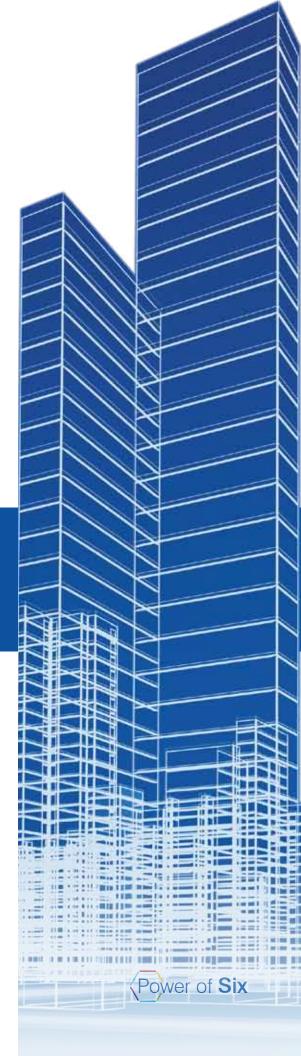


First time in India

Dedicated Outdoor Air Systems (DOAS) with Refrigeration on Board







A global provider of components and systems for Energy Recovery, Indoor Air Quality (IAQ), Fresh Air Treatment, Evaporative Cooling, Desiccant Dehumidification & Green Buildings.

A leading supplier of Dedicated Outdoor Air System (DOAS) in Asia with focus on high latent load challenges. **DRI** continuously innovates and designs "**Green**" systems with specialised technologies to meet the ever evolving need for Fresh Air Systems.



Adding to its existing range of **ULTIMA** & **ZENITH** DOAS System, **DRI** brings you ...







Dedicated Outdoor Air Systems (DOAS)

with

Refrigeration on Board

In tropical regions bringing outdoor air in conditioned space means higher utility bills as the outdoor air needs to be both cooled and dehumidified before inducing in the conditioned space.

Energy recovery equipment have been a savior for providing a cost effective solutions to this problem.

The **HEXAIR**[™] series with the Power of **Six** provides the right **Green** Fresh Air Solutions.

Need for **Happy "New" Air...**Ventilation

Indoor Air is 10 times more polluted than Outdoor Air ...



- We spend 90% of our lives conditioned indoor space, where air quality is frequently up to 10 times more polluted than Outdoor Air.
- Poor Indoor Air Quality, one of the top 5 Environmental risks to Public Health.

Source: EPA

Common Indoor Air Pollutants

| Building occupants | Carbon dioxide (CO ₂), tobacco smoke, perfume, body odors. | |
|---|--|--|
| Building materials | Dust, fiberglass, asbestos, gases including formaldehyde. | |
| Workplace cleansers, solvents, pesticides, disinfectants, glues | Toxic vapors, volatile organic compounds (VOCs). | |
| Furniture, carpets and paints | Gases, vapors, odors. | |
| Carpets, fabric, foam cushions | Dust mites | |
| Photocopiers, electric motors, electrostatic air cleaners | Ozone | |

Ventilation for acceptable Indoor Air Quality

| Minimum Ventilation Rates in Breathing Zone | | | | | |
|---|--|-----------------------------------|--|--|--|
| Occupancy Category | People Outdoor Air Rate (cfm / Person) | Area Outdoor Air Rate (cfm / ft2) | | | |
| Office Space | 5 | 0.06 | | | |
| Class Room | 10 | 0.12 | | | |
| Hotels | 5 | 0.06 | | | |

As per Ashrae 62.1

The Solution for *Pollution is Dilution*i.e.
Bring in Fresh Outdoor Air to flush out Stale Indoor Air





Dedicated Outdoor Air Systems (DOAS) with Refrigeration on Board

- R series
- MR series

DRI HEXAIR - R series

- Integrated with cooling units helps free up space, simplify installation, reduce operating cost and minimize capital cost.
- Gives you the ability to deliver cool and dehumidified air after energy recovery, cooled using a on board condensing unit independent of any chiller/chilled water supply or external condensing unit/VRF unit.
- Delivered fresh air is closer to the Room Temperature Neutral condition.

