YORK®	PACKAGED ROOFTOP AIR CONDITIONING UNITS	
QUICK START-UP GUIDE	New Release	Form 100.50-NO1 (302)

eco2

00623VIP

EPA Energy BUILDINGS ALLY

IMPORTANT!

READ BEFORE PROCEEDING!

GENERAL SAFETY GUIDELINES

This equipment is a relatively complicated apparatus. During installation, operation, maintenance or service, individuals may be exposed to certain components or conditions including, but not limited to: refrigerants, oils, materials under pressure, rotating components, and both high and low voltage. Each of these items has the potential, if misused or handled improperly, to cause bodily injury or death. It is the obligation and responsibility of operating/service personnel to identify and recognize these inherent hazards, protect themselves, and proceed safely in completing their tasks. Failure to comply with any of these requirements could result in serious damage to the equipment and the property in which it is situated, as well as severe personal injury or death to themselves and people at the site.

This document is intended for use by owner-authorized operating/service personnel. It is expected that this individual possesses independent training that will enable them to perform their assigned tasks properly and safely. It is essential that, prior to performing any task on this equipment, this individual will have read and understood this document and any referenced materials. This individual will also be familiar with and comply with all applicable governmental standards and regulations pertaining to the task in question.

SAFETY SYMBOLS

The following symbols are used in this document to alert the reader to areas of potential hazard:

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

CAUTION identifies a hazard which could lead to damage to the machine, damage to other equipment and/or environmental pollution. Usually an instruction will be given, together with a brief explanation.

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

NOTE is used to highlight additional information which may be helpful to you.

External wiring, unless specified as an optional connection in the manufacturer's product line, is NOT to be connected inside the micro panel cabinet. Devices such as relays, switches, transducers and controls may NOT be installed inside the micro panel. NO external wiring is allowed to be run through the micro panel. All wiring must be in accordance with YORK's published specifications and must be performed ONLY by qualified YORK personnel. YORK will not be responsible for damages/problems resulting from improper connections to the controls or application of improper control signals. Failure to follow this will void the manufacturer's warranty and cause serious damage to property or injury to persons.

CHANGEABILITY OF THIS DOCUMENT

In complying with YORK's policy for continuous product improvement, the information contained in this document is subject to change without notice. While YORK makes no commitment to update or provide current information automatically to the manual owner, that information, if applicable, can be obtained by contacting the nearest YORK Applied Systems Service office.

It is the responsibility of operating/service personnel to verify the applicability of these documents to the equipment in question. If there is any question in the mind of operating/service personnel as to the applicability of these documents, then prior to working on the equipment, they should verify with the owner whether the equipment has

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NOMENCLATURE

BASE MODEL NUMBER

1 2 3 4 BASE PRODUCT TYPE

- Y : YORK
- P : Packaged Rooftop
- A : Air-Cooled
- L : Scroll

5 6 7 NOMINAL CAPACITY

0	2	5	: 25-ton
0	3	0	: 30-ton
0	3	5	: 35-ton
0	4	0	: 40-ton
0	4	5	: 45-ton
0	5	0	: 50-ton
0	5	5	: 55-ton
0	6	0	: 60-ton
0	6	5	: 65-ton
0	7	0	: 70-ton
0	7	5	: 75-ton
0	8	0	: 80-ton
0	8	5	: 85-ton
0	9	0	: 90-ton
0	9	5	: 95-ton

8 9 APPLICATION

- C : Cooling Only
- N : Natural Gas Heat
- G : Natural Gas Heat SS HX
- E : Electric Heat
- S : Steam Heat
- H : Hot Water Heat
- C : Constant Volume
- V : VAV, VFD
- F : FlexSys Configuration

10 REFRIGERANT

- B : R-407C
- C : R-22

11 12 VOLTAGE

1	7	: 200 / 3 / 60
2	8	: 230 / 3 / 60
4	6	: 460 / 3 / 60
4	5	: 400 / 3 / 50
5	8	: 575 / 3 / 60

13 14 DUCT LOCATIONS

- B : Bottom Supply
- L : Left Supply
- R : Right Supply
- B : Bottom Return
- R : Rear Return
- S : Side Return

15 16 DESIGN SPECIAL

- A : Rev. Level A
- X : Std. Product
- S : Special

TABLE OF CONTENTS

QUICK START GUIDE – YPAL UNITS

This quick-start guide indicates required field wiring, miscellaneous connections, and minimum programming to provide proper unit operation. This guide does not include required basic installation practices discussed in the Installation, Operation, and Maintenance manual (Form 100.50-NOM1). The IOM should be reviewed to ensure all proper procedures and safety precautions are followed when installing this equipment.

In addition, any system alarms indicated by the Optic Logic Panel should be diagnosed as referenced in the Installation, Operation, and Maintenance manual - refer to the Fault Description Table, located in the Service section of that manual.

This Quick Start-Up Guide is divided according to unit type, and options. Units are categorized as either Constant Volume, Variable Volume or *FlexSys VAV, and how the unit is being controlled - Thermostat, Space Sensor, or Stand Alone (VAV Only). Refer to applicable section for required field wiring, miscellaneous connections, and programming.

