

# Champion®

The Dishwashing Machine Specialists

Project \_\_\_\_\_  
Item No. \_\_\_\_\_  
Quantity \_\_\_\_\_

84 SERIES RACK CONVEYOR

## STANDARD FEATURES

- **ENERGY STAR® Qualified**
- Dual-pawl cradle drive system
- One-piece cast stainless steel upper & lower spray arm assemblies for ease of cleaning
- Internal removable scrap basket and three-piece scrap screen
- Standard vertical opening accommodates 18" x 26" sheet pans
- Wide leakproof swing out insulated hinged doors on wash/rinse
- Anti-jam conveyor drive system
- Energy Sentinel (Idle pump shut-off)
- Convenient top-mounted controls
- Automatic tank fill
- Door safety switch
- Never leak, ball valve drain closure
- Enclosure panels (front and sides)
- Stainless steel heavy-gauge construction, including base and feet
- Electric tank heat
- 3 Hp wash and rinse pump motors
- Stainless steel pump and impeller
- Two-point electrical connection
- Self-diagnostic controls
- Vent fan control switch
- Stainless steel rear manifolds

## PREWASH MODELS ONLY

- External prewash scrap basket
- Prewash pump 1 Hp motor
- 22" Prewash
- 26" Prewash
- 36" Prewash

## 84 SERIES

84, 106 PW, 110 FFPW, 120 HDPW  
High-Temperature  
Rack Conveyor Dishwashing Machine



Model 84 Shown with Vent  
Cowl and Damper Option

*Photo is for general visual  
representation only. Please  
refer to specifications for  
the latest detailed product  
information.*

## SPECIFIER STATEMENT

Specified unit will be Champion model 84 Series high temperature rack conveyor dishwashing machine. Features top mounted control cabinet; upper and lower one-piece stainless steel spray arm assemblies, removable internal scrap baskets with three-piece scrap screens. Swing out insulated front access doors. Anti-jam conveyor drive system.

1 year parts and labor warranty.



Champion Industries, Inc.  
2674 N. Service Road,  
Jordan Station, Ontario, Canada L0R 1S0  
Tel: 905/562-4195 Fax: 905/562-4618

Champion Industries, Inc.  
3765 Champion Blvd., Winston-Salem, NC 27105  
Tel: 336/661-1556 Fax: 336/661-1979  
[www.championindustries.com](http://www.championindustries.com)

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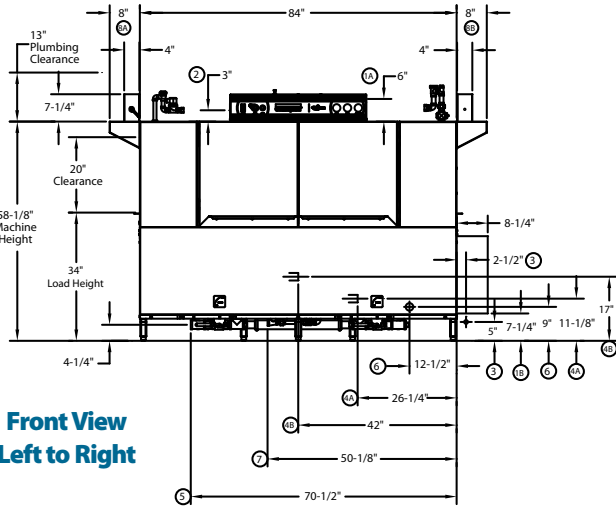
# 84 SERIES

**84, 106 PW, 110 FFPW, 120 HDPW**  
 High-Temperature  
 Rack Conveyor Dishwashing Machine

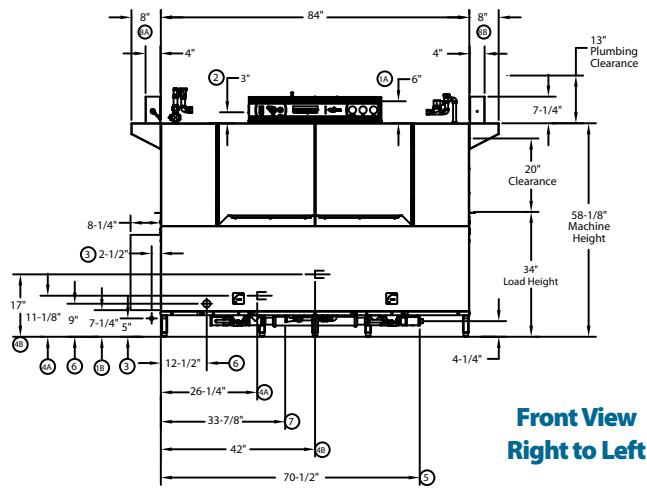
**Champion**<sup>®</sup>  
 The Dishwashing Machine Specialists

