SECTION 23 50 00

HVAC EQUIPMENT

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* Napoleon Heating and Cooling; Manufactured fireplace products.  
.  
This section is based on the products of Napoleon Heating and Cooling, which is located at:  
Wolf Steel USA 103 Miller Dr.  
Crittenden, KY 41030  
Toll Free Tel: 800-461-5581  
Email: [request info (care@napoleonproducts.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=Napoleon+Heating+and+Cooling&coid=47583&rep=&fax=&message=RE:%20Spec%20Question%20(15700nap):%20%20&mf=)  
Web: <https://napoleonheatingandcooling.com>   
 [ [Click Here](https://www.arcat.com/arcatcos/cos47/arc47583.html) ] for additional information.  
Napoleon Heating & Cooling is proud to be committed to your total home comfort. Time after time, Napoleon has led the way with new and innovative, patented technology that continually surpasses industry standards. More than anything we want you to feel confident in choosing a Napoleon furnace or air conditioner for your home, our products are designed to provide that confidence and ensure that every Napoleon Product is beyond compare.  
It all began in 1976 when a small steel fabrication business launched by Wolfgang Schroeter started manufacturing steel railings in Barrie, Ontario, Canada. By 1981, the name "Napoleon" was born and, with it, the first single glass door (a first in the industry) using Pyroceram high temperature ceramic glass and a cast iron frame. This was the first of many milestones for Wolf Steel and over the next few years, the demand for Napoleon's wood stoves grew beyond Ontario's borders to the rest of Canada and the United States. Napoleon works with its customers designing and implementing features sought after by discriminating consumers around the globe.  
Napoleon's commitment to producing quality products combined with honest, reliable service has proven to be a successful benchmark to ensuring the continued growth of the company.  
Napoleon is an ISO9001 - 2008 registered company and operates with 1,200,000+ square feet of manufacturing space and over 1000 employees.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Gas furnaces.
    2. Central air conditioners.
    3. Central heat pumps.
    4. Ductless heat pumps and air conditioners
    5. Condo pack heating and cooling systems.
    6. Indoor air quality products.
    7. Whole house high efficiency air cleaners
    8. Thermostats.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 22 11 13 - Facility Water Distribution Piping.
    2. Section 26 05 00 - Common Work Results for Electrical.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. CSA B149.1 - Natural Gas and Propane Installation Code.
    2. CSA B149.2 - Propane Storage and Handling Code.
    3. NFPA 54 - National Fuel Gas Code.
    4. NFPA 70 - National Electric Code.
    5. UL 1995/CSA C22.2 No.236 - Standard for Heating and Cooling Equipment.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Preparation instructions and recommendations.
        2. Storage and handling requirements and recommendations.
        3. Installation methods.
     3. Shop Drawings: Overall dimensions and required clearances including detail of architectural enclosing requirements. Detailed schematics of electrical control wiring and power rough-in.
     4. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
     5. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic checking and adjustment and periodic cleaning and maintenance of all components.
  2. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Manufacturer with a minimum of 5 years documented experience with the types of products specified.
     2. Installer Qualifications: Installer with a minimum 2 years documented experience with the type of products specified.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
       1. Finish areas designated by Architect.
       2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
       3. Refinish mock-up area as required to produce acceptable work.
  1. DELIVERY, STORAGE, AND HANDLING
     1. Store products in manufacturer's unopened packaging until ready for installation.
     2. Store products in covered area, well protected from weather.
  2. SEQUENCING
     1. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.
     2. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
  3. PROJECT CONDITIONS
     1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
  4. WARRANTY

\*\* NOTE TO SPECIFIER \*\* Select the following paragraph for Series 9500 and 9600 gas furnaces only.

* + 1. Gas Furnaces: Provide with the Manufacturers 10 year Limited Unit Replacement Heat Exchanger, Lifetime Limited Heat Exchanger and 10 Year Limited Parts Warranty.

\*\* NOTE TO SPECIFIER \*\* Select the following paragraph for Series 9600Q gas furnaces only.

* + 1. Gas Furnaces: Provide with the Manufacturers 20 year Limited Unit Replacement Heat Exchanger, Lifetime Limited Heat Exchanger and 10 Year Limited Parts Warranty.

\*\* NOTE TO SPECIFIER \*\* Select the following paragraph for Series 9700 gas furnaces only.

* + 1. Gas Furnaces: Provide with the Manufacturers 15 year Limited Unit Replacement Heat Exchanger, Lifetime Limited Heat Exchanger and 10 Year Limited Parts Warranty.
    2. Ductless Heat Pumps and Air Conditioners: Provide Heat Pumps and Multi-Zone Heat Pumps with the Manufacturers 6 year Limited Compressor, and 6 year Limited Parts Warranty.
    3. Condo-Pack: Provide with the Manufacturers 20 year Limited Heat Exchanger, 10 year Limited Furnace Module, and 5 year Limited Parts Warranty. Provide NC15 Air Conditioner with the Manufacturers 5 year compressor, and 1 year Limited Parts Warranty.
    4. Central A/C: Provide with the Manufacturers 10 Year Limited Compressor Warranty and 10 Year Limited Parts Warranty.
    5. Hybrid Heating Systems: Provide with the Manufacturers Limited Lifetime Warranty.
    6. Whole House High Efficiency Media Air Cleaners: Provide with the Manufacturers 10 Year Limited Parts Warranty.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Napoleon Heating and Cooling, which is located at: Wolf Steel USA 103 Miller Dr.; Crittenden, KY 41030; Toll Free Tel: 800-461-5581; Email: [request info (care@napoleonproducts.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=Napoleon+Heating+and+Cooling&coid=47583&rep=&fax=&message=RE:%20Spec%20Question%20(15700nap):%20%20&mf=); Web: <https://napoleonheatingandcooling.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. GAS FURNACES
     1. Napoleon 8000 Element Series - Mid-Efficiency Gas Furnace.
        1. Dependable, proven single-stage design.
        2. Natural gas and propane models available.
        3. Hot surface ignition for dependable operation and reduced energy costs.
        4. Durable heat exchangers.
        5. Industry standard cabinet sizes for add-on cooling applications.
        6. Flex Fit installation options: horizontal left and right, upflow and downflow.
        7. Motor Type: PSC.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model WGS80M050A3A-C:
         1. Voltage: 208-230/60. Indoor Noise Level dBA, H-M-L: 41-37-31.
         2. Cabinet (WxDxH): 14.5 x 28.5 x 33.75 inches (368 x 724 x 857 mm).
      2. Model WGS80M070A3A-C:
         1. Voltage: 208-230/60. Indoor Noise Level dBA, H-M-L: 42-40-36.
         2. Cabinet (WxDxH): 14.5 x 28.5 x 33.75 inches (368 x 724 x 857 mm).
      3. Model WGS80M080B4A-C:
         1. Voltage: 208-230/60. Indoor Noise Level dBA, H-M-L: 50-45-42.
         2. Cabinet (WxDxH): 17.5 x 28.5 x 33.75 inches (444 x 724 x 857 mm).
      4. Model WGS80M090B4A-C:
         1. Voltage: 208-230/60. Indoor Noise Level dBA, H-M-L: 50-48-46.
         2. Cabinet (WxDxH): 17.5 x 28.5 x 33.75 inches (444 x 724 x 857 mm).
      5. Model WGS80M110C5A-C:
         1. Voltage: 208-230/60. Indoor Noise Level dBA, H-M-L: 43-37-27.
         2. Cabinet (WxDxH): 21 x 28.5 x 33.75 inches (533 x 724 x 857 mm).
      6. Model WGS80M135D5A-C:
         1. Voltage: 208-230/60. Indoor Noise Level dBA, H-M-L: 43-38-28.
         2. Cabinet (WxDxH): 24.5 x 28.5 x 33.75 inches (622 x 724 x 857 mm).
    1. Napoleon 9500 Series High Efficiency Gas Furnace may be installed in alcove or closet installations that require zero clearance. Certified by CSA for application in Canada and the United States.
       1. Efficiency (AFUE): 95 percent.
       2. ECM Blower Motor: High efficiency multispeed.
       3. Wrinkle Bent Primary Heat Exchanger Tubes: T140 aluminized.
       4. Heat Recovery Coil: 29-4C stainless teel.
       5. Burners: Aluminized multi-port in-shot.
       6. Integrated Furnace Control: Self diagnostic.
       7. Zero clearance in all positions.
       8. Multi-fit: Upflow, downflow, horizontal left and horizontal right.
       9. Igniter: Premium hot surface.
       10. Direct and single vent installation approved.
       11. Concentric venting approved.
       12. Propane conversion kit.
       13. Canada High Altitude: 0 to 4,500 ft (1372 m).
       14. US High Altitude: 0 to 5,400 ft (1646 m).
       15. Units Factory Fired: 100 percent.
       16. Flexible condensate trap mounting for easy service.
       17. Manifold Cover: Clear front.
       18. Modular heating and blower for easy service.
       19. Sealed Vestibule and Blower Compartments for quiet operation.
       20. High flow rate condensate drain.
       21. Can be used for new construction heat.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model: WPX030S2AA-N.
         1. Input Btu/Hr: 30,000. Output Btu/Hr: 29,000.
         2. Blower Size: 112-6RDD. Motor Size: 1/3 hp. AC Tonnages: 1.5, 2, 2.5.
         3. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (445 x 749 x 864 mm).
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      2. Model: WPX040S2AA-N.
         1. Input Btu/Hr: 40,000. Output Btu/Hr: 38,000.
         2. Blower Size: 112-6RDD. Motor Size: 1/3 hp. AC Tonnages: 1.5, 2, 2.5.
         3. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (445 x 749 x 864 mm)
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      3. Model: WPX060S2AA-N.
         1. Input Btu/Hr: 60,000. Output Btu/Hr: 57,000.
         2. Blower Size: 112-8RDD. Motor Size: 1/2 hp. AC Tonnages: 2, 2.5, 3.
         3. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (445 x 749 x 864 mm)
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      4. Model: WPX080S2AA-N.
         1. Input Btu/Hr: 80,000. Output Btu/Hr: 76,000.
         2. Blower Size: 112-8RDD. Motor Size: 1/2 hp. AC Tonnages: 2, 2.5, 3.
         3. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (445 x 749 x 864 mm)
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      5. Model: WPX100S2AA-N.
         1. Input Btu/Hr: 100,000. Output Btu/Hr: 95,000.
         2. Blower Size: 112-10RDD. Motor Size: 1 hp. AC Tonnages: 3, 4, 5.
         3. Cabinet (WxDxH): 22.5 x 29.5 x 34 inches (445 x 749 x 864 mm)
         4. Supply Air (WxH): 21.25 x 19.63 inches (540 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).

\*\* NOTE TO SPECIFIER \*\* Delete venting paragraph if not required.

