

# INSTRUCTION SHEET

## 3-Phase Sensing Wire Upgrade Power Zone® 410 Kit

Model G0074120

Intended for 240-480 Volt RTS Switches

### **⚠ DANGER**

Automatic start-up. Disconnect utility power and render unit inoperable before working on unit. Failure to do so will result in death or serious injury.

(000191)



### **⚠ WARNING**

Consult Manual. Read and understand manual completely before using product. Failure to completely understand manual and product could result in death or serious injury. (000100a)

### **⚠ WARNING**

Equipment damage. Only qualified service personnel may install, operate, and maintain this equipment. Failure to follow proper installation requirements could result in death, serious injury, and equipment or property damage. (000182a)

Table 1 - Applicable Models

RTSN100K3	RTSN600K3
RTSN200K3	RTSN800K3
RTSN400K3	RTSN100R3
RTSW100K3	RTSN200R3
RTSW200K3	RTSN400R3

Table 2 - Contents of Kit G0074120

Part Number	Description	Qty.
073590A	FUSE 5A X BUSS	1
0D3587	DECAL FUSE REPLACEMENT	1
0G9294	SCREW HHSD #8-32 X 1/2	1
A0003084227	WIRE N3 TO FUSE WHT/BLK	1
A0003295722	WIRE N2D PM4 TO F2 WHT/BLK	1
A0003447297	DECAL N3 UTILITY 3 CONNECTION	1
A0003447300	DECAL CONTAINS PHASE SENSE KIT	3

Table 2 - Contents of Kit G0074120

A0003748887	WIRE N1C PM3 TO F1 WHT/BLK	1
A0003748957	WIRE N3A F7 TO TB3 WHT/BLK	1
G028739	TIE WRAP UL 3.9 X10 NATL	20
G073591	FUSEBLOCK 30A 600V 1POS	1

## Preparing for Installation

### **⚠ DANGER**

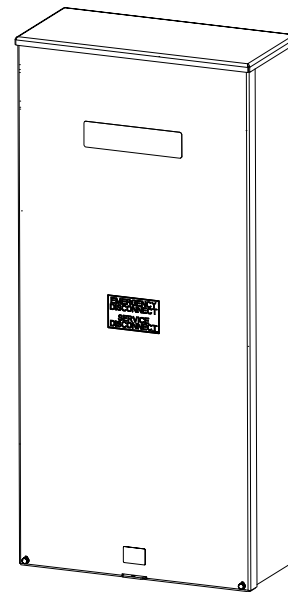
Automatic start-up. Disconnect utility power and render unit inoperable before working on unit. Failure to do so will result in death or serious injury.

(000191)

After de-energizing the unit, open enclosure according to the owner's manual.

## Installing 3-Phase Sensing Wire Upgrade Power Zone 410 Kit

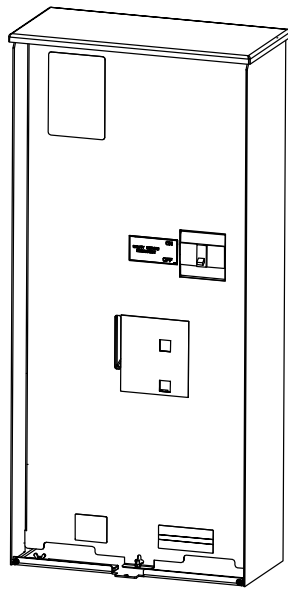
1. Disconnect utility, or turn service circuit breaker OFF, to disconnect all power to transfer switch.



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Figure 1. 3-Phase Automatic Transfer Switch  
(RTSW100K3 Shown)

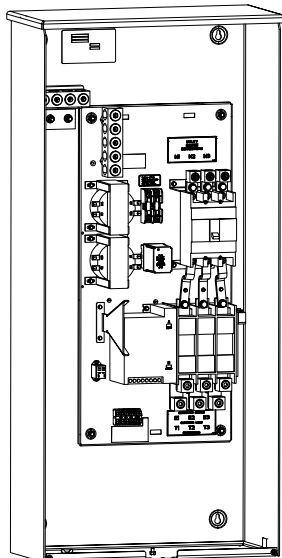
2. Verify back-up generation is de-activated.
3. See [Figure 2](#). Remove front cover and inner dead front panel.



