PROCESS WATER CHILLER

MODELS 8200 - 8306

UNI*TROL* ELECTRONICS, INC.
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NORTHBROOK, IL 60062
847-480-0115
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WARRANTY

PARTS: Unitrol warrants this chiller to be free of defects in *materials* that effect operation, for a period of one year from date of shipment from factory, if said equipment has not been altered or abused by customer and is being used for the purpose that the equipment was designed for. Parts will be shipped, FOB Northbrook, Illinois. Defective parts will be returned to Unitrol at customer's expense when so requested by Unitrol.

LABOR: Necessary warranty labor is covered for a period of 90 days from the date of shipment from factory, if said equipment has not been altered or abused by customer and is being used for the purpose that the equipment was designed for. Parts will be replaced or repaired, at manufacturer's option on any parts found to be defective. Unitrol shall not, without its prior written approval, be liable for any costs involved in field repairs. Transportation of equipment to or returning from Unitrol shall be at customer's expense.

Alternately, Unitrol may elect to send a local refrigeration contractor to do warranty service. In this case, Unitrol will pay contractor directly.

To be covered by this warranty, please follow the following procedure:

1. **Contact the Unitrol service department at 847-480-0115 to discuss the problem you are having with this chiller.**
2. **If Unitrol concurs that this is a warranty issue, and the chiller is <u>more</u> than 90 days from date of factory shipment, a Unitrol representative will either arrange to have a replacement part shipped, or authorize a locally purchased replacement at a pre-agreed price that will be reimbursed by Unitrol.**
3. **If Unitrol concurs that this is a warranty issue, and the chiller is <u>less</u> than 90 days from date of factory shipment, a Unitrol representative will have a factory approved service technician dispatched to make repairs under the above terms. Alternately, the Unitrol representative will direct that the chiller be returned to the factory for repairs.**

No other warranty, either written or implied, shall cover this equipment, and Unitrol shall not be liable for any damage caused to other equipment or personnel due to failure of this product. Unitrol reserves the right to change specifications at any time.

UNI*TROL* PROCESS WATER CHILLER

Thank you for purchasing this Unitrol process water chiller. It was manufactured with pride in our Northbrook, Illinois factory. Unitrol also manufactures the Unitrol line of RESISTANCE WELDING CONTROLS. This line includes controls that include safety systems to protect the welding machine operator, as well as quality control features that allow you to produce a large volume of weldments that will match the highest quality requirements.

This Unitrol water chiller has been designed to operate under the most severe industrial conditions. Please observe the installation instructions to be sure that this chiller will provide years of superior service.

MODEL NUMBER: **8200**

SERIAL NUMBER: **0122311**
DATE OF MANUFACTURE: **01/2022**
REFRIGERANT:**R407C**

OPTIONS:

CHILLER MODEL	NOMINAL CAPACITY	LINE VOLTAGE AND PHASE	STANDARD WATER PUMP
8200, 8200L	60,000 BTU/HR	460/3	2 HP, 50 GPM @35PSI
8201, 8201L	60,000 BTU/HR	230/3	2 HP, 50 GPM @35PSI
8206, 8206L	60,000 BTU/HR	575/3	2 HP, 50 GPM @35PSI
8250, 8250L	90,000 BTU/HR	480/3	2 HP, 50GPM @35PSI
8251, 8251L	90,000 BTU/HR	230/3	2 HP, 50GPM @35PSI
8256, 8256L	90,000 BTU/HR	575/3	2HP, 50 GPM@35PSI
8300, 8300L	120,000 BTU/HR	480/3	3HP, 80GPM @35PSI
8301, 8301L	120,000 BTU/HR	230/3	3HP, 80GPM @35PSI
8306, 8306L	120,000 BTU/HR	575/3	3HP, 80 GPM@35PSI

NOTES

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INSTALLATION

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THIS CHILLER IS DESIGNED FOR INSIDE INSTALLATION. ONLY CHILLERS PURCHASED WITH THE –OS (OUTSIDE) KIT CAN BE INSTALLED OUTSIDE IN AREAS WHERE THE AIR TEMPERATURE CAN FALL BELOW 45ºF, AND SUCH INSTALLATION WILL VOID THE WARRANTY.

1. Carefully uncrate chiller components and inspect for external damage. If any damage is seen, do not continue until a representative of the freight company views the damage, and a claim to the freight company has been filed.
2. Install the chiller in a location that will keep the air intake (back of chiller with air filter) and air exhaust (front of chiller with expanded metal plate) **at least 36”** from the nearest wall. This is required to allow maximum air movement over the condenser coil.

FAILURE TO ALLOW MINIMUM WALL CLEARANCE WILL RESULT IN HIGH FREON TEMPERATURES AND WILL VOID WARRANTY.

3. Bolt the chiller in place using the four mounting pads at the end of the round legs.
4. Remove the front expanded metal panel.
5. Remove the water tank cover and untie the water float. Leave the water tank cover off for 100
6. Run conduit or covered flexible cable from the service hole below the ON/OFF switch to a local fused disconnect. The fused disconnect should be no more than 36” from the point of entry to the chiller.

WIRE SIZE AND FUSES: Install slow blow (time delay) fuses in the fused disconnect and use connecting wire per the chart below:

CHILLER MODEL	LINE AND PHASE	FUSE SIZE TIME DELAY	MINIMUM WIRE GAUGE
8200, 8200L	460/3	25A	10
8201, 8201L	230/3	40A	8
8206, 8206L	575/3	20A	10
8250, 8250L	480/3	35A	10
8251, 8251L	240/3	60A	6
8256, 8566L	575/3	28A	10
8300, 8300L	480/3	45A	8
8301, 8301L	230/3	90A	4
8306, 8306L	575/3	35A	10

7. Connect 3 wires to the white terminal marked L1, L2, L. Connect the wires in any order. The phase sequence will be adjusted in a step below. **Check the nameplate to be sure that the line voltage matches the incoming service.** Note that a chiller marked 480V will operate on 430V – 500V. A chiller that is marked 230V will operate on 208V – 260V.

8. **GROUNDING: Be sure to connect a separate ground wire to the ground terminal mounted on the base pan. This wire should be sized to handle at least 50% of the nameplate average amperage**

PLUMBING

PIPE INSULATION

ALL PIPES <u>FROM</u> THE CHILLER AND <u>RETURNING TO</u> THE CHILLER <u>MUST</u> BE INSULATED. COMMERCIAL SNAP-ON FOAM INSULATION IS SUFFICIENT FOR THIS PURPOSE.

