YORK
BY JOHNSON CONTROLS

Service Information

File In/With:	SI0285 New 514
Equipment Affected:	OptiView panels retrofitted on Trane, Carrier, McQuay, and YORK HT/OT High Pressure Monoshell Chillers

OptiView Panel Microboard Replacements

GENERAL

The Competitive OptiView control panel retrofit kits utilized the OptiView panel with the 031-01730-000 microboard from their introduction until mid-2011 when the microprocessor chip became unavailable. At that time software was developed that utilized the 031-02430-001 microboard. While developing the 2430 microboard software we also incorporated the functionality being performed by the IDC controller. This presents several options for 031-01730-000 board replacement.

Option 1: Microboard Replacement (IDC remains)

The 1730 microboard can be replaced by ordering the following parts.

- New 2430 microboard pre-programmed for your specific chiller manufacturer

  Carrier: 331-02430-702

  Trane: 331-02430-701

  McQuay: 331-02430-703

  York HT/OT High Pressure: 331-02430-704

In addition to the replacement of the microboard, you will need to accomplish the following tasks:

- Change the version 1.06 eprom to the version 1.02 eprom on the I/O board. The Frick version 1.02 eprom part number is 031-02535-001.
- Reconfigure the I/O

When this option is chosen the IDC controller will remain in place and continue to perform its original functions.

Work on this equipment should only be done by properly trained personnel who are qualified to work on this type of equipment. Failure to comply with this requirement could expose the worker, the equipment and the building and its inhabitants to the risk of injury or property damage.

The instructions on this service bulletin are written assuming the individual who will perform this work is a fully trained HVAC & R journeyman or equivalent, certified in refrigerant handling and recovery techniques, and knowledgeable with regard to electrical lock out/tag out procedures. The individual performing this work should be aware of and comply with all Johnson Controls, national, state and local safety and environmental regulations while carrying out this work. Before attempting to work on any equipment, the individual should be thoroughly familiar with the equipment by reading and understanding the associated service literature applicable to the equipment. If you do not have this literature, you may obtain it by contacting a Johnson Controls Service Office.

Should there be any question concerning any aspect of the tasks outlined in this bulletin, please consult a Johnson Controls Service Office prior to attempting the work. Please be aware that this information may be time sensitive and that Johnson Controls reserves the right to revise this information at any time. Be certain you are working with the latest information.

Product Technical Support

Option 2: Microboard Replacement and IDC Removal

As noted earlier, the IDC functionality is now incorporated into the competitive Optiview software. With the installation of the 031-02430-001 microboard and the supporting software, the IDC can be eliminated. Listed below are the steps required to upgrade from the IDC controller.

- Determine what functions are controlled by the IDC.
- Remove the IDC and label the output wires for future connection. All other wiring and relays associated with the IDC can be removed.
- The eprom on the Frick analog board must be changed from version 1.06 to version 1.02. The Frick version 1.02 eprom part number is 031-02535-001. This is the only change to the analog board.
- All of the yellow input relays and black output relays of the Frick digital board must be rearranged. (See the Figure 1, 2, or 3, depending upon application, for proper placement)
- All of input and output jumpers of the Frick digital board must be rearranged. (See Figure 1, 2, or 3, depending upon application, for proper placement)
- The output wires that were removed from the IDC can now be connected to the Frick digital board. (See Figure 1, 2, 3, or 4) depending upon application, for proper placement)

  Carrier chillers can be either 24VAC or 120 VAC

  Trane chillers are 120 VAC

- If there are no digital inputs the digital I/O board must be configured to provide power to the output modules. See Figure 4 for jumper location. Note that digital motor bearing temperature feature must be enabled on the OptiView Motor Temperature Screen.
- If the IDC controlled the liquid by-pass control valve, the wiring will now be placed on the OptiView I/O board (031-01743-000). See Figure 5 - “Liquid Valve Control” drawing for proper placement.

  Be sure to check that there is 24 VAC between TB-6 terminal 5 and TB-1 terminal 162.

