



Installation Instructions

Agility Drive Panel UPS Replacement

Model Number: HDWA

This document applies to service offering applications only.

SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

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SO-SVN028A-EN

TRANE
TECHNOLOGIES



Introduction

Read this manual thoroughly before operating or servicing this unit.

Warnings, Cautions, and Notices

Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:

⚠ WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.

NOTICE Indicates a situation that could result in equipment or property-damage only accidents.

Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

⚠ WARNING

Proper Field Wiring and Grounding Required!

Failure to follow code could result in death or serious injury. All field wiring **MUST** be performed by qualified personnel. Improperly installed and grounded field wiring poses **FIRE** and **ELECTROCUTION** hazards. To avoid these hazards, you **MUST** follow requirements for field wiring installation and grounding as described in NEC and your local/state electrical codes.

⚠ WARNING

Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in death or serious injury. Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, **MUST** follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- Before installing/servicing this unit, technicians **MUST** put on all PPE required for the work being undertaken (Examples; cut resistant gloves/sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). **ALWAYS** refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.
- When working with or around hazardous chemicals, **ALWAYS** refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labeling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.
- If there is a risk of energized electrical contact, arc, or flash, technicians **MUST** put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, **PRIOR** to servicing the unit. **NEVER PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.**

⚠ WARNING**Follow EHS Policies!**

Failure to follow instructions below could result in death or serious injury.

- All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.
- Non-Trane personnel should always follow local regulations.

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Revision History

Document updated to reflect Service Offering number.



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General Information

Parts List for KIT19017

Table 1. Parts list for KIT19017

Mnemonic	Part Description	Quantity
CNT08155	UPS; N1C.L2000-IR	1
BRK05234	Bracket; UPS Retrofit Mounting	1
WIR10207	Harness; 120V UPS Power	1
WIR10514	Harness; UPS Comm	1
SCR02683	Screw; Hex Flange W/ Locking Serrations, M6 X 1.0 X 16	2
SCR02435	Screw; M8 X 16MM, Hex Cap	2
50712778	Schematic - Page 3	1
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Note: A jumper ships loose with the UPS, and must be plugged into the back of the UPS before operation.

Installation

⚠ WARNING

Hazardous Voltage w/Capacitors!

Failure to follow instructions below could result in death or serious injury. Disconnect all electric power, including remote disconnects and wait for DC capacitors to discharge before servicing. Refer to the manufacturer's recommendations for proper discharge time as DC bus capacitors retain hazardous voltages after input power has been disconnected. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized. Verify with a CAT III or IV voltmeter rated per NFPA 70E that all capacitors have discharged before touching any internal components.

1. Verify chiller is in stop mode.

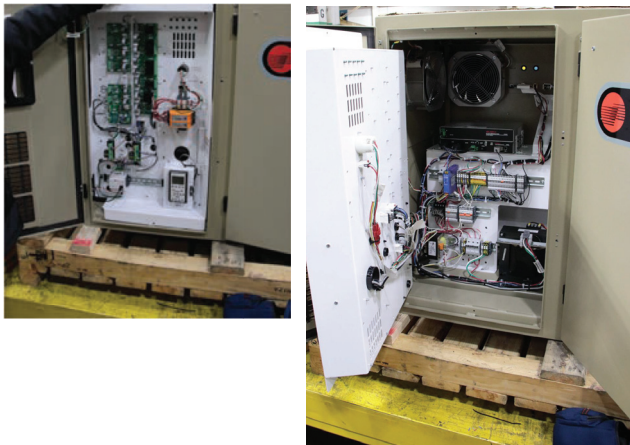
NOTICE

Equipment Damage!

Do not start the chiller before the UPS is fully charged. Starting the chiller before the UPS is fully charged could cause catastrophic equipment damage.

2. Disconnect power to the unit and ensure lockout tag out.
3. Open the outer control panel door.
4. Open the inner control tub for access to the existing UPS.

