

7AH1AC

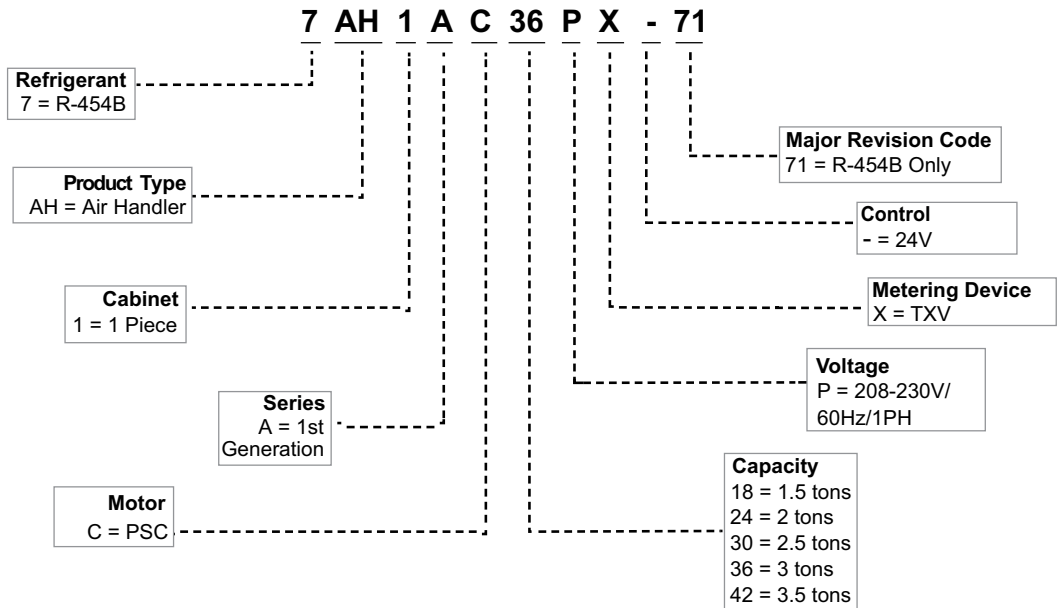
Upflow/Horizontal | PSC Motor | TXV Furnished | R-454B | 60Hz

RESIDENTIAL
PRODUCT SPECIFICATIONS

1.5 to 3.5 Tons
Optional Electric Heat - 5 to 15 kW

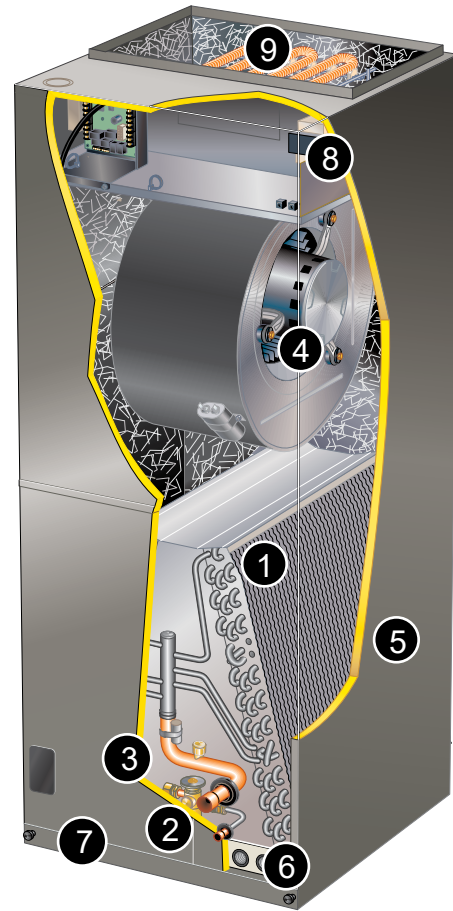


MODEL NUMBER IDENTIFICATION



FEATURE HIGHLIGHTS

1. Omniguard® Coil
2. Mechanical or Brazed Line Set Connections
3. Check and Expansion Valve
4. PSC Blower Motor
5. Heavy Gauge Steel Cabinet
6. Anti-Microbial Dual Position Drain Pans
7. Built in Filter Rack
8. Transformer and Blower Relay
9. Electric Heat (optional)



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APPROVALS AND WARRANTY

APPROVALS

- Tested with matching air conditioners and heat pump units in accordance with AHRI Standard 210/240-2023
- AHRI Certified system match-ups and expanded ratings, visit www.alliedratings.com
- ETL Listed to US and Canadian safety standards and components within are bonded for grounding to meet safety standards for servicing required by NEC and CEC
- Optional electric heaters are ETL listed and rated in accordance with US Department of Energy (DOE) test procedures and Federal Trade Commission (FTC) labeling regulations
- Blower performance data according to unit tests conducted in Allied air test chamber
- Approved for installation in manufactured housing and mobile homes.
- ISO 9001 Registered Manufacturing Quality System

WARRANTY

10-years limited warranty on all parts, extended warranty available. Warranty provides for a total of 10-years of limited warranty. Coverage (Standard 5-year limited parts warranty plus an additional 5-year limited extended parts warranty).

Warranty must be registered online within 60 days of installation to qualify for 10-year coverage.

Unregistered equipment defaults to 5-year coverage.

See full warranty at www.alliedair.com for terms, conditions, and exclusions.

FEATURES

APPLICATIONS

- 1.5 to 3.5 ton nominal sizes
- Upflow or horizontal applications

NOTE - Downflow applications require optional conversion kit.