* + - 1. Venting: Canada:
         1. Furnace must be vented with ULC S636 certified PVC manufactured by IPEX, and Royal Building Products (GVS-65 and GVS90), or ULC S636 certified, or PPE manufactured by M and G Duravent.
      2. Venting: In United States:
         1. Schedule 40 PVC, ASTM D1785 or CSA B137.3.
         2. PVC-DWV, ASTM D2665 or CSA B181.2.
         3. Schedule 40 CPVC, ASTM F441 or CSA 137.6.
         4. PVC Primer and Solvent Cement: ASTM D2564.
         5. PPE ULC S636 manufactured by M and G Duravent - must terminate using 45 and 90 degree elbows, or a tee.
         6. Vent lengths requiring more than 6, 90 degree elbows; add listed equivalents for every elbow up to the maximum allowable vent length.
    1. Napoleon 9600 Series High Efficiency Gas Furnace: Two stage Gas Furnace may be installed in four positions, alcove or closet installations that require zero clearance. Certified by CSA for application in Canada and the United States.
       1. Efficiency (AFUE): 96 percent.
       2. ECM Blower Motor: High efficiency variable speed.
       3. Wrinkle Bent Primary Heat Exchanger Tubes: T140 aluminized.
       4. Heat Recovery Coil: 29-4C stainless steel.
       5. Burners: Aluminized multi-port in-shot.
       6. Integrated Furnace Control: Self diagnostic.
       7. Zero clearance in all positions.
       8. Multi-fit: Upflow, downflow, horizontal left and horizontal right.
       9. Igniter: Premium hot surface.
       10. Direct and single vent installation approved.
       11. Concentric venting approved.
       12. Propane conversion kit.
       13. Canada High Altitude: 0 to 4,500 ft (1372 m).
       14. US High Altitude: 0 to 5,400 ft (1646 m).
       15. Units Factory Fired: 100 percent.
       16. Flexible condensate trap mounting for easy service.
       17. Manifold Cover: Clear front.
       18. Modular heating and blower for easy service.
       19. Sealed Vestibule and Blower Compartments for quiet operation.
       20. Low fire is 60 percent of high fire rate.
       21. High flow rate condensate drain.
       22. Can be used for new construction heat.
       23. Optional UV light installation.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model: WPV040T2AA-N:
         1. High Fire Input Btu/Hr: 40,000. Low Fire Input Btu/Hr: 24,000.
         2. Blower Size: 112-6RDD. Motor Size: 1/3 hp. AC Tonnages: 1.5, 2, 2.5.
         3. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (445 x 749 x 864 mm).
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      2. Model: WPV060T3AA-N:
         1. High Fire Input Btu/Hr: 60,000. Low Fire Input Btu/Hr: 36,000.
         2. Blower Size: 112-8RDD. Motor Size: 1/2 hp. AC Tonnages: 1.5, 2, 2.5, 3.
         3. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (445 x 749 x 864 mm).
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      3. Model: WPV080T3AA-N:
         1. High Fire Input Btu/Hr: 80,000. Low Fire Input Btu/Hr: 48,000.
         2. Blower Size: 112-8RDD. Motor Size: 1/2 hp. AC Tonnages: 1.5, 2, 2.5, 3.
         3. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (445 x 749 x 864 mm).
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      4. Model: WPV080T4BA-N:
         1. High Fire Input Btu/Hr: 80,000. Low Fire Input Btu/Hr: 48,000.
         2. Blower Size: 112-10RDD. Motor Size: 3/4 hp. AC Tonnages: 2, 2.5, 3, 4.
         3. Cabinet (WxDxH): 22.5 x 29.5 x 34 inches (445 x 749 x 864 mm).
         4. Supply Air (WxH): 21.25 x 19.63 inches (540 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      5. Model: WPV100T5BA-N:
         1. High Fire Input Btu/Hr: 100,000. Low Fire Input Btu/Hr: 60,000.
         2. Blower Size: 112-10RDD. Motor Size: 1 hp. AC Tonnages: 2.5, 3, 4, 5.
         3. Cabinet (WxDxH): 22.5 x 29.5 x 34 inches (445 x 749 x 864 mm).
         4. Supply Air (WxH): 21.25 x 19.63 inches (540 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      6. Model: WPV120T5BA-N:
         1. High Fire Input Btu/Hr: 120,000. Low Fire Input Btu/Hr: 72,000.
         2. Blower Size: 112-10RDD. Motor Size: 1 hp. AC Tonnages: 2.5, 3, 4, 5.
         3. Cabinet (WxDxH): 22.5 x 29.5 x 34 inches (445 x 749 x 864 mm).
         4. Supply Air (WxH): 21.25 x 19.63 inches (540 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).

\*\* NOTE TO SPECIFIER \*\* Delete venting paragraph if not required.

* + - 1. Venting: Canada:
         1. Furnace must be vented with ULC S636 certified PVC manufactured by IPEX, and Royal Building Products (GVS-65 and GVS90), or ULC S636 certified, or PPE manufactured by M and G Duravent.
      2. Venting: In United States:
         1. Schedule 40 PVC, ASTM D1785 or CSA B137.3.
         2. PVC-DWV, ASTM D2665 or CSA B181.2.
         3. Schedule 40 CPVC, ASTM F441 or CSA 137.6.
         4. PVC Primer and Solvent Cement: ASTM D2564.
         5. PPE ULC S636 manufactured by M and G Duravent - must terminate using 45 and 90 degree elbows, or a tee.
         6. Vent lengths requiring more than 6, 90 degree elbows; add listed equivalents for every elbow up to the maximum allowable vent length.
    1. Napoleon 9600E Series High Efficiency Gas Furnace may be installed in two positions, alcove or closet installations that require zero clearance. Certified by CSA for application in Canada and the United States.
       1. Efficiency (AFUE): 95 percent.
       2. ECM Blower Motor High efficiency multispeed.
       3. Wrinkle Bent Primary Heat Exchanger Tubes: T140 aluminized.
       4. Heat Recovery Coil: 29-4C stainless teel.
       5. Burners: Aluminized multi-port in-shot.
       6. Integrated Furnace Control: Self diagnostic.
       7. Zero clearance in all positions.
       8. Multi-fit: Upflow, downflow, horizontal left and horizontal right.
       9. Igniter: Premium hot surface.
       10. Direct and single vent installation approved.
       11. Concentric venting approved.
       12. Propane conversion kit.
       13. Canada High Altitude: 0 to 4,500 ft (1372 m).
       14. US High Altitude: 0 to 5,400 ft (1646 m).
       15. Units Factory Fired: 100 percent.
       16. Flexible condensate trap mounting for easy service.
       17. Manifold Cover: Clear front.
       18. Modular heating and blower for easy service.
       19. Sealed Vestibule and Blower Compartments for quiet operation.
       20. High flow rate condensate drain.
       21. Can be used for new construction heat.
       22. Optional SureView Wedge Kit Available.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model: WSX040T2AA-EN:
         1. Input BTU/hr: 40,000. Output BTU/hr: 38,000.
         2. Blower Size: 112-6RDD. Motor Size: 1/3 hp. AC Tonnages: 1.5, 2, 2.5.
         3. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (445 x 749 x 864 mm).
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      2. Model: WSX060T3AA-EN:
         1. Input BTU/hr: 60,000. Output BTU/hr: 58,000.
         2. Blower Size: 112-8RDD. Motor Size: 1/2 hp. AC Tonnages: 1.5, 2, 2.5, 3.
         3. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (445 x 749 x 864 mm).
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356 x 584 mm).
      3. Model: WSX080T3AA-EN:
         1. Input BTU/hr: 80,000. Output BTU/hr: 77,000.
         2. Blower Size: 112-8RDD. Motor Size: 1/2 hp. AC Tonnages: 1.5, 2, 2.5, 3.
         3. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (445 x 749 x 864 mm).
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).

\*\* NOTE TO SPECIFIER \*\* Delete venting paragraph if not required.

* + - 1. Venting: Canada
         1. Furnace must be vented with ULC S636 certified PVC manufactured by IPEX, and Royal Building Products (GVS-65 and GVS90), or ULC S636 certified, or PPE manufactured by M and G Duravent.
      2. Venting: In United States:
         1. Schedule 40 PVC, ASTM D1785 or CSA B137.3.
         2. PVC-DWV, ASTM D2665 or CSA B181.2.
         3. Schedule 40 CPVC, ASTM F441 or CSA 137.6.
         4. PVC Primer and Solvent Cement: ASTM D2564.
         5. PPE ULC S636 manufactured by M and G Duravent - must terminate using 45 and 90 degree elbows, or a tee.
         6. Vent lengths requiring more than 6, 90 degree elbows; add listed equivalents for every elbow up to the maximum allowable vent length.
    1. Napoleon 9600Q Series High Efficiency Gas Furnace: Two stage Gas Furnace may be installed in two positions, alcove or closet installations that require zero clearance. Certified by CSA for application in Canada and the United States.
       1. Efficiency (AFUE): 96 percent.
       2. ECM Blower Motor High efficiency multispeed.
       3. Vortex Turbulator Heat Exchanger: T140 Aluminized.
       4. Heat Recovery Coil: 29-4C stainless teel.
       5. Burners: Aluminized multi-port in-shot.
       6. Integrated Furnace Control: Self diagnostic.
       7. Two-Stage Control: First stage start up operates at 60 percent of full heating capacity.
       8. Propane conversion kit.
       9. Can be used for new construction heat.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model WSX040T2AA-N.
         1. Input BTU/hr: 40,000. Output BTU/hr: 38,000.
         2. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (444 x 749 x 867 mm).
         3. Venting: Clearance to Combustibles: 0.
         4. Venting: Minimum Vent Size: 1.5 inches (38 mm).
         5. Venting: Maximum Vent Size: 3 inches (76 mm).
         6. Venting: Minimum Vent Length: 15 feet (4572 mm).
         7. Venting: Maximum Vent Length: 75 feet (22860 mm).
         8. Airflow and Cooling: Motor Type and Size: 1/3 hp.
         9. Airflow and Cooling: Recommended AC Tonnage: 1.5, 2, and 2.5.
      2. Model WSX060T3AA-N.
         1. Input BTU/hr: 60,000. Output BTU/hr: 58,000.
         2. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (444 x 749 x 867 mm).
         3. Venting: Clearance to Combustibles: 0.
         4. Venting: Minimum Vent Size: 1.5 inches (38 mm).
         5. Venting: Maximum Vent Size: 3 inches (76 mm).
         6. Venting: Minimum Vent Length: 15 feet (4572 mm).
         7. Venting: Maximum Vent Length: 100 feet (22860 mm).
         8. Airflow and Cooling: Motor Type and Size: 1/2 hp.
         9. Airflow and Cooling: Recommended AC Tonnage: 1.5, 2, and 2.5.
      3. Model WSX080T3AA-N.
         1. Input BTU/hr: 80,000. Output BTU/hr: 77,000.
         2. Cabinet (WxDxH): 17.5 x 29.5 x 34 inches (444 x 749 x 867 mm).
         3. Venting: Clearance to Combustibles: 0.
         4. Venting: Minimum Vent Size: 2 inches (51 mm).
         5. Venting: Maximum Vent Size: 3 inches(76 mm).
         6. Venting: Minimum Vent Length: 15 feet (4572 mm).
         7. Venting: Maximum Vent Length: 100 feet (22860 mm).
         8. Airflow and Cooling: Motor Type and Size: 1/2 hp.
         9. Airflow and Cooling: Recommended AC Tonnage: 1.5, 2, 2.5 and 3.

\*\* NOTE TO SPECIFIER \*\* Delete venting paragraph if not required.

