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Natatorium Dehumidification Discount List

For unlisted items, call us at 361-882-2233

Last updated 1/26/2017

Brand	Name	Description	Brochure	Disc off List
Desert Aire	<p>ExpertAire™ 1.25 to 15 Ton Pool A/C Units/Dehumidifiers</p>   <p>ExpertAire™ is an enduring product line for Desert Aire that represents the culmination of our core expertise in dehumidification. The ability of these units to be applied to diverse applications combined with their flexibility to appropriately regulate the introduction of outdoor air to a facility makes them a true energy efficient workhorse that consistently performs time and again.</p>	<p>Applications</p> <p>Desert Aire's ExpertAire™ Series products are designed for applications with air temperatures between 65° and 95°F (18° and 35°C) that require moisture removal between 4 and 100 lbs (2 and 45 kg) per hour.</p> <p>Meets AHRI 910 - Desert Aire's ExpertAire™ Series dehumidifiers have been designed with this standard in mind:</p> <ul style="list-style-type: none"> • Using the latest coil design technology to increase evaporator and condenser capacity while simultaneously reducing their pressure drop. This combination yields the highest MRE available. • Coils designed from the onset to use R410a refrigerant. Since 2006 ExpertAire™ series designed with R410a, thus optimizing this system's design and performance well in advance of the deadline. <p>Moisture Removal Capacity (MRC) - 18.0-45.0 lbs/hr at 82°F/60% RH in air cooling mode (95°F Available in one of the following five refrigeration configurations:</p> <p>Reheat Only-This is the standard design that removes moisture from the air at the evaporator</p> <p>Reheat & Water-In addition to the reheat coil, a water condensing coil is added to the circuit. Either circuit can become the primary heat sink allowing the circuit's latent and sensible energy to be directed to a water source or returned to the air.</p> <p>Reheat and Remote Condenser Ready- This option allows the dehumidification process to continue when cooling is required in the zone being conditioned.</p> <p>Reheat & Water & Remote Condenser Ready-This is a combination of all heat sink options available. This option is chosen when pool water heating and air conditioning are all required. All heat sinks are sized to reject 100% of the recovered energy.</p> <p>Reheat & Partial Water & Remote Condenser Ready-Comprised of a partially sized water coil, a full sized reheat coil, a full sized remote condenser and two three-way valves, this circuit provides the most flexibility in heat rejection.</p> <p>Construction</p> <ul style="list-style-type: none"> • Horizontal (LC) unit panels constructed of sturdy 18-gauge galvanized steel • Vertical (LV) unit panels constructed of sturdy 20-gauge galvanized steel • Removable side panels provide easy access to all serviceable elements • Panels coated with high-yield polyester, textured, fingerprint-resistant powder-coat paint • Closed cell foam insulation superior to fiberglass insulation • Insulation meets: <ul style="list-style-type: none"> ASTM mold, mildew, moisture resistance specifications NFPA fire specifications & UL specifications • Stainless steel sloped drain pan minimizes corrosion • Refrigerant Reheat Coil - die-formed, aluminum, fins are damage resistant and adequate coil separation avoids re-hydration • Each system also includes a hot gas reheat coil that is sized for 100% rejection of the recovered energy <p>What's in it for you?</p> <p>ExpertAire™ dehumidifier optimizes moisture removal by using a specially designed coil to maximize the system's latent capability, thus yielding 3x-4x the moisture removal capacity over a standard A/C system.</p> <p>Reheat coil allows the unit to continue to dehumidify without over-cooling the space. A distinct feature is that they can be equipped with an outdoor air (OA) intake connection to help meet ASHRAE 62 standards. OA is introduced after the evaporator coil but prior to the reheat condenser to guarantee moisture removal capacities.</p> <p>Units are equipped with an evaporator bypass damper which automatically adjusts the evaporator air volume to maintain proper air distribution over the coil in all modes of operation.</p> <p>Features & Options</p> <ul style="list-style-type: none"> • Multiple humidity control methods provide energy efficient dehumidification • Optional polymer e-coated coils • Auxiliary Heat Options - electric heat, hot water coil • Premium high-efficiency blower motors • Unit-mounted optional fused or non-fused power disconnects • Unit controls and compressors are isolated from the air stream for ease of service and quiet operation 	<p>ExpertAire Brochure</p>	<p>25%</p>