- Applicable to expansion valve systems in cooling applications and check and expansion valve systems in heat pump applications
- Wide-range check and expansion valve is factory installed
- Optional field installed electric heaters available in several sizes for additive heating capacity

REFRIGERANT SYSTEM

1

Omniguard® Coil

- Enhanced aluminum alloy tube/enhanced fin coil for superior corrosion resistance
- Aluminum tubing, hairpins, distributor and header tubes
- Ripple-edged aluminum fins
- Twin coil construction assembled in a “A” configuration for large surface area
- Provides excellent heat transfer and low air resistance for maximum efficiency
- Precise circuiting for uniform refrigerant distribution
- Lanced fins provide maximum exposure of fin surface to air stream
- Axial grooved tubing provides superior heat transfer
- Coil thoroughly factory tested under high pressure to ensure leakproof construction

2

Mechanical or Brazed Line Set Connections

- Copper refrigerant sweat connections on both liquid and suction lines for easy brazing
- Lines extend outside of the cabinet for ease of connection
- See dimension drawings for locations

Braze-Free/Press Fitting Flexibility

- Units can accommodate braze-free or press fittings for installation versatility

3

R-454B Check and Expansion Valve

- For use with R-454B systems
- Wide range valve with Chatleff style fitting
- Factory installed on all models, internal to cabinet

FEATURES

REFRIGERANT DETECTION SYSTEM (RDS)

- Complies with UL 60335-2-40 approved standard
- Required for all systems using R-454B refrigerant
- Consists of a factory installed Refrigerant Detection System (RDS) sensor and a Refrigerant Detection System (RDS) Blower Control Board

Refrigerant Detection System (RDS) Air Handler Sensor

- Sensor ensures safe operation for systems equipped with R-454B refrigerant
- Indoor sensor will detect any R-454B refrigerant

NOTE - Sensor must be repositioned for horizontal-right, horizontal-left, and downflow applications.

Blower Control Board

- Connected to the RDS sensor
- Used as interface between indoor unit and thermostat to control system
- Ensures safe operation for systems equipped with R-454B refrigerant
- If R-454B refrigerant is detected, the refrigerant detection system will stop compressor and/or heating operation and operate the blower to reduce concentrations in the conditioned space
- Once safe levels are reached the HVAC system will resume normal operation
- Multi-color LED for system status and as an aid in troubleshooting
- Flashing LED codes for system status (Green/Blue) and diagnosing Sensor errors (Red)
- Alarm relay can trigger an external alarm if R-454B refrigerant is detected
- Zone relay opens all zone dampers (if part of a zoning system) if R-454B refrigerant is detected
- Power is disabled to thermostat to prevent demand if R-454B refrigerant is detected
- On system start-up blower will run for five minutes and any thermostat demands are disabled

NOTE - Refer to the Installation Instructions for additional information

BLOWER

4 Permanent Split Capacitor (PSC) Motor

- Multi-speed PSC motor
- Choice of blower speeds
- Speed changes easily accomplished by a simple wiring change
- Blower is easily removed from unit for servicing

Time Delay Blower Relay

- Relay allows one second blower “on” delay before continuous fan or cooling operation and 45 second blower “off” delay after continuous fan or cooling operation

5 CABINET

- Constructed of heavy gauge galvanized steel
- Pre-painted cabinet finish
- Completely insulated with foil faced fiberglass insulation
- Removable panels provide complete service access
- Filter access door for easy filter replacement
- Thumbscrews hold filter door in place
- Electrical inlets provided in sides and top of cabinet
- See dimension drawing for locations
- Plugs in cabinet for drain connections for upflow (left and right) and horizontal applications
- See dimension drawing

Low Leakage Cabinet

- All models have less than 2% air leakage and meet ANSI/ASHRAE Standard 193-2010 “Method of Test for Determining the Air Tightness of HVAC Equipment”

Upflow/Horizontal Capability (Optional Downflow)

- Shipped for upflow and horizontal right-hand discharge
- May be field converted to horizontal left-hand air discharge by repositioning horizontal drain pan
- Optional downflow kit required for field conversion

6 Anti-Microbial Dual Position Drain Pans

- Anti-Microbial additive resists growth of mold and mildew on drain pan which improves indoor air quality and reduces drain line blockage
- Drain pans designed for upflow or horizontal applications
- Deep, corrosion resistant high temperature engineered polymer drain pans have dual pipe drains
- See dimension drawing

7 FILTER

- Disposable 1 inch filter is furnished
- Filter rack furnished in cabinet for easy filter installation
- See Specifications tables for filter sizes

8 Transformer

- 24 volt transformer with in-line fuse and blower cooling relay furnished as standard
- Factory installed in the unit control box

FEATURES

CABINET (Continued)

Optional Accessories

Downflow Conversion Kit

- Required for field conversion to downflow position
- Kit consists of insulated downflow drain pan, insulated drain pan drip shields, coil drip shields, seal plates and support brackets for repositioning coil and drain pan

Horizontal Support Frame Kit

- Provides support of unit in horizontal applications
- Consists of (2) 1 x 1-1/2 x 32-5/8 in. and (2) 1 x 3 x 53-7/8 in. painted heavy gauge cold rolled steel support channels with assembly and suspending holes
- Bolts and nuts furnished for field assembly
- Suspending rods must be field provided

Side Return Unit Stand (Upflow Only)

- Raises unit 16 in. above floor for side return air duct connection
- Eliminates need for wooden platform construction
- All aluminum construction
- Two adjustable frames fit all sizes

Wall Hanging Bracket Kit (Upflow Only)

- Allows unit to be hung on wall at any height
- Consists of heavy-gauge steel support brackets (one for air handler, one for wall mount)
- Screws furnished for fastening one bracket to unit
- Bolts for fastening one bracket to wall are field provided

High Performance Economizer (Commercial Applications Only)

- Designed for applications requiring outdoor air to be utilized in a commercial HVAC system
- Allows the entry of fresh outdoor air for free cooling, reducing the requirement for mechanical cooling
- Heavy gauge galvanized steel cabinet lined with thick fiberglass insulation
- Mixed air sensor, outdoor air sensor and 24VAC transformer furnished
- Approved for California Title 24 building standards
- ASHRAE 90.1-2010 compliant
- See separate Product Specifications document for additional information and available control and sensor options

9 OPTIONAL ELECTRIC HEAT

- ETL listed
- Field install internal to unit cabinet
- Available in several kW sizes
- See Electric Heat tables
- Helix wound nichrome heating elements exposed directly in air stream resulting in instant heat transfer, low element temperatures and long service life
- Each element equipped with accurately located limit control with fixed temperature off setting and automatic reset

