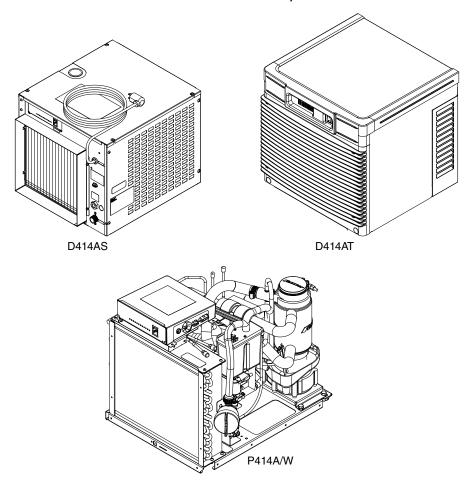
# D414AT, D414AS, P414A/W Ice Machines

# Installation Guide

Please visit https://www.follettice.com/technicaldocuments for the Operation and Service manual for your unit.



# Welcome to Follett

Follett equipment enjoys a well-deserved reputation for excellent performance, long-term reliability and outstanding after-the-sale support. To ensure that this equipment delivers that same degree of service, review this guide carefully before you begin your installation.

Should you have need technical help, please call our Technical Service group at (877) 612-5086 or (610) 252-7301.

Please have your model number, serial number and complete and detailed explanation of the problem when contacting Technical Service.

# **Getting Started**

After uncrating and removing all packing material. Inspect the equipment for concealed shipping damage. All freight is to be inspected upon delivery. If visible signs of damage exist, please refuse delivery or sign your delivery receipt "damaged." Follett Customer Service must be notified within 48 hours. Wherever possible, please include detailed photos of the damage with the original packaging so that we may start the freight claim process.



- Moving parts. Do not operate with front cover removed.
- Hot parts. Do not operate with cover removed.
- To reduce risk of shock disconnect power before servicing.
- Most ice machine cleaners contain citric or phosphoric acid, which can cause skin irritation. Read caution label on product and follow instructions carefully.
- Ice is slippery. Be sure counters and floors around dispenser are clean, dry and free of ice.
- Ice is food. Follow recommended cleaning instructions to maintain cleanliness of delivered ice.

# **Specifications**

## **Electrical**

- Each ice machine and dispenser requires a separate circuit with electrical disconnect within 10 ft (6 m).
- Equipment ground required.
- Standard electrical 115 V, 60 Hz, 1 phase.
- Connect to a dedicated 15A circuit.
- Maximum ice machine amperage 11A each.
- Cord and plug provided on ice machine.

# **Plumbing**

- 3/8" FPT water inlet
- 3/4" MPT drain
- 3/8" FPT condenser inlet (water-cooled condenser only)
- 3/8" FPT condenser drain (water-cooled condenser only)

#### Notes:

- Slope to drain of 1/4" per foot (20 mm per 1 m run) with a 1/2" min. is recommended.
- Water shut-off recommended within 10 feet (3 m), drain to be hard piped and insulated.
- Separate drains for ice machine and condenser. To prevent back flow, do NOT connect drains.
- Follett recommends a Follett water filter system be installed in the ice machine inlet water line (standard capacity, high capacity, carbonless high capacity).

#### **Ambient**

Air temperature*	100 F/38 C max.	50 F/10 C min. (best performance below 80 F/27 C)
Water temperature <sup>†</sup>	90 F/32 C max.	45 F/10 C min. (best performance below 70 F/21 C)
Water pressure	70 psi max. (482 kPA)	10 psi min. (68 kPA)
Condenser water temperature	90 F/32.2 C max.	45 F/7.2 C min
Condenser water pressure	125 psi (862 kPA) max.	10 psi (68 kPA) min.

<sup>\*</sup> Ambient air temperature is measured at the air-cooled condenser coil inlet.