REASON #1: DURING WARM WEATHER THE INSULATION WILL PREVENT CONDENSATION FROM THE PIPES.

REASON #2: EVERY SQUARE INCH OF ALL PIPES IN THE SYSTEM WILL ACT AS AN EXCHANGE SURFACE FOR THE CHILLER. IN OTHER WORDS, THE CHILLER WILL TRY TO AIR CONDITION THE FACTORY. THE ENERGY USED IN THIS WAY IS WASTED AND MIGHT LOWER THE ENERGY ABILITY OF THE CHILLER TO A POINT LOWER THAN THAT REQUIRED FOR THE MACHINE LOADS.

PIPE SIZING CHART

CHILLER MODEL	MINIMUM HEADER SIZE	MINIMUM DOWN RUNS
8200 - 8256	1-1/2”	¾”
8300 - 8306	2”	¾”

Note: On type “L” chillers, pipe size may be reduced for low flow applications. Consult Unitrol for sizing assistance.

Check the plumbing hookup diagram at the back of this book to do the following:

1. **MAKEUP WATER:** For chillers that do NOT have the 8001-01 manual refill option, install a water line to the **AUTO REFILL MAKEUP WATER** port. A ¼” pipe or hose is sufficient for

this purpose. This will be used to keep the internal water tank filled if there are any leaks in the outside water system. A float valve is provided in the water tank.

Because this same pipe will be used to circulate water to the machinery if the chiller is taken out of service, the pipe size should be at least 1-1/4". Install a TEE and shut off valve as shown in the plumbing diagram to allow the chiller to be isolated for service purposes.

2. **Y-STRAINER FILTER:** Install a valve on the short Y portion of this "Y" filter as shown in the plumbing diagram. This will allow easy flush out of dirt trapped in the filter without the need to turn off the system. It is not necessary to connect this valve to a drain.
3. Install the black "Y" filter supplied with this chiller to the 1" brass bulkhead marked **WATER RETURN**.

WARRANTY IS VOID IF THE Y-STRAINER WATER FILTER IS NOT INSTALLED ON THE CHILLER

4. Install a shutoff valve, C, on the input side of this "Y" filter to allow maintenance as shown on the plumbing diagram. Since this will be used only momentarily to flush out the strainer, it is not necessary to connect this valve output to a drain as the dirt can be blown into a bucket.
5. Install a TEE and second valve connected to a drain as shown on the plumbing diagram. This will allow use of the chiller on city water during major maintenance.
6. Connect a return pipe from the machinery being chilled to the input of the TEE of step 5 above as shown in the plumbing diagram.
7. Connect a valve to the black 1" bulkhead fitting marked **WATER OUT** as shown on the plumbing diagram.
8. Install a TEE to the other side of this valve with a valve between this TEE and a TEE from the water makeup line per the plumbing diagram.
9. Set outside water valves as follows: TURN ON VALVES #3, #4, and M. TURN OFF VALVES: #1, and #2
10. Turn water on and the tank should fill until the water float valve closes. Be sure that the fill point is below the overflow bulkhead fitting on the tank. Adjust as necessary for the maximum fill point without overflow. . **For chillers with the 8001-01 MANUAL WATER REFILL option, fill the tank until the water is up to the FULL level on the sight glass.**

FLOOD COOLING EXCHANGER OPTION:

If your chiller model has this option installed (/FC at end of model number), a water-to-water stainless exchanger is installed to cool an outside fluid loop using the internal refrigerated water.

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Connect a hose from the output of an outside sump pump set in the catchment tank to the 1” bulkhead marked **FLOOD IN**. Connect hose from the 1” bulkhead marked: **FLOOD OUT** to the flood nozzles aimed at the seam wheel.

INITIAL STARTUP

1. Turn the ON/OFF switch to OFF.
2. Turn the fused disconnect ON.
3. POWER UP PROCEDURE:
    a. Turn the main switch to the ON position momentarily while observing the back of the water.
    b. If the pump motor rotates **CLOCKWISE,** the system is now ready for use.
    c. If the pump motor rotates **COUNTERCLOCKWISE** as viewed from the rear of the motor, contact the Unitrol service department for assistance.
4. Turn the control switch back to the **ON** position. The temperature controller should turn on, and the water pump should start operating. Because you will be filling all of the outside pipes, it is possible that the water tank will drain down. If this happens, stop the chiller until the makeup valve has filled the tank. Continue to do this until the water tank remains full.

DO NOT ALLOW THE PUMP TO GO DRY. OPERATING A CHILLER PUMP WITHOUT AT LEAST 8” OF WATER DEPTH IN THE WATER TANK CAN BURN OUT THE PUMP SEALS.

SETTING TEMPERATURE CONTROLLER

NOTE: If this chiller has the 8001-03 DEW POINT PROTECTION option, go to page 20 for information on setting the temperature controller.

The temperature displayed on the temperature controller is the water tank temperature.

1. Push the **SEL** button on the TEMPERATURE CONTROLLER. The display will show **SV**.
2. Press the **SEL** button again and the SV value will be displayed.
3. Push the ▲ or ▼ to select the desired turn-on temperature for the chiller. Note that this chiller has been factory set to allow a minimum temperature of 55ºF.
4. Push and release the **SEL** button. This will lock in the new setting.
5. Then push the ▼ button and **SEL** button at the same time.
6. Release both buttons. The display will briefly show 00, and then the tank temperature.

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TEMPERATURE CONTROLLER OPERATION

1. When the water tank is at least 3ºF above the **SV** (customer set point), the compressor will start operating. At this time, a small red square light marked **OUT** located just above the **SEL** button on the controller will glow.
2. When the water tank temperature reaches the **SV** value, the compressor will turn off and the red **OUT** light will stop glowing.

BYPASSING CHILLER DURING SERVICE

The chiller can be inspected and adjusted with all exterior panels removed.

However if it is required that the chiller be taken off line, and water flow is still required, set the water valves (as shown on the plumbing diagram) as follows:

CONNECTING LOAD TO BUILDING LINE AND DRAIN:

TURN OFF VALVES: #3, #4, and M

TURN ON VALVES: #1 and #2

CONNECTING LOAD TO CHILLER:

TURN ON VALVES #3, #4, and M

TURN OFF VALVES: #1, and #2

If any problems are incurred during this installation, contact the Unitrol service department at 847-480-0115. Please have the model number and serial number ready.

