FROG ENGINEERING

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Quick Installation Guide
All Series of CW Type Front Cooler/Side Cooler

Congratulations you have just received your Chilled Water In Row Unit Solution.This quick guide willl assist & ensure the proper installation steps from unpacking step until POWER ON step.

Warning!
Please read this guide carefully to avoid incorrect actions / connections that may cause the cooling unit to malfunction or not working properly.

Warnings and Important Safety Instructions in this manual do not cover all possible conditions and situations that may occur. It is your responsibility to use common sense, caution, and care when installing, maintaining, and operating your Cooling Units.

The present Quick Installation Guide covers water-cooled models; however, the characteristics of your cooling unit may slightly differ from those described in this Guide and not all warning signs may be applicable. Avoid vibrations while transferring these Cooling Units.

Package contents:

1. Front or Side Cooler
2. Power Input cable connection
3. Quick Installation Guide (this document)
4. User Manual

Quick Installation diagram

1. **Physical Installation**
2. **CW Piping connection**
3. **Water Temperature Adjustment**
4. **Electrical connection**

Warning!
Frog Engineering under no circumstances provides the water chiller connection pipes and also the following accessories.

1. Indoor to outdoor unit piping of 1_1/4" (DN32) or any mounting accessories
2. Proper isolation tubes to the above mentioned pipes
3. Glycol-Water mix or specific Ethylene Glycol heat transfer fluid
4. Any kind of mixing valve that adjusts the inlet water temperature coming from the water chiller

Note: The water chiller is sold separately

1 Physical Installation

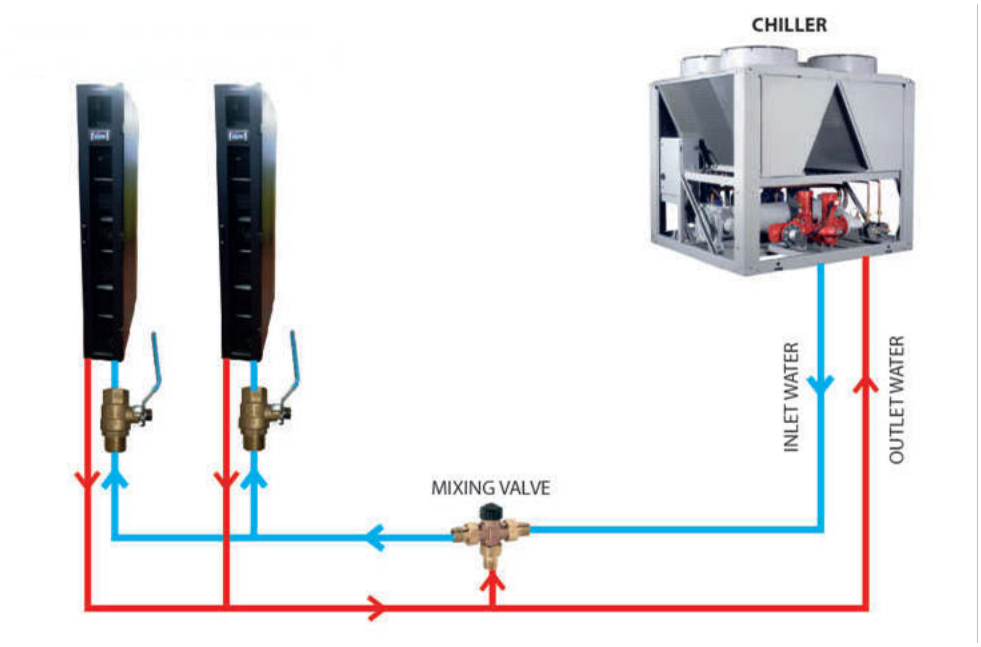
Remove the Cooling Unit from the pallette. Beware the Cooling Unit's height & depth are relatively high, unlike the width is quite low. Please take care not to accidentally drop the Cooling Unit down. Place the cooler to the desired location. Use the Baying Kit to tie the Cooling Unit to the Frog Engineering Rack Cabinet right next to it. You might adjust the height from the adjustable feet (whenever available).

2 CW Piping Connection

Locate the water pipes connection (positioned either on top or bottom of the Cooling Unit's rear side). The water pipes' size should be 1_1/4" - DN 32 (both Inlet + Outlet pipes have the same diameter). Connect the pipes; if the Water Chiller feeds several indoor units, then shut off valves should be used in order to manually on-off the Cooling Unit during most emergencies or repairs; 2x shut off valves must be used. In order to eliminate water condensation from the water pipes, isolate properly all the pipes between Indoor to Outdoor units, all around the pipes. Do not apply pipe isolation inside the Cooling Unit. After completing these steps, you can allow water coming from the Chiller. If Water Chiller does not charge the indoor unit, then check the air-purge valve to remove any existing air out of the system.

3 Water Temperature Adjustment

Our product is recommended to operate at 14°C inlet water temperature. If the temperature of inlet water is below 10°C, humidity may rise above desired values. This can be easily prevented or rectified by using a mixing valve as shown in figure below:



To increase the temperature of inlet water, you might use 3-way mixing valve. 3-way valve would mix cold incoming water with warmer return water and supply water to the cooling unit.

4 Electrical Connection

The indoor unit comes with a 2,5 meters long power pigtail ending to a European "Schuko" TYPE 16A-250V CEE 7/7 plug (2P+E) (depending on the model). Plug this into a UPS socket. The Maximum Power absorbed will be 1KW. Make sure you protect this line by a 10A or maximum 16A circuit breaker. (If the installation demands no plugs, the cable terminals can be used for direct connection of the indoor unit to the Mains cables).

If any kind of Technical Support is needed please contact Frog Engineering.