* + - 1. Venting: Canada:
         1. Furnace must be vented with ULC S636 certified PVC manufactured by IPEX, and Royal Building Products (GVS-65 and GVS90), or ULC S636 certified, or PPE manufactured by M and G Duravent.
      2. Venting: In United States:
         1. Schedule 40 PVC, ASTM D1785 or CSA B137.3.
         2. PVC-DWV, ASTM D2665 or CSA B181.2.
         3. Schedule 40 CPVC, ASTM F441 or CSA 137.6.
         4. PVC Primer and Solvent Cement: ASTM D2564.
         5. PPE ULC S636 manufactured by M and G Duravent - must terminate using 45 and 90 degree elbows, or a tee.
         6. Vent lengths requiring more than 6, 90 degree elbows; add listed equivalents for every elbow up to the maximum allowable vent length.
    1. Napoleon 9700 Series High Efficiency Gas Furnace may be installed in alcove or closet installations that require zero clearance. Certified by CSA for application in Canada and the United States.
       1. Efficiency (AFUE): 97 percent.
       2. ECM Blower Motor High efficiency variable speed.
       3. Wrinkle Bent Primary Heat Exchanger Tubes: T140 Aluminized.
       4. Heat Recovery Coil: 29-4C stainless steel.
       5. Berners: Aluminized Multi-Port In-Shot.
       6. Integrated Furnace Control: Self diagnostic.
       7. Removable heat exchanger for easy service.
       8. Zero clearance installation.
       9. Upflow only.
       10. Igniter: Premium hot surface.
       11. Direct and Single Vent installation approved.
       12. Concentric venting approved.
       13. Propane conversion kit.
       14. Certified to 4500 ft (1372 m).
       15. Units Factory Fired: 100 percent.
       16. Manifold Cover: Clear front.
       17. Modular heating and blower for easy service.
       18. Sealed Vestibule and Blower Compartments for quiet operation.
       19. Low fire is 60 percent of high fire rate.
       20. High flow rate condensate drain.
       21. Can be used for new construction heat.
       22. Equipped with UV light.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model: WUV040T2AA-N:
         1. High Fire Input Btu/Hr: 40,000. Low Fire Input Btu/Hr: 24,000.
         2. Blower Size: 112-6RDD. Motor Size: 1/3 hp. AC Tonnages: 1.5, 2, 2.5.
         3. Cabinet (WxDxH): 17.5 x 31 x 34 inches (445 x 787 x 864 mm).
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      2. Model: WUV060T3AA-N:
         1. High Fire Input Btu/Hr: 60,000. Low Fire Input Btu/Hr: 36,000.
         2. Blower Size: 112-8RDD. Motor Size: 1/2 hp. AC Tonnages: 1.5, 2, 2.5, 3.
         3. Cabinet (WxDxH): 17.5 x 31 x 34 inches (445 x 787 x 864 mm).
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      3. Model: WUV080T3AA-N:
         1. High Fire Input Btu/Hr: 80,000. Low Fire Input Btu/Hr: 48,000.
         2. Blower Size: 112-8RDD. Motor Size: 1/2 hp. AC Tonnages: 1.5, 2, 2.5, 3.
         3. Cabinet (WxDxH): 17.5 x 31 x 34 inches (445 x 787 x 864 mm).
         4. Supply Air (WxH): 16.25 x 19.63 inches (413 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      4. Model: WUV080T4BA-N:
         1. High Fire Input Btu/Hr: 80,000. Low Fire Input Btu/Hr: 48,000.
         2. Blower Size: 112-10RDD. Motor Size: 3/4 hp. AC Tonnages: 2, 2.5, 3, 4.
         3. Cabinet (WxDxH): 22.5 x 31 x 34 inches (572 x 787 x 864 mm).
         4. Supply Air (WxH): 21.25 x 19.63 inches (540 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      5. Model: WUV100T5BA-N:
         1. High Fire Input Btu/Hr: 100,000. Low Fire Input Btu/Hr: 60,000.
         2. Blower Size: 112-10RDD. Motor Size: 1 hp. AC Tonnages: 2.5, 3, 4, 5.
         3. Cabinet (WxDxH): 22.5 x 31 x 34 inches (572 x 787 x 864 mm).
         4. Supply Air (WxH): 21.25 x 19.63 inches (540 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).
      6. Model: WUV120T5BA-N:
         1. High Fire Input Btu/Hr: 120,000. Low Fire Input Btu/Hr: 72,000.
         2. Blower Size: 112-10RDD. Motor Size: 1 hp. AC Tonnages: 2.5, 3, 4, 5.
         3. Cabinet (WxDxH): 22.5 x 31 x 34 inches (572 x 787 x 864 mm).
         4. Supply Air (WxH): 21.25 x 19.63 inches (540 x 499 mm).
         5. Return Air: 14 x 23 inches (356x 584 mm).

\*\* NOTE TO SPECIFIER \*\* Delete venting paragraph if not required.

* + - 1. Venting: Canada:
         1. Furnace must be vented with ULC S636 certified PVC manufactured by IPEX, and Royal Building Products (GVS-65 and GVS90), or ULC S636 certified, or PPE manufactured by M and G Duravent.
      2. Venting: In United States:
         1. Schedule 40 PVC, ASTM D1785 or CSA B137.3.
         2. PVC-DWV, ASTM D2665 or CSA B181.2.
         3. Schedule 40 CPVC, ASTM F441 or CSA 137.6.
         4. PVC Primer and Solvent Cement: ASTM D2564.
         5. PPE ULC S636 manufactured by M and G Duravent - must terminate using 45 and 90 degree elbows, or a tee.
         6. Vent lengths requiring more than 6, 90 degree elbows; add listed equivalents for every elbow up to the maximum allowable vent length.

\*\* NOTE TO SPECIFIER \*\* Delete article if not applicable.

* 1. CENTRAL AIR CONDITIONERS
     1. Napoleon Central Split System Top Discharge Air Conditioners. Micro-channel condenser coils wrapping around inside of air conditioner. Compact aluminum coils allow for smaller air conditioner size while using less refrigerant.
        1. Conforms to UL Standard 1995. Certified to CAN/CSA Standard C22.2 No.236.
        2. Refrigerant: R-410A. Chlorine free. No ozone depletion.
        3. Power Requirements: 208/230 VAC - 60 Hz - 1 Phase.
        4. Compressor: High efficiency. Condenser: Micro-Channel aluminum coils.
        5. Swept fan blades.
        6. PSC Motor: Permanently lubricated. Removable from top of unit.
        7. Service Valves and Refrigerant Connections: Outside of cabinet for accessibility and servicing.
        8. Electrical Connections: Accessible through a removable service panel.
        9. Components:
           1. Side Panels: Vertical extruded slots allow air flow and protect air conditioner interior. Powder coated withstanding 1000 hours of salt spray testing.
           2. Micro-Channel Coils: Compact all-aluminum coils.
           3. Venturi: Integral to the housing, a deep venturi is used in conjunction with the swept fan blade to provide more efficient air flow.
           4. Swept Fan Blades: Contoured providing quieter operation and efficient air flow.
           5. Scroll Compressor: Low vibration and quiet operation. Built-in safety features.

\*\* NOTE TO SPECIFIER \*\* Delete air conditioners series options not required.

* + - 1. Air Conditioners 13 SEER Series:

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - * 1. Model: NT13A018B. Tons: 1.5. Capacity: 18000 btu/hr.

Cabinet (WxDxH): 24 x 24 x 27 inches (610 x 610 x 686 mm)

SCFM Indoor Air Coil: 600.

Ref Charge 410A: 49 oz.

Compressor LRA: 56.3 Amps. Compressor RLA: 9 Amps.

Fan Blade Diameter and No. of Blades: 18 inches (457 mm). 4 blades.

Condenser Fan: FLA: 0.7. HP: 1/8. RPM Rated: 1075.

MCA: 12.

Maximum Fuse/Breaker: 20 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT13A024B. Tons: 2.0. Capacity: 22000 btu/hr.

Cabinet (WxDxH): 24 x 24 x 27 inches (610 x 610 x 686 mm)

SCFM Indoor Air Coil: 800.

Ref Charge 410A: 45 oz.

Compressor LRA: 62.9 Amps. Compressor RLA: 10.9 Amps.

Fan Blade Diameter and No. of Blades: 18 inches (457 mm). 4 blades.

Condenser Fan: FLA: 0.7. HP: 1/8. RPM Rated: 1075.

MCA: 14.3.

Maximum Fuse/Breaker: 25 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT13A030B. Tons: 2.5. Capacity: 27200 btu/hr.

Cabinet (WxDxH): 24 x 24 x 27 inches (610 x 610 x 686 mm).

SCFM Indoor Air Coil: 1000.

Ref Charge 410A: 59 oz.

Compressor LRA: 67.8 Amps. Compressor RLA: 12.8 Amps.

Fan Blade Diameter and No. of Blades: 18 inches (457 mm). 4 blades.

Condenser Fan: FLA: 0.7. HP: 1/8. RPM Rated: 1075.

MCA: 16.7.

Maximum Fuse/Breaker: 25 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT13A036B. Tons: 3.0. Capacity: 33000 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 27 inches (749 x 749 x 686 mm).

SCFM Indoor Air Coil: 1165.

Ref Charge 410A: 60 oz.

Compressor LRA: 72.2 Amps. Compressor RLA: 14.1 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 18.4.

Maximum Fuse/Breaker: 30 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT13A042B. Tons: 3.5. Capacity: 37000 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 27 inches (749 x 749 x 686 mm).

SCFM Indoor Air Coil: 1260.

Ref Charge 410A: 57oz.

Compressor LRA: 109 Amps. Compressor RLA: 16.7 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 21.7.

Maximum Fuse/Breaker: 35 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).

* + - * 1. Model: NT13A048B. Tons: 4.0. Capacity: 43500 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 27 inches (749 x 749 x 686 mm).

SCFM Indoor Air Coil: 1550.

Ref Charge 410A: 87 oz.

Compressor LRA: 124 Amps. Compressor RLA: 18.5 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 23.9.

Maximum Fuse/Breaker: 40 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).

* + - * 1. Model: NT13A060B. Tons: 5.0. Capacity: 52000 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 27 inches (749 x 749 x 686 mm).

SCFM Indoor Air Coil: 1550.

Ref Charge 410A: 86 oz.

Compressor LRA: 152.5 Amps. Compressor RLA: 23.7 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 30.4.

Maximum Fuse/Breaker: 50 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).

* + - 1. Air Conditioners 14 SEER Series:
         1. Model: NT14A018B. Tons: 1.5. Capacity: 18000 btu/hr.

Cabinet (WxDxH): 24 x 24 x 27 inches (610 x 610 x 686 mm.

SCFM Indoor Air Coil: 600.

Ref Charge 410A: 56 oz.

Compressor LRA: 56.3 Amps. Compressor RLA: 9.0 Amps.

Fan Blade Diameter and No. of Blades: 18 inches (457 mm). 4 blades.

Condenser Fan: FLA: 0.7. HP: 1/8. RPM Rated: 1075.

MCA: 12.0.

Maximum Fuse/Breaker: 20 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT14A024B. Tons: 2.0. Capacity: 23400 btu/hr.

Cabinet (WxDxH): 24 x 24 x 27 inches (610 x 610 x 686 mm).

SCFM Indoor Air Coil: 775.

Ref Charge 410A: 86 oz.

Compressor LRA: 62.9 Amps. Compressor RLA: 10.9 Amps.

Fan Blade Diameter and No. of Blades: 18 inches (457 mm). 4 blades.

Condenser Fan: FLA: 0.7. HP: 1/8. RPM Rated: 1075.

MCA: 14.3.

Maximum Fuse/Breaker: 25 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT14A030B. Tons: 2.5. Capacity: 28600 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 27 inches (749 x 749 x 686 mm).

SCFM Indoor Air Coil: 1000.

Ref Charge 410A: 58 oz.

Compressor LRA: 67.8 Amps. Compressor RLA: 12.8 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 16.8.

Maximum Fuse/Breaker: 25 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT14A036B. Tons: 3.0. Capacity: 33800 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 27 inches (749 x 749 x 686 mm).

SCFM Indoor Air Coil: 1100.

Ref Charge 410A: 57 oz.

Compressor LRA: 72.2 Amps. Compressor RLA: 14.1 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 18.4.

Maximum Fuse/Breaker: 30 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT14A042B. Tons: 3.5. Capacity: 38000 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 38.875 inches (749 x 749 x 987 mm).

SCFM Indoor Air Coil: 1275.

Ref Charge 410A: 63 oz.

Compressor LRA: 109 Amps. Compressor RLA: 16.7 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 21.7.

Maximum Fuse/Breaker: 35 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).

* + - * 1. Model: NT14A048B. Tons: 4.0. Capacity: 44000 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 38.875 inches (749 x 749 x 987 mm).

SCFM Indoor Air Coil: 1575.

Ref Charge 410A: 94 oz.

Compressor LRA: 123.9 Amps. Compressor RLA: 17 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 22.1.

Maximum Fuse/Breaker: 35 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).

* + - * 1. Model: NT14A060B. Tons: 5.0. Capacity: 53500 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 47.875 inches (749 x 749 x 1216 mm).

SCFM Indoor Air Coil: 1475.

Ref Charge 410A: 95 oz.

Compressor LRA: 152.6 Amps. Compressor RLA: 23.7 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 1.1. HP: 1/5. RPM Rated: 850.

MCA: 30.7.

Maximum Fuse/Breaker: 50 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).

* + - 1. Air Conditioners 16 SEER Series:
         1. Model: NT16A018B. Tons: 1.5. Capacity: 19100 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 27 inches (749 x 749 x 686 mm).

SCFM Indoor Air Coil: 600.

Ref Charge 410A: 61 oz.

Compressor LRA: 56.3 Amps. Compressor RLA: 9 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 12.

Maximum Fuse/Breaker: 20 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT16A024B. Tons: 2.0. Capacity: 24000 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 27 inches (749 x 749 x 686 mm).

SCFM Indoor Air Coil: 775.

Ref Charge 410A: 63 oz.

Compressor LRA: 62.9 Amps. Compressor RLA: 10.9 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 14.4.

Maximum Fuse/Breaker: 25 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT16A030B. Tons: 2.5. Capacity: 29400 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 27 inches (749 x 749 x 686 mm).

SCFM Indoor Air Coil: 1000.

