

DRY-700-35-E

Desiccant Dehumidifiers

700 CFM @ 2.5 ESP / 16.6 lbs of H₂O/hr @ 75°F / 50% RH



The DESICAiR® DRY-700-35-E desiccant dehumidifier is designed for water damage remediation service. The DRY-700 is portable, self contained, and is designed for maneuverability in small spaces like building elevators and tight corridors.

Engineered to operate under severe operating conditions, the DESICAiR® DRY-700 uses desiccant technology to remove water vapor directly from the air. Removing water from the air reduces the air vapor pressure, which improves evaporation. This makes the DRY-700 the logical choice for structural drying, support drying for mold remediation, and

new construction building envelope drying. Since the silica gel desiccant does not rely on condensation, the DRY-700 provides drying well below 32°F dewpoint. Humidity can be controlled below levels at which moisture condenses on surfaces, thereby preventing corrosion, mold and mildew formation.

The DRY-700 boasts a 9KW, proportionally controlled, electric resistance heater to provide the reactivation energy required to handle a variety of drying situations year round. Getting 700 cfm of dehumidified process air where it is needed is no problem with 2.5" external static pressure.

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Features

Portability / Manueverability

- 12' self-storing power cord
- Heavy duty wheels on solid steel axle
- Narrow width to fit through doorways

High capacity

- Delivers 700 scfm with 2.5" ESP
- 9 KW reactivation heater to remove 16.6 lbs. of H₂O/hr. at 75°F/50% RH inlet conditions
- Independent process and reactivation inlet and outlet connections

Solid construction

- Rugged all aluminum cabinet construction
- Magnehelic differential pressure gauges for balancing air flow across rotor
- 30% pleated inlet air filters
- Proportionally controlled electric reactivation
- Built in air proving and temperature over heat protection
- Beaded air connections to accomodate 8" round flex-duct

Control Panel

- D-STAT Control
simple On-Off-Auto-selector switch
- LED indicator lights
- Rotary non-fused disconnect switch

Accessories available:

- Unit Operating Status Dry Contact
- Emergency Stop Push Button
- D-STAT II Control (cycles reactivation blower and heater on/off)



Specifications (Portable Unit)

Process Volume:	700 SCFM
Moisture Removal:	16.6 lbs/hr*
Heater Watts:	9.0 kW
ESP Process:	2.5" wc
ESP Reactivation:	1" wc
Weight:	330 lbs
Dimensions (LxWxH):	70.2 x 28.0" x 36.8"
Full load amps:	50.8 A @ 230/1/60

*@75°F / 50%RH inlet conditions

Principle of Operation

The operation of the DRY-700 desiccant system is based on two counter current air streams flowing through a desiccant wheel. Return air from the conditioned space is drawn through the rotating desiccant wheel. The desiccant adsorbs moisture from the air stream and the dry supply air is returned to the conditioned space. The moisture containing portion of the wheel rotates into the regeneration section. The desiccant releases the adsorbed moisture into the heated regeneration air stream which is then exhausted to the outside.