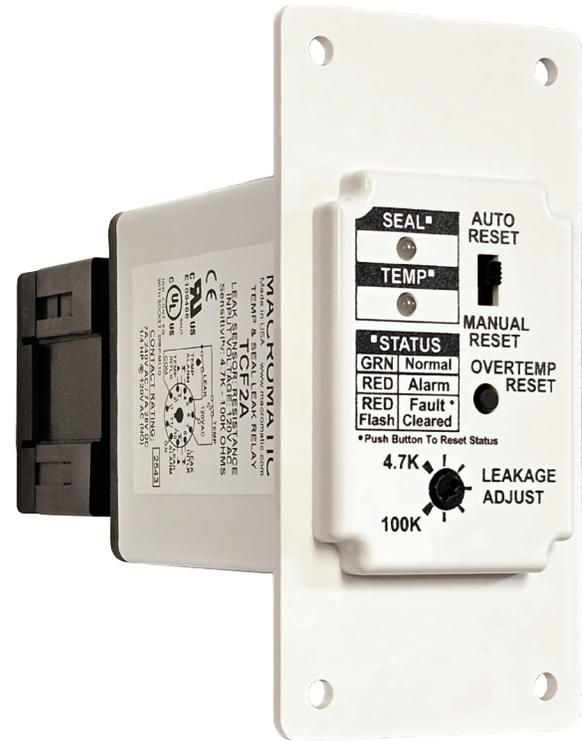


The proprietary MiniCAS pump monitoring system used in a FLYGT control panel makes it difficult to utilize existing controls once a Tsurumi pump is placed in that application.

The Tsurumi MiniCAS CONVERSION KIT, part# 20009466, utilizes a Pump Monitor Relay that will directly replace the MiniCAS relay and install in the existing relay base. This PMR will allow for connections to separate thermal over-temperature switches and/or moisture probes that are installed in the replacement pump.

Some small modifications must be done to ensure correct operation. See the following page for details.

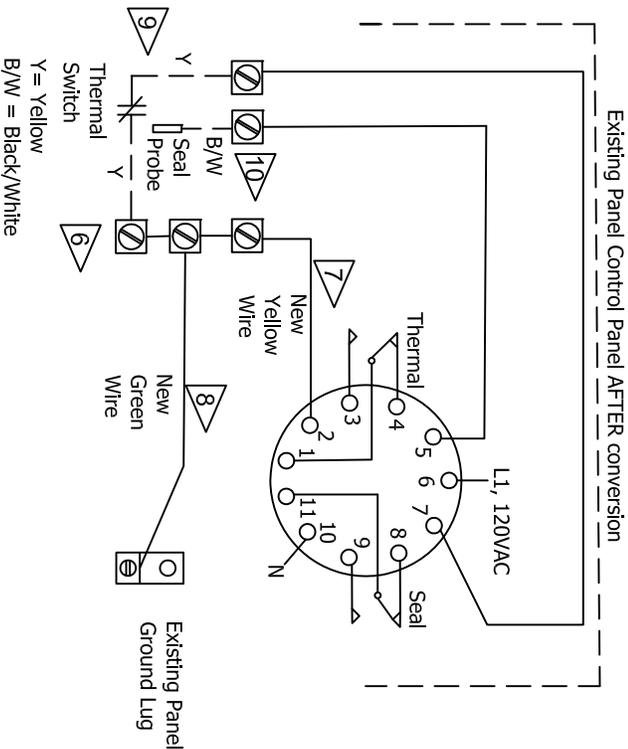
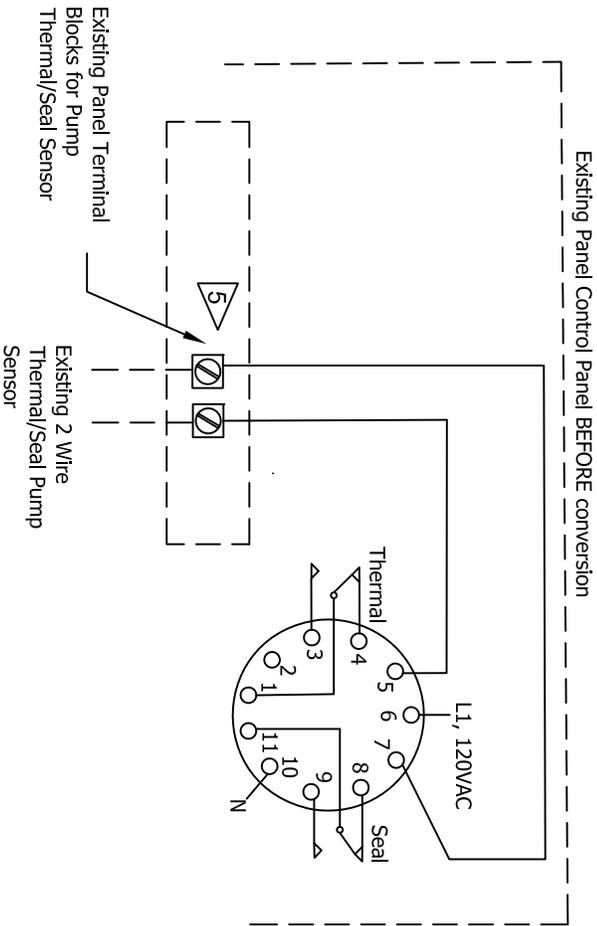