Ref Charge 410A: 86 oz.

Compressor LRA: 67.8 Amps. Compressor RLA: 12.8 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 16.8.

Maximum Fuse/Breaker: 25 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT16A036B. Tons: 3.0. Capacity: 35600 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 38.875 inches (749 x 749 x 987 mm).

SCFM Indoor Air Coil: 1200.

Ref Charge 410A: 101 oz.

Compressor LRA: 72.2 Amps. Compressor RLA: 14.1 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 18.4.

Maximum Fuse/Breaker: 30 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).

* + - * 1. Model: NT16A042B. Tons: 3.5. Capacity: 41500 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 38.875 inches (749 x 749 x 987 mm).

SCFM Indoor Air Coil: 1350.

Ref Charge 410A: 104 oz.

Compressor LRA: 109 Amps. Compressor RLA: 16.7 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.

MCA: 21.7

Maximum Fuse/Breaker: 35 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).

* + - * 1. Model: NT16A048B. Tons: 4.0. Capacity: 45000 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 47.75 inches (749 x 749 x 1213 mm).

SCFM Indoor Air Coil: 1600.

Ref Charge 410A: 118 oz.

Compressor LRA: 123.9 Amps. Compressor RLA: 17 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 1.1. HP: 1/5. RPM Rated: 850.

MCA: 22.4.

Maximum Fuse/Breaker: 35 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).

* + - * 1. Model: NT16A060B. Tons: 5.0. Capacity: 56500 btu/hr.

Cabinet (WxDxH): 29.5 x 29.5 x 47.75 inches (749 x 749 x 1213 mm).

SCFM Indoor Air Coil: 1750.

Ref Charge 410A: 117 oz.

Compressor LRA: 152.5 Amps. Compressor RLA: 23.7 Amps.

Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.

Condenser Fan: FLA: 1.1. HP: 1/5. RPM Rated: 850.

MCA: 30.7.

Maximum Fuse/Breaker: 50 Amps.

Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).

\*\* NOTE TO SPECIFIER \*\* Delete article if not applicable or delete paragraphs not required.

* 1. CENTRAL HEAT PUMPS
     1. Napoleon 15 SEER Split System Heat Pumps:
        1. Conforms to UL Standard 1995. Certified to CAN/CSA Standard C22.2 No.236.
        2. Refrigerant: R-410A. Chlorine free. Does not contribute to ozone depletion.
        3. Fin and tube condenser.
        4. Swept fan blades.
        5. Permanently lubricated PSC motor. Removable from top of unit.
        6. Service Valves and Refrigerant Connections: Located outside cabinet.
        7. Electrical Connections: Accessible through a removable service pane.
        8. Side Panels: Protect heat pump. Vertical extruded slots on panels allow right air flow.
           1. Powder coated withstanding 1000 hours of salt spray testing.
        9. Venturi: Integral to housing, a deep venturi is used in conjunction with swept fan blade to provide more efficient air flow.
        10. Swept Fan Blades: Contoured blades provide quieter operation. Produces efficient air flow.
        11. High Efficiency Scroll Compressor: Industry leading compressor brand. Low vibration and quiet operation. Built-in safety features.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model: NT15H024A. Tons: 2.0.
         1. Cabinet (WxDxH): 24 x 24 x 27 inches (610 x 610 x 686 mm).
         2. Cooling Capacity: 23200 btu/hr. Heating Capacity: 20600 btu/hr.
         3. Heating Seasonal Performance Factor (HSPF): 8.5.
         4. SCFM Indoor Air Coil: 820.
         5. Ref Charge 410A: 120 oz.
         6. Compressor LRA: 62.9 Amps. Compressor RLA: 10.97 Amps.
         7. Fan Blade Diameter and No. of Blades: 18 inches (457 mm). 4 blades.
         8. Condenser Fan: FLA: 0.7. HP: 1/8. RPM Rated: 1075.
         9. MCA: 14.3.
         10. Maximum Fuse / Breaker: 25 Amp.
         11. Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).
      2. Model: NT15H030A. Tons: 2.5.
         1. Cabinet (WxDxH): 24 x 24 x 27 inches (610 x 610 x 686 mm).
         2. Cooling Capacity: 28000 btu/hr. Heating Capacity: 26800 btu/hr.
         3. Heating Seasonal Performance Factor (HSPF): 9.
         4. SCFM Indoor Air Coil: 1050.
         5. Ref Charge 410A: 149 oz.
         6. Compressor LRA: 67.8 Amps. Compressor RLA: 12.8 Amps.
         7. Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.
         8. Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.
         9. MCA: 16.8.
         10. Maximum Fuse / Breaker: 25 Amp.
         11. Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).
      3. Model: NT15H036A. Tons: 3.0.
         1. Cabinet (WxDxH): 29.5 x 29.5 x 38.875 inches (749 x 749 x 987 mm).
         2. Cooling Capacity: 32000 btu/hr. Heating Capacity: 32000 btu/hr.
         3. Heating Seasonal Performance Factor (HSPF): 9.
         4. SCFM Indoor Air Coil: 1200.
         5. Ref Charge 410A: 145 oz.
         6. Compressor LRA: 72.2 Amps. Compressor RLA: 14.1 Amps.
         7. Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.
         8. Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.
         9. MCA: 18.4.
         10. Maximum Fuse / Breaker: 30 Amp.
         11. Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 3/4 inch (19 mm).
      4. Model: NT15H042A. Tons: 3.5.
         1. Cabinet (WxDxH): 29.5 x 29.5 x 47.88 inches (749 x 749 x 1216 mm).
         2. Cooling Capacity: 37400 btu/hr. Heating Capacity: 38000 btu/hr.
         3. Heating Seasonal Performance Factor (HSPF): 9.
         4. SCFM Indoor Air Coil: 1280.
         5. Ref Charge 410A: 268 oz.
         6. Compressor LRA: 109.0 Amps. Compressor RLA: 16.7 Amps.
         7. Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.
         8. Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.
         9. MCA: 21.7.
         10. Maximum Fuse / Breaker: 35 Amp.
         11. Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).
      5. Model: NT15H048A. Tons: 4.0.
         1. Cabinet (WxDxH): 29.5 x 29.5 x 47.88 inches (749 x 749 x 1216 mm).
         2. Cooling Capacity: 43000 btu/hr. Heating Capacity: 20600 btu/hr.
         3. Heating Seasonal Performance Factor (HSPF): 9.
         4. SCFM Indoor Air Coil: 1470.
         5. Ref Charge 410A: 266 oz.
         6. Compressor LRA: 123.9 Amps. Compressor RLA: 17.0 Amps.
         7. Fan Blade Diameter and No. of Blades: 24 inches (610 mm). 2 blades.
         8. Condenser Fan: FLA: 0.8. HP: 1/6. RPM Rated: 850.
         9. MCA: 22.4.
         10. Maximum Fuse / Breaker: 35 Amp.
         11. Liquid Line: 3/8 inch. (9.5 mm). Suction Line: 7/8 inch (22 mm).

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. DUCTLESS HEAT PUMPS AND AIR CONDITIONERS
     1. Napoleon Ductless Heat Pumps and Air Conditioners: NC19 Series.
        1. Attributes:
           1. Auto-restart.
           2. Sleep mode.
           3. Louver position memory function.
           4. Independent dehumidification.
           5. Standard remote.
           6. Self-diagnostic controls.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model: NC19-12F-B. SEER: 16.5. EER: 10.
         1. Cooling Capacity: 12,000 btu/hr. MCA: 15. Max Fuse: 20 Amp.
         2. Voltage: 115 VAC 60 Hz.
         3. Indoor Noise Level (H/M/L): 42 / 33 / 24.5 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 51.5 dBA.
         5. Maximum Pipe Length: 82 ft (25 m).
         6. Maximum Elevation: 33 ft (10 m).
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         8. Indoor Dimensions (WxDxH): 31.57 x 7.44 x 11.69 inch (802 x 189 x 297 mm).
         9. Outdoor Dimensions (WxDxH): 30.31 x 11.81 x 21.85 inch (770 x 300 x 555 mm).
      2. Model: NC19-18F-B. SEER: 20. EER: 10.75.
         1. Cooling Capacity: 17,000 btu/hr. MCA: 15. Max Fuse: 20 Amp.
         2. Voltage: 208-230 VAC 60 Hz
         3. Indoor Noise Level (H/M/L): 42 / 36 / 24 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 53.5 dBA.
         5. Maximum Pipe Length: 98 ft (30 m).
         6. Maximum Elevation: 66 ft (20 m).
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         8. Indoor Dimensions (WxDxH): 37.99 x 8.46 x 12.56 inch (965 x 215 x 319 mm).
         9. Outdoor Dimensions (WxDxH): 30.50 x 13.11 x 21.81 inch (775 x 333 x 554 mm).
      3. Model: NC19-24F-B. SEER: 19. EER: 22.
         1. Cooling Capacity: 22,000 btu/hr. MCA: 18. Max Fuse: 25 Amp.
         2. Voltage: 208-230 VAC 60 Hz
         3. Indoor Noise Level (H/M/L): 45.5 / 36 / 26.5 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 57 dBA.
         5. Maximum Pipe Length: 98 ft (30 m)
         6. Maximum Elevation: 66 ft (20 m)
         7. Refrigeration Pipe Size: Liquid Side: 3/8 inch. Gas Side: 5/8 inch.
         8. Indoor Dimensions (WxDxH): 42.52 x 8.90 x 13.19 inch (1080 x 226 x 335 mm).
         9. Outdoor Dimensions (WxDxH): 33.27 x 14.29 x 27.64 inch (845 x .363 x 702 mm).
    1. Napoleon Ductless Heat Pumps and Air Conditioners: NHAS Series.
       1. Attributes:
          1. Auto-restart.
          2. Sleep mode.
          3. Functions in Low Temperatures: 5 degrees F (Minus 15 degrees C).
          4. Louver position memory function.
          5. Auto defrosting.
          6. Independent dehumidification.
          7. Standard remote.
          8. Self-diagnostic controls.
          9. Voltage: 208-230 VAC 60 Hz

