

NEW!

DOAS

DN SERIES

WITH **INTEGRATED
REFRIGERATION
& ENERGY RECOVERY**

- ◆ 375–4,950 CFM
- ◆ Outdoor
- ◆ Low dewpoint conditions



DOAS WITH INTEGRATED REFRIGERATION & ENERGY RECOVERY

DOAS TECHNOLOGY

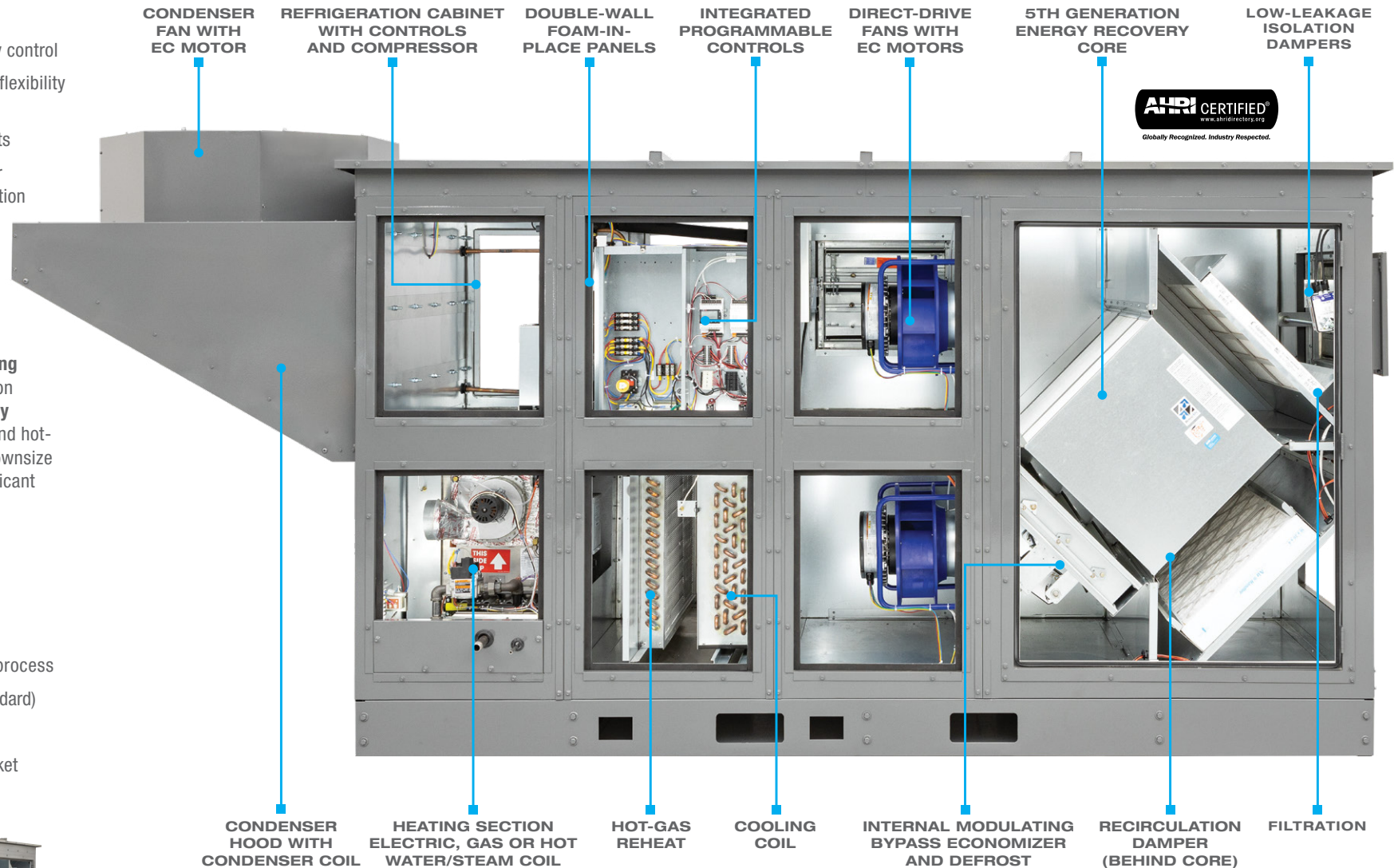
- ◆ Enhance IAQ
- ◆ Reduce energy consumption
- ◆ Optimize ventilation strategy
- ◆ Downsize HVAC equipment
- ◆ Decrease capital costs
- ◆ Greater operating savings
- ◆ Improve humidity control
- ◆ Increase system flexibility
- ◆ Meet all ASHRAE 90.1 requirements
- ◆ 100% outdoor air with no recirculation

DN SERIES WITH ENERGY RECOVERY

RenewAire's DOAS effectively conditions outdoor air with efficient and sustainable technology. By **enabling HVAC units to operate independently**, depending on building load, our DOAS unit with **fixed-plate energy recovery**, innovative cooling and heating features and hot-gas reheat will optimize your ventilation strategy, downsize equipment, decrease capital costs and realize significant operating savings.

