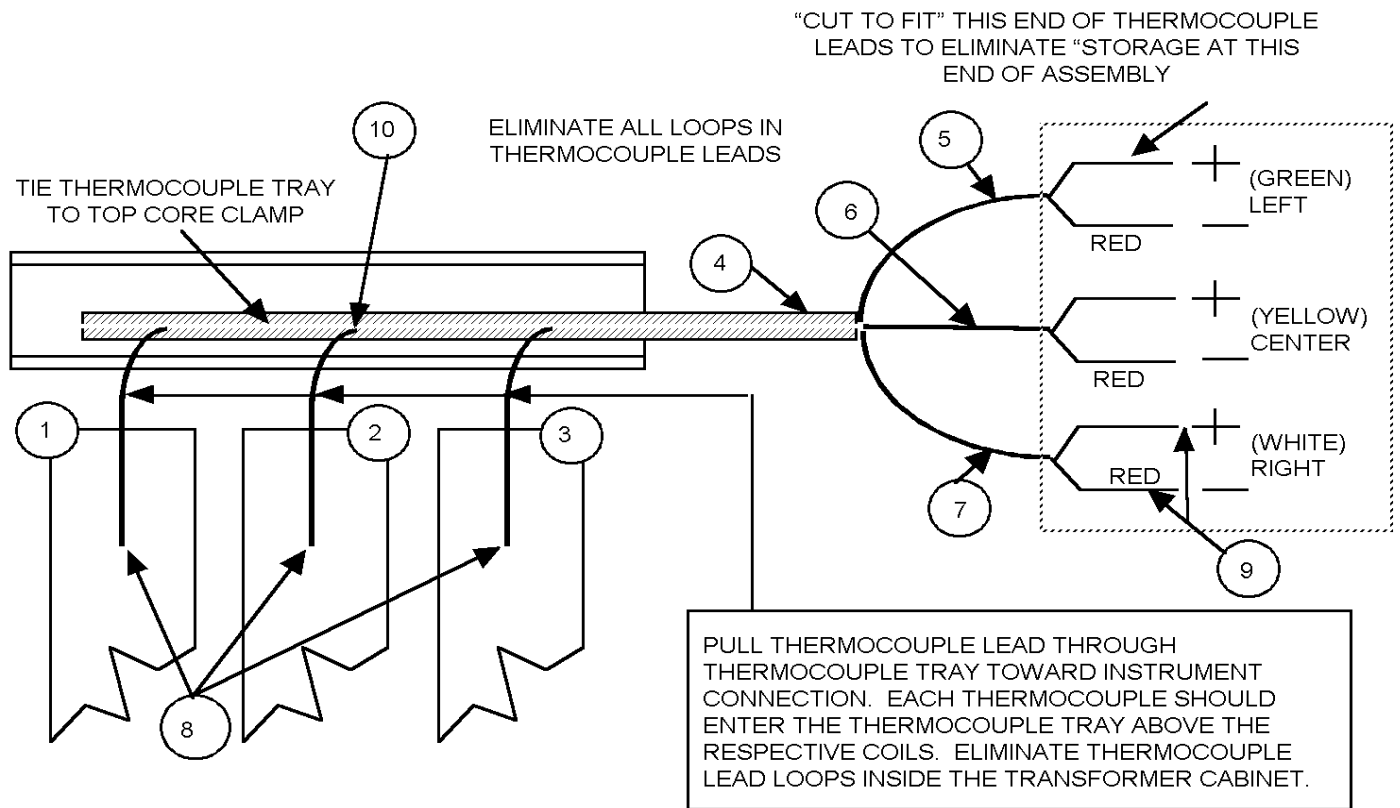


NOTES:

- 1 AND 5: THERMOCOUPLE FOR LEFT COIL POSITION -- GREEN MARKER ON BOTH ENDS
- 2 AND 6: THERMOCOUPLE FOR CENTER COIL POSITION -- YELLOW MARKER ON BOTH ENDS
- 3 AND 7: THERMOCOUPLE FOR RIGHT COIL POSITION -- WHITE MARKER ON BOTH ENDS
4. FLEXIBLE SLIT TUBE FOR BINDING THREE THERMOCOUPLES TOGETHER  
THERMAL SPECIFICATION FOR TUBING -- CLASS F -- 150 C
8. TIPS OF THERMOCOUPLES FOR INSERTION INTO COILS. SOME MODELS ARE BARE; SOME ARE INSULATED.
9. BARE WIRE ENDS OF THERMOCOUPLES FOR CONNECTION TO CONTROL SYSTEM.
10. MINIMUM RADIUS FOR THERMOCOUPLE LEADS IS ONE-HALF INCH.
11. ALWAYS CUT THERMOCOUPLE LEADS TO LENGTH REQUIRED FOR PROPER INSTALLATION.  
NEVER FORM LOOPS OF THERMOCOUPLE WIRE INSIDE THE TRANSFORMER ENCLOSURE/CABINET.
12. THERMOCOUPLE WIRE INSULATION IS RATED 220 C.