# Water usage (water-cooled condenser only)

- 0.25 gpm @ 50 F (10 C)
- 0.5 gpm @ 70 F (21 C)
- 1.25 gpm @ 90 F (32 C)

## Shipping weight

■ 160 lb (73 kg)



<sup>&</sup>lt;sup>†</sup> Ambient water temperature is measured in the ice machine reservoir.

# Refrigeration pressure data

- Water regulating valve is factory set at 300 (±10) PSIG head pressure.
- Readings within 10% of table values should be considered normal.

# **Compressor data**

Locked rotor amps 48A

# Compressor current draw

Air-cooled					
Ambient air temperature	60 F/15.6 C	70 F/21.1 C	80 F/26.7 C	90 F/32.2 C	100 F/37.8 C
Amperage	6.3A	6.5A	6.7A	6.9A	7.1A
High-side pressure (psi)	190	220	250	290	330
Low-side pressure (psi)	27	29	31	33	36
Water-cooled					
Water temperature at float	50 F/10 C	60 F/15.6 C	70 F/21.1 C	80 F/26.7 C	90 F/32.2 C
	5.6A	5.6A	5.7A	5.8A	5.8A

# **Water-cooled Ice Machine Refrigeration Pressure**

Discharge Pressure/Suction Pressure

ö Condenser inlet water temperature °F/°C

<b>≅</b>					
inlet wate F/°C	°F/°C	50/10	70/21	90/32	
ie inle e °F/	50/10	280/27	285/29	290/31	psi
nachine perature	70/21	280/27	285/29	290/31	psi
lce m temp	90/32	280/27	285/29	290/31	psi

Gearmotor data	Split-Phase	PSC (permanent split capacitor)
Gearmotor current	1.8A-1.9A (nominal)	0.8A-0.9A (nominal)
Locked rotor amps	14A	7A-14A (temperature dependent)

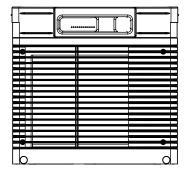


# **Dimensions and clearances**

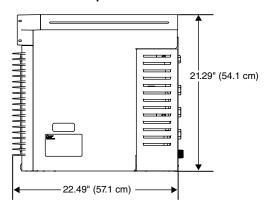
- Entire front of ice machine must be clear of obstructions/connections to allow removal.
- 12" (30.5 cm) clearance above ice machine for service.
- 6" (15.3 cm) minimum clearance between exhaust side of ice machine and any adjacent equipment.
- 18" (45.7 cm) minimum, 10 ft (3 m) maximum clearance between discharge and air intake grilles.

#### **D414AT**

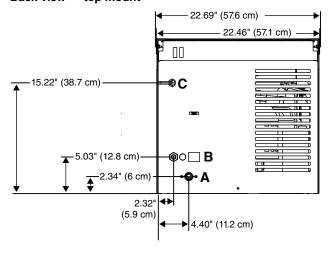
#### Front view — top mount



#### Side view — top mount

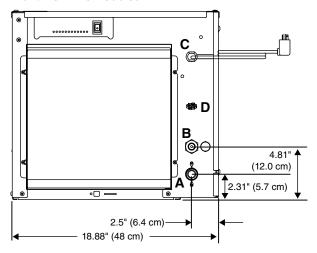


## Back view — top mount

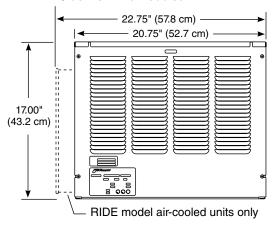


#### **D414AS**

#### Front view — air-cooled



#### Side view — air-cooled



**A** – 3/4" MPT drain

**B** – 3/8" FPT water inlet

C - Electrical cord

**D** – Bin signal connection (DO NOT APPLY VOLTAGE!)



# Cleaning

Follett ice machines and dispensers, and their associated cleaning and sanitizing procedures, are designed for use with potable water sources. The presence, or suspected presence, of infectious agents may call for additional measures, including the replacement of components and more comprehensive disinfection measures. Follett recommends that these cleaning and sanitizing procedures be reviewed with the appropriate infectious agent subject matter experts to assure complete remediation.