- Thermal sequencer relay brings elements on and off line, in sequence and equal increments, with time delay between each
- Initiates and terminates blower operation
- Heating control relay(s) furnished as standard
- Factory assembled with controls installed and wired
- Electric heat control wiring plugs into mating connector on air handler unit

Circuit Breaker (CB) Models

- All "CB" model heaters are equipped with circuit breakers for overload and short circuit protection
- Factory wired and mounted on electric heat unit
- Current sensitive and temperature actuated
- Manual reset
- Flexible plastic circuit breaker cover protects circuit breaker in areas with high humidity or unconditioned areas to prevent nuisance tripping
- Circuit breakers qualify as disconnect means at unit in many areas, eliminate the need for field provided disconnect
- Consult local electrical code in your area

Optional Accessories

Single-Point Power Source Control Box

- Control Box may be used with optional electric heat when single power supply is connected to multi-circuit electric heat
- Field installs external to the unit cabinet on either side or top
- Constructed of heavy gauge steel, baked enamel finish, pre-punched mounting holes, electrical inlet knockouts, and terminal strip
- Removeable cover provides easy access
- Dimensions (H x W x D) - 7 x 7 x 4 in.

SPECIFICATIONS

| Size | | 018 | 024 | 030 | 036 | 042 |
|-----------------------------|--------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Nominal Tonnage | | 1.5 | 2 | 2.5 | 3 | 3.5 |
| Refrigerant Type | | R-454B | R-454B | R-454B | R-454B | R-454B |
| Connections | Liquid line (OD) - in. | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 |
| | Suction line (OD) - in. | 3/4 | 3/4 | 3/4 | 7/8 | 7/8 |
| | Condensate drain (FPT) - in. | (2) 3/4 | (2) 3/4 | (2) 3/4 | (2) 3/4 | (2) 3/4 |
| Indoor Coil | Net face area - ft. ² | 3.30 | 3.77 | 4.72 | 5.66 | 5.66 |
| | Tube diameter - in. | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 |
| | Rows | 3 | 3 | 3 | 3 | 3 |
| | Fins - in. | 15 | 15 | 15 | 15 | 15 |
| Blower | HP | 1/5 | 1/3 | 1/2 | 1/3 | 1/2 |
| | Wheel nominal diameter x width - in. | 9 x 6 | 9 x 6 | 10 x 8 | 10 x 8 | 10 x 8 |
| | Air volume range - cfm | 420 - 920 | 590 - 1105 | 770 - 1310 | 805 - 1560 | 1155 - 1815 |
| ¹ Filters | Size - in. | 15 x 20 x 1 | 15 x 20 x 1 | 15 x 20 x 1 | 18 x 20 x 1 | 18 x 20 x 1 |
| Shipping Data - lbs. | | 129 | 136 | 143 | 169 | 169 |

ELECTRICAL DATA

| | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|
| Line voltage data (Volts-Phase-Hz) | 208/230-1-60 | 208/230-1-60 | 208/230-1-60 | 208/230-1-60 | 208/230-1-60 |
| ² Maximum overcurrent protection (MOCP) amps (unit) | 15 | 15 | 15 | 15 | 15 |
| ³ Minimum circuit ampacity (MCA) (unit) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Blower Motor Full Load Amps | 1.1 | 1.6 | 2.2 | 2.0 | 2.5 |

OPTIONAL ACCESSORIES - ORDER SEPARATELY

| Description | 018, 024, 030 | 036, 042 |
|---|---|--------------|
| Downflow Conversion Kit | Y9658 | Y9659 |
| Electric Heat | See Electric Heat Data Tables on page 9 | |
| Horizontal Support Frame Kit | 56J18 | 56J18 |
| Side Return Unit Stand (Upflow Only) | 45K32 | 45K32 |
| Single-Point Power Source Control Box (for Electric Heat) | 21H39 | 21H39 |
| Wall Hanging Bracket Kit (Upflow Only) | 45K30 | 45K30 |
| High Performance Economizer (Commercial Only) | 10U53 | 10U53 |

REPLACEMENT CIRCUIT BREAKERS

| Voltage | Description | Order Number |
|--------------------|----------------|--------------|
| 208/240V - 1 Phase | 25 amp, 2 pole | 41K13 |
| | 30 amp, 2 pole | 17K70 |
| | 35 amp, 2 pole | 72K07 |
| | 40 amp, 2 pole | 49K14 |
| | 45 amp, 2 pole | 17K71 |
| | 50 amp, 2 pole | 41K12 |
| | 60 amp, 2 pole | 17K72 |

INSTALLATION CLEARANCES WITH ELECTRIC HEAT

| | |
|-----------------------|---------------|
| Cabinet | 0 inch (0 mm) |
| To Plenum | 0 inch (0 mm) |
| To Outlet Duct | 0 inch (0 mm) |
| Floor | 0 inch (0 mm) |
| Service / Maintenance | See Note #1 |

¹ Front service access - 24 inches (610 mm) minimum.

NOTE - If cabinet depth is more than 24 inches (610 mm), allow a minimum of the cabinet depth plus 2 inches (51 mm).

BLOWER DATA

7AH1AC-018 PERFORMANCE

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | |
|--------------------------------------|---|-------|--------|-------|-----|-------|
| | High | | Medium | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.10 | 920 | 264 | 690 | 190 | 540 | 144 |
| 0.20 | 880 | 251 | 670 | 183 | 525 | 140 |
| 0.30 | 855 | 238 | 640 | 176 | 505 | 136 |
| 0.40 | 790 | 224 | 605 | 167 | 470 | 130 |
| 0.50 | 710 | 210 | 550 | 155 | 420 | 122 |

NOTE - All air data measured external to unit with dry coil and 1 inch non-pleated air filter in place.
Electric heaters have no appreciable air resistance.