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**Figure 2. Remove Front Cover**

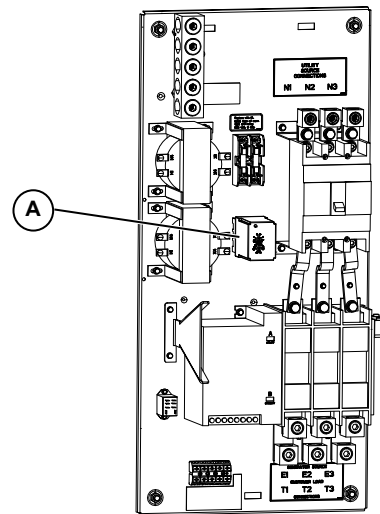
4. Locate a mounting spot for the provided fuse block spot close to the existing fuses on the inner sub-plate.
  - a. Verify the provided N3 and N3A wire lengths will reach the terminals of the fuseblock from the customer terminal block and the power monitor base.
5. Use the provided self-drilling screw (0G9294) to mount provided fuse block (G073591) to the back plate.
6. Apply decal replacement label next to fuse block.



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**Figure 3. Locate Fuse Block Mounting Location**

7. See [Figure 4](#). Remove power monitoring device (A); it will not be used when the switch is paired with Power Zone 410. Firmly pull toward user until power monitor unseats from the mounting base terminal.



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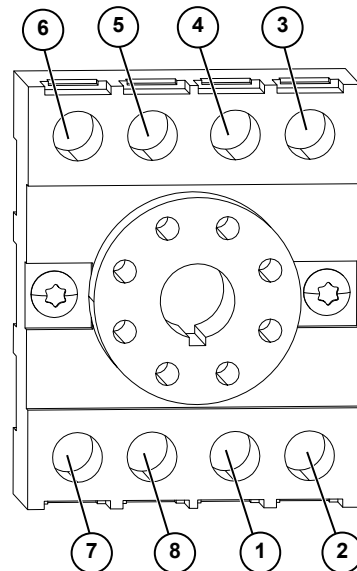
**Figure 4. Power Monitoring Device**

8. See [Wiring Diagram—Original Wiring Diagram](#). Loosen and remove wire N2B coming out of Fuse 2 and leading to X4 of the transformer TR1.

**NOTE:** N2B wire will NOT be reused.

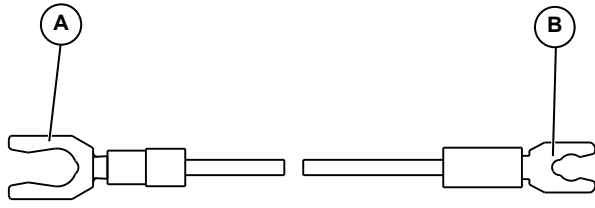
**NOTE:** Terminal designations are located on the plastic power monitor mounting base. Designations will be visible once the power monitor is removed.

9. See [Figure 5](#). Loosen Terminal 3, 4, 5, and 8 of the power monitor base.



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**Figure 5. Power Monitoring Base**



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**Figure 6. Installation Wire Example**

10. See [Wiring Diagram—After Installing Phase Sense Sense Kit](#). Remove the original N1C wire from Terminal 8 of the power monitor base to Fuse 1. Install the longer, provided N1C wire from Terminal 3 of the power monitor base to Fuse 1.

**NOTE:** There will be two wires connected to Terminal 3.

11. See [Figure 6](#). Install the provided wire with N2D printed on the insulation.
  - a. Connect the large snap spade connector (A) to one side of the fuse block (F2).
  - b. Connect the small snap spade connector (B) to Terminal 4 of the power monitor.
  - c. Tighten both connections.