References to "Programming" indicates the setpoints that should be programmed/verified, under the respective key on the OptiLogic Control Center keypad – *Configuration Key, Setpoint Key, Unit Setup Key, Unit Status Key.* The *Configuration Key* is factory set and only requires field verification.

Unit options should be programmed based on the unit configuration as supplied by the factory.

Refer to Appendix 1 for Installation and Programming information before using this quick-start guide.

* FlexSys VAV is YORK's VAV Underfloor Air Unit.

CONSTANT VOLUME UNITS

THERMOSTAT CONTROL

Field Wiring

- Connect thermostat wiring to CTB1 (inside control panel) terminals 1 - 7 (See Appendix 1)
- Install a jumper wire between terminals 7 (G) and 17 (OCC)

Programming

Configuration Key

- Unit Type = CV
- # Of Compressors = 4 or 6

Unit Setup Key

- Cooling Mode Enable = On

Unit Status Key

- Unit Date and Time = correct date/time

SPACE SENSOR CONTROL

Field Wiring

- Connect space sensor to CTB1 (inside control panel) terminals 9 - 12 (See Appendix 1)
  - *Terminals 9 & 10 for space sensor connection*
  - *Terminals 11 & 12 for optional space sensor remote setpoint adjustment.*
  - *NOTE - shielded wire must be used that is terminated at one end only, with the shielding connected to terminal 8 of CTB1*

- Field-supplied contacts connected to terminals 16 (R) to 17 (occ)

  Contact closure controls the unit to the occupied setpoints

  NOTE: If the daily schedule program will be programmed, this connection is not needed (refer to programming section of this quick-start guide)

Programming

Configuration Key

- Unit Type = CV
- # Of Compressors = 4 or 6

Setpoint Key

- Unoccupied Cooling Setpoint = 45 to 99
- Occupied Cooling Setpoint = 45 to 99

Unit Setup Key

- Space Sensor Enable = ON
- Cooling Mode Enable = ON
- Internal Clk/Scheduling = ON
  not required if unit is being cycled by Occ Input on CTB1 Occupied Input (terminals 16 to 17)
- Weekly Schedule = Programmed Times
  not required if unit is being cycled by Occ Input on CTB1 Occupied Input (terminals 16 to 17)

Unit Status Key

- Date and Time = Correct Date/Time

VARIABLE AIR VOLUME UNITS

THERMOSTAT CONTROL

Field Wiring

- Connect thermostat wiring to CTB1 (inside control panel) terminals 1 - 7 (See Appendix 1)
- Install a jumper wire between terminals 7 (G) and 17 (OCC)
  - *Assumes thermostat connected to "G"*
  - *Daily schedule can be programmed in lieu of this function (refer to IOM)*

Misc. Connections

Pneumatic tubing must be field-supplied and installed from the duct static transducer "high" side connection (mounted in the return section of the unit), to a field-supplied static pressure probe that is to be installed approximately two-thirds down the trunk line in the duct work.

Duct static transducer range is 0 iwc to 5 iwc

An atmospheric static pressure probe with bracket is factory supplied (shipped in the return section of the unit) that is to be installed on the rear-upper corner of the unit exterior. (See Appendix 1) A barbed fitting is already factory installed on the rear corner of the unit, and should be used to connect the atmospheric probe using field-supplied pneumatic tubing.

Bracket to be mounted with factory installed bolts at location of barbed fitting

Pneumatic tubing to be connected from barbed fitting on unit to top connection on atmospheric sensor probe.

Note: Large opening on atmospheric sensor probe should be positioned at the bottom as supplied by the factory.

Programming

Configuration Key

- Unit Type = VAV
- # Of Compressors = 4 or 6
- Duct Sensor Hi Limit = 5.0 iwc

Setpoint Key

- VAV Cool Low Temp = programmable from 50 to 70 degrees
  The unit will supply this discharge air temperature with a "Y1" call from the thermostat
- VAV Cool High Temp = programmable from 50 to 70 degrees
  The unit will supply this discharge air temperature with a "Y2" call from the thermostat
- Duct Static Pressure = programmable from 0 iwc to 5 iwc

Unit Setup Key

- Cooling Mode Enable = ON
- Duct Pressure Limit = programmable from 0 iwc to 5 iwc
- VAV With Thermostat = ON

Unit Status Key

- Date and Time = Correct Date/Time

SPACE SENSOR CONTROL

Field Wiring

- Connect space sensor to CTB1 (inside control panel) terminals 9 - 12 with shielded wire (See Appendix 1)
  - *Terminals 9 & 10 for space sensor connection*
  - *Terminals 11 & 12 for optional space sensor remote setpoint adjustment.*
  - *Shielded wire is terminated at one end only, with the shielding connected to terminal 8 of CTB1*
- Field-supplied contacts connected to terminals 16 (R) to 17 (occ) (See Appendix 1)
  - *Daily schedule can be programmed in lieu of this function (refer to IOM).*

Misc. Connections

Pneumatic tubing must be field-supplied and installed from the duct static transducer "high" side connection (mounted in the return section of the unit), to a field-supplied static pressure probe that is to be installed approximately two-thirds down the trunk line in the duct work.

