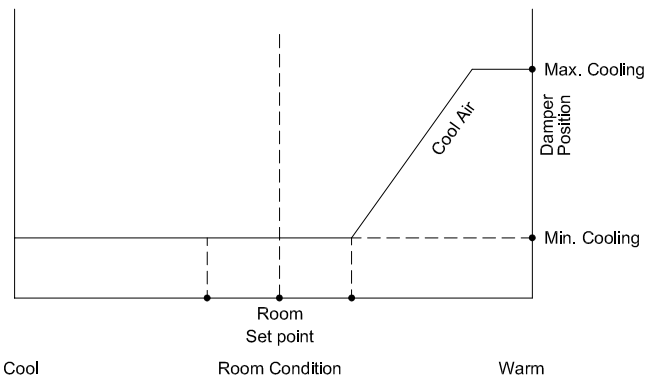


**LEGEND**

- FACTORY ELECTRICAL WIRING
- - - - - FIELD ELECTRICAL WIRING

**CONTROL GRAPH**



**Sequence of Operation -- Cooling only  
Pressure Dependent**

On power up the damper will calibrate closed for 2 minutes.

On an increase in space temperature the controller regulates the actuator to open the air damper and increase the flow of cool air. On an increase of space temperature greater than the cooling proportional band, the damper position (%) is maintained at its pre-selected maximum setting.

On a decrease in space temperature the controller regulates the actuator to close the air damper and reduce the flow of cool air. If the space temperature decreases to less than the cooling proportional band, the damper position (%) is maintained at the pre-selected minimum setting.

**PROJECT:**



**ENGINEER:**

*BE MB*

**CUSTOMER:**

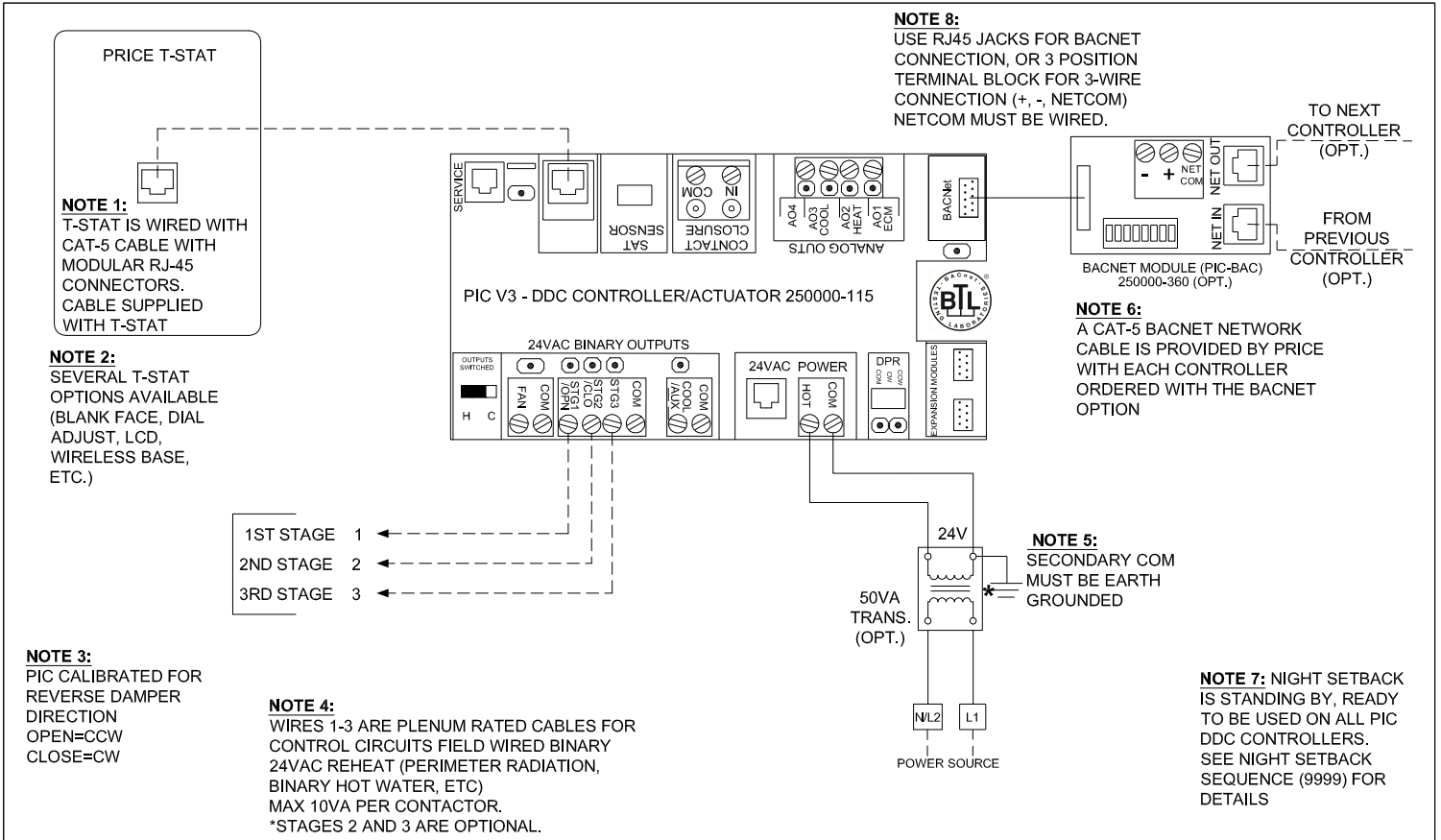
260541

**SUBMITTAL DATE:**

**SPEC. SYMBOL:**

2017/09/06

**LGB  
PIC DDC  
PRESSURE DEPENDENT  
COOLING ONLY  
NO LOCAL REHEAT CONTROL**

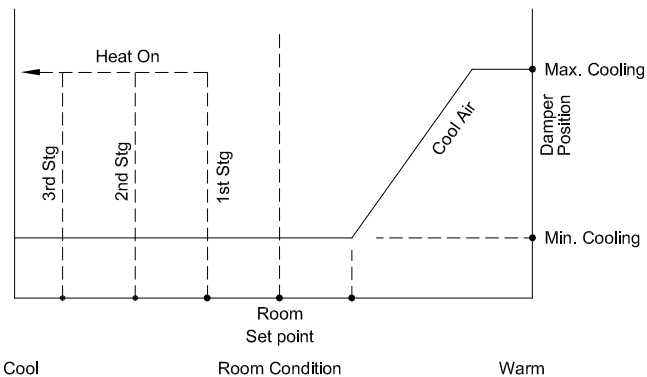


**Calibration note:** Suitable min and max heating flows must be selected in order to maintain flow through energized electric coils of at least 200 fpm and at least 70 cfm/kW throughout the entire operating range.

**LEGEND**

- FACTORY ELECTRICAL WIRING
- - - - - FIELD ELECTRICAL WIRING

**CONTROL GRAPH**



**Sequence of Operation -- Cooling**

**With up to 3 stage binary reheat - Pressure Dependent**

On power up the damper will calibrate closed for 2 minutes.  
 On an increase in space temperature the controller regulates the actuator to open the air damper and increase the flow of cool air.  
 On an increase of space temperature greater than the cooling proportional band, the damper position (%) is maintained at its pre-selected maximum setting.  
 On a decrease in space temperature the controller regulates the actuator to close the air damper and reduce the flow of cool air.  
 If the space temperature decreases to less than the cooling proportional band, the damper position (%) is maintained at the pre-selected minimum setting.