7AH1AC-024 PERFORMANCE

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | |
|--------------------------------------|---|-------|--------|-------|-----|-------|
| | High | | Medium | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.10 | 1105 | 342 | 1010 | 280 | 675 | 210 |
| 0.20 | 1045 | 322 | 980 | 262 | 675 | 202 |
| 0.30 | 1000 | 307 | 940 | 247 | 655 | 192 |
| 0.40 | 915 | 284 | 805 | 235 | 630 | 180 |
| 0.50 | 855 | 268 | 740 | 216 | 590 | 170 |

NOTE - All air data measured external to unit with dry coil and 1 inch non-pleated air filter in place.
Electric heaters have no appreciable air resistance.

7AH1AC-030 PERFORMANCE

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | |
|--------------------------------------|---|-------|--------|-------|-----|-------|
| | High | | Medium | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.10 | 1310 | 496 | 1080 | 391 | 870 | 310 |
| 0.20 | 1260 | 466 | 1055 | 378 | 870 | 301 |
| 0.30 | 1215 | 449 | 1025 | 361 | 855 | 288 |
| 0.40 | 1155 | 431 | 985 | 343 | 810 | 278 |
| 0.50 | 1085 | 408 | 935 | 325 | 770 | 265 |

NOTE - All air data measured external to unit with dry coil and 1 inch non-pleated air filter in place.
Electric heaters have no appreciable air resistance.

7AH1AC-036 PERFORMANCE

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | |
|--------------------------------------|---|-------|--------|-------|------|-------|
| | High | | Medium | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.10 | 1560 | 532 | 1275 | 402 | 1020 | 295 |
| 0.20 | 1520 | 518 | 1240 | 388 | 970 | 287 |
| 0.30 | 1445 | 502 | 1190 | 375 | 955 | 280 |
| 0.40 | 1395 | 480 | 1150 | 363 | 910 | 270 |
| 0.50 | 1325 | 460 | 1085 | 346 | 805 | 254 |

NOTE - All air data measured external to unit with dry coil and 1 inch non-pleated air filter in place.
Electric heaters have no appreciable air resistance.

7AH1AC-042 PERFORMANCE

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | |
|--------------------------------------|---|-------|--------|-------|------|-------|
| | High | | Medium | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.10 | 1815 | 674 | 1525 | 498 | 1300 | 394 |
| 0.20 | 1755 | 652 | 1495 | 486 | 1275 | 387 |
| 0.30 | 1695 | 634 | 1450 | 473 | 1250 | 376 |
| 0.40 | 1605 | 607 | 1390 | 455 | 1210 | 367 |
| 0.50 | 1530 | 582 | 1345 | 441 | 1155 | 356 |

NOTE - All air data measured external to unit with dry coil and 1 inch non-pleated air filter in place.
Electric heaters have no appreciable air resistance.

ELECTRIC HEAT DATA

7AH1AC-018 | SINGLE PHASE

| Electric Heat Model Number | Input | | | Blower Motor Full Load Amps | ² Minimum Circuit Ampacity | ³ Maximum Overcurrent Protection |
|--|-------|-----|-------------------|-----------------------------|---------------------------------------|---|
| | Volt | kW | ¹ Btuh | | | |
| 5 kW ECB45-5 (27A09) Terminal Block ECB45-5CB (27A13) 30A Circuit Breaker | 208 | 3.6 | 12,300 | 1.1 | 23 | ⁴ 25 |
| | 220 | 4.0 | 13,800 | 1.1 | 24 | ⁴ 25 |
| | 230 | 4.4 | 15,000 | 1.1 | 25 | ⁴ 25 |
| | 240 | 4.8 | 16,400 | 1.1 | 26 | 30 |
| 7.5 kW ECB45-7.5 (27A10) Terminal Block ECB45-7.5CB (27A14) 45A Circuit Breaker | 208 | 5.6 | 19,200 | 1.1 | 35 | 35 |
| | 220 | 6.3 | 21,500 | 1.1 | 37 | ⁴ 40 |
| | 230 | 6.9 | 23,500 | 1.1 | 39 | ⁴ 40 |
| | 240 | 7.5 | 25,600 | 1.1 | 40 | ⁴ 40 |
| 10 kW ECB45-10 (27A11) Terminal Block ECB45-10CB (27A15) 60A Circuit Breaker | 208 | 7.2 | 24,600 | 1.1 | 45 | ⁴ 45 |
| | 220 | 8.0 | 27,500 | 1.1 | 47 | ⁴ 50 |
| | 230 | 8.8 | 30,000 | 1.1 | 49 | ⁴ 50 |
| | 240 | 9.6 | 32,700 | 1.1 | 51 | 60 |

ELECTRIC HEAT DATA

7AH1AC-024 | SINGLE PHASE

| Electric Heat Model Number | Input | | | Blower Motor Full Load Amps | ² Minimum Circuit Ampacity | ³ Maximum Overcurrent Protection |
|--|-------|-----|-------------------|-----------------------------|---------------------------------------|---|
| | Volt | kW | ¹ Btuh | | | |
| 5 kW ECB45-5 (27A09) Terminal Block ECB45-5CB (27A13) 30A Circuit Breaker | 208 | 3.6 | 12,300 | 1.6 | 24 | ⁴ 25 |
| | 220 | 4.0 | 13,800 | 1.6 | 25 | ⁴ 25 |
| | 230 | 4.4 | 15,000 | 1.6 | 26 | 30 |
| | 240 | 4.8 | 16,400 | 1.6 | 27 | 30 |
| 7.5 kW ECB45-7.5 (27A10) Terminal Block ECB45-7.5CB (27A14) 45A Circuit Breaker | 208 | 5.6 | 19,200 | 1.6 | 36 | ⁴ 40 |
| | 220 | 6.3 | 21,500 | 1.6 | 38 | ⁴ 40 |
| | 230 | 6.9 | 23,500 | 1.6 | 39 | ⁴ 40 |
| | 240 | 7.5 | 25,600 | 1.6 | 41 | 45 |
| 10 kW ECB45-10 (27A11) Terminal Block ECB45-10CB (27A15) 60A Circuit Breaker | 208 | 7.2 | 24,600 | 1.6 | 45 | ⁴ 45 |
| | 220 | 8.0 | 27,500 | 1.6 | 48 | ⁴ 50 |
| | 230 | 8.8 | 30,000 | 1.6 | 50 | ⁴ 50 |
| | 240 | 9.6 | 32,700 | 1.6 | 52 | 60 |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

¹ Electric heater capacity only - does not include additional blower motor heat capacity.

² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

³ HACR type breaker or fuse.

⁴ **Bold indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size shown. See table on page 7.**

ELECTRIC HEAT DATA

7AH1AC-030 | SINGLE PHASE

| Electric Heat Model Number | Input | | | Blower Motor Full Load Amps | ² Minimum Circuit Ampacity | | ³ Maximum Overcurrent Protection | | Single Point Power Source | |
|---|-------|------|-------------------|-----------------------------|---------------------------------------|-------|---|-------------|---------------------------------------|---|
| | Volt | kW | ¹ Btuh | | Ckt 1 | Ckt 2 | Ckt 1 | Ckt 2 | ² Minimum Circuit Ampacity | ³ Maximum Overcurrent Protection |
| 5 kW ECB45-5 (27A09) Terminal Block ECB45-5CB (27A13) 30A Circuit Breaker | 208 | 3.6 | 12,300 | 2.2 | 24 | --- | 4 25 | --- | --- | --- |
| | 220 | 4.0 | 13,800 | 2.2 | 26 | --- | 30 | --- | --- | --- |
| | 230 | 4.4 | 15,000 | 2.2 | 27 | --- | 30 | --- | --- | --- |
| | 240 | 4.8 | 16,400 | 2.2 | 28 | --- | 30 | --- | --- | --- |
| 7.5 kW ECB45-7.5 (27A10) Terminal Block ECB45-7.5CB (27A14) 45A Circuit Breaker | 208 | 5.6 | 19,200 | 2.2 | 37 | --- | 4 40 | --- | --- | --- |
| | 220 | 6.3 | 21,500 | 2.2 | 39 | --- | 4 40 | --- | --- | --- |
| | 230 | 6.9 | 23,500 | 2.2 | 40 | --- | 4 40 | --- | --- | --- |
| | 240 | 7.5 | 25,600 | 2.2 | 42 | --- | 45 | --- | --- | --- |
| 10 kW ECB45-10 (27A11) Terminal Block ECB45-10CB (27A15) 60A Circuit Breaker | 208 | 7.2 | 24,600 | 2.2 | 46 | --- | 4 50 | --- | --- | --- |
| | 220 | 8.0 | 27,500 | 2.2 | 49 | --- | 4 50 | --- | --- | --- |
| | 230 | 8.8 | 30,000 | 2.2 | 51 | --- | 60 | --- | --- | --- |
| | 240 | 9.6 | 32,700 | 2.2 | 53 | --- | 60 | --- | --- | --- |
| 12.5 kW ECB45-12.5CB (27A16) (1) 50A and (1) 25A Circuit Breaker | 208 | 9.4 | 32,000 | 2.2 | 40 | 19 | 4 40 | 4 20 | 59 | 60 |
| | 220 | 10.5 | 35,800 | 2.2 | 43 | 20 | 4 45 | 4 20 | 62 | 70 |
| | 230 | 11.5 | 39,200 | 2.2 | 44 | 21 | 4 45 | 25 | 65 | 70 |
| | 240 | 12.5 | 42,600 | 2.2 | 46 | 22 | 50 | 25 | 68 | 70 |
| 15 kW ECB45-15CB (27A17) (1) 60A and (1) 25A Circuit Breaker | 208 | 10.8 | 36,900 | 2.2 | 46 | 22 | 4 50 | 25 | 68 | 70 |
| | 220 | 12.1 | 41,300 | 2.2 | 49 | 23 | 4 50 | 25 | 72 | 80 |
| | 230 | 13.2 | 45,100 | 2.2 | 51 | 24 | 60 | 25 | 75 | 80 |
| | 240 | 14.4 | 49,100 | 2.2 | 53 | 25 | 60 | 25 | 78 | 80 |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

¹ Electric heater capacity only - does not include additional blower motor heat capacity.

² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

³ HACR type breaker or fuse.

⁴ Bold indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size shown. See table on page 7.

