



TFTN340-399 High Efficiency Gas-Fired Condensing Boiler

SUBMITTAL SHEET
Section 1 – General Specifications
Section 2 – Product Dimensions
Section 3 – Field Wiring

Project Name: _____ Date: _____
Location: _____
Engineer: _____
Contractor: _____ Rep: _____

1 – GENERAL SPECIFICATIONS

Product Features:

- ✓ Certified to ANSI Z21.13 / CSA 4.9
- ✓ SA-240 S43932 Chromium SS Fire Tube Heat Exchanger
- ✓ Stainless-steel supply & return pipes
- ✓ ASME H-stamped as a heating boiler
- ✓ Maximum operating pressure 80 psi
- ✓ Top & bottom water & gas connections
- ✓ Wall mounted (floor mounting with optional kit)
- ✓ Zero clearance to combustibles (clearances required for service)
- ✓ Modulating burner, 10:1 turndown ratio (TFTN340 = 8.5:1)
- ✓ Certified as Direct Vent or for use with indoor combustion air
- ✓ Sealed cabinet with integrated silencer and air-filter
- ✓ 7 in. touch screen display
- ✓ High energy ignition transformer (spark ignition)
- ✓ Integrated LWCO (UL353 certified)
- ✓ On/off power switch
- ✓ 120VAC convenience outlet
- ✓ WiFi remote connectivity embedded
- ✓ Integrated 3-Zone controller (3x CH inputs & outputs)
- ✓ DHW zone input (tank thermostat or sensor)
- ✓ Outdoor and 2x Auxiliary temperature sensor inputs
- ✓ 0-10V input for external temperature or burner power control
- ✓ Boiler, DHW and 2x Auxiliary pump outputs
- ✓ Variable speed pump output (0-10V / PWM)
- ✓ Boiler power output signal (0-10V)
- ✓ Alarm contact

Control Features:

- ✓ Integral microprocessor safety control – flame and temperature safeguard
- ✓ Fully adjustable burner test mode
- ✓ AUTO CH boiler temperature adjustment/reset (based on outdoor and/or indoor temperature or T-stat cycles)
- ✓ Adjustable reset curve (min-T/max-T/slope/offset)
- ✓ Adjustable reset temperature boost
- ✓ Summer/Winter changeover (WWSD)
- ✓ Integrated programmable T-stat x 3 (with optional NTI Room Sensors)
- ✓ Freeze protection (on/off settable)
- ✓ Settings backup & restore options
- ✓ Cascade up to 8 TFTN-series boilers
- ✓ Manual mode operation (pumps/fan/alarm)
- ✓ Boiler statistics
- ✓ Lockout, error and warning history
- ✓ Internet outdoor temperature via WiFi connection
- ✓ Adjustable delta-T control (w/ variable speed pump)
- ✓ Adjustable high limit (CSD-1 compliant)
- ✓ DHW recirculation with adjustable schedule
- ✓ Buffer tank charging function
- ✓ 3 independently adjustable CH zones
- ✓ Adjustable CH zone priority logic
- ✓ Adjustable DHW/CH priority switching logic
- ✓ Anti-legionella function
- ✓ Adjustable system pump activation logic
- ✓ Adjustable CH anti-cycle function
- ✓ Adjustable maintenance schedule/warning
- ✓ Optional NTI 3-Zone Pump/Valve Controller (expands zone control up to six – each independently adjustable)
- ✓ Optional NTI Room Sensor

Factory Supplied Items:

- ✓ Outdoor sensor
- ✓ 30 psi ASME pressure relief valve
- ✓ Pressure & temperature gauge
- ✓ LP conversion kit
- ✓ Vent screens

| Model | Water Connections, NPT | Gas Connection, NPT | Exhaust/Air Intake Connections | Max. Exhaust/Air Intake Length (4 in. pipe) |
|-------------|------------------------|---------------------|--------------------------------|---|
| TFTN340-399 | 1-1/2" (Male) | 3/4" (Male) | 4 in. (PVC/CPVC/PP/SS) | 150 ft |

Performance Specifications

| Model | Input Rating, MBH | Heating Capacity, MBH | Net AHRI Rating, Water MBH | TE % |
|---------|-------------------|-----------------------|----------------------------|------|
| TFTN340 | 39.9 - 340 | 324 | 282 | 95.4 |
| TFTN399 | 39.9 - 399 | 380 | 330 | 95.4 |