Duct static transducer range is 0 iwc to 5 iwc

An atmospheric static pressure probe with bracket is factory supplied (shipped in the return section of the unit) that is to be installed on the rear-upper corner of the unit exterior. (See Appendix 1) A barbed fitting is already factory installed on the rear corner of the unit, and should be used to connect the atmospheric probe using field-supplied pneumatic tubing.

Bracket to be mounted with factory installed bolts at location of barbed fitting

Pneumatic tubing to be connected from barbed fitting on unit to top connection on atmospheric sensor probe.

Note: Large opening on atmospheric sensor probe should be positioned at the bottom as supplied by the factory.

Programming

Configuration Key

- Unit Type = VAV
- # Of Compressors = 4 or 6
- Duct Sensor High Limit = 5.0 iwc

Setpoint Key

- Unoccupied Cooling Setpoint = 45 to 99 degrees
- VAV Cool Reset Temp = 60 to 95 degrees
- VAV Cool Low Temp = programmable from 50 to 70 degrees
  The unit will supply this discharge air temperature when cooling demand is low
- VAV Cool High Temp = programmable from 50 to 70 degrees
  The unit will supply this discharge air temperature when cooling demand is high
- Duct Static Pressure = programmable from 0 iwc to 5 iwc

Unit Setup Key

- Space Sensor Enable = ON
- Cooling Mode Enable = ON
- Duct Pressure Limit = programmable from 0 iwc to 5 iwc
- VAV With Thermostat = OFF
- Internal Clk/Scheduling = ON
  not required if unit is being cycled on by Occ Input on CTB1 Occupied Input (terminals 16 to 17)
- Weekly Schedule = Programmed Times
  not required if unit is being cycled on by Occ Input on CTB1 Occupied Input (terminals 16 to 17)

Unit Status Key

- Date and Time = Correct Date/Time

STAND ALONE CONTROL (NO THERMOSTAT OR SPACE SENSOR CONNECTED TO UNIT)

Field Wiring

- Field-supplied contacts to CTB1 (inside control panel) terminals 16 (R) to 17 (occ) (See Appendix 1)
  - *Daily schedule can be programmed in lieu of this function (refer to IOM).*

Misc. Connections

Pneumatic tubing must be field-supplied and installed from the duct static transducer "high" side connection (mounted in the return section of the unit), to a field-supplied static pressure probe that is to be installed approximately two-thirds down the trunk line in the duct work.

Duct static transducer is 0 iwc to 5 iwc

An atmospheric static pressure probe with bracket is factory supplied (shipped in the return section of the unit) that is to be installed on the rear-upper corner of the unit exterior. (See Appendix 1) A barbed fitting is already factory installed on the rear corner of the unit, and should be used to connect the atmospheric probe using field-supplied pneumatic tubing.

Bracket to be mounted with factory installed bolts at location of barbed fitting.

Pneumatic tubing to be connected from barbed fitting on unit to top connection on atmospheric sensor probe.

Note: Large opening on atmospheric sensor probe should be positioned at the bottom as supplied by the factory.

Programming

Configuration Key

- Unit Type = VAV
- # Of Compressors = 4 or 6
- Duct Sensor High Limit = 5.0 iwc

Setpoint Key

- VAV Cool Low Temp = programmable from 50 to 70 degrees
  This is the discharge air temperature the unit will supply when in the occupied mode
- Duct Static Pressure = programmable from 0 iwc to 5 iwc

Unit Setup Key

- Space Sensor Enable = OFF
- Cooling Mode Enable = ON
- Duct Pressure Limit = programmable from 0 iwc to 5 iwc
- VAV With Thermostat = OFF
- Internal Clk/Scheduling = ON
  not required if unit is being cycled on by Occ Input on CTB1 Occupied Input (terminals 16 to 17)
- Weekly Schedule = Programmed Times
  not required if unit is being cycled on by Occ Input on CTB1 Occupied Input (terminals 16 to 17)

Unit Status Key

- Date and Time = Correct Date/Time

FLEXSYS VAV UNITS

STAND ALONE CONTROL ONLY

Field Wiring

- Field-supplied contacts to CTB1 (inside control panel) terminals 16 (R) to 17 (occ) (See Appendix 1)
  - *Contact closure controls the unit to the occupied setpoints (see "Programming" section of this guide)*
  - *Daily schedule can be programmed in lieu of this function (refer to IOM).*
- Return Air Bypass Damper Actuator
  - *The wires to connect the actuator are located in the supply fan section, in the proximity of the actuator in the supply fan section floor, opposite the supply fan motor side.*
  - *The plug assembly/wires are attached with an elastic band and must be wired to the actuator, and the "plugs" mated together.*
    - *Wire labeled "1(COM)" to terminal 1 in the actuator*
    - *Wire labeled "2(200)" to terminal 2 in the actuator*
    - *Wire labeled "5(AO)" to terminal 5 in the actuator*

Misc. Connections

Pneumatic tubing must be field-supplied and installed from the duct static transducer "high" side connection (mounted in the return section of the unit), to a field-supplied static pressure probe that is to be installed approximately two-thirds down the trunk line in the duct work.

