

# 100% dedicated outdoor air systems





Optimized rooftop systems for DOAS applications











One of the most challenging applications of an HVAC system is to provide 100% outdoor air to a space to fulfill ASHRAE 62.1 building design recommendations. It requires a system that is capable of conditioning summer and winter outdoor air to the required indoor comfort conditions – on a continuous basis.

Whether operating as a stand-alone rooftop system or integrated with a Daikin Applied terminal unit system to provide conditioned outdoor air ventilation, Daikin Applied 100% dedicated outdoor air rooftop systems (DOAS) are optimized to meet this challenge, efficiently and effectively.

Daikin Applied rooftop systems provide features and solutions for demanding applications like laboratories, clean-rooms, pharmaceutical buildings, healthcare facilities, and schools that require superior conditioned air for improved indoor air quality and increased occupant comfort.

## 100% outdoor air solutions

#### **Cooling solutions**

- Excellent multi-stage capacity control and part-load performance for better leaving air temperature and comfort control. Select optional, modulating VFD compressor(s) for precise leaving air temperature control
- Supply air fans and evaporator coils can be optimally selected for lower cfm per ton (required for 100% OA applications)
- Modulating hot gas reheat (MHGRH) captures compressor heat to provide industry leading part-load humidity control while meeting ASHRAE 90.1 (2013) requirements. Substitute an optional subcooling coil for increased efficiency





#### **Heating solutions**

- Modulating gas furnaces with turn-down options as high as 20:1 meet part-load demands and accurately control discharge air temperature
- Gas furnaces with a design temperature rise of 60°F 100°F provide sufficient capacity for 100% OA applications
- Face and bypass, or integral face and bypass steam/hot water coils allow boilers to be used and provide freeze protection for steam/water coils

#### Energy recovery solutions

- Reduce cooling/heating loads and save energy
- Factory-installed energy recovery systems eliminate coordination and leakage problems associated with field installation
- Meet ASHRAE 90.1 (2013) requirements





#### **Control solutions**

- Precise discharge temperature control with ambient changeover provides excellent heating, cooling, dehumidification, and comfort control
- Flexible reheat and reset options provide increased energy savings

### Make it a complete system for optimum performance

#### Choose a Daikin Applied rooftop unit



**Rebel**<sup>™</sup> 3 to 15-tons



Maverick<sup>™</sup> II 15 to 75-tons



RoofPak<sup>™</sup> 15 to 150-tons

2

#### **Choose from Daikin Applied supporting units**



Destiny<sup>™</sup> commercial indoor air handler 600 to 15,000 cfm



Vision<sup>™</sup> semi-custom indoor air handler 900 to 100,000 cfm



Skyline<sup>™</sup> semi-custom outdoor air handler 900 to 65,000 cfm



VAVs



Daikin VRVs with cassettes



Scroll condensing unit

#### Focused on a sustainable future

Daikin Applied is committed to sustainable practices as part of our corporate culture. We believe it is the right thing to do for our customers, our community, the environment and ourselves. As a global leader in HVAC technology, Daikin Applied has a unique opportunity to make a difference in sustainable initiatives and to continue to lead the industry in environmental solutions.

For more information about Daikin Applied 100% dedicated outdoor air systems, contact your local Daikin Applied sales office or visit www.DaikinApplied.com to find an office near you.

GSA Contract Holder

