TECHNICALLY SPEAKING



By Ed Brink, Meier Supply Training and Technical Specialist

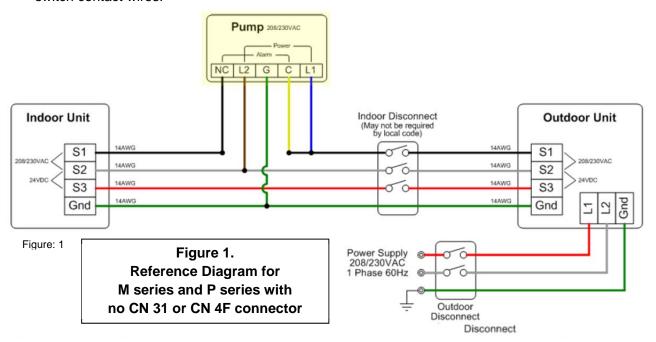
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Meier Supply Co., Inc., 123 Brown Street, Johnson City, NY 13790 www.MeierSupply.com EBrink@MeierSupply.com 607-797-7700

Mini Split Pump Installation

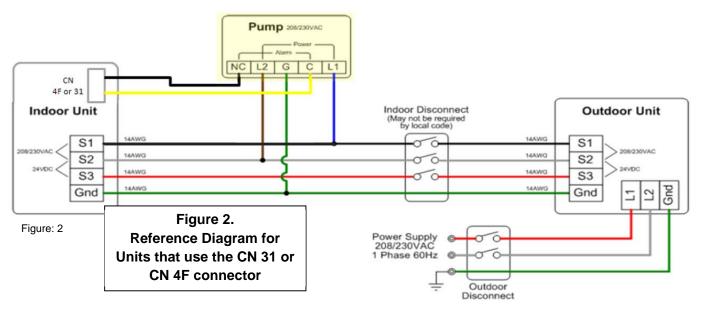
Every week I field a call or two on how to wire in a condensate pump on a Mitsubishi system. We offer multiple types of pumps, whether it is a Sauermann, Little Giant or another manufacturer's pump - wiring is basically the same.

First, make sure the pump is rated at 230 volts and has a "Normally Closed" safety switch that will break power to the indoor unit when there is an overflow condition. Next, locate the terminals on the pump. On the Little Giant and Sauermann SI 1730-230 the terminals are labeled right on the pump. Remember N and L2 are the same terminal when used on a 230v system. On the Sauermann SI 3100-230 there will be 4 wires. Blue and Brown are the power wires. Yellow and White are the switch contact wires.



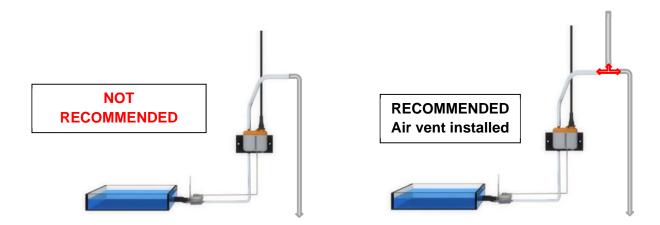
On the M series and P series with no CN 31 or CN 4F connector use Figure 1 as a reference on how to wire each pump. The key is to make sure power is removed from S1 on the indoor unit if there is an overflow condition!

On Units that use the CN 31 or CN 4F connector use Figure 2 as a wiring reference. The pump is wired in parallel to S1 and S2 and the switch contacts are connecting to terminals 1 and 2 for CN 31. On units that have a CN 4F connector, you must cut the jumper wire and wire the pump contacts in the wires just cut.



One of the other common complaints I get concerning condensate pumps is that they can be noisy. This is commonly due to improper installation of the pump. In the install manual it states "To avoid siphoning, the end of the discharge line must terminate minimum 4" above the level of the condensate collection tray. If the end of the discharge line is terminated below the level of the condensate collection tray then a siphoning effect will occur in the pipes and the pump will become unprimed. The pump will then periodically vibrate and become noisy. Siphon effect causes fatal damage to the pump."

In order to prevent off-cycle siphoning of the pump it is recommended to install an air vent on the discharge piping when the outlet is below the collection reservoir. Doing so will increase the life expectancy of the pump and eliminate a lot of the excess noise of the pump.



* For additional support contact Meier Supply at any of our locations *

email: <u>EBrink@MeierSupply.com</u> 123 Brown Street phone: 607-797-7700 Johnson City, NY 13790