

COOL AIR

INCORPORATED



Models

LBW-420-LEL (24 VDC powered)

Ammonia Leak Detector

INTRODUCTION

The Cool Air Incorporated LBW-420-LEL Detector is a state-of-the-art ammonia leak detector that detects and displays ammonia concentrations of 0 to 9.9%. It comes equipped with a long-life ammonia sensor that has a quick and accurate response to ammonia concentrations.

The Cool Air Incorporated LBW-420-LEL has a fully isolated DC to DC power supply, allowing the LBW-420-LEL to be powered from the same DC supply as the 4-20 mA monitoring circuits without concern for ground isolation.

The LBW-420-LEL requires a DC supply voltage between 18 and 36 volts DC.

The LBW-420-LEL can be configured to supply power to the 4-20 mA circuit(s) or can operate as a fully isolated 4-20 mA sensor. Refer to **4-20 mA Analog Outputs** for more details.

The Cool Air Incorporated LBW-420-LEL can be optionally equipped with an AC to DC converter to allow operating the detector with 100 to 240VAC input.

Once the detector senses ammonia at or above the ALARM set point, the relays will activate and stay activated until a relay reset is initiated (see “**Resetting the Relays**”)

STANDARD FEATURES

All LBW-420-LEL’s come with these additional standard features:

- Programmable Alarm set point.
- Selectable Service Mode timeout.
- Range selectable 4-20 mA analog output signals, for ammonia
- Normally-open, normally-closed contacts for shutting down compressors and closing valves.
- A NEMA 4X, UL-listed enclosure.

AVAILABLE OPTIONS

- A remote alarm light and horn box with a toggle switch to TEST/NORMAL/SILENCE the alarm.



Contact Cool Air Incorporated technical support for more detailed information, or for purchasing any of these options.

LBW-420-LEL and LBW-420-LEL SPECIFICATIONS

Ammonia Detection Sensitivity	0 to 10%
Display	0.8", 7-segment LED, 4-digit
Controls	Service mode jumper Enter, Up, and Down pushbuttons Rotary selector switch Jumper
Ammonia Sensor	Ammonia gas sensing head
Relays	Alarm, pre-alarm, and Aux Form C (SPDT), normally-open, normally-closed, energized in normally-open state Contact rating: 5A, 120 VAC or 24 VDC
Outputs	Contacts for: alarm, pre-alarm, and auxiliary relays, 4-20 mA DC, conforming to S50.01 ratings, Type 2L and Type 2H
Operating Temperature	40°F to 110°F
Operating Humidity	5% to 95% RH, non-condensing
Power Requirements	LBW-420-LEL 24 Volts DC, 18 – 36, +/- 10% 0.25 Amps max.
Dimensions	9½"H x 8"W x 4½"D
Weight	6 lbs.
Enclosure	NEMA 4X rated, UL listed
Pollution Degree	1
Options	1. 100 to 240VAC to 24VDC power supply 2. Remote alarm light and horn unit with box, cable, & TEST/NORMAL/SILENCE toggle switch.

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