Cimco

Model A21

CIMCO ELECTRONICS, INC.
www.cimcoelectronics.com
E-MAIL: cimco@cimcoelectronics.com

P.O. Box 1338
McMurray, PA 15317
PHONE (724) 941- 8001
FAX (724) 941- 8002

Standard Features

- Monitors and displays one ambient and three winding temperatures
- Micro-controller based
- Hinged barrier cabinet
- Programmable on and off set-points
- Automatically displays hottest temperature
- Manually displays temperature of all three inputs and maximum temperature in memory
- Status lights for power, fans, alarm, and trip
- Maximum temperature memory for three inputs
- Relays controlled by current highest operating temperature
- Two fan power relays
- Alarm relay for remote monitoring
- Trip relay for remote monitoring
- Local alarm - 90 db
- System test verifies all set-points and ambient temperature
- Instrument and fan power fuses
- Input power 120/240 vac - 50 or 60 Hz

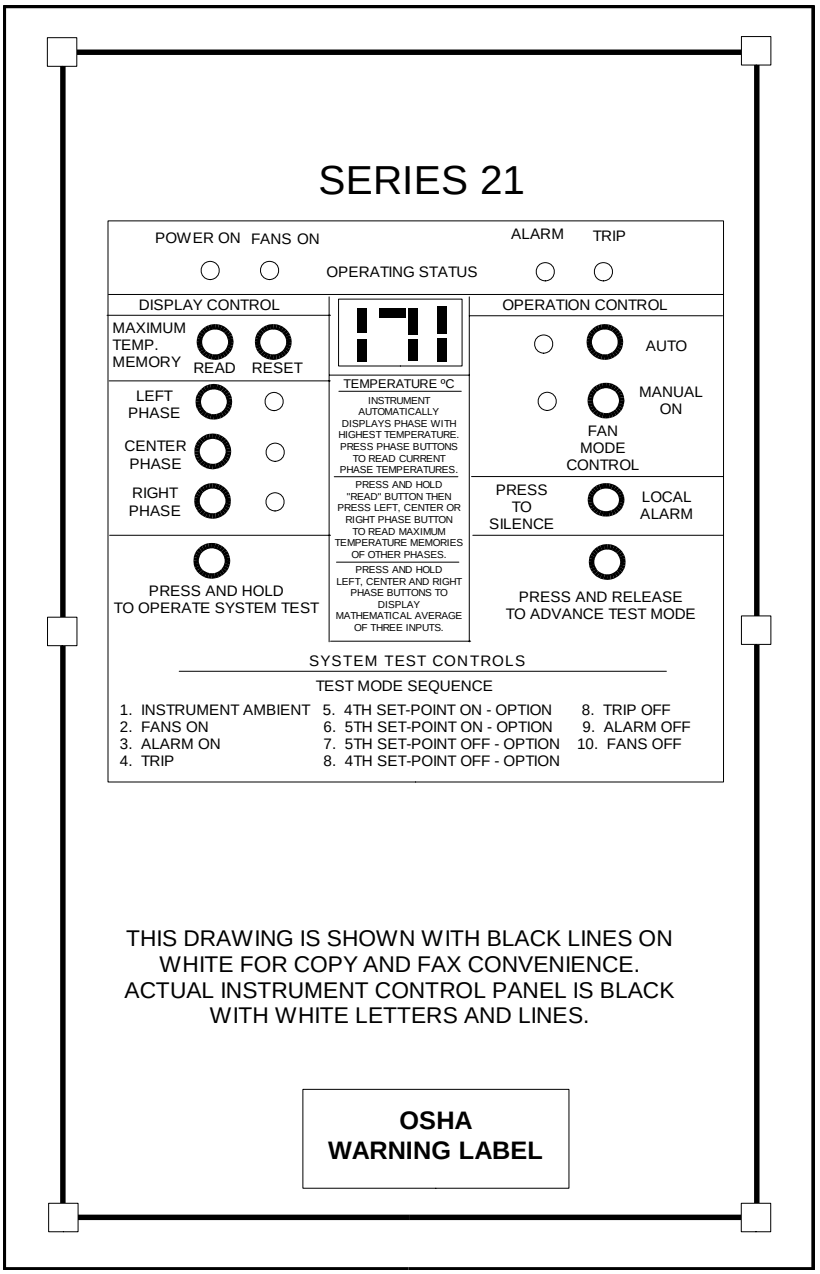
Optional Features

- Fourth and Fifth set-point relays
- Choice of current loops
- Choice of VDC signals
- Trip signal (6 vdc)
- RS-232
- RS-485
- 100 ohm RTDs (NOT RECOMMENDED!)
- Alarm (95 db or 105 db)
- AC/ DC Input Capable:
  Input power 85-264VAC at 47-440Hz
  or
  110-270 DC

Model A21

WINDING TEMPERATURE INDICATOR AND CONTROLLERS FOR DRY-TYPE TRANSFORMERS

OPERATOR CONTROL PANEL



THIS DRAWING IS SHOWN WITH BLACK LINES ON WHITE FOR COPY AND FAX CONVENIENCE. ACTUAL INSTRUMENT CONTROL PANEL IS BLACK WITH WHITE LETTERS AND LINES.

