

REVISIONS			
REV.	DESCRIPTION	DATE	APPRVD.

Notes:

In the event of a power loss, the Noritz unit will not have power to operate the 'internal freeze prevention' electric heater, so water would have to be drained from the system (unit & plumbing) manually to prevent any type of freezing.

An additional method to prevent freezing to the unit, would be by having the solenoid valves in place and wired to 110v supply, water will automatically be supplied to the Noritz only when there is power and water will automatically be drained from the system upon power loss of power outage.

*1. 3/4" or bigger Solenoid Valve, normally open. Closes upon 110V power loss.

*2. Up to 3/4" Solenoid Valve, normally closed. Opened upon 110V power loss.

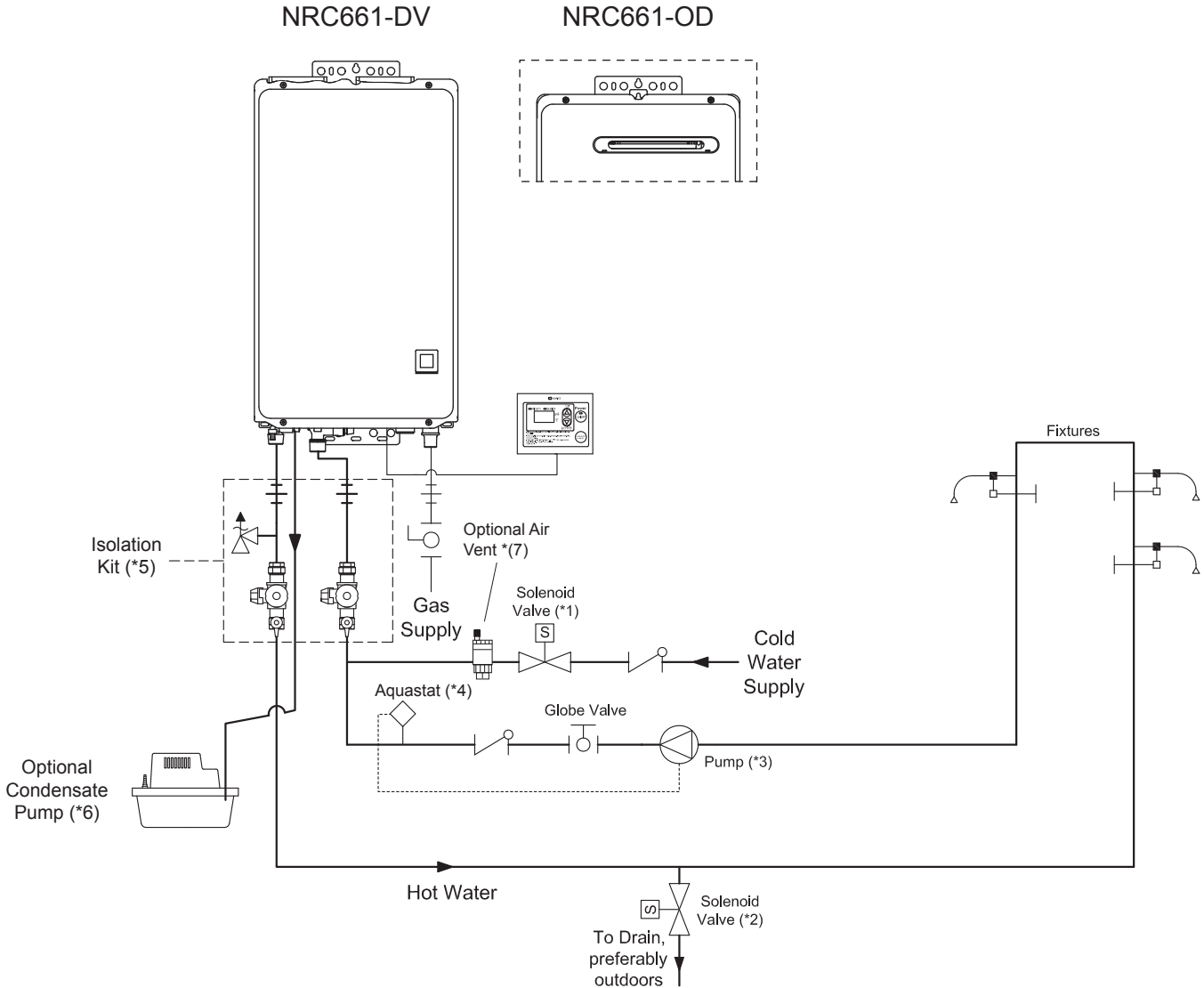
*3. Size the pump to provide a maximum of 2 GPM through the system at 10 ft. of head plus piping losses. Adjust the flow using a globe valve and verify the flow rate using the maintenance monitors.

*4. Wire aquastat to pump according to "Circulation Pump to Aquastat Wire Diagram (PAWD.pdf)." Set the aquastat to 10°F below the set output temperature.

*5. Noritz recommends the use of Isolator Kit (IK-WV-200) with installation. Connections are available in Threaded and Sweat. These kits include an integrated shut-off and service valve with unions and a pressure relief valve.

*6. Use condensate pump when drain is located far away from water heater and size for desired lift distance. For the condensate drain line, use 1/2" PVC pipe. Slope horizontal pipe downwards 1/4" per foot towards drain or condensate pump. Do not submerge or block end of drain pipe.

*7. Optional Air Vent. Install at highest point in system to prevent air locking.



NORITZ
 11160 Grace Avenue
 Fountain Valley, California 92708
 866-7NORITZ (866-766-7489)
 www.noritz.com

MODEL:
 NRC661-Series

APPLICATION:
 Domestic Hot Water
 Recirculation
 Additional Freeze Protection

DRAWING NUMBER:
 (19)NRC661 -DHW-RECIRCULATION-
 ADDITIONAL-FREEZE

DRAWING DATE:
 7/23/2014

- Noritz Accessories**
- RC-7651M (Remote Controller)
 - RC-CORD10 (10' Remote Controller Cord, optional in 26')
 - IK-WV-200 (Isolation Kit)

Note: This diagram is for reference only. Installation must comply with State and Local Code, all gas and water pipe must be sized correctly to specific length, according to accepted engineering methods or the UPC Code for Noritz Water Heaters to operate correctly.

- Shut-off Ball Valve
- Check Valve
- Union
- Pressure Relief Valve (Watts 174A, Zurn P3000BR, Cash Acme F-82)
- Aquastat (Honeywell Model #L6006A or L6006C)
- Pump
- Mixing Valve
- Thermal Expansion Tank