

Cimco Series 40-7
WINDING TEMPERATURE
INDICATOR AND CONTROLLER
FOR DRY-TYPE TRANSFORMERS

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FEATURES

SERIES 40-7

- WINDING TEMPERATURE MEASUREMENT
- MAXIMUM TEMPERATURE MEMORY
- FAN AUTO/MANUAL CONTROL
- FAN POWER 120VAC 50/60HZ
- SPDT ALARM SIGNAL
- SPDT TRIP SIGNAL
- LED DIGITAL METER
- TYPE "E" THERMOCOUPLE
- TEST ALARM
- SILENCE ALARM
- POWER ON LED LIGHT
- FANS ON LED LIGHT
- OVER TEMPERATURE LED LIGHT
- FANS AUTO/MANUAL CONTROL
- TEST ALARM CONTROL
- SILENCE ALARM CONTROL
- 120 VAC 50/60HZ INSTRUMENT POWER

OPERATION

AS THE TEMPERATURE OF THE TRANSFORMER HOT SPOT CHANGES THE AMBIENT COMPENSATED CIRCUIT PROVIDES AN ACCURATE INDICATION OF THE TEMPERATURE WHICH THE THERMOCOUPLE SENSES. THE SET POINTS FOR THE SWITCH OPERATION ARE ENERGIZED FROM THE SAME CIRCUIT WHICH DRIVES THE INDICATOR ON THE FACE OF THE PANEL. THE ALARM AND TRIP RELAYS HAVE APPROXIMATELY 5 DEGREES C. HYSTERESIS TO HELP MAINTAIN SHUT DOWN AND ALARM INFORMATION. THE FANS RELAY HAS APPROXIMATELY 20 DEGREES C. HYSTERESIS TO EXTEND THE LIFE OF THE FAN MOTORS AND THE FANS RELAY.

THE FANS SWITCH CAN BE IN THE AUTOMATIC OR MANUAL POSITION. IN AUTOMATIC, THE FANS TURN ON AND OFF AT THE PREVIOUSLY SET FANS ON AND OFF TEMPERATURE. IN THE MANUAL POSITION, THE FANS WILL BE TURNED ON AT ALL TIMES.

WITH THE "PUSH TO TEST ALARM" AND "PUSH TO SILENCE ALARM" SWITCHES, THE OPERATOR CAN CHOOSE TO TEST BOTH THE LOCAL AND REMOTE ALARMS OR SILENCE THE LOCAL ALARM. THE REMOTE ALARM CONTINUES UNTIL THE THE ALARM CONDITION CLEARS.

THE MAXIMUM TEMPERATURE MEMORY IS DISPLAYED ON THE METER BY PRESSING THE PUSH TO READ CONTROL. THE MAXIMUM MEMORY IS ERASED BY PRESSING THE PUSH TO RESET CONTROL. THE MEMORY IS RETAINED IN THE ELECTRONICS FOR 30 DAYS OR MORE IF POWER TO THE INSTRUMENT IS LOST. A BATTERY IS NOT USED TO RETAIN MEMORY.

