

Model #: 48A2V030CNG53318
Serial #: 1719U45469

2018
30 Ton



United Technologies

Product Data

WeatherMaker®

Packaged Rooftop Units

20 to 60 Nominal Tons

L: 13' 10"
W: 7' 10"
H: 6' 7"



Operating Weight: 5,002



48/50A2,A3,A4,A5020-060
Single-Package Gas Heating/Electric Cooling
Rooftop Units and Electric Cooling
Rooftop Units with Optional Electric Heat with *ComfortLink* Controls
and Puron® Refrigerant (R-410A)

Model number nomenclature



48 A2 V 030 C N G 5 3 3 18

48A2, A3, A4, A5 UNITS

48 A2 D 050 F E G 6 2 1 GN

48 – Cooling Unit with Gas Heat

Configuration

- A2 – CV/SAV Vertical with ComfortLink Controls and Puron® Refrigerant (R-410A)
- A3 – VAV Vertical with ComfortLink Controls and Puron Refrigerant (R-410A)
- A4 – CV/SAV Horizontal with ComfortLink Controls and Puron Refrigerant (R-410A)
- A5 – VAV Horizontal with ComfortLink Controls and Puron Refrigerant (R-410A)

Heat Options

- D – Low Gas Heat
- E – High Gas Heat
- F – Low Gas Heat with Humidi-MiZer
- G – High Gas Heat with Humidi-MiZer
- M – Low Gas Heat Stainless
- N – High Gas Heat Stainless
- S – Staged Low Gas Heat Stainless
- T – Staged High Gas Heat Stainless
- V – Staged Low Gas Heat Stainless with Humidi-MiZer
- W – Staged High Gas Heat Stainless with Humidi-MiZer

Unit Size - Nominal Tons

- 020 – 20
- 025 – 25
- 027 – 27
- 030 – 30
- 035 – 35
- 040 – 40
- 050 – 50
- 060 – 60

Control Options

- No Features
- A – Controls Expansion Module with Phase Monitor
- B – CO₂ Sensor
- C – Smoke Detector
- D – CO₂ Sensor and Smoke Detector
- E – Plugged Filter Indicator and Lube Lines
- F – Plugged Filter Indicator, Lube Lines and CO₂ Sensor
- G – Plugged Filter Indicator, Lube Lines and Smoke Detector
- H – Plugged Filter Indicator, Lube Lines, CO₂ Sensor and Smoke Detector
- J – CO₂ Sensor with Controls Expansion Module and Phase Monitor
- K – Smoke Detector with Controls Expansion Module and Phase Monitor
- L – CO₂ Sensor and Smoke Detector with Controls Expansion Module and Phase Monitor
- M – Plugged Filter Indicator and Lube Lines with Controls Expansion Module and Phase Monitor
- N – Plugged Filter Indicator, Lube Lines and CO₂ Sensor with Controls Expansion Module and Phase Monitor
- P – Plugged Filter Indicator, Lube Lines and Smoke Detector with Controls Expansion Module and Phase Monitor
- Q – Plugged Filter Indicator, Lube Lines, CO₂ Sensor and Smoke Detector with Controls Expansion Module and Phase Monitor

LEGEND

- Al – Aluminum
- Cu – Copper
- CV – Constant Volume
- MCHX – Microchannel Heat Exchanger
- SAV™ – Staged Air Volume
- VAV – Variable Air Volume
- VFDB – Variable Frequency Drive Bypass

NOTES:

1. VAV and SAV models are equipped with a supply fan motor variable frequency drive (VFD).
2. All indoor fan motors meet the minimum efficiency requirements as established by the Energy Independence and Security Act (EISA) 2007.

Factory-Installed Options

Refer to price pages for available option codes.