**MODEL 84** Shipping weight crated: **1200 lbs.**

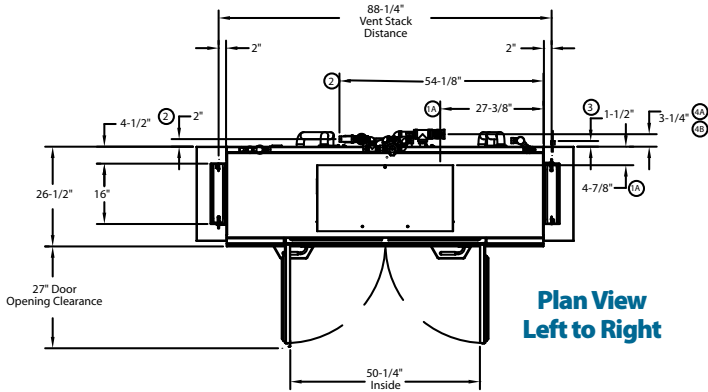
Dimensions shown in inches [mm]



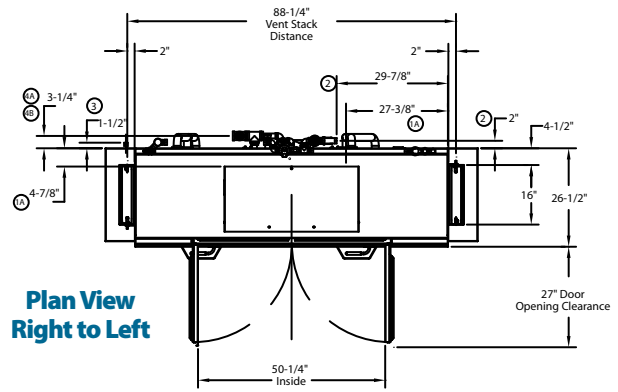
**Front View  
 Left to Right**



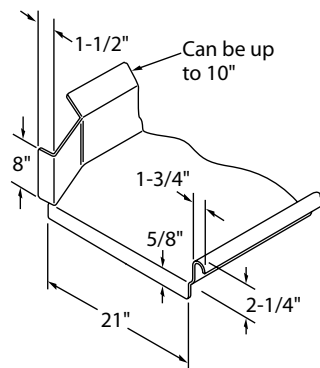
**Front View  
 Right to Left**



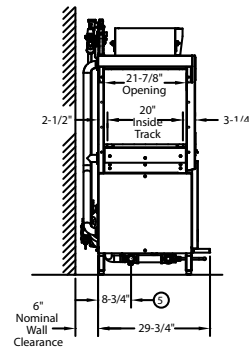
**Plan View  
 Left to Right**



**Plan View  
 Right to Left**



**Suggested Table  
 Construction**



**End View**

Due to an ongoing value analysis program at Champion, specifications contained in this catalog are subject to change without notice.

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# 84 SERIES

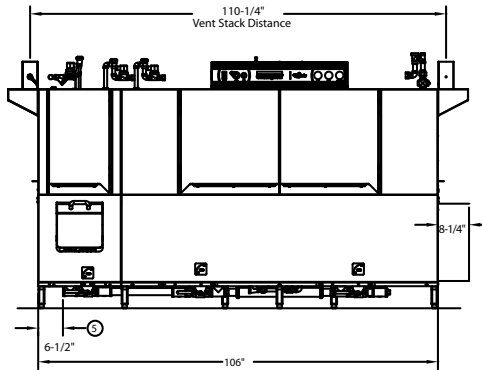
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## MODEL 106 PW WITH 22" PREWASH

Dimensions shown in inches [mm]

