48TJD/TJF/TJM/TJN016, 020, 024, 028
SINGLE-PACKAGE COOLING UNITS WITH
FACTORY-INSTALLED GAS HEAT

50TJ016, 020, 024, 028
SINGLE-PACKAGE COOLING UNITS WITH
FACTORY-INSTALLED OPTIONAL ELECTRIC HEAT

— PERFORMANCE DATA
— CERTIFIED DIMENSION PRINT
— CERTIFIED ROOF CURB
DIMENSION PRINT
— HORIZONTAL SUPPLY/RETURN
ADAPTER ROOF CURB DIMENSION
PRINT
— SERVICE OPTION DIMENSION PRINT
DESCRIPTION

The 48TJ units are one-piece electric cooling/gas heating units and the 50TJ units are one-piece electric cooling/optional electric heating units, prewired and precharged. The 48/50TJ units have bottom air openings for separate supply and return ductwork. The 48TJD units are low heat units and the 48TJF units are high heat units. The 48TJM units are low heat, stainless steel heat exchanger units and the 48TJN units are high heat, stainless steel heat exchanger units. The unit is intended for installation on an accessory curb (ordered separately). Horizontal supply and return connections are also possible with a factory-preassembled horizontal conversion adapter roof curb accessory (ordered separately). Bottom discharge on concentric applications requires a transition duct (field-supplied) external to the unit.

STANDARD UNIT FEATURES

All units meet ASHRAE Standard 90.1.
Standard one-year product warranty.
Five-year warranty on the compressor (48/50TJ016). One year warranty on the compressor (48/50TJ020-028).
Units are rated in accordance with ARI standard 360. Standard unit is certified and listed by ETL and ETL, Canada.
Low outdoor temperature cooling operation to 40 F (4 C) as standard.
Dual freezestat protection is provided as standard.
Dual scroll compressors with internal linebreak protection.
Indoor and outdoor coils constructed of aluminum fins mechanically bonded to seamless internally grooved copper tubes.
Dual TXVs (thermostatic expansion valves) metering devices.
Liquid line filter driers provided in each refrigeration circuit.
Optional gear-driven EconoMi$er IV equipped with solid-state controller that includes CO2 ventilation control capability.
Manually adjustable outside air intake for up to 25% outside air.
Automatic changeover (when used with an auto-changeover thermostat).
Single-point gas and electric connections. Disconnect in accordance with NEC must be field-supplied and installed.
All units utilize 2-stage cooling.
Belt drive adjustable evaporator fan.
Choice of low-medium or high-static indoor fan drive capability.

Cabinet made of pre-painted, galvanized steel with baked enamel finish.
Cooling systems have low and high-pressure switches. Two-inch disposable type return-air filters are factory installed.
Provision for alternate end return in base unit. Horizontal supply available by using accessory curb. EconoMi$er IV may be used with horizontal supply and return.
Direct drive propeller condenser fans with vertical discharge.

48TJ UNITS ONLY

Five-year non-prorated warranty on Alumagard™ coated Turbo-tubular™ gas heat exchanger.
2-stage gas heat in a single 2-stage gas valve.
Induced draft combustion system with Hall effect sensor to detect proper operation of induced-draft motor.
Heavy Alumagard coated heat exchangers with aluminized steel burners.
Optional stainless steel heat exchangers.
Heating controls with solid-state direct spark ignition system (pilotless system) and redundant gas valve. High temperature limit switches and auto-reset flame rollout switch are standard.
Reliable IGC (integrated gas unit controller) with built in diagnostics to determine error codes and control fan on/off delays for energy savings and maximum comfort control.
Integrated gas unit controller provides anti-cycle protection for gas heat operation.

PERFORMANCE DATA

Unit Operating Weight ________________________________ lb/kg

COOLING

Gross Total Capacity ______________________________ Btu/h/kW
at Condenser Air Temperature __________________ °F/°C
Gross Sensible Capacity __________________________ Btu/h/kW
Compressor Power Input ______________________________ kW
Indoor Entering Air db ________ °F/°C wb ________ °F/°C
Cfm / L/s ________ External Static Pressure ________ in. wg/Pa
Indoor Fan Motor Size __________________________ Hp/kW
Exhaust Fan Motor Size __________________________ Hp/kW

Curb Weight ______________________________ lb/kg

HEATING

Heating Capacity:
Gas Stage 1 ______________________________ Btu/h/kW
Gas Stage 2 ______________________________ Btu/h/kW
Gas Heating Capacity Total __________________________ Btu/h/kW
Electric Stage 1 ______________________________ kW
Electric Stage 2 ______________________________ kW
Electric Heating Capacity Total __________________________ kW
ELECTRICAL DATA
Power Supply to Unit __________ Volts ________________ Phase _________ Hz
Minimum Circuit Amps __________ Maximum Fuse Amps __________