Periodic cleaning of Follett's ice machine system is required to ensure peak performance and delivery of clean, sanitary ice. The recommended cleaning procedures that follow should be performed at least as frequently as recommended and more often if environmental conditions dictate.

Cleaning of the condenser can usually be performed by facility personnel. Cleaning of the ice machine system should be performed by your facility's trained maintenance staff or a Follett authorized service agent. Regardless of who performs the cleaning, it is the operator's responsibility to see that this cleaning is performed according to the schedule below. Service problems resulting from lack of preventive maintenance will not be covered under the Follett warranty.

# Recommended cleaning intervals\*

Maestro Plus	Frequency
Drain Line	weekly
Drain Pan/Drip Pan	weekly
Exterior, Water Station Tube	as needed
Condenser	monthly (air-cooled only)
Ice Machine	semi-annually
Transport Tube	semi-annually

<sup>\*</sup> Ice machine must be cleaned prior to start-up.

# Weekly

The exterior may be cleaned with a stainless cleaner such as 3M™ Stainless Steel Cleaner & Polish or equivalent.

# Monthly

## Condenser (air-cooled ice machine only)

- 1. Use a vacuum cleaner or stiff brush to carefully clean condenser coils of lint and debris to ensure optimal performance.
- 2. When reinstalling counter panels in front of RIDE® model ice machines, be sure that ventilation louvers line up with condenser air duct.

# Semi-Annually (more often if conditions dictate)

- A cleaning procedure should always include both the ice machine and bin/dispenser.
- Icemaking system can be cleaned in place.

## **Cleaning Tool Checklist**

- (1) 1.5 gallon (or larger) plastic bucket
- (2) clean cloths
- Sanitary gloves
- Safety glasses
- SafeCLEAN™ Plus ice machine cleaner
- (2) SaniSponge™ (P/N 00131524 single sponge)



# **CAUTION!**

- Wear rubber gloves and safety goggles (or face shield) when handling SafeCLEAN Plus solution.
- Use only Follett approved cleaners.
- Do not use solvents, abrasive cleaners, metal scrapers or sharp objects to clean any part of the dispenser.

**SafeCLEAN Plus Solution:** Follow the directions on the SafeCLEAN Plus packaging to mix 1 gal. (3.8 L) of Follett SafeCLEAN Plus solution. Use 100 F (38 C) water.

#### **Cleaning Procedure**

Note: Check drains and drain cup to ensure they are open and flowing freely.

- 1. If ice machine was running recently, ensure that the evaporator is completely free of ice before proceeding. If there is ice in the evaporator, complete steps 2-8 using only hot water to remove the ice, then begin Cleaning Procedure again.
- 2. Remove front or top cover.
- 3. Disconnect bin signal cable from ice machine electrical box.
- **4.** Press **CLEAN** switch. The **MAINTENANCE** light will turn on and the machine will fill and drain three times. Wait for the **LOW WATER** light to turn on.
- 5. Remove water reservoir drain tube from the evaporator drain cup bracket and lift tube to higher level than reservoir.
- **6.** Remove lid from cleaning cup and fill (about 1 quart) until SafeCLEAN Plus solution completely fills the reservoir. Place lid back on cup.
- 7. CLEANER FULL light will turn on and machine will start cleaning cycle then rinse three times; this process takes approximately 15 minutes.
- 8. When machine is finished cleaning, the MAINTENANCE light will turn off.
- **9.** Remove top bearing insulation. Loosen Phillips-head screw on nozzle connected to evaporator. Remove nozzle from evaporator side only, leave other side of nozzle connected to transport tube.
- 10. Soak both Sani-Sponges in remaining SafeCLEAN Plus solution .
- 11. Insert both sponges soaked in SafeCLEAN Plus solution into nozzle then insert one at a time.
- **12.** Replace nozzle onto evaporator and tighten screw. Ensure drain is connected to reservoir and vent tubes are connected to evaporator drain pan. Replace top bearing insulation.
- 13. Lower water reservoir drain tube back to evaporator drain bracket.
- 14. Reconnect bin signal cable. Wait for ice to push sponges through transport tube.
- 15. Collect sponges from ice storage bin.
- 16. Replace front or top cover.
- 17. After 10 minutes, dispense all ice and discard.
- 18. Clean the dispenser/bin.