Questions can be directed to Tom Brown at thomas.a.brown@jci.com or (717) 771-6359

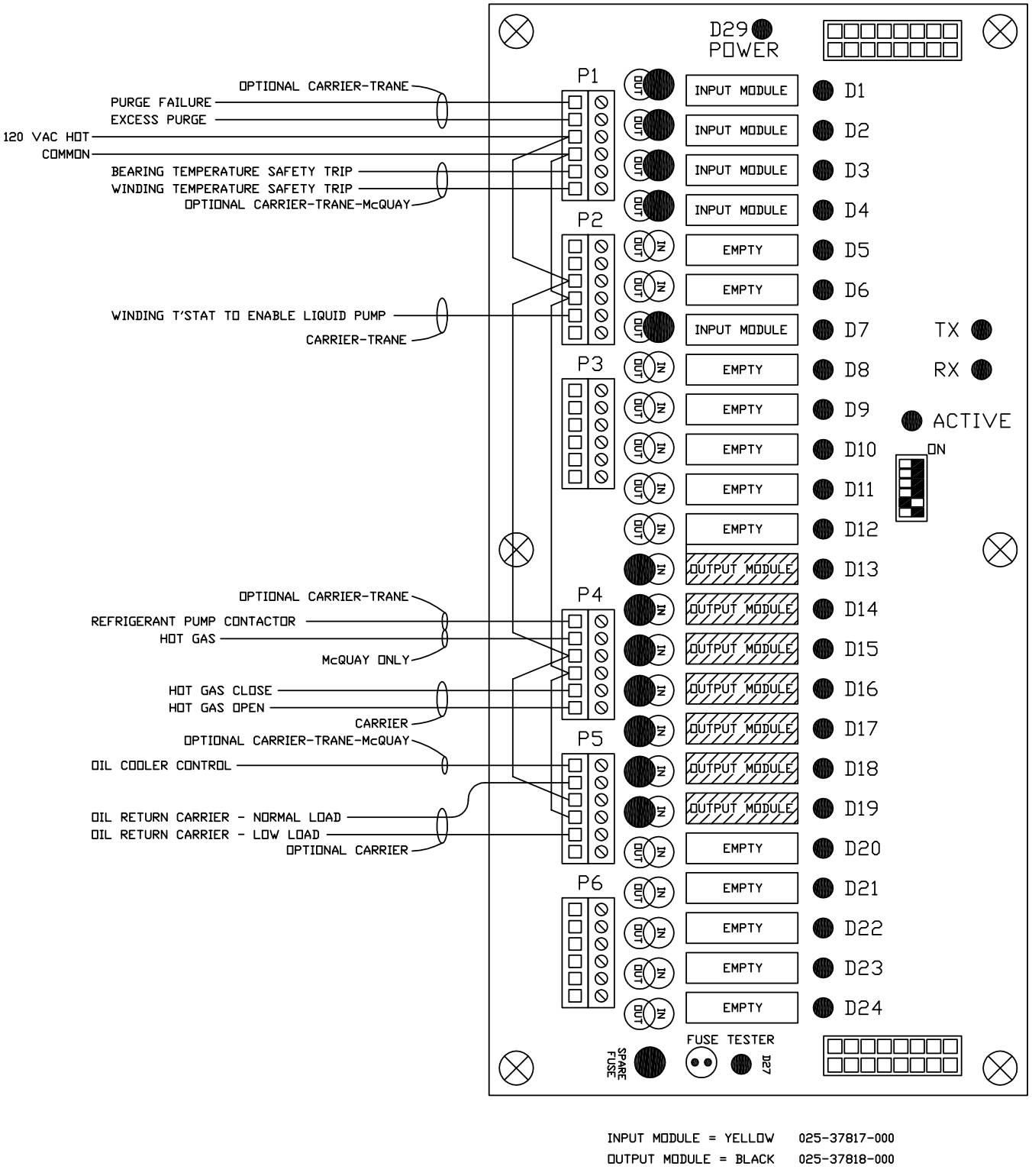
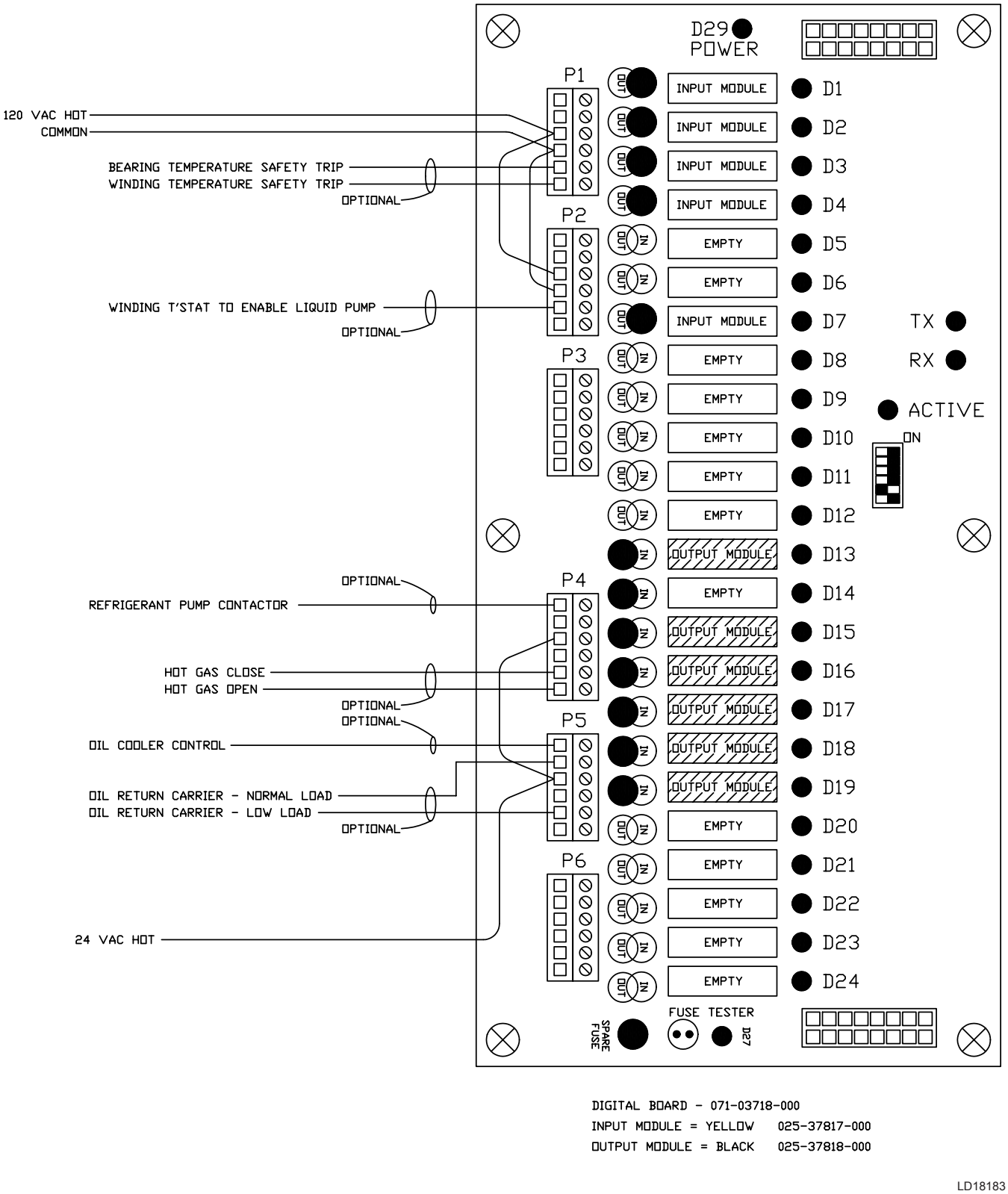


