



NOTES:

- UNLESS OTHERWISE NOTED, ALL SWITCHES ARE SHOWN AT 25° C (77° F), AT ATMOSPHERIC PRESSURE, AT 50% RELATIVE HUMIDITY, WITH ALL UTILITIES TURNED OFF, AND AFTER A NORMAL SHUTDOWN HAS OCCURRED.
- DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS. DASHED LINE ENCLOSURES AND/OR DASHED DEVICE OUTLINES INDICATE COMPONENTS PROVIDED BY THE FIELD. PHANTOM LINED ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS. SOLID LINES INDICATE WIRING BY TRANE CO.
- ALL FIELD WIRING MUST BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC), STATE AND LOCAL REQUIREMENTS. ALL FIELD WIRING MUST HAVE AN INSULATION VOLTAGE RATING THAT EQUALS OR EXCEEDS UNIT RATED VOLTAGE.
- USE CLASS 2 WIRING.
- 24V OUTPUT IS RATED 15VA.

WIRING SHOWN IS FOR 2-POSITION 2-WIRE ISOLATION VALVES. FIELD INSTALLED ACTUATOR WIRING UTILIZES THE SAME CONNECTION POINTS AS FACTORY ACTUATOR WIRING. SEE INSET "C" FOR MODULATING & 2-10V FIELD INSTALLED VALVE WIRING.

WIRING SHOWN IS FOR 3 WIRE MODULATING DAMPER. SEE INSET "D" FOR 2-10V DAMPER WITH FREEZESTAT. SEE INSET "E" FOR 2-10V DAMPER WITHOUT FREEZESTAT. SEE INSET "G" FOR 3 WIRE MODULATING DAMPER WITH FREEZESTAT. SEE INSET "H" FOR FREEZESTAT ONLY. SEE INSET "J" FOR ERS A.

FIELD WIRING SHOWN IS FOR 2-POSITION 2-WIRE ISOLATION COOLING VALVES. FIELD INSTALLED 2-POSITION 2-WIRE ACTUATOR UTILIZES THE SAME CONNECTION POINTS AS FACTORY WIRING. SEE INSET "A" FOR MODULATING & 2-10V FIELD INSTALLED COOLING VALVE FIELD CONNECTIONS.

FIELD WIRING SHOWN IS FOR 2-POSITION 2-WIRE ISOLATION HEATING VALVES. FIELD INSTALLED 2-POSITION 2-WIRE ACTUATOR UTILIZES THE SAME CONNECTION POINTS AS FACTORY WIRING. SEE INSET "A" FOR MODULATING & 2-10V FIELD INSTALLED HEATING VALVE FIELD CONNECTIONS.

FIELD WIRING SHOWN IS FOR MODULATING OUTSIDE AIR DAMPER. SEE INSET "B" FOR 2-10V OUTSIDE AIR DAMPER FIELD WIRING.

SW1 AND SW2 ARE ALWAYS IN THE N.C. POSITION.

SW3 IS SHOWN IN THE OFF POSITION. SW3 IS SET TO THE OFF POSITION WHEN DG15=J,0 OR DG16=A,B,C,D,E,F,G,H,K,L,M,N,P. SW3 IS SET TO THE ON POSITION WHEN DG14=E,F AND DG15=B,C,D,E,F,G,H AND DG16=0.

SW4 IS ALWAYS IN THE OFF POSITION.

WIRE BI5-EH2 NOT PRESENT ON 2-10V VALVE UNITS.

SEE INSET "K" FOR FAN STATUS WIRING. DG26 = N.

FIELD WIRING SHOWN IS FOR MODULATING FACE AND BYPASS ACTUATOR. SEE INSET "L" FOR 2-10V WIRING.

WIRING IS SHOWN FOR FACE & BYPASS MODULATING. SEE INSET "F" FOR 2-10V WIRING. FIELD INSTALLED ACTUATOR UTILIZES THE SAME CONNECTION POINTS AS FACTORY WIRING.

| DEVICE PREFIX LOCATION CODE |                     |
|-----------------------------|---------------------|
| AREA                        | LOCATION            |
| 1                           | LH CONTROL PANEL    |
| 2                           | LH END POCKET       |
| 3                           | AIR SECTION         |
| 4                           | RH END POCKET       |
| 5                           | TOP ACCESS PANEL    |
| 6                           | FIELD INSTALLED     |
| 7                           | RH CONTROL BOX E-HT |

| LEGEND             |                             |                 |
|--------------------|-----------------------------|-----------------|
| DEVICE DESIGNATION | DESCRIPTION                 | LINE NUMBER     |
| 1U2                | CSTI ADAPTER BOARD          | 84,88           |
| 1U4                | ENGINE BOARD                | 118,86          |
| 1K6                | RELAY; FAN STATUS           | 83,84           |
| 2L1                | COOLING COIL VALVE MOTOR    | 114             |
| 4L1                | COOLING COIL VALVE MOTOR    | 114             |
| 6L1                | COOLING COIL VALVE MOTOR    | 82,91,114       |
| 2L2                | HEATING COIL VALVE MOTOR    | 122             |
| 4L2                | HEATING COIL VALVE MOTOR    | 122             |
| 6L2                | HEATING COIL VALVE MOTOR    | 87,95,122       |
| 3RT5               | DISCHARGE AIR TEMP SENSOR   | 86              |
| 2L3                | OUTSIDE AIR DAMPER ACTUATOR | 100,105,117,128 |
| 2S9                | CSTI FREEZESTAT             | 100,110,117     |
| 3RT3               | ENTERING WATER TEMP SENSOR  | 125             |
| 5S13               | UNIT MOUNTED FAN SWITCH     | 134             |
| 4L4                | F&B DAMPER ACTUATOR         | 77,118          |

| TRANE     |                           |
|-----------|---------------------------|
| 4619-3730 | SCHEMATIC DIAGRAM         |
|           | VERTICAL UNIT VENT        |
|           | CSTI ISOLATION VALVE WITH |
|           | FACE AND BYPASS DAMPER    |