ELECTRIC HEAT DATA

7AH1AC-036 | SINGLE PHASE

| Electric Heat Model Number | Input | | | Blower Motor Full Load Amps | ² Minimum Circuit Ampacity | | ³ Maximum Overcurrent Protection | | Single Point Power Source | |
|---|-------|------|-------------------|-----------------------------|---------------------------------------|-------|---|-------------|---------------------------------------|---|
| | Volt | kW | ¹ Btuh | | Ckt 1 | Ckt 2 | Ckt 1 | Ckt 2 | ² Minimum Circuit Ampacity | ³ Maximum Overcurrent Protection |
| 5 kW ECB45-5 (27A09) Terminal Block ECB45-5CB (27A13) 30A Circuit Breaker | 208 | 3.6 | 12,300 | 2.0 | 24 | --- | 4 25 | --- | --- | --- |
| | 220 | 4.0 | 13,800 | 2.0 | 25 | --- | 4 25 | --- | --- | --- |
| | 230 | 4.4 | 15,000 | 2.0 | 26 | --- | 30 | --- | --- | --- |
| | 240 | 4.8 | 16,400 | 2.0 | 28 | --- | 30 | --- | --- | --- |
| 7.5 kW ECB45-7.5 (27A10) Terminal Block ECB45-7.5CB (27A14) 45A Circuit Breaker | 208 | 5.6 | 19,200 | 2.0 | 36 | --- | 4 40 | --- | --- | --- |
| | 220 | 6.3 | 21,500 | 2.0 | 38 | --- | 4 40 | --- | --- | --- |
| | 230 | 6.9 | 23,500 | 2.0 | 40 | --- | 4 40 | --- | --- | --- |
| | 240 | 7.5 | 25,600 | 2.0 | 42 | --- | 45 | --- | --- | --- |
| 10 kW ECB45-10 (27A11) Terminal Block ECB45-10CB (27A15) 60A Circuit Breaker | 208 | 7.2 | 24,600 | 2.0 | 46 | --- | 4 50 | --- | --- | --- |
| | 220 | 8.0 | 27,500 | 2.0 | 48 | --- | 4 50 | --- | --- | --- |
| | 230 | 8.8 | 30,000 | 2.0 | 50 | --- | 4 50 | --- | --- | --- |
| | 240 | 9.6 | 32,700 | 2.0 | 53 | --- | 60 | --- | --- | --- |
| 12.5 kW ECB45-12.5CB (27A16) (1) 50A and (1) 25A Circuit Breaker | 208 | 9.4 | 32,000 | 2.0 | 40 | 19 | 4 40 | 4 20 | 59 | 60 |
| | 220 | 10.5 | 35,800 | 2.0 | 42 | 20 | 4 45 | 4 20 | 62 | 70 |
| | 230 | 11.5 | 39,200 | 2.0 | 44 | 21 | 4 45 | 25 | 65 | 70 |
| | 240 | 12.5 | 42,600 | 2.0 | 46 | 22 | 50 | 25 | 68 | 70 |
| 15 kW ECB45-15CB (27A17) (1) 60A and (1) 25A Circuit Breaker | 208 | 10.8 | 36,900 | 2.0 | 46 | 22 | 4 50 | 25 | 68 | 70 |
| | 220 | 12.1 | 41,300 | 2.0 | 48 | 23 | 4 50 | 25 | 71 | 80 |
| | 230 | 13.2 | 45,100 | 2.0 | 50 | 24 | 4 50 | 25 | 74 | 80 |
| | 240 | 14.4 | 49,100 | 2.0 | 53 | 25 | 60 | 25 | 78 | 80 |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

¹ Electric heater capacity only - does not include additional blower motor heat capacity.

² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

³ HACR type breaker or fuse.

⁴ **Bold indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size shown. See table on page 7.**

ELECTRIC HEAT DATA

7AH1AC-042 | SINGLE PHASE

| Electric Heat Model Number | Input | | | Blower Motor Full Load Amps | ² Minimum Circuit Ampacity | | ³ Maximum Overcurrent Protection | | Single Point Power Source | |
|---|-------|------|-------------------|-----------------------------|---------------------------------------|-------|---|------------|---------------------------------------|---|
| | Volt | kW | ¹ Btuh | | Ckt 1 | Ckt 2 | Ckt 1 | Ckt 2 | ² Minimum Circuit Ampacity | ³ Maximum Overcurrent Protection |
| 5 kW ECB45-5 (27A09) Terminal Block ECB45-5CB (27A13) 30A Circuit Breaker | 208 | 3.6 | 12,300 | 2.5 | 25 | --- | 425 | --- | --- | --- |
| | 220 | 4.0 | 13,800 | 2.5 | 26 | --- | 30 | --- | --- | --- |
| | 230 | 4.4 | 15,000 | 2.5 | 27 | --- | 30 | --- | --- | --- |
| | 240 | 4.8 | 16,400 | 2.5 | 28 | --- | 30 | --- | --- | --- |
| 7.5 kW ECB45-7.5 (27A10) Terminal Block ECB45-7.5CB (27A14) 45A Circuit Breaker | 208 | 5.6 | 19,200 | 2.5 | 37 | --- | 440 | --- | --- | --- |
| | 220 | 6.3 | 21,500 | 2.5 | 39 | --- | 440 | --- | --- | --- |
| | 230 | 6.9 | 23,500 | 2.5 | 41 | --- | 45 | --- | --- | --- |
| | 240 | 7.5 | 25,600 | 2.5 | 42 | --- | 45 | --- | --- | --- |
| 10 kW ECB45-10 (27A11) Terminal Block ECB45-10CB (27A15) 60A Circuit Breaker | 208 | 7.2 | 24,600 | 2.5 | 46 | --- | 450 | --- | --- | --- |
| | 220 | 8.0 | 27,500 | 2.5 | 49 | --- | 450 | --- | --- | --- |
| | 230 | 8.8 | 30,000 | 2.5 | 51 | --- | 60 | --- | --- | --- |
| | 240 | 9.6 | 32,700 | 2.5 | 53 | --- | 60 | --- | --- | --- |
| 12.5 kW ECB45-12.5CB (27A16) (1) 50A and (1) 25A Circuit Breaker | 208 | 9.4 | 32,000 | 2.5 | 41 | 19 | 445 | 420 | 60 | 60 |
| | 220 | 10.5 | 35,800 | 2.5 | 43 | 20 | 445 | 420 | 63 | 70 |
| | 230 | 11.5 | 39,200 | 2.5 | 45 | 21 | 445 | 25 | 66 | 70 |
| | 240 | 12.5 | 42,600 | 2.5 | 47 | 22 | 50 | 25 | 68 | 70 |
| 15 kW ECB45-15CB (27A17) (1) 60A and (1) 25A Circuit Breaker | 208 | 10.8 | 36,900 | 2.5 | 46 | 22 | 450 | 25 | 68 | 70 |
| | 220 | 12.1 | 41,300 | 2.5 | 49 | 23 | 450 | 25 | 72 | 80 |
| | 230 | 13.2 | 45,100 | 2.5 | 51 | 24 | 60 | 25 | 75 | 80 |
| | 240 | 14.4 | 49,100 | 2.5 | 53 | 25 | 60 | 25 | 78 | 80 |