**Reheat Operation:** On a decrease in space temperature into the heating proportional band, the 1st stage binary 24VAC reheat output will energize. Upon further decreases, the 2nd then 3rd stages of reheat (if used) will energize.

**PROJECT:**

**ENGINEER:**

**CUSTOMER:**

**SUBMITTAL DATE:**

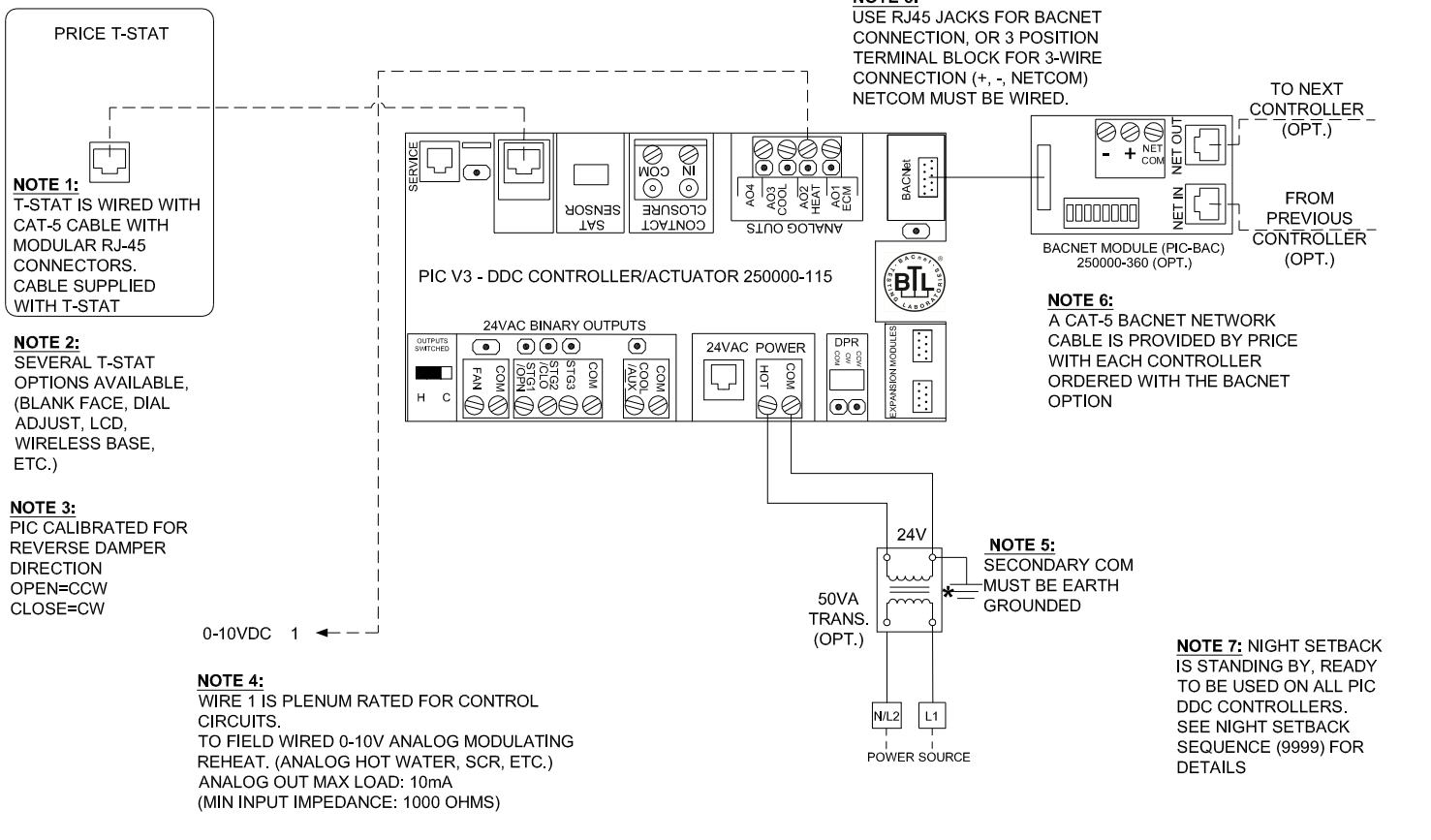
**SPEC. SYMBOL:**

**PRICE**<sup>®</sup>

**LGB  
PIC DDC**  
PRESSURE DEPENDENT  
WITH UP TO 3 STG BINARY REHEAT

260542

2017/09/06



**Calibration note:** Suitable min and max heating flows must be selected in order to maintain flow through energized electric coils of at least 200 fpm and at least 70 cfm/kW throughout the entire operating range.

**Sequence of Operation -- Cooling  
With Analog modulating reheat - Pressure Dependent**

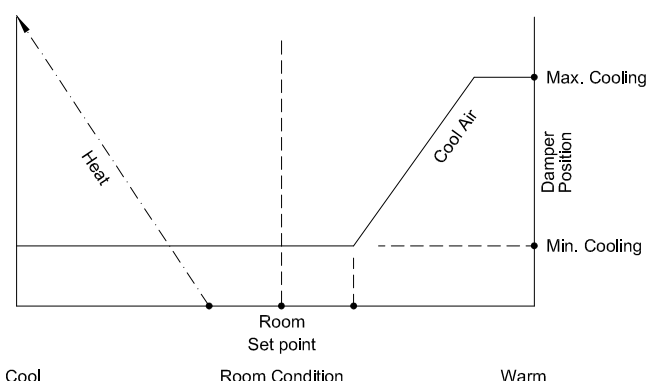
On power up the damper will calibrate closed for 2 minutes.  
 On an increase in space temperature the controller regulates the actuator to open the air damper and increase the flow of cool air.  
 On an increase of space temperature greater than the cooling proportional band, the damper position (%) is maintained at its pre-selected maximum setting.  
 On a decrease in space temperature the controller regulates the actuator to close the air damper and reduce the flow of cool air. If the space temperature decreases to less than the cooling proportional band, the damper position (%) is maintained at the pre-selected minimum setting.


**Reheat Operation:** On a decrease in space temperature, the controller modulates the 0-10VDC output to increase heat proportionally to the room demand.