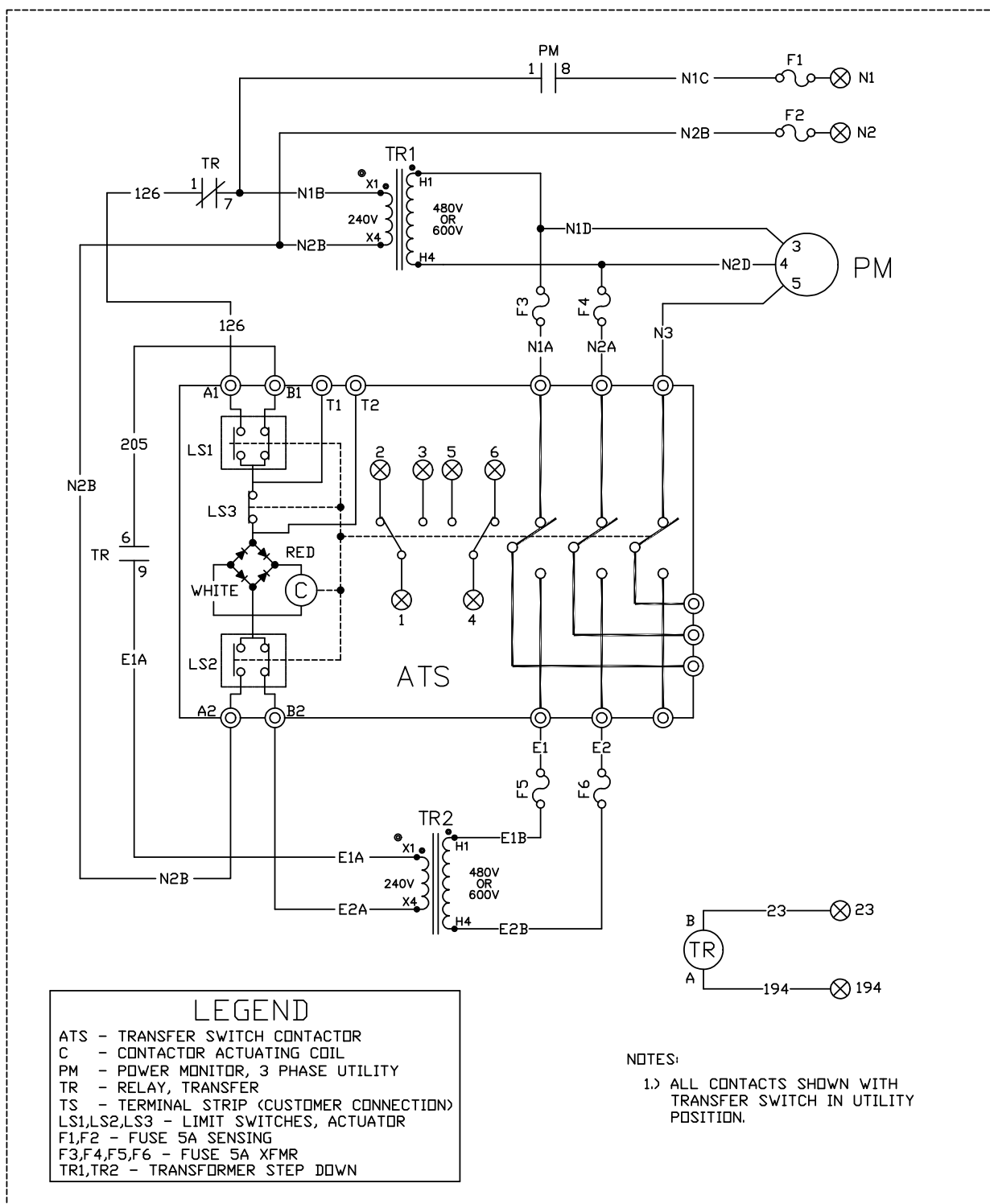
**NOTE:** There will be two wires connected to Terminal 4.

12. See [Figure 6](#). Install the provided wire with N3 printed on the insulation.
  - a. Connect the large snap spade connector (A) to the same side of the newly installed fuse block (F7) as the N2D wire.
  - b. Install the smaller snap spade connector (B) to Terminal 5 of the power monitor base. There will be a total of two wires connected to Terminal 5.
  - c. Tighten both connections.
12. See [Figure 6](#). Install the wire with N3A printed on the insulation.
  - a. Connect the large snap spade connector (A) to the remaining open terminal on the newly installed fuse block (F7).
  - b. Install the small snap spade side (B) to the middle connector in the customer connect terminal block.
  - c. Tighten both connections.

13. Apply label with "Utility 3" next to Terminal 3 (see [Wiring Diagram—After Installing Phase Sense Kit](#) of the customer connection terminal block.
14. Apply all three phase sense kit decals to the front cover, inner panel, and switch mounting plate.
15. Install provided 5 amp fuse into new the fuseblock.
16. Assemble transfer switch panels.
17. Test switch functions per the transfer switch owner's manual.