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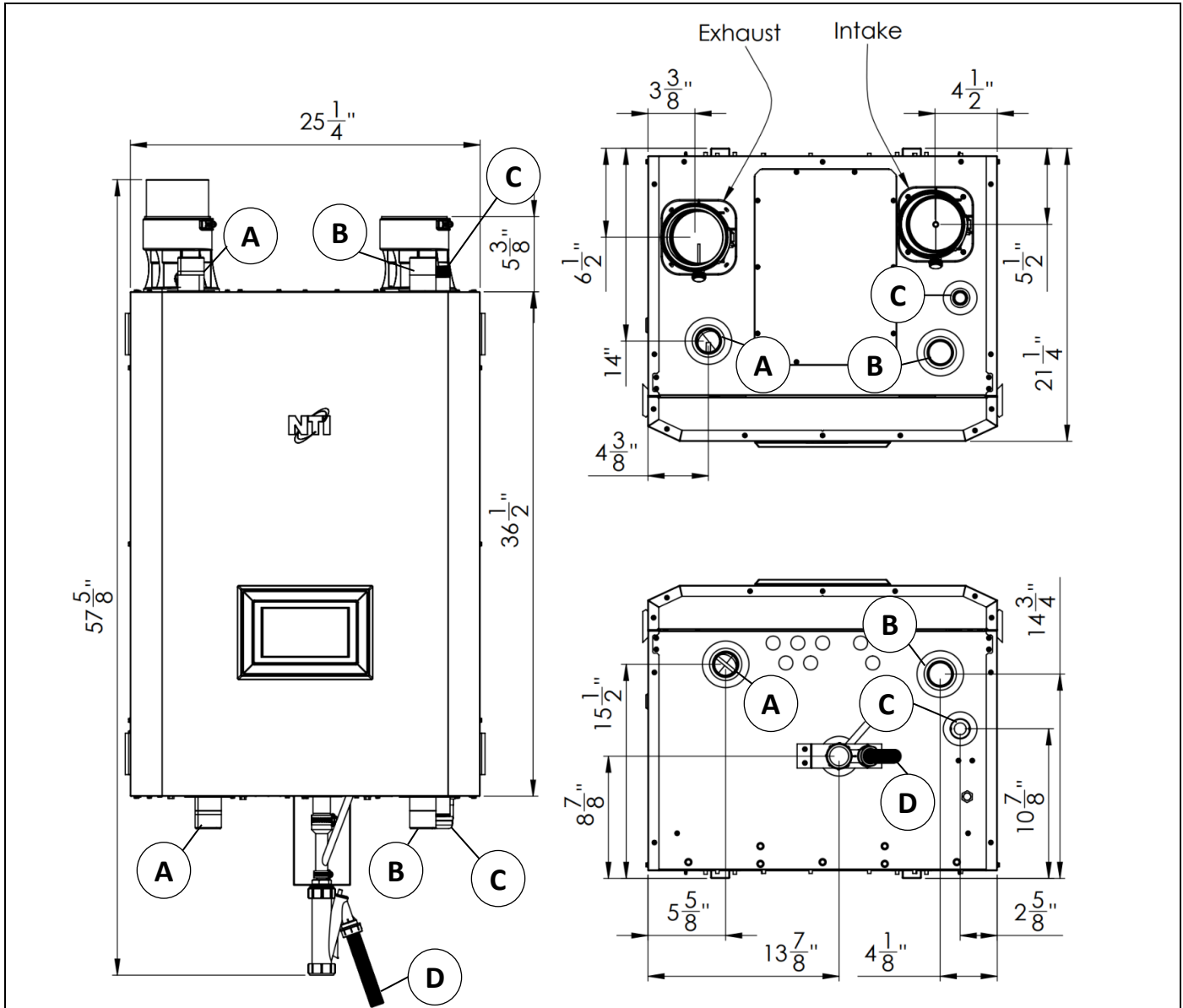
NTI Boilers Inc. 30 Stonegate Drive, Saint John, NB E2H 0A4 Canada
Technical Services: 1-800-688-2575 Fax: 1-506-432-1135 Web: [http:// www.ntiboilers.com](http://www.ntiboilers.com)
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2 – PRODUCT DIMENSIONS - in.