Packaging/Communication

- 1 – Domestic
- 3 – Export
- A – Domestic with BACnet Communication Option
- C – Export with BACnet Communication Option

Design Series

- 2 – A Series
- 3 – 050

Voltage

- 1 – 575-3-60
- 5 – 208/230-3-60
- 6 – 460-3-60

Coil Options

- Al/Cu Cond, Al/Cu Evap
- A – Al/Cu Cond, Al/Cu Evap with Digital Compressor
- B – Cu/Cu Cond, Al/Cu Evap with Digital Compressor
- C – Cu/Cu Cond, Al/Cu Evap
- D – Al/Cu Cond Precoat, Al/Cu Evap with Digital Compressor
- E – Al/Cu Cond Precoat, Al/Cu Evap
- F – E-coated Al/Cu, Al/Cu Evap
- G – MCHX Cond, Al/Cu Evap
- H – E-coated MCHX Cond, Al/Cu Evap
- J – MCHX Cond with Coil Grilles, Al/Cu Evap
- K – E-coated MCHX Cond with Coil Grilles, Al/Cu Evap
- L – E-coated Al/Cu Cond, Al/Cu Evap with Digital Compressor
- M – MCHX Cond, Al/Cu Evap with Digital Compressor
- N – E-coated MCHX Cond, Al/Cu Evap with Digital Compressor
- P – MCHX Cond with Coil Grilles, Al/Cu Evap with Digital Compressor
- Q – Al/Cu Cond, Al/Cu Evap with Hot Gas Bypass
- R – Cu/Cu Cond, Al/Cu Evap with Hot Gas Bypass
- S – Al/Cu Cond Precoat, Al/Cu Evap with Hot Gas Bypass
- T – E-coated Al/Cu, Al/Cu Evap with Hot Gas Bypass
- V – MCHX Cond, Al/Cu Evap with Hot Gas Bypass (No Humidizer)
- W – E-coated MCHX Cond, Al/Cu Evap with Hot Gas Bypass (No Humidizer)
- X – MCHX Cond with Coil Grilles, Al/Cu Evap with Hot Gas Bypass (No Humidizer)
- Y – E-coated MCHX Cond with Coil Grilles, Al/Cu Evap with Hot Gas Bypass (No Humidizer)
- Z – E-coated MCHX Cond with Coil Grilles, Al/Cu Evap with Digital Compressor
- 2 – E-coated Al/Cu Cond, Al/Cu E-Coat Evap
- 3 – E-coated MCHX Cond, Al/Cu E-Coat Evap
- 4 – E-coated MCHX Cond with Coil Grilles, Al/Cu E-Coat Evap
- 5 – E-coated Al/Cu Cond, Al/Cu E-Coat Evap with Digital Compressor
- 6 – E-coated MCHX Cond, Al/Cu E-Coat Evap with Digital Compressor
- 7 – E-coated MCHX Cond with Coil Grilles, Al/Cu E-Coat Evap with Digital Compressor

Motor Options

No VFD			VFDB			VFD		
A	5 HP	J	5 HP	L	5 HP			
C	10 HP	1	10 HP	N	10 HP			
D	15 HP	2	15 HP	P	15 HP			
E	20 HP	3	20 HP	Q	20 HP			
F	25 HP	4	25 HP	R	25 HP			
G	30 HP	5	30 HP	S	30 HP			
H	40 HP	6	40 HP	T	40 HP			