# Schematic Diagram—Original Wiring Schematic

## SCHEMATIC – DIAGRAM

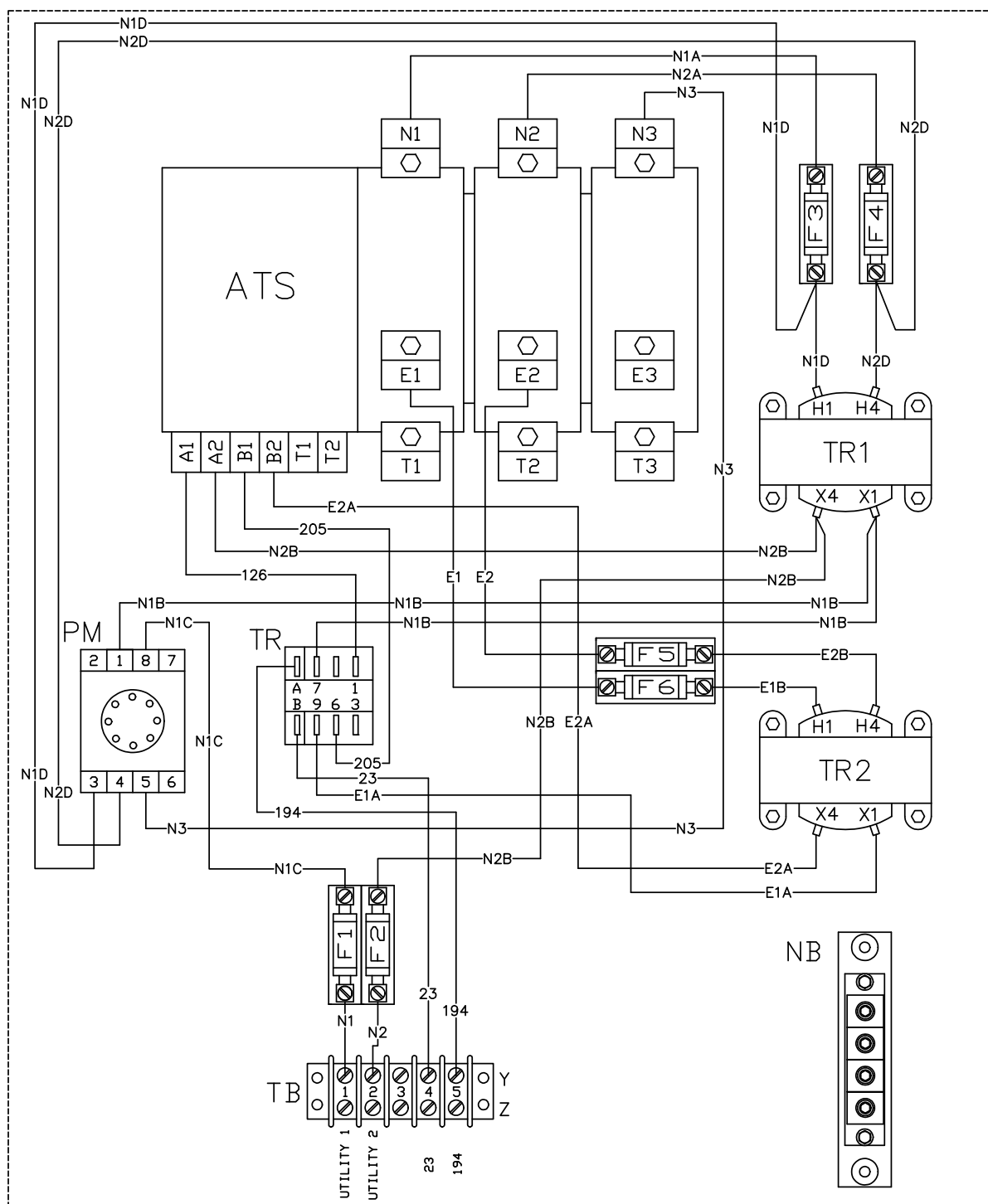


REVISION: "A"  
DATE: 09/24/10

SCHEMATIC/WIRING - DIAGRAM  
400 AMP 480-VAC  
DRAWING #: 0J1777

## Wiring Diagram—Original Wiring Diagram

## WIRING – DIAGRAM

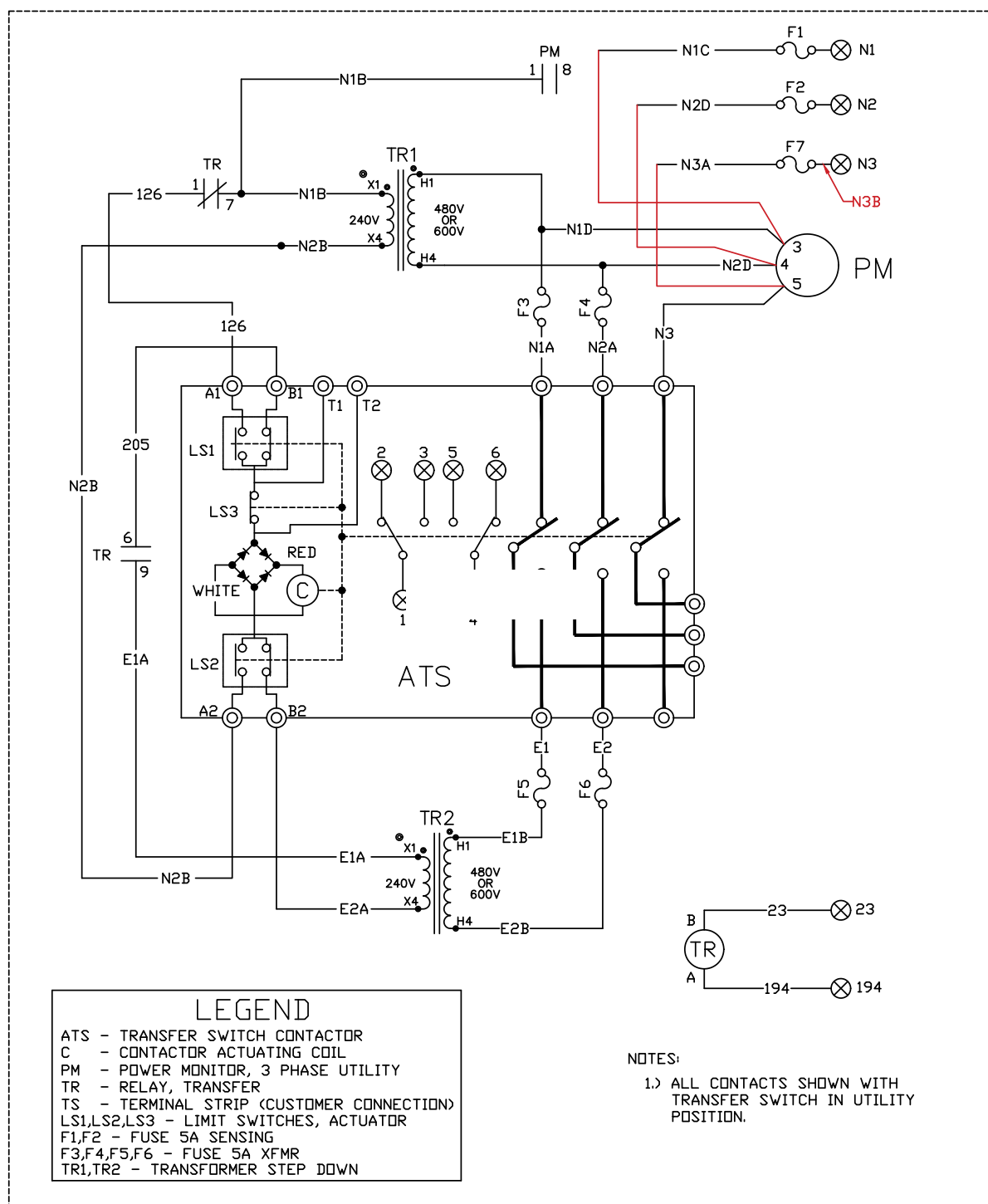