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model: NHAS-12. SEER: 19. EER: 11. MCA: 15.
         1. Cooling Capacity: 12,000 btu/hr. Heating Capacity: 12,000 btu/hr.
         2. HSPF4: 9.5. HSPF5: 8.
         3. Indoor Noise Level (H/M/L): 38 / 32 / 24 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 57 dBA.
         5. Maximum Pipe Length: 82 ft (25 m)
         6. Maximum Elevation: 33 ft (10 m)
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         8. Indoor Dimensions (WxDxH): 31.57 x 7.44 x 11.69 inch (802 x 189 x 297 mm).
         9. Outdoor Dimensions (WxDxH): 30.31 x 11.81 x 21.85 inch (770 x 300 x 555 mm).
      2. Model: NHAS-18.SEER: 19. EER: 11. MCA: 15. Max Fuse: 20 Amp.
         1. Cooling Capacity: 18,000 btu/hr. Heating Capacity: 18,000 btu/hr.
         2. HSPF4: 10. HSPF5: 8.
         3. Indoor Noise Level (H/M/L): 43 / 35 / 30.5 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 57.5 dBA.
         5. Maximum Pipe Length: 98 ft (30 m).
         6. Maximum Elevation: 66 ft (20 m).
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         8. Indoor Dimensions (WxDxH): 37.99 x 8.46 x 12.56 inch (965 x 215 x 319 mm).
         9. Outdoor Dimensions (WxDxH): 30.50 x 13.11 x 21.81 inch (775 x 333 x 554 mm).
      3. Model: NHAS-24.SEER: 17. EER: 9.5. MCA: 18. Max Fuse: 25 Amp.
         1. Cooling Capacity: 24,000 btu/hr. Heating Capacity: 24,000 btu/hr.
         2. HSPF4: 9.5. HSPF5: 8.
         3. Indoor Noise Level (H/M/L): 48 / 42.5 / 34 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 53 dBA.
         5. Maximum Pipe Length: 98 ft (30 m).
         6. Maximum Elevation: 66 ft (20 m).
         7. Refrigeration Pipe Size: Liquid Side: 3/8 inch. Gas Side: 5/8 inch.
         8. Indoor Dimensions (WxDxH): 42.52 x 8.90 x 13.19 inch (1080 x 226 x 335 mm).
         9. Outdoor Dimensions (WxDxH): 33.27 x 14.29 x 27.64 inch (845 x .363 x 702 mm).
    1. Napoleon Ductless Heat Pumps and Air Conditioners: NH21 Series.
       1. Attributes:
          1. Auto-restart.
          2. Sleep mode.
          3. Functions in Low Temperatures: Minus 13 degrees F (Minus 25 degrees C).
          4. Louver position memory function.
          5. Auto defrosting.
          6. Independent dehumidification.
          7. Standard remote.
          8. Self-diagnostic controls.
          9. Voltage: 208-230 VAC 60 Hz.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model: NH21-12F. SEER: 21.5. EER: 13. MCA: 12. Max Fuse: 15 Amp.
         1. Cooling Capacity: 12,000 btu/hr. Heating Capacity: 12,000 btu/hr.
         2. HSPF4: 9.8. HSPF5: 7.7
         3. Indoor Noise Level (H/M/L): 36.5 / 30 / 25 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 57.5 dBA.
         5. Maximum Pipe Length: 82 ft (25 m).
         6. Maximum Elevation: 33 ft (10 m).
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         8. Indoor Dimensions (WxDxH): 31.57 x 7.44 x 11.69 inch (802 x 189 x 297 mm).
         9. Outdoor Dimensions (WxDxH): 30.31 x 11.81 x 21.85 inch (770 x 300 x 555 mm).
      2. Model: NH21-18F. SEER: 20.8. EER: 13. MCA: 15. Max Fuse: 20 Amp.
         1. Cooling Capacity: 18,000 btu/hr. Heating Capacity: 18,000 btu/hr.
         2. HSPF4: 10. HSPF5: 8.
         3. Indoor Noise Level (H/M/L): 43 / 38 / 32 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 61 dBA.
         5. Maximum Pipe Length: 98 ft (30 m).
         6. Maximum Elevation: 66 ft (20 m).
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         8. Indoor Dimensions (WxDxH): 37.99 x 8.46 x 12.56 inch (965 x 215 x 319 mm).
         9. Outdoor Dimensions (WxDxH): 30.50 x 13.11 x 21.81 inch (775 x 333 x 554 mm).
      3. Model: NH21-24F. SEER: 20.5. EER: 12.5. MCA: 18. Max Fuse: 25 Amp.
         1. Cooling Capacity: 24,000 btu/hr. Heating Capacity: 25,000 btu/hr.
         2. HSPF4: 10. HSPF5: 8.3.
         3. Indoor Noise Level (H/M/L): 47 / 42 / 33 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 61 dBA.
         5. Maximum Pipe Length: 98 ft (30 m).
         6. Maximum Elevation: 66 ft (20 m).
         7. Refrigeration Pipe Size: Liquid Side: 3/8 inch. Gas Side: 5/8 inch.
         8. Indoor Dimensions (WxDxH): 42.52 x 8.90 x 13.19 inch (1080 x 226 x 335 mm).
         9. Outdoor Dimensions (WxDxH): 33.27 x 14.29 x 27.64 inch (845 x .363 x 702 mm).
    1. Napoleon Ductless Heat Pumps and Air Conditioners: NH25 Series.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model: NH25-09F. SEER: 25. EER: 14.5. MCA: 9. Max Fuse: 15 Amp.
         1. Cooling Capacity: 9,000 btu/hr. Heating Capacity: 10,900 btu/hr.
         2. HSPF4: 11.2. HSPF5: 9.
         3. Indoor Noise Level (H/M/L): 42 / 33 / 24.5 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 55.5 dBA.
         5. Maximum Pipe Length: 82 ft (25 m).
         6. Maximum Elevation: 33 ft (10 m).
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 3/8 inch.
         8. Indoor Dimensions (WxDxH): 32.87 x 7.80 x 11.02 inch (835 x 198 x 279 mm).
         9. Outdoor Dimensions (WxDxH): 31.5 x 13.11 x 21.81 inch (800 x 333 x 554 mm).
         10. Attributes:

Auto-restart.

Sleep mode.

Low Temperature Function: Minus 22 degrees F (Minus 30 degrees C).

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Self-diagnostic controls.

Hyper heat remote.

Voltage: 208-230 VAC 60 Hz.

* + - 1. Model: NH25-12F. SEER: 22.5. EER: 13. MCA: 9. Max Fuse: 15 Amp.
         1. Cooling Capacity: 12,000 btu/hr. Heating Capacity: 11,800 btu/hr.
         2. HSPF4: 12. HSPF5: 9.9.
         3. Indoor Noise Level (H/M/L): 43 / 36 / 24 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 56 dBA.
         5. Maximum Pipe Length: 82 ft (25 m).
         6. Maximum Elevation: 33 ft (10 m).
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         8. Indoor Dimensions (WxDxH): 32.87 x 7.80 x 11.02 inch (835 x 198 x 279 mm).
         9. Outdoor Dimensions (WxDxH): 31.5 x 13.11 x 21.81 inch (800 x 333 x 554 mm).
         10. Attributes:

Auto-restart.

Sleep mode.

Low Temperature Function: Minus 22 degrees F (Minus 30 degrees C).

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Self-diagnostic controls.

Hyper heat remote.

Voltage: 208-230 VAC 60 Hz.

* + - 1. Model: NH25-18F. SEER: 20. EER: 12.5. MCA: 18. Max Fuse: 25 Amp.
         1. Cooling Capacity: 17,000 btu/hr. Heating Capacity: 18,000 btu/hr.
         2. HSPF4: 10.3. HSPF5: 8.8.
         3. Indoor Noise Level (H/M/L): 45 / 36 / 26.5 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 57.5 dBA.
         5. Maximum Pipe Length: 98 ft (30 m).
         6. Maximum Elevation: 66 ft (20 m).
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         8. Indoor Dimensions (WxDxH): 38.98 x 5.58 x 12.40 inch (990 x 142 x 315 mm).
         9. Outdoor Dimensions (WxDxH): 33.27 x 14.29 x 27.64 inch (845 x 363 x 702 mm).
         10. Attributes:

Auto-restart.

Sleep mode.

Low Temperature Function: Minus 22 degrees F (Minus 30 degrees C).

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Self-diagnostic controls.

Hyper heat remote.

Voltage: 208-230 VAC 60 Hz.

* + - 1. Model: NH25-24F. SEER: 20.5. EER: 13. MCA: 20. Max Fuse: 30 Amp.
         1. Cooling Capacity: 24,000 btu/hr. Heating Capacity: 24,000 btu/hr.
         2. HSPF4: 11.5. HSPF5: 9.6.
         3. Indoor Noise Level (H/M/L): 47 / 44 / 36.5 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 60 dBA.
         5. Maximum Pipe Length: 164 ft (50 m).
         6. Maximum Elevation: 82 ft (36 m).
         7. Refrigeration Pipe Size: Liquid Side: 3/8 inch. Gas Side: 5/8 inch.
         8. Indoor Dimensions (WxDxH): 46.69 x 10.16 x 13.39 inch (1186 x 258 x 810 mm).
         9. Outdoor Dimensions (WxDxH): 37.2 x 16.14 x 31.89 inch (944 x 410 x 810 mm).
         10. Attributes:

Auto-restart.

Sleep mode.

Low Temperature Function: Minus 22 degrees F (Minus 30 degrees C).

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Self-diagnostic controls.

Standard remote.

Voltage: 208-230 VAC 60 Hz.

* + - 1. Model: NH25-30F. SEER: 19.8. EER: 11.5. MCA: 20. Max Fuse: 30 Amp.
         1. Cooling Capacity: 30,000 btu/hr. Heating Capacity: 30,000 btu/hr.
         2. HSPF4: 9.4. HSPF5: 8.
         3. Indoor Noise Level (H/M/L): 49 / 42 / 37.5 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 59 dBA.
         5. Maximum Pipe Length: 164 ft (50 m).
         6. Maximum Elevation: 82 ft (36 m).
         7. Refrigeration Pipe Size: Liquid Side: 3/8 inch. Gas Side: 5/8 inch.
         8. Indoor Dimensions (WxDxH): 46.69 x 10.16 x 13.39 inch (1186 x 258 x 810 mm).
         9. Outdoor Dimensions (WxDxH): 37.2 x 16.14 x 31.89 inch (944 x 410 x 810 mm).
         10. Attributes:

Auto-restart.

Sleep mode.

Low Temperature Function: 5 degrees F (Minus 15 degrees C).

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Standard remote.

Voltage: 208-230 VAC 60 Hz.

* + - 1. Model: NH25-36F. SEER: 16. EER: 8.6. MCA: 25. Max Fuse: 35 Amp.
         1. Cooling Capacity: 36,000 btu/hr. Heating Capacity: 36,000 btu/hr.
         2. HSPF4: 8.5. HSPF5: 7.
         3. Indoor Noise Level (H/M/L): 48.5 / 44 / 38 dBA.
         4. Outdoor Noise Level (H/M/L): Approximately 59 dBA.
         5. Maximum Pipe Length: 213 ft (64 m).
         6. Maximum Elevation: 98 ft (30 m).
         7. Refrigeration Pipe Size: Liquid Side: 3/8 inch. Gas Side: 5/8 inch.
         8. Indoor Dimensions (WxDxH): 46.69 x 10.16 x 13.39 inch (1186 x 258 x 810 mm).
         9. Outdoor Dimensions (WxDxH): 37.2 x 16.14 x 31.89 inch (944 x 410 x 810 mm).
         10. Attributes:

Auto-restart.

Sleep mode.

Low Temperature Function: 5 degrees F (Minus 15 degrees C).

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Standard remote.

Voltage: 208-230 VAC 60 Hz.

* + 1. Napoleon Ductless Heat Pumps and Air Conditioners: Multi-Zone Series.
       1. Voltage: 208-230 VAC 60 Hz

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model: NCASSETTE12. MCA: 1.3. Max Fuse: 15 Amp.
         1. Indoor Noise Level (H/M/L): 50 / 47 / 43.
         2. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         3. Indoor Dimensions (WxDxH): 22.44 x 22.44 x 10.24 inches (570 x 570 x 260 mm).
         4. Attributes:

Auto-restart.

Sleep mode.

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Self-diagnostic controls.

* + - 1. Model: NCASSETTE18. MCA: 1.9. Max Fuse: 15 Amp.
         1. Indoor Noise Level (H/M/L): 50 / 47 / 43.
         2. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         3. Indoor Dimensions (WxDxH): 22.44 x 22.44 x 10.24 inches (570 x 570 x 260 mm).
         4. Attributes:

Auto-restart.

Sleep mode.

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Self-diagnostic controls.

* + - 1. Model: NH21-09F-I. MCA: 0.25. Max Fuse: 15 Amp.
         1. Indoor Noise Level (H/M/L): 37 / 32 / 27.
         2. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 3/8 inch.
         3. Indoor Dimensions (WxDxH): 31.25 x 7.75 x 10.50 inches (794 x 197 x 267 mm).
         4. Attributes:

Auto-restart.

Sleep mode.

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Self-diagnostic controls.

* + - 1. Model: NH21-12F-I. MCA: 0.25. Max Fuse: 15 Amp.
         1. Indoor Noise Level (H/M/L): 37 / 32 / 27.
         2. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         3. Indoor Dimensions (WxDxH): 31.25 x 7.75 x 10.50 inches (794 x 197 x 267 mm).
         4. Attributes:

Auto-restart.

Sleep mode.

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Self-diagnostic controls.

* + - 1. Model: NH21-18F-I. MCA: 0.4. Max Fuse: 15 Amp.
         1. Indoor Noise Level (H/M/L): 42 / 37 / 34.
         2. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: 1/2 inch.
         3. Indoor Dimensions (WxDxH): 42.52 x 8.90 x 13.19 inches (1080 x 226 x 335 mm).
         4. Attributes:

Auto-restart.

Sleep mode.

Louver position memory function.

Auto defrosting.

Independent dehumidification.

Self-diagnostic controls.

