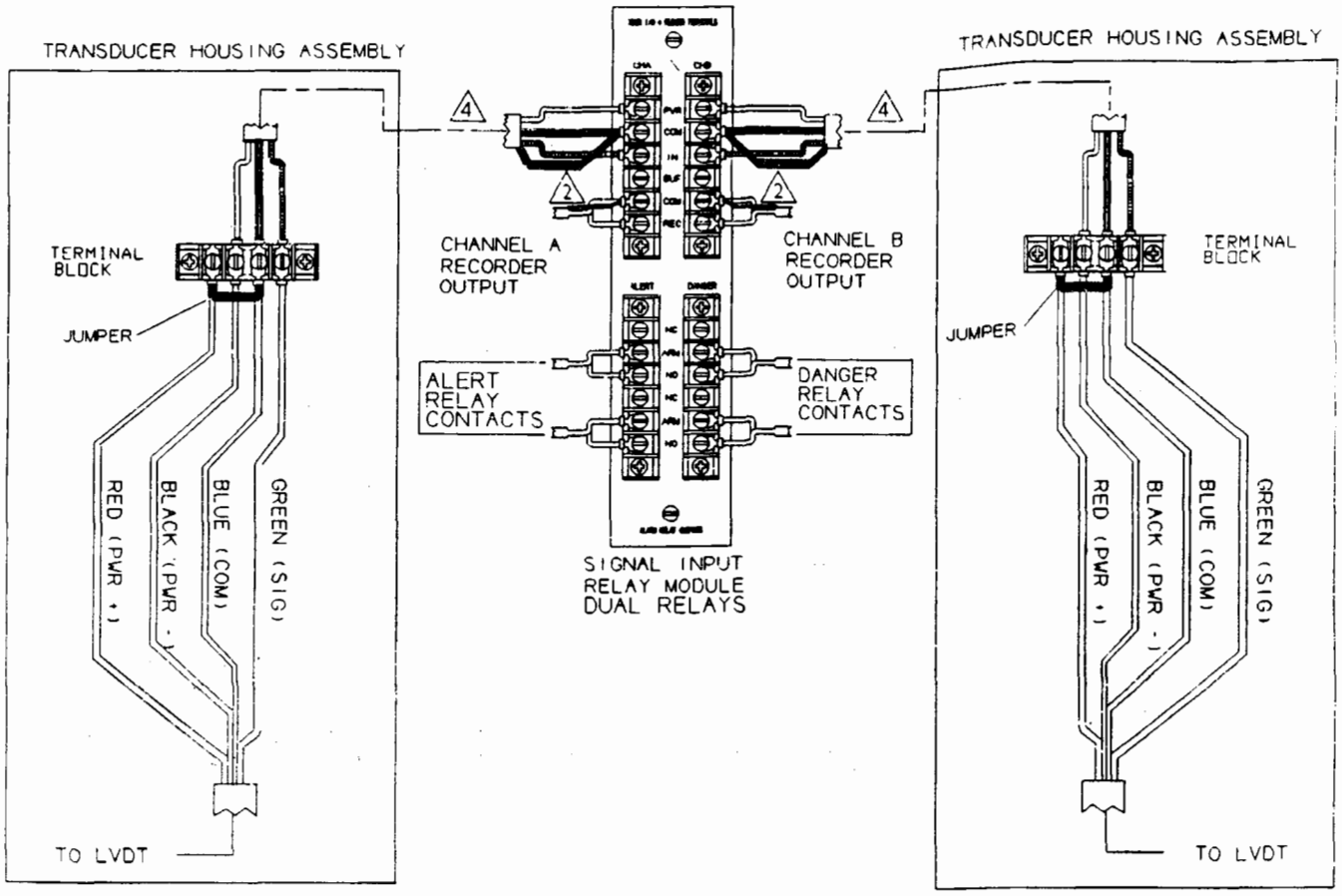
15 Field Wiring Diagram

3300/45 FIELD WIRING



1. Wiring Recommendations:

   a. Signal Module to LVDT, 18 to 22 AWG solid or stranded 3 - wire shielded with insulating sheath. 1000 feet (305 metres) maximum.

   b. Signal Module to Recorder, 18 to 22 AWG solid or stranded 2 - wire shielded with insulating sheath.

△2. Shields terminated to Signal Module Common.

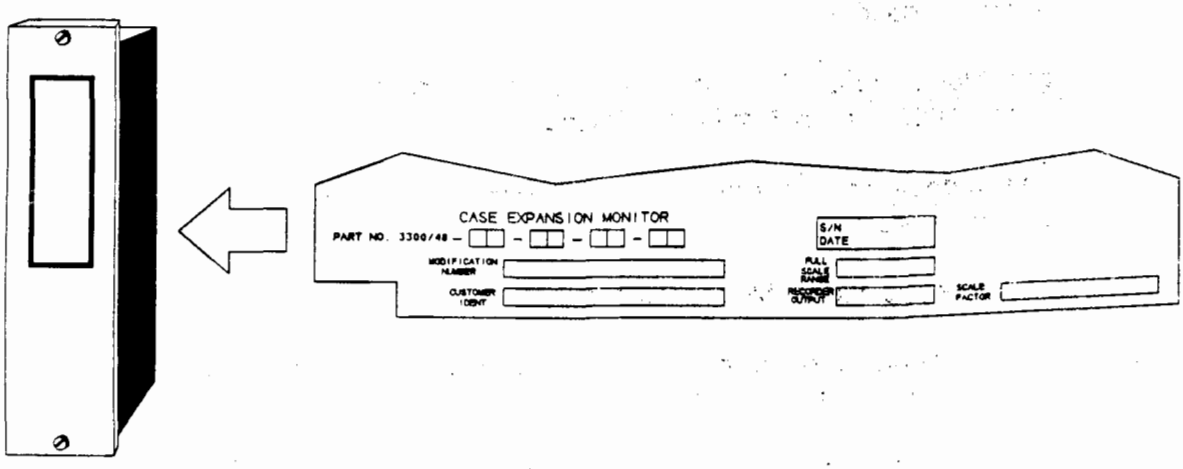
3. To minimize ground loop noise problems, a single point earth ground (GND) to system common (COM) connection is recommended.

△4. Maximum cable length between Signal Input Relay Module and LVDT must not exceed 1000 feet (305 metres).

16 Recommended Spare Parts

Qty	Description	Part Number
	Case Expansion Monitor	3300/48 - ☐☐ - ☐☐ - ☐☐ - ☐☐
1	Front Panel PWA Assembly	84132-01
1	Monitor Circuit Assembly	82803-01
1	Expander Board PWA	81410-01
1	Signal Input Relay Module	
	No Relays	81544-01 ☐0☐0
	Epoxy Sealed Relays	81545-01 ☐0☐1
	Hermetically Sealed Relays	81546-01 ☐0☐2

To order replacement parts, specify the complete part number according to this table as indicated on the identification decal. If the monitor has been modified, specify the modification number on the parts order. User must set programmable options (Reference section 7 of this manual). If in doubt about the part number, call your Bently Nevada Corporation representative before ordering.



17 Specifications

INPUTS

Signal Inputs:	Two channels LVDT input, 230K Ohm input impedance.
Signal Scale Factors:	9V/inch (0.35V/mm) - 1 Inch LVDT 10V/inch (0.39V/mm) - 2 Inch LVDT 3.5V/inch (0.14V/mm) - 4 Inch LVDT

SIGNAL CONDITIONING

Monitor Range:	Full scale meter range selected per Option Table.
Accuracy:	± 0.33% of full scale error typical at +77°F (+25°C). ± 1% of full scale error maximum at +77°F (+25°C).

ALARMS

Alarm Set Points:	Alert/Danger alarm levels (adjustable from 0 to 100% of full scale).
Alarm Delay:	Alarm delay times are user-programmable per options.

DISPLAYS

Meter:	LCD bar graph, dual scale with outside scales marked per monitor full scale range. Bargraph resolution is 1.6% of full scale.
LEDs:	Green LEDs annunciate transducer OK condition and monitor mode, red LEDs annunciate DANGER alarm, ALERT alarm, and BYPASS conditions.

CONTROLS

Front Panel:	Front panel switches (3) for reading ALERT and DANGER setpoint levels, and MODE for changing between direct and differential modes.
Internal:	Switches on circuit board for setpoint adjustment, Danger Bypass, Channel Bypass, and Calibration functions.
External:	External remote controls: Reset, Inhibit, and SetPoint and Calibration Adjust (↑ and ↓).

OUTPUT

Recorder:	Output proportional to selected full scale monitor range and protected against continuous short circuit to ground: +4 mA to +20 mA, +12 Vdc compliance. +1 Vdc to +5 Vdc, 100 Ohm output impedance. 0 Vdc to -10 Vdc, 100 Ohm output impedance.
Transducer Power:	-24 Vdc or -18 Vdc per option selected in power supply. Output is short circuit protected.
Alarms and OK:	Relay drives for ALERT, DANGER, and system OK.