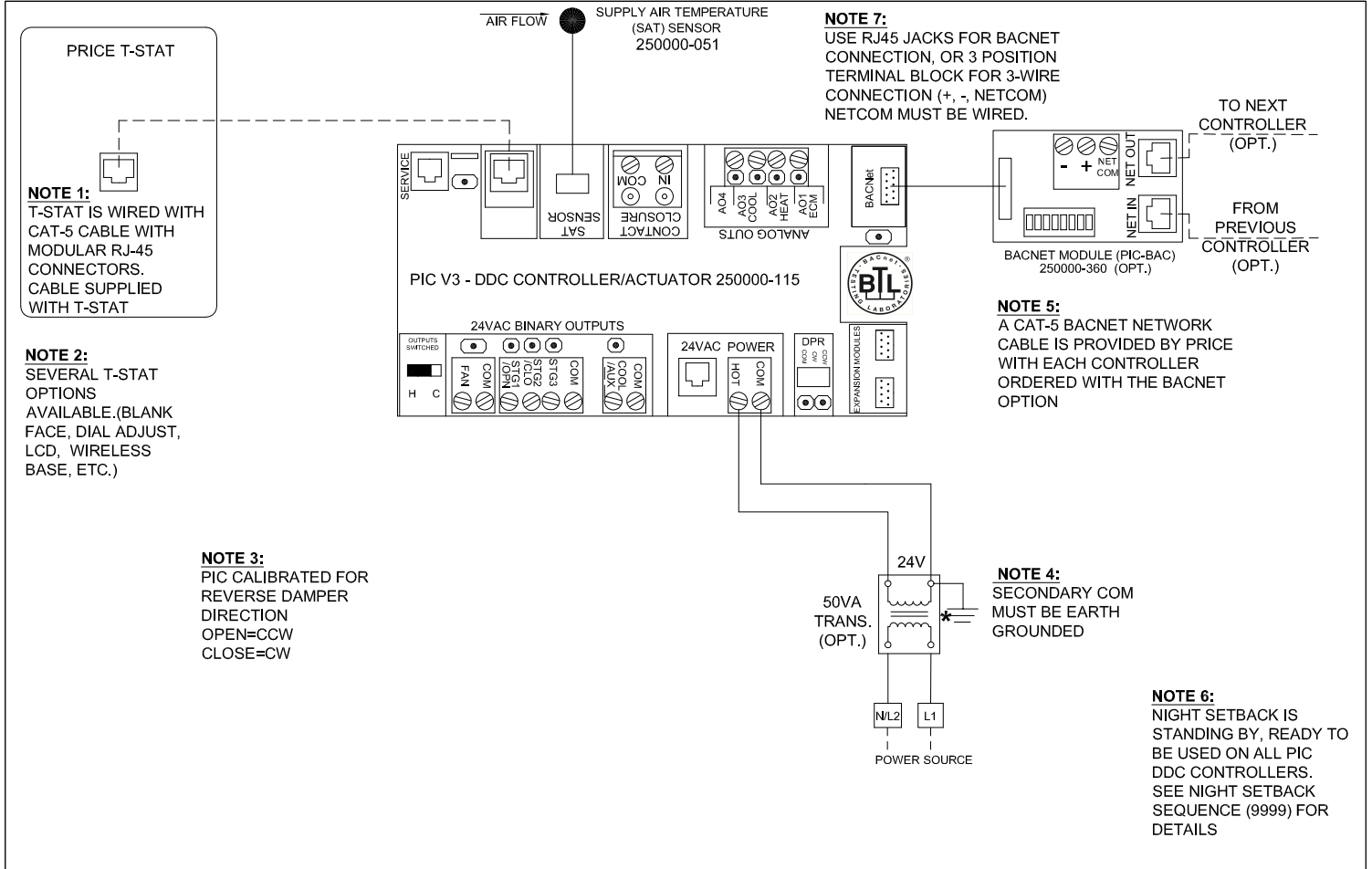
**LEGEND**

- FACTORY ELECTRICAL WIRING
- FIELD ELECTRICAL WIRING

**CONTROL GRAPH**



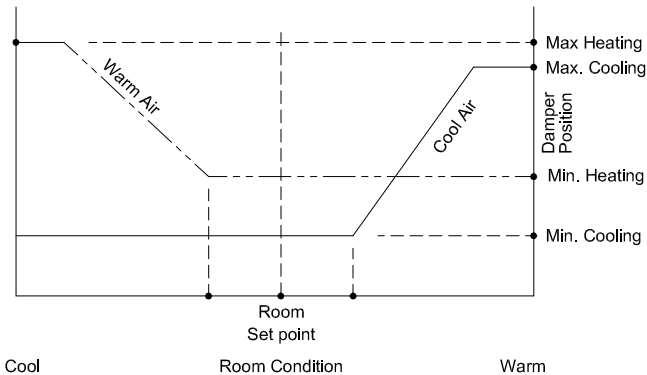
<b>PROJECT:</b>		 <b>LGB PIC DDC PRESSURE DEPENDENT COOLING 0-10V ANALOG REHEAT</b>
<b>ENGINEER:</b>		
<b>CUSTOMER:</b>		
<b>SUBMITTAL DATE:</b>	<b>SPEC. SYMBOL:</b>	



**LEGEND**

- FACTORY ELECTRICAL WIRING
- - - - - FIELD ELECTRICAL WIRING

**CONTROL GRAPH**



**Sequence of Operation -- Heat/cool changeover  
Pressure Dependent**

On power up the damper will calibrate closed for 2 minutes.

**Cool supply air:** On an increase in space temperature the controller regulates the actuator to open the air damper and increase the flow of cool air. On an increase of space temperature greater than the cooling proportional band, the damper position (%) is maintained at its pre-selected maximum setting. On a decrease in space temperature the controller regulates the actuator to close the air damper and reduce the flow of cool air. If the space temperature decreases to less than the cooling proportional band, the damper position (%) is maintained at the pre-selected minimum setting.

**Warm supply air:** On a decrease in space temperature the controller regulates the actuator to open the air damper and increase the flow of warm air. On a decrease of space temperature greater than the heating proportional band, the damper position (%) is maintained at its pre-selected maximum setting.

On an increase in space temperature the controller regulates the actuator to close the air damper and reduce the flow of warm air. If the space temperature increases above the heating proportional band, the damper position (%) is maintained at the pre-selected minimum setting.