* + - 1. Model: NMZO-27F-B. SEER: 22. EER: 12. MCA: 25. Max Fuse: 35 Amp.
         1. Cooling Capacity: 27,000 btu/hr. Heating Capacity: 28,000 btu/hr.
         2. HSPF4: 9.8. HSPF5: 8.
         3. Indoor Noise Level (H/M/L): N/A.
         4. Outdoor Noise Level (H/M/L): Approximately 63 dBA.
         5. Maximum Pipe Length: 197 ft (60 m).
         6. Maximum Elevation: 49 ft (15 m).
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: .3/8 inch.
         8. Indoor Dimensions (WxDxH): N/A.
         9. Outdoor Dimensions (WxDxH): 37.24 x 16.14 x 31.89 inch (946 x 410 x 810 mm).
         10. Attributes:

Auto-restart.

Low Temperature Function: Minus 13 degrees F (Minus 25 degrees C).

Auto defrosting.

Independent dehumidification.

Voltage: 208-230 VAC 60 Hz.

Self-diagnostic controls.

* + - 1. Model: NMZO-36F-B. SEER: 16.5. EER: 8.9. MCA: 27. Max Fuse: 40 Amp.
         1. Cooling Capacity: 36,000 btu/hr. Heating Capacity: 39,000 btu/hr.
         2. HSPF4: 9. HSPF5: 7.9.
         3. Indoor Noise Level (H/M/L): N/A.
         4. Outdoor Noise Level (H/M/L): Approximately 65 dBA.
         5. Maximum Pipe Length: 197 ft (60 m).
         6. Maximum Elevation: 49 ft (15 m).
         7. Refrigeration Pipe Size: Liquid Side: 1/4 inch. Gas Side: .3/8 inch.
         8. Indoor Dimensions (WxDxH): N/A.
         9. Outdoor Dimensions (WxDxH): 37.24 x 16.14 x 31.89 inch (946 x 410 x 810 mm).
         10. Attributes:

Auto-restart.

Low Temperature Function: Minus 13 degrees F (Minus 25 degrees C).

Auto defrosting.

Independent dehumidification.

Self-diagnostic controls.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required or delete paragraph options not required.

* 1. CONDO PACK HEATING AND COOLING SYSTEMS
     1. High Efficiency Condensing Single Stage Gas Heat / Electric Cooling. P-C Series. SEER: 12. Self-contained, Thru-The-Wall unit. Industry standard footprint for retrofit applications. Standard Color: Taupe.
        1. Conforms to ANSI/UL 1995, ANSI Z21.47.
        2. Certified to CAN/CSA C22.2 NO. 236, CAN/CSA 2.3 and CAN/CGA 2.17
        3. Features:
           1. Shell Dimension (HxWxD): 43.13 x 28 x 32 inches (1095 x 711 x 813 mm).
           2. Sleeve Dimension (HxWxD): 44.88 x 28.88 inches (1140 x 734 mm) wall penetration.
           3. Heating:

Condensing single stage gas furnace.

Heat Exchanger: Stainless steel.

Sealed burner tray. Keeps cold external air from circulating in vestibule

Clear front manifold condensate cover.

* + - * 1. Circulation:

Dual Inlet Blower for higher flow rates / reduced air noise.

Endura Pro Multi-Speed Electronically Commutated Motor for increased electrical efficiency.

* + - * 1. Cooling:

R-410A refrigerant system.

Micro-Channel condenser and evaporator coils.

High Efficiency compressors.

One Piece motorized Condenser Fan design.

* + - * 1. Electrical:

Unit Voltage, Frequency, and Phase: 208/230V-60 Hz-1 PH.

Compressor Type: Rotary.

Indoor Fan (FLA - HP - RPM): 2.8 - 1/3 - 1050.

Combustion Fan FLA: 1.25.

\*\* NOTE TO SPECIFIER \*\* Delete capacity options not required.

Capacity: 1.0 ton (T12A). Rated Amps: 5.3. LRA: 28.5. MCA: 10.2.

Max Fuse/Breaker: 15 Amps.

Condenser Fan (FLA / HP / RPM): 0.79 / 1/4 / 1100.

Capacity: 1.5 ton (T18A). Rated Amps: 7.4. LRA: 38.5. MCA: 13.9.

Max Fuse/Breaker: 20 Amps.

Condenser Fan (FLA / HP / RPM): 0.9 / 1/3 / 1120.

Capacity: 2 ton (T24A). Rated Amps: 10. LRA: 60.9. MCA: 17.6

Max Fuse/Breaker: 25 Amps.

Condenser Fan (FLA / HP / RPM): 1.8 / 1/3 / 1380.

* + - * 1. Gas Controls and Additional Data:

Ignition System: Spark Ignition.

Gas Connection: 1/2 NPT.

Gas and AC Condensate Hose Size: 1/2 and 5/8 inch ID.

* + - * 1. Indoor access to all parts and maintenance needs.
        2. Innovative, dual slide-out chassis can be partially or fully removed for efficient servicing.
        3. With spare modules, building management can perform quick swap outs, maintaining indoor conditions in the apartment/condo, while troubleshooting nonfunctioning units offline.
        4. Can perform direct replacement of the individual modules at the end of their service life instead of replacement of the complete appliance.
        5. All control harnesses are separated with modular quick disconnects so module swap outs do not require time consuming rewiring.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model P-C15A-T12A-A. Cooling: Btu/h: 12,000. SEER: 12.5.
         1. Heating: AFUE: 96.8 percent. Input Btu/h: 15,000. Output Btu/h: 14,500.
      2. Model P-C15A-T18A-A. Cooling: Btu/h: 17,000. SEER: 13.0.
         1. Heating: AFUE: 96.8 percent. Input Btu/h: 15,000. Output Btu/h: 14,500.
      3. Model P-C15A-T24A-A. Cooling: Btu/h: 23,000. SEER: 12.0.
         1. Heating: AFUE: 96.8 percent. Input Btu/h: 15,000. Output Btu/h: 14,500.
      4. Model P-C30A-T12A-A. Cooling: Btu/h: 12,000. SEER: 12.5.
         1. Heating: AFUE: 93 percent. Input Btu/h: 30,000. Output Btu/h: 28,000.
      5. Model P-C30A-T18A-A. Cooling: Btu/h: 17,000. SEER: 13.0.
         1. Heating: AFUE: 93 percent. Input Btu/h: 30,000. Output Btu/h: 28,000.
      6. Model P-C30A-T24A-A. Cooling: Btu/h: 23,000. SEER: 12.0.
         1. Heating: AFUE: 93 percent. Input Btu/h: 30,000. Output Btu/h: 28,000.
      7. Model P-C40A-T12A-A. Cooling: Btu/h: 12,000. SEER: 12.5.
         1. Heating: AFUE: 91.7 percent. Input Btu/h: 40,000. Output Btu/h: 37,000.
      8. Model P-C40A-T18A-A. Cooling: Btu/h: 17,000. SEER: 13.0.
         1. Heating: AFUE: 91.7 percent. Input Btu/h: 40,000. Output Btu/h: 37,000.
      9. Model P-C40A-T24A-A. Cooling: Btu/h: 23,000. SEER: 12.0.
         1. Heating: AFUE: 91.7 percent. Input Btu/h: 40,000. Output Btu/h: 37,000.
      10. Model P-C50A-T12A-A. Cooling: Btu/h: 12,000. SEER: 12.5.
          1. Heating: AFUE: 90.6 percent. Input Btu/h: 50,000. Output Btu/h: 45,300.
      11. Model P-C50A-T18A-A. Cooling: Btu/h: 17,000. SEER: 13.0.
          1. Heating: AFUE: 90.6 percent. Input Btu/h: 50,000. Output Btu/h: 45,300.
      12. Model P-C50A-T24A-A. Cooling: Btu/h: 23,000. SEER: 12.0.
          1. Heating: AFUE: 90.6 percent. Input Btu/h: 50,000. Output Btu/h: 45,300.
    1. High Efficiency Condensing Single Stage Gas Heat / Electric Cooling. P-C Series. EER: 11. Self-contained, Thru-The-Wall unit. Industry standard footprint for retrofit applications. Standard Color: Taupe.
       1. Conforms to ANSI/UL 1995, ANSI Z21.47.
       2. Certified to CAN/CSA C22.2 NO. 236, CAN/CSA 2.3 and CAN/CGA 2.17.
       3. Features:
          1. Shell Dimension (HxWxD): 43.13 x 28 x 32 inches (1095 x 711 x 813 mm).
          2. Shell Dimension 2 Ton Units (HxWxD): 43.13 x 28 x 39 inches. (1095 x 711 x 991 mm).
          3. Sleeve Dimension (HxWxD): 44.88 x 28.88 inches (1140 x 734 mm) wall penetration.
          4. Heating:

Condensing single stage gas furnace.

Heat Exchanger: Stainless steel.

Sealed burner tray. Keeps cold external air from circulating in vestibule.

Clear front manifold condensate cover.

* + - * 1. Circulation:

Dual Inlet Blower for higher flow rates / reduced air noise.

Endura Pro Multi-Speed Electronically Commutated Motor for increased electrical efficiency.

* + - * 1. Cooling:

R-410A refrigerant system.

Micro-Channel condenser and evaporator coils.

High efficiency compressors.

One piece motorized condenser fan design.

* + - * 1. Electrical:

Unit Voltage, Frequency, and Phase: 208/230V-60 Hz-1 PH.

Compressor Type: Rotary.

Indoor Fan (FLA - HP - RPM): 2.8 - 1/3 - 1050.

Combustion Fan FLA: 1.25.

\*\* NOTE TO SPECIFIER \*\* Delete capacity options not required.

Capacity: 1.0 ton (A12A). Rated Amps: 5.3. LRA: 28.5. MCA: 10.2.

Max Fuse/Breaker: 15 Amps.

Condenser Fan (FLA / HP / RPM): 0.79 / 1/4 / 1100.

Capacity: 1.5 ton (A18A). Rated Amps: 7.4. LRA: 38.5. MCA: 13.9.

Max Fuse/Breaker: 20 Amps.

Condenser Fan (FLA / HP / RPM): 0.9 / 1/3 . 1120.

Capacity: 2 ton (A24A). Rated Amps: 10. LRA: 60.9. MCA: 17.6.

Max Fuse/Breaker: 25 Amps.

Condenser Fan (FLA / HP / RPM): 1.6 / 1/3 / 1380.

* + - * 1. Gas Controls and Additional Data:

Ignition System: Spark Ignition.

Gas Connection: 1/2 NPT.

Gas and AC Condensate Hose Size: 1/2 and 5/8 inch ID.

* + - * 1. Indoor access to all parts and maintenance needs.
        2. Innovative, dual slide-out chassis can be partially or fully removed for efficient servicing.
        3. With spare modules, building management can perform quick swap outs, maintaining indoor conditions in the apartment/condo, while troubleshooting nonfunctioning units offline.
        4. Can perform direct replacement of the individual modules at the end of their service life instead of replacement of the complete appliance.
        5. All control harnesses are separated with modular quick disconnects so module swap outs do not require time consuming rewiring.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model P-C15A-A12A-A. Cooling: Btu/h: 12,000. EER: 11.
         1. Heating: AFUE: 96.8 percent. Input Btu/h: 15,000. Output Btu/h: 14,500.
      2. Model P-C15A-A18A-A. Cooling: Btu/h: 17,000. EER: 11.
         1. Heating: AFUE: 96.8 percent. Input Btu/h: 15,000. Output Btu/h: 14,500.
      3. Model P-C15A-A24A-A. Cooling: Btu/h: 24,000. EER: 11.
         1. Heating: AFUE: 96.8 percent. Input Btu/h: 15,000. Output Btu/h: 14,500.
      4. Model P-C30A-A12A-A. Cooling: Btu/h: 12,000. EER: 11.
         1. Heating: AFUE: 93 percent. Input Btu/h: 30,000. Output Btu/h: 27,900.
      5. Model P-C30A-A18A-A. Cooling: Btu/h: 17,000. EER: 11
         1. Heating: AFUE: 93 percent. Input Btu/h: 30,000. Output Btu/h: 27,900.
      6. Model P-C30A-A24A-A. Cooling: Btu/h: 24,000. EER: 11
         1. Heating: AFUE: 93 percent. Input Btu/h: 30,000. Output Btu/h: 27,900.
      7. Model P-C40A-A12A-A. Cooling: Btu/h: 12,000. EER: 11.
         1. Heating: AFUE: 91.7 percent. Input Btu/h: 40,000. Output Btu/h: 36,700.
      8. Model P-C40A-A18A-A. Cooling: Btu/h: 17,000. EER: 11.
         1. Heating: AFUE: 91.7 percent. Input Btu/h: 40,000. Output Btu/h: 36,700.
      9. Model P-C40A-A24A-A. Cooling: Btu/h: 24,000. EER: 11.
         1. Heating: AFUE: 91.7 percent. Input Btu/h: 40,000. Output Btu/h: 36,700.
      10. Model P-C50A-A12A-A. Cooling: Btu/h: 12,000. EER: 11.
          1. Heating: AFUE: 90.6 percent. Input Btu/h: 50,000. Output Btu/h: 45,300.
      11. Model P-C50A-A18A-A. Cooling: Btu/h: 17,000. EER: 11.
          1. Heating: AFUE: 90.6 percent. Input Btu/h: 50,000. Output Btu/h: 45,300.
      12. Model P-C50A-A24A-A. Cooling: Btu/h: 23,000. EER: 11.
          1. Heating: AFUE: 90.6 percent. Input Btu/h: 50,000. Output Btu/h: 45,300.
    1. High Efficiency Gas Heat / Electric Cooling. PSC Series. Self-contained, Thru-The-Wall unit. Industry standard footprint for retrofit applications. Standard Color: Taupe.
       1. Conforms to ANSI/UL 1995, ANSI Z21.47.
       2. Certified to CAN/CSA C22.2 NO. 236, CAN/CSA 2.3 and CAN/CGA 2.17.
       3. Features:
          1. Shell Dimension (HxWxD): 43.13 x 28 x 32 inches (1095 x 711 x 813 mm).
          2. Sleeve Dimension (HxWxD): 44.88 x 28.88 inches (1140 x 734 mm) wall penetration.
          3. Heating:

Condensing single stage gas furnace.