SUBMITTAL DATA
Job Name ___________________________________________________________
Architect __________________________________________________________
Engineer __________________________________________________________
Contractor __________________________________________________________
Unit Designation ____________________________

OPTIONS AND ACCESSORIES

FACTORY-INSTALLED OPTIONS
☐ Fully Integrated Gear Driven EconoMiSer IV
☐ Additional 5-Year (6th-10th Year) Extended Protection Plan on the Heat Exchanger (48TJ)
☐ Service Option Package (Hinged Access Panels, Non-Fused Disconnect, 115-v Convenience Outlet)
☐ Low/High Gas Heat (48TJ)
☐ Electric Heat (50TJ)
☐ Pre-Coated Condenser Coils
☐ E-Coated Condenser Coils
☐ Stainless Steel Heat Exchangers (48TJ)
☐ High Static Fan Motor

FIELD-INSTALLED ACCESSORIES
☐ Fully Integrated Gear Driven EconoMiSer IV
☐ PremierLink™ Control
☐ EconoMiSer2
☐ Low Ambient Kit — Down to 10 F (016, 020, 028)
☐ Low Ambient Kit — Down to 25 F (024)
☐ Motormaster® Control — Down to –20 F
☐ Return Air Temperature Sensor (Differential Dry Bulb EconoMiSer IV Control)
☐ Solid-State Enthalpy Control — Outside Air
☐ Solid-State Enthalpy Control with Harness — Return Air
☐ Winter Start Package
☐ Roof Curb (14-in.)
☐ Roof Curb (24-in.)
☐ Roof Curb (Horizontal Supply)
☐ Factory Preassembled, Horizontal Conversion Adapter Roof Curb
☐ Power Exhaust
☐ Barometric Relief
☐ Thermostat and Subbase
☐ Time Guard II Device
☐ Two-Position Damper Package
☐ Liquid Propane (LP) Gas Kit (48TJ only)
☐ Hail Guard
☐ Hydronic (Glycol) Coil
☐ Electric Heat
☐ CO₂ Sensor — Duct Mount
☐ CO₂ Sensor — Wall Mount
CERTIFIED DIMENSION PRINT

NOTES:
1. REFER TO PRINT FOR ROOF CURB ACCESSORY DIMENSIONS.
2. DIMENSIONS IN 1/8 IN MILLIMETERS.
3. CENTER OF GRAVITY.
4. N. DIRECTION OF AIR FLOW
5. OUTWORK TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY.
6. MINIMUM CLEARANCE
   * REAR: 4' 6" (1382) FOR COIL REMOVAL. THIS DIMENSION CAN BE REDUCED TO 4' 2" (1279) IF CONDITIONS PERMIT COIL REMOVAL FROM THE TOP
   * 4" (102) TO COMBUSTIBLE SURFACES, ALL FOUR SIDES INCLUES BETWEEN UNITS.
   * LEFT SIDE: 4' 0" (1219) FOR PROPER CONDENSER COIL AIR FLOW.
   * FRONT: 4' 0" (1219) FOR CONTROL BOX ACCESS.
   * RIGHT SIDE: 4' 0" (1219) FOR PROPER OPERATION OF DAMPER AND POWER EXHAUST IF SO EQUIPPED.
   * TOP: 6' 0" (1829) TO ASSURE PROPER CONDENSER FAN OPERATION.
   * BOTTOM: 14" (356) TO COMBUSTIBLE SURFACES. WHEN NOT USING CURB.
   * CONTROL BOX SIDE: 3' 0" (914) TO UNBROUNGED SURFACES.
   * NON-COMBUSTIBLE.
   * NO EMBRACING STRINGER, 9" (229) TO BLOCK OR CONCRETE WALLS, OR OTHER GROUNDED SURFACES.
   * LOCAL CODES OR JURISDICTION MAY PREVAIL.
7. WITH THE EXCEPTION OF CLEARANCE FOR THE CONDENSER COIL AND THE DAMPER/POWER EXHAUST AS SHOWN IN NOTE 6, A REMOVABLE FENCE OR BARRIERS REQUIRE NO CLEARANCE.
8. DIMENSIONS ARE FROM OUTSIDE OF CURB OR CURB POST.
   ALLOW 0.5/8" (16) ON EACH SIDE FOR TOP COVER Drip EDGE.
9. SEE DRAWING 50TJ2805325 FOR SERVICE OPTION DETAILS.
NOTE: The horizontal supply/return adapter roof curb has the same length and width as the standard roof curb.