THERMOCOUPLE INSTALLATION AND CONTROL CODES

ITEM NO.	COIL POSITION	COLOR CODE MARKED ON BOTH ENDS
1 AND 5	LEFT OF PHASE A	GREEN
2 AND 6	CENTER OR PHASE B	YELLOW
3 AND 7	RIGHT OR PHASE C	WHITE

TYPE E THERMOCOUPLE (+) LEAD IS PURPLE  
RED THERMOCOUPLE LEADS ARE ALWAYS (-) NEGATIVE

REF: CIMCO DRAWINGS

- 9-17-93-A
- 9-30-93-A
- 11-14-93-A
- 11-14-93-B
- 11-13-93-C

REDRAWN 6-24-96

T/C INSTALLATION INSTRUCTIONS  
NOV. 11, 1993  
DRAWING 11-13-93-A  
NOT TO SCALE

CIMCO ELECTRONICS, INC.  
104 MAIN ST.; P. O. BOX 248  
WEST MIDDLESEX, PA 16159  
PHONE 412-528-9559  
FAX 412-528-1108

## THERMOCOUPLE ASSEMBLY DESCRIPTION

1. GENERAL INFORMATION
  1. THREE THERMOCOUPLES IN EACH ASSEMBLY
  2. EACH THERMOCOUPLE IS COLOR CODED TO IDENTIFY LEFT, CENTER, AND RIGHT COILS.
  3. ASSEMBLY IS CONTAINED IN ROUND FLEXIBLE CABLE TRAY WITH "WIRE SLIT" THROUGH THE ENTIRE LENGTH.
  4. CUT TO FIT IN TRANSFORMER FACTORY OR IN THE FIELD INSTALLATION.
  5. ELIMINATE ALL LOOPS INSIDE THE TRANSFORMER ENCLOSURE.
  
2. THERMOCOUPLE SPECIFICATIONS
  1. "NON-MAGNETIC" TYPE E THERMOCOUPLES
  2. CLASS H (220 C) THERMAL RATING
  3. WELDED TIPS
  4. NO ADDITIONAL CHEMICALS HELPS PREVENT CORROSION
  
3. BARE SENSOR TIP (CLASSIFIED BY CIMCO AS NON-INSULATED)
  1. PROTECTIVE COVER OVER WELDED TIP
  2. FOUR INCHES LONG TO PROTECT AGAINST DAMAGE TO TRANSFORMER COILS.
  
4. INSULATED SENSOR TIP (CLASSIFIED BY CIMCO AS INSULATED)
  1. FOUR FEET OF ELECTRICAL INSULATION ON TIP OF THERMOCOUPLE
  2. FOR USE IN 1.2 KV CLASS TRANSFORMER COILS
  3. ADDITIONAL ELECTRICAL INSULATION IS NOT REQUIRED WHEN USED IN 1.2 KV CLASS TRANSFORMER COILS.
  4. THERMAL RATING IS CLASS H (220 C) THERMAL RATING .
  
5. PHYSICAL FEATURES OF ASSEMBLY
  1. REDUCES THERMOCOUPLE INSTALLATION TIME
  2. THERMOCOUPLE LEADS ARE COLOR CODED
  3. ONE ASSEMBLY MOUNTED ON TOP CORE CLAMPS
  4. EACH THERMOCOUPLE LEAD CAN BE CUT TO THE EXACT LENGTH REQUIRED FOR NEAT ASSEMBLY.
  5. "THERMOCOUPLE TRAY" HAS CLASS F (150 C) THERMAL RATING.
  6. "THERMOCOUPLE TRAY" HAS 500 VAC RATING.
  7. "TIE WRAPS" HAVE 115 C THERMAL RATING.
  
6. CIMCO DRAWING NUMBERS
 

1. DRAWING 91793A	15 FEET LONG; UNINSULATED TIPS
2. DRAWING 93093A	20 FEET LONG, UNINSULATED TIPS
3. DRAWING 111393A	INSTALLATION INSTRUCTIONS FOR TRANSFORMER FACTORIES
4. DRAWING 111493A	15 FEET LONG, INSULATED TIPS
5. DRAWING 111493B	20 FEET LONG, INSULATED TIPS

THERMOCOUPLE ASSEMBLIES;  
INFORMATION TO CUSTOMERS

<b>REDRAWN 6-21-</b>	T/C ASSEMBLY DESCRIPTIONS NOV. 13, 1993 DRAWING 11-13-93-C NOT TO SCALE	CIMCO ELECTRONICS, INC. 104 MAIN ST.; P. O. BOX 248 WEST MIDDLESEX, PA 16159 PHONE 412-528-9559 FAX 412-528-1108
----------------------	---	--