Duct static transducer is 0 iwc to 5 iwc

An atmospheric static pressure probe with bracket is factory supplied (shipped in the return section of the unit) that is to be installed on the rear-upper corner of the unit exterior. (See Appendix 1) A barbed fitting is already factory installed on the rear corner of the unit, and should be used to connect the atmospheric probe using field-supplied pneumatic tubing.

Bracket to be mounted with factory installed bolts at location of barbed fitting

Pneumatic tubing to be connected from barbed fitting on unit to top connection on atmospheric sensor probe.

Note: Large opening on atmospheric sensor probe should be positioned at the bottom as supplied by the factory.

Programming

Configuration Key

- Unit Type = FLEXSYS
- # Of Compressors = 4 or 6
- Duct Sensor High Limit = 2.5 or 5.0 iwc

Setpoint Key

- VAV Cool High Temp = programmable from 50 to 70 degrees
  This is the discharge air temperature the unit will supply when in the occupied mode
- Duct Static Pressure = programmable from 0 iwc to 5 iwc
- FlexSys MSAT Setpoint = Programmable from 55 to 70 degrees

Unit Setup Key

- Space Sensor Enable = OFF
- Cooling Mode Enable = ON
- Duct Pressure Limit = programmable from 0 iwc to 5 iwc
- VAV With Thermostat = OFF
- Internal Clk/Scheduling = ON
  not required if unit is being cycled on by Occ Input on CTB1 Occupied Input (terminals 16 to 17)
- Weekly Schedule = Programmed Times
  not required if unit is being cycled on by Occ Input on CTB1 Occupied Input (terminals 16 to 17)

Unit Status Key

- Date and Time = Correct Date/Time

UNIT OPTIONS

HEAT

Field Wiring

VAV units require field wiring from terminals 20 (HR) - 21 (com). This OUTPUT from the unit used to supply a 24 VAC signal to drive the VAV boxes open anytime heat is called for due to the unit VFD being drive to 100%. Refer to Appendix 1.

Failure to field-wire this connection may cause unit shutdown and/or damage to the ductwork from over-pressurization

The VAV relay output cannot exceed a current draw of 20VA. If the power requirement of the VAV boxes exceeds this amount, isolation relays must be field-supplied and installed to prevent overloading the unit controller power supply

Misc. Connections

No additional field wiring required

Programming

Configuration Key

- # of Heating Steps = 0 - 6
  - 0 = HW or Steam
  - Gas Heat = 2 - 6
    two steps per gas heat module
  - Electric Heat = 1 - 6
    Refer to electric heat data plate for # of steps
- Heating Type = gas, electric, HW, or Steam
- Freezestat = Programmable ON or OFF
  - HW or Steam option = ON
  - None, Gas, or Electric = OFF

Setpoint Key

- Unoccupied Heating Setpoint = 45 to 99
  Only applies to unit with Space Sensor installed
- Occupied Heating Setpoint = 45 to 99
  Only applies to CV units with Space Sensor installed
- Warm-Up RAT = programmable 50 to 85 degrees
  Only applies to VAV units
  Must have Space Sensor and Return Sensor installed
- Hydro Heat 1st Stage = programmable from 75 to 150 degrees
  Only applies to HW or Steam
  Unit will control discharge air temperature to this setpoint when heating demand is low
- Hydro Heat 2nd Stage = programmable from 75 to 150 degrees
  Only applies to HW or Steam
  Unit will control discharge air temperature to this setpoint when heating demand is high

Unit Setup Key

- Rev Acting Heat Valve = ON or OFF
  Only applies to HW or Steam
  Reverse acting heating valve = ON
  Direct acting heating valve = OFF
- Heating Mode Enable = ON
- VAV Occupied Heat = ON or OFF
  Only applies to VAV units
  Occupied heating available = ON
  Must have Thermostat or Space Sensor installed to be programmed ON
- Morning Warm-up = ON or OFF
  Only applies to VAV units
  Morning warm-up available = ON
  Must have Space Sensor and Return Air Sensor installed
  Must have Internal Clk/Scheduling = ON
  Must have Weekly Schedule = Programmed Times
- Max Warm-Up Time = programmable from 0 to 240 minutes
  Only applies to VAV units
  Must have either Space Sensor or Return Air Sensor installed
  Must have Internal Clk/Scheduling = ON
  Must have Weekly Schedule = Programmed Times

ECONOMIZER

Field Wiring

No additional field wiring required

Misc. Connections

No additional connections required

Programming

Configuration Key

- Economizer Installed = Yes

Setpoint Key

- Economizer 1st stage = programmable 40 to 65 degrees
  This setpoint only applies to Constant Volume units
  This is the setpoint at which the discharge air will be controlled to when operating in economizer mode with low cooling demand
- Economizer 2nd stage = programmable 40 to 65 degrees
  This setpoint only applies to Constant Volume units
  This is the setpoint at which the discharge air will be controlled to when operating in economizer mode with high cooling demand
- Outside Air Enthalpy = programmable 22 to 40 btu/lb

Unit Setup Key

- Economizer Enable = ON

POWER EXHAUST

Field Wiring

No additional field wiring is required

Misc. Connections

Pneumatic tubing must be field-supplied and installed from the building static transducer "high" side connection (mounted in the return section of the unit), to a location in the building where building pressure is to be controlled

Building static transducer range is -.5 iwc to +.5 iwc

An atmospheric static pressure probe with bracket is factory supplied (shipped in the return section of the unit) that is to be installed on the rear-upper corner of the unit exterior. (See Appendix 1) A barbed fitting is already factory installed on the rear corner of the unit, and should be used to connect the atmospheric probe using field-supplied pneumatic tubing.