| Connection/Description | Size |
|----------------------------|-----------|
| A – Central Heating Supply | 1-1/2 in. |
| B – Central Heating Return | 1-1/2 in. |

| Connection/Description | Size |
|------------------------|---------|
| C – Gas Inlet | 3/4 in. |
| D – Condensate Drain | - |

MINIMUM SERVICE CLEARANCES - in.

| Front | Top | Sides | Back | Bottom | Flue & Water Pipes |
|-------|-----|-------|------|--------|--------------------|
| 18 | 12 | 2 | 0 | 14 | 1 |



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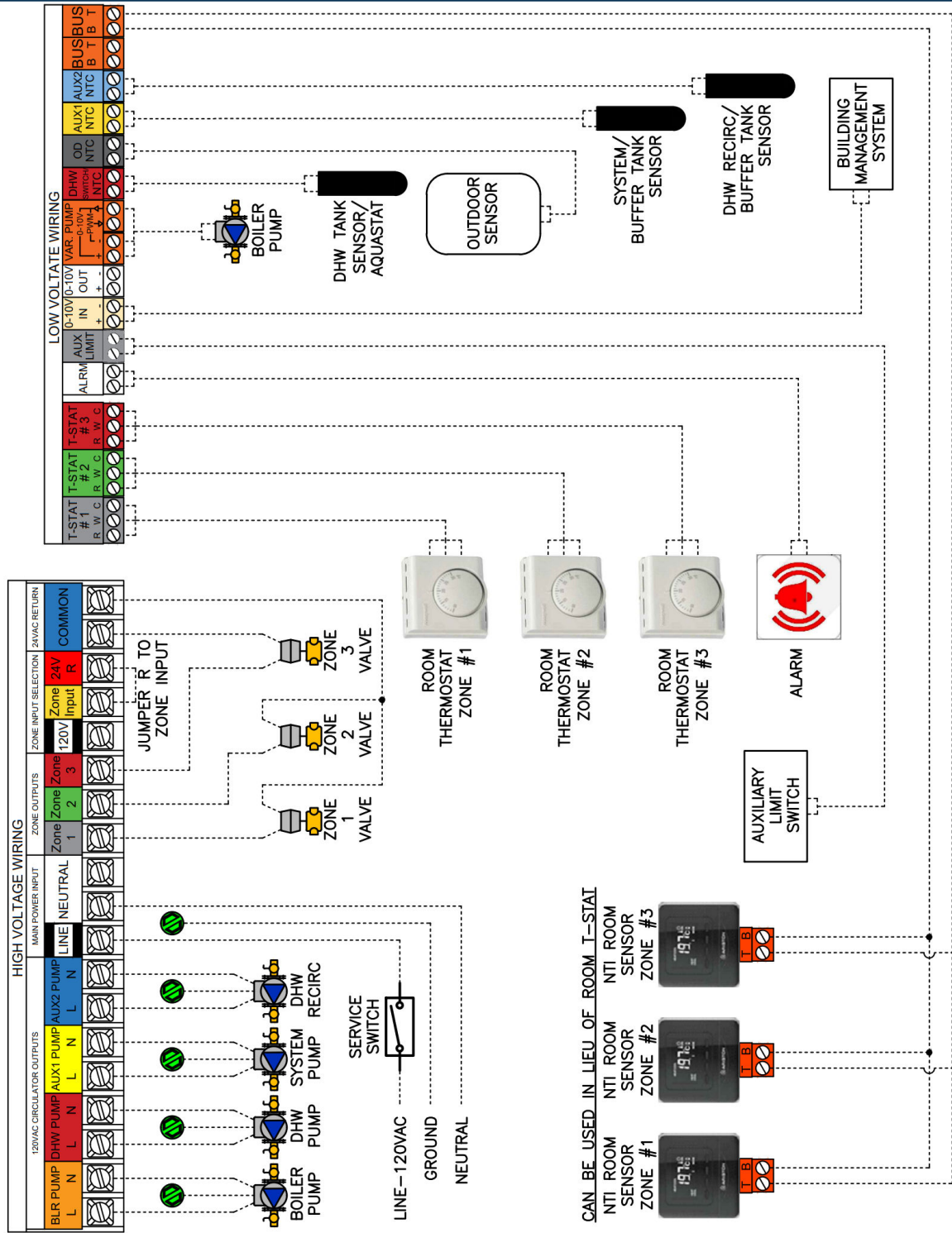
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3 -- FIELD WIRING (24V ZONE VALVES)



