

**50HC**  
High—Efficiency  
Single Package Rooftop  
Cooling Only/Electric Heat  
with Puron® (R—410A) Refrigerant  
3 to 12.5 Tons — (Sizes 04 to 14)



## Product Data



Model #: 50HC-A04A2A6A2F0A0  
Serial #: 2916C88177

2016  
3 Ton



L: 6' 3"  
W: 3' 11"  
H: 2' 10"

C10222

Shipping Weight: 458 lbs



# MODEL NUMBER NOMENCLATURE

5 0 H C - A 0 4 A 2 A 6 A 2 F 0 A 0

Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Example:	5	0	H	C	-	D	0	8	A	3	A	5	-	0	A	0	A	0

## Unit Heat Type

50 - Electric Heat Packaged Rooftop

## Model Series - WeatherMaster®

HC - High Efficiency

## Heat Options

- = Standard (No Electric Heat)
- A = Low Electric Heat
- B = Medium Electric Heat
- C = High Electric Heat

## Refrig. Systems Options

- A = Single stage cooling models
- B = Single stage cooling models with Humidi-MiZer®
- D = Two stage cooling models
- E = Two stage cooling models with Humidi-MiZer
- F = Single stage cooling models with Motormaster® Low Ambient Controller
- G = Two stage cooling models with Motormaster Low Ambient Controller

## Cooling Tons

- 04 - 3 ton
- 05 - 4 ton
- 06 - 5 ton
- 07 - 6 ton
- 08 - 7.5 ton
- 09 - 8.5 ton
- 11 - 10 ton (12.0 EER)
- 12 - 10 ton (11.7 EER)
- 14 - 12.5 ton

## Sensor Options

- A = None
- B = RA Smoke Detector
- C = SA Smoke Detector
- D = RA + SA Smoke Detector
- E = CO<sub>2</sub>
- F = RA Smoke Detector and CO<sub>2</sub>
- G = SA Smoke Detector and CO<sub>2</sub>
- H = RA + SA Smoke Detector and CO<sub>2</sub>
- J = Condensate Overflow Switch (electro-mechanical controls only)
- K = Condensate Overflow Switch and RA Smoke Detectors
- L = Condensate Overflow Switch and RA + SA Smoke Detectors

## Indoor Fan Options 3, 4, 5 Ton Models Only\*

- 0 = Electric (Direct) Drive x13 Motor
- 2 = Medium Static Option - Belt Drive
- 3 = High Static Option - Belt Drive

## Indoor Fan Options 6-12.5 Ton Models Only

- 1 = Standard Static Option - Belt Drive
- 2 = Medium Static Option - Belt Drive
- 3 = High Static Option - Belt Drive
- C = High Static Option with High-Efficiency Motor, Belt Drive (Size 14 only)

## Coil Options (RTPF) (Outdoor - Indoor - Hail Guard)

- A = Al/Cu - Al/Cu
- B = Precoat Al/Cu - Al/Cu
- C = E-coat Al/Cu - Al/Cu
- D = E-coat Al/Cu - E-coat Al/Cu
- E = Cu/Cu - Al/Cu
- F = Cu/Cu - Cu/Cu
- M = Al/Cu - Al/Cu — Louvered Hail Guard
- N = Precoat Al/Cu - Al/Cu — Louvered Hail Guard
- P = E-coat Al/Cu - Al/Cu — Louvered Hail Guard
- Q = E-coat Al/Cu - E-coat Al/Cu — Louvered Hail Guard
- R = Cu/Cu - Al/Cu — Louvered Hail Guard
- S = Cu/Cu - Cu/Cu — Louvered Hail Guard

\* See Price Pages for specific Humidi-MiZer models.