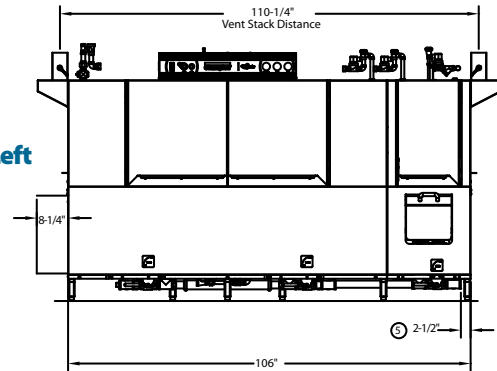
Shipping weight crated: **1375 lbs.**



Front View

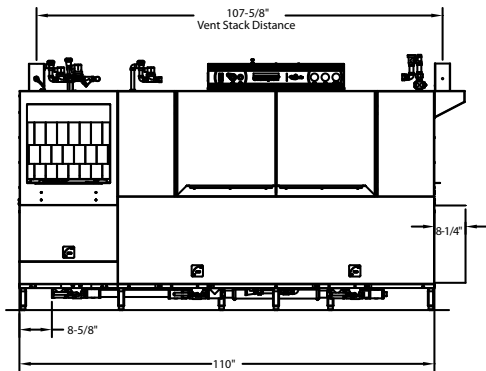
Right to Left

Left to Right



## MODEL 110 FFPW WITH 26" FRONT FEED PREWASH

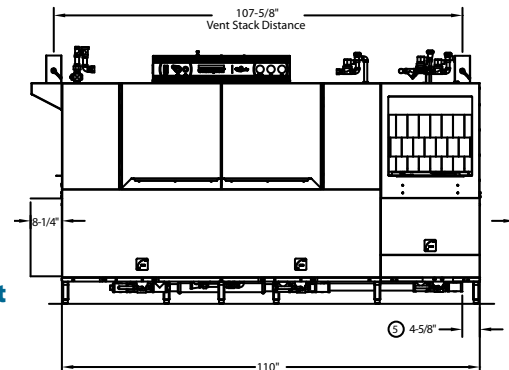
Shipping weight crated: **1400 lbs.**



Front View

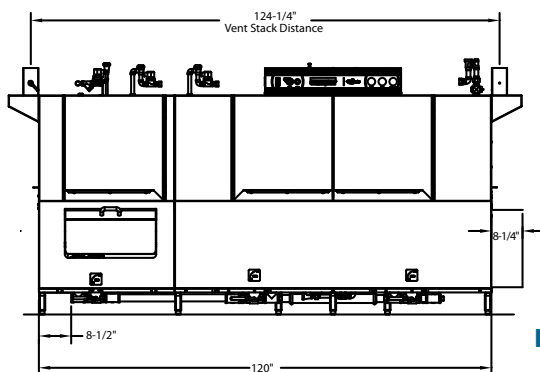
Right to Left

Left to Right



## MODEL 120 HDPW WITH 36" HEAVY DUTY PREWASH

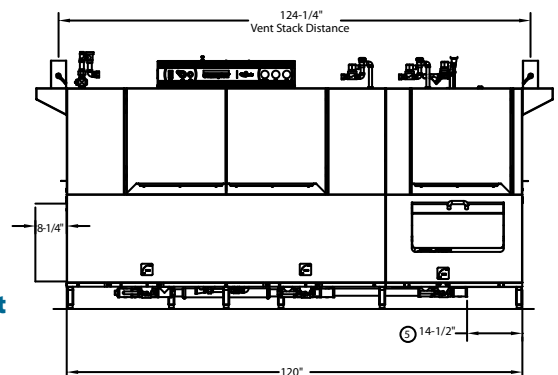
Shipping weight crated: **1550 lbs.**



Front View

Right to Left

Left to Right



**NOTE:** For complete machine dimensions, plan view, end view, specifications and table construction see 84 drawing page.

# 84 SERIES

**84, 106 PW, 110 FFPW, 120 HDPW**  
High-Temperature  
Rack Conveyor Dishwashing Machine

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Dimensions shown in inches

Utilities	
<b>1 Electrical Connection</b> A Machine electrical connection B Booster electrical connection	
<b>2 Hot Water</b> Main connection 3/4" NPT	
<b>3 Cold Water</b> Contact Factory	
<b>4 Hot Water Tank</b> A Heat inlet connection 1" NPT B Heat return connection 1" NPT	
<b>5 Drain</b> Connection 1 1/2" NPT	
<b>6 Steam</b> Inlet connection 1 1/4" NPT	
<b>7 Condensate</b> Connection 1" NPT return to boiler	
<b>8 Vents</b> A Stack connection - Load end 150 CFM @ 1/4" static pressure B Stack connection - Unload end 400 CFM @ 1/4" static pressure	

**Warning:** Plumbing and electrical connections should be made by qualified personnel who will observe all the applicable plumbing, sanitary, safety codes and the National Electrical Code.

**Note:** Water Hammer Arrestor (meeting ASSE-1010 standard or equivalent) to be supplied (by others) in common water supply line at service connection.

**Plumbing Notes:** Because of the variation in house-supplied steam and water pressures, steam and water pressure regulating valves (PRVs) may be needed. (Water PRV is standard on machines with booster.) The PRVs can either be purchased from Champion or obtained locally.

**Venting Notes:** Fabricated duct size: 3-7/8" x 15-7/8" (Outside dimensions)

**84 Electric**  
**TABLE A - Machine Connection**

Machine only			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Minimum Overcurrent Protective Device
208/60/3	90	110	110
240/60/3	80	100	100
480/60/3	40	50	50
575/60/3	31	40	40

**84 ONLY**  
**TABLE B - Booster Connection**

40°F/22°C Rise – 15 kW Electric built-in booster (booster only)			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Minimum Overcurrent Protective Device
208/60/3	42	50	50
240/60/3	36	45	45
480/60/3	18	25	25
575/60/3	15	20	20

70°F/39°C Rise – 24 kW Electric built-in booster (booster only)			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Minimum Overcurrent Protective Device
208/60/3	67	80	80
240/60/3	58	70	70
480/60/3	29	35	35
575/60/3	24	30	30

**84 with Steam or Hot Water Heat**  
**TABLE A - Machine Connection**

Machine and steam built-in booster			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Minimum Overcurrent Protective Device
208/60/3	15	20	20
240/60/3	14	20	20
480/60/3	7	15	15
575/60/3	6	15	15

Contact factory for single phase information.

