

Johnson Controls A19AAT-2C

Johnson Controls A19AAT-2C Penn Series A19 Thermostat Instruction Manual

Model: A19AAT-2C

Brand: Johnson Controls

1. PRODUCT OVERVIEW

The Johnson Controls A19 Series Thermostat (Model A19AAT-2C) is a robust and compact temperature control device specifically engineered for temporary cooling installations. It features a Single-Pole, Single-Throw (SPST) switch that opens on a temperature drop, making it ideal for applications requiring precise temperature management outside the range of standard on-board thermostats.

Key Features:

- Single-stage cooling controls with SPST switches that open on temperature drop.
- Designed to override on-board refrigerator thermostats for accurate temperature control.
- Adjustable 20 to 80°F (-7 to 27°C) set point range with a fixed differential.
- Enclosed in a rugged steel NEMA 1 enclosure for durability.
- Includes a 6-foot extension cord with a piggyback style plug.
- Equipped with a remote sensing bulb and a 6 ft (1.8 m) capillary tube.



Image: The Johnson Controls A19AAT-2C Penn Series A19 Thermostat, showing its black housing, temperature adjustment dial, power cord with piggyback plug, and the coiled copper remote sensing bulb with its capillary tube.

2. PACKAGE CONTENTS

Upon opening the package, verify that all components are present:

- Johnson Controls A19AAT-2C Thermostat Control Unit
- 6-foot Extension Cord with Piggyback Style Plug
- Remote Sensing Bulb with 6 ft (1.8 m) Capillary Tube

3. SETUP INSTRUCTIONS

3.1. Location Selection

Choose a location for the thermostat control unit that is easily accessible and where the ambient temperature does not interfere with the sensing bulb's operation. Ensure the location is dry and protected from direct sunlight or extreme temperatures.

3.2. Sensing Bulb Placement

The remote sensing bulb is critical for accurate temperature measurement. Place the bulb in the area where temperature control is desired (e.g., inside a refrigerator or cooling chamber). Ensure the bulb is not in direct contact with cooling coils or heat sources, which could lead to inaccurate readings. The 6 ft (1.8 m) capillary tube allows for flexible placement.

3.3. Electrical Connection

The thermostat comes with a 6-foot extension cord and a piggyback style plug. Plug the thermostat's cord into a standard 120V AC outlet. Then, plug the appliance you wish to control (e.g., a portable cooling unit or refrigerator) into the piggyback receptacle on the thermostat's plug.

Warning: Ensure the appliance's power requirements do not exceed the thermostat's electrical ratings. Consult the appliance's manual for its power consumption.

4. OPERATING INSTRUCTIONS

4.1. Setting the Temperature

The A19AAT-2C thermostat features an adjustable dial for setting the desired temperature. The range is from 20°F to 80°F (-7°C to 27°C). Rotate the dial to the desired set point. The thermostat will activate the connected cooling appliance when the temperature rises above the set point and deactivate it when the temperature drops below the set point, maintaining the desired range.

4.2. Switch Action

This thermostat utilizes a Single-Pole, Single-Throw (SPST) switch that **opens on temperature drop**. This means that when the temperature in the sensed area falls below the set point, the electrical circuit to the connected appliance is interrupted, turning off the cooling unit. When the temperature rises above the set point, the circuit closes, and the cooling unit turns on.

5. MAINTENANCE

5.1. Cleaning

Periodically wipe the exterior of the thermostat control unit with a soft, dry cloth to remove dust and debris. Do not use abrasive cleaners or immerse the unit in water.

