



95% A.F.U.E. MULTI-POSITION GAS FURNACES

Features

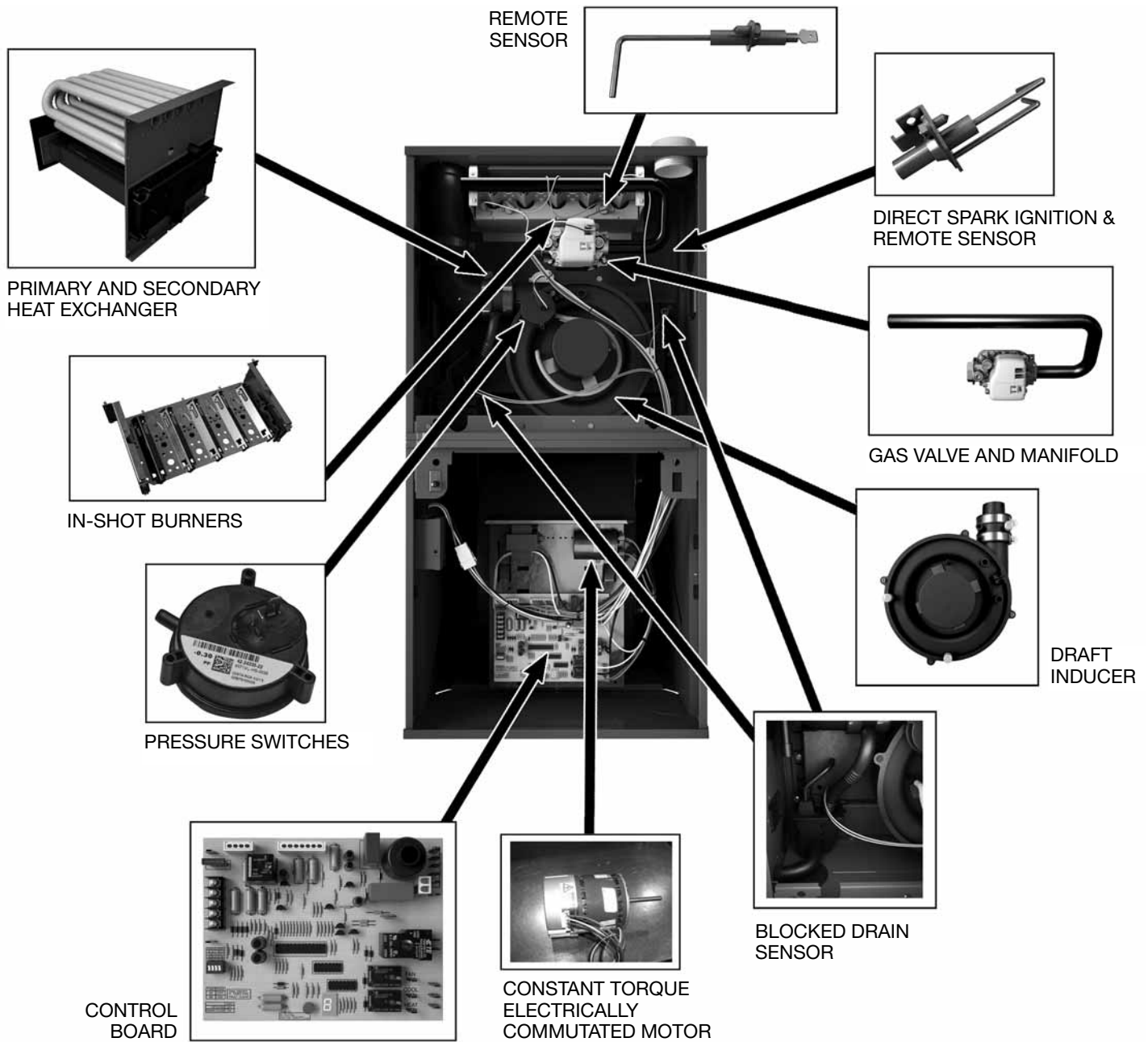
- 95% residential gas furnace CSA certified
- 4 way multi-posure design
- 7-Segment LED all units
- Direct Spark Ignition for reliability and longevity
- Water Management System with patented Blocked Drain Sensor
- Heat exchanger is removable for improved serviceability. Aluminized steel primary and stainless steel secondary construction provide maximum corrosion resistance and thermal fatigue reliability.
- Low profile "34 inch" cabinet ideal for space constrained installations.
- Blower Shelf design – serviceable in all furnace orientations
- Pre marked hoses – insures proper system drainage
- Vent with 2" or 3" PVC
- Replaceable Collector box
- Hemmed edges on cabinet and doors
- Quarter turn fasteners for tool less access
- Integrated control boards feature dip switches for easy system set up
- Self priming condensate trap
- Constant torque electrically commutated motor
- Solid bottom included
- Cabinet air leakage less than 2% at 1 inch H₂O when tested in accordance with ASHRAE standard 193

TZ95MSX SERIES
Model with Input Rates
from 40 to 115 kBTU
[11.72 to 33.71 kW]
 (All Models 95% A.F.U.E.†)



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STANDARD EQUIPMENT

Completely assembled and wired; blocked drain sensor, 7 segment LED and marked hoses; heat exchanger; primary: aluminized steel, secondary: 29-4C stainless steel; solid bottom; induced draft; pressure switches; redundant main gas control; blower compartment door safety switch; solid state time on/off blower control; limit controls; manual shut-off valve; 100% safety lock out; cool fan off delay; field selectable heat fan off delay; one hour automatic retry; power and self-test diagnostics; flame sense current diagnostics; electronic air cleaner connections; twinning (built-in) features; humidifier connections; humidifier on/off delay; low speed continuous fan option; single speed option for heating and cooling applications; transformer; direct drive, multi-speed Constant Torque electrically commutated motor. (Please note: a thermostat is not included as standard equipment.)