### INCLUDED PARTS

- Pump Monitor Relay, Macromatic, 120V, MiniCAS Conversion
- Terminal Block, PXC, 20A, PT 2,5-TWIN
- End Barrier Block, PXC, D-ST 2,5-TWIN
- End Barrier Block, PXC, 35-5
- Wire, 18 AWG, MTW, STR, YELLOW
- Wire, 18 AWG, MTW, STR, GREEN



- This instruction is for converting a MiniCAS Seal/Thermal Relay in an existing control panel with a Tsurumi Seal/Thermal relay so a Tsurumi Pump with a 2 wire normally closed thermal sensor and a single seal probe can be connected to an existing control panel that has a MiniCAS pump protection relay. This conversion will minimize any alterations to the existing panel so the existing panels seal and thermal indicator lights will function as normal.
- This instruction will work for either Inner Door mount or Backplate DIN rail installations and is Only for 120 VAC Relays - Verify before continuing.
- Warning! Disconnect all Power to the Control before installation. Failure to do so can cause serious injury or Death!
- Remove relay from original Socket (Do not disconnect any original wires from the socket base)
- Locate existing terminal blocks on DIN rail that the existing pump thermal/seal sensor is connected to. These terminals will be reused when connecting the Tsurumi Pump thermal/seal wires.
- On the DIN Rail where existing pump thermal/seal sensor terminal blocks are located, install new 3 port terminal block that will be needed to connect the Tsurumi thermal/seal wires. Note: It will most likely have to be installed at the end of the terminal block assembly in the existing panel. Slide the new 3 port terminal block flush with the last terminal block on the assembly and then snap on the included end stop to prevent then new 3 port terminal block from sliding.
- Install new "Yellow" wire into terminal 2 of the existing relay socket. Install the other end of the yellow wire into the top port of the 3 port terminal block. Note: Extra length wire is included, so cut to length and strip ends  $\frac{1}{4}$ "
- Install new "Green" wire into the 2nd port of the 3 port terminal block. Install the other end of the green wire into the existing panel ground lug. Note: Extra length wire is included, so cut to length and strip ends  $\frac{1}{4}$ "
- Connect the Tsurumi Thermal Sensor (yellow wires). One yellow wire into the bottom terminal of the 3 port terminal block and the other yellow wire into the "left" existing terminal block. Note: Verify the "left" existing terminal block is connected to relay socket terminal 7 (If NOT and it is connected to pin 5 then install the thermal switch yellow wire to the "right" existing terminal block)
- Connect the Tsurumi Seal probe (B/W) to the "right" existing terminal block. Note: Verify the "right" existing terminal block is connected to relay socket terminal 5 (If NOT and it is connected to pin 7, then install the seal probe to the "left" existing terminal block.)
- Test the installation. Turn on power - the panel thermal and seal indicator lights should be off. Remove one of the yellow Tsurumi Thermal sensor wires - Panel Thermal Indicator should Glow/Turn on. Reconnect yellow Tsurumi Thermal Sensor - Panel Thermal Indicator should turn off.
- Questions? Call Tsurumi Technical Support. 888-878-7864



Notes:

- WARNING! Electrical Shock Hazard! Disconnect power before servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.
- Install in accordance with National Electric Code, NFPA 70. Seal all boxes, fittings and conduit with appropriate seal devices to prevent moisture and gases from entering enclosure.
- Connect all grounds to a good ground.
- Dashed lines represent field wiring - Use minimum 60 deg C Copper Wire
- Branch Circuit Protection Device/Disconnect Means Field Provided.

Ident. Number:	----
Part Number:	20009466
Quote Number:	N/a
Drawn By:	B. Klabunde
Checked By:	J. Sonnier
Date:	2-3-2021
Revision Level:	001

Page Notes:

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Sheet Description:

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Sheet No:

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OR

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