Heat Exchanger: Stainless steel.

Sealed burner tray. Keeps cold external air from circulating in vestibule.

Clear front manifold condensate cover.

* + - * 1. Circulation:

Dual Inlet Blower for higher flow rates / reduced air noise.

Endura Pro Multi-Speed Electronically Commutated Motor for increased electrical efficiency.

* + - * 1. Cooling:

R-410A refrigerant system.

Micro-Channel condenser and evaporator coils.

High efficiency compressors.

* + - * 1. Electrical:

Unit Voltage, Frequency, and Phase: 208/230V-60 Hz-1 PH.

Indoor Fan (FLA - HP - RPM): 2.8 - 1/3 - 1050.

Combustion Fan FLA: 1.25.

\*\* NOTE TO SPECIFIER \*\* Delete capacity options not required.

Capacity: 1.0 ton (A012). Rated Amps: 5.5. LRA: 26. MCA: 10.7.

Max Fuse/Breaker: 15 Amps.

Condenser Fan (FLA / HP / RPM): 1.0 / 1/6 / 1075.

Compressor: Rotary.

Capacity: 1.5 ton (A018). Rated Amps: 9. LRA: 48. MCA: 15.1.

Max Fuse/Breaker: 20 Amps.

Condenser Fan (FLA / HP / RPM): 1 / 1/6 1075.

Compressor: Scroll.

Capacity: 2 ton (A024). Rated Amps: 13.5 LRA: 58.3. MCA: 20.7.

Max Fuse/Breaker: 30 Amps.

Condenser Fan (FLA / HP / RPM): 1.0 / 1/6 / 1075.

Compressor: Scroll.

Capacity: 2.5 ton (A030). Rated Amps: 12.8. LRA: 64. MCA: 20.3.

Max Fuse/Breaker: 30 Amps.

Condenser Fan (FLA / HP / RPM): 1.5 / 1/4 / 1075.

Compressor: Scroll.

Capacity: 1.0 ton (B012). Rated Amps: 5.3. LRA: 28.5 MCA: 10.2.

Max Fuse/Breaker: 15 Amps.

Condenser Fan (FLA / HP / RPM): 0.79 / 1/4 / 1100.

Compressor: Rotary.

Capacity: 1.5 ton (B018). Rated Amps: 7.4 LRA: 38.5 MCA: 12.8.

Max Fuse/Breaker: 20 Amps.

Condenser Fan (FLA / HP / RPM): 0.79 / 1/4 / 1100.

Compressor: Rotary.

Capacity: 2 ton (B024). Rated Amps: 10.0 LRA: 34.8. MCA: 16.7.

Max Fuse/Breaker: 25 Amps.

Condenser Fan (FLA / HP / RPM): 1.4 / 1/3 / 1600.

Compressor: Rotary.

Capacity: 2.5 ton (B030). Rated Amps: 12.8. LRA: 67.8. MCA: 20.2.

Max Fuse/Breaker: 30 Amps.

Condenser Fan (FLA / HP / RPM): 1.4 / 1/3 / 1600.

Compressor: Scroll.

* + - * 1. Gas Controls and Additional Data:

Ignition System: Spark Ignition.

Gas Connection: 1/2 NPT.

Gas and AC Condensate Hose Size: 1/2 and 5/8 inch ID.

* + - * 1. Indoor access to all parts and maintenance needs.
        2. Innovative, dual slide-out chassis can be partially or fully removed for efficient servicing.
        3. With spare modules, building management can perform quick swap outs, maintaining indoor conditions in the apartment/condo, while troubleshooting nonfunctioning units offline.
        4. Can perform direct replacement of the individual modules at the end of their service life instead of replacement of the complete appliance.
        5. All control harnesses are separated with modular quick disconnects so module swap outs do not require time consuming rewiring.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model PSC015A012A-TP. Cooling: Btu/h: 12,800. EER: 10.8.
         1. Heating: TE: 90 percent. AFUE: 96.8 percent.

Input Btu/h: 15,000. Output Btu/h: TE: 14520. AFUE: 13,500.

* + - 1. Model PSC015A018A-TP. Cooling: Btu/h: 16,500. EER: 9.6.
         1. Heating: TE: 90 percent. AFUE: 96.8 percent.

Input Btu/h: 15,000. Output Btu/h: TE: 14520. AFUE: 13,500.

* + - 1. Model PSC015A024A-TP. Cooling: Btu/h: 19,500. EER: 9.0.
         1. Heating: TE: 90 percent. AFUE: 96.8 percent.

Input Btu/h: 15,000. Output Btu/h: TE: 14520. AFUE: 13,500.

* + - 1. Model PSC015A030A-TP. Cooling: Btu/h: 24,400. EER: 9.0.
         1. Heating: TE: 90 percent. AFUE: 96.8 percent.

Input Btu/h: 15,000. Output Btu/h: TE: 14520. AFUE: 13,500.

* + - 1. Model PSC015B012A-TP. Cooling: Btu/h: 12,000. EER: 11.0.
         1. Heating: TE: 90 percent. AFUE: 96.8 percent.

Input Btu/h: 15,000. Output Btu/h: TE: 13,500. AFUE: 14,520.

* + - 1. Model PSC015B018A-TP. Cooling: Btu/h: 16,000. EER: 10.
         1. Heating: TE: 90 percent. AFUE: 96.8 percent.

Input Btu/h: 15,000. Output Btu/h: TE: 13,500. AFUE: 14,520.

* + - 1. Model PSC015B024A-TP. Cooling: Btu/h: 21,000. EER: 10.0.
         1. Heating: TE: 90 percent. AFUE: 96.8 percent.

Input Btu/h: 15,000. Output Btu/h: TE: 13,500. AFUE: 14,520.

* + - 1. Model PSC015B030A-TP. Cooling: Btu/h: 25,000. EER: 9.0.
         1. Heating: TE: 90 percent. AFUE: 96.8 percent.

Input Btu/h: 15,000. Output Btu/h: TE: 13,500. AFUE: 14,520.

* + - 1. Model PSC030A012A-TP. Cooling: Btu/h: 12,000. EER: 11.
         1. Heating: TE: 90 percent. AFUE: 93 percent.

Input Btu/h: 30,000. Output Btu/h: TE: 27,000. AFUE: 27,900.

* + - 1. Model PSC030A018A-TP. Cooling: Btu/h: 16,000. EER: 10.
         1. Heating: TE: 90 percent. AFUE: 93 percent.

Input Btu/h: 30,000. Output Btu/h: TE: 27,000. AFUE: 27,900.

* + - 1. Model PSC030A024A-TP. Cooling: Btu/h: 21,000. EER: 10.
         1. Heating: TE: 90 percent. AFUE: 93 percent.

Input Btu/h: 30,000. Output Btu/h: TE: 27,000. AFUE: 27,900.

* + - 1. Model PSC030A030A-TP. Cooling: Btu/h: 25,000. EER: 9.0.
         1. Heating: TE: 90 percent. AFUE: 93 percent.

Input Btu/h: 30,000. Output Btu/h: TE: 27,000. AFUE: 27,900.

* + - 1. Model PSC030B012A-TP. Cooling: Btu/h: 12,800. EER: 10.8.
         1. Heating: TE: 90 percent. AFUE: 93 percent.

Input Btu/h: 30,000. Output Btu/h: TE: 27,000. AFUE: 27,900.

* + - 1. Model PSC030B018A-TP. Cooling: Btu/h: 16,500. EER: 9.6.
         1. Heating: TE: 90 percent. AFUE: 93 percent.

Input Btu/h: 30,000. Output Btu/h: TE: 27,000. AFUE: 27,900.

* + - 1. Model PSC030B024A-TP. Cooling: Btu/h: 19,500. EER: 9.0.
         1. Heating: TE: 90 percent. AFUE: 93 percent.

Input Btu/h: 30,000. Output Btu/h: TE: 27,000. AFUE: 27,900.

* + - 1. Model PSC030B030A-TP. Cooling: Btu/h: 24,400. EER: 9.0.
         1. Heating: TE: 90 percent. AFUE: 93 percent.

Input Btu/h: 30,000. Output Btu/h: TE: 27,000. AFUE: 27,900.

* + - 1. Model PSC040A012A-TP. Cooling: Btu/h: 12,800. EER: 10.8.
         1. Heating: TE: 90 percent. AFUE: 91.7 percent.

Input Btu/h: 40,000. Output Btu/h: TE: 36,000. AFUE: 36,680.

* + - 1. Model PSC040A018A-TP. Cooling: Btu/h: 16,500. EER: 9.6.
         1. Heating: TE: 90 percent. AFUE: 91.7 percent.

Input Btu/h: 40,000. Output Btu/h: TE: 36,000. AFUE: 36,680.

* + - 1. Model PSC040A024A-TP. Cooling: Btu/h: 19,500. EER: 9.0.
         1. Heating: TE: 90 percent. AFUE: 91.7 percent.

Input Btu/h: 40,000. Output Btu/h: TE: 36,000. AFUE: 36,680.

* + - 1. Model PSC040A030A-TP. Cooling: Btu/h: 24,400. EER: 9.0.
         1. Heating: TE: 90 percent. AFUE: 91.7 percent.

Input Btu/h: 40,000. Output Btu/h: TE: 36,000. AFUE: 36,680.

* + - 1. Model PSC040B012A-TP. Cooling: Btu/h: 12,000. EER: 11.0.
         1. Heating: TE: 90 percent. AFUE: 91.7 percent.

Input Btu/h: 40,000. Output Btu/h: TE: 36,000. AFUE: 36,680.

* + - 1. Model PSC040B018A-TP. Cooling: Btu/h: 16,000. EER: 10.0.
         1. Heating: TE: 90 percent. AFUE: 91.7 percent.

Input Btu/h: 40,000. Output Btu/h: TE: 36,000. AFUE: 36,680.

* + - 1. Model PSC040B024A-TP. Cooling: Btu/h: 21,000. EER: 10.0.
         1. Heating: TE: 90 percent. AFUE: 91.7 percent.

Input Btu/h: 40,000. Output Btu/h: TE: 36,000. AFUE: 36,680.

* + - 1. Model PSC040B030A-TP. Cooling: Btu/h: 25,000. EER: 9.
         1. Heating: TE: 90 percent. AFUE: 91.7 percent.

Input Btu/h: 40,000. Output Btu/h: TE: 36,000. AFUE: 36,680.

* + - 1. Model PSC050A012A-TP. Cooling: Btu/h: 12,800. EER: 10.8.
         1. Heating: TE: 90 percent. AFUE: 90.6 percent.