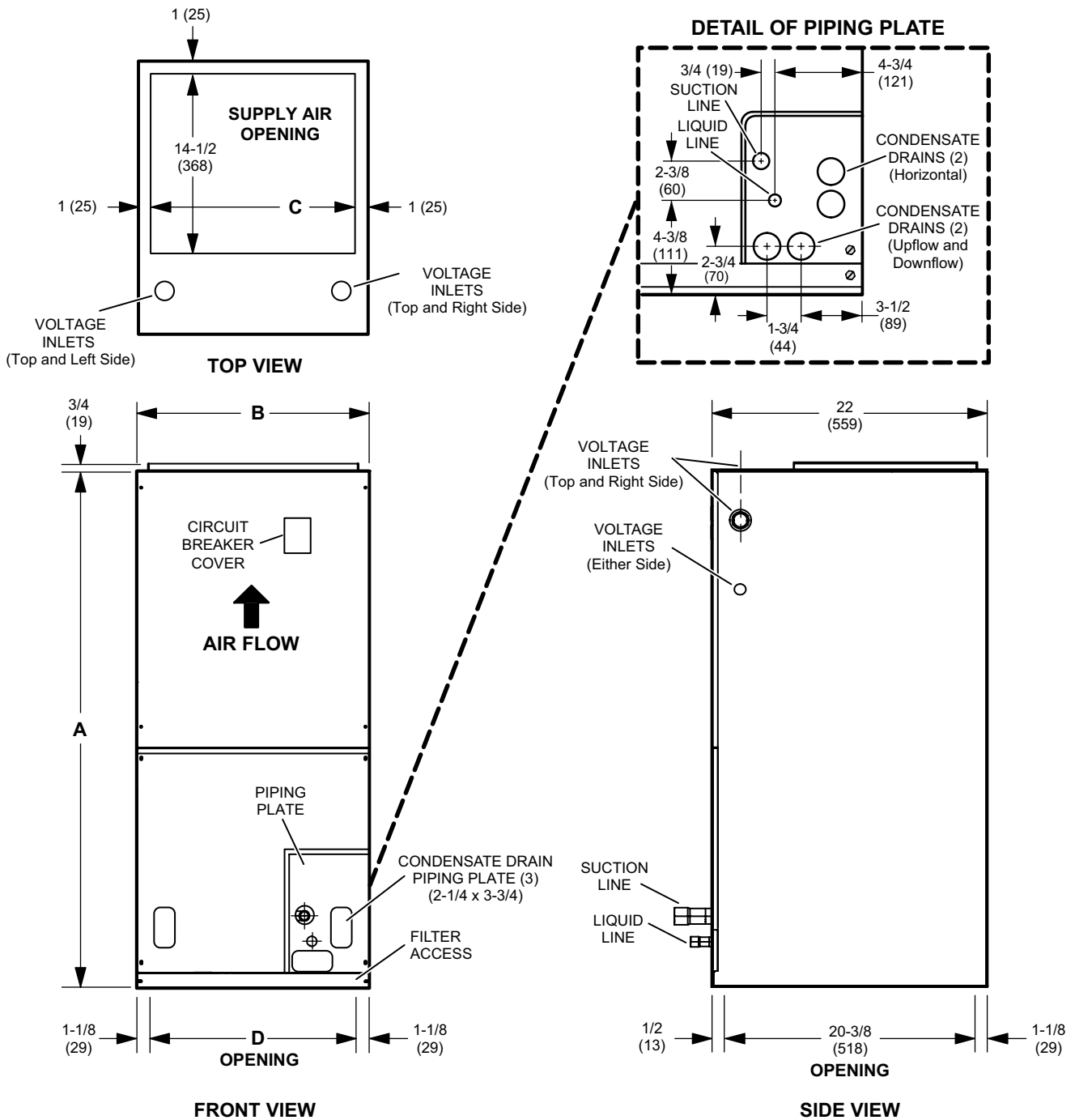
NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

¹ Electric heater capacity only - does not include additional blower motor heat capacity.

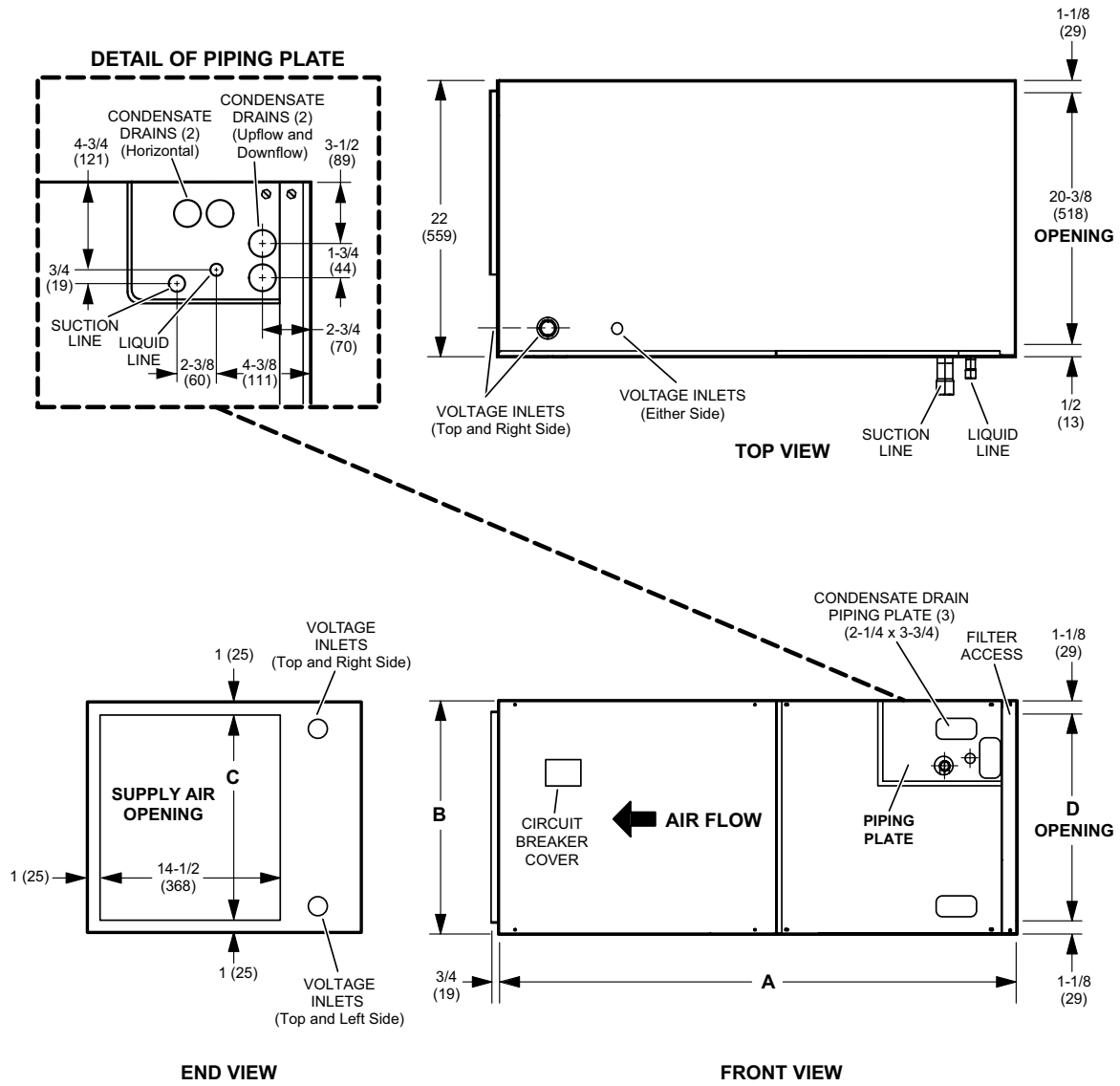
² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