**Note: On single phase models (-3 voltage code), the following are not available as factory-installed options:**

- Humidi-MiZer
- Coated Coils or Cu Fin Coils
- Louvered Hail Guards
- Economizer or 2-Position Damper
- Powered 115 Volt Convenience Outlet

## Factory Assigned

- 0 = Standard
- 1 = LTL

## Electrical Options

- A = None
- B = HACR Breaker
- C = Non-Fused Disconnect
- D = Thru-The-Base Connections
- E = HACR and Thru-The Base Connections
- F = Non-Fused Disconnect and Thru-The-Base Connections
- G = 2-Speed Indoor Fan (VFD) Controller
- H = 2-Speed Fan Controller (VFD) and HACR Breaker
- J = 2-Speed Fan Controller (VFD) and Non-Fused Disconnect
- K = 2-Speed Fan Controller (VFD) and Thru-The-Base Connections
- L = 2-Speed Fan Controller (VFD) w/ HACR Breaker and Thru-The Base Connections
- M = 2-Speed Fan Controller (VFD) with Non-Fused Disconnect and Thru-The-Base Connections

## Service Options

- 0 = None
- 1 = Unpowered Convenience Outlet
- 2 = Powered Convenience Outlet
- 3 = Hinged Panels
- 4 = Hinged Panels and Unpowered Convenience Outlet
- 5 = Hinged Panels and Powered Convenience Outlet
- C = Foil Faced Insulation
- D = Foil Faced Insulation with Unpowered Convenience Outlet
- E = Foil Faced Insulation with Powered Convenience Outlet
- F = Foil Faced Insulation & Hinged Panels
- G = Foil Faced Insulation & Hinged Panels with Unpowered Convenience Outlet
- H = Foil Faced Insulation & Hinged Panels with Powered Convenience Outlet

## Intake / Exhaust Options

- A = None
- B = Temperature Economizer w/ Barometric Relief
- F = Enthalpy Economizer w/ Barometric Relief
- K = 2-Position Damper
- U = Low Leak Temperature Economizer w/ Barometric Relief
- W = Low Leak Enthalpy Economizer w/ Barometric Relief

## Base Unit Controls

- 0 = Electromechanical Controls can be used with W7212 EconoMi\$er (Non-Fault Detection and Diagnostic)
- 1 = PremierLink™ Controller
- 2 = RTU Open Multi-Protocol Controller
- 6 = Electro-mechanical w/ 2-speed fan and W7220 Econo controller controls. Can be used with W7220 EconoMi\$er X (w/ Fault Detection & Diagnostic)
- D = ComfortLink Controls (Not available on 2-stage cooling 07 size models)

## Design Revision

- A = Factory Design Revision

## Voltage

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

Not all possible options can be displayed above - see the 50HC 3 to 12.5 Ton Price Pages, or contact your Carrier Expert for more details.

**Table 6 – PHYSICAL DATA**

**(COOLING)**

**3 – 6 TONS**

		<b>50HC**04</b>	<b>50HC**05</b>	<b>50HC**06</b>	<b>50HC*A07</b>	<b>50HC*D07</b>
<b>Refrigeration System</b>						
# Circuits / # Comp. / Type		1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / 1–Stage Scroll	1 / 1 / 2–Stage Scroll
Puron® refrigerant (R–410A) charge (lbs–oz)		9 – 0	12 – 8	13 – 3	14 – 0	14 – 0
Humidi–MiZer® Puron refrigerant (R–410A) charge (lbs–oz)		11 – 0	19 – 12	20 – 0	22 – 8	22 – 8
Metering Device		TXV	TXV	TXV	TXV	TXV
High–press. Trip / Reset (psig)		630 / 505	630 / 505	630 / 505	630 / 505	630 / 505
Low–press. Trip / Reset (psig)		54 / 117	54 / 117	54 / 117	54 / 117	54 / 117
<b>Evap. Coil</b>						
Material (Tube Fin)		Cu / Al	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Coil type		3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF
Rows / FPI		3 / 15	3 / 15	4 / 15	3 / 15	3 / 15
Total Face Area (ft <sup>2</sup> )		5.5	7.3	7.3	8.9	8.9
Condensate Drain Conn. Size		3/4–in	3/4–in	3/4–in	3/4–in	3/4–in
<b>Humidi–MiZer Coil</b>						
Material (Tube Fin)		Cu / Al	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Coil type		3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF
Rows / FPI		1 / 17	2 / 17	2 / 17	2 / 17	2 / 17
Total Face Area (ft <sup>2</sup> )		3.9	5.2	5.2	5.2	5.2
<b>Evap. Fan and Motor</b>						
Standard Static 1 phase	Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	–	–
	Max BHP	1.0	1.0	1.0	–	–
	RPM Range	600–1200	600–1200	600–1200	–	–
	Motor Frame Size	48	48	48	–	–
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	–	–
	Fan Diameter (in)	10 x 10	10 x 10	10 x 10	–	–
Standard Static 3 phase	Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	1 / Belt	1 / Belt
	Max BHP	1.0	1.0	1.0	1.7	1.7
	RPM Range	600–1200	600–1200	600–1200	489–747	489–747
	Motor Frame Size	48	48	48	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter (in)	10 x 10	10 x 10	11 x 10	15 x 15	15 x 15
Standard Static 3 phase†	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt	1 / Belt	1 / Belt
	Max BHP	1.7	1.7	1.7	1.7	1.7
	RPM Range	560–854	560–854	770–1175	489–747	489–747
	Motor Frame Size	48	48	48	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter (in)	10 x 10	10 x 10	10 x 10	15 x 15	15 x 15

