



**COMPONENT SPECIFICATION**

TITLE

**Heating Blanket Relay Panel Assemblies**

APPROVALS:	DATE	REV	DCN NO	BY	CHK	DCC	DATE
DRAWN: W. Althouse	2/2/98	A	E980007-00-W	n/a	n/a	n/a	n/a
CHECKED:		B	E990249-00-W	WEA			6/9/99
APPROVED:							
DCC RELEASE:							

**DESCRIPTION**

Heating blanket temperature controller and power switching relay assemblies, connecting cords and junction boxes, including single-channel assembly H1 and multi-channel assemblies H2, H3, and H4, connecting cord set HC, and junction boxes HJ1 and HJ2.

**REQUIREMENTS**

- General:** Assemblies shall be fabricated in accordance with the drawings listed herein and shall be tested to certify performance in accordance with this specification.
- UL Listing:** The final assemblies shall be UL listed.
- Materials:** All materials shall be new. Equipment items shall be UL approved. Substitutions for product types and manufacturers specified in the drawings must be approved by LIGO. Substitutions will be considered upon request and submission of appropriate product data.
- Wiring:**
- A. All conductors shall be installed in accordance with latest requirements of NEC. Conductor insulation shall be rated for 90 °C or greater.
  - B. Label each conductor as indicated on connection diagram with heat shrink type label (Panduit LS4H Heat Shrink Marking System or equal).
  - C. Install cable ties to neatly train and lace cables inside cabinets. Thermocouple conductors shall be routed in bundles separated from power and control conductors by at least 2 inches.
  - D. No more than two conductors shall be terminated at any one terminal location.
- Identification:** Each assembly shall be identified with an engraved label on the front panel carrying the assembly drawing number (“LIGO-D980021-A-W”, “LIGO-D980025-A-W”, “LIGO-D980029-A-W”, or “LIGO-D980033-A-W”, as appropriate). Labels shall be three-layer laminated plastic and shall be attached with screws. Lettering shall be white on dark background and shall be 1/4” high.
- Nameplates:** Engraved nameplates shall be marked and installed as designated on drawings. Nameplates shall be three-layer laminated plastic and shall be attached with screws. Lettering shall be white on dark background and shall be sized as indicated on drawings.
- Testing:** Functional testing shall be performed to assure proper operation of each controller circuit and continuity of each connecting cord and junction box. A written test report shall be furnished with each assembly.
- Preparation for delivery:** Assemblies shall be packaged for shipping to prevent damage from vibration, shock and climatic condition.



# COMPONENT SPECIFICATION

TITLE

## Heating Blanket Relay Panel Assemblies

**DRWG NO. TITLE**

**ASSEMBLY H1:**

- D980021-A-W Heating Blanket Relay Panel Box 'H1' Assembly
- D980038-A-W Materials List - Assembly 'H1' Heating Blanket Relay Box
- D980023-B-W Heating Blanket Relay Panel Assembly 'H1' Schematic Diagram
- D980022-B-W Heating Blanket Relay Panel Assembly 'H1' Connection Diagram

**SUBASSEMBLY H2-1:**

- D980025-A-W Subassembly 'H2-1' -Heating Blanket Panel 'H2'
- D980040-A-W Materials List - Subassembly 'H2-1' Heating Blanket Relay Panel
- D980027-B-W Subassembly 'H2-1' Schematic Diagram
- D980026-B-W Subassembly 'H2-1' Connection Diagram
- D980091-A-W Controller Display and Equipment Connector Details

**SUBASSEMBLY H3-1:**

- D980029-A-W Subassembly 'H3-1' -Heating Blanket Panel 'H2'
- D980042-A-W Materials List - Subassembly 'H3-1' Heating Blanket Relay Panel
- D980031-B-W Subassembly 'H3-1' Schematic Diagram
- D980030-B-W Subassembly 'H3-1' Connection Diagram
- D980091-A-W Controller Display and Equipment Connector Details

**SUBASSEMBLY H4-1:**

- D980033-A-W Subassembly 'H4-1' -Heating Blanket Panel 'H2'
- D980044-A-W Materials List - Subassembly 'H4-1' Heating Blanket Relay Panel
- D980035-B-W Subassembly 'H4-1' Schematic Diagram
- D980034-B-W Subassembly 'H4-1' Connection Diagram
- D980091-A-W Controller Display and Equipment Connector Details

**ASSEMBLY HC:**

- D980036-A-W Heating Blanket Cord Set Assembly 'HC'
- D980045-A-W Materials List - Assembly 'HC' Heating Blanket Cord Set

**ASSEMBLY HJ1:**

- D980037-A-W 6-Way Heating Blanket Junction Box Assembly 'HJ1'
- D980046-A-W Materials List - Assembly 'HJ1' 6-Way Heating Blanket Junction Box

**ASSEMBLY HJ2:**

- D980092-A-W 2-Way Heating Blanket Junction Box Assembly 'HJ2'
- D980093-A-W Materials List - Assembly 'HJ2' 2-Way Heating Blanket Junction Box