Quality Assurance

ISO 9001:2008-certified processes



Physical data — 48A2,A3,A4,A5 units



UNIT 48A2,A3,A4,A5	020D/E			025D/E			027D/E			030D/E		
NOMINAL CAPACITY (tons)	20			25			27			30		
BASE UNIT OPERATING WEIGHT (lb)	See Unit Weights Table											
COMPRESSOR Quantity ... Type (Ckt 1/Ckt 2) Number of Refrigerant Circuits Oil	2 ... ZP67/1...ZP91 2 Precharged			2 ... ZP91/1...ZP91 2 Precharged			2 ... ZP91/1...ZP91 2 Precharged			2...ZP72, 2...ZP72 2 Precharged		
REFRIGERANT Operating Charge (lb), Ckt 1/Ckt 2 RTPF Coils MCHX Coils MCHX Coils with Humidi-MiZer	26.2/18.8 14.9/11.8 22.1/11.8			30.2/15.2 16.5/11.0 23.7/11.0			32.8/16.5 16.5/11.0 23.7/11.0			30.5/34.3 15.1/15.3 15.1/22.5		
MCHX CONDENSER* Quantity Total Face Area (sq ft)	1 32.9			1 32.9			1 32.9			1 32.9		
RTPF CONDENSER Quantity Rows...Fins/in. Total Face Area (sq ft)	1 2...15 33.3			1 3...15 33.3			1 3...15 33.3			1 4...15 33.3		
CONDENSER FAN Nominal Cfm Quantity... Diameter (in.) Motor Hp	19,500 2 ... 30 1			19,500 2 ... 30 1			19,500 2 ... 30 1			19,500 2 ... 30 1		
EVAPORATOR COIL Tube Size (in.) Rows ... Fins/in. Total Face Area (sq ft)	Cross-Hatched Copper Tubes, Aluminum Plate Fins with Intertwined Circuits											
HUMIDI-MIZER COIL Coil Construction Quantity Face Area (sq ft)	E-Coated Aluminum Novation® Heat Exchanger with Microchannel Coil Technology											
EVAPORATOR FAN Quantity ... Size (in.) Type Drive Nominal Cfm Motor Hp Motor Frame Size Motor Bearing Type Maximum Allowable Rpm Motor Pulley Pitch Diameter Nominal Motor Shaft Diameter (in.) Fan Pulley Pitch Diameter (in.) Nominal Fan Shaft Diameter (in.) Belt Quantity Belt Type Belt Length (in.) Pulley Center Line Distance (in.) Factory Speed Setting (rpm)	Centrifugal Type											
FURNACE SECTION Supply Line Pressure Range Rollout Switch Cutout Temp (F)† Burner Orifice Diameter (in. ...drill size) Natural Gas Std Liquid Propane Alt Thermostat Heat Anticipator Setting Stage 1 (amps) Stage 2 (amps) Gas Input (Btuh) Stage 1 (Low Heat/High Heat) Stage 2 (Low Heat/High Heat) Efficiency (Steady State) (%) Temperature Rise Range Manifold Pressure (in. wg) Natural Gas Std Liquid Propane Alt Gas Valve Quantity	5.0-in. wg min/13.5-in. wg max.											
HIGH-PRESSURE SWITCH (psig) Cutout Reset (Auto.)	650 500			650 500			650 500			650 500		
MIXED-AIR FILTERS Quantity ... Size (in.) Standard Pleated	10 ... 20 x 24 x 2 5 ... 20 x 20 x 4 5 ... 20 x 24 x 4			10 ... 20 x 24 x 2 5 ... 20 x 20 x 4 5 ... 20 x 24 x 4			10 ... 20 x 24 x 2 5 ... 20 x 20 x 4 5 ... 20 x 24 x 4			10 ... 20 x 24 x 2 5 ... 20 x 20 x 4 5 ... 20 x 24 x 4		
OUTDOOR-AIR FILTERS Quantity...Size (in.)	8...16 x 25 x 2 4...20 x 25 x 2											
POWER EXHAUST Motor, Quantity...Hp Fan, Diameter...Width (in.)	Direct Drive, Single-Phase Motors (Factory-Wired for High Speed Operation), Forward-Curved Fan Wheels with Backdraft Dampers on Each Fan Housing 4...1 11 x 10											

LEGEND
 Al — Aluminum
 Cu — Copper
 MCHX — Microchannel Heat Exchanger
 RTPF — Round Tube Plate Fin

*Sizes 020 to 027: Circuit 1 uses the lower portion of condenser coil, Circuit 2 uses the upper portion.
 Sizes 030 and 035: Circuit 1 uses the upper portion of condenser coil, Circuit 2 uses the lower portion.
 Sizes 040 and 050: Circuit 1 uses the left condenser coil, Circuit 2 the right.
 Size 060: Circuit A uses the two MCHX coils near the bulkhead, Circuit B uses the two MCHX coils near the control box.
 †Rollout switch is manual reset.