MAINTENANCE
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DIAGNOSTIC LIGHTS

LOW WATER FLOW:

The WATER FLOW SAFETY SWITCH, located just inside the black WATER OUT bulkhead, is detecting water flowing through the evaporator of the chiller at a flow rate (gpm) *below* the setting on the WATER FLOW SAFETY SWITCH.

WHY THE LOW WATER FLOW SAFETY SWITCH IS IMPORTANT

If the water flowing through the evaporator (chilling component) of the refrigeration system is too low, the water deep in the evaporator can easily reach temperatures below freezing.

When this happens, the evaporator can eventually crack from the expanding ice. This will cause a break between the water system and the refrigeration Freon system destroying the evaporator.

When this happens, the Freon will blow out of the system through the water tank, and water will enter the refrigeration section. Permanent damage can easily occur to the compressor at this point.

DO NOT DEFEAT THE WATER FLOW SAFETY SWITCH!

When this red light glows, the compressor will not operate even if the tank temperature is higher than the **SV** value, but the water pump will continue operation. It can be caused by several conditions:

1. The water pump is not operating correctly. This can be caused by
    a. A motor failure on the pump
    b. An internal broken pump impeller
    c. A 3Ø pump motor operating in the incorrect rotation
2. A foreign object has been sucked into the water pump intake port (bulkhead at bottom of tank).
3. A problem with the MOTOR STARTER contactor K1.
    a. The overload on the water pump MOTOR STARTER K1 has tripped. The reset button on the overload can be pushed to reset the contactor. However the cause should be found and corrected. Otherwise this contactor will continue to trip. Tripping of the overload can be caused by one of the following conditions:
        i. The setting on the overload is too low. Check the pump motor nameplate for amperage and set the rotary switch on the overload to a value about 25% higher.
        ii. Contacts on contactor K1 are arched causing an imbalance of voltage, especially for 3Ø chillers.

b. Contacts on the motor starter are not closing due to a defective contactor or burned out contactor coil.

4. The flow in the machinery is not sufficient to satisfy the minimum setting of the water flow safety switch. Check to be sure that water valves and solenoid valves on the equipment being chilled are open. An internal bypass has been factory installed to allow even a minimum of outside flow.
5. Note that on models with the letter **L,** a much larger internal bypass has been installed to allow the chiller to operate with virtually no outside water flow.

LOW FREON FAULT:

The Freon pressure in the sealed refrigeration system has fallen below the setting on the LOW FREON safety switch. The water pump will continue to operate, but the refrigeration system will not turn on.

This is usually caused by a Freon leak in the system. A certified refrigeration technician can check the system, locate the Freon leak, repair and recharge the system.

A LOW FREON fault can sometimes clear by itself for a short time, but will come back rapidly. You may hear the compressor turning ON and OFF rapidly. In this case, turn the chiller off to prevent damage to the system and consult a certified refrigeration technician.

This problem can also be caused by a faulty expansion valve (TXV). This component controls the flow of Freon in the evaporator.

HIGH FREON FAULT:

The Freon pressure in the sealed refrigeration system has gone above the setting on the HIGH FREON safety switch. When this switch trips, the chiller will reset in 5 minutes or more.

This HIGH FREON FAULT can be caused by one of the following:

DIRTY AIR INTAKE FILTER: If the airflow across the condenser coil is below a minimum requirement, the ability for heat to be removed from this coil will be greatly reduced. The temperature of the Freon in this coil will continue to rise until the set pressure value has been exceeded. This filter should be cleaned with soapy water once per week for normal factory conditions, or more frequently for factories that have a large dust or grinding dust content in the air.

DIRTY CONDENSER COILS: If dirt has been trapped on the surfaces of the condenser coil's fins, the ability for these surfaces to transfer air to the passing air stream will be greatly reduced. See the maintenance section for coil cleaning directions.

LOW AIR FLOW ACROSS THE CONDENSER CAUSED BY INSTALLATION OF CHILLER TOO CLOSE TO A WALL: If the air intake (air intake filter) is less than 36" from a wall, or the air exhaust grill on the back of the chiller is less than 36" from a wall, air flow will be restricted and will reduce the ability of this air to remove heat from the condenser coil. The chiller has to be moved to eliminate this problem.

USE OF AN INTAKE AIR FILTER DURING EXTREMELY HOT DAYS: If the room temperature exceeds 90ºF, it is possible that the small reduction caused by even a clean intake air filter will

cause the system to overheat and trip the HIGH FREON safety switch. Remove the air filter and replace it when air temperature falls below 90ºF.

THE NEED FOR MORE AIR FLOW OVER THE CONDENSER COIL: In extreme cases of high room temperature and restricted air flow around the chiller, it might be necessary to use an additional fan to force air across the condenser coil. This can be done using a commercial fan blowing air into the front of the coil (where air filter is located), or by installing a factory fan booster kit. Consult the Unitrol service department on this.

LOW TANK WATER FAULT: This fault light is used only with option #8001-01 Manual Tank Water Refill. It will glow when the water level inside the water tank falls below the water level switch. When this happens, the water pump and the compressor will turn off. See page 17 for more information on this fault light..

PREVENTATIVE MAINTENANCE

ONLY A CERTIFIED REFRIGERATION TECHNICIAN SHOULD BE ALLOWED TO SERVICE THE SEALED REFRIGERATION SECTION OF THIS CHILLER

CLEAN THE CONDENSER: Inspect the evaporator coil fins (behind the air intake filter) every 3 months of operation. If there is evidence of dirt or grease buildup, clean the evaporator fins using a water hose from the outside. Flush as much of the trapped debris as possible from between the fins.

If there is too much buildup for reasonable cleaning, use a commercially available aluminum fin spray solvent such as Nonacid condenser coil cleaner, W.W. Grainger #5W403. Follow directions on the product label.

WATER TANK CLEANING: Remove the cover of the water tank once every 6 months and inspect to see if there is a large buildup of material in the water. Remove as much material as possible. Clean the water float.

OTHER MAINTENANCE:

Bearings on the water pump are sealed and do not require periodic oil or grease.

There are no other periodic service components in the system.