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Desert Aire	<p>SelectAire (SA) Series 18 to 60 Tons 8,200-26,400 CFM Pool A/C Units/Dehumidifiers</p>  <p>The SelectAire™ Series is a dual refrigerant circuit, packaged dehumidification system that is carefully designed and manufactured for commercial natatoriums, such as: high school and university indoor pools, YMCA/YWCA, JCC and municipal natatoriums.</p>  <p>SelectAire™ (SA) Series equipment features an exclusive exhaust air heat recovery system and patented air flow balancing. The SA system effectively addresses exhaust air energy loss in a natatorium and recovers it more efficiently than any other heat recovery method including economizer systems.</p>	<p>Applications SelectAire™ dehumidifiers can be installed either indoors or outdoors. Offered with No Code Ventilation, Code Ventilation, Code Ventilation with Energy Recovery, Extended Range Purge, and Source Capture options. Advanced Microprocessor Controller (Optional remote user interface) - Precise temperature and humidity control, LONWORKS®, Modbus®, BACnet™, SNMP v1-3, LAN or Internet. Systems remove 55 - 340 pounds of moisture per hour.</p> <p>Construction</p> <ul style="list-style-type: none"> • Base rails and supports constructed of 12-gauge steel channels • Cabinet made of 16-gauge Galvanneal steel with powder-coat paint • 16 gauge removable side panels, single side access hinged electrical panel • Rated for 1000-hour salt spray • Thermal & sound insulation made of engineered polymer cell foam (EPFI) • Single point power connection for all units • RA: 4" MERV 8, pleated filters, OA: SA18-30: 2" MERV 8; SA35-60: 4" MERV 8 • Maximum of 38" coil height maximizes moisture removal • Sloped, stainless steel drain pan for each circuit • 8" min separation between evaporator & condenser coils prevents re-evaporation, coils designed for maximized latent removal • Dual, independent refrigeration circuits operate independently or simultaneously • Heavy-duty scroll compressors <p>What's in it for you? Dehumidification system allows staging to minimize energy consumption and optimize energy recovery by using different condensing elements for the appropriate heat sinks. Desert Aire's energy recovery system achieves the highest energy recovery of any pool dehumidifier. It uses a heat pump concept to maximize both the sensible and latent recovery. In addition it does not waste conditioned air in the cooling mode like a standard HVAC economizer method does. Flexible Design - Reheat only, Reheat & Water, Reheat & Air Remote Condenser Ready, Reheat & Air & Remote Condenser Ready.</p> <p>Design Configurations Basic Outdoor Air Box w/no Energy Recovery -Outdoor air box system option to integrate ventilation air into the dehumidification package. Dehumidifier blower will act as the ventilation fan & supply air blower. Exhaust air blower (by others) removes air to establish a negative pressure in the space. What's in it for you? Modulating damper and filtration added to dehumidification system is factory installed. For outdoor units the assembly includes a rain hood. <ul style="list-style-type: none"> • O/A PER CODE (OCCUPIED) - System brings in the design code minimum ventilation air volume between the evaporator and reheat coils • CLOSED (NON OCCUPIED) - The ventilation air is turned off to save energy. Basic Outdoor Air Energy Recovery System - Basic outdoor air energy recovery system option integrates ventilation air into the dehumidification package. Dehumidifier blower acts as the ventilation fan and supply air blower. The integral exhaust air blower removes the air to establish a negative pressure in the space. What's in it for you? The SelectAire™ is the most efficient method to recover the total energy of the exhaust air. Since the airflows and loads are maintained through the special airflow control sequence the amount of recovery can be optimized. The SelectAire™ has a constant rate of energy recovery by using the heat pump principle when activated and is always controlled automatically based on the zone condition.</p> <p>Extended Outdoor Air System with Energy Recovery - Extended Outdoor Air system option integrates ventilation air into the dehumidification package when there is the need for higher airflow or purge capability. Return air is brought back to the dehumidifier where the air is exhausted to meet the design intent of the facility. Dehumidifier blower acts as the ventilation fan and supply air blower to provide all of the required ventilation air for the pool room. Integral exhaust air blower is balanced to establish and maintain a negative pressure in the space. The DESERT AIRE SelectAire™ dehumidifier includes a modulating damper to divert a specific flow rate of air through the evaporator coil. What's in it for you? System uses the principle of a heat pump to recover energy in the heating mode by operating one of the two circuits in conjunction with exhaust air. Exhaust air consists of two energy components: sensible and latent. The cold evaporator coil absorbs both of these components. Energy required to operate the compressors is returned in the form of heat. This option provides high COP efficiency to the exhaust air recovery cycle. Modulating damper automatically provides a constant airflow and load for the evaporator coil and optimizes the moisture removal efficiency of the system. Similarly, even if outdoor air is preheated, it should always be introduced downstream of the evaporator coil. Cold and dry air introduced before the evaporator coil will lower the unit's dehumidification capacity.</p>	<p>SelectAire Brochure</p>	25%