# **Exterior Cabinet**

Clean stainless steel panels with stainless steel cleaner.



# **Electrical system**



# ATTENTION!

To prevent circuit breaker overload, wait 15 minutes before restarting this unit. This allows the compressor to equalize and the evaporator to thaw.

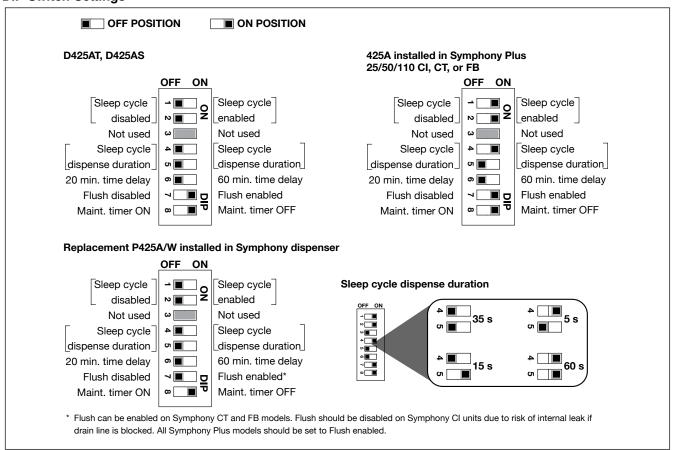
#### Normal control board operation

The PC board indicator lights provide all the information necessary to determine the machine's status. Green indicator lights generally represent "go" or normal operation; yellow indicators represent normal off conditions; red indicators generally represent alarm conditions, some of which will lock the machine off.

A flashing green light labeled POWER indicates power to the machine. All other normal operation status indicators are covered as follows:

Ice machine disposition	Operating conditions	
Legend: ● ON ○ OFF ● ON or OFF	<b>②</b> FLASHING	
C CLEANER FULL WANDS CLEANER FULL WANDS CLEANER FULL WANDS CLOW WATER CLOW WATER CLOW WATER CLOW BIN C	1. Normal running.	
C CLEANER FULL WANDS OF HI AMPS O	2. Normal time delay. When the bin fills with ice, the LOW BIN light goes out momentarily and the refrigeration and auger drive systems immediately shut down. (Note: The fan motor will continue to run for 10 minutes to cool condenser) The TIME DELAY light comes on, initiating the time delay period. When the time delay expires, the machine will restart provided that the LOW BIN light is on.	

#### **DIP Switch Settings**



# Warranty Registration and Equipment Evaluation

Thank you for purchasing Follett® equipment. Our goal is to deliver high value products and services that earn your complete satisfaction by delivering high-value products and services backed by outstanding customer and technical support.

Please review the installation instructions thoroughly. It is important that the installation be performed to factory specifications so your equipment operates at its maximum efficiency.

Follett LLC will not be liable for any consequential damages, expenses, connecting or disconnecting charges, or any losses resulting from a defect of the machine. For full warranty details, visit our website www.follettice.com/productwarranties.

Registering your equipments helps Follett track your equipment's service history should you need to contact us for technical support, and your feedback helps us improve our products and services. Please visit www.follettice.com/support to complete the Warranty Registration form.

Should you have any questions, please contact Follett's technical support group at (877) 612-5086 or (610) 252-7301 and we will be happy to assist you.

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