5.2. Inspection

Regularly inspect the power cord, plug, and capillary tube for any signs of damage, such as fraying, cuts, or kinks. Ensure the sensing bulb remains securely in its intended location. If any damage is observed, discontinue use and contact a qualified technician for repair or replacement.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Appliance not turning on/off	Incorrect temperature setting; Power issue; Damaged sensing bulb/capillary tube.	Verify set point; Check power outlet and connections; Inspect sensing bulb for damage.
Inaccurate temperature readings	Improper sensing bulb placement; External heat/cold interference.	Relocate sensing bulb away from direct heat/cold sources; Ensure bulb is fully exposed to the controlled environment.
Thermostat not responding	Unit malfunction.	Contact Johnson Controls customer support for assistance.

7. SPECIFICATIONS

Feature	Detail
Model Number	A19AAT-2C
Brand	Johnson Controls
Temperature Control Type	Cooling

Feature	Detail
Set Point Range	20 to 80°F (-7 to 27°C)
Differential	2 +/- 1.11°C (Fixed)
Switch Action	SPST Open Low (Opens on temperature drop)
Enclosure Type	Rugged Steel NEMA 1
Power Cord Length	6 feet
Sensing Bulb Capillary Tube Length	6 ft (1.8 m)
Color	Black
Item Weight	1.87 Pounds
Manufacturer	Johnson Controls Inc

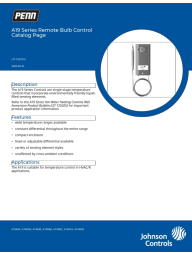

8. WARRANTY AND SUPPORT

For information regarding the warranty of your Johnson Controls A19AAT-2C Thermostat, please refer to the documentation included with your purchase or visit the official Johnson Controls website. For technical support, troubleshooting assistance beyond this manual, or to inquire about replacement parts, please contact Johnson Controls customer service directly.

Johnson Controls Customer Service:

- Website: www.johnsoncontrols.com
- Phone: Refer to your regional Johnson Controls contact information.

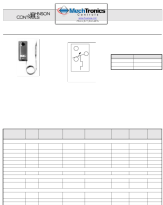
Related Documents - A19AAT-2C

	<p>PENN A19 Series Remote Bulb Control Catalog Page Johnson Controls</p> <p>Catalog page for the PENN A19 Series Remote Bulb Controls, featuring single-stage temperature controls with liquid-filled sensing elements. Includes selection charts, technical specifications, replacement parts, and contact information.</p>
	<p>Hx 3 Touch Screen Thermostat User Information Manual</p> <p>This user information manual provides detailed instructions and guidance for the Johnson Controls Hx 3 Touch Screen Thermostat (Model: S1-THXU430W), covering installation, features, operation, app connectivity, and settings.</p>



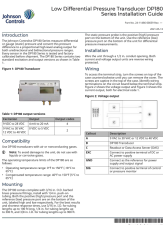
[Johnson Controls A421 Series Electronic Temperature Controls with Off-Cycle Defrost Installation Instructions](#)

Comprehensive installation guide for Johnson Controls PENN A421 Series Electronic Temperature Controls, featuring off-cycle defrost functionality. Covers product overview, applications, dimensions, mounting, wiring, setup, adjustments, troubleshooting, and technical specifications.



[Johnson Controls A19 Series Remote Bulb Control - Temperature Sensors](#)

Detailed specifications and selection guide for Johnson Controls A19 Series remote bulb temperature controls, used in HVAC, heating, ventilating, and refrigeration applications. Includes model numbers, electrical ratings, and features.



[Johnson Controls DP180 Series Low Differential Pressure Transducer Installation Guide](#)

Installation guide for the Johnson Controls DP180 Series Low Differential Pressure Transducer, covering product overview, installation, wiring, compatibility, mounting, calibration, compliance, and repair information.



[A419 Series Electronic Temperature Controls with Display and NEMA 1 or NEMA 4X Watertight Enclosures](#)

This technical bulletin from Johnson Controls details the A419 Series Electronic Temperature Controls, designed for single-stage refrigeration and HVAC applications. It covers features, benefits, NEMA 1 and NEMA 4X enclosure options, operation, wiring, adjustments, troubleshooting, fault codes, ordering information, and technical specifications.