MAINTENANCE
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MAINTENANCE PARTS LIST

DIRECTION BOOK: 8000-50= Direction book

WATER COMPONENTS:

8000-14A=Water Flow safety switch, for 1-1/4" Tee
8000-21 = Water pump and motor, 230/460 3Ø, 2HP, for 8200, 8201, 8250, 8251
8000-21A = Water Pump seal kit, 2HP
8000-23 = Water pump and motor, 3HP, 230/460 3Ø, 3HP, for 8300, 8301
8000-23A = Water pump seal kit, 3HP
8000-24 = Water pump and motor, 575V, 2HP, for 8206, 8256
8000-25 = Water pump and motor, 575V, 3HP, for 8306
8000-30 = Water float valve, ¼"
8000-30A= Water float valve, ½" high flow
8000-40 = 15-gallon water tank with fittings. Specify chiller model
8000-45 = Water solenoid valve, 115V, for
8000-45A= Water solenoid valve coil only, 115V, for 8250, 8250L, 8300, 8300L, specify valve model number
8000-46 = Water solenoid valve, 230V, for 8251, 8251L, 8301, 8301L
8000-46A= Water solenoid valve coil only, 230V, for 8251, 8251L, 8301, 8301L, specify valve model number
8000-47 = Check valve

ELECTRICAL COMPONENTS:

8000-02A=Temperature controller, 115V. Check chiller to match voltage
8000-02B=Temperature controller, 220V. Check chiller to match voltage
8000-07A=ON/OFF switch, 2 position, SPST, for 8200, 8206, 8250, , 8256, 8300, 8306
8000=07B= ON/OFF switch, 2 position, DPST, for 8251, 8301,
8000-11 = 3-pole contactor, 115V, for compressor, 8200, 8206, 8250, 8256, 8300, 8306
8000-11A= 3-pole contactor, 230V, for compressor, 8201,8251, 8301
8000-12 = 3-pole contactor for water pump, 115V, for 8200, 8206, 8250, 8256, 8300, 8306
8000-12A =3-pole contactor for water pump, 230V, for 8201, 8251, 8251, 8301
8000-13A = water pump contactor overload relay, specify chiller model
8000-16 = Red panel neon, 115V, for 8200, 8206, 8250, 8256, 8300, 8306
8000-16A =Red panel neon, 230V, for 8201, 8251, 8301
8000-17 = 150VA transformer with fuse blocks and fuses, 8200, 8206, 8250, 8256, 8300, 8306

FILTERS:
8200FR = Washable air intake filter for 8200, 8201, and 8206, 36-1/4 X 49-3/4"
8300FR = Washable air intake filter for 8250, 8300, and 8306, 36-1/4" x 45-3/4"
8000-18 = Flushable intake water "Y" strainer, 1-1/4"

MAINTENANCE
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REFRIGERATION COMPONENTS:

Note: Unitrol will only sell refrigeration components to certified refrigeration technicians

COMPRESSORS:
80RF-16 = 460/3, 8200
80RF-17 = 230/3, 8201
80RF-17A=575V/3, 8206
80RF-18 = 480/3, 8250
80RF-19 = 230/3, 8251
80RF-19A=575V/3, 8256
80RF-20 = 480/3, 8300
80RF-21 = 230/3, 8301
80RF-21A=575V, 8306

EVAPORATORS:
80RF-37 = Brazed plate only, 8200, 8201, 8206
80RF-37A =Brazed plate assembly with expansion valve and equalizer tube brazed, 8200, 8201
80RF-38 = Brazed plate only, 8250, 8251, 8256
80RF-38A =Brazed plate assembly with expansion valve and equalizer tube brazed, 8250, 8251, 8256
80RF-39 = Brazed plate only, 8300, 8306
80RF-39A =Brazed plate assembly with expansion valve and equalizer tube brazed, 8300, 8306

EXPANSION VALVES:
80RF-47 = Expansion valve, 8200, 8201, 8206
80RF-48 = Expansion valve, 8250, 8251, 8256
80RF-49 = Expansion valve, 8300, 8301, 8306

REFRIGERATION LIQUID LINE FILTER/DRIER:
80RF-58 = Refrigeration liquid filter = Sealed, for standard installation
80RF-58A= Replicable core, for burn-out installation, includes 2 cores

REFRIGERATION SIGHT GLASS:
80RF-68 = Sight glass

PLUMBING HOOKUP DRAWING

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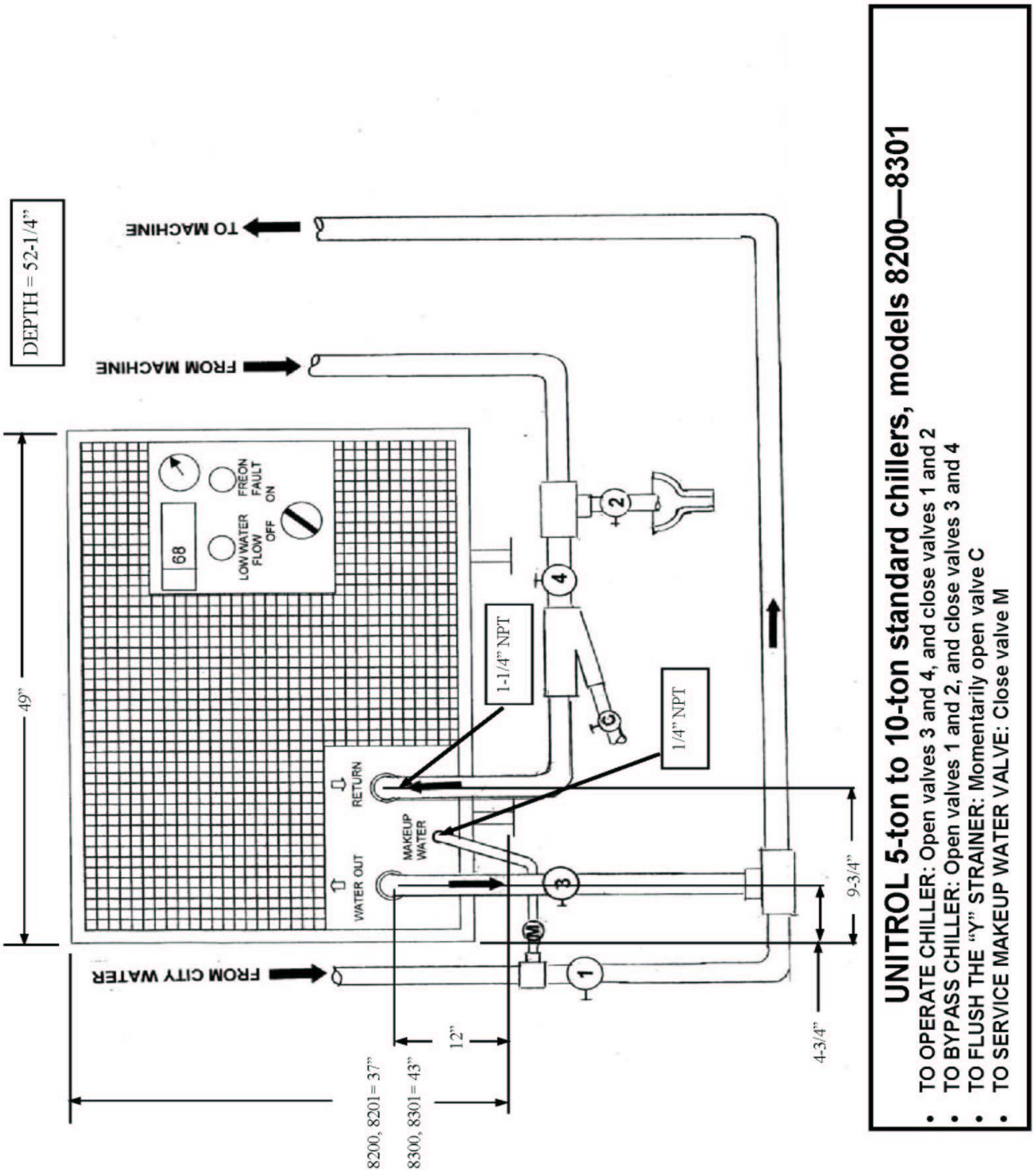

