

THERMAL SWITCH KIT PL-79900  
INSTALLATION INSTRUCTIONS

ACME TRANSFORMER THERMAL SWITCH KITS ARE DESIGNED FOR USE WITH SINGLE AND THREE PHASE DRIVE ISOLATION AND DISTRIBUTION TRANSFORMERS. THERMAL SWITCH KITS ARE AVAILABLE FOR ONE OR THREE SENSOR SYSTEM.

THERMAL SENSORS CAN BE FIELD OR FACTORY INSTALLED IN THE TRANSFORMER WINDING DUCTS TO DETECT ABNORMAL TEMPERATURES.

THE THERMAL SENSORS ARE A NORMALLY CLOSED CONTACT THAT OPENS AT  $200^{\circ}\text{C} \pm 10^{\circ}\text{C}$  AND HAS A CURRENT CAPACITY OF 5 AMPS @ 120V OR 2.5 AMPS @ 240V. THIS CONTACT CAN ACTIVATE ANY NUMBER OF DIFFERENT TYPES OF ALARMS OR MECHANISMS THAT COULD WARN OF A POTENTIAL CATASTROPHIC FAILURE.

THERMAL SWITCH KIT PL-79900

SINGLE SENSOR SYSTEM

1. REMOVE THE YELLOW-BLUE EPOXY RIBBON FROM WRAP AND KNEAD UNTIL A DEEP GREEN COLOR IS OBTAINED.

CAUTION: MAY IRRITATE SENSITIVE SKIN. CONTAINS EPOXY AND AMINE RESINS. WASH HANDS AFTER USE.  
KEEP OUT OF REACH OF CHILDREN.

NOTE: EPOXY SHOULD BE USED WITHIN 30 MINUTES AFTER KNEADING AS IT WILL BEGIN TO HARDEN.

2. APPLY A 1/16" THICK LAYER OF EPOXY TO BOTTOM OF TERMINAL BLOCK. CLEAN AND DRY MOUNTING SURFACE. (SEE CHART AND ILLUSTRATION ON PAGE 2 FOR MOUNTING SURFACE LOCATION). MOUNT TERMINAL BLOCK BY PRESSING DOWN FIRMLY ON SURFACE.

KVA	MOUNTING POSITION	ILLUSTRATION
27.0-118.0	BOTTOM OF THE CASE	FIGURE 1
145-750	TOP FLANGE OF THE CORE BRACKET	FIGURE 2

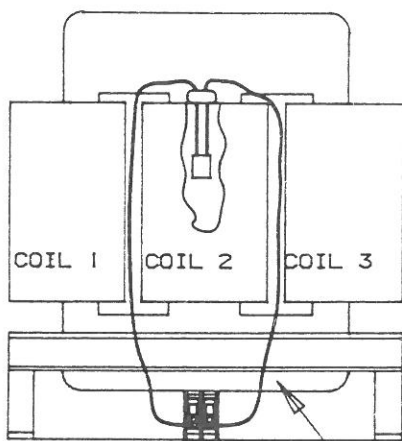


FIGURE "1"

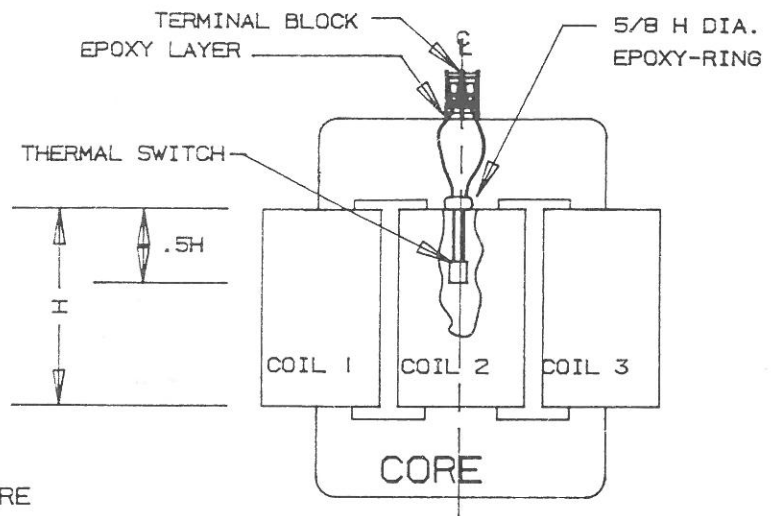
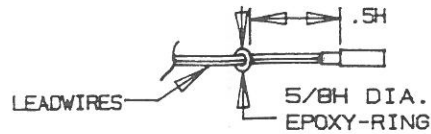