**PROJECT:**

**ENGINEER:**

**CUSTOMER:**

**SUBMITTAL DATE:**

**SPEC. SYMBOL:**

**PRICE**<sup>®</sup>

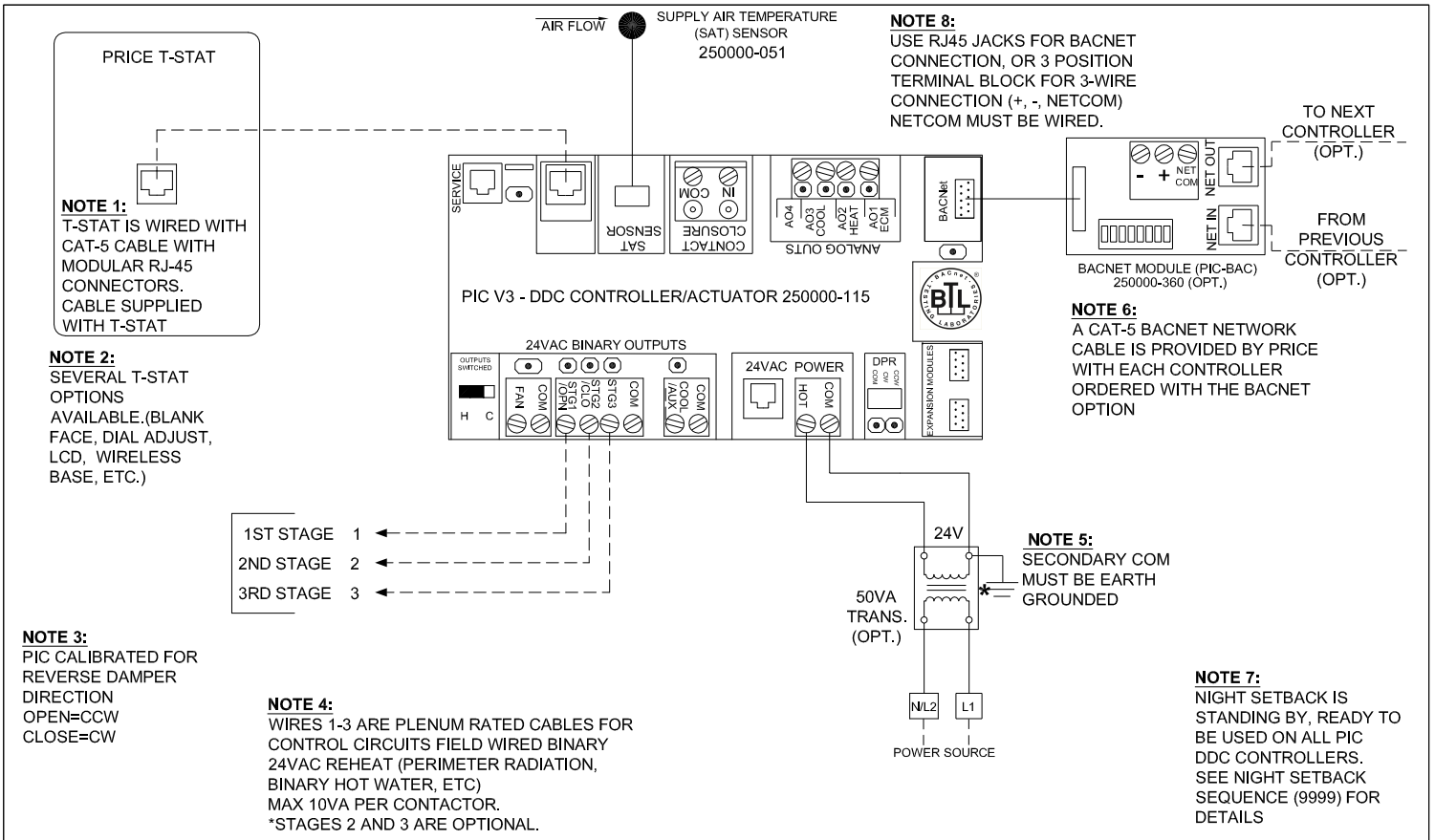
*BE MB*

**LGB  
PIC DDC**

PRESSURE DEPENDENT  
HEAT/COOL CHANGEOVER  
NO LOCAL REHEAT CONTROL

260544

2017/09/06

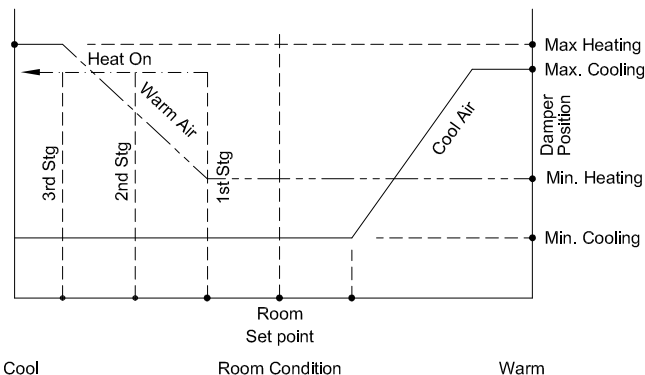


**Calibration note:** Suitable min and max heating flows must be selected in order to maintain flow through energized electric coils of at least 200 fpm and at least 70 cfm/kW throughout the entire operating range.

**LEGEND**

- FACTORY ELECTRICAL WIRING
- - - - - FIELD ELECTRICAL WIRING

**CONTROL GRAPH**



**Sequence of Operation -- Heat/cool changeover  
With up to 3 stage binary reheat - Pressure Dependent**  
On power up the damper will calibrate closed for 2 minutes.

**Cool supply air:** On an increase in space temperature the controller regulates the actuator to open the air damper and increase the flow of cool air. On an increase of space temperature greater than the cooling proportional band, the damper position (%) is maintained at its pre-selected maximum setting.

On a decrease in space temperature the controller regulates the actuator to close the air damper and reduce the flow of cool air. If the space temperature decreases to less than the cooling proportional band, the damper position (%) is maintained at the pre-selected minimum setting.

**Warm supply air:** On a decrease in space temperature the controller regulates the actuator to open the air damper and increase the flow of warm air. On a decrease of space temperature greater than the heating proportional band, the damper position (%) is maintained at its pre-selected maximum setting.

On an increase in space temperature the controller regulates the actuator to close the air damper and reduce the flow of warm air. If the space temperature increases above the heating proportional band, the damper position (%) is maintained at the pre-selected minimum setting.

**Reheat Operation:** On a decrease in space temperature into the heating proportional band, the 1st stage binary 24VAC reheat output will energize. Upon further decreases, the 2nd then 3rd stages of reheat (if used) will energize.