FIGURE 1 - I/O FOR 031-02430-001 MICROBOARD (TRANE)



DIGITAL BOARD - 071-03718-000
INPUT MODULE = YELLOW 025-37817-000
OUTPUT MODULE = BLACK 025-37818-000

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FIGURE 2 - DIGITAL I/O FOR 031-02430-001 MICROBOARD – 24 VOLT AC (CARRIER ONLY)

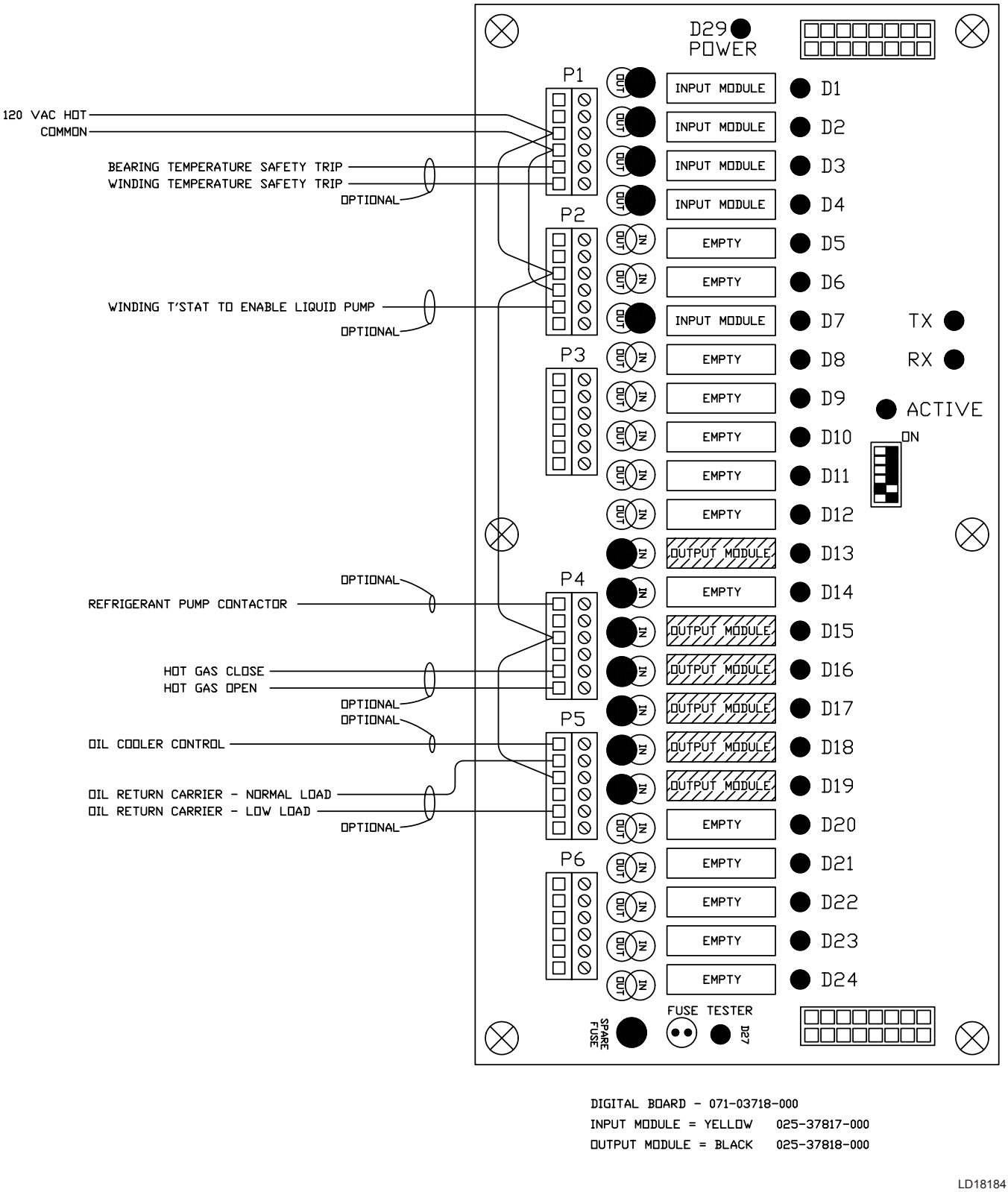
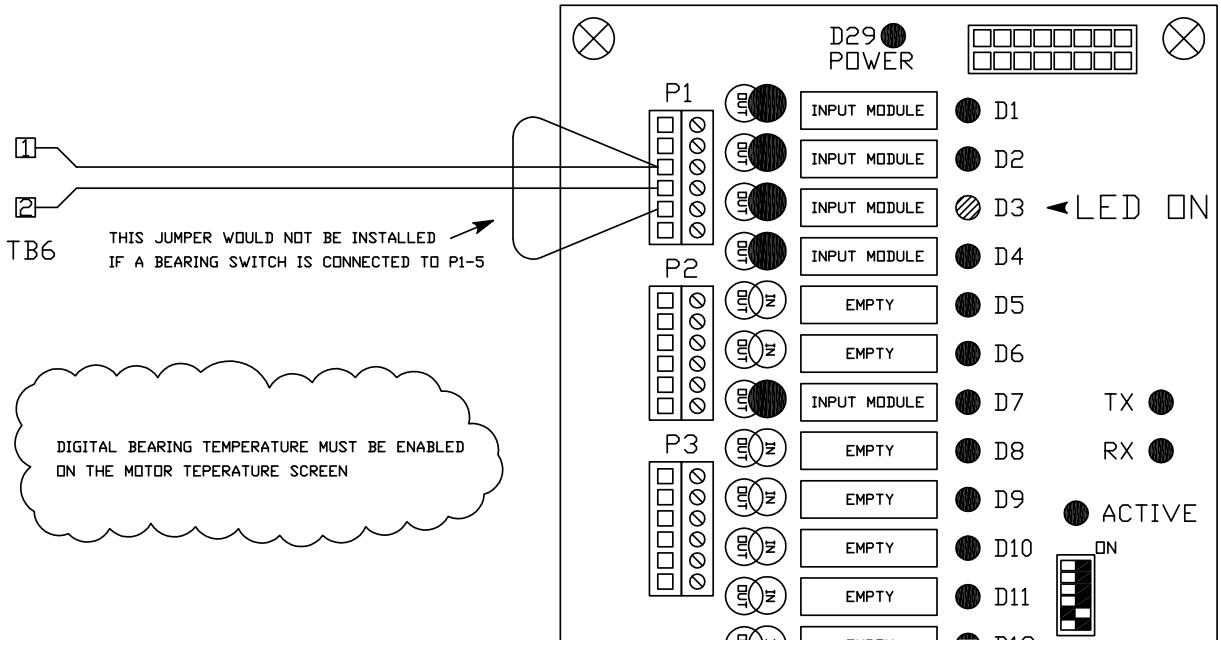


