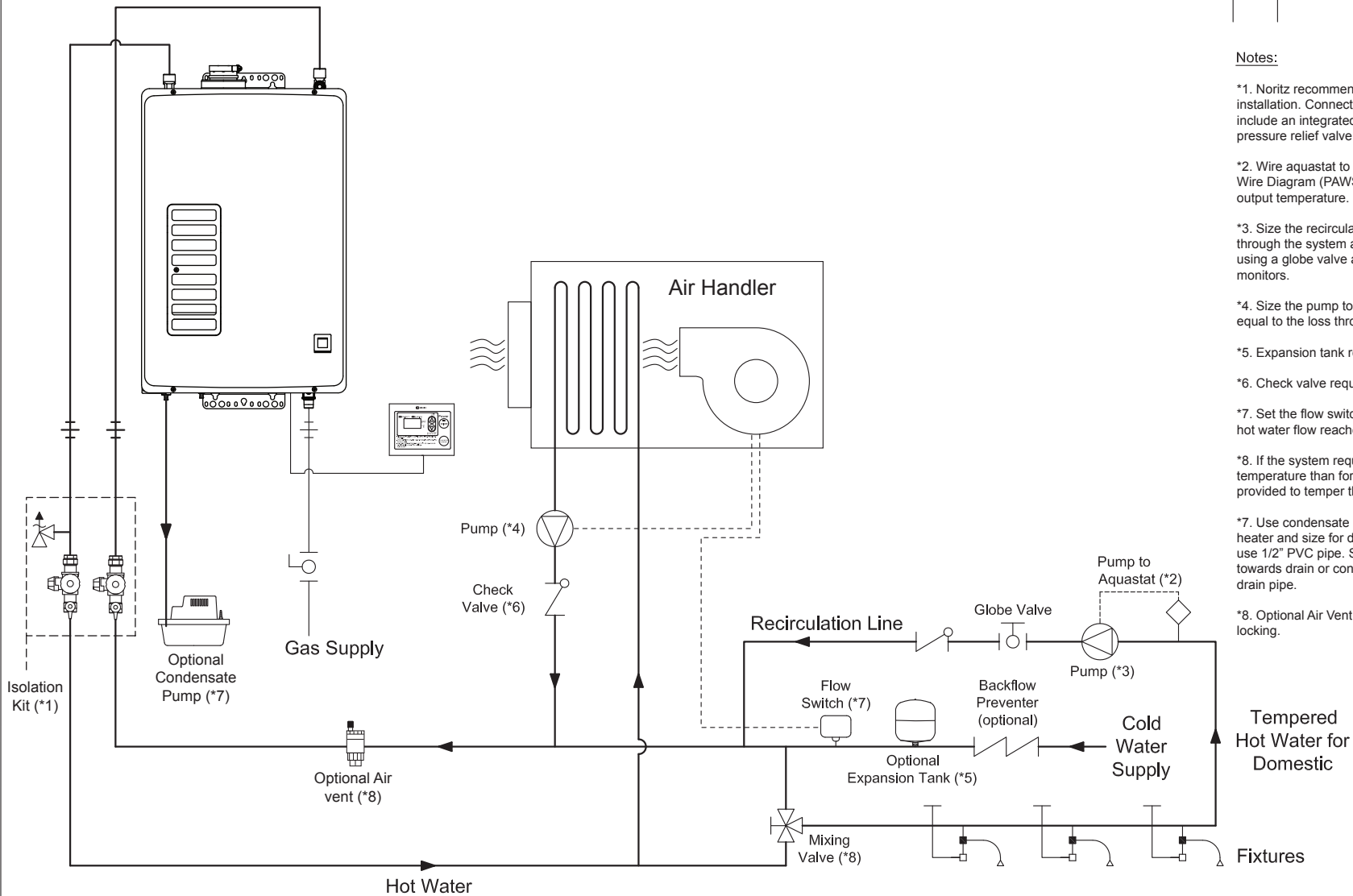


# NRC663-FSV



## REVISIONS

REV.	DESCRIPTION	DATE	APPRVD.

### Notes:

\*1. Noritz recommends the use of Isolation Kit (IK-WV-200) with installation. Connections are available in Threaded or Sweat. These Kits include an integrated shut-off and service valve with unions and a pressure relief valve.

\*2. Wire aquastat to pump according to "Circulation Pump to Aquastat Wire Diagram (PAWS.pdf)." Set the aquastat to 10°F below the set output temperature.

\*3. Size the recirculation pump to provide a maximum of 1.5 GPM through the system at 10 ft of head plus pinging losses. Adjust the flow using a globe valve and verify the flow rate with the maintenance monitors.

\*4. Size the pump to provide a maximum of 2 GPM with a head pressure equal to the loss through the water heater and Air Handler.

\*5. Expansion tank required if a back flow preventer is installed.

\*6. Check valve required if it is not included with the pump.

\*7. Set the flow switch to deactivate the Air Handler when the domestic hot water flow reaches 2 GPM. Adjust as necessary to prevent cycling.

\*8. If the system requires water for space heating at a higher temperature than for other uses, means such as a mixing valve shall be provided to temper the water for the other uses to help prevent scalding.

\*7. 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.

\*8. Optional Air Vent. Install at highest point in system to prevent air locking.



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MODEL:  
NRC663-Series

APPLICATION:  
Hydronic Heating  
Domestic Hot Water  
Recirculation Loop

DRAWING NUMBER:  
(9)NRC661-DHW-HYDRONIC-  
RECIRCULATION

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