AHRI RATINGS TABLES

48/50FE 1-Phase AHRI Ratings[a,b,c,d]

UNIT	COOLING STAGES	NOMINAL CAPACITY (tons)	NET COOLING CAPACITY 2 (MBH)	TOTAL POWER 2 (kW)	SEER2	EER2	RATED INDOOR AIRFLOW (cfm)
48/50FE*A04	1	3.0	34.0	3.0	13.4	11.5	1050
48/50FE*A05	1	4.0	48.0	4.2	13.4	11.5	1500
48/50FE*A06	1	5.0	57.5	5.0	13.4	11.4	1500

48FE*A/M 3-Phase AHRI Ratings[a,b,c,d]

UNIT	COOLING STAGES	NOMINAL CAPACITY (tons)	NET COOLING CAPACITY (MBH)	TOTAL POWER (kW)	SEER	EER	IEER WITH 2-SPEED INDOOR FAN MOTOR	NET COOLING CAPACITY 2 (MBH)	TOTAL POWER 2 (kW)	SEER2	EER2	RATED INDOOR AIRFLOW (cfm)	AHRI RATING CFM	AHRI PART LOAD CFM
48FE*A04	1	3.0	34.4	2.9	14.0	11.8	—	34.0	3.0	13.4	11.5	1050	—	—
48FE*A05	1	4.0	48.0	4.1	14.0	11.8	—	48.0	4.2	13.4	11.5	1500	—	—
48FE*A06	1	5.0	57.5	5.0	14.0	11.4	—	57.5	5.0	13.4	11.4	1500	—	—
48FE*M07	2	6.0	70.0	6.3	—	11.2	15.0	—	—	—	—	2400	—	—
48FE*M08	2	7.5	86.0	7.7	—	11.2	15.0	—	—	—	—	—	2650	1575
48FE*M09	2	8.5	98.0	8.8	—	11.2	15.0	—	—	—	—	—	3400	1700
48FE*M12	2	10.0	118.0	10.7	—	11.0	15.0	—	—	—	—	—	3500	2100
48FE*M14	2	12.5	136.0	12.6	—	10.8	15.0	—	—	—	—	—	3750	2250
48FE*M16	2	15.0	174.0	16.1	—	10.8	14.5	—	—	—	—	—	5250	3500
48FE**20	2	17.5	206.0	19.1	—	10.8	14.5	—	—	—	—	—	6125	3675
48FE**24	2	20.0	248.0	24.8	—	10.0	14.5	—	—	—	—	—	7000	4200
48FE**28	2	25.0	278.0	28.4	—	9.8	14.0	—	—	—	—	—	8750	5567
48FE**30	2	27.5	314.0	32.0	—	9.8	14.0	—	—	—	—	—	10000	6000

50FE-A/M 3-Phase AHRI Ratings[a,b,c,d]

UNIT	COOLING STAGES	NOMINAL CAPACITY (tons)	NET COOLING CAPACITY (MBH)	TOTAL POWER (kW)	SEER	EER	IEER WITH 2-SPEED INDOOR FAN MOTOR	NET COOLING CAPACITY 2 (MBH)	TOTAL POWER 2 (kW)	SEER2	EER2	RATED INDOOR AIRFLOW (cfm)	AHRI RATING CFM	AHRI PART LOAD CFM
50FE*A04	1	3.0	34.4	2.9	14.0	11.8	—	34.0	3.0	13.4	11.5	1050	—	—
50FE*A05	1	4.0	48.0	4.1	14.0	11.8	—	48.0	4.2	13.4	11.5	1500	—	—
50FE*A06	1	5.0	57.5	5.0	14.0	11.4	—	57.5	5.0	13.4	11.4	1500	—	—
50FE*M07	2	6.0	70.0	6.3	—	11.2	15.5	—	—	—	—	2400	—	—
50FE*M08	2	7.5	86.0	7.5	—	11.4	15.2	—	—	—	—	—	2650	1575
50FE*M09	2	8.5	98.0	8.6	—	11.4	15.2	—	—	—	—	—	3400	1700
50FE*M12	2	10.0	118.0	10.5	—	11.2	15.2	—	—	—	—	—	3500	2100
50FE*M14	2	12.5	136.0	12.1	—	11.0	15.2	—	—	—	—	—	3750	2250
50FE*M16	2	15.0	174.0	15.8	—	11.0	14.7	—	—	—	—	—	5250	3500
50FE**20	2	17.5	206.0	18.7	—	11.0	14.7	—	—	—	—	—	6125	3675
50FE**24	2	20.0	248.0	24.3	—	10.2	14.7	—	—	—	—	—	7000	4200
50FE**28	2	25.0	278.0	27.8	—	10.0	14.2	—	—	—	—	—	8750	5567
50FE**30	2	27.5	314.0	31.4	—	10.0	14.2	—	—	—	—	—	10000	6000