**REVISION: "A"**  
**DATE: 09/24/10**

**SCHEMATIC/WIRING - DIAGRAM**  
**400 AMP 480-VAC**  
**DRAWING #: 0J1777**

# Schematic Diagram—After Installing Phase Sense Kit

## SCHEMATIC – DIAGRAM

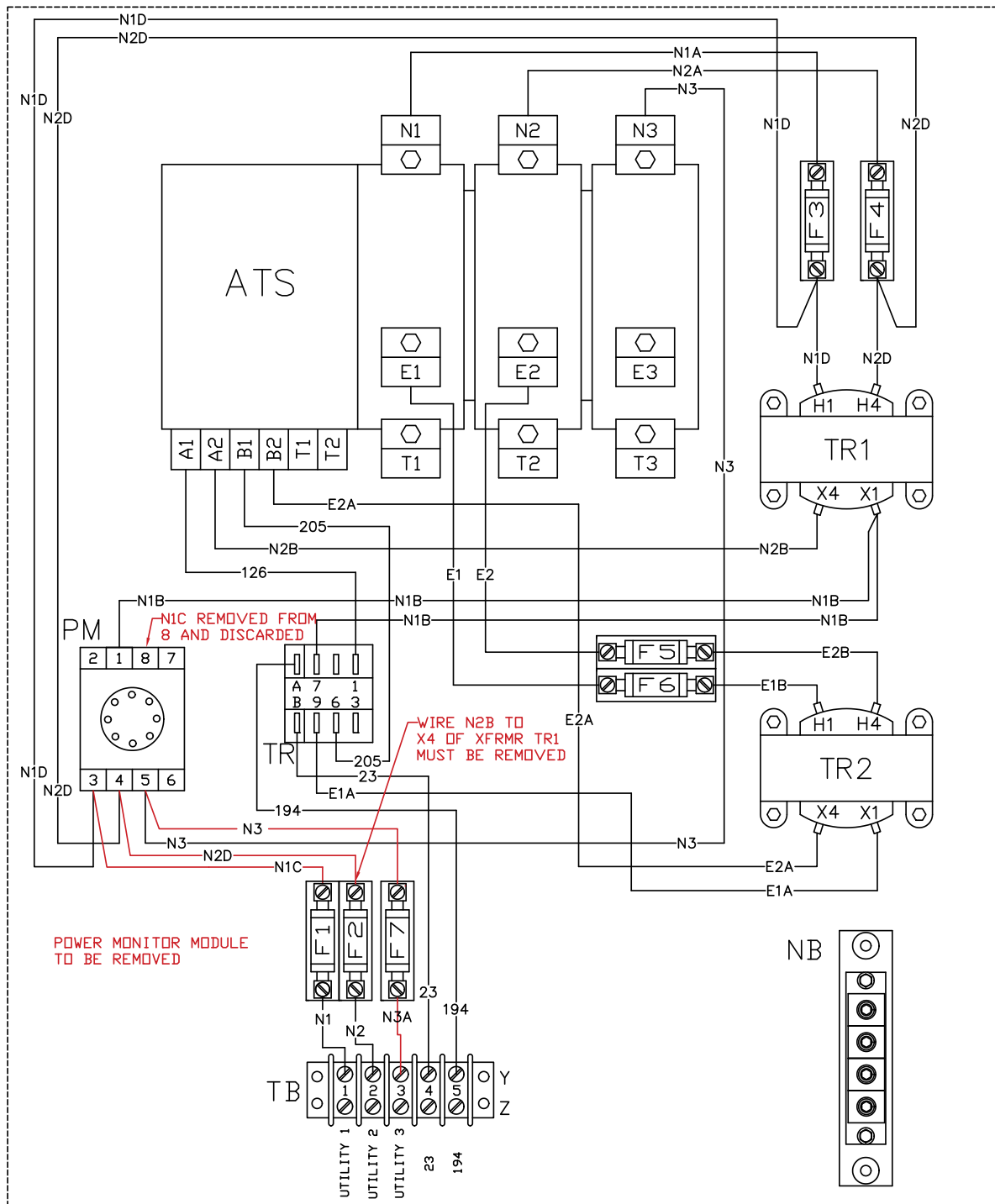


REVISION: "A"  
Date: 09/24/10

SCHEMATIC/WIRING - DIAGRAM  
400 AMP 480-VAC with Phase Sense Kit Installed  
DRAWING #: 0J1777

# Wiring Diagram—After Installing Phase Sense Kit

## WIRING – DIAGRAM



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SCHEMATIC/WIRING - DIAGRAM  
400 AMP 480-VAC with Phase Sense Kit Installed  
DRAWING #: 0J1777

Part No. A0003277957 Rev A 12/01/2022

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