**PROJECT:**

**ENGINEER:**

**CUSTOMER:**

**SUBMITTAL DATE:**

**SPEC. SYMBOL:**

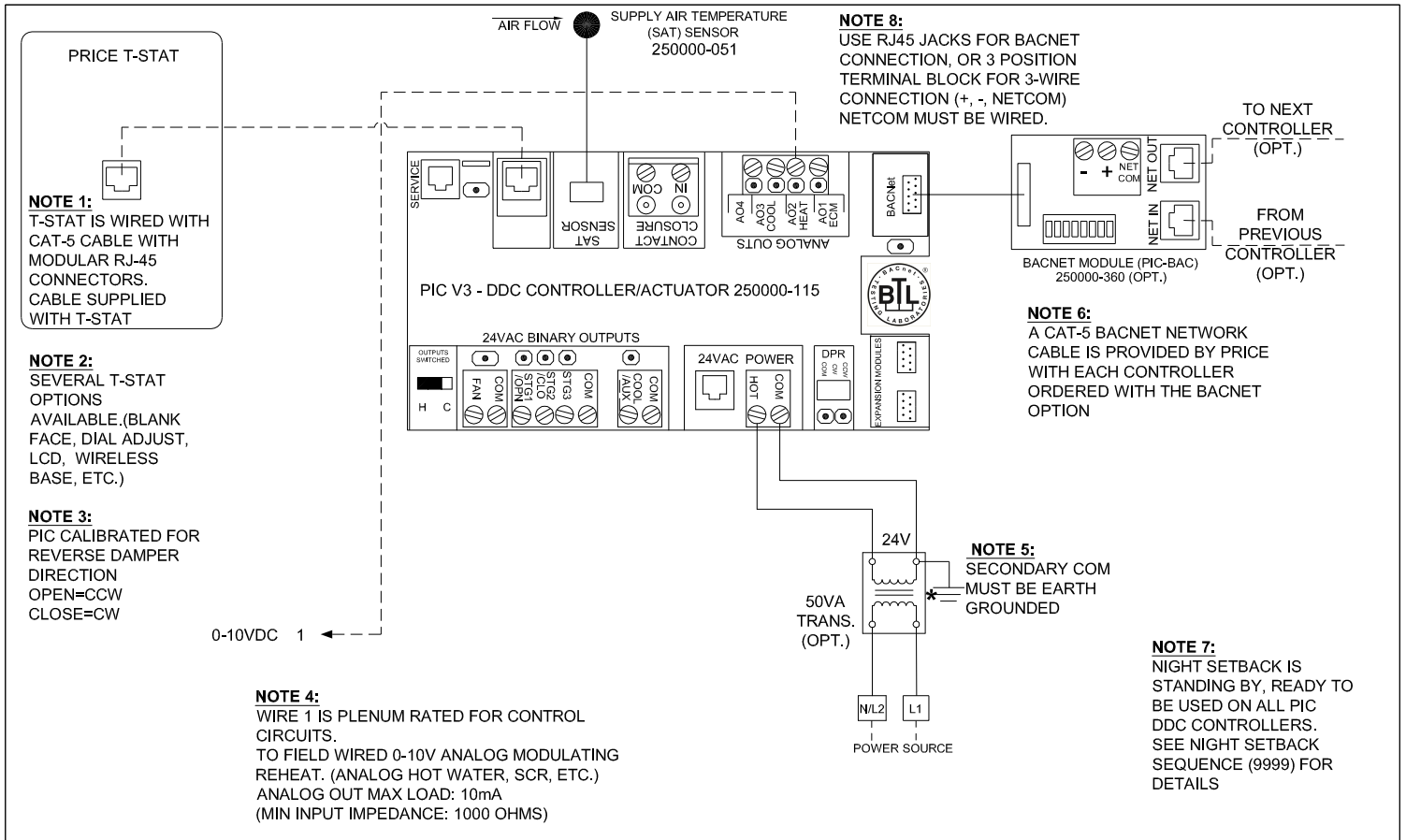
**PRICE**<sup>®</sup>

**LGB  
PIC DDC**

PRESSURE DEPENDENT  
HEAT/COOL CHANGEOVER  
WITH UP TO 3 STG BINARY REHEAT

260545

2017/09/06



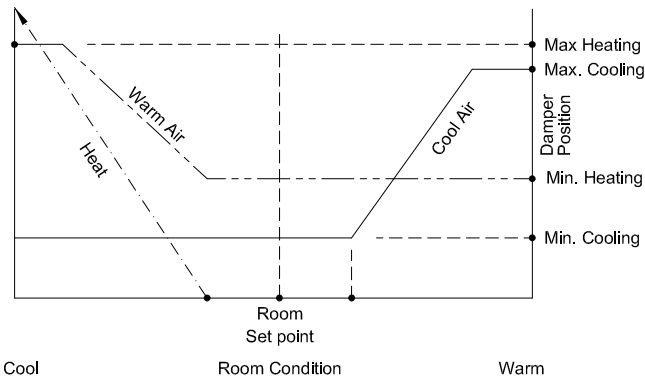
**Calibration note:** Suitable min and max heating flows must be selected in order to maintain flow through energized electric coils of at least 200 fpm and at least 70 cfm/kW throughout the entire operating range.

**Sequence of Operation -- Heat/cool changeover OR cooling  
With Analog modulating reheat - Pressure Dependent**  
On power up the damper will calibrate closed for 2 minutes.

**LEGEND**

- FACTORY ELECTRICAL WIRING
- - - - - FIELD ELECTRICAL WIRING

**CONTROL GRAPH**



**Cool supply air:** On an increase in space temperature the controller regulates the actuator to open the air damper and increase the flow of cool air. On an increase of space temperature greater than the cooling proportional band, the damper position (%) is maintained at its pre-selected maximum setting.

On a decrease in space temperature the controller regulates the actuator to close the air damper and reduce the flow of cool air. If the space temperature decreases to less than the cooling proportional band, the damper position (%) is maintained at the pre-selected minimum setting.

**Warm supply air:** On a decrease in space temperature the controller regulates the actuator to open the air damper and increase the flow of warm air. On a decrease of space temperature greater than the heating proportional band, the damper position (%) is maintained at its pre-selected maximum setting.

On an increase in space temperature the controller regulates the actuator to close the air damper and reduce the flow of warm air. If the space temperature increases above the heating proportional band, the damper position (%) is maintained at the pre-selected minimum setting.

**Reheat Operation:** On a decrease in space temperature, the controller modulates the 0-10VDC output to increase heat proportionally to the room demand.