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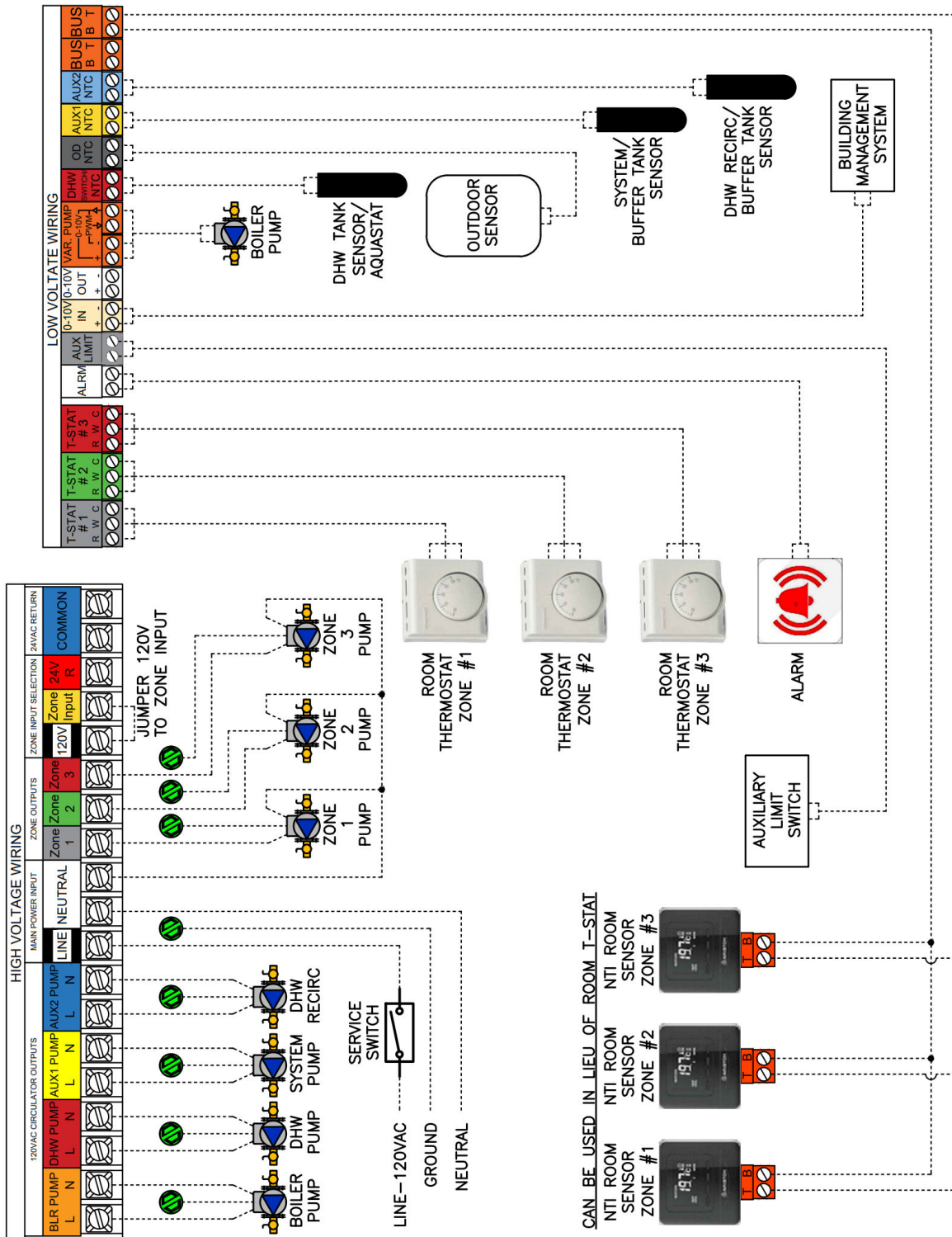
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4 -- FIELD WIRING (120V ZONE PUMPS)



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