NOTE(S):

a. Rated in accordance with AHRI Standards 210/240 (04-06 size) and 340/360 (07-30 size).
b. Rating are based on:
Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temperature and 95°F (35°C) db outdoor air temperature.
IEER Standard: A measure that expresses cooling part-load EER efficiency for commercial unitary air-conditioning and heat pump equipment on the basis of weighted operation at various load capacities.
c. Units comply with ASHRAE 90.1-2016 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) and DOE-2023 (Department of Energy) Energy Standard for minimum SEER2 and EER2 requirements.
d. 50FE units comply with US Energy Policy Act (2005). To evaluate code compliance requirements, refer to state and local codes.

FACTORY-INSTALLED OPTIONS AND FIELD-INSTALLED ACCESSORIES

ITEM	48/50FE*04-07	48/50FE*08-12	48/50FE*16	48/50FE*20-30
GAS HEAT (48FE units only)				
Low, Medium or High Gas Heat — Aluminized Heat Exchanger	O	O	O	O
Low, Medium or High Gas Heat — Stainless Steel Heat Exchanger	O	O	O	O
Propane Conversion Kit (48FE only)	A[a]	A	A	A
High Altitude Conversion Kit (48FE only)	A[a]	A	A	A
Flue Discharge Deflector (48FE only)	A	A	A	A
Flue Shield	A[a]	A	—	—
ELECTRIC HEAT (50FE units only)				
Electric Resistance Heaters	A	A	A	A
Single Point Kits	A	A	A	A
CABINET				
Thru-the-Base Electrical or Gas-Line Connections	O / A	O / A	O / A	—
Hinged Access Panels	O	O	O	O
MERV-8 Filters	A	A	A	A
MERV-13 Filters, 2 in.	A	A	A	A
MERV-13 Filters, 4 in.	O	O	O	O
4-in. Filter Rack (filters not included)	—	A	A	A
Disconnect Switch Bracket	—	—	A	—
Supply Duct Cover	—	—	A	—
COIL OPTIONS				
Cu/Cu Indoor and/or Outdoor Coils	O[b,c]	O[b]	O[b]	O
Pre-coated Outdoor Coils	O[c]	O	O	O
Premium, E-coated Indoor/Outdoor Coils	O[c]	O	O	O
HUMIDITY CONTROL				
Humidi-MiZer® Adaptive Dehumidification System[c]	O	O	O	O
CONDENSER PROTECTION				
Condenser Coil Hail Guard (louvered design)[c]	O / A	O / A	O / A	O / A
CONTROLS				
Thermostats, Temperature Sensors, and Subbases	A	A	A	A
SystemVu™ DDC Communicating Controller	O	O[d]	O[d]	O
Smoke Detector (supply and/or return air)	O / A	O / A	O / A	O / A
Horn Strobe Annunciator	A	A[e]	A[e]	A[e]
Time Guard II Compressor Delay Control Circuit	A	A	A	A
Phase Monitor	O / A	O / A	O / A	O / A
Condensate Overflow Switch	O / A	O / A	O / A	O / A
ECONOMIZERS AND OUTDOOR AIR DAMPERS				
EconomizerONE for Electromechanical Controls, complies with FDD (Standard and Ultra Low Leak damper models)[c,f]	O / A	O / A	O / A	O / A
Wi-Fi Stick for EconomizerONE (optional)	A	A	A	A
EconoMi$er® 2 for DDC controls (Standard and Ultra Low Leak air damper models)[c,d]	O / A	O / A	O / A	O / A
Motorized Two-Position Outdoor-Air Damper	A	A	A	A
Manual Outdoor-Air Damper (25% and 50%)	A	A	A	A
Barometric Relief[g]	O / A	O / A	O / A	O / A
Power Exhaust — Prop Design	A	A	A	O / A
ECONOMIZER SENSORS AND IAQ DEVICES				
Single Dry Bulb Temperature Sensors[h]	O / A	O / A	O / A	O / A
Differential Dry Bulb Temperature Sensors[h]	A	A	A	A
Single Enthalpy Sensors[h]	O / A	—	—	—
Differential Enthalpy Sensors[h]	A	A	A	A
CO_2 Sensor (wall, duct, or unit mounted)[h]	O / A	O / A	O / A	O / A
INDOOR MOTOR AND DRIVE				
Multiple Motor and Drive Packages	O	O	O	O
Fan Filter Status Switch	O / A	O / A	O / A	O / A
LOW AMBIENT CONTROL				
Winter Start Kit[i]	A	A	A	A
Low Ambient Controller to 0°F (–18°C)	—	A[k]	A	A
Low Ambient Controller to –20°F (–29°C)[j]	A	—	—	—
POWER OPTIONS				
Convenience Outlet (powered)	O[c]	O	O	O
Convenience Outlet (unpowered)	O / A	O	O	O
Convenience Outlet, 20 Amp (unpowered)	—	A	A	A
Non-Fused Disconnect[l]	O[m]	O	O	O
High SCCR Protection[n]	O	O	O	O
ROOF CURBS				
Roof Curb 14 in. (356 mm)	A	A	A	A
Roof Curb 24 in. (610 mm)	A	A	A	A