³ HACR type breaker or fuse.

⁴ **Bold indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size shown. See table on page 7.**

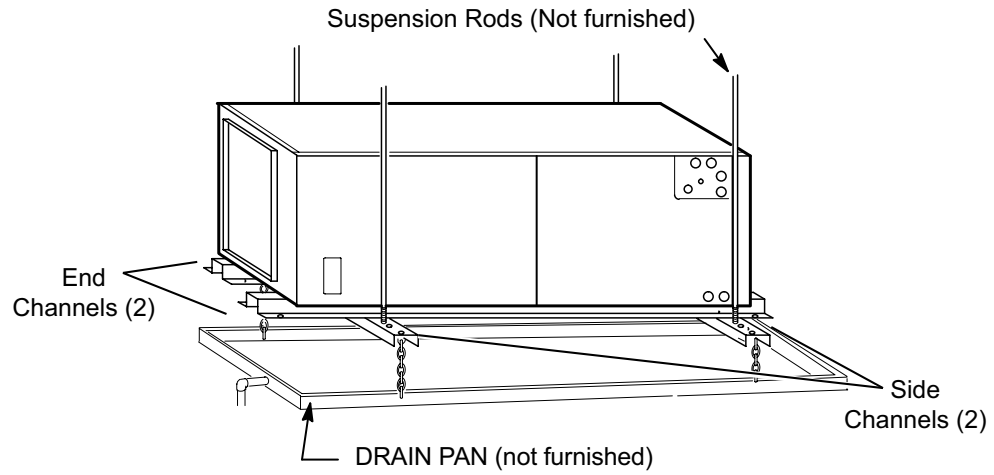


| Dimensions | 018 | | 024 | | 030 | | 036, 042 | |
|------------|--------|------|--------|------|--------|------|----------|------|
| | in. | mm | in. | mm | in. | mm | in. | mm |
| A | 43-1/2 | 1105 | 45-1/2 | 1156 | 47 | 1194 | 53-5/8 | 1362 |
| B | 18-1/2 | 470 | 18-1/2 | 470 | 18-1/2 | 470 | 21-1/2 | 546 |
| C | 16-1/2 | 419 | 16-1/2 | 419 | 16-1/2 | 419 | 19-1/2 | 495 |
| D | 16-1/4 | 413 | 16-1/4 | 413 | 16-1/4 | 413 | 19-1/4 | 489 |



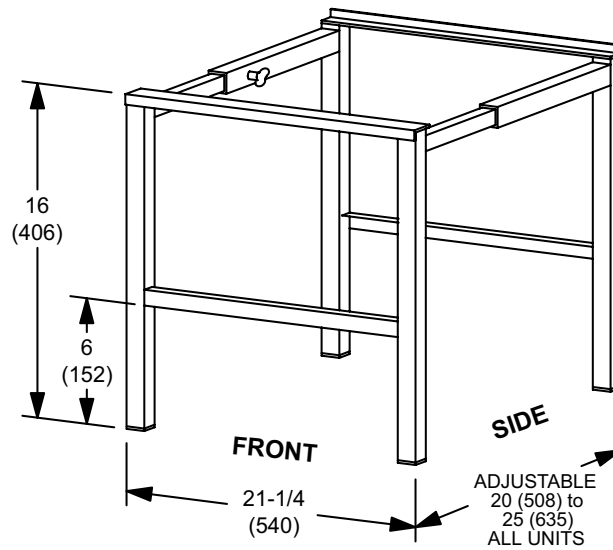
| Dimensions | 018 | | 024 | | 030 | | 036, 042 | |
|------------|--------|------|--------|------|--------|------|----------|------|
| | in. | mm | in. | mm | in. | mm | in. | mm |
| A | 43-1/2 | 1105 | 45-1/2 | 1156 | 47 | 1194 | 53-5/8 | 1362 |
| B | 18-1/2 | 470 | 18-1/2 | 470 | 18-1/2 | 470 | 21-1/2 | 546 |
| C | 16-1/2 | 419 | 16-1/2 | 419 | 16-1/2 | 419 | 19-1/2 | 495 |
| D | 16-1/4 | 413 | 16-1/4 | 413 | 16-1/4 | 413 | 19-1/4 | 489 |

HORIZONTAL SUPPORT FRAME KIT



Includes (2) 1 x 1-1/2 x 32-5/8 in. side channels and (2) 1 x 3 x 53-7/8 in. end channels.

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