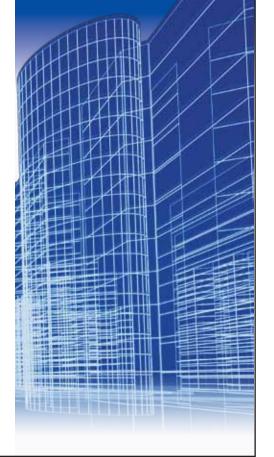


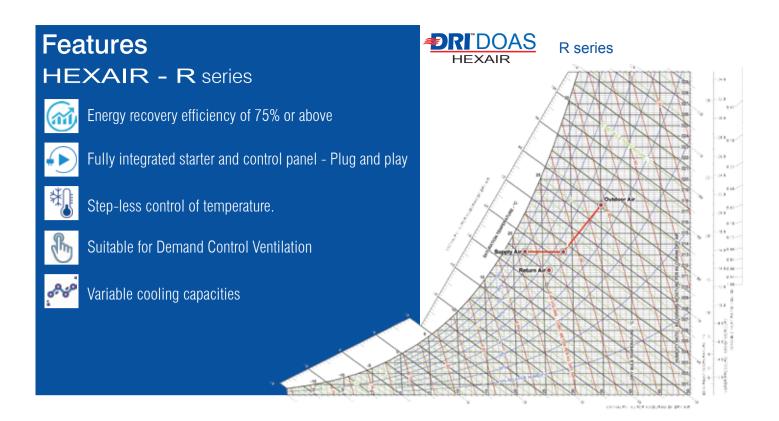
Benefits

- Delivering room neutral fresh air at no additional load on room cooling units.
- Ideal for retrofit cases.
- Product is ideal in cases where the building is not having chiller.
- Gives you the ability to supply fresh air directly to the space.
- Special mixing boxing can be avoided.



- ImprovedIndoor Air Quality
- EffectiveHumidity Management
- ProperSpace Utilisation
- Highest MRE
- Free Reheat
- Utilises waste heat for Regeneration





DRI HEXAIR - R series...Technical Data*

| Unit Models | | Hexair-R-100 | Hexair-R-190 | Hexair-R-300 | Hexair-R-600 | Hexair-R-700 |
|---------------|-----|--------------|--------------|--------------|--------------|--------------|
| Unit Air flow | CFM | 1000 | 2500 | 4000 | 7500 | 10000 |
| | CMH | 1700 | 4250 | 6800 | 12750 | 17000 |





Dedicated Outdoor Air Systems (DOAS)

with Refrigeration on Board

DRI HEXAIR - MR series

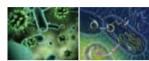
An important aspect on maintaining Indoor Air Quality (IAQ) in conditioned space is RH (Relative Humidity) Management.

Increase in RH causes:

Mould and Mildew Formation



Increases Viral and Bacterial Activities



Improper design of cooling units often causes addition of moisture in the conditioned space thereby increasing humidity.

HEXAIR - MR takes care of these concerns

- **HEAXIR MR** integrates desiccant dehumidification, cooling unit and energy recovery to maintain RH in conditioned spaces.
- The system also utilizes waste heat to regenerate specially customized desiccant wheel series thereby increasing the moisture removal capacity.
- The unit provides space neutral leaving temperature and low dew point to take care of room latent internal loads.
- Dehumidification is at no extra energy cost, as it uses waste heat of condensing coil to regenerate the desiccant wheel.
- The system is most energy efficient as it eliminates need for energy guzzling over cooling and reheat. It can be a 100% outdoor air or can work on partial outdoor and re-circulation air.



Benefits

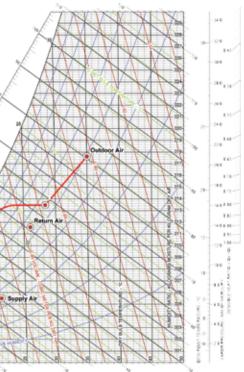
- Low dew point outdoor air.
- Takes care of internal latent loads thereby better RH management.
- Independent temperature management and RH control in the building.
- Flexibility of increasing chilled water temperature in chiller based system, as parallel system is limited to temperature control.
- Dry Healthy duct work.

Features

HEXAIR - MR series

- 100% outdoor air operation with an option to provide re-circulation.
- Energy recovery efficiency of 75% or above.
- Fully integrated starter and control panel
 - Plug and play
- Step-less control of temperature.
- Variable cooling capacities.
- Suitable for Demand Control Ventilation.

MR series



DRI HEXAIR - MR series... Technical Data*

| Unit Models | | UVS-R-15000 | UVS-R-20000 | UVS-R-25000 | UVS-R-30000 |
|---------------|-----|-------------|-------------|-------------|-------------|
| Unit Air flow | CFM | 8828 | 11770 | 14713 | 17655 |
| OTHE 7 WE HOW | CMH | 15000 | 20000 | 25000 | 30000 |









India's First

Dedicated Outdoor Air Systems (DOAS)

with Refrigeration on Board

- 1. Improved Indoor Air Quality
- 2. Proper Space Utilisation
- 3. Free Reheat

- 4. Humidity Management
- **5.** Highest MRE
- **6.** Utilises waste heat or Regeneration











Happy "New" Aix



- Hotels & Hospitality
- Commercial Spaces & Malls
- Hospitals & Health care facilities
- Office Spaces & IT Offices



- 1. Integrated Manufacturing
- 2. Certified Components & Casing(s)
- 3. Single Point responsibility

- **4.** Govt. recognized certified test labs
- 5. World Class sales & service network
- 6. Made in India



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