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	SelectAire (SA) Series Cont.	<p>Extended Outdoor Air System with Energy Recovery and Source Capture Exhaust</p> <p>Dual Exhaust system option integrates ventilation air into the dehumidification package when the facility has two exhaust duct systems. The first exhaust blower (supplied by others) captures the exhaust air at the low pool level and removes air to outside the building without a chance for recirculation. High return air is brought back to the dehumidifier where the remainder is exhausted to meet the facility design intent. The dehumidifier blower acts as the ventilation fan and supply air blower. The integral exhaust air blower is balanced to establish and maintain a negative pressure in the space.</p> <p>The SelectAire™ control system simplifies air balancing while maintaining the correct proportions of return air, supply air, exhaust air and outdoor air. It works by monitoring and controlling the static pressure difference at three areas: the outdoor air intake, evaporator coil, and the zone/ambient. Pressure difference at the specially designed orifice in the outdoor air flow path controls the outdoor air flow.</p> <p>What's in it for you?</p> <p>Monitoring the pressure drop through the evaporator and controlling the evaporator bypass damper maintains the flow rate through the evaporator and optimizing the moisture removal. Monitoring the difference between the zone pressure and ambient pressure controls the exhaust fan and helps to guarantee the negative static pressure within the space. The control system then modulates the respective damper in response to the pressure readings to achieve the desired airflow.</p> <p>Other Features & Options</p> <p>Additional design features of the SelectAire™ System with Extended Outdoor Air and Source Capture Exhaust:</p> <ul style="list-style-type: none"> • VFD for exhaust air - A unit mounted pressure transducer is provided by Desert Aire. 1/8" pressure tubing is run to the space and to the outdoor air by the installing contractor. Suitable terminations are provided by Desert Aire. • Outdoor Air Balance Plate - Calibrated by Desert Aire to control outdoor air damper. • Exhaust Air Balance Plate - Calibrated by Desert Aire, installed between the cold air and warm air dampers to maintain the proper ratio of exhaust air from these two locations to ensure a building negative pressure. • Return air static pressures up to 1.5 inch WC and supply air static can be up to 2.0 inch WC • Optional Coil Electrofin E-Coat to resist chemicals and corrosion • Auxiliary Heat - Hot water coil supplied downstream from hot gas reheat coil; steam coil supplied downstream from hot gas; reheat coil; electric SCR heat supplied downstream from hot gas reheat coil • Control outputs for field supplied auxiliary heating devices • Condenser (Choose Per Circuit) - Air-cooled remote condenser rejects excess heat to the outdoors (full THR - Total Heat of Rejection) or water condenser for chiller • Pool Water Heat - Coaxial heat exchanger for recovery of heat to pool water 		
Desert Aire	Parts	OEM parts for your Desert Aire HVAC units and handheld service tools. Call for individual parts pricing. Part price includes shipping to destination.		10%