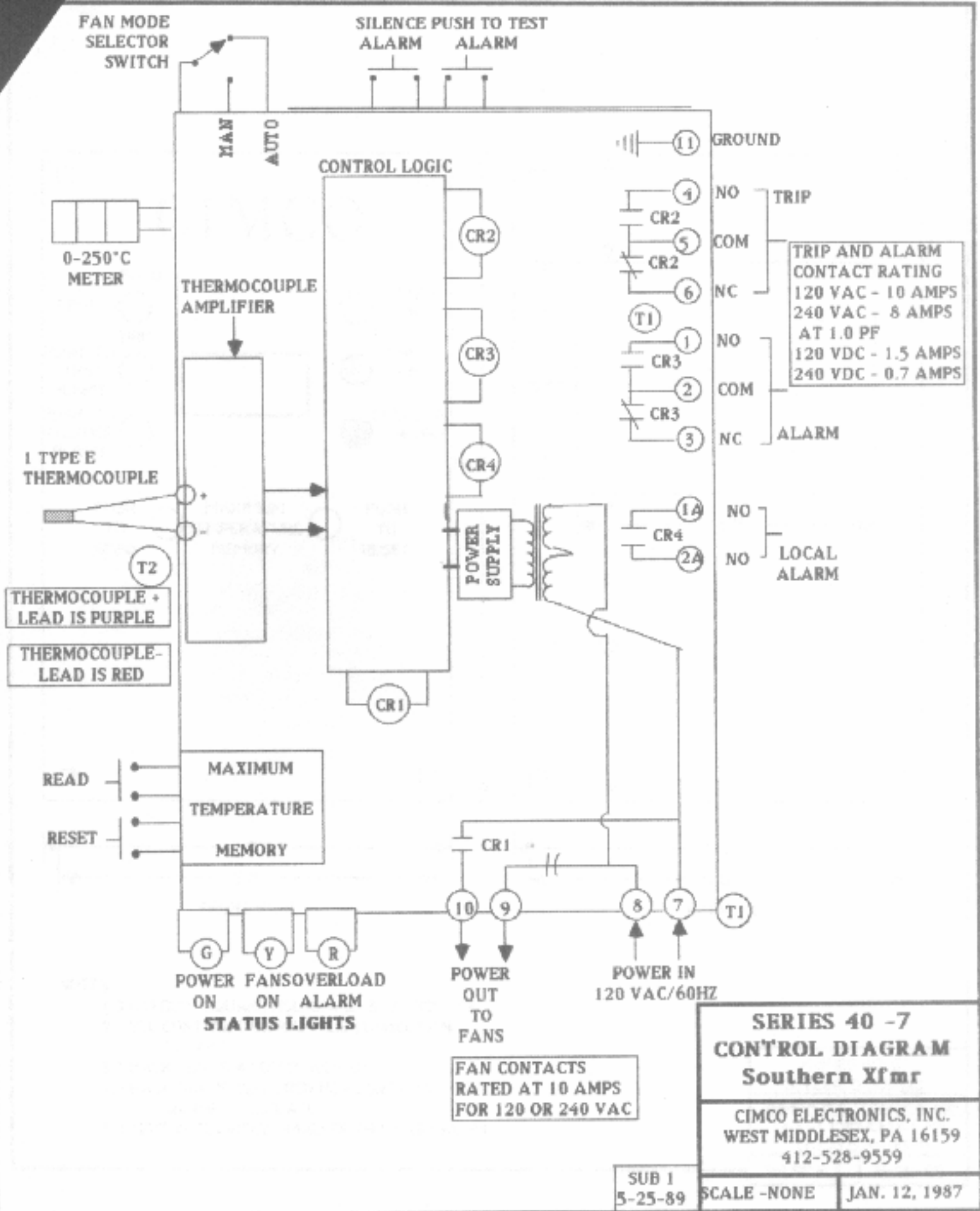
MOUNTING AND INSTALLATION

THIS COMPACT INSTRUMENT CAN BE PANEL MOUNTED ON EITHER THE DRY-TYPE TRANSFORMER CASE, THE TRANSITION COMPARTMENTS, OR THE LOW VOLTAGE SWITCH GEAR COMPARTMENTS. SINCE THE 40-6 CONTAINS ALL THE NECESSARY COMPONENTS TO ACCOMPLISH THE INDICATING AND CONTROL FUNCTIONS, THERE IS ONLY ONE PIECE TO INSTALL. CARRIAGE BOLTS ARE INCLUDED WITH THE INSTRUMENT FOR CONVENIENT MOUNTING AND TO DISCOURAGE TAMPERING BY UNAUTHORIZED PERSONNEL. ELECTRICAL AND THERMOCOUPLE CONNECTIONS ARE EASILY MADE TO THE TERMINAL BLOCKS ON THE BACK OF THE INSTRUMENT.

THERE ARE TWO ALARM CONTACTS; A NORMALLY OPEN CONTACT FOR USE WITH A LOCAL ALARM, WHICH CAN BE SILENCED BY PUSHING THE "PUSH TO SILENCE ALARM" SWITCH, AND A SPDT CONTACT WHICH IS NOT AFFECTED BY THE "SILENCE" SWITCH.

THERE IS ALSO A SPDT SHUT-DOWN CONTACT. BOTH THE ALARM AND THE SHUT-DOWN CONTACTS HAVE "NORMALLY OPEN" AND "NORMALLY CLOSED" CAPABILITY.

THE "FAN POWER" TERMINALS SUPPLY 120VAC 50/60HZ WHEN THE FANS SWITCH IS IN THE MANUAL POSITION, OR WHEN THE FANS ON TEMPERATURE HAS BEEN EXCEEDED.



**SERIES 40 - 7
CONTROL DIAGRAM
Southern Xfmr**

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SUB 1
5-25-89

SCALE - NONE

JAN. 12, 1987