† Humidi–MiZer models only

– Not applicable

Table 6 (cont.) – PHYSICAL DATA

(COOLING)

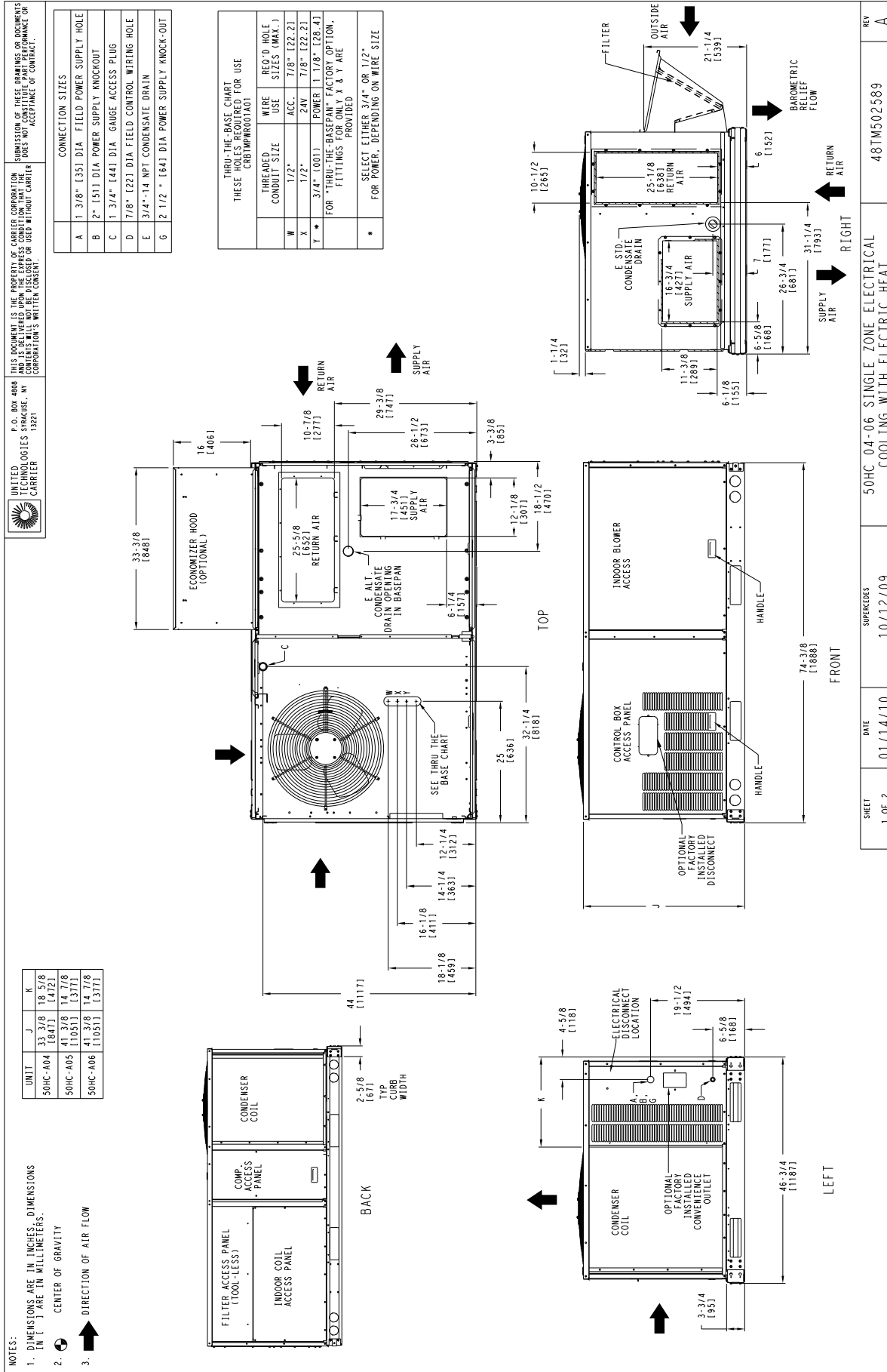
3 – 6 TONS

		50HC**04	50HC**05	50HC**06	50HC*A07	50HC*D07
<b>Evap. Fan and Motor</b>						
Medium Static 3 phase	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt	1 / Belt	1 / Belt
	Max BHP	1.7	1.7	2.4	2.9	2.9
	RPM Range	770–1175	920–1303	1035–1466	733–949	733–949
	Motor Frame Size	48	56	56	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter (in)	10 x 10	10 x 10	10 x 10	15 x 15	15 x 15
Medium Static 3 phase†	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt	1 / Belt	1 / Belt
	Max BHP	1.7	1.7	2.4	2.9	2.9
	RPM Range	770–1175	770–1175	1035–1466	733–949	733–949
	Motor Frame Size	48	48	56	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter (in)	10 x 10	10 x 10	10 x 10	15 x 15	15 x 15
High Static 3 phase	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt	1 / Belt	1 / Belt
