Sales and Engineering Data

Water Source Heat Pumps Products
Thermostats and Sensors Specifications, Data and Wiring

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Non-Programmable Electronic Thermostat
2 Heat/2 Cool, Auto Changeover, Hardwired – P/N 910121746
For Use With Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With
MicroTech® III Controls

Overview
For 2-stage heating, 2-stage cooling and boilerless electric heat control, the non-programmable thermostat provides simple control capabilities. With alarm fault clearing, a timed override button and unit status LED, this thermostat provides an easy interface to the Micro-Tech III SmartSource controller for both automatic and manual changeover capabilities. It can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to 910121746 Install Manual

Features
- Configurable
- 2-Stage Heat/2-Stage Cool Systems
- Large Display With Backlight
- Selectable Fahrenheit or Celsius
- Status Indicator Light
- Relay Outputs (minimum voltage drop in thermostat)
- Remote Sensor Compatible

Specifications
Electrical rating:
- 24 VAC (18-30 VAC)
- 1 amp maximum per terminal
- 3 amp maximum total load
Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)
System configurations: 2-stage heat, 2-stage cool
Timing: Anti-short Cycle: 4 minutes (bypass anti-short cycle delay by returning to OFF mode for 5 seconds)
Backlight Operation: 10 seconds
Terminations: A – Alarm input, L – Status input, S1 & S2 – (Accessory Remote or Outdoor Sensor), R – 24 VAC hot, C – 24 VAC common, W1 – 1st stage heat, Y1 – 1st stage cool, W2 – 2nd stage heat, Y2 – 2nd stage cool, G – Fan, O – Override/reset
**Non-programmable electronic thermostat wiring**

WSHP MicroTech III Controller
Terminals TB1 and TB2

**Notes:** Includes thermostat and wall plate. Refer to 910121746 Install Manual.

“When remote reset of a lockout condition is required at the wall thermostat, it will be necessary to utilize a conductor between terminal “O” on the wall thermostat to “TB1 terminal 4” on the MicroTech III unit controller (non-programmable stat only).

**Accessory Remote Room Sensor**
(Part No. 107096010)

The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.

**Optional remote sensor wiring**

Cut R12 from circuit board
Programmable Electronic Thermostat
2 Heat/2 Cool, 7-Day Programmable, Auto Changeover, Hardwired – P/N 910121748

For Use With Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 2-stage heating, 2-stage cooling and boilerless electric heat control, the Programmable thermostat provides simple control capabilities. With alarm fault clearing, a timed override button and unit status LED, this thermostat provides an easy interface to the MicroTech III SmartSource controller for both automatic and manual changeover capabilities. It can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to 910121748 Install Manual

Features
• 7-Day, 5-2-Day or 5-1-1-Day Programmable
• Configurable
• 2-Stage Heat/2-Stage Cool Systems
• Large Display With Backlight
• Selectable Fahrenheit or Celsius
• Status Indicator Light
• Relay Outputs (minimum voltage drop in thermostat)
• Remote Sensor Compatible

Specifications
Electrical rating:
• 24 VAC (18-30 VAC)
• 1 amp maximum per terminal
• 3 amp maximum total load

Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)

System configurations: 2-stage heat, 2-stage cool
Timing: Anti-short Cycle: 4 minutes (bypass anti-short cycle delay by returning to OFF mode for 5 seconds)
Backlight Operation: 10 seconds
Terminations: A – Alarm input, L – Status input, S1 & S2 – (Accessory Remote or Outdoor Sensor), R – 24 VAC hot, C – 24 VAC common, W1 – 1st stage heat, Y1 – 1st stage cool, W2 – 2nd stage heat, Y2 – 2nd stage cool, G – Fan, O – Override/reset
Dimensions

7-day programmable electronic thermostat wiring

MicroTech III Unit Control Board
Low Voltage Terminal Strip (Circuit 1)

TB2

24VAC Common
W3 - Heat 3
Fan
Cool 1
Cool 2
Heat 1
Heat 2
Alarm Output
24VAC

Override / optional

Thermostat Terminals

C
Y1
Y2
W1
W2
Y1
Y2
G

Notes: Includes thermostat and wall plate. Refer to 910121748 Install Manual

Accessory Remote Room Sensor
(Part No. 107096010)
The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.

Optional remote sensor wiring

Thermostat

Remote Sensor

Cut R12 from circuit board

Wire2
Programmable Electronic Thermostat
2 Heat/2 Cool, 7-Day Programmable, Auto Changeover, Hardwired – P/N 910193093

For Use With Latest Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 2-stage heating, 2-stage cooling, high-low fan speed, and boilerless electric heat control. This programmable thermostat provides simple control capabilities, with alarm fault clearing, a timed override button and unit status LED. It easily interfaces to the MicroTech III SmartSource controller for both automatic and manual changeover capability, and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to IO manual 910193093

Features
• 7-Day, 5-2-Day Day Programmable
• Battery Backup for Clock and Schedule
• 2-Stage Heat/2-Stage Cool Systems
• Large Display With Backlight
• Selectable Fahrenheit or Celsius
• Alarm Indicator
• Relay Outputs (minimum voltage drop in thermostat)
• Remote Sensor Compatible
• Intuitive Programming
• Timed Override
• Time and Temperature Display
• Remote Fault Reset
• Two Speed Fan Hi/Low

Specifications
Electrical rating:
• Minimum wire size 22AWG
• Maximum length 200 feet
• Number of wires: 7 for single stage or 9 for two stage units. Add two additional for optional remote sensor.
• 24 VAC (18-30 VAC)
• 1 amp maximum per terminal
• 3 amp maximum total load
Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)
Backlight Operation: 10 seconds
Terminations: A – Alarm input, S1 & S2 – (Accessory Remote or Outdoor Sensor), R – 24 VAC hot, C – 24 VAC common, W1 – 1st stage heat, Y1 – 1st stage cool, W2 – 2nd stage heat, Y2 – 2nd stage cool, G – Fan, G2 – Fan high
Accessory Remote Room Sensor
(Part No.667720401)
The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.

Programmable touchscreen thermostat wiring

Optional remote sensor wiring

Notes: Includes thermostat and wall plate Refer to IO manual 910193093
Programmable Electronic Thermostat
2 Heat/2 Cool, 7-Day Programmable, Auto Changeover, Hardwired – P/N 910193126

For Use With Latest Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 2-stage heating, 2-stage cooling and boilerless electric heat control. This programmable thermostat provides simple control capabilities, with alarm fault clearing, a timed override button and unit status LED. It easily interfaces to the MicroTech III SmartSource controller for both automatic and manual changeover capability, and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to IO manual 910193126

Features
- 7-Day, 5-2-Day Day Programmable
- Battery Backup for Clock and Schedule
- 2-Stage Heat/2-Stage Cool Systems
- Large Display With Backlight
- Selectable Fahrenheit or Celsius
- Status Indicator Light
- Relay Outputs (minimum voltage drop in thermostat)
- Remote Sensor Compatible
- Intuitive Programming
- Timed Override
- Time and Temperature Display
- Remote Fault Reset
- Filter Life Alert

Specifications
Electrical rating:
- Minimum wire size 22AWG
- Maximum length 200 feet
- Number of wires: 7 for single stage or 9 for two stage units. Add two additional for optional remote sensor.
- 24 VAC (18-30 VAC)
- 1 amp maximum per terminal
- 3 amp maximum total load

Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ±1°F (±0.5°C)

Backlight Operation: 10 seconds
Terminations: A – Alarm input, S1 & S2 – (Accessory Remote or Outdoor Sensor), R – 24 VAC hot, C – 24 VAC common, W1 – 1st stage heat, Y1 – 1st stage cool, W2 – 2nd stage heat, Y2 – 2nd stage cool, G – Fan,
Dimensions

Programmable touchscreen thermostat wiring
MicroTech III Controller Terminals TB2

Optional remote sensor wiring

Notes: Includes thermostat and wall plate Refer to IO manual 910193126

Accessory Remote Room Sensor
(Part No.667720401)
The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.
Programmable Electronic Thermostat
2 Heat/3 Cool, 7-Day Programmable, Auto Changeover, Hardwired – P/N 910193127

For Use With Latest Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 2-stage heating, 3-stage cooling and boilerless electric heat control. This programmable thermostat provides simple control capabilities, with alarm fault clearing, a timed override button and unit status LED. It easily interfaces to the MicroTech III SmartSource controller for both automatic and manual changeover capability, and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to IO manual 910193127

Features
- 7-Day, 5-2-Day Day Programmable
- Battery Power for Clock and Schedule
- 2-Stage Heat/3-Stage Cool Systems
- Large Display With Backlight
- Selectable Fahrenheit or Celsius
- Alarm Indicator
- Relay Outputs (minimum voltage drop in thermostat)
- Remote Outputs Compatible
- Intuitive Programming
- Timed Override
- Time and Temperature Display
- Remote Fault Reset (for 2-stage electric heater or 2-stage with electric heat)
- Filter Life Alert

Specifications
Electrical rating:
- Minimum wire size 22AWG
- Maximum length 200 feet
- Number of wires: 7 for single stage or 9 for two stage units. Add two additional for optional remote sensor.
- 24 VAC (18-30 VAC)
- 1 amp maximum per terminal
- 3 amp maximum total load

Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)

Backlight Operation: 10 seconds
Terminations: A – Alarm input, S1 & S2 – (Accessory Remote or Outdoor Sensor), R – 24 VAC hot, C – 24 VAC common, W1 – 1st stage heat, Y1 – 1st stage cool, W2 – 2nd stage heat, Y3 – 3rd stage cooling, Y2 – 2nd stage cool, G – Fan
**Dimensions**

```
Dimensions

5.50

1.19

4.73

1.19
```

**Programmable touchscreen thermostat wiring**

MicroTech III Controller Terminal TB2

I/O Expansion Module TB1

**Optional remote sensor wiring**

Remote Sensor (Optional)

**Accessory Remote Room Sensor**

Part No. 667720401

The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.

**Notes:** Includes thermostat and wall plate Refer to IO manual 910193127
Programmable Electronic Thermostat

3 Heat/2 Cool, 7-Day Programmable, Auto Changeover, Hardwired – P/N 910193128

For Use With Latest Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview

For 3-stage heating, 2-stage cooling and boilerless electric heat control. This programmable thermostat provides simple control capabilities, with alarm fault clearing, a timed override button and unit status LED. It easily interfaces to the MicroTech III SmartSource controller for both automatic and manual changeover capability, and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to IO manual 910193128

Features

• 7-Day, 5-2-Day Day Programmable
• Battery Power for Clock and Schedule
• 3-Stage Heat/2-Stage Cool Systems
• Large Display With Backlight
• Selectable Fahrenheit or Celsius
• Alarm Indicator
• Relay Outputs (minimum voltage drop in thermostat)
• Remote Outputs Compatible
• Intuitive Programming
• Timed Override
• Time and Temperature Display
• Remote Fault Reset (for 2-stage electric heater or 2-stage with electric heat
• Filter Life Alert

Specifications

Electrical rating:
• Minimum wire size 22AWG
• Maximum length 200 feet
• Number of wires: 7 for single stage or 9 for two stage units. Add two additional for optional remote sensor.
• 24 VAC (18-30 VAC)
• 1 amp maximum per terminal
• 3 amp maximum total load

Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)

Backlight Operation: 10 seconds

Terminations: A – Alarm input, S1 & S2 – (Accessory Remote or Outdoor Sensor), R – 24 VAC hot, C – 24 VAC common, W1 – 1st stage heat, Y1 – 1st stage cool, W2 – 2nd stage heat, W3 - 3rd stage heat, Y2 – 2nd stage cool, G – Fan
### Programmable touchscreen thermostat wiring

**MicroTech III Controller Terminals TB2**

- R
- C
- G
- Y1
- Y2
- W1
- W2
- G
- A

### Optional remote sensor wiring

**Remote Sensor (Optional)**

- Wire 1
- Wire 2
- S1
- SC

**Notes:** Includes thermostat and wall plate Refer to IO manual 910193128

### Accessory Remote Room Sensor

**Part No. 667720401**

The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.
Programmable Electronic Thermostat
2 Heat/2 Cool, 7-Day Programmable, Dehumidification, Auto Changeover, Hardwired – P/N 910193129

For Use With Latest Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 2-stage heating, 2-stage cooling, dehumidification, and boilerless electric heat control. This programmable thermostat provides simple control capabilities, with alarm fault clearing, a timed override button and unit status LED. It easily interfaces to the MicroTech III SmartSource controller for both automatic and manual changeover capability, and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to IO manual 910193129

Features
- 7-Day, 5-2-Day Day Programmable
- Battery Backup for Clock and Schedule
- 2-Stage Heat/2-Stage Cool Systems
- Smart Dehumidification or Simplified Dehumidification
- Large Display With Backlight
- Selectable Fahrenheit or Celsius
- Status Indicator Light
- Relay Outputs (minimum voltage drop in thermostat)
- Remote Sensor Compatible
- Intuitive Programming
- Timed Override
- Time and Temperature Display

Specifications
Electrical rating:
- Minimum wire size 22AWG
- Maximum length 200 feet
- Number of wires: 7 for single stage or 9 for two stage units. Add two additional for optional remote sensor.
- 24 VAC (18-30 VAC)
- 1 amp maximum per terminal
- 3 amp maximum total load

Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)

Backlight Operation: 10 seconds
Terminations: A – Alarm input, S1 & S2 – (Accessory Remote or Outdoor Sensor), R – 24 VAC hot, C – 24 VAC common, W1 – 1st stage heat, Y1 – 1st stage cool, W2 – 2nd stage heat, Y2 – 2nd stage cool, G – Fan, DH – Dehumidification
Dimensions

Programmable touchscreen thermostat wiring

MicroTech III Controller Terminals TB2

I/O Expansion Module TB1

Optional remote sensor wiring

Accessory Remote Room Sensor (Part No. 667720401)
The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.

Notes: Includes thermostat and wall plate Refer to IO manual 910193129
Wi-Fi Programmable Electronic Thermostat
2 Heat/2 Cool, 7-Day Programmable, Auto Changeover, Hardwired – P/N 910193130

For Use With Latest Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 2-stage heating, 2-stage cooling, high-low fan speed and boilerless electric heat control. This Wi-Fi programmable thermostat provides simple control capabilities, with alarm fault clearing, a timed override button and unit status LED. It easily interfaces to the MicroTech III SmartSource controller for both automatic and manual changeover capability, and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to IO manual 910193130

Features
• 7-Day, 5-2-Day Day Programmable
• 2-Stage Heat/2-Stage Cool Systems
• Large Display With Backlight
• Selectable Fahrenheit or Celsius
• Status Indicator Light
• Relay Outputs (minimum voltage drop in thermostat)
• Remote Sensor Compatible
• Intuitive Programming via App
• Timed Override
• Time and Temperature Display
• Remote Fault Reset
• Two speed fan operation Hi/Low
• Filter Life Alert

Specifications
Electrical rating:
• 24 VAC (18-30 VAC)
• Minimum wire size 22AWG
• Maximum length 200 feet
Number of wires: 7 for single stange, 9 for two stage. Add two additional for optional remote sensor.
• 1 amp maximum per terminal
• 3 amp maximum total load
Temperature control range: 45°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)
**Backlight Operation:** 10 seconds

**Terminations:**
- A – Alarm input, S1 & S2 – (Accessory Remote or Outdoor Sensor),
- R – 24 VAC hot,
- C – 24 VAC common,
- W1 – 1st stage heat,
- Y1 – 1st stage cool,
- W2 – 2nd stage heat,
- Y2 – 2nd stage cool,
- G – Fan,
- G2 – Fan high,

**Dimensions**

![Dimensions diagram]

**Wi-Fi programmable touchscreen thermostat wiring**

- MicroTech III Controller Terminals TB2
- Terminal Strip

**Optional remote sensor wiring**

**Notes:** Includes thermostat and wall plate. Refer to IO manual 910193130

**Accessory Remote Room Sensor (Part No. 667720401)**

The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.
Wi-Fi Programmable Electronic Thermostat
2 Heat/2 Cool, 7-Day Programmable, Auto Changeover, Hardwired – P/N 910193131

For Use With Latest Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 2-stage heating, 2-stage cooling and boilerless electric heat control. This Wi-Fi programmable thermostat provides simple control capabilities, with alarm fault clearing, a timed override button and unit status LED. It easily interfaces to the MicroTech III SmartSource controller for both automatic and manual changeover capability, and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to IO manual 910193131.

Features
• 7-Day, 5-2-Day Day Programmable
• Battery Power for Clock and Schedule
• 2-Stage Heat/2-Stage Cool Systems
• Large Display With Backlight
• Selectable Fahrenheit or Celsius
• Status Indicator Light
• Relay Outputs (minimum voltage drop in thermostat)
• Remote Sensor Compatible
• Intuitive Programming
• Timed Override
• Time and Temperature Display
• Remote Fault Reset
• Filter Life Alert
• Fan Schedule
• Sub-base Terminations
• User Coded Lockout
• Android and IOS Apps
• Alarm reset
• Alerts change filter, fail to cool, fail to heat, high heat setpoint, high temperature, low cool setpoint, low temperature
• Share control
• Indefinite thermostats per account
• Apply setting to all thermostat on account
• Vacation schedule

Specifications
Electrical rating:
• 24 VAC (18-30 VAC)
• 1 amp maximum per terminal
• 3 amp maximum total load

Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)
Backlight Operation: 10 seconds

Terminations: A – Alarm input, S1 & S2 – (Accessory Remote or Outdoor Sensor), R – 24 VAC hot, C – 24 VAC common, W1 – 1st stage heat, Y1 – 1st stage cool, W2 – 2nd stage heat, Y2 – 2nd stage cool, G – Fan,

Dimensions

Programmable touchscreen thermostat wiring

MicroTech III Controller Terminals TB2

Optional remote sensor wiring

Notes: Includes thermostat and wall plate Refer to IO manual 910193131.

Accessory Remote Room Sensor (Part No.667720401)
The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.
Wi-Fi Programmable Electronic Thermostat
2 Heat/3 Cool, 7-Day Programmable, Auto Changeover, Hardwired – P/N 910193132
For Use With Latest Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 2-stage heating, 3-stage cooling for waterside economizer or simplified dehumidification and boilerless electric heat control. This Wi-Fi programmable thermostat provides simple control capabilities, with alarm fault clearing, a timed override button and unit status LED. It easily interfaces to the MicroTech III SmartSource controller for both automatic and manual changeover capability, and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to IO manual 910193132

Features
- 7-Day, 5-2-Day Day Programmable
- 2-Stage Heat/3 -Stage Cool Systems
- Large Display With Backlight
- Selectable Fahrenheit or Celsius
- Alarm Indicator
- Relay Outputs (minimum voltage drop in thermostat)
- Remote Sensor Compatible
- Intuitive Programming via App
- Timed Override
- Time and Temperature Display
- Remote Fault Reset
- Filter Life Alert
- Fan Schedule
- Sub-base Terminations
- User Coded Lockout
- Android and IOS Apps
- Alarm reset
- Alerts change filter, fail to cool, fail to heat, high heat setpoint, high temperature, low cool setpoint, low temperature.
- Share control
- Indefinite thermostats per account
- Apply setting to all thermostat on account
- Vacation schedule

Specifications
Electrical rating:
- 24 VAC (18-30 VAC)
- Minimum wire size 22AWG
- Maximum length 200 feet
- Number of wires: 7 for single stage, 9 for two stage. Add two additional for optional remote sensor.
- 1 amp maximum per terminal
- 3 amp maximum total load

Temperature control range: 45°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)
Backlight Operation: 10 seconds
Terminations:  
A – Alarm input,  
S1 & S2 – (Accessory Remote or Outdoor Sensor),  
R – 24 VAC hot,  
C – 24 VAC common,  
W1 – 1st stage heat,  
Y1 – 1st stage cool,  
W2 – 2nd stage heat,  
Y2 – 2nd stage cool,  
Y3 – 3rd stage cooling  
G – Fan

Dimensions

Accessory Remote Room Sensor  
(Part No. 667720401)  
The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.

Notes: Includes thermostat and wall plate. Refer to IO manual 910193132
Wi-Fi Programmable Electronic Thermostat
3 Heat/2 Cool, 7-Day Programmable, Auto Changeover, Hardwired – P/N 910193133

For Use With Latest Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 3-stage heating, 2-stage cooling for waterside economizer or simplified dehumidification and boilerless electric heat control. This Wi-Fi programmable thermostat provides simple control capabilities, with alarm fault clearing, a timed override button and unit status LED. It easily interfaces to the MicroTech III SmartSource controller for both automatic and manual changeover capability, and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to IO manual 910193133

Features
- Fan Schedule
- Sub-base Terminations
- User Coded Lockout
- Android and IOS Apps
- Alarm reset
- Alerts change filter, fail to cool, fail to heat, high heat setpoint, high temperature, low cool setpoint, low temperature.
- Share control
- Indefinite thermostats per account
- Apply setting to all thermostat on account
- Vacation schedule

Specifications
Electrical rating:
- 24 VAC (18–30 VAC)
- Minimum wire size 22AWG
- Maximum length 200 feet
- Number of wires: 7 for single stage, 9 for two stage. Add two additional for optional remote sensor.
- 1 amp maximum per terminal
- 3 amp maximum total load

Temperature control range: 45°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)
Backlight Operation: 10 seconds
Terminations: A – Alarm input, S1 & S2 – (Accessory Remote or Outdoor Sensor), R – 24 VAC hot, C – 24 VAC common, W1 – 1st stage heat, Y1 – 1st stage cool, W2 – 2nd stage heat, Y2 – 2nd stage cool, W3 – 3rd stage heat, G – Fan

Dimensions

Wi-Fi programmable touchscreen thermostat wiring
MicroTech III Controller Terminals TB2

Notes: Includes thermostat and wall plate. Refer to IO manual 910193133

Accessory Remote Room Sensor (Part No. 667720401)
The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.

Optional remote sensor wiring
Wi-Fi Programmable Electronic Thermostat
2 Heat/2 Cool, Dehumidification, 7-Day Programmable, Auto Changeover, Hardwired – P/N 910193134

For Use With Latest Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 2-stage heating, 2-stage cooling, dehumidification and boilerless electric heat control. This Wi-Fi programmable thermostat provides simple control capabilities, with alarm fault clearing, a timed override button and unit status LED. It easily interfaces to the MicroTech III SmartSource controller for both automatic and manual changeover capability, and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to IO manual 910193134

Features
• 7-Day, 5-2-Day Day Programmable
• Battery Power for Clock and Schedule
• 2-Stage Heat/2-Stage Cool, Dehumidification Systems
• Large Display With Backlight
• Selectable Fahrenheit or Celsius
• Alarm Indicator
• Relay Outputs (minimum voltage drop in thermostat)
• Remote Sensor Compatible
• Intuitive Programming
• Timed Override
• Time and Temperature Display
• Remote Fault Reset (Use with HGRH dehumidification and humidistat)

Specifications
Electrical rating:
• Minimum wire size 22AWG
• Maximum length 200 feet
• Number of wires: 7 for single stage or 9 for two stage units. Add two additional for optional remote sensor.
• 24 VAC (18-30 VAC)
• 1 amp maximum per terminal
• 3 amp maximum total load

Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)
**System configurations:** 2-stage heat, 2-stage cool

**Timing:** Anti-short Cycle: 4 minutes (bypass anti-short cycle delay by returning to OFF mode for 5 seconds)

**Backlight Operation:** 10 seconds

**Terminations:**
- **A** – Alarm input
- **S1 & S2** – (Accessory Remote or Outdoor Sensor)
- **R** – 24 VAC hot
- **C** – 24 VAC common
- **W1** – 1st stage heat
- **Y1** – 1st stage cool
- **W2** – 2nd stage heat
- **Y2** – 2nd stage cool
- **DH** – Dehumidification
- **G** – Fan

**Dimensions**

---

**Programmable touchscreen thermostat wiring**

- **MicroTech III Controller Terminal TB2**
  - **R**, **C**, **G**, **Y1**, **Y2**, **W1**, **W2**, **A**

- **I/O Expansion Module TB1**
  - **1**

- **Programmable Touch Screen**

---

**Accessory Remote Room Sensor (Part No.667720401)**

The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.

**Optional remote sensor wiring**

---

**Notes:** Includes thermostat and wall plate Refer to IO manual 910193134
Non-Programmable Electronic Thermostat Hardwired
1 Heat/1 Cool, Auto Changeover Fan Speed Control – P/N 668811201
For Use With Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With
MicroTech® III Controls

Overview
For 1-stage heating, 1-stage cooling, the Non-Programmable thermostat provides simple control
capabilities. With alarm fault clearing, a timed override button and unit status LED. This thermostat provides
an easy interface to MicroTech III unit controls with automatic changeover capabilities and can be connected
to the accessory remote temperature sensor.

Note: For complete installation, operation and main-
tenance information, refer to 668811201 Install Manual

Features
- Configurable
- Single-Stage Heat/Cool Systems
- Single-Stage Heat Pump Systems
- Two Speed Fan Control
- Large Display With Backlight
- Selectable Fahrenheit or Celsius
- Compatible with Gas, Oil, or Electric
- SimpleSet™ Field Programming
- Status Indicator Light
- Relay Outputs (minimum voltage drop in thermostat)
- Remote Sensor Compatible

Specifications
Electrical rating:
- 24 VAC (18-30 VAC)
- 1 amp maximum per terminal
- 3 amp maximum total load

Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)

System configurations: 1-stage heat, 1-stage cool
Timing: Anti-short Cycle: 4 minutes (bypass anti-short cycle delay by returning to OFF mode for 5 seconds)
Backlight Operation: 10 seconds

Terminations: S1 & S2 – (Accessory Remote or Outdoor Sensor), Y – 1st stage cool, W – 1st stage heat, O/B – 24 VAC hot, RC – 24 VAC hot, RH – G2 – High Fan, G1 – Low Fan, RC – 24 VAC hot, RH – 24 VAC hot, C – 24 VAC common
Non-programmable electronic thermostat wiring

WSHP MicroTech III Controller
Terminals TB1 and TB2

Optional remote sensor wiring

Accessory Remote Room Sensor
(Part No. 667720401)
The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.

Notes: Includes thermostat and wall plate. Refer to 668811201 Install Manual. *When remote reset of a lockout condition is required at the wall thermostat, it will be necessary to utilize a conductor between terminal "O" on the wall thermostat to "TB1 terminal 4" on the MicroTech III unit controller (non-programmable stat only).
Programmable Electronic Thermostat Hardwired
1 Heat/1 Cool, Auto Changeover Fan Speed Control – P/N 668811301

For Use With Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
For 1-stage heating, 1-stage cooling, the Programmable thermostat provides simple control capabilities. With alarm fault clearing, a timed override button and unit status LED. This thermostat provides an easy interface to MicroTech III unit controls with automatic changeover capabilities and can be connected to the accessory remote temperature sensor.

Note: For complete installation, operation and maintenance information, refer to 668811301 Install Manual

Features
• 7-Day, 5-2-Day or 5-1-1-Day Programmable
• Configurable
• Single-Stage Heat/Cool Systems
• Single-Stage Heat Pump Systems
• Two-Speed Fan Speed Selection
• Large Display With Backlight
• Selectable Fahrenheit or Celsius
• Compatible with Gas, Oil, or Electric
• SimpleSet™ Field Programming
• Status Indicator Light
• Relay Outputs (minimum voltage drop in thermostat)
• Remote Sensor Compatible

Specifications

Electrical rating:
• 24 VAC (18-30 VAC)
• 1 amp maximum per terminal
• 3 amp maximum total load

Temperature control range: 55°F to 90°F (13°C to 32°C)
Accuracy: ± 1°F (± 0.5°C)

System configurations: 1-stage heat, 1-stage cool

Timing: Anti-short Cycle: 4 minutes (bypass anti-short cycle delay by returning to OFF mode for 5 seconds)

Backlight Operation: 10 seconds

Terminations: S1 & S2 – (Accessory Remote or Outdoor Sensor), Y – 1st stage cool, W – 1st stage heat, O/B – 24 VAC hot, RH – 24 VAC hot, C – 24 VAC common
**Programmable electronic thermostat wiring**

MicroTech III Controller Terminals TB2

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>C</td>
</tr>
<tr>
<td>Y1</td>
<td>Y2</td>
</tr>
<tr>
<td>W2</td>
<td>A</td>
</tr>
</tbody>
</table>

Terminal Strip

Programmable Thermostat Terminals

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>C</td>
</tr>
<tr>
<td>Y1</td>
<td>Y2</td>
</tr>
<tr>
<td>W2</td>
<td>A</td>
</tr>
</tbody>
</table>

**Accessory Remote Room Sensor**

(Part No. 667720401)

The remote indoor temperature sensor provides the ability to measure room temperature remote from the thermostat location.

**Optional remote sensor wiring**

Thermostat

Remote Sensor

Cut R12 from circuit board

S1 S2

Wire1

Wire2

**Notes:** Includes thermostat and wall plate. Refer to 668811301 Install Manual.
Basic Sensor – P/N 910152149
For Use With Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
This sensor is used in conjunction with the MicroTech III equipped units. The sensor has a status indication and override/reset button.

Note: For complete installation, operation and maintenance information, refer to IM 1238 Install Manual

Sensor
Temperature ....10K-2 Thermistor, ±0.36°F (±0.2°C)

Sensor controls
Override/Reset ..........1 button to request timed occupancy override and reset alarms.
Inputs:.........................(1), Controller alarm & system status, 5VDC max.
Outputs:
Temperature ....(4), Analog thermistor resistance.
Termination:.................3 Terminals, 16 to 22 AWG.
Mounting:......................Standard 2” x 4” J-Box or Drywall

Enclosure material
ABS Plastic, UL94V-0.

Ambient
32º to 122ºF (0º to 50ºC), 0 to 95%RH, Non-condensing.

Agency
Restriction of the use of certain Hazardous Substances (RoHS).

Wiring
Daikin recommends using twisted pair of at least 22AWG and sealant filled connectors for all wire connections. Larger gauge wire may be required for long runs. All wiring must comply with the National Electric Code (NEC) and local codes. Do NOT run this device’s wiring in the same conduit as AC power wiring. Tests show that fluctuating and inaccurate signal levels are possible when AC power wiring is present in the same conduit as the signal lines.

Number of wires: 3
Terminal descriptions

1. Status Indicator Input from the MicoTech III Unit Controller. (5VDC).
2. Output Signal, Room Temp Thermistor Sensor. (10K ATP Z curve, 10K-2).

---

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Cool/Warm Adjustable Sensor – P/N 910171464

For Use With Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

**Overview**

This sensor is used in conjunction with the MicroTech III equipped units. The sensor has a status indication temperature adjust and override/reset button.

*Note: For complete installation, operation and maintenance information, refer to IM 1238 Install Manual*

**Sensor**

Temperature ....10K-2 Thermistor, ±0.36°F (±0.2°C)

**Sensor controls**

Setpoint ...................Slider
Override/Reset .......1 button to request timed occupancy override and reset alarms.

Inputs:.....................(1), Controller alarm & system status, 5VDC max.

Outputs:
Setpoint ............(3), Analog, 0 to 5 VDC.
Temperature .......(4), Analog thermistor resistance.
Termination:.........4 Terminals, 16 to 22 AWG.
Mounting:...............Standard 2” × 4” J-Box or Drywall

**Enclosure material**

ABS Plastic, UL94V-0.

**Ambient**

32° to 122°F (0° to 50°C), 0 to 95%RH, Non-condensing.

**Agency**

Restriction of the use of certain Hazardous Substances (RoHS).

**Wiring**

Daikin recommends using twisted pair of at least 22AWG and sealant filled connectors for all wire connections. Larger gauge wire may be required for long runs. All wiring must comply with the National Electric Code (NEC) and local codes. Do NOT run this device’s wiring in the same conduit as AC power wiring. Tests show that fluctuating and inaccurate signal levels are possible when AC power wiring is present in the same conduit as the signal lines.

**Number of wires:** 4
Terminal descriptions

Four conductors are required for the basic sensor with cool to warm 910171464.

1.............. Status Indicator Input from the MicoTech III Unit Controller. (5VDC).

3.............. Output Signal, Setpoint Adjust from 55º to 95ºF (default) or ±5º Configurable. (0 to 5VDC) See Setpoint Analog Range Tolerances.

4.............. Output Signal, Room Temp Thermistor Sensor. (10K ATP Z curve, 10K-2).

5.............. Ground or Neutral* (AC requires separate shielded wire). Common Reference for All Signal Terminals.

CAUTION

The AC power wiring at terminals [R] & [S] should be run in a separate twisted shielded pair to avoid fluctuating and inaccurate signal levels induced into the other sensor signal wires. This sensor AC power can be run in the same conduit with the sensor signal wire as long as it’s run in twisted, shielded pair and terminated properly.

Setpoint analog range tolerance

<table>
<thead>
<tr>
<th>Terminals</th>
<th>55º to 95ºF Scale</th>
<th>-3º to +3ºF Scale (Enfinity)</th>
<th>-5º to +5ºF Scale (SmartSource)</th>
<th>Terminal 3 Analog Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB1 1 4 5</td>
<td>@55ºF (min.)</td>
<td>@-3ºF (min.)</td>
<td>@-5ºF (min.)</td>
<td>0.0 to 0.10 vdc</td>
</tr>
<tr>
<td></td>
<td>@65ºF</td>
<td>@-1.5ºF</td>
<td>@-2.5ºF</td>
<td>1.3 to 1.42 vdc</td>
</tr>
<tr>
<td></td>
<td>@75ºF</td>
<td>@0ºF</td>
<td>@0ºF</td>
<td>2.12 to 2.2 vdc</td>
</tr>
<tr>
<td></td>
<td>@85ºF</td>
<td>@+1.5ºF</td>
<td>@+2.5ºF</td>
<td>2.58 to 2.63 vdc</td>
</tr>
<tr>
<td></td>
<td>@95ºF (max.)</td>
<td>@+3ºF (max.)</td>
<td>@+5ºF (max.)</td>
<td>3.0 to 4.0 vdc</td>
</tr>
</tbody>
</table>

Cool/Warm Adjustable Sensor Wiring

MicroTech III Controller
Terminals TB1

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Cool-Warm AdjstSensor-910171464 Specs / Page 2 of 2
Digitally Adjustable Display Sensor – P/N 910152147
For Use With Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Digital display sensor details

Sensor controls
Setpoint .................2 Up/Down buttons
Occupied ..............1 button to check and request change in Occupancy Status.
Override/Reset ..........1 button to request timed occupancy override and reset alarms.
Inputs:...................(1), Controller alarm & system status, 5VDC max.
Outputs:
Unoccupied......(U), Unoccupied = Digital low to ground (Same ground as power source), 100mA @5VDC max.
System Off......(E), System Off = Digital low to ground (Same ground as power source), 100mA @5VDC max.
Setpoint ..........(3), Analog, 0 to 5 VDC.
Temperature ....(4), Analog thermistor resistance.
Termination:.........10 Terminals, 16 to 22 AWG.
Mounting:.........Standard 2" × 4" J-Box or Drywall

Supply voltage
AC Hot..............(R) 7 to 28VAC, 24VAC nominal, 0.17VA
GND/Neutral.......(5) Sensor common reference ground.

Sensor
Temperature .... 10K-2 Thermistor, ±0.36°F (±0.2°C)

Display
LCD
Overall size......2.04"W × 1.33"H.
Main Digits........±999.9 Digits @0.6"H
Resolution.........0.5 displayed value, 0.1 for offset adjust
Main Value.......Temp, Humidity & Setpoint, toggling every 5 sec.
Eng. Units.........°F, °C, %RH.
Occupied Icon: Hollow = Unoccupied, Solid = Occupied.

Overview
The display sensor is used in conjunction with the MicroTech III equipped units. The sensor has a digital display for Temperature, Occupancy, Alarm, Setpoint and Status indication. Controls include four buttons for Setpoint, Occupied/Unoccupied Request, and Override Reset.

Note: For complete installation, operation and maintenance information, refer to IM 1237-x Install Manual

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Enclosure material
ABS Plastic, UL94V-0.

Ambient
32°F to 122°F (0°C to 50°C), 0 to 95%RH, Non-condensing.

Agency
Restriction of the use of certain Hazardous Substances (RoHS).

Terminations
Daikin recommends using a twisted shielded pair of at least 22AWG for the power wire connections. The shield should be earth grounded only at the power source. Larger gauge wire may be required for long runs.

Sensor circuit board

Terminal descriptions
R .......... 15 to 28VAC* (AC requires separate shielded wire) (Shield terminated at power source only)
U .......... Unoccupied Contact. (Terminal grounded when in Unoccupied, VDC only).
E .......... System “Off” Indication. (Terminal grounded when in System “Off” mode, VDC only).
1.......... Status Indicator Input from the MicroTech III Unit Controller. (5VDC).
3.......... Output Signal, Room Temp Thermistor Sensor. (10K ATP Z curve, 10K-2). 91011575 tenant override only
4.......... Ground or Neutral* (AC requires separate shielded wire). Common Reference for All Signal Terminals.
5.......... Setpoint Analog Range Tolerance

Setpoint analog range tolerance

<table>
<thead>
<tr>
<th>Setpoint Range</th>
<th>Terminal 3 Analog Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>55°F to 95°F</td>
<td>3.0 to 4.0 vdc</td>
</tr>
<tr>
<td>-3°F to +3°F</td>
<td>0.0 to 0.10 vdc</td>
</tr>
<tr>
<td>-5°F to +5°F</td>
<td>2.12 to 2.2 vdc</td>
</tr>
</tbody>
</table>

Note: * The AC power wiring at terminals [R] & [5] should be run in a separate twisted shielded pair to avoid possible fluctuating and inaccurate signal levels induced into the other sensor signal wires. This sensor AC power can be run in the same conduit with the sensor signal wire as long as it’s run in twisted, shielded pair and terminated properly.

Digitally adjustable room temperature sensor wiring
Digitally Adjustable Display Sensor

Used With:
Water Source Heat Pumps (WSHP) - Sensor Part No. 910121754
  SmartSource® Units - Models GS & GT
  Enfinity™ Units with MicroTech® III Controls - Models CCH, CCW; VFC, VFW; LVC, LVW; MHC, MHW & VHC, VHF

Fan Coil Units (FCU) - Sensor Part No. 910113679
  Models With MicroTech III Controls

Overview
The display sensor is used in conjunction with the MicroTech III equipped units as described in the Application Section below. The same sensor is used for Water Source Heat Pump (WSHP) and for Fan Coil Units (FCU) with just a hardware jumper and menu change during configuration. The sensor has a digital display for Temperature, Humidity, Occupancy, Fan Speed, System Mode, Alarm, Setpoint and Status indication. Controls include six buttons for Setpoint, System Mode, Fan Speed, Occupied/Unoccupied Request, and Override Reset.

Digital display sensor - P/N 910121754, Fan Coil P/N 910113679

910113679, Fan Coil Unit Model:
• Display sensor to show room temperature, fan speed (Auto/High/Medium/Low), system mode (Heat/Cool/Auto/Off), alarm, override and occupancy.

910121754, Water Source Heat Pump Model:
• Display sensor to show room temperature, room humidity, fan speed (Auto/On), system mode (Heat/Cool/Auto/Off/Dhum), alarm, override and occupancy.
• De-humidification output contact has an adjustable setpoint and configurable deadband. This output operates automatically using the RH setpoint and deadband in the system “Auto” mode or in the “Dhum” mode.

Sensor dimensions

![Sensor Dimensions Diagram]
Termination
Daikin Applied recommends using twisted pair of at least 22AWG and sealant filled connectors for all wire connections. Larger gauge wire may be required for long runs. All wiring must comply with the National Electric Code (NEC) and local codes. Do NOT run this device’s wiring in the same conduit as AC power wiring. Tests show that fluctuating and inaccurate signal levels are possible when AC power wiring is present in the same conduit as the signal lines. If you are experiencing any of these difficulties, please contact your Daikin Applied representative.

Figure 1: Sensor circuit board

Terminal Descriptions
R ........ 15 to 28VAC (AC requires separate shielded wire)
DH ...... Dehumidification Contact (Triac from R to DH @170mA, WHSP Only).
U ........ Unoccupied Contact. (Terminal grounded when in Unoccupied, VDC only).
E ........ System “Off” Indication. (Terminal grounded when in System “Off” mode, VDC only).

1........ Status Indicator Input from the MicoTech III SmartSource Unit Controller. (5VDC).
2........ Output Signal, and Fan Mode System (0 to 5VDC). Output Signal, System Mode Select for FCU only, (0 to 5VDC).
3........ Output Signal, Setpoint Adjust from 55°F to 95°F (default) or ±5°F Configurable. (0 to 5VDC) See Setpoint Analog Range Tolerances.
4........ Output Signal, Room Temp Thermistor Sensor. (10K ATP Z curve, 10K-2).
5........ Ground or Neutral (AC requires separate shielded wire). Common Reference for All Signal Terminals.
6........ Output Signal, Fan Speed Select for FCU only. (0 to 5VDC). Terminal 6 not used for WSHP units.

Setpoint analog range tolerance

<table>
<thead>
<tr>
<th>Setpoint Analog Tolerance</th>
<th>55° to 95°F Scale</th>
<th>-5° to +5°F Scale</th>
<th>Terminal 3 Analog Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>@ 55°F (min.)</td>
<td>@ -5°F (min.)</td>
<td>0.0 to 0.10 vdc</td>
<td></td>
</tr>
<tr>
<td>@ 85°F</td>
<td>@ -2.5°F</td>
<td>1.3 to 1.42 vdc</td>
<td></td>
</tr>
<tr>
<td>@ 75°F</td>
<td>@ 0°F</td>
<td>2.12 to 2.2 vdc</td>
<td></td>
</tr>
<tr>
<td>@ 85°F</td>
<td>@ +2.5°F</td>
<td>2.58 to 2.63 vdc</td>
<td></td>
</tr>
<tr>
<td>@ 95°F (max.)</td>
<td>@ +5°F (max.)</td>
<td>3.0 to 4.0 vdc</td>
<td></td>
</tr>
</tbody>
</table>

Specifications
Supply Voltage:
AC Hot.................. (R) 7 to 28VAC, 24VAC nominal, 0.17VA
GND/Neutral……… (5) Sensor common reference ground.

Sensor:
Temperature .......... 10K-2 Thermistor, ±0.36°F (±0.2°C)
Humidity ............. 2% Accuracy from 20 to 80%, Capacitive.

Outputs:
Unoccupied......... (U), Unoccupied = Digital low to ground (Same ground as power source), 100mA @5VDC max.
Dehumidify......... (DH), = Dehumidify = Voltage output (same as supply voltage), 170mA max.
System Off......... (E), System Off = Digital low to ground (Same ground as power source), 100mA @5VDC max.
Fan Speed .......... (2 or 6), Analog, 0 to 5 VDC.
System Mode....... (2), Analog, 0 to 5 VDC.
Setpoint .......... (3), Analog, 0 to 5 VDC.
Temperature .......... (4), Analog thermistor resistance.
Sensor Controls:
Setpoint .......... 2 Up/Down buttons
System.............. 1 button to cycle between Heat/Cool
                   Auto/Off/Dhum/Off
Fan .................. 1 button to cycle between Auto/High/
                   On.
Occupied .......... 1 button to check and request change
                   in Occupancy Status.
Override/Reset ... 1 button to request timed occupancy
                   override and reset alarms.
Inputs:................ (1), Controller alarm & system status,
                   5VDC max.
Termination:........ 10 Terminals, 16 to 22 AWG.
Mounting:............ Standard 2" × 4" J-Box or Drywall

Field Setup Jumper J50:
PRG.................... Program Mode, On = Program,
                   Off = Run.
F/C....................... Display Units, On = °C, Off = °F.
MDL..................... MODEL, On = WSHP.

Display:
LCD
Overall size......... 2.04"W × 1.33"H.
Main Digits.......... ±999.9 Digits @0.6"H
Resolution.......... 0.5 displayed value, 0.1 for offset
                   adjust
Main Value.......... Temp, Humidity & Setpoint, toggling
                   every 5 sec.
Eng. Units.......... °F, °C, %RH.
System............... Heat/Cool/Auto/Off/Dhum.
Fan ...................... Auto/High/Medium/Low/Off.
Occupied Icon...... Hollow = Unoccupied,
                   Solid = Occupied.
Function............... Override, Alarm, E-Save, Setpoint

Field Configuration Menu:
Requires J50 PRG jumper to be “On”.
Offset.............. Temp. or Humidity display, ±2°F
                   (±1.0°C) and ±5% RH.
Setpoint range ..... Default 55°F to 95°F (13°C to 35°C) or
                   ±5°F (±3°C). Adjustable between 55°F
                   to 95°F or ±3°F (±1.6°C).
Fan Lock-in......... Any fan speed or off can be locked in
                   System Lock-in. Any system mode
                   can be locked in
Resolution.......... Main display can be default .5, or .1 or
                   1.0 (°F, °C or %).
Display Mode....... Temp only, RH only, Setpoint only or
                   any combination.
Dhum DB ............ Dehumidify Dead Band adjust,
                   2% default.

Enclosure Material:
ABS Plastic, UL94V-0.

Ambient:
32°F to 122°F (0°C to 50°C), 0 to 95%RH, Non-condensing.

Agency:
RoHS.

Note: For complete Installation, operation and maintenance
       information for the Digitally Adjustable Sensor, refer to
       IOM 1171.
Applications
The display sensor can be used on the products shown in the table below

### Product usage guide

<table>
<thead>
<tr>
<th>Units</th>
<th>Product</th>
<th>Models</th>
<th>Controls</th>
<th>Used with Digitally Adjustable Sensor with Temperature and Humidity Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Source Heat Pumps</td>
<td>Horizontal</td>
<td>Enfinity™</td>
<td>W. CCH, CCW</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Vertical</td>
<td></td>
<td>W. VFC, VFW, LVC, LVW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vertical Stacked</td>
<td></td>
<td>W. VHC</td>
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</tr>
<tr>
<td></td>
<td>Console</td>
<td></td>
<td>W. MHC, MHW</td>
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</tr>
<tr>
<td></td>
<td>Horizontal &amp; Vertical</td>
<td>SmartSource 1-Stage</td>
<td>W. GSH, GSV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vertical Stacked</td>
<td>SmartSource 2-Stage</td>
<td>W. GTH, GTV</td>
<td></td>
</tr>
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<td>MicroTech III SmartSource Unit Controller</td>
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</tr>
<tr>
<td>Fan Coils</td>
<td>Horizontal</td>
<td>ThinLine™</td>
<td>FC.H, FH.H</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Vertical</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The display sensor for water source heat pump applications is shown in the table below.

### Water source heat pump application guide

<table>
<thead>
<tr>
<th>Units</th>
<th>Product</th>
<th>Models</th>
<th>Applications</th>
<th>Electric Heat</th>
<th>Water-side Economizer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stages</td>
<td>Smart Dehumidification</td>
<td>Hot Gas Reheat</td>
</tr>
<tr>
<td>Water Source Heat Pumps</td>
<td>Horizontal</td>
<td>Enfinity™</td>
<td>W. CCH, CCW</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Vertical</td>
<td></td>
<td>W. VFC, VFW, LVC, LVW</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Vertical Stacked</td>
<td></td>
<td>W. VHC</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Console</td>
<td></td>
<td>W. MHC, MHW</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Horizontal &amp; Vertical</td>
<td>SmartSource 1-Stage</td>
<td>W GSH, GSV</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Horizontal &amp; Vertical</td>
<td>SmartSource 2-Stage</td>
<td>W. GTH, GTV</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Note:**
1. With optional Boilerless controls
Overview
The basic sensor provides simple room temperature sensing for 2-stage heating, 2-stage cooling, and 2-stage electric heat applications. Electric heat options include boilerless, supplemental, and primary heat capabilities. Unit status is provided through a flashing LED located on the sensor while timed tenant override and fault reset are provided through the override button.

Note: For complete installation, operation and maintenance information for the Basic Sensor, refer to IM 955-x

Features
Setpoint Adjustment: None
Stages: Heating (4), Cooling (3)
Annunciation: Status LED
Reset: Alarm (Override Button), Setback Override (Override Button)

Application
Electric Heat: Boilerless, Supplemental, Primary
Waterside Economizer: 3-Way Valve Control

Dimensions
Temperature sensor wiring to MicroTech III unit controller (669529001)

Temperature Sensor Terminals

MicroTech III Unit Controller TB1 Terminals

DC signal com Room Sensor/T0 Setpoint Adjust Fan Mode/H-C-Auto Room Sensor LED

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Room Temperature Sensors Adjustable 55° to 95°F or +/- 3°F – P/N 669529101
Sensor +/- 3°F – P/N 669529201
For Use With Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
The adjustable 55° to 95°F or +/- 3°F or +/-1.5°C sensors can be used for 2-stage heating, 2-stage cooling, and 2-stage electric heat applications. Electric heat options include boilerless, supplemental, and primary heat capabilities. Unit status is provided through a flashing LED located on the sensor while timed tenant override and fault reset are provided through the override button. Changing the system or fan mode is easily accomplished through the slider switches.

Note: For complete installation, operation and maintenance information for the Room Temperature Sensors, refer to IM 955-x

Sensor Functions

![Diagram](image_url)

Adjustable 55°F to 95°F (Part No. 669529101)

Adjustable +/- 3°F or +/-1.5°C (Part No. 669529201)
Sensor Specifications
Thermistor resistance (10kΩ)
  • (Conforms to Advance Thermal Products curve 2)
Ambient Temperature Limits:
Shipping and Storage: 40°F to 160°F (–40°C to 71°C)
Operating: 40°F to 140°F (4°C to 60°C)
Humidity: 5 to 95% RH, noncondensing
Locations: NEMA Type 1, Indoor only
Connections: Color Coded Leads

Operating Modes
Cool Mode
  ■ In cool mode the MicroTech III wall-mounted temperature sensor controls the cooling system
Heat Mode
  ■ In heat mode, the Microtech III wall-mounted Room Temperature Sensors controls the heating system.
Auto-Changeover Mode
  ■ In this mode the Microtech III wall-mounted Room Temperature Sensors will automatically change from heat mode to cool mode, or vice versa.

All Temperature Sensors
Timed Override
  ■ Press Override button for more than 3 but less than 10 seconds and Unit will return to Occupied operation until the override time expires (as programmed in BMS).

Dimensions

Wiring P/N 669529101 & P/N 669529201

MicroTech III Sensor Kits – Water Source Heat Pump (10 kW)

<table>
<thead>
<tr>
<th>Sensor Kit P/N</th>
<th>Tenant Override Button</th>
<th>SPT Adj. Pot</th>
<th>Status LED</th>
<th>Fan and Mode Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>669529101</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes 55°F to 95°F (12°C to 35°C)</td>
</tr>
<tr>
<td>669529201</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes -3°F to +3°F (-1.5°C to +1.5°C)</td>
</tr>
</tbody>
</table>

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Room Temperature Sensor – Adjustable Cool/Warm With Occupancy Switch – P/N 910121753

For Use With Daikin Enfinity™ And SmartSource® Water Source Heat Pump Units With MicroTech® III Controls

Overview
The Adjustable Cool/Warm Sensor with Occupancy Switch can be used for 2-stage heating, 2-stage cooling, and 2-stage electric heat applications. Unit status is provided through a flashing LED located on the thermostat while timed tenant override and fault reset are provided through the override button. Changing the system mode, fan mode and occupancy is easily accomplished through the slider switches.

Note: For complete installation, operation and maintenance information for the Room Temperature Sensor, refer to IOM 1177

Sensor Functions

This sensor is used for water source heat pump applications requiring the following functionality:

- **Cool/Warm Room Temperature Adjustment** – This slide adjustment is used to set the desired room temperature. To increase the desired room temperature, move the slide to the right toward "Warm". To decrease the desired room temperature, move the slide to the left toward "Cool".

- **Occupancy Switch** – Move the switch to the "Occ" to allow the unit to operate in the occupied mode. Move the switch to the "Unoc" to allow the unit to operate in the unoccupied mode. Move the switch to the "Off" so heating, cooling and the fan remain off.

- **System Switch** – Set to "Heat" for heating only operation. Set to "Auto" for operation of heating or cooling as needed to satisfy the room setpoint conditions. Set to "Cool" for cooling only operation. The output voltage on Terminal 2 will change based on the system mode selection.

- **Fan Switch** – Set to "Auto" to allow the fan to on when heat or cool are on. Set to "On" to allow the fan to operate continuously in the occupied mode and cycle on a call for heat or cool in the unoccupied mode.

- **Status LED** – This green LED will light to indicate the system status. See table below for unit status LED definitions.

- **Override Button** – When the "Override" button is pressed, the thermistor sensor across terminal 4 is shorted. If held for more than 5 seconds but less than 11 seconds, it puts the water source heat pump controller into a timed Occupied Override. If the unit is in alarm, then holding the "Override" Button for more than 11 seconds will clear all alarms in the water source heat pump controller but only if the cause of the alarm has already returned to its non-alarm condition. Some alarms will not reset from the room sensor. In this case, power to the unit must be cycled off for 5 seconds to clear the alarm. Continuously resetting alarms from the room sensor could damage the controller. Please call a service technician when repeated alarm resets are required to keep the unit operational.
WSHP unit status LED definition

<table>
<thead>
<tr>
<th>Status LED</th>
<th>Unit Status</th>
<th>Unit Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>OFF</td>
<td></td>
</tr>
<tr>
<td>0.5 seconds</td>
<td>0.5 seconds</td>
<td>Controller Off (or Network “Wink” operation active)</td>
</tr>
<tr>
<td>0.0 seconds</td>
<td>Continuous</td>
<td>Unit running in Night Setback Override Mode or no power to the sensor</td>
</tr>
<tr>
<td>0.5 seconds</td>
<td>5.5 seconds</td>
<td>Unoccupied Mode</td>
</tr>
<tr>
<td>5.5 seconds</td>
<td>0.5 seconds</td>
<td>Standby Mode</td>
</tr>
<tr>
<td>Continuous</td>
<td>0.0 seconds</td>
<td>Occupied Mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Alarm”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Override”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Unoccupied”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Energy Save” or “Load Shed” command from Energy Management System</td>
</tr>
</tbody>
</table>

Termination
Daikin recommends using twisted pair of at least 22AWG and sealant filled connectors for all wire connections. Larger gauge wire may be required for long runs. All wiring must comply with the National Electric Code (NEC) and local codes. Do NOT run this device’s wiring in the same conduit as AC power wiring. Fluctuating and inaccurate signal levels are possible when AC power wiring is present in the same conduit as the signal lines. If you are experiencing any of these difficulties, please contact your Daikin representative.

Field mounting and wiring termination

Terminal Descriptions
1 - Unit Status Indicator Input from the MicoTech III SmartSource Unit Controller. (5VDC)
2 - Output Signal, Fan and Unit Mode (0 to 5VDC)
3 - Output Signal, Setpoint Adjustment
4 - Output Signal, Room Temp Thermistor Sensor. (10K ATP Z curve, 10K-2)
5 - Ground or Neutral. Common Reference for All Signal Terminals
E – Emergency Shutdown. (Terminal grounded when in System “Off” mode, VDC only)
U - Unoccupied Contact. (Terminal grounded when in Unoccupied, VDC only)

Wiring P/N 910121753
Wiring between the sensor and the water source heat pump unit for typical heating and cooling operation is shown below.
**Applications**

The display sensor can be used on the products shown in the table below.

**Product usage guide**

<table>
<thead>
<tr>
<th>Units</th>
<th>Product</th>
<th>Models</th>
<th>Controls</th>
<th>Used with Digitally Adjustable Sensor with Temperature and Humidity Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Source Heat Pumps</td>
<td>Enfinity™</td>
<td>W. CCH, CCW</td>
<td>MicroTech III Unit Controller</td>
<td>Yes</td>
</tr>
<tr>
<td>Vertical</td>
<td></td>
<td>W. VFC, VFW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical Stacked</td>
<td></td>
<td>W. VHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Console</td>
<td></td>
<td>W. MHC, MHW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horizontal &amp; Vertical</td>
<td>SmartSource 1-Stage</td>
<td>W. GSH, GSV</td>
<td>MicroTech III SmartSource Unit Controller</td>
<td></td>
</tr>
<tr>
<td>SmartSource 2-Stage</td>
<td></td>
<td>W. GTH, GTV</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The display sensor for water source heat pump applications is shown in the table below.

**Water source heat pump application guide**

<table>
<thead>
<tr>
<th>Units</th>
<th>Product</th>
<th>Models</th>
<th>Applications</th>
<th>Electric Heat</th>
<th>Water-side Economizer</th>
<th>3-Way Valve Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal</td>
<td>Enfinity™</td>
<td>W. CCH, CCW</td>
<td>1 1</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Vertical</td>
<td>W. VFC, VFW</td>
<td>1 1</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Vertical Stacked</td>
<td>W. VHC</td>
<td>1 1</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Console</td>
<td>W. MHC, MHW</td>
<td>1 1</td>
<td>No</td>
<td>Yes¹</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Horizontal &amp; Vertical</td>
<td>SmartSource 1-Stage</td>
<td>W. GSH, GSV</td>
<td>3 4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Horizontal &amp; Vertical</td>
<td>SmartSource 2-Stage</td>
<td>W. GTH, GTV</td>
<td>3 4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: ¹With optional Boilerless controls
Daikin Applied Training and Development
Now that you have made an investment in modern, efficient Daikin equipment, its care should be a high priority. For training information on all Daikin HVAC products, please visit us at www.DaikinApplied.com and click on Training, or call 540-248-9646 and ask for the Training Department.

Warranty
All Daikin equipment is sold pursuant to its standard terms and conditions of sale, including Limited Product Warranty. Consult your local Daikin Applied representative for warranty details. Refer to Form 933-430285Y. To find your local Daikin Applied representative, go to www.DaikinApplied.com.

Aftermarket Services
To find your local parts office, visit www.DaikinApplied.com or call 800-37PARTS (800-377-2787). To find your local service office, visit www.DaikinApplied.com or call 800-432-1342.

This document contains the most current product information as of this printing. For the most up-to-date product information, please go to www.DaikinApplied.com.

Products manufactured in an ISO Certified Facility.