FIGURE "2"

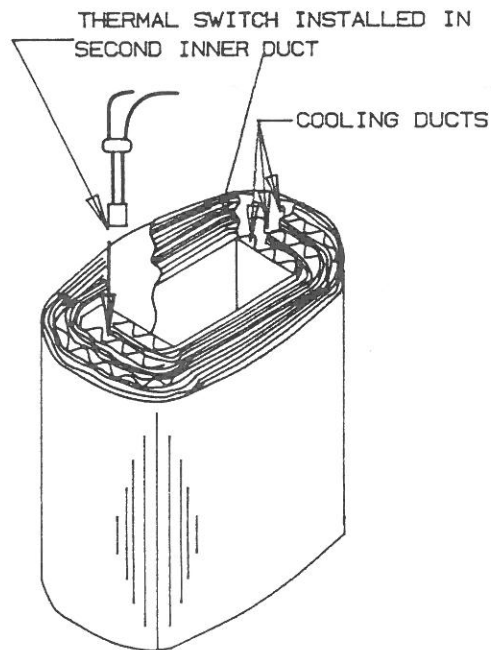
CORE  
BOTTOM OF THE CASE

3. USING SENSOR AS A GUIDE, MEASURE 1/2 THE COIL HEIGHT AND MARK THIS POINT ON THE THERMAL SENSOR LEADWIRE WITH A RING OF EPOXY. THIS WILL ACT AS A GUIDE FOR INSERTION. SEE DETAIL "A"



DETAIL "A"

4. STARTING AT THE CORE, COUNT OUT TO THE SECOND COOLING DUCT, INSERT THE SENSOR IN THE COOLING DUCT TO THE EPOXY RING. <sup>1</sup> THE EPOXY RING WILL BE AT THE TOP OF THE COIL. ALL THERMAL SENSORS ARE TO BE INSERTED ONLY INTO THE TOP OF THE COIL. SEE DETAIL "B".



DETAIL "B"

<sup>1</sup> THREE PHASE UNITS: DROP SENSOR IN CENTER WINDING.  
SINGLE PHASE UNITS: DROP SENSOR IN ANY COIL.

5. TAKE THE STRIPPED END OF THE LEADWIRE AND INSERT EACH LEADWIRE INTO THE TERMINALS OF THE TERMINAL BLOCK.

NOTE: USE TIE WRAPS TO CONSOLIDATE THE LEADS INTO ONE PATH TO THE TERMINAL BLOCK. SEE FIGURE "3".

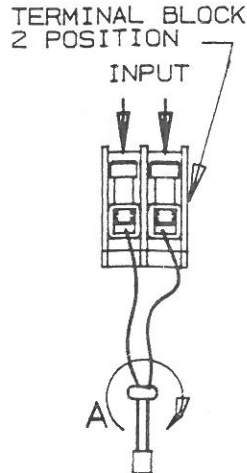


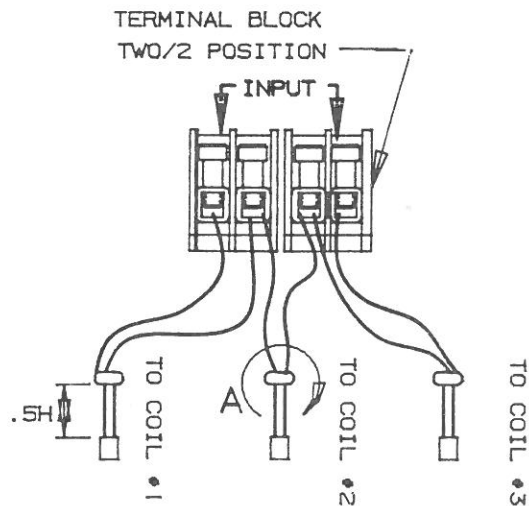
FIGURE "3"

### THREE SENSOR SYSTEM

1. FOR THREE SENSOR SYSTEMS, REPEAT STEPS 1 THROUGH 4 OF SINGLE SENSOR SYSTEM INSTRUCTIONS. INSERT A THERMAL SWITCH IN ALL THREE COILS OF THE THREE PHASE UNIT.

2. INSERT THE STRIPPED END OF THE LEADWIRE INTO THE COMBINATION OF TWO/TWO POSITION THERMAL BLOCK AS ILLUSTRATED.

NOTE: USE TIE WRAPS TO CONSOLIDATE THE LEADS INTO THREE PATHS TO THE TERMINAL BLOCK.



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