NOTE(S):

a. Not available for 48FE Ultra Low NOx units.
b. Cu/Cu coils are only available with louvered hail guards.
c. Not available as a factory-installed option on single phase (-3 voltage code) models. Use field-installed accessory where available.
d. Models with SystemVu controls comply with California Title 24 Fault Detection and Diagnostic (FDD).
e. Requires a field-supplied 24-v transformer for each application. See price pages for details.
f. FDD (Fault Detection and Diagnostic) capability per California Title 24 section 120.2.
g. Included with economizer.
h. Sensors used to optimize economizer performance.
i. See application data for assistance.
j. Not necessary on SystemVu units, as they are capable of operating at temperatures down to 25°F (–4°C).
k. Size 14 models operate down to 0°F (–18°C) standard; Low Ambient control is not available.
l. Non-fused disconnect switch cannot be used when unit electrical rating exceeds:
208/230-1-60 and 208/230-3-60 = 80 amps (FLA).
480-3-60 and 575-3-60 = 80 amps (FLA).
Size 16: 208/230-3-60 = 200 amps (FLA).
Size 16: 460/575-3-60 = 100 amps (FLA).
Carrier RTUBuilder automatically selects the amp limitations.
m. Not available for 48FE Ultra Low NOx 460-v units.
n. High SCCR (Short Circuit Current Rating) is not available on the following: units with Humidi-MiZer system, low ambient controls, phase loss monitor, non-fused disconnect, powered convenience outlet, or 575-v models.

LEGEND

O — Factory-Installed Option
A — Field-Installed Accessory

To learn more, please visit our site www.carrier.com

Carrier's WeatherMaker® rooftop units (RTUs) with Puron Advance™ and EcoBlue™ Fan Technology offer an environmentally sustainable solution for a brighter future.

