Cautions

ELECTRICAL HAZARD: Disconnect power from equipment prior to making any internal adjustments. Service should only be performed by qualified personnel.

FRAGILE: Inspect the equipment prior to installation. Do not install the equipment if damage is apparent. Do not attempt to disassemble this equipment. If damaged, return to the supplier.

ELECTROSTATIC HAZARD: This is sensitive electronic equipment. Apply safe ant-static practices when handling this equipment.

Introduction

The 404 water alarm is a water leakage detector with an alarm sounder. Advanced electronics provides rapid detection of water in at-risk locations, such as sumps, under sinks, around washing machines, in bathrooms, etc.

The 404 is powered from an external DC source. A dry-contact alarm relay output is available for connection to other equipment, such as a security system.

These instructions provide trained installation personnel with details to install and commission 404 water alarms for optimum performance.

Preparation

Equipment

Before commencing installation, ensure all equipment and tools to mount and connect the equipment are available, such as drills, mounting screws, cables and ladders.

Installation location

Choose a location where water will flow if there is a leak (eg near or beneath sump pumps, plumbing, refrigerators, dishwashers, washing machines, sinks, water heaters, toilets, basements HVAC equipment and garages).

WARNING: Ensure the water alarm is protected from inadvertent knocking or dislodgement from the chosen location. If placing on a metal surface, ensure the sensor inputs do not short-circuit on the metal.

Installation

Power Wiring

The terminals accept (0.4 ~ 2.5) mm^2 conductors.

1. Run the wiring from the DC power source (eg security system).
2. Strip the conductor insulation to expose 5 mm of the conductor.
3. Connect the conductors to the terminals as shown in Fig. 1.

WARNING: Take care to ensure the insulation does not get clamped by the terminal contact.

4. Check the wiring for continuity, short circuits and earth faults.

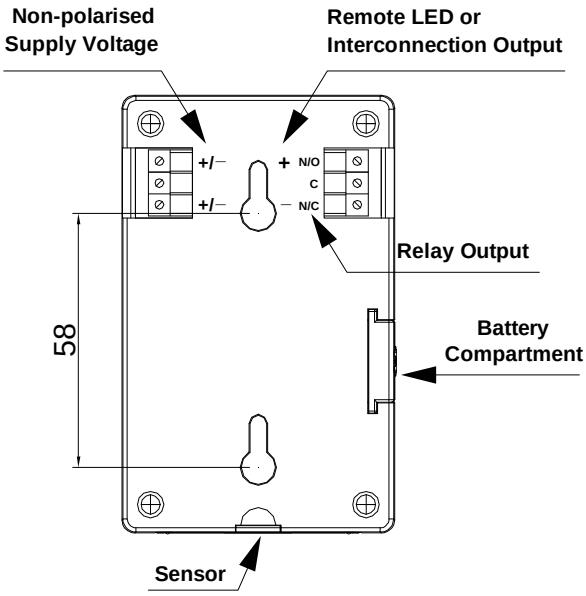

Fig. 1: 404 wiring connections

Install the Interconnection Function (where fitted)

WARNING: To avoid the electrical shock hazard, do not use old wiring that may have been used for mains voltages. Use wiring with conductors of (1 ~ 2.5) mm^2 cross-sectional area. Wiring should have an insulation resistance of at least AC 300 V.

WARNING: Do not connect this water alarm to any device other than another 404 water alarm. Connecting anything else to this device may prevent it from working properly.

Up to 38 units can be interconnected, with a maximum cable length of 400 m.

1. Strip the conductor insulation to expose 5 mm of the conductor.
2. Install the interconnect wiring to the terminals as shown in Fig. 1.

Install the Output Relay Function (where fitted)

WARNING: To avoid the electrical shock hazard, do not use old wiring that may have been used for mains voltages. Use wiring with conductors of (1 ~ 2.5) mm^2 cross-sectional area. Wiring should have an insulation resistance of at least AC 300 V.

1. Install the wiring from the ancillary equipment to the terminals as shown in Fig. 1.

Remote LED Indicator (where fitted)

1. Run wiring and connect to the remote LED alarm indicator output.
2. Install the wiring to the terminals as shown in Fig. 1.

Commissioning

Water Alarm

WARNING: The water alarm has a loud alarm signal. Use hearing protection when testing.

1. Test the water alarm by simulating a leak using a small volume of water at a depth of at least 3 mm.
2. Check that the sounder operates.
3. For interconnection models, the alarm sounder operates on all interconnected units during the test, and the LED lights only on the unit being tested.
4. For relay output models, the relay operates during the test.
5. For remote LED alarm indicator models, the remote LED operates during the test.
6. Remove the water source.
7. Check the sounder silences.

8. For interconnection models, the alarm sounders silence on all interconnected units.
9. For relay output models, the relay resets.
10. For remote LED alarm indicator models, the remote LED resets

If the tests fail, replace the unit.

Final Conditions

Once installed and tested, the water alarm will immediately start monitoring for water.

References

Document	Description
31-0019	404 water alarm datasheet

View the complete range of products at www.numens.net

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