**106 PW, 110 FFPW, 120 HDPW Electric**  
**TABLE A - Machine Connection**

Machine Only			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Minimum Overcurrent Protective Device
208/60/3	95	125	125
240/60/3	83	100	100
480/60/3	41	50	50
575/60/3	32	40	40

**106 PW, 110 FFPW, 120 HDPW**  
**TABLE B - Booster Connection**

40°F/22°C Rise – 15 kW Electric built-in booster (booster only)			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Minimum Overcurrent Protective Device
208/60/3	42	50	50
240/60/3	36	45	45
480/60/3	18	25	25
575/60/3	15	20	20

70°F/39°C Rise – 24 kW Electric built-in booster (booster only)			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Minimum Overcurrent Protective Device
208/60/3	67	80	80
240/60/3	58	70	70
480/60/3	29	35	35
575/60/3	24	30	30

**106 PW, 110 FFPW, 120 HDPW**  
**Steam or Hot Water Heat**  
**TABLE A - Machine Connection**

Machine and steam built-in booster			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Minimum Overcurrent Protective Device
208/60/3	20	25	25
240/60/3	17	25	25
480/60/3	9	15	15
575/60/3	6	15	15

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High-Temperature  
Rack Conveyor Dishwashing Machine

### SPECIFICATIONS

#### Capacity

Racks per hr. (NSF rated)	356
Wash tank (US gal.)	21
Conveyor speed (ft./min.)	9.9

#### Motor Horsepower

Drive	1/6
Wash	3
Rinse	3

#### Water Consumption

US Gal. per hr. (max. use)	131
US Gal. per rack	.37

#### Heating

Tank Heat, electric (kW)	25
Tank heat, steam (lbs./hr. required at 15 PSI flow pressure)	125
Electric booster (built-in) (kW supplied for 40°F rise)	15
Electric booster (kW supplied for 70°F rise)	24
Steam booster (lbs./hr. required for 40°F rise)	75
Steam booster (lbs./hr. required for 70°F rise)	120

*Booster heaters completely inter plumbed,  
Controls are interwired*

#### Venting

Load end (minimum CFM)	200
Unload end (minimum CFM)	400

#### Standard 20" x 20" rack complement

Peg	2
Flat	1



**NEW** Exclusive Digital Gauges



**NEW** Durable Stainless Steel Start/Stop Switches



One-Piece Cast Stainless Steel Spray Assembly



Stainless Steel Built-in Nested Booster



Two-Piece Scrap Screen



Built-in Scrap Basket for ease of cleaning



# 84 SERIES

**84, 106 PW, 110 FFPW, 120 HDPW**

High-Temperature  
Rack Conveyor Dishwashing Machine

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## OPTIONS & ACCESSORIES

- Tank heat: choice of steam coil, steam injector, hot water coil
- 2 Hp prewash motor
- 48" Blower-dryer - steam or electric
- Booster Heaters (completely interplumbed, controls are interwired)
  - Steam: 40°F or 70°F rise
  - Electric: 15 kW (40°F rise) (built-in only)
  - Electric: 24 kW (70°F rise) (built-in only)
- Heat Recovery
- Cantilever sideloader (with or without hood) for 90° load operation
  - 24" Sideload
  - 30" Sideload (accepts sheet pans)
- Extended pawl bar (extended drive unit) for use with load tabling
- Racks: peg or flat racks (specify type)
- Steam pressure regulating valve (unmounted)
- Table limit switch, unmounted (recommended on all rack conveyor installations)
- Vent cowl, stainless steel with 7" stack and locking damper
- Extended vent hood, stainless steel with 7" stack and locking damper
- Water pressure regulating valve (unmounted) (standard with booster)
- Water hammer kit
- Drain tempering kit
- Vertical clearance through machine: 24" (instead of standard 20") for larger ware
- Model CCT 180 (180° Corner Conveyor Table)
- Model CCT 90 (90° Corner Conveyor Table)
- Model RCT 64 or RCT 84 Roller Conveyor Table (See factory for custom length)
- Splash shields



**NEW CCT 90**  
90° Corner Conveyor Table (shown)  
**NEW CCT 180**  
180° Corner Conveyor Table  
also available



**Cantilever Sideloaders**  
(No hood)



**Model RCT 64 or RCT 84**  
Roller  
Conveyor Table

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