**PROJECT:**

**ENGINEER:**

**CUSTOMER:**

**SUBMITTAL DATE:**

**SPEC. SYMBOL:**

**PRICE®**

*BE MB*

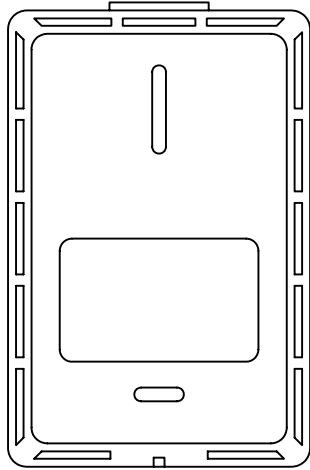
**LGB  
PIC DDC**

PRESSURE DEPENDENT  
HEAT/COOL CHANGEOVER  
0-10V ANALOG REHEAT

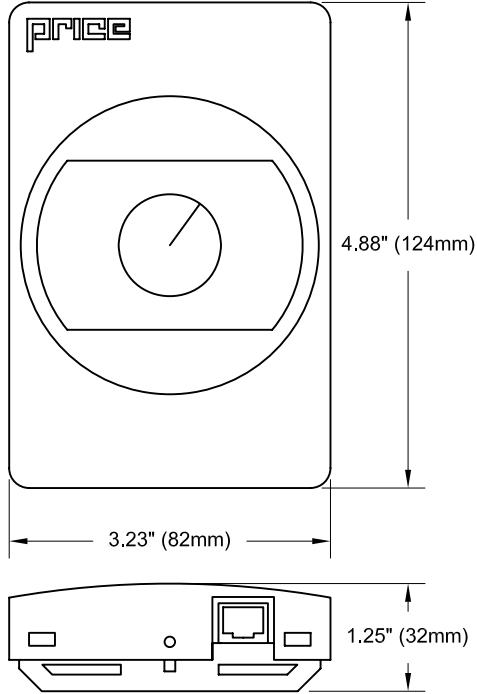
260546

2017/09/06

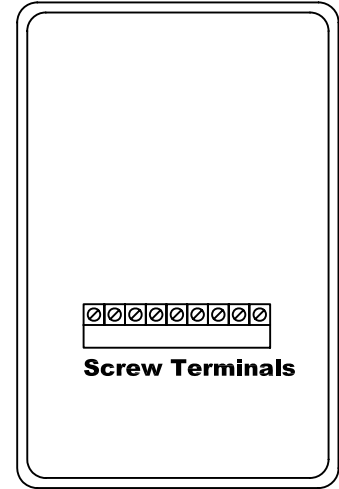
**Base**



**Cover Top  
Dial model**



**Cover Inside**



**PROJECT:**



**ENGINEER:**

LGB

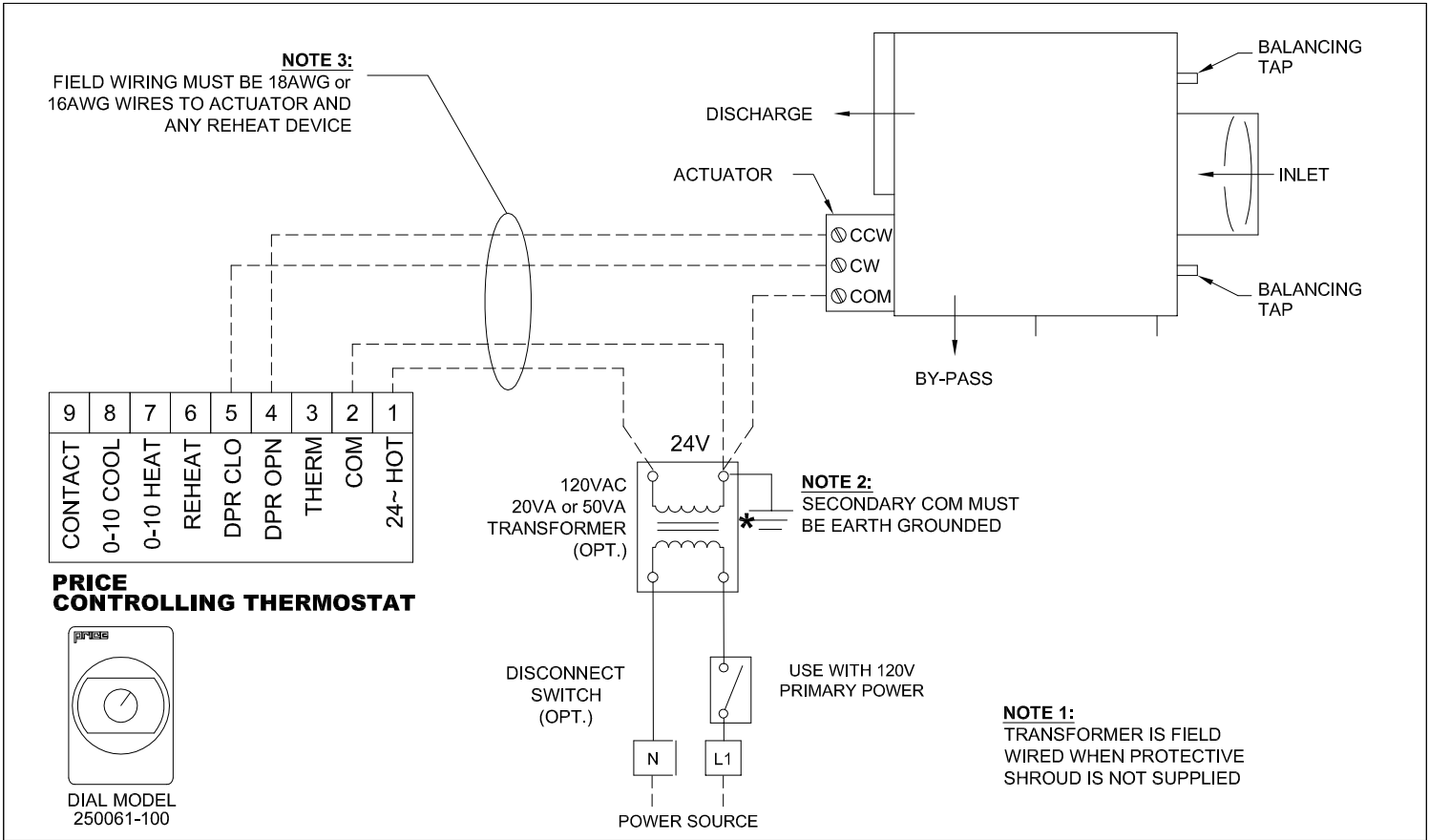
**CUSTOMER:**

XXX

**SUBMITTAL DATE:**

**SPEC. SYMBOL:**

12/14/2007



### LEGEND

----- FIELD ELECTIRCAL WIRING

#### Balancing Procedure:

1. Open the dampers of all supply outlets on the discharge duct from the terminal unit.
2. Adjust the room thermostat so that 100 % of the air from terminal unit is delivered to the room.
3. Adjust the inlet damper of the terminal unit to provide the required total amount of air.
4. Starting with the outlet the furthest away, adjust the damper of each air outlet to the required air volumes.
5. Take a static pressure reading using the dual pressure taps on the inlet panel (to obtain an average reading, link the two pressure taps together using two **equal** lengths of tubing connected by a "T").
6. Adjust the room thermostat to provide 100 % by-pass air flow (or the minimum air volume to the room, if required).
7. Position the by-pass sliding damper so that the static pressure reading obtained in step 5 remains unchanged.
8. Readjust the room thermostat to its operating set point.

#### Sequence of Operation -- Direct acting, pressure dependent arrangement for cooling applications.

The PCT thermostat shall use its built in PI (proportional & integral) to control the damper based on the demand in the space for both heating and cooling operations.

On a rise in room temperature, the thermostat energizes the actuator. The actuator slowly rotates the damper shaft counter-clockwise to increase the cold air to the room.

On a fall in room temperature the thermostat reverses the above action. The actuator slowly rotates the damper shaft clockwise to decrease cold air to the room.

**PROJECT:**

**ENGINEER:**

**CUSTOMER:**

**SUBMITTAL DATE:**

**SPEC. SYMBOL:**

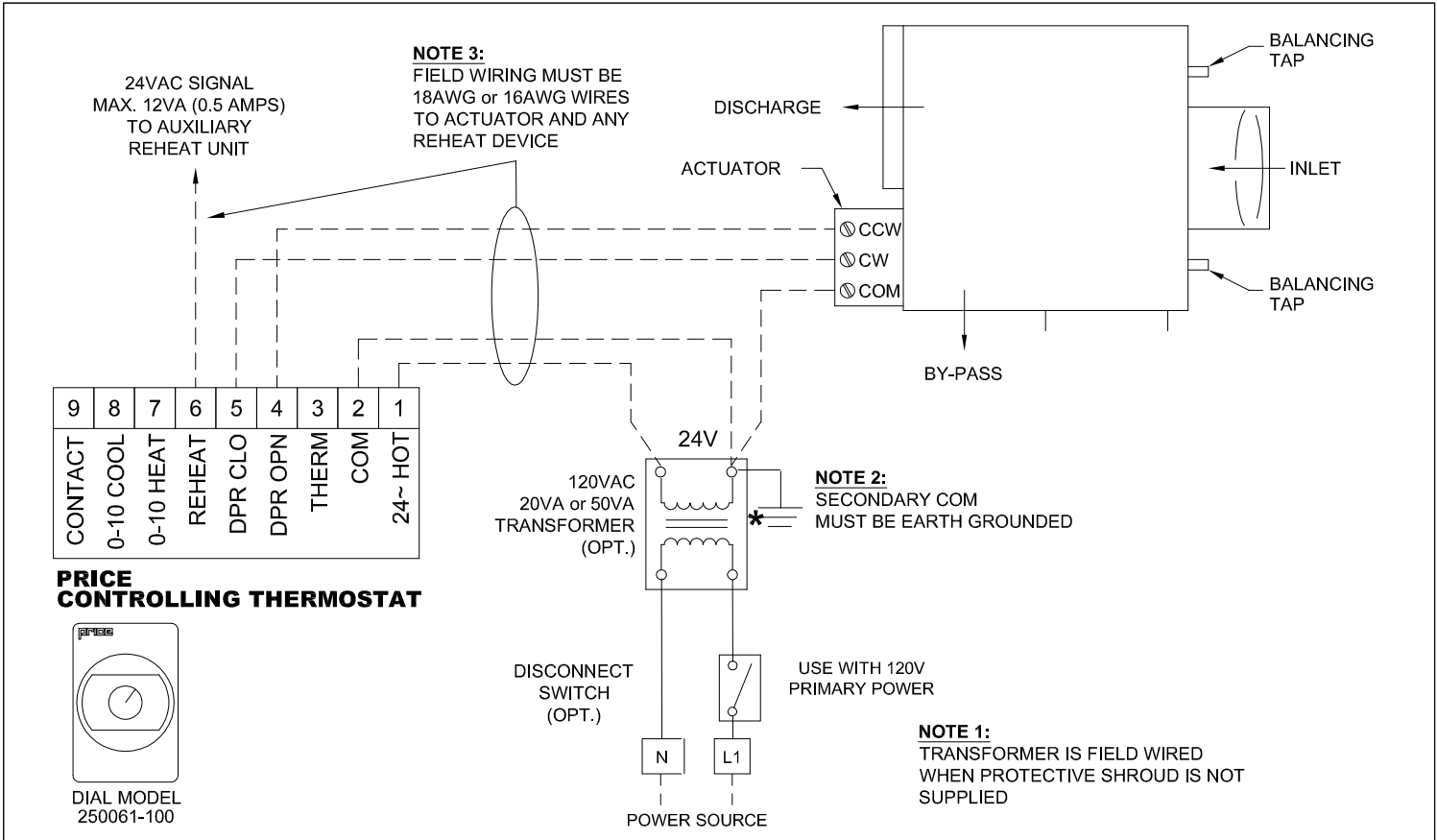
**PRICE®**

LGB  
24V Floating Actuator  
Clg.  
Low Pressure By-Pass  
Pressure Dependent  
PCT-D THERMOSTAT

220005

2019/11/06





**LEGEND**

----- FIELD ELECTRICAL WIRING

**Balancing Procedure:**

1. Open the dampers of all supply outlets on the discharge duct from the terminal unit.
2. Adjust the room thermostat so that 100 % of the air from terminal unit is delivered to the room.
3. Adjust the inlet damper of the terminal unit to provide the required total amount of air.
4. Starting with the outlet the furthest away, adjust the damper of each air outlet to the required air volumes.
5. Take a static pressure reading using the dual pressure taps on the inlet panel (to obtain an average reading, link the two pressure taps together using two **equal** lengths of tubing connected by a "T").
6. Adjust the room thermostat to provide 100 % by-pass air flow (or the minimum air volume to the room, if required).
7. Position the by-pass sliding damper so that the static pressure reading obtained in step 5 remains unchanged.
8. Readjust the room thermostat to its operating set point.

