QHA100

LIQUID NITROGEN HIGH LEVEL ALARM

The ideal independent safety monitor for over-fill of bio-storage freezers and fill systems. The QHA100 Liquid Nitrogen High Level Alarm consists of a level sensor, monitor/alarm unit (with visual and audible alarms) and a low output voltage power supply unit. Designed for automatic monitoring of liquid nitrogen levels in all unpressurised vessels and refrigerators. Low Level option available.

KEY FEATURES

- Continuously monitors levels of liquid nitrogen..
- Adjustable sensor position.
- Built in visual and audible warnings if level becomes 'High'. 'Low' level option available.
- Connection for remote alarm (dry contact) to in house monitoring systems, auto safety valve units. The QHA100T option provides a user-defined time delay on the alarm output.
- Easy to fit and install.
- Compact and lightweight.
- Reliable and maintenance free.
- Independent warning of sensor damage.
- Stand alone or multiple vessel monitoring system (QHA100L).
- Optional sensor mounting kit.
- Sensor occupies negligible space in vessel.
- The sensible precaution to prevent over-fill and high level detection.

APPLICATIONS

The monitor/alarm unit continuously monitors the signal from the level sensor and houses the audible and visual alarms. The unit is self-contained and powered from a low voltage power supply – a larger system can be powered from a single power supply unit (QHA100L). We do recommend a backup power supply is used (QM12VBAT) to avoid issues in the event of a mains failure.

The QHA100 is easy to fit and the sensor is positioned at the location required in the vessel. When the liquid nitrogen level is below this sensor the Normal light is on and and the output from the system will allow a safety valve (not supplied) to be powered in an open position. In the event that the liquid nitrogen level goes above the sensor, the alarm will activate and the signal connected to the safety valve will close the valve and stop further over fill. The signal can be also connected to an auto-dial unit to alert users of an issue.

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QUANTUM CRYOGENICS

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TECHNICAL SPECIFICATIONS

QHA100 Dimensions	W80 x H100 x D40mm
Power Supply Unit Dimensions	W60 x H55 x D90mm 15V DC supplied with product
Power Requirements	Mains powered 240/220V, 50/60Hz (110V available)
Interconnecting Cable	Length 2 metres, voltage 15V DC
Sensor Lead	Length 1.5 metres, diameter 2.5mm (other lengths available as required)
Level Sensor	Length 6mm, diameter less than 4mm

EQUIPMENT OPTIONS

QHA100T	Timer delay option
QHA100L	Multiple vessel monitoring option
QHA100TL	Timer delay and multiple vessel monitoring option

SERVICE AND SUPPORT

Design & installation	Quantum can advise on how to integrate your existing equipment and/or design systems to suit specific requirements and maximise safety and reliability.
Calibration	It is recommended that all products are calibrated at least every 12 months, either on site or at Quantum Cryogenics.
Maintenance and refurbishment	A maintenance check is advised every 12 months. Quantum offers a choice of maintenance contracts and will refurbish/upgrade any product, regardless of age or condition.

Quantum Production has a policy of continuous improvement and we reserve the right to upgrade or change specifications without prior notice. Full technical specifications are available upon request.

ACCESSORIES

PART NO.	DESCRIPTION
QAD200	Auto Dialler Unit – fixed line
QAD200/GSM	Auto Dialler Unit – mobile network (user to provide SIM card)
QM12VBAT	Backup Power Supply Unit
QLA101	Sensor Location Kit
QLA102	Sensor Location Probe
QLC150	Replacement sensor – 1.5m cable
QLC250	Replacement sensor – 2.5m cable
QLC350	Replacement sensor – 3.5m cable

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