FIGURE 3 - DIGITAL I/O FOR 031-02430-001 MICROBOARD – 120 AC COILS



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(When no digital inputs are required and a digital outpoint exists;
i.e. hot gas valve, oil cooler, or refrigerant pump.)

FIGURE 4 - CONFIGURING THE DIGITAL I/O BOARD

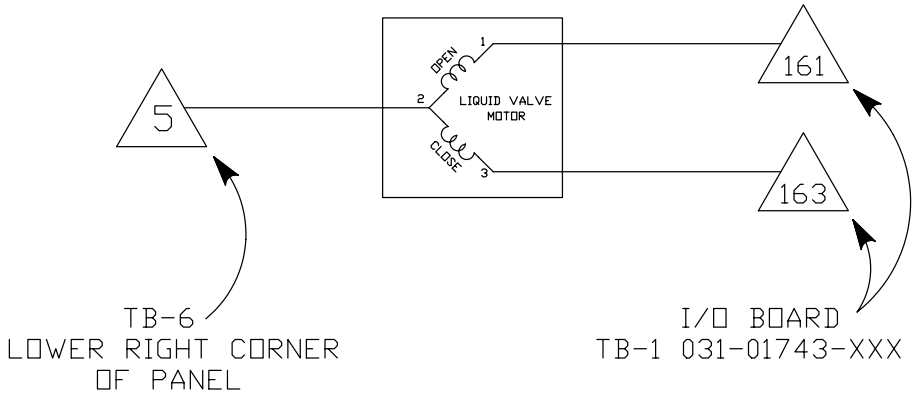

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FIGURE 5 - VARIABLE ORIFICE VALVE (WIRED THE SAME AS YT AND YK)