**Sequence of Operation -- Direct acting, pressure dependent arrangement for cooling applications with 1 stage of reheat or perimeter heating.**

The PCT thermostat shall use its built in PI (proportional & integral) to control the damper based on the demand in the space for both heating and cooling operations.

**Cool supply air:** On a rise in room temperature, the thermostat energizes the actuator. The actuator slowly rotates the damper shaft counter-clockwise to increase the cold air to the room.

On a fall in room temperature the thermostat reverses the above action. The actuator slowly rotates the damper shaft clockwise to decrease cold air to the room. If the room temperature continues to fall, the thermostat energizes a control relay for the reheat coil or the perimeter reheat.

**Note:** When an electric duct reheat coil is installed, the minimum air volume must maintain or exceed the minimum required face velocity as indicated on the electric reheat coil nameplate and any pressure differential or airflow switch that is being used. Minimum airflow is set with adjustable end stops on the actuator.


**PROJECT:**

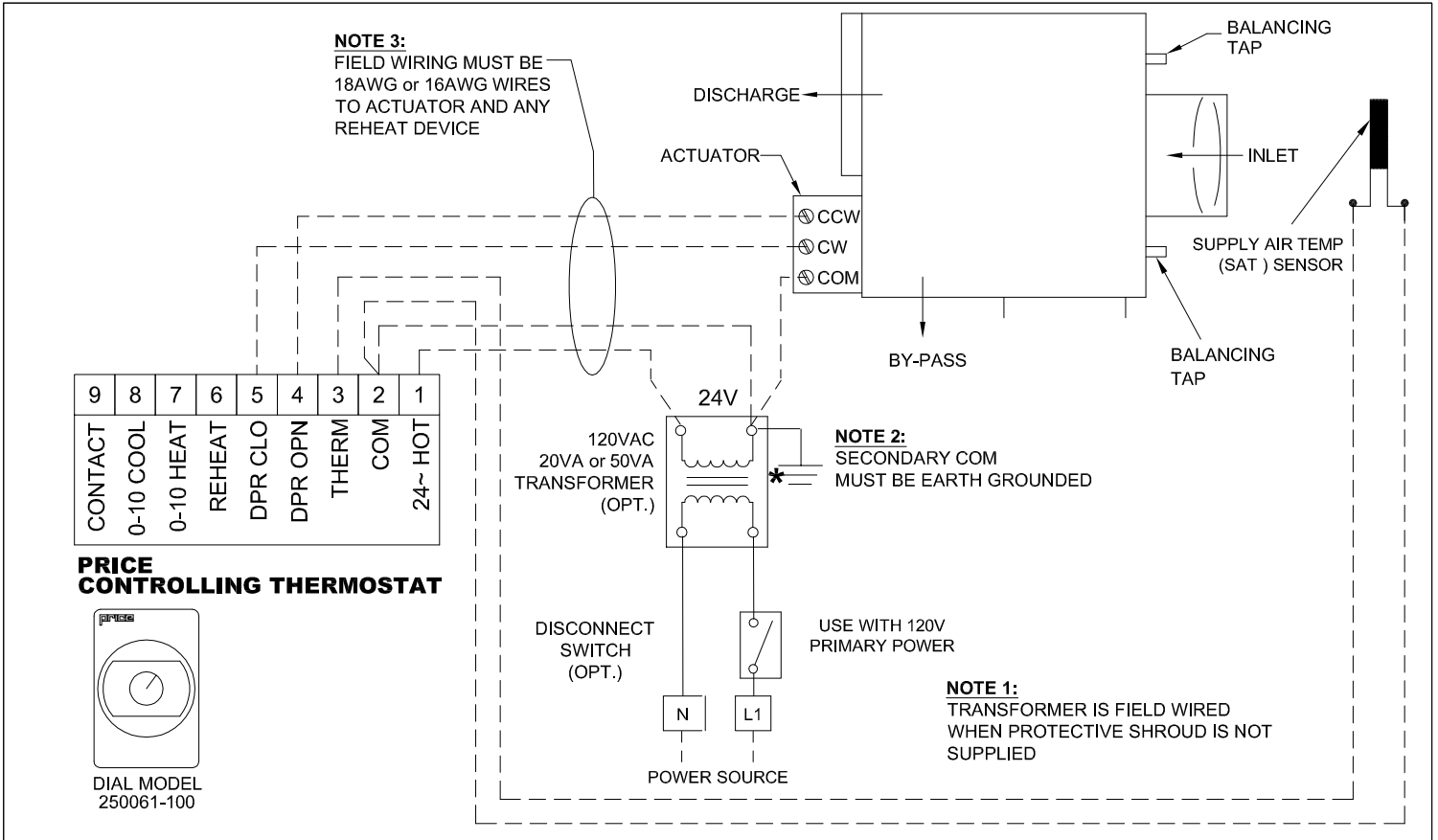
**ENGINEER:**

**CUSTOMER:**

**SUBMITTAL DATE:**

**SPEC. SYMBOL:**

<b>PRICE®</b>	
	LGB
220006	24V Floating Actuator Clg., 1 Stage Reheat Low Pressure By-Pass Pressure Dependent PCT-D THERMOSTAT
2019/11/08	



**LEGEND**

----- FIELD ELECTRICAL WIRING

**Balancing Procedure:**

1. Open the dampers of all supply outlets on the discharge duct from the terminal unit.
2. Adjust the room thermostat so that 100 % of the air from terminal unit is delivered to the room.
3. Adjust the inlet damper of the terminal unit to provide the required total amount of air.
4. Starting with the outlet the furthest away, adjust the damper of each air outlet to the required air volumes.
5. Take a static pressure reading using the dual pressure taps on the inlet panel (to obtain an average reading, link the two pressure taps together using two **equal** lengths of tubing connected by a "T").
6. Adjust the room thermostat to provide 100 % by-pass air flow (or the minimum air volume to the room, if required).
7. Position the by-pass sliding damper so that the static pressure reading obtained in step 5 remains unchanged.
8. Readjust the room thermostat to its operating set point.

**Sequence of Operation -- Direct acting, pressure dependent arrangement for automatic cooling-heating changeover applications.**

The PCT thermostat uses the Dynamic Neutral Mode by default. When the supply air (SAT) is 2 Deg C. below the room temperature, the mode is considered to be in cooling, when the supply air is 2 Deg. C. above the room temperature, the mode is considered to be in heating.

**Cool supply air:** On an increase in space temperature the controller regulates the actuator to rotate the sliding gate damper counter-clockwise to increase the flow of cool air. On an increase of space temperature greater than the cooling proportional band, the damper position is maintained at its pre-selected maximum setting.