UNITROL 5-ton to 10-ton standard chillers, models 8200—8301

- TO OPERATE CHILLER: Open valves 3 and 4, and close valves 1 and 2
- TO BYPASS CHILLER: Open valves 1 and 2, and close valves 3 and 4
- TO FLUSH THE "Y" STRAINER: Momentarily open valve C
- TO SERVICE MAKEUP WATER VALVE: Close valve M

SCHEMATIC DRAWINGS
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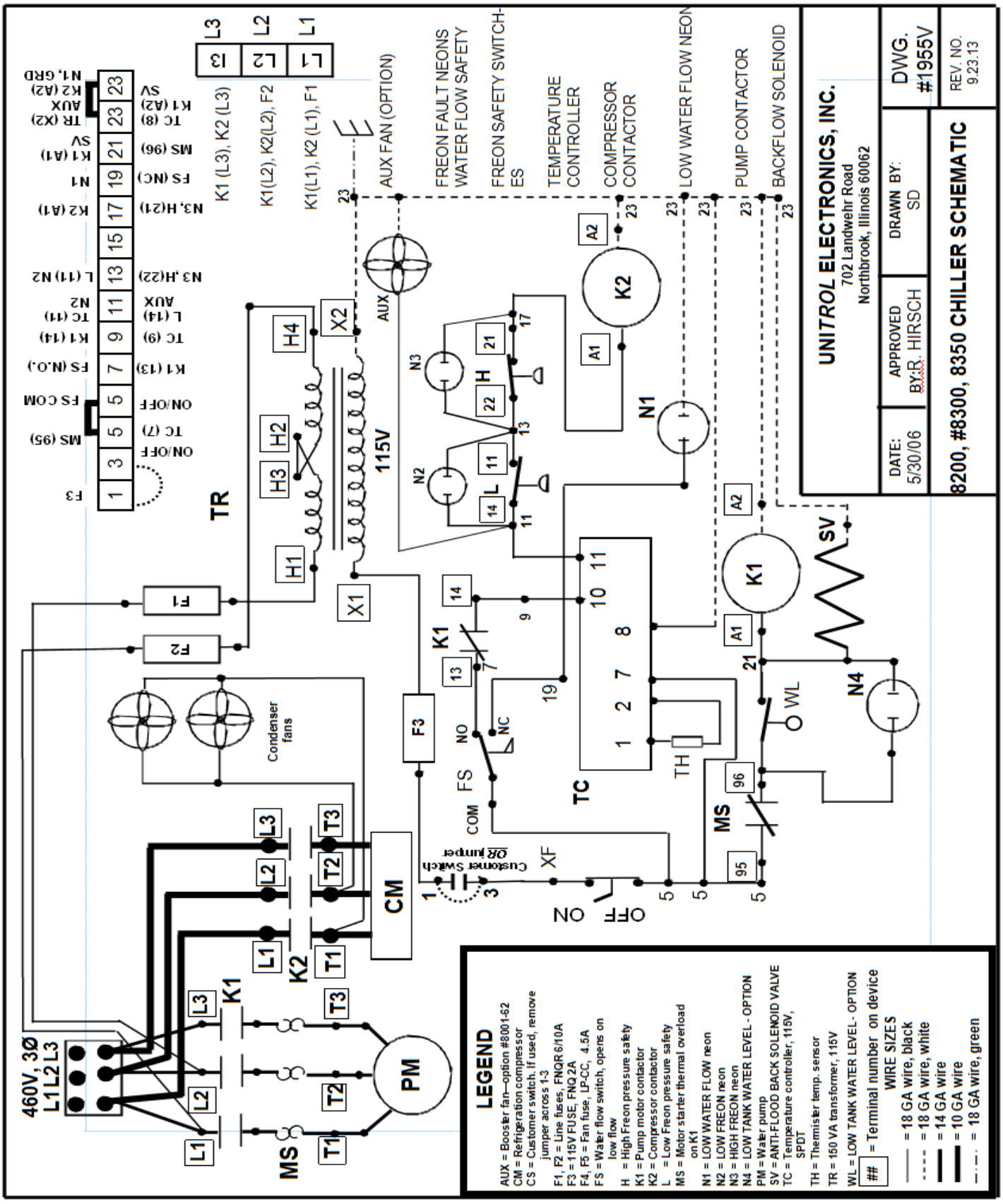

SCHEMATICS/1955V 8200, 8250, 8300, 480/3SCHEMATIC/pub

SCHEMATIC DRAWINGS

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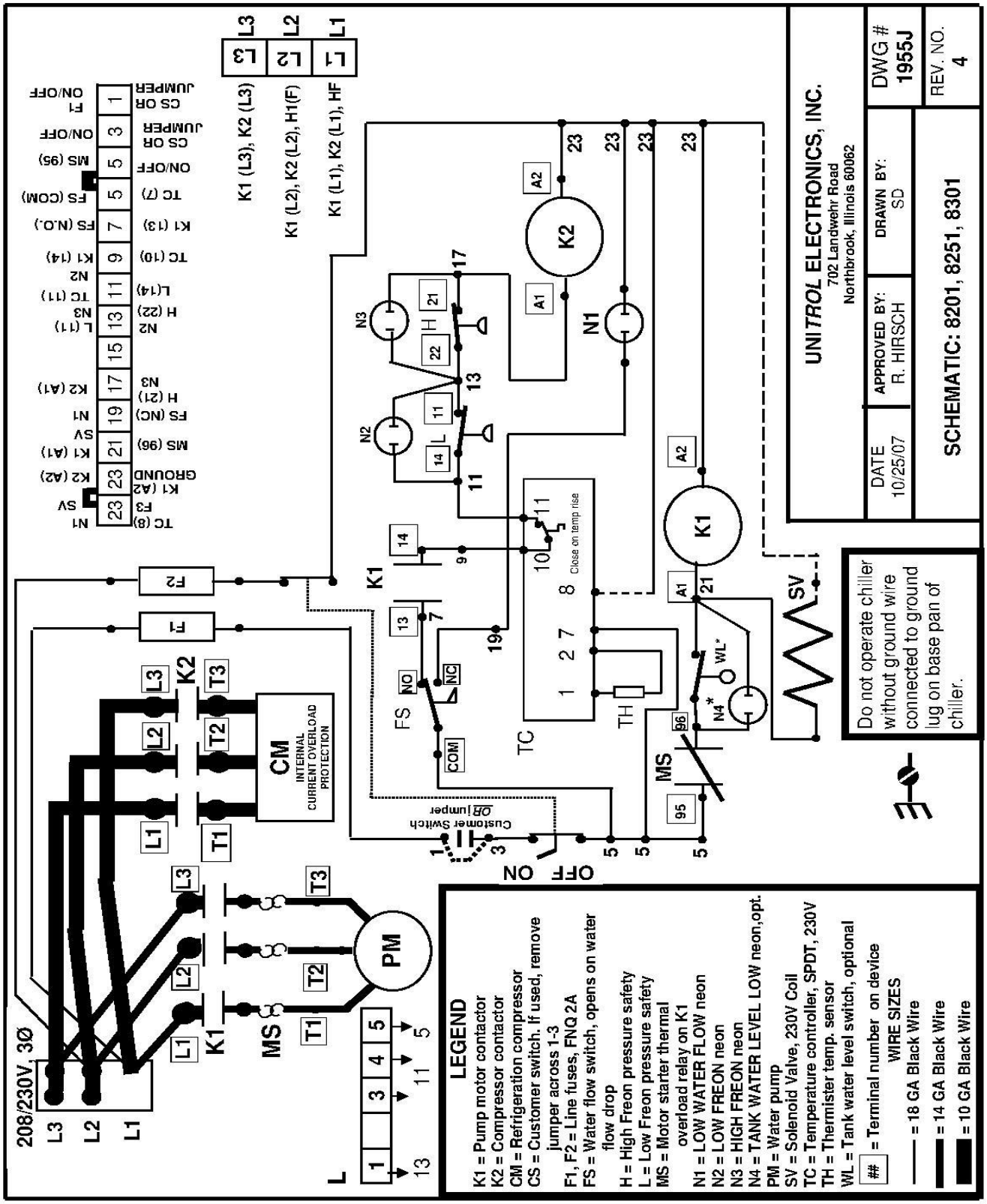

SCHEMATIC DRAWINGS

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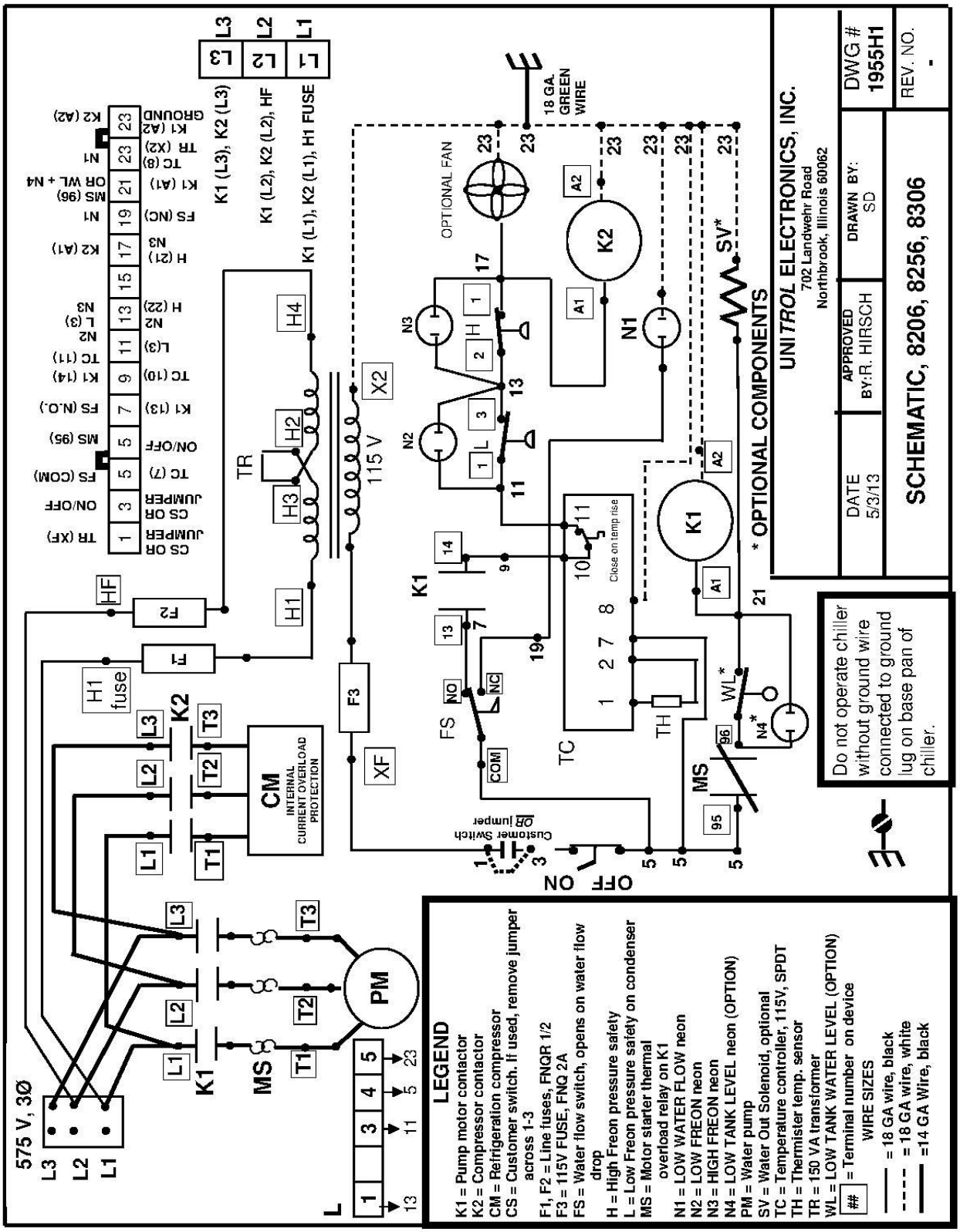

OPTIONS

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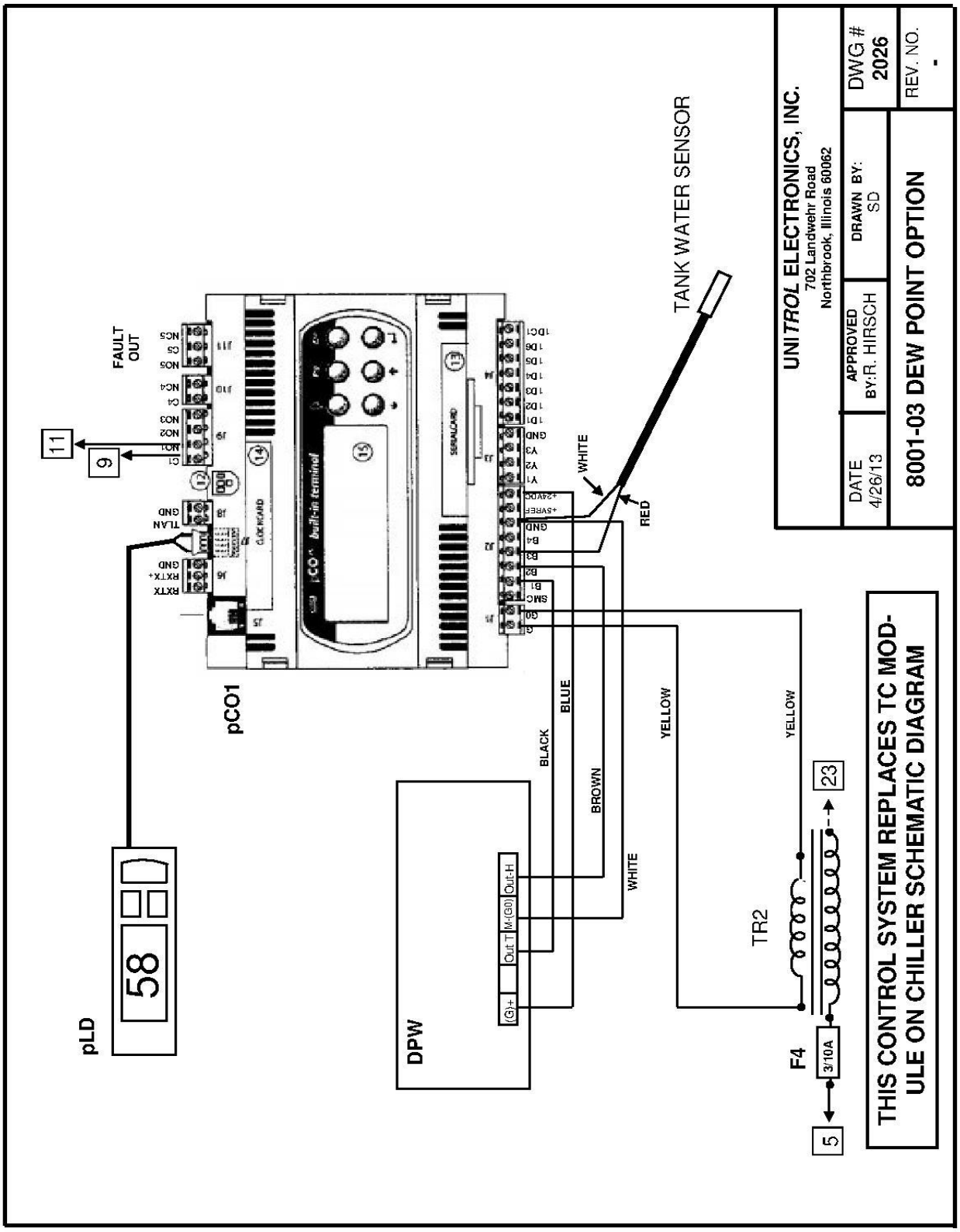


pub/schematics/2026 DEW POINT OPTION 8001-03

OPTIONS

MODEL 8200 - 8306

MANUAL TANK WATER REFILL OPTION #8001-01

FUNCTION: This option provides a tank refill port on the front of the chiller. Water or water/glycol mix is pored into this port to fill the internal water tank. Fill until the water reaches the FULL point on the chiller.

This option also adds a LOW WATER LEVEL float switch at the mid-point of the tank. This switch will open when water falls below the switch level. At that time,

1. The **LOW WATER TANK LEVEL** light will glow
2. The water pump will turn OFF
3. The refrigeration compressor will turn OFF

DEW POINT PROTECTION SYSTEM OPTION 8001-03

FUNCTION: This option prevents the tank temperature from being chiller below the DEW POINT of the factory air. Water that is below the dew point can cause condensation inside water-cooled welding transformers that can, over time, damage or destroy the welding transformer.

OPERATION: When the control is chilling the water, if the water temperature drops below the DEW POINT at that moment:

1. The “snow flake” light on the controller will stop flashing
2. The refrigeration compressor will stop operation
3. The display will alternately display the tank temperature and the code: **Dpl** (dew point lockout). This will continue until the tank temperature rises 3°F above the dew point temperature of the room.
4. If the set point (SP) that was entered into the controller is below the water temperature, the compressor will come on and chill the water down to the dew point.

EXAMPLE:

1. Controller is customer-set for 60°F (SP setting on the controller)
2. The DEW POINT of the room at that moment is 62°F
3. The water temperature in the tank is 66°F
4. The “snow flake” on the controller is flashing
5. The compressor is operating to chill the water
6. The water temperature in the tank now drops to 62°F (the DEW POINT)

7. The “snow flake” on the controller stops flashing
8. The compressor stops operation, but the water pump continues to operate
9. The display alternately shows the tank water temperature and

dP

TEMPERATURE CONTROL SYSTEM AND SETUP: This option uses a different temperature setting procedure than is used with this option is not installed on the chiller.

FIRST TURN ON: When the chiller is first turned on, the display will briefly show:

888

then

- -

Then for about 30 seconds

E O

Then

dPL

then

0 0

and finally the tank water temperature. Once this initial procedure has been completed, the compressor will turn on if the temperature is at least 3°F above the **SV** number as customer-set in the next section.

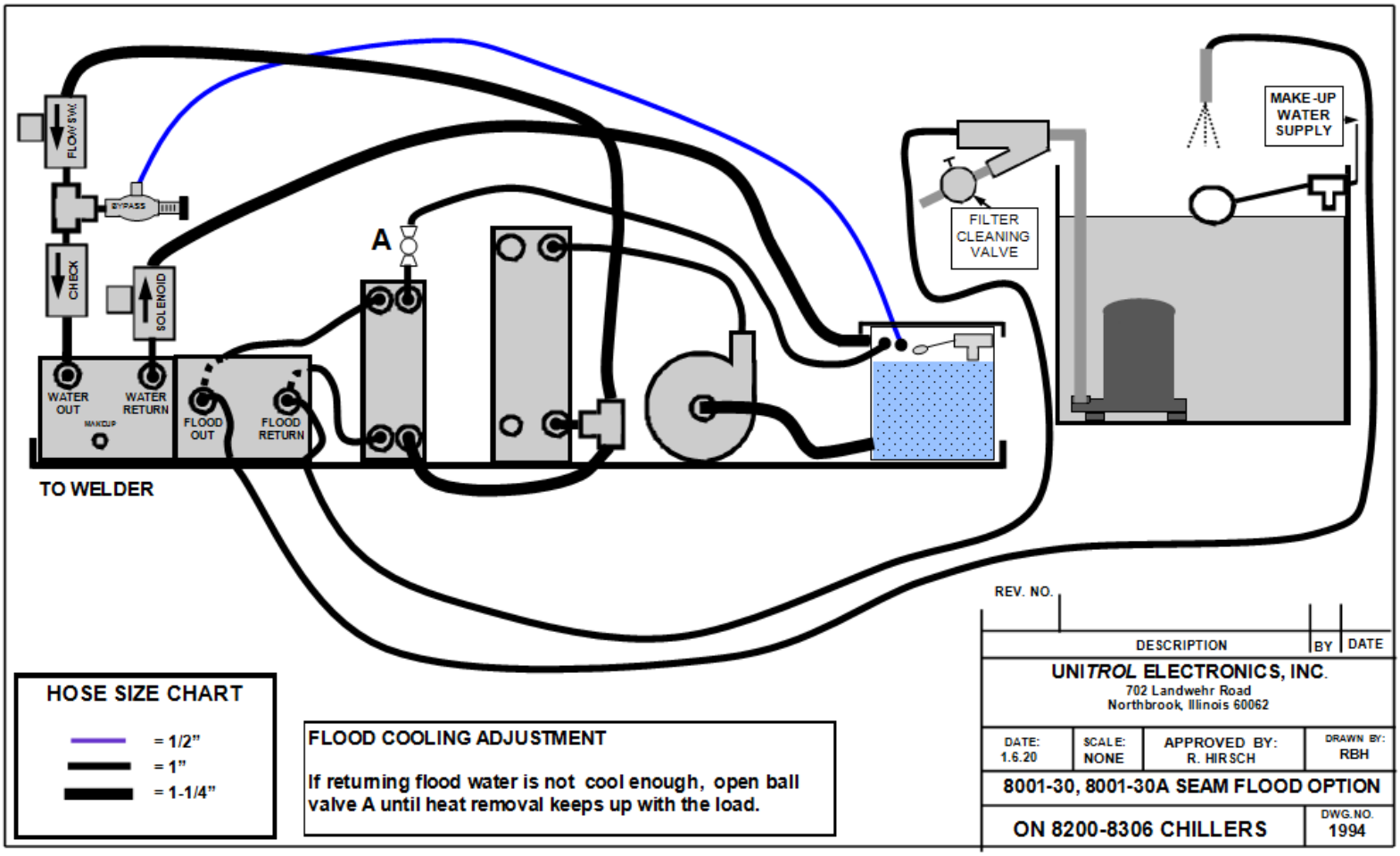
SETTING TEMPERATURE SET VALUE (SV):

1. Press the **SEL** button once on the control to display the current **SV** (target temperature). The compressor will operate if the water tank temperature is at least 3°F above this **SV** temperature and the water tank temperature is above the DEW POINT at that moment.
2. If you want to change this number, press the **SEL** button **a second time** and then use the ▲or ▼ button to increase or decrease the **SV** temperature.
3. When you are finished, press the **SEL** button to lock this number.
    a. NOTE: If you do not push the **SEL** button after changing the **SV** temperature value, the system will go back to the original **SV** temperature (will not change the target temperature). If you want to go back to display the tank water temperature,

press the ▲or ▼button **at the same time** until this tank water temperature is displayed.

4. If you want to view the DEW POINT (**d P),** relative humidity (**r H),** room temperature (**r T**), or tank water temperature (**t t**), push the ▼button until you see the symbol for the value you want to view. Then push the **SEL** button. When you are finished, push the ▲or ▼button **at the same time** until this tank water temperature is displayed.
5. Note that if you do not push the ▲or ▼button **at the same time,** the display will go back to the tank water temperature in about 5 minutes automatically.

FLOOD COOLING OPTION
8001-30(1.5 TON), 8001-30A (3.25 TON)



DRAWINGS/8001-30, 8001-30A.pub

MAINTENANCE RECORD

MODEL 8200 - 8306

DATE	PROBLEM	RESOLUTION

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