Bracket to be mounted with factory installed bolts at location of barbed fitting

Pneumatic tubing to be connected from barbed fitting on unit to top connection on atmospheric sensor probe.

Note: Large opening on atmospheric sensor probe should be positioned at the bottom as supplied by the factory.

Programming

Configuration Key

- Power Exhaust Configuration = 0 - 3
  - *0 = no power exhaust*
  - *1 = on/off based on outside air damper position*
    select this setpoint if no building pressure transducer was installed in the return section of the unit
  - *2 = on/off based on building pressure*
    select this setpoint if a building pressure transducer is installed in the return section of the unit
  - *3 = Proportional control based on:*
    select this setpoint if the unit is equipped with either a power exhaust damper actuator, or variable speed drive for the power exhaust

Setpoint Key

- Building Pressure = programmable -.20 to +.20
  - Only applies to Power Exhaust Configurations 2 and 3 as programmed under configuration key

Unit Setup Key

- Exh Dmpr Pos For ON = programmable from 0% to 100%
  Only applies to units with power exhaust damper actuators
- Exh Dmpr Pos For OFF = programmable from 0% to 100%
  Only applies to units with power exhaust damper actuators
- OA Dmpr Pos For ON = programmable from 0% to 100%
  Only applies to units programmed for Power Exhaust Configuration 1
- OA Dmpr Pos For OFF = programmable from 0% to 100%
  only applies to units programmed for Power Exhaust Configuration 1
- Power Exhaust Enable = ON

TRANSDUCERS - SUCTION AND DISCHARGE

Field Wiring

No additional field wiring required

Misc. Connections

No additional connections required

Programming

Configuration Key

- Transducer package = 0 - 3
  0 = no transducers
  1 = transducers on system 1
  2 = transducers on system 1 & 2
  3 = transducers on system 1, 2, & 3

LOW AMBIENT KIT

Field Wiring

No additional field wiring required

Misc. Connections

No additional connections required

Programming

Configuration Key

- Low Ambient Conf = 0 - 3
  0 = no low ambient kit
  1 = low ambient kit on system 1
  2 = low ambient kit on system 1 & 2
  3 = low ambient kit on system 1, 2, & 3

Unit Setup Key

- Low Ambient Operation = ON

$C0_2$ SENSOR

Field Wiring

The CO_2 sensor must be field wired with two-conductor shielded wire to terminals 13 (IAQ+) and 14 (IAQ-) of CTB1 in the control panel - the CO_2 sensor is not polarity sensitive, so either wire can be connect to terminals 13 and 14. Refer to Appendix 1. CO_2 sensor is factory-supplied and shipped with the unit.

Misc. Connections

No additional connections required

Programming

Setpoint Key

- Demand Ventilation = programmable 750 ppm to 1500 ppm

Unit Setup Key

- Economizer Enable = ON
- IAQ Sensor Enable = ON

AIR MEASURING STATION

Field Wiring

No additional field wiring required

Misc. Connections

No additional connections required

Programming

Configuration Key

- Airflow Meas Config = Full, Minimum, or 1/4 - 3/4

Setpoint Key

- Min. Outside Air Flow = Programmable 0 to 15000 CFM

Unit Setup Keys

- OA Flow Control Enable = ON

The Following Are Optional Modes Of Operation For Customer Use

SMOKE PURGE OPERATION

Field Wiring

- Connect customer supplied contacts CTB1 (inside control panel) to terminals 16 (R) to 19 (SMK)
- Also see below cautions pertaining to Smoke Purge Modes 2 - 4. Refer to Appendix 1.

Misc. Connections

No additional connections required

Programming

Unit Setup Key

- Smoke Purge Mode = 0 - 5
  - *0 = No Smoke Purge*
  - *1 = Unit Shutdown*
  - *2 = Building Pressurization*
  - *3 = Building Exhaust*
  - *4 = Building Purge*
  - *5 = Building Purge with Duct Pressure Control*

- Contact closure between terminals 16 & 19 on CTB1 initiates smoke purge operation

Smoke Purge Modes 2 - 4, with VAV systems require field wiring from terminals 20 (HR) to 21 (com) on CTB1. This OUTPUT from the unit is used to supply a 24 VAC signal to drive the VAV boxes open due to the unit VFD being driven to 100%. Failure to field-wire this connection may cause unit shutdown and/or damage to the ductwork from over-pressurization.