Input Btu/h: 50,000. Output Btu/h: TE: 45,000. AFUE: 45,300

* + - 1. Model PSC050A018A-TP. Cooling: Btu/h: 16,500. EER: 9.6.
         1. Heating: TE: 90 percent. AFUE: 90.6 percent.

Input Btu/h: 50,000. Output Btu/h: TE: 45,000. AFUE: 45,300

* + - 1. Model PSC050A024A-TP. Cooling: Btu/h: 19,500. EER: 9.0.
         1. Heating: TE: 90 percent. AFUE: 90.6 percent.

Input Btu/h: 50,000. Output Btu/h: TE: 45,000. AFUE: 45,300

* + - 1. Model PSC050A030A-TP. Cooling: Btu/h: 24,400. EER: 9.0.
         1. Heating: TE: 90 percent. AFUE: 90.6 percent.

Input Btu/h: 50,000. Output Btu/h: TE: 45,000. AFUE: 45,300

* + - 1. Model PSC050B012A-TP. Cooling: Btu/h: 12,000. EER: 11.0.
         1. Heating: TE: 90 percent. AFUE: 90.6 percent.

Input Btu/h: 50,000. Output Btu/h: TE: 45,000. AFUE: 45,300

* + - 1. Model PSC050B018A-TP. Cooling: Btu/h: 16,000. EER: 10.0.
         1. Heating: TE: 90 percent. AFUE: 90.6 percent.

Input Btu/h: 50,000. Output Btu/h: TE: 45,000. AFUE: 45,300

* + - 1. Model PSC050B024A-TP. Cooling: Btu/h: 21,000. EER: 10.0.
         1. Heating: TE: 90 percent. AFUE: 90.6 percent.

Input Btu/h: 50,000. Output Btu/h: TE: 45,000. AFUE: 45,300

* + - 1. Model PSC050B030A-TP. Cooling: Btu/h: 25,000. EER: 9.
         1. Heating: TE: 90 percent. AFUE: 90.6 percent.

Input Btu/h: 50,000. Output Btu/h: TE: 45,000. AFUE: 45,300

\*\* NOTE TO SPECIFIER \*\* Delete article if not required or delete paragraphs not required.

* 1. INDOOR AIR QUALITY PRODUCTS
     1. Napoleon Energy Recovery Ventilator: Model NERV2400T. Home ventilation system combining performance with energy efficiency for mid to large size homes.
        1. Standards Compliance:
           1. UL 1812 requirements regulating installation of Energy Recovery Ventilators.
           2. CSA C22.2 no. 113 Standard applicable to ventilators.
           3. CSA F326 requirements regulating installation of Energy Recovery Ventilators.
           4. HVI certified and ENERGY STAR qualified.
        2. Performance Requirements:
           1. Power Consumption: of 22 W and 2.9 cfm/Watt at 64 cfm.
           2. Up to 210 CFM at 0.4 inch wg.
        3. Housing: Pre-painted steel. Insulation: Expanded polystyrene.
        4. Dimensions (WxHxD): 32.19 x 33.19 x 20.06 inches (818 x 843 x 510 mm).
        5. Weight (including core): 108 lb. (49 kg).
        6. Mounting: Suspension by chains and springs or supplied wall bracket system.
        7. Oval Shaped Ports: Four, made to fit 6 inch (152 mm) round ducts.
           1. Exhaust air to outdoors.
           2. Fresh air from outdoors.
           3. Exhaust air from building.
           4. Fresh air to building.
        8. Drains: Optional.
        9. Filters: 2 washable Merv 6 filters. HEPA Filters are available.
        10. Supply and Exhaust Blower ECM Motors: Thermally protected electronically Commutated.
        11. Controls: X-Touch wall controls.
            1. Manual Modes: Recirculation, 20 MIN/H, Continuous, Smart and Turbo.
        12. Energy Recovery Core: Recovery efficiency of 84 percent at 32 degrees F (0 degrees C) and 65 percent at minus 13 degrees F (minus 25 degrees C).
            1. Dimensions: 14.25 x 14.25 x 16.6 inch (36.2 x 36.2 x 42.2 cm).
            2. Exchange surface: 136 sq ft (12.6 sq m).
            3. Weight: 26 lb. (11.8 kg).
            4. Type: Counterflow.
            5. Material: Polymerized paper.
        13. Unit Electrical Characteristics: Volts: 120. Frequency: 60 Hz. Amps: 2.2. Watts: 135.
        14. Dampers: Electronic balancing and no balancing.
        15. Homeshield Defrosting System: No negative pressure is created by air exhausted to outdoors, as air is recirculated into house, helping prevent backdraft.
            1. Defrost Modes:

Factory set.

Extended defrost for colder areas.

Discretion. Keeps same speed when performing defrost as performing ventilation.

* + 1. Napoleon Energy Recovery Ventilator: Model NERV75T. Home ventilation system combining performance with energy efficiency for mid to large size homes.
       1. Standards Compliance:
          1. UL 1812 compliant. Safety.
          2. Install in compliance with CSA F326.
          3. Performance tested as per CSA C439.
          4. Compliant with Prop 65.
       2. CFM: 35 to 136 at 0.2 inches wg.
       3. CFM: 35 to 127 at 0.4 inches wg.
       4. Sensible Recovery Energy:
          1. SRE: 75 percent at 32 degrees F (0 degrees C) at 65 cfm.
          2. SRE: 57 percent at minus 77 degrees F (25 degrees C) at 66 cfm.
       5. Dimensions (WxHxD): 21 x 21.5 x 16.13 inches (533 x 546 x 414 mm).
       6. Painted door, corrosion resistant galvanized body.
       7. One-piece molded insulation shell, no air leakage. Expanded polystyrene: UL 94 HF-1 certified.
       8. Ports Size: 5 inch (127 mm).
          1. Exhaust air from building.
          2. Fresh air to building.
          3. Exhaust air to outside.
          4. Fresh air from outside.
       9. Recirculation defrost.
       10. No recirculation mode.
       11. Motorized dampers (no additional backdraft dampers required)
       12. No drain required.
       13. Power Cord: 6 ft.
       14. Electrical:120 volts, 60 Hz, 2.5 A, 163 W.
       15. Sound:
           1. dBA: 73.2 at 127 cfm at 0.4 inches wg.
           2. dBA: 60.1 dBA at 64 cfm at 0.2 inches wg.
       16. Core: Polypropylene crossflow. Polymeric membrane and aluminum covers. Impact resistant. Non washable. Dimensions: 12 x 12 x 9 inches (30.5 x 30.5 x 23 cm).
       17. Filters: MERV 8 grade washable standard filter.
           1. MERV13 grade filter available.
       18. Defrosting System: Homeshield. No negative pressure is created by air exhausted to outdoors since air is recirculated into the house, helping to prevent any backdraft.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. WHOLE-HOUSE HIGH EFFICENCY MEDIA AIR CLEANERS
     1. Whole House High Efficiency Media Air Cleaners:
        1. Removes atmospheric and household dust, coal dust, insecticide dust, mites, pollen, mold spores, fungi, bacteria, pet dander, cooking smoke and grease, tobacco smoke particles, and more down to 0.3 micron (1/84,000 of an inch).
        2. Filter: High Efficiency MERV 11 Media, rated at 492 ft per min. Removes airborne contaminants down to 0.3 micron.
           1. Material: Constructed of continuous hydrophobic polyolefin fibers that will not shred or absorb moisture. Cellulose free. Will not sustain mold growth.
           2. Features a structured density gradient with an electret charge for higher initial and sustained efficiency over life of filter.
           3. Filter Depth: 5-1/4 inch.
           4. Filter has an exact fit with the cabinet. No foam, sponge, or fiberglass filler. All air passes through filter and not through filler material.
           5. User-friendly, easy-to-change filter cartridge.
           6. Lasts up to one year in standard applications.
           7. Reversible air flow. Mounts in any position.
        3. Cabinet Construction: Heavy gauge galvanized steel cabinet resists corrosion and provides trouble-free vertical or horizontal installation. Mounting holes facilitate mounting to duct work or air handling system. Durable powder coat paint finish on door resists corrosion.

\*\* NOTE TO SPECIFIER \*\* Delete model option not required.

* + - 1. Model: NNA-NC1625-A.
         1. House Size: Less than 3000 sq ft (278.7 sq m).
         2. Air Flow: Up to 1400 cfm (2379 cu m per hr).
         3. Duct Size: 16 x 25 inches (40.6 x 63.5 cm).
         4. Intake Dimensions (HxL): 13.25 x 23.7 inches (33.7 x 60.2 cm).
         5. Cabinet Dimensions (WxHxL): 7.5 x 17.4 x 26.5 inches (19.1 x 44.2 x 67.3 cm).
         6. Weight: 18 lbs (8.2 kg).
         7. Pressure Drop: 0.066 (in./wg) at 246 fpm. 0.217 (in./wg) at 492 fpm.
         8. MERV Rating: 11.
      2. Model: NNA-NC2025-A.
         1. House Size: Greater than 3000 sq ft (278.7 sq m).
         2. Air Flow: Up to 2000 cfm (3398 cu m per hr).
         3. Duct Size: 20 x 25 inches (51 x 63.5 cm).
         4. Intake Dimensions (HxL): 18.1 x 23.25 inches (46 x 59.1 cm).
         5. Cabinet Dimensions (WxHxL): 7.5 x 22.5 x 26.1 inches (19.1 x 56.5 x 66.3 cm).
         6. Weight: 20 lbs (9.1 kg).
         7. Pressure Drop: 0.069 (in./wg) at 246 fpm. 0.207 (in./wg) at 492 fpm.
         8. MERV Rating: 11.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required or delete paragraphs not required.

* 1. THERMOSTATS
     1. Napoleon 1H/1C Non Programmable Thermostat - Horizontal.
        1. Model NT144HCNPH:
           1. Single stage thermostat.
           2. Battery back-up.
           3. Horizontal pad.
     2. Napoleon 1H/1C Non Programmable Thermostat - Vertical.
        1. Model NT144HCNPV:
           1. Single stage thermostat.
           2. Battery back-up.
           3. Simple to use.
           4. Vertical pad.
     3. Napoleon 1H/1C 5/2-day Programmable Thermostat - Vertical.
        1. Model NT151HCPV:
           1. Single stage thermostat.
           2. Programmable.
           3. Battery Back-up.
     4. Napoleon 3H/2C 7-day Programmable Thermostat - 12 sq in Touchscreen
        1. Model NT953H2CP:
           1. For single or two-stage furnace.
           2. Touchscreen: 12 inch (605 mm).
           3. Programmable: 7 Day.
           4. Battery back-up.
     5. Napoleon 1H/1C EZ Set Non Programmable Thermostat.
        1. Model NT86HCEZ:
           1. Single stage thermostat.
           2. Pre-Sets: 3 temperatures.
           3. Sleep timer.
           4. Battery back-up.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until wall openings and rough-in have been properly prepared.
      2. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install in accordance with manufacturer's instructions and the requirements of authorities having jurisdiction.
      2. Use manufacturer's guidelines for minimum clearances to combustibles, walls, and finishes.
      3. Anchor all components firmly in position.

\*\* NOTE TO SPECIFIER \*\* Include the following for following two paragraphs for natural gas fireplaces.

* + 1. Connect to natural gas system in accordance with NFPA 54.
    2. Connect to natural gas system in accordance with CSA B149.1.

\*\* NOTE TO SPECIFIER \*\* Include the following for following two paragraphs for propane fireplaces.

* + 1. Connect to propane system in accordance with NFPA 54.
    2. Connect to propane system in accordance with CSA B149.1 and B149.2.

\*\* NOTE TO SPECIFIER \*\* Include one of the following two paragraphs for electric fireplaces and for wood or gas and wood fireplaces equipped with electric controls or blowers.

* + 1. Connect to power supply and control wiring in accordance with NFPA 70.
    2. Connect to power supply and control wiring in accordance with CSA C221.
    3. Upon completion of installation, visually inspect all exposed surfaces. Touch up scratches and abrasions with touch up paint recommended by the manufacturer; make imperfections invisible to the unaided eye from a distance of 5 feet.
    4. Test for proper operation and adjust until satisfactory results are obtained.
  1. PROTECTION
     1. Protect installed products until completion of project.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION