and dehumidifying of the air around the mould area.

The system is completely automatic. It adjusts itself depending on the room humidity and sends air to the mould surface with a «Dew point» of + 4°C.

The great advantage of this system is the absolute independence of operation which does not require the replacement and/or regeneration of dehydrating substances, which involve higher management costs and greater energy consumption.

There is also an energy saving because part of the dehumidified air (about 30%) is recycled, allowing an improvement of the microclimate around the mould and the Robot.

## DESCRIPTION OF OPERATION

The appliance draws damp air from the room and then filters, dries, dehumidifies and post-heats it. Finally a fan sends this process air, dried as needed, to the area to be treated (enclosed volume between Mould and Robot).

Because of the strong initial cooling, the humidity precipitates in the form of condensate and is evacuated into the drainage channels through the union.

The appliance is controlled by a system with Microprocessor which keeps the «Dew Point» value of the outgoing air automatically constant whatever the value of the relative humidity and ingoing temperature starting from the maximum values + 35°C and R.H. 80%.

The «Dew Point» delivery value set must not be greater than the temperature of the water sent to the mould or than its surface temperature.

Example: Mould water + 6°C

Mould surface temperature + 7÷8°C

To avoid condensation the air entering must have a «Dew Point» lower than 7°C, i.e. air with Temp. +18°C and R.H. 40% which corresponds to a «Dew Point» of 4.05°C.

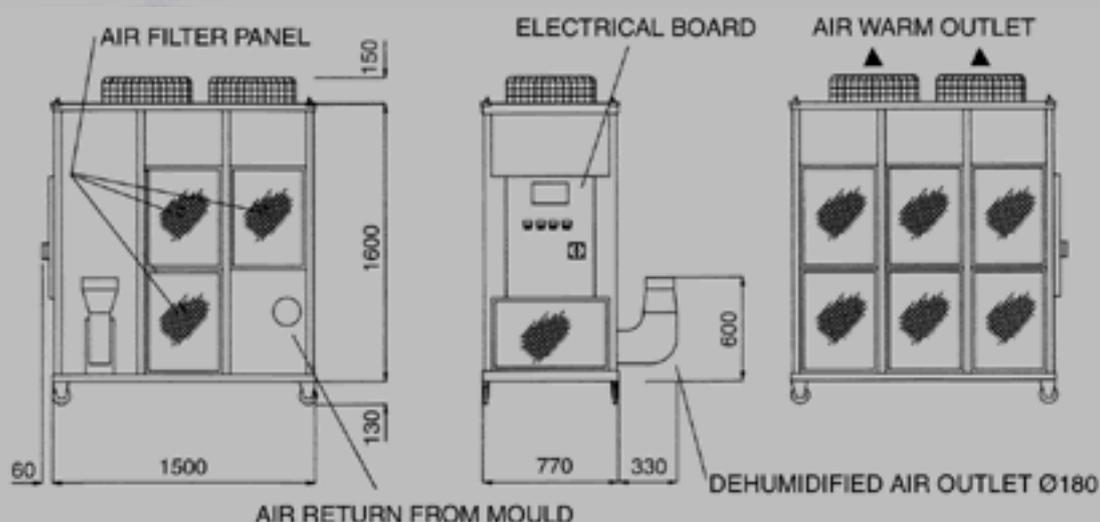
**DA/WATER serie's is different from DA/AIR for the condensing side, because this one has water condensation.**

### technical details

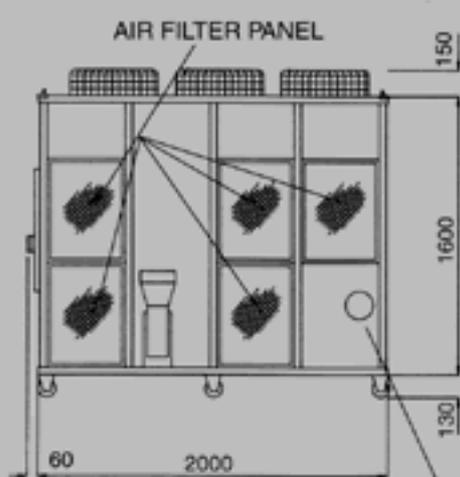
Model	Rating*	Consumer ventilator	Total lift	Overall dimensions (mm)			Vacuum weight	Installed power
	Kcal/h	m <sup>3</sup> /h	mm ca	length	width	height	Kg	kW
DA500	10.500	500	90	1.500	760	1.600	500	5,5
DA1000	21.000	1.000	90	2.000	760	1.600	550	10,3
DA1500	32.000	1.500	133	2.000	760	1.600	600	15,3
DA2000	42.500	2.000	185	2.500	1.000	1.600	700	18,6

\* This is valid under the following conditions: + 32°C, air temperature with 70% R.U. Mould leaving air at 18°C with 40% R.U. (Dew Point 4°C)

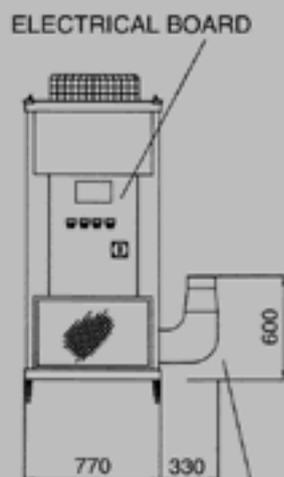
## DA 500



# DA 1000 ÷ 1500



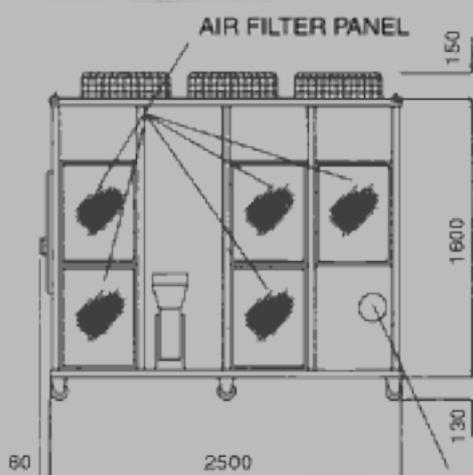
AIR RETURN FROM MOULD



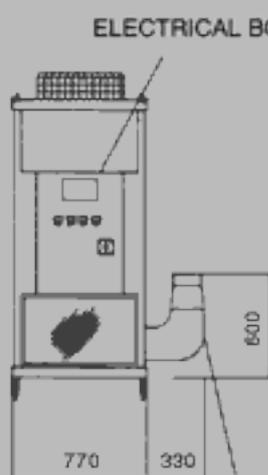
DEHUMIDIFIED AIR OUTLET Ø180



# DA 2000



AIR RETURN FROM MOULD



DEHUMIDIFIED AIR OUTLET Ø190