48/50FE**04, 05, 06, 07

48/50FE**08, 09, 12, 16

48/50FE**20, 24, 28, 30

ecoblue™ technology

Puron ADVANCE™

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AHRI CERTIFIED™ www.ahridirectory.org
Unitary Small AC
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

AHRI CERTIFIED™ www.ahridirectory.org
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AHRI Standard 340/360
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48/50FE Units Physical Data

NOMINAL TONS	3.0		4.0		5.0		6.0		7.5		8.5		10.0		12.5		15.0		17.5		20.0		25.0		27.5	
48/50FE UNIT	48/50FE*A04	48/50FE*B04	48/50FE*A05	48/50FE*B05	48/50FE*A06	48/50FE*B06	48/50FE*M07	48/50FE*N07	48/50FE*M08	48/50FE*N08	48/50FE*M09	48/50FE*N09	48/50FE*M12	48/50FE*N12	48/50FE*M14	48/50FE*N14	48/50FE*M16	48/50FE*N16	48/50FE*M20	48/50FE*N20	48/50FE*M24	48/50FE*N24	48/50FE*M28	48/50FE*N28	48/50FE*M30	48/50FE*N30
BASE UNIT OPERATING WT (lb) 48/50FE	482 / 437		543 / 498		556 / 511		607 / 562		787 / 743		868 / 805		878 / 815		1041 / 978		1408 / 1325		1800 / 1673		2000 / 1873		2174 / 2047		2351 / 2224	
REFRIGERATION SYSTEM	Puron Advance™ R-454B						Puron Advance™ R-454B						Puron Advance™ R-454B						Puron Advance™ R-454B							
No. Circuits / No. Compressors / Type	1 / 1 / Scroll						1 / 1 / 2-Stage Scroll		1 / 2 / Scroll				1 / 2 / Scroll						1 / 2 / Scroll							
Metering Device	Acutrol						TXV	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV	—
Humidi-MiZer® Metering Device	—	TXV-Acutrol	—	TXV-Acutrol	—	TXV-Acutrol	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV	—	TXV
EVAPORATOR COIL MATERIAL	Cu Tube / Al Fin (3/8 in. RTPF)						Cu Tube / Al Fin (3/8 in. RTPF)						Cu Tube / Al Fin (3/8 in. RTPF)						Cu Tube / Al Fin (3/8 in. RTPF)							
CONDENSER COIL MATERIAL	Cu Tube / Al Fin (5/16 in. RTPF)						Cu Tube / Al Fin (5/16 in. RTPF)						Cu Tube / Al Fin (5/16 in. RTPF)						Cu Tube / Al Fin (5/16 in. RTPF)							
HUMIDI-MIZER COIL MATERIAL	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin	—	Cu Tube / Al Fin
EVAPORATOR FAN AND MOTOR																										
1 Phase Motor Quantity / Drive Type / Fan Type	1 / Direct / Vane Axial	—	1 / Direct / Vane Axial	—	1 / Direct / Vane Axial	—	—						—						—							
3 Phase Motor Quantity / Drive Type / Fan Type	1 / Direct / Vane Axial						1 / Direct / Vane Axial						1 / Direct / Vane Axial						2 / Direct / Vane Axial							
CONDENSER FAN AND MOTOR																										
Motor Quantity / Drive Type	1 / Direct								2 / Direct						1 / Direct				3 / Direct		4 / Direct				6 / Direct	
FILTERS: QUANTITY	Return Air: 2 / Outdoor Air: 1						Return Air: 4 / Outdoor Air: 1										Return Air: 6 / Outdoor Air: 2		Return Air: 6 / Outdoor Air: 4				Return Air: 9 / Outdoor Air: 4			