OPTIONAL EQUIPMENT

Side and bottom filter racks; return air cabinet for all sizes.
NOTE: Furnace is not listed for use with fuels other than natural or L.P. (propane) gas.
All models can be converted by a qualified distributor or local service dealer to use L.P. (propane) gas without changing burners. Factory approved kits must be used to convert from natural to L.P. (propane) gas and may be ordered as optional accessories from a parts distributor.
For L.P. (propane) operation, refer to Conversion Kit Index Form.

WARNING
THIS FURNACE IS NOT APPROVED
OR RECOMMENDED
FOR USE IN MOBILE HOMES

Physical Data and Specifications—Upflow Models U.S. and Canadian Models

| MODEL NUMBERS | TZ95MSX040B30A | TZ95MSX060B30A | TZ95MSX070B30A | TZ95MSX085C50A | TZ95MSX100C50A | TZ95MSX115D50A |
|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| HIGH FIRE INPUT BTU/HR [kW] ① | 42,000 [12.31] | 56,000 [16.41] | 70,000 [20.50] | 84,000 [24.61] | 98,000 [38.71] | 112,000 [32.82] |
| HEATING CAPACITY BTU/HR [kW] | 40,320 [11.82] | 53,760 [15.75] | 67,200 [19.68] | 80,640 [23.63] | 94,080 [37.16] | 107,520 [31.51] |
| HIGH ALTITUDE OUTPUT 10% DERATE [kW] ② | 36,288 [10.64] | 48,384 [14.18] | 60,480 [17.72] | 72,576 [21.28] | 84,672 [24.81] | 96,768 [28.36] |
| BLOWER (D x W) [mm] | 11 x 7 [279 x 178] | 11 x 8 [279 x 203] | 11 x 8 [279 x 203] | 11 x 10 [279 x 254] | 11 x 10 [279 x 254] | 11 x 11 [279 x 279] |
| MOTOR H.P. [W]— TYPE | 1/2 [373]-5-Constant Torque ECM | 1/2 [373]-5-Constant Torque ECM | 1/2 [373]-5-Constant Torque ECM | 1 [746]-5-Constant Torque ECM | 1 [746]-5-Constant Torque ECM | 1 [746]-5-Constant Torque ECM |
| MOTOR FULL LOAD AMPS | 4.0 | 6.8 | 6.8 | 8.3 | 8.3 | 8.3 |
| HEATING SPEED | MED-HIGH | MED-HIGH | MED-HIGH | MED-HIGH | MED-HIGH | MED-HIGH |
| COOLING SPEED | HIGH | HIGH | HIGH | HIGH | HIGH | HIGH |
| MINIMUM EXT. STATIC PRESSURE (IN. W.C.) [kPa] | .18 [.045] | .20 [.050] | .23 [.057] | .28 [.070] | .28 [.070] | .28 [.070] |
| MAXIMUM EXT. STATIC PRESSURE (IN. W.C.) [kPa] | 1.0 [0.250] | 1.0 [0.250] | 1.0 [0.250] | 1.0 [0.250] | 1.0 [0.250] | 1.0 [0.250] |
| HEATING CFM @ .2" [.049 kPa] W.C. E.S.P. [L/s] | 1049 [494] | 1139 [537] | 1211 [571] | 1704 [804] | 1748 [825] | 1750 [825] |
| COOLING CFM @ .5" [.124 kPa] W.C. E.S.P. [L/s] | 1121 [528] | 1232 [581] | 1318 [622] | 1742 [822] | 1782 [841] | 1934 [912] |
| TEMPERATURE RISE-HIGH FIRE RANGE IN DEGREES °F [°C] | 25 - 55 [14 - 31] | 35 - 65 [19 - 36] | 40 - 70 [22 - 39] | 35 - 65 [19 - 36] | 35 - 65 [19 - 36] | 45 - 75 [25 - 42] |
| RETURN AIR CABINETS (OPT.) RXGR- FILTER SIZE [mm] | C17B (2) 12" x 16" [305 x 406] | C17B (2) 12" x 16" [305 x 406] | C17B (2) 12" x 16" [305 x 406] | C21B (2) 12" x 20" [305 x 508] | C21B (2) 12" x 20" [305 x 508] | C24B (2) 24" x 16" [609 x 406] |
| APPROX. SHIPPING WEIGHT (LBS.) [kg] | 123.5 [56] | 128 [58] | 132 [60] | 147.5 [67] | 152 [69] | 165 [75] |
| AFUE ③ | 95.00% | 95.00% | 95.00% | 95.00% | 95.00% | 95.00% |

NOTES: All models are 115V, 60HZ, 1 phase Gas connection size for all models is 1/2" [13 mm] N.P.T.

① Installation instructions for high altitude derate.

② Canadian installations only.

③ In accordance with D.O.E. test procedures.

*S=Standard Models

NOTE: Standard model complies with California low nox requirements.

This furnace does not meet air district requirements of 14 ng/J NOx emissions limit, and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.