BENEFITS

- ◆ Configurable unitary-platform design
- ◆ Single-source responsibility
- ◆ Streamlined design-to-purchase-to-installation process
- ◆ Ability to reach 49°F dewpoint conditions (53°F standard)
- ◆ Shorter lead times compared to other products
- ◆ One of the most energy-efficient DOAS on the market

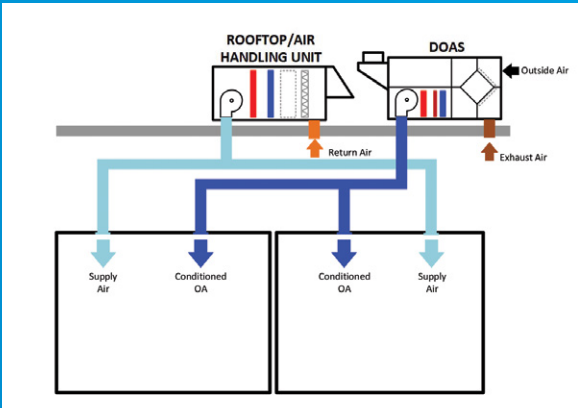


NEW! INTEGRATED REFRIGERATION FEATURES & SPECIALTIES

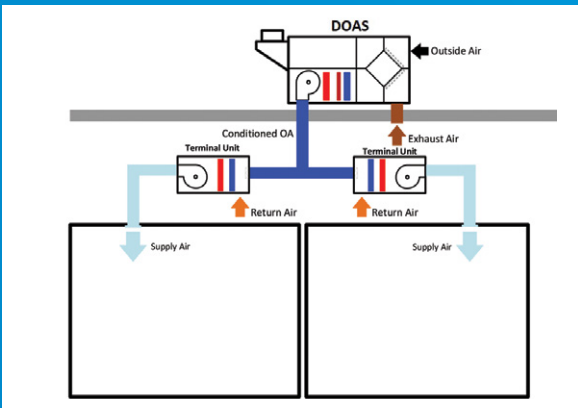
- ◆ High-efficiency variable speed compressor
- ◆ Electronic expansion valve
- ◆ Refrigeration specialties
- ◆ High-efficiency variable speed condenser fan
- ◆ Filter drier
- ◆ Sight glass
- ◆ Hot gas reheat coil and control valve (option)
- ◆ Suction line accumulator with hot gas reheat

APPLICATION STRATEGIES


TERMINAL UNIT SYSTEMS



**DOAS DIRECT TO ZONE
WITH ROOFTOP/CENTRAL AHU**



**DOAS AIR SUPPLIED TO INTAKES
OF TERMINAL UNITS**

		DN-2	DN-3	DN-5	
UNIT	Airflow Range	375-1,650 CFM	750-3,300 CFM	1,125-4,950 CFM	
	Capacity	2-10 tons	3.5-20 tons	5.5-30 tons	
	Installation Location	Outdoor	Outdoor	Outdoor	
	Airflow Orientation	Vertical/Horizontal			
	Available Voltages	208-230V 3P (all); 460V 3P (all); 575V (VFD only)			
	Unit Disconnect	Single-point connection/fused (optional)			
	Energy Recovery	RenewAire enthalpic static-plate G5			
	Internal Bypass of Energy Recovery	Yes, modulating bypass using face and bypass dampers			
CABINET	Refrigerant	R410A			
	Wall Construction	1" or 2" double-wall, injected foam panels (2" optional)			
	Insulation	1" R-6.5 or 2" R-13.0			
	Panels with Thermal Break	Available on 2" double-wall units			
	Painted Cabinets	2,500-hour salt spray rated in white, grey or custom (optional)			
SUPPLY/EXHAUST FAN	Isolation Dampers	Low-leakage Class I dampers			
	Supply Blower	High-efficiency plenum fans			
	Supply Fan Type	Direct-drive			
	Supply Fan Speed Control	ECM/VFD (optional)			
	Supply Fan Vibration Isolation	Neoprene/spring (VFD only)			
	Supply/Exhaust Fan Motor HP (kW)	200-240V 3P	2.70 kW	2.70 kW	2.70 kW x2
		380-480V 3P	3.70 kW	3.70 kW	3.70 kW x2
		575V 3P	3 HP	5 HP	5 HP x2
VFD		3 HP	5 HP	5 HP x2	
Unit ESP	2" WC at 1,500 CFM	2.5" WC at 3,000 CFM	3" WC at 4,500 CFM		
COOLING/HEATING	Cooling Coil	Direct expansion, chilled water (optional)			
	Heating Section	Electric heat (SCR), indirect gas furnace (5:1, 10:1 modulation), hot water, steam (optional)			
	Hot Gas Reheat	Modulating (optional)			
CONTROLS	Economizer/Defrost Capability	Modulating			
	Microprocessor Controller	Integrated programmable controller			
	Control Hardware	Carel c.pCO mini			
	Optional Communications	BACnet MS/TP or IP, Modbus RTU, or TCP			
	Airflow Monitoring	Yes			
OPTIONS	Recirculation Mode	Yes (optional)			
	GFCI Convenience Outlet	120 VAC, 20A (field powered)			
	Roof Curbs	14" height			
	Seismic and Wind-Rated Curbs	Yes			
	MERV 8 (2" only), 13 and 14 Filters	Available in 2" and 4"			
	Mist Eliminator	3/8"			
	Drain Overflow Switch	Yes			
Coil Coatings	Yes				
Certification		For Core:  AHRI CERTIFIED Global Recognition. Industry Respect.			



TONNAGE RANGE

	DN-2	DN-3	DN-5
Airflow (CFM)	375	750	1,125
	1,650	3,300	4,950
Calculated Capacity (Btu/hr)	21,310	42,619	63,929
	119,666	239,332	360,945
Capacity (Tons)	2	3.5	5.5
	10	20	30

THEORETICAL ISMRE*

	DN-2	DN-3	DN-5
Airflow (CFM)	1,125	2,250	3,375
LAT (°F/°F)	49°F/49°F	49°F/49°F	49°F/49°F
	53°F/53°F	53°F/53°F	53°F/53°F
Theoretical ISMRE	7.6	5.7	7.3
	8.2	6.1	7.9

* Data derived from internal calculations