The VAV relay output cannot exceed a current draw of 20VA. If the power requirement of the VAV boxes exceeds this amount, isolation relays must be field supplied and installed to prevent overloading the unit controller power supply

EMERGENCY SHUTDOWN

Field Wiring

- Connect customer supplied contacts CTB1 (inside control panel) to terminals 16 (R) to 18 (SD)
- Contact closure will shut down the unit. Refer to Appendix 1.

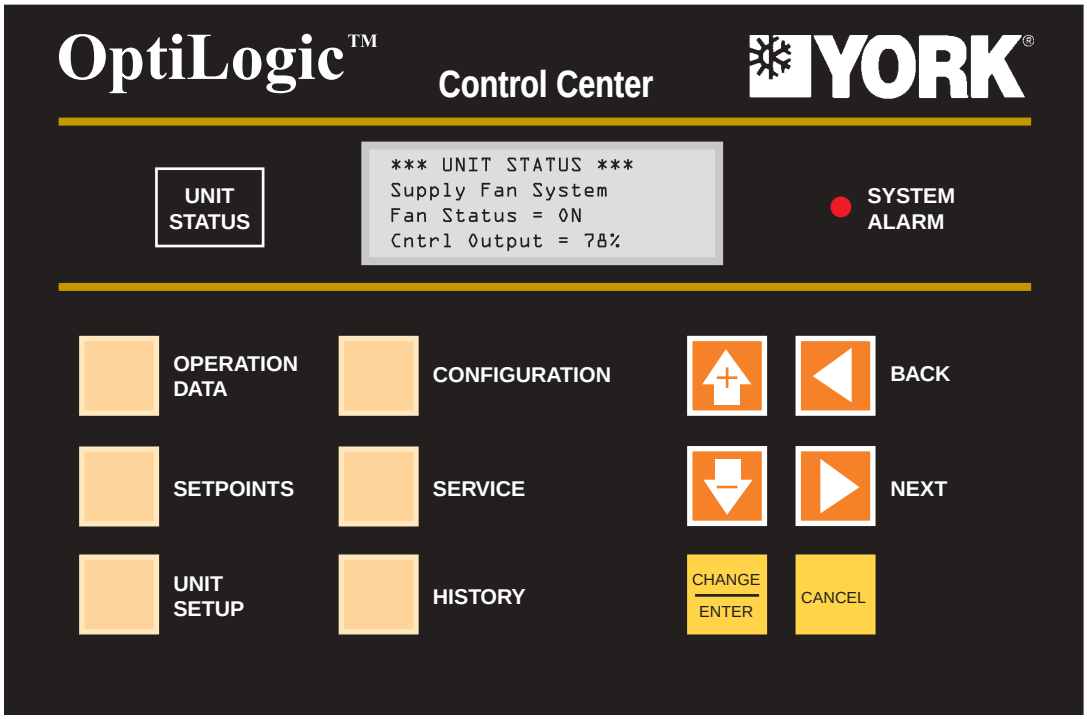
Misc. Connections

No additional connections required

Programming

None Required

APPENDIX 1



LD06581

FIG. 1 – OPTILOGIC CONTROL CENTER

LD07427

FIG. 2 – DUCT STATIC OR BUILDING STATIC TRANSDUCER (LOCATED IN RETURN SECTION OF UNIT)

FIELD CONTROL WIRING

LOCATION OF CTB1

Wiring Notes:

1. Wiring shown indicates typical wiring.
2. All wiring is Class 2, low voltage.
3. Maximum power available from the 24 VAC terminal is 40 VA.
4. Use shielded wire where shown.

