

## ROOF TOP VENTILATING UNIT

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### 1. GENERAL

#### 1.1 Scope

- .1 provide factory fabricated roof top unit as shown.

#### 1.2 Shop drawings

- .1 Submit shop drawings for packaged unit with equipment model number, outline dimensions, enclosure details, space requirements for service and maintenance, and support arrangements.
- .2 Provide rating information showing capacity and power input requirements for heating and cooling at full load.
- .3 Provide diagrams showing;
  - a) requirements for field assembly with air flows, connection pipe sizes and external pressure drop at rated air flow,
  - b) unit internal and external electrical power and control wiring with motors, starters, relays and interlocks identified, and with terminal and wire numbers marked.
- .4 Submit sound power data for supply, relief, or return fans rated at more than {2.0 m<sup>3</sup>/s}{4000 CFM} and for condenser section where unit capacity exceeds {40 kW}{11.4 tons}.

#### 1.3 Reference standards

- .1 Sound ratings to AMCA (Air Moving and Air Conditioning Association) 301 when tested to AMCA 300 and soundproofing to ARI 270.
- .2 Fans to AMCA 99
- .3 Fan ratings to AMCA 210, and ASHRAE 51.
- .4 Weatherproofing to AGA rain test standards.
- .5 Salt spray test to ASTM B117.
- .6 Units larger than {40 KW}{11.4 tons} to ARI 210 Standard for Unitary Air Conditioning Equipment.

#### 1.4 Warranty

- .1 Compressors to be warranted against failure for three (3) years parts only.
- .2 Gas heat exchangers to be warranted against failure for ten (10) years parts only.

### 2. PRODUCTS

#### 2.1 Unit:

- .1 roof top package type suitable for ;
  - a) supply air quantity,
  - b) return air quantity,
  - c) external static pressure,
  - d) cooling capacity
  - e) heating capacity,
  - f) heat reclaim as scheduled.
- .2 hermetic reciprocating or scroll compressor, evaporator, air cooled condenser, condenser fans, evaporator fan, heater section, filter box, economizer section, power exhaust fans, motor starters, and controls,
- .3 roof curb mounting frame for down discharge supply and up-flow return,
- .4 factory assembled and tested with refrigeration piping, refrigerant and oil charge and
- .5 ready for connection to ductwork, gas and electric power source.

*Standard of Acceptance*

- o McQuay
- o Trane
- o Mafna

#### 2.2 Basic unit

- .1 Channel base frame:
  - a) fabricated from welded structural steel or formed channels in ladder configuration with cross members at ends and under major equipment loads,
  - b) fitted with lifting lugs, and
  - c) designed to evenly distribute unit weight.