	Max BHP	2.4	2.9	2.9	4.7	4.7
	RPM Range	1035–1466	1208–1639	1303–1687	909–1102	909–1102
	Motor Frame Size	56	56	56	14	14
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter (in)	10 x 10	10 x 10	10 x 10	15 x 15	15 x 15
<b>Condenser Coil</b>						
Material (Tube/Fin)	Cu / Al	Cu / Al	Cu / Al	Cu / Al	Cu / Al	
Coil type	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	
Rows / FPI	2 / 17	2 / 17	2 / 17	2 / 17	2 / 17	
Total Face Area (ft <sup>2</sup> )	12.7	21.3	21.3	20.5	20.5	
<b>Condenser fan / motor</b>						
Qty / Motor Drive Type	1/ Direct	1/ Direct	1/ Direct	2/ Direct	2/ Direct	
Motor HP / RPM	1/8 / 825	1/4 / 1100	1/4 / 1100	1/4 / 1100	1/4 / 1100	
Fan diameter (in)	22	22	22	22	22	
<b>Filters</b>						
RA Filter # / Size (in)	2 / 16 x 25 x 2	4 / 16 x 16 x 2	4 / 16 x 16 x 2	4 / 16 x 20 x 2	4 / 16 x 20 x 2	
OA inlet screen # / Size (in)	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 36 x 1	1 / 20 x 36 x 1	

† Humidi–MiZer® models only

– Not applicable

# CURBS & WEIGHTS DIMENSIONS – 50HC 04-06



**Fig. 1 – Dimensions 50HC 04-06**

# CURBS & WEIGHTS DIMENSIONS – 50HC 04–06 (cont.)

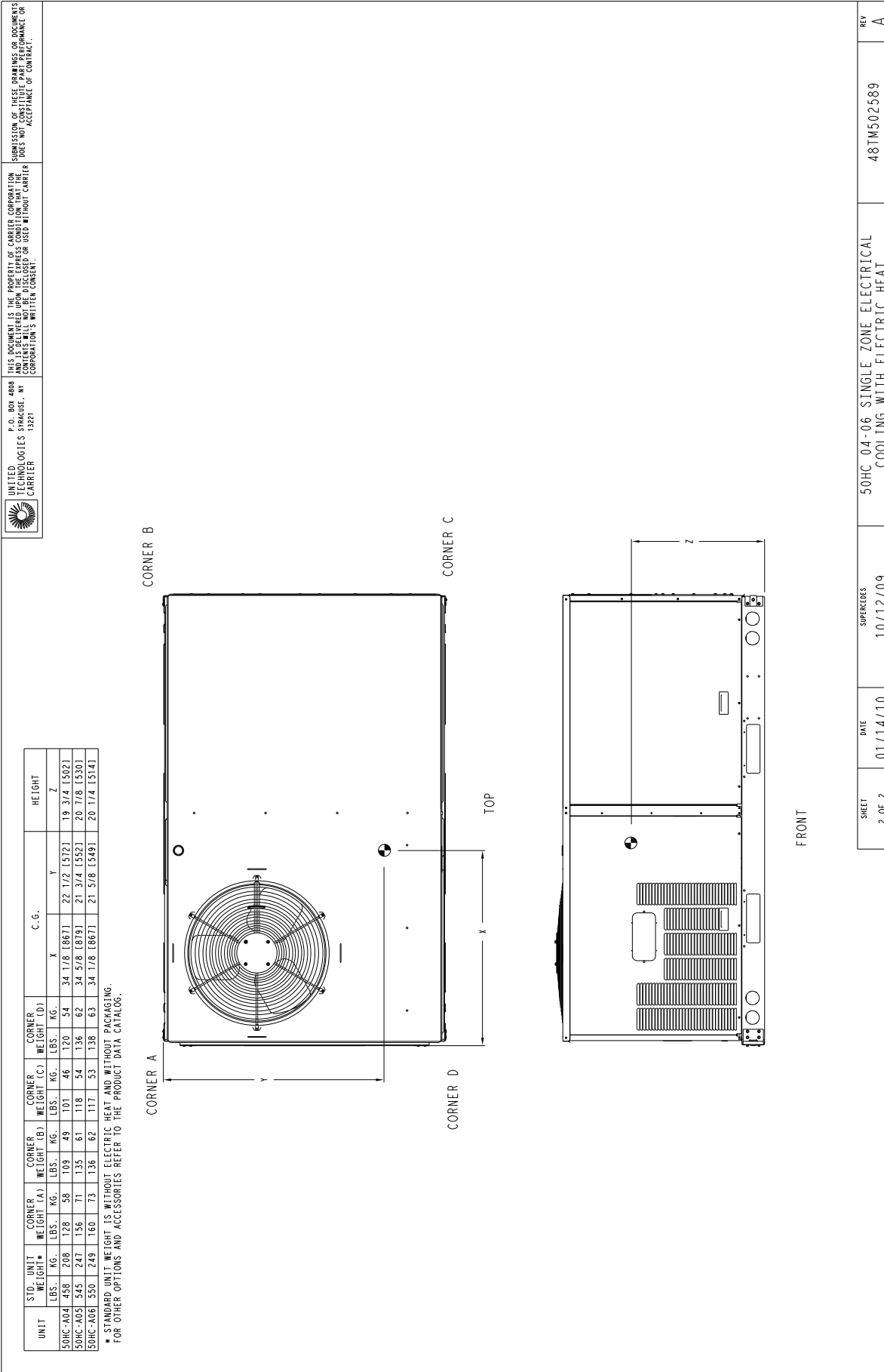


Fig. 2 – Dimensions 50HC 04–06