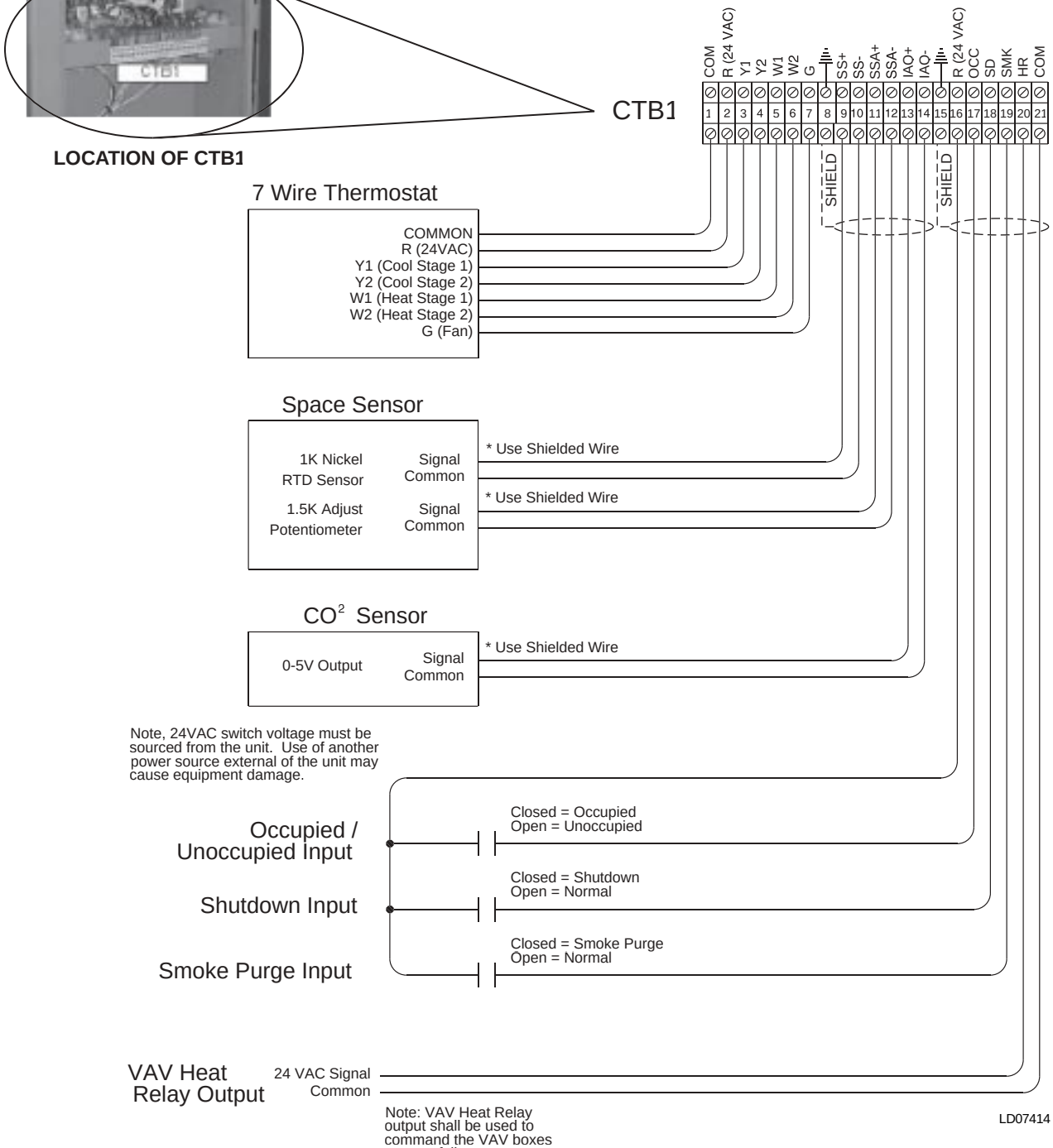


FIG. 3 – FIELD CONTROL WIRING

LOCATION OF ATMOSPHERIC PRESSURE SENSOR AND BRACKET

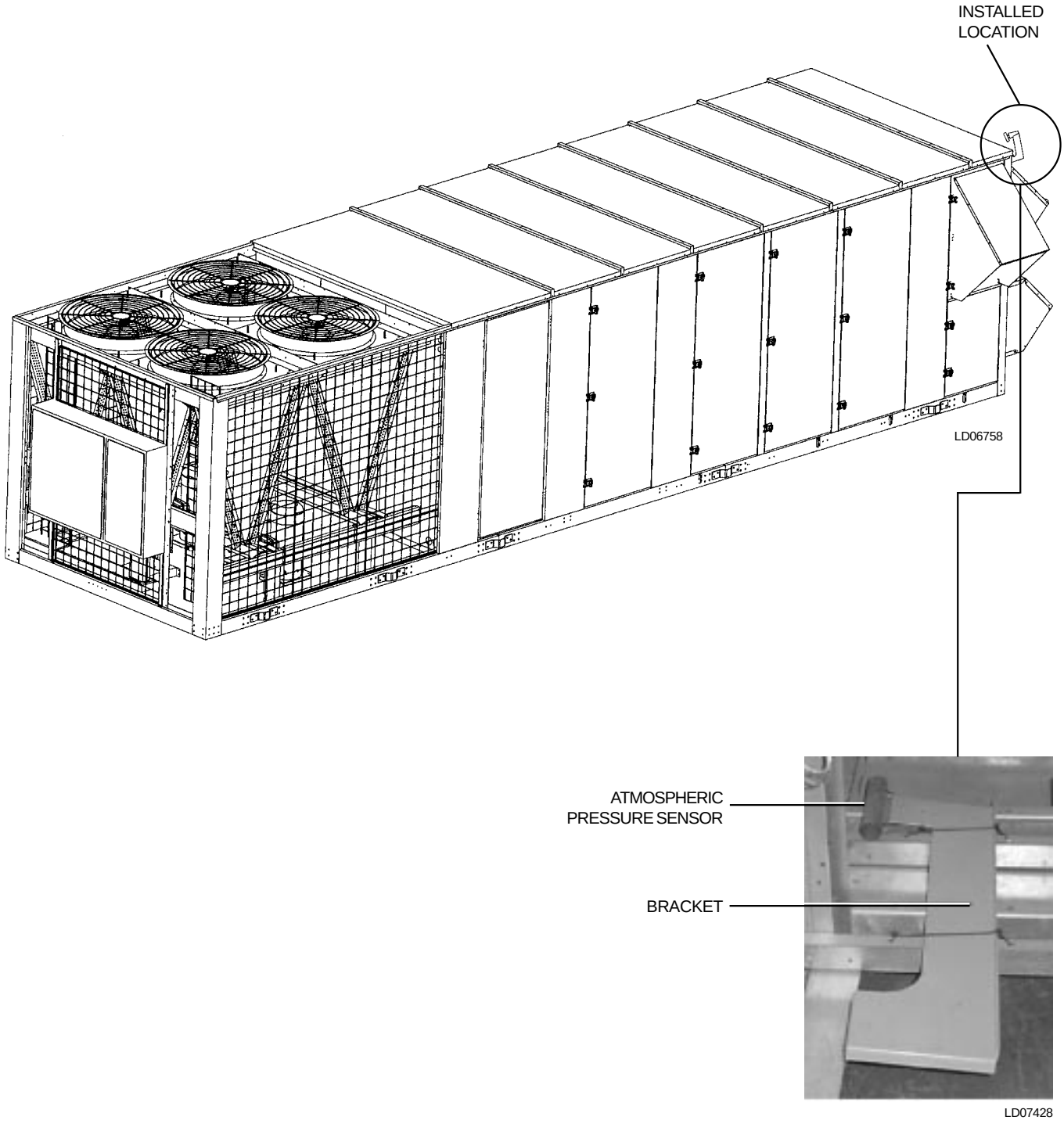


FIG. 4 – ATMOSPHERIC PRESSURE SENSOR AND BRACKET (SHIPPED IN SUPPLY FAN SECTION OF UNIT)

HOW TO CHANGE SETPOINTS

HOW TO CHANGE SETPOINTS

For this explanation, all changeable parameters will be referred to as "setpoints". This includes those parameters that are changeable listed under function group keys of UNIT CONFIGURATION, SETPOINTS, and UNIT SETUP.

The top of display will show **"edit mode"** for the particular setpoint you are changing and the "setpoint" will begin to flash. Using the Up Arrow (↑) and Down Arrow (↓) keys changes the setpoint. Pushing the Change/Enter key then enters the setpoint. After pushing the enter key the **"edit mode"** on the top line of the display will then revert to the keypad group that the setpoint pertains to.

For example if you wish to change the "Unoccupied Cooling Setpoint", we know that this setpoint is located under the SETPOINT key. Pressing the SETPOINT key results in the display shown below:

```
*** SETPOINTS ***
Unoccupied Heating
Setpoint = 60°F
```

Notice that the top line of the display shows what keypad group you have navigated to. In this case, the SETPOINTS key was pressed and ***SETPOINTS*** is displayed on the top line. Now, pressing the NEXT key advances from the Unoccupied Heating Setpoint, to the Unoccupied Cooling Setpoint and will result in the display shown below.

```
*** SETPOINTS ***
Unoccupied Cooling
Setpoint = 86°F
```

When the CHANGE/ENTER key is pressed you will enter into the **edit mode** to change the Unoccupied Cooling Setpoint, and the current value of 86°F will blink (if a password was not previously entered you will be prompted to enter the password before advancing to the edit mode – refer to explanation under section on PASSWORD entry). The top line of the display will change from ***SETPOINTS*** to **EDIT MODE** and is shown in the display shown below.

```
*** EDIT MODE ***
Unoccupied Cooling
Setpoint = 86°F
```