On a decrease in space temperature the controller regulates the actuator to rotate the sliding gate damper clockwise to reduce the flow of cool air. If the space temperature decreases to less than the cooling proportional band, the damper position is maintained at the pre-selected minimum setting.

**Warm supply air:** On a decrease in space temperature the controller regulates the actuator to rotate the sliding gate damper counter-clockwise to increase the flow of warm air. On a decrease of space temperature greater than the heating proportional band, the damper position is maintained at its pre-selected maximum setting.

On an increase in space temperature the controller regulates the actuator to rotate the sliding gate damper clockwise to reduce the flow of warm air. If the space temperature increases above the heating proportional band, the damper position is maintained at the pre-selected minimum setting.

**PROJECT:**

**ENGINEER:**

**CUSTOMER:**

**SUBMITTAL DATE:**

**SPEC. SYMBOL:**

**PRICE®**

LGB

24V Floating Actuator

Clg. - Htg. Changeover

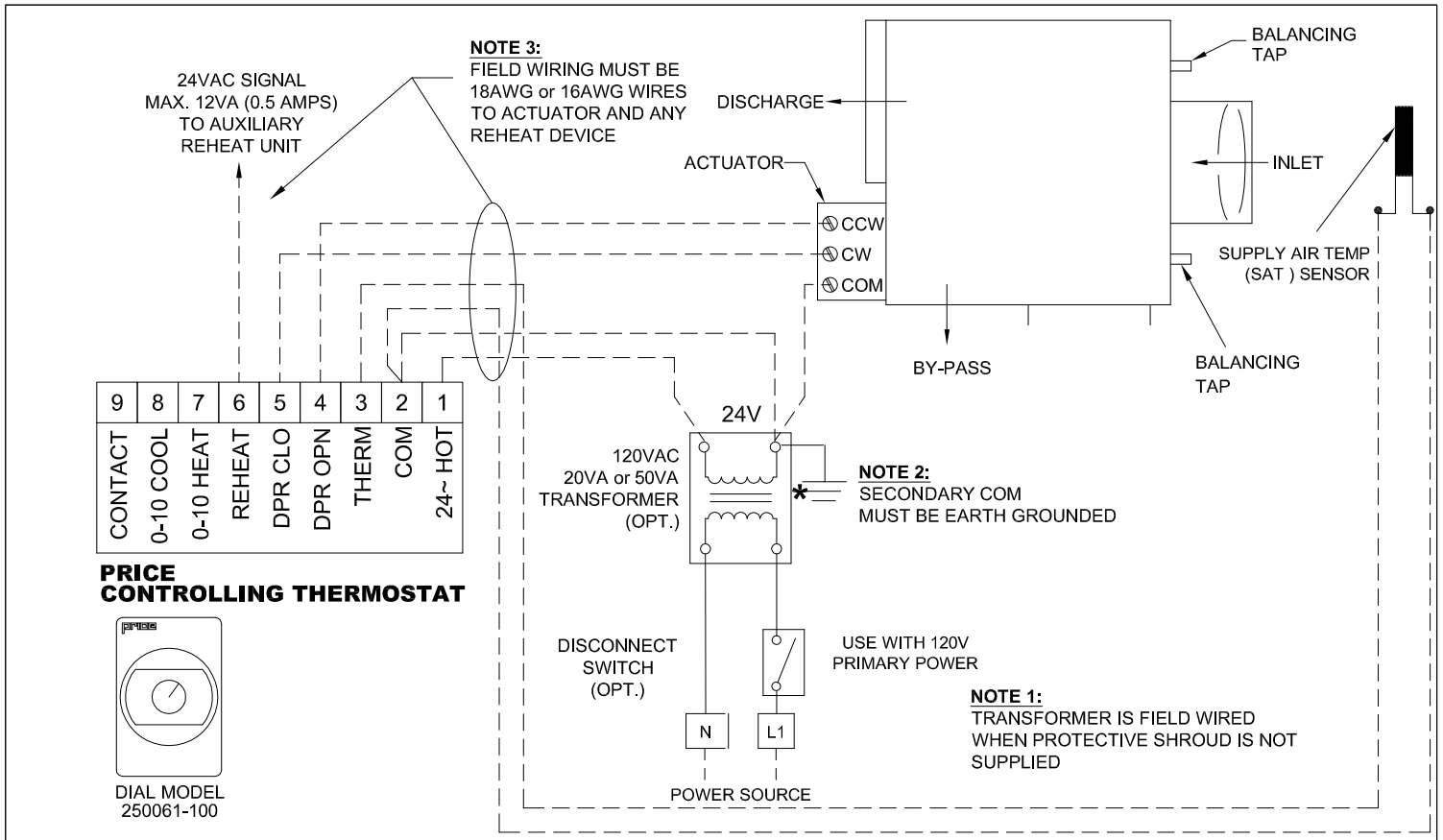
Low Pressure By-Pass

Pressure Dependent

PCT-D THERMOSTAT

220007

2019/11/08



**LEGEND**

----- FIELD ELECTRICAL WIRING

**Balancing Procedure:**

1. Open the dampers of all supply outlets on the discharge duct from the terminal unit.
2. Adjust the room thermostat so that 100% of the air from terminal unit is delivered to the room.
3. Adjust the inlet damper of the terminal unit to provide the required total amount of air.
4. Starting with the outlet the furthest away, adjust the damper of each air outlet to the required air volumes.
5. Take a static pressure reading using the dual pressure taps on the inlet panel (to obtain an average reading, link the two pressure taps together using two equal lengths of tubing connected by a "T").
6. Adjust the room thermostat to provide 100% by-pass air flow (or the minimum air volume to the room, if required).
7. Position the by-pass sliding damper so that the static pressure reading obtained in step 5 remains unchanged.
8. Readjust the room thermostat to its operating set point.

**Sequence of Operation – Direct acting, pressure dependent arrangement for automatic cooling-heating changeover applications with 1 stage of reheat or perimeter heating.**

The PCT thermostat uses the Dynamic Neutral Mode by default. When the supply air (SAT) is 2 Deg. C. below the room temperature, the mode is considered to be in cooling, when the supply air is 2 Deg. C. above the room temperature, the mode is considered to be in heating.

**Cool supply air:** On an increase in space temperature the controller regulates the actuator to rotate the sliding gate damper counter-clockwise to increase the flow of cool air. On an increase of space temperature greater than the cooling proportional band, the damper position is maintained at its pre-selected maximum setting. On a decrease in space temperature the controller regulates the actuator to rotate the sliding gate damper clockwise to reduce the flow of cool air. If the space temperature decreases to less than the cooling proportional band, the damper position is maintained at the pre-selected minimum setting.

**Warm supply air:** On a decrease in space temperature the controller regulates the actuator to rotate the sliding gate damper counter-clockwise to increase the flow of warm air. On a decrease of space temperature greater than the heating proportional band, the damper position is maintained at its pre-selected maximum setting. On an increase in space temperature the controller regulates the actuator to rotate the sliding gate damper clockwise to reduce the flow of warm air. If the space temperature increases above the heating proportional band, the damper position is maintained at the pre-selected minimum setting.

**Reheat Operation:** On a decrease in space temperature into the heating proportional band, the reheat output will energize to send 24VAC to a reheat device. Additionally, the 0-10VDC output can be used to send a modulating signal to a reheat device.

**PROJECT:**

**ENGINEER:**

**CUSTOMER:**

**SUBMITTAL DATE:**

**SPEC. SYMBOL:**

**PRICE®**

LGB

24V Floating Actuator  
Clg.-Htg. c/o, 1 Stage Reheat  
Low Pressure By-Pass  
Pressure Dependent  
PCT-D THERMOSTAT

220008

2019/11/08