OSHA WARNING LABEL

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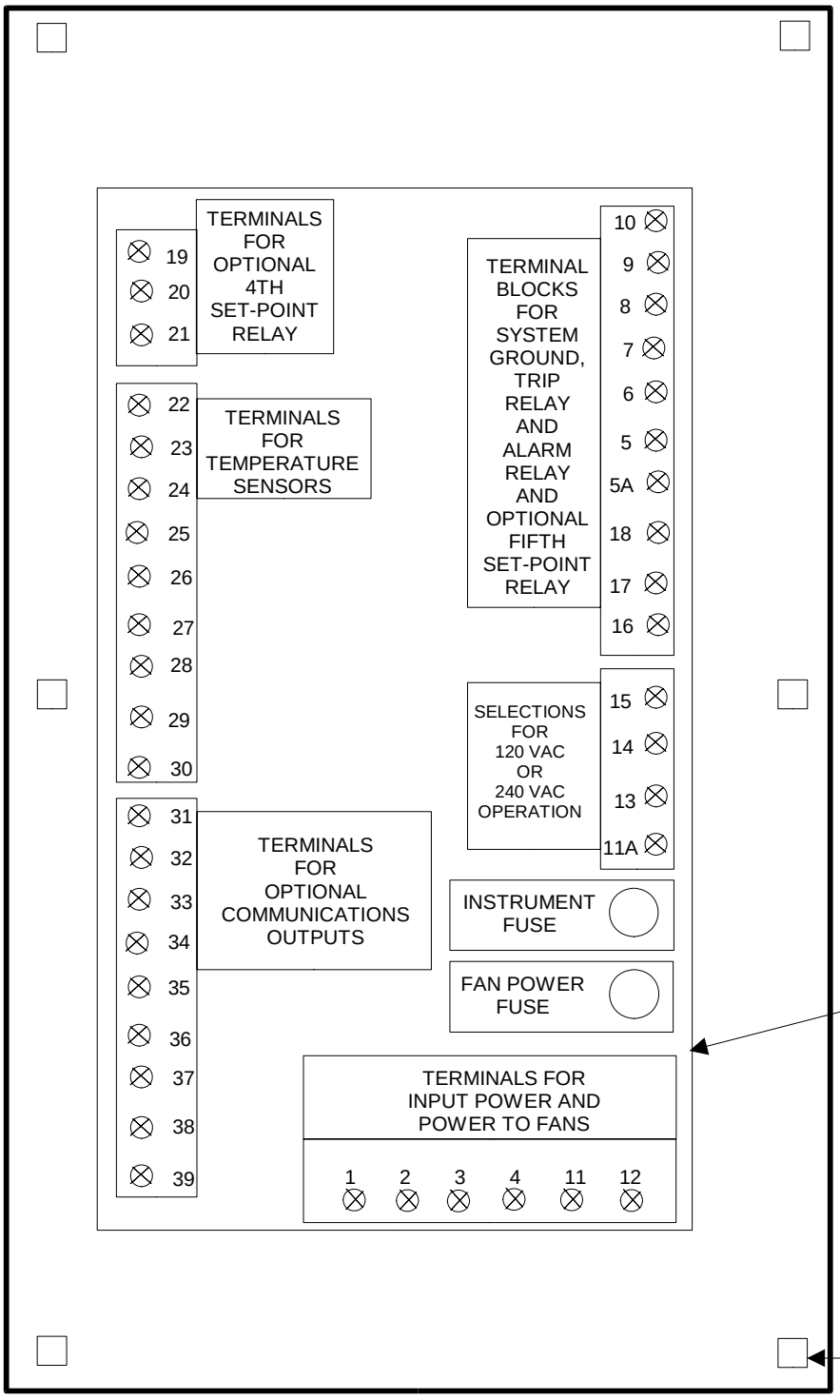

CAUTION

1. MODEL A21 INSTRUMENTS USE MICRO-CONTROLLERS FOR SIGNAL PROCESSING AND LOGIC CONTROL.

2. MODEL A21 INSTRUMENTS THEREFORE MUST BE SHIELDED FROM MAGNETIC FIELDS GENERATED BY TRANSFORMERS.

3. EACH MODEL A21 INSTRUMENT IS SHIPPED FROM CIMCO WITH A CARBON STEEL FACE-PLATE AND MOUNTED INTO A CARBON STEEL HINGED CABINET. CABINET DEPTH IS 4.5 INCHES.

4. CONNECTION INSTRUCTIONS ARE SILK-SCREENED ON THE BACK OF THE INSTRUMENT

5. CALL CIMCO FOR ADVICE ON NON-STANDARD INSTALLATIONS WITH ABNORMAL MAGNETIC OR ELECTRIC FIELDS.

6. ALWAYS CONNECT SYSTEM GROUND TO TERMINAL 10 AND THE BARRIER CABINET.

7. BACKPLATE DESIGN MAY DIFFER TO REFLECT DIFFERENT OPTIONS

BOX SIZE
3.5" X 6.5" X 11.5"

FACE-PLATE SIZE
9" X 15.25"

SIX MOUNTING HOLES

BACK SIDE VIEW

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SPECIFICATION INSTRUCTIONS FOR MODEL A21 AND OPTIONS

1. MODEL A21
   1. INCLUDES BARRIER CABINET; CONTACT CIMCO FOR NON-STANDARD INSTALLATIONS
   2. USES MICRO-CONTROLLER FOR SIGNAL PROCESSING AND LOGIC CONTROL

	Use these letters to order options
2. OPTIONAL RELAYS (SELECT ONLY ONE FROM THIS GROUP)	
1. FOURTH SET-POINT RELAY	A
2. FIFTH SET-POINT RELAY	B
3. FOURTH AND FIFTH SET-POINT RELAYS	C
3. COMMUNICATIONS OPTIONS (SELECT ONE ONLY FROM THIS GROUP)	
1. ONE 0-1 milli-amp CURRENT LOOP	D
2. ONE 0-10 milli-amp CURRENT LOOP	E
3. ONE 0-20 milli-amp CURRENT LOOP	F
4. ONE 4-20 milli-amp CURRENT LOOP	G
5. THREE 0-1 milli-amp CURRENT LOOPS	H
6. THREE 0-10 milli-amp CURRENT LOOPS	I
7. THREE 0-20 milli-amp CURRENT LOOPS	J
8. THREE 4-20 milli-amp CURRENT LOOPS	K
9. ONE 0-1 VDC SIGNAL	L
10. ONE 0-2.5 VDC SIGNAL	M
11. ONE 0-5 VDC SIGNAL	N
12. ONE 0-10 VDC SIGNAL	O
13. THREE 0-1 VDC SIGNALS	P
14. THREE 0-2.5 VDC SIGNALS	Q
15. THREE 0-5 VDC SIGNALS	R
16. THREE 0-10 VDC SIGNALS	S
17. RS-232C	T
18. RS-485	U
19. ONE 6 VDC SIGNAL	W
20. OTHER CURRENT LOOPS AND VDC SIGNALS ARE AVAILABLE WITH SPECIAL ORDER	

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Use these letters to order options

4. TEMPERATURE SENSORS
   1. TYPE E THERMOCOUPLE IS STANDARD
   2. 100 OHM RTD (NOT RECOMMENDED) — RTD-100

5. ALARM MOUNTED ON FRONT OF INSTRUMENT
   1. 95 db AT TWO FOOT — AL95
   2. 105 db AT TEN FEET — AL105

6. AC/DC INPUT POWER CAPABLE (UNIVERAL POWER SUPPLY) — X

6. SPECIFY MODEL NUMBER
   1. USE THE FOLLOWING PROCEDURE AND EXAMPLES USING THE ABOVE INFORMATION.
   2. FORMAT = A21 + RELAY OPTIONS + COMMUNICATIONS OPTIONS + TEMPERATURE SENSORS + POWER OPTIONS
   3. A21 SPECIFIES SERIES 21 INSTRUMENT WITH BARRIER CABINET
   4. A21-D SPECIFIES MODEL A21 WITH ONE 0-1 milli-amp CURRENT LOOP.
   5. A21-A-D SPECIFIES MODEL A21 WITH FOURTH SET-POINT RELAY PLUS ONE 0-1 ma CURRENT LOOP.
   6. A21-B SPECIFIES MODEL A21 WITH FIFTH SET-POINT RELAY.
   7. A21-RTD-100 SPECIFIES MODEL A21 AND THREE 100 OHM RTD's WITH 20 FOOT TWISTED PAIR LEADS.
   8. A21-X SPECIFIES MODEL A21 WITH AC/DC INPUT POWER CAPABLE OPTION.