With the display shown above, the 86°F will be blinking. The user can now use the Up Arrow (↑) or Down Arrow (↓) keys to change this setpoint. Once the setpoint is displaying the preferred value, the Enter/Change key is pressed again to enter the new setpoint and exit the edit mode resulting in the display shown below. Note the top line of the display has reverted back to the key group for the setpoint.

```
** ENTER L-2 PASSWORD

Password = XXXX
```

In this case it has reverted back to *** SETPOINTS*** and the new setpoint value is displayed (see below).

```
*** SETPOINTS ***
Unoccupied Cooling
Setpoint = 82°F
```

PASSWORD

PASSWORD

Five of the seven OptiLogic Control Center functions (Setpoints, Unit Setup, Service, Unit Status and Configuration) contain values/data that can be changed by a user.

- The password for “Unit Setup” and “Setpoints” is 9 6 7 5
- Pressing the Change/Enter key for a setpoint or parameter for which the appropriate level of password has not been previously entered will initiate the password mode.
- To change configuration settings, call your local YORK Service Office.

Entering a password will be done as follows:

- In the password mode, the illustrated OptiLogic Control Center display window will show the level of password required and “XXXX” as place holders for the password to be entered.
- The cursor will be on the left most “X”
- The password will be entered by moving the cursor between the digits of the password with the Next (>) or Back (<) keys and changing the numbers (0-9) with the Up Arrow (↑) and Down Arrow (↓) keys.
- When all numbers are entered, the user will press the Change/Enter key. If the selected password matches the stored password, the control will initiate the “**edit mode”** and allow changes. If they do not match, < ****Invalid Password** > will be displayed on the top line of the display 3 seconds and the display will remain in the Password mode. Pressing the Cancel key will drop the user out of the password mode back to the view only display.

A password will be active until one of the following occurs:

- The user presses “cancel”, which results in the display of the Function Menu screen, and then presses “cancel” again.
- No OptiLogic Control Center keypad button is pressed for more than 10 minutes.

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Form 100.50-NO1 (302)
New Release