48FE Gas Heat Data

NOMINAL TONS	3.0		4.0		5.0		6.0	7.5	8.5	10.0	12.5	15.0	17.5	20.0	25.0	27.5
48FE UNIT	48FE**04	48FE(G/H)*04	48FE**05	48FE(G/H)*05	48FE**06	48FE(G/H)*06	48FE**07	48FE**08	48FE**09	48FE**12	48FE**14	48FE**16	48FE**20	48FE**24	48FE**28	48FE**30
GAS CONNECTION																
Natural Gas	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Liquid Propane	X	—	X	—	X	—	X	X	X	X	X	X	X	X	X	X
NATURAL GAS HEAT																
LOW HEAT : No. of Stages / No. of Burners																
Single Phase Units	1 / 2	1 / 1	1 / 2	1 / 1	1 / 2	1 / 1	—	—	—	—	—	—	—	—	—	—
3 Phase Units	1 / 2	1 / 1	1 / 2	1 / 1	1 / 2	1 / 1	1 / 2	1 / 3	1 / 3	2 / 4	2 / 4	2 / 6	2 / 5	2 / 5	2 / 5	2 / 5
Temperature Rise (°F)	25-55	20-50	25-55	20-50	20-55	15-45	15-55	25-55	20-55	25-65	20-65	15-55	15-45	15-45	10-45	10-45
MEDIUM HEAT : No. of Stages / No. of Burners																
Single Phase Units	1 / 3	1 / 1	1 / 3	1 / 1	1 / 3	1 / 1	—	—	—	—	—	—	—	—	—	—
3 Phase Units	2 / 3	1 / 1	1 / 3	1 / 1	1 / 3	1 / 1	1 / 3	2 / 4	2 / 4	2 / 5	2 / 5	2 / 8	2 / 7	2 / 7	2 / 7	2 / 7
Temperature Rise (°F)	50-85	20-60	35-65	20-60	30-65	20-60	25-65	35-65	30-65	30-65	25-65	20-60	25-55	20-55	15-55	15-55
HIGH HEAT: No. of Stages / No. of Burners																
Single Phase Units	—	—	1 / 3	—	1 / 3	—	—	—	—	—	—	—	—	—	—	—
3 Phase Units	—	—	2 / 3	—	2 / 3	—	2 / 3	2 / 5	2 / 5	2 / 5	2 / 5	2 / 10	2 / 9	2 / 9	2 / 9	2 / 9
Temperature Rise (°F)	—	—	50-80	—	40-80	—	35-80	40-75	35-75	35-70	30-70	35-65	30-60	30-60	20-60	20-60
LIQUID PROPANE HEAT																
LOW HEAT: No. of Stages / No. of Burners																
Single Phase Units	1 / 2	—	1 / 2	—	1 / 2	—	—	—	—	—	—	—	—	—	—	—
3 Phase Units	1 / 2	—	1 / 2	—	1 / 2	—	1 / 2	1 / 3	1 / 3	2 / 4	2 / 4	2 / 6	2 / 5	2 / 5	2 / 5	2 / 5
Temperature Rise (°F)	25-55	—	25-55	—	20-55	—	15-55	25-55	20-55	25-65	20-65	15-55	15-45	15-45	10-45	10-45
MEDIUM HEAT: No. of Stages / No. of Burners																
Single Phase Units	1 / 3	—	1 / 3	—	1 / 3	—	—	—	—	—	—	—	—	—	—	—
3 Phase Units	2 / 3	—	1 / 3	—	1 / 3	—	1 / 3	2 / 4	2 / 4	2 / 5	2 / 5	2 / 8	2 / 7	2 / 7	2 / 7	2 / 7
Temperature Rise (°F)	50-85	—	35-65	—	30-65	—	25-65	35-65	30-65	30-65	25-65	20-60	25-55	20-55	15-55	15-55
HIGH HEAT: No. of Stages / No. of Burners																
Single Phase Units	—	—	1 / 3	—	1 / 3	—	—	—	—	—	—	—	—	—	—	—
3 Phase Units	—	—	2 / 3	—	2 / 3	—	2 / 3	2 / 5	2 / 5	2 / 5	2 / 5	2 / 10	2 / 9	2 / 9	2 / 9	2 / 9
Temperature Rise (°F)	—	—	50-80	—	40-80	—	35-80	40-75	35-75	35-70	30-70	35-65	30-60	30-60	20-60	20-60

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