Figure 1. Inner control tub removal



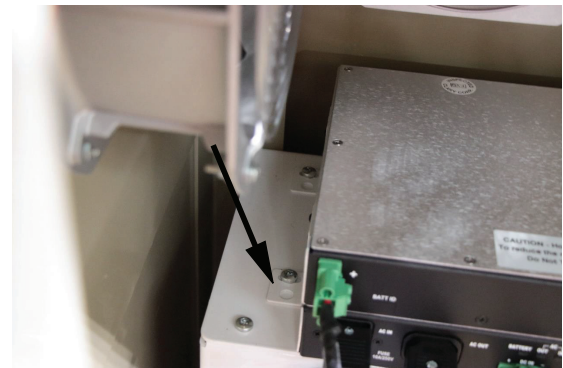
5. Remove all electrical connections and cables to the UPS.

Figure 2. Electrical connections and cables removal



6. Remove existing UPS angle brackets on the left and right side of the UPS.

Figure 3. Angle brackets removal



7. Install the mounting bracket to back of the new UPS using the M8 x 16 screws provided. See following figure.

Figure 4. Mounting bracket installed

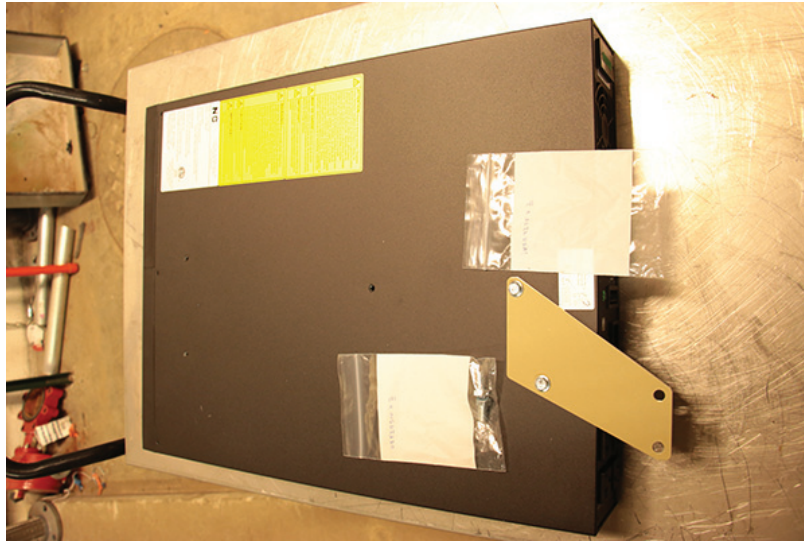


Figure 5. Mounting bracket



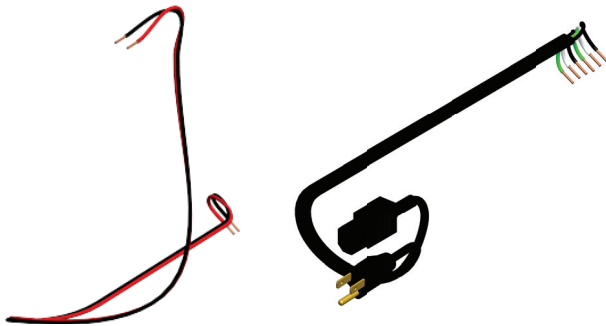
8. Install the UPS in the center section of the panel as shown in the following figure.

Figure 6. UPS installation



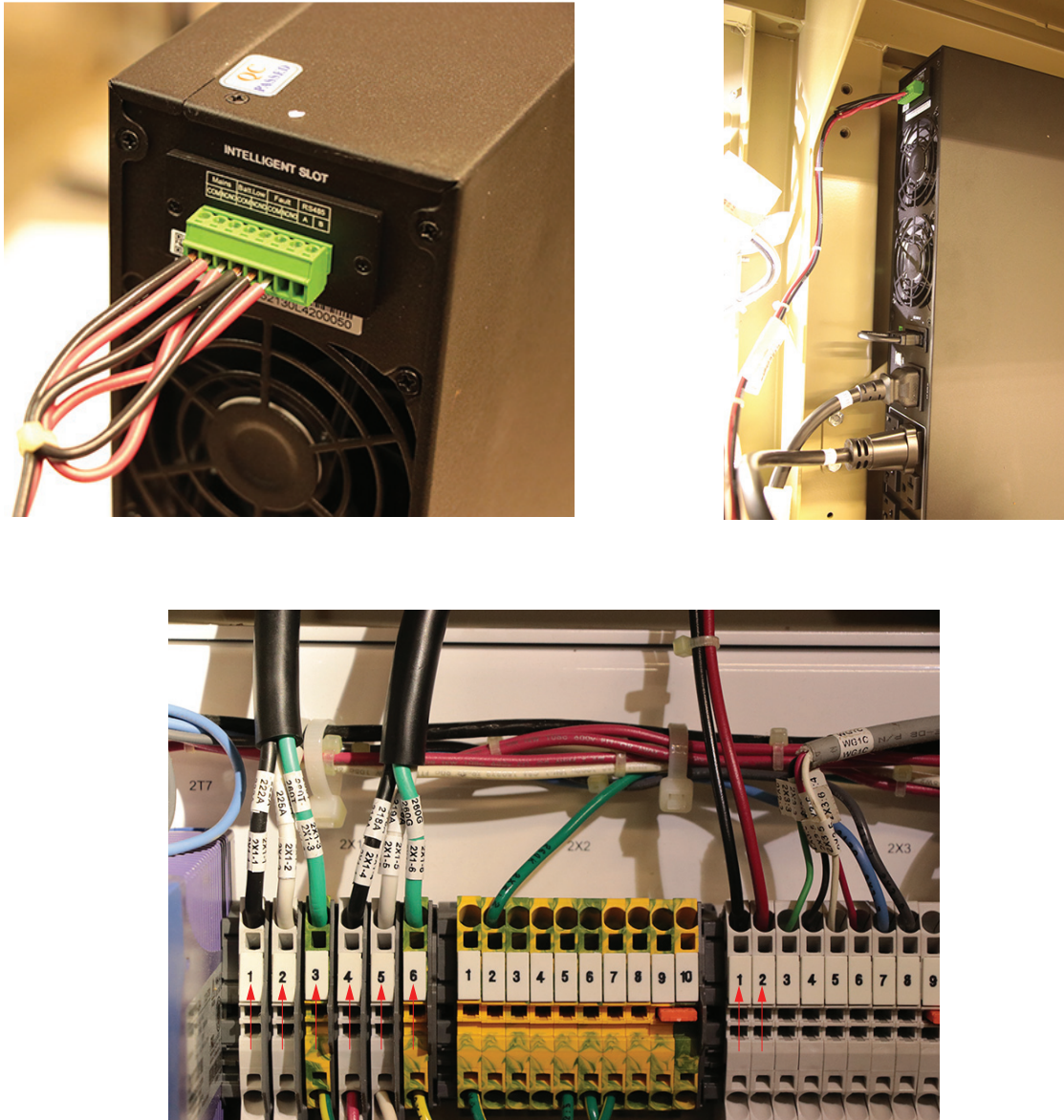
9. Use wire harnesses WIR10207 and WIR10514 provided.

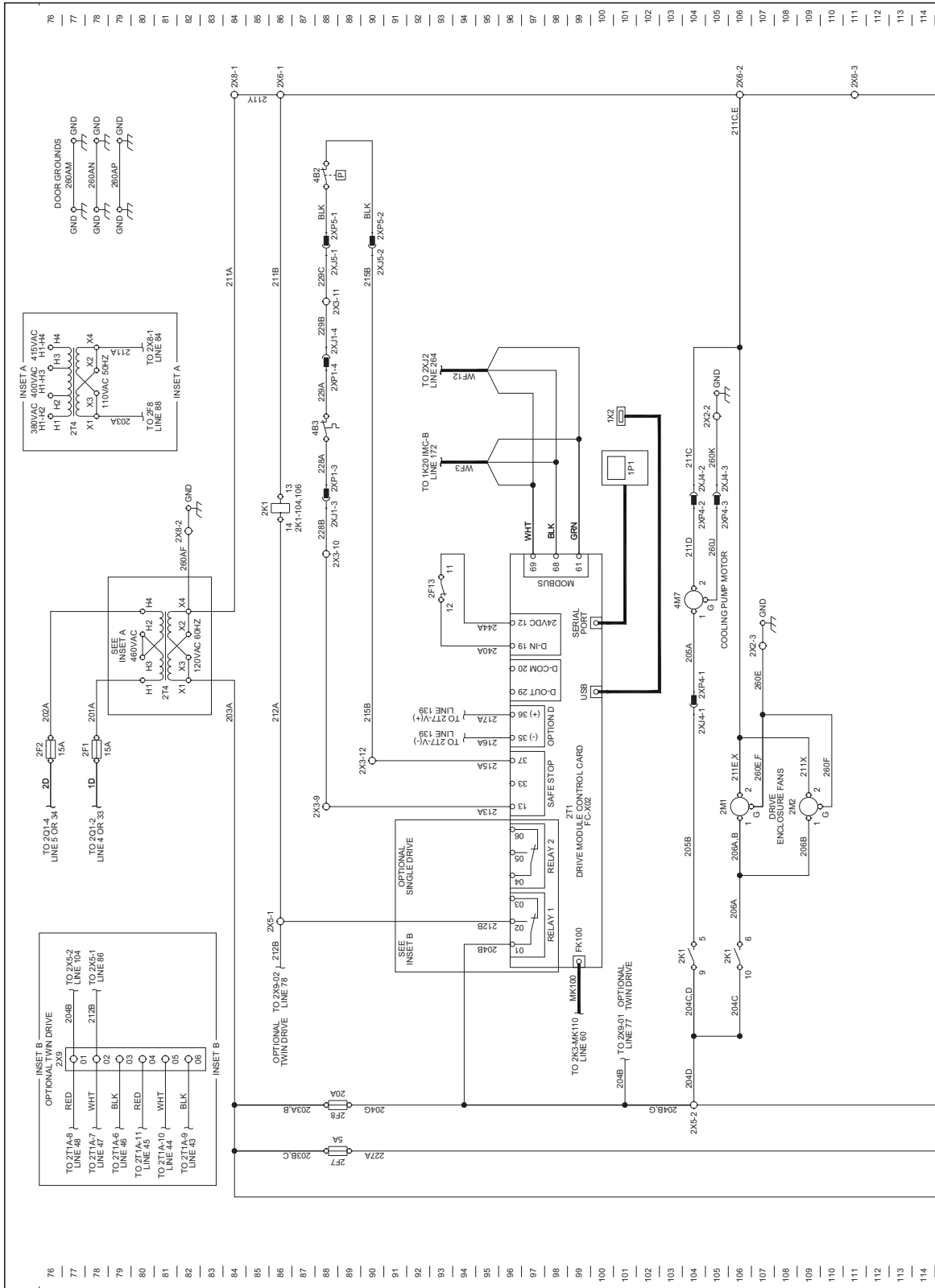
Figure 7. Wire harnesses

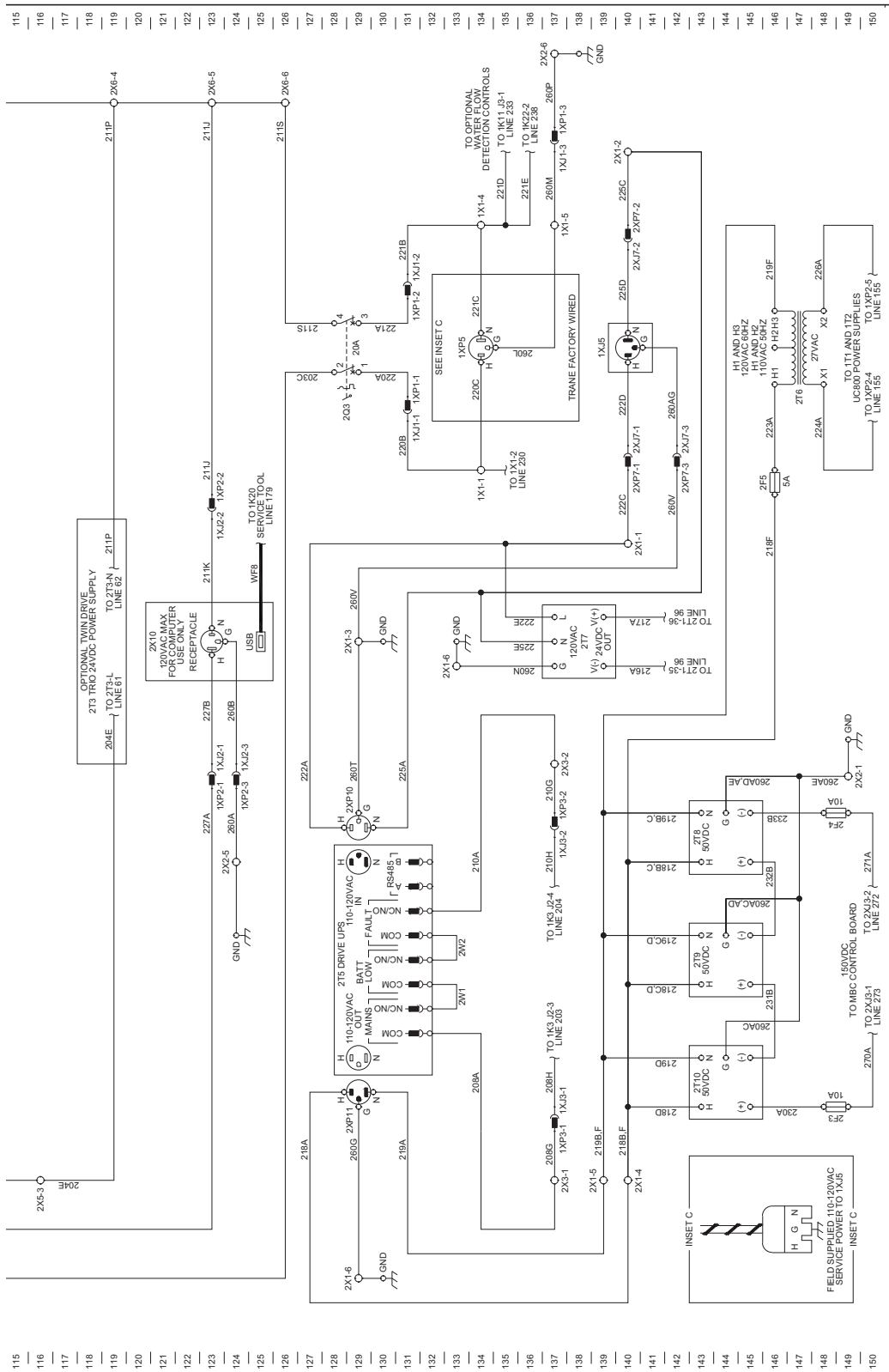


10. Connect power and control wiring as shown in the schematic.

Figure 8. Power and control wiring connection

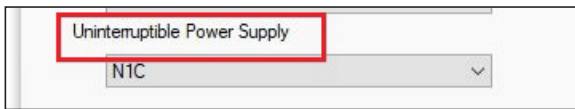
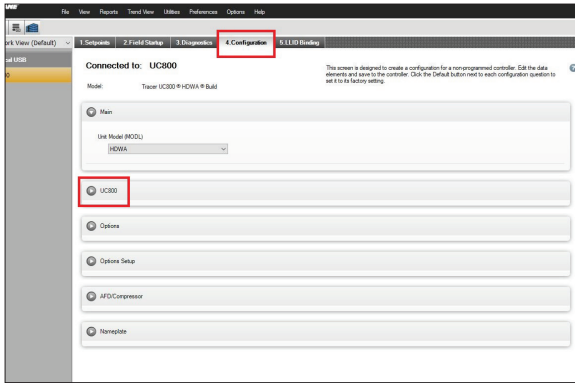






- Using Tracer TU, navigate to the Configuration menu, expand the UC800 field and change "Uninterruptible Power Supply" from "Clary" to "N1C".

Note: If you don't see this option or do not have version 2.01 firmware or later, skip this step.

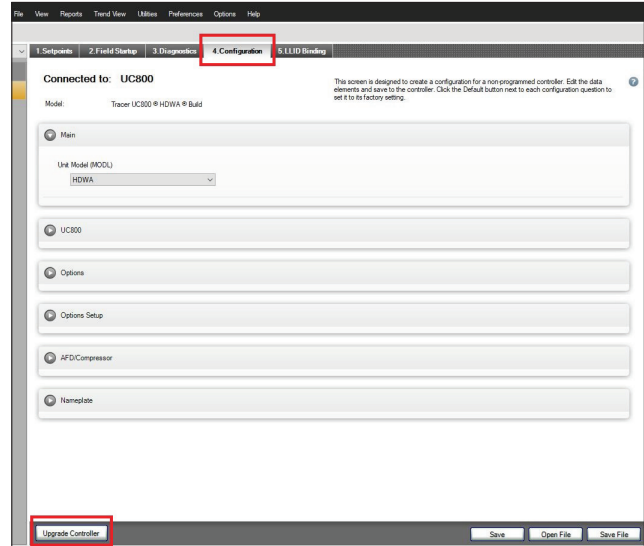


Important: Firmware 2.01 or new is required.

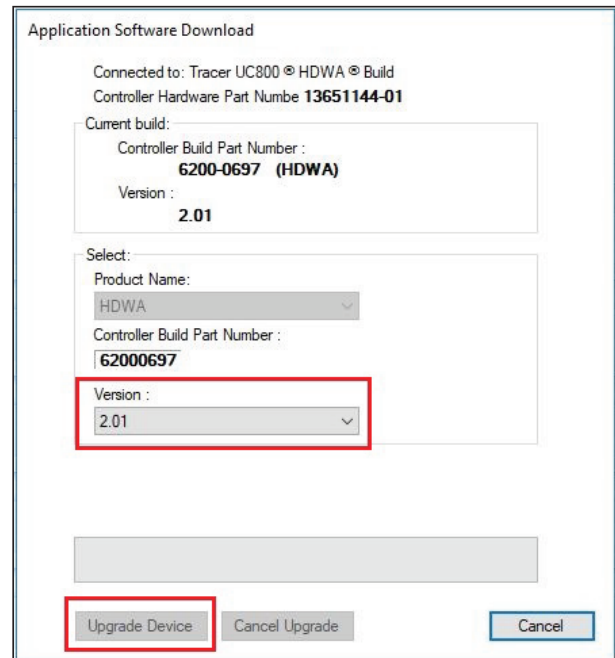
Check/Upgrade the UC800 Firmware Version

To check and/or upgrade the firmware on the UC800, see the instructions below:

- Connect with TU and go to the Configuration menu and click the "Upgrade Controller" option.



- If the version is not 2.01 or later, click the drop down menu under Version to choose a newer version and then click "Upgrade Device" to upgrade.



Battery Charge

NOTICE:

Equipment Damage!

Do not start the chiller before the UPS is fully charged. Starting the chiller before the UPS is fully charged could cause catastrophic equipment damage.

The UPS drive requires eight (8) hours to fully charge the internal battery.

Check UPS Power Status

To check the UPS powers up, see the instructions below:

1. Hold the “-” / ON button for 3 second to turn on.

Figure 9. UPS ON-OFF buttons

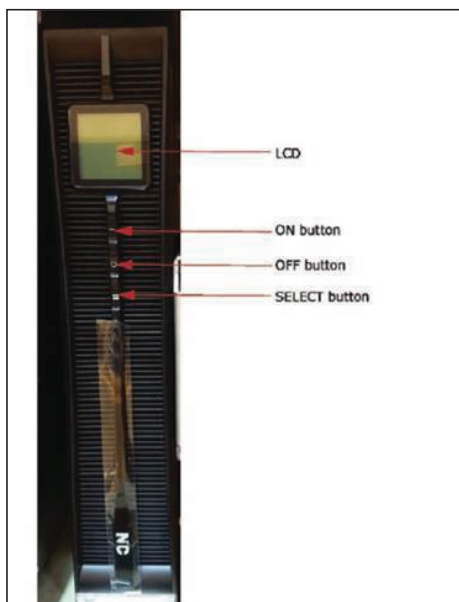


Figure 10. UPS display



- b. Press and hold the ON button again for 3 seconds to check the buzzer gets silenced.
3. To turn the UPS off, press and hold the OFF “O” button for 1 – 2 seconds.

2. Pass Criteria

- a. Startup process takes approximately 10 seconds and UPS turns on, refer to the following figure. The UPS is in the battery mode and will buzz/alarm every few seconds during battery test.



Notes

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