

Model LD 200 - Liquid Nitrogen Level Detector/Alarm

Operating Instructions

Introduction

The Model LD 200 is designed for detecting liquid nitrogen level in containment vessels by means of a special cryogenic thermistor probe. The tip of the probe is positioned to a desired level within the vessel and liquid. It is able to indicate a drop in set minimum level by being able to measure even the slightest temperature rise (should the liquid nitrogen level drop below the tip).

Operation

Calibration of this unit was done in a metal Dewar. Repeated runs produced data wherein the sensor level agreed with float dip stick measurements. Expect a level indication within about 1/8" - some variation will be caused by conditions such as frost on the probe and ambient temperature in the container.

The probe should produce repeatable results once it has been set up properly. Some adjustment is provided by a front panel potentiometer.

Additional

The unit is shipped with a plug-in power supply. Alarm relay single pole contacts are brought out to screw terminals. Normally open/normally closed (N.O. /N.C.) refer to the state in non-alarm condition.

When liquid level is normal, the green LED is on. Low level is signaled by a flashing red LED and a pulsing beeper. If the probe is disconnected (open), the red LED and beeper will come on steady.

Limited Warranty

Hampshire Controls Corporation warrants each item manufactured against defects in material and workmanship, when used as recommended, for a period of one year from original purchase. Products believed to have such defects must be returned to the factory by prepaid transportation.

Hampshire Controls obligation under this warranty is limited to the repair or replacement, at its option, of those items, which upon examination, prove to be defective. Such repair or replacement will be made without charge.

This warranty will be void if repairs or alterations are made or attempted without factory authorization, or if the item has been subject to misuse, negligence or accident.

Hampshire Controls Corp. assumes no liability for consequential damages of any kind. The purchaser, by acceptance of the product, assumes all liability of the consequences of its use or misuse.

Hampshire Controls Corp. makes no other warranty, whether expressed or implied, in connection with the sale or use of its products.

HAMPSHIRE CONTROLS CORPORATION

PO Box 516, Dover, NH 03821-0516, TEL 603/749-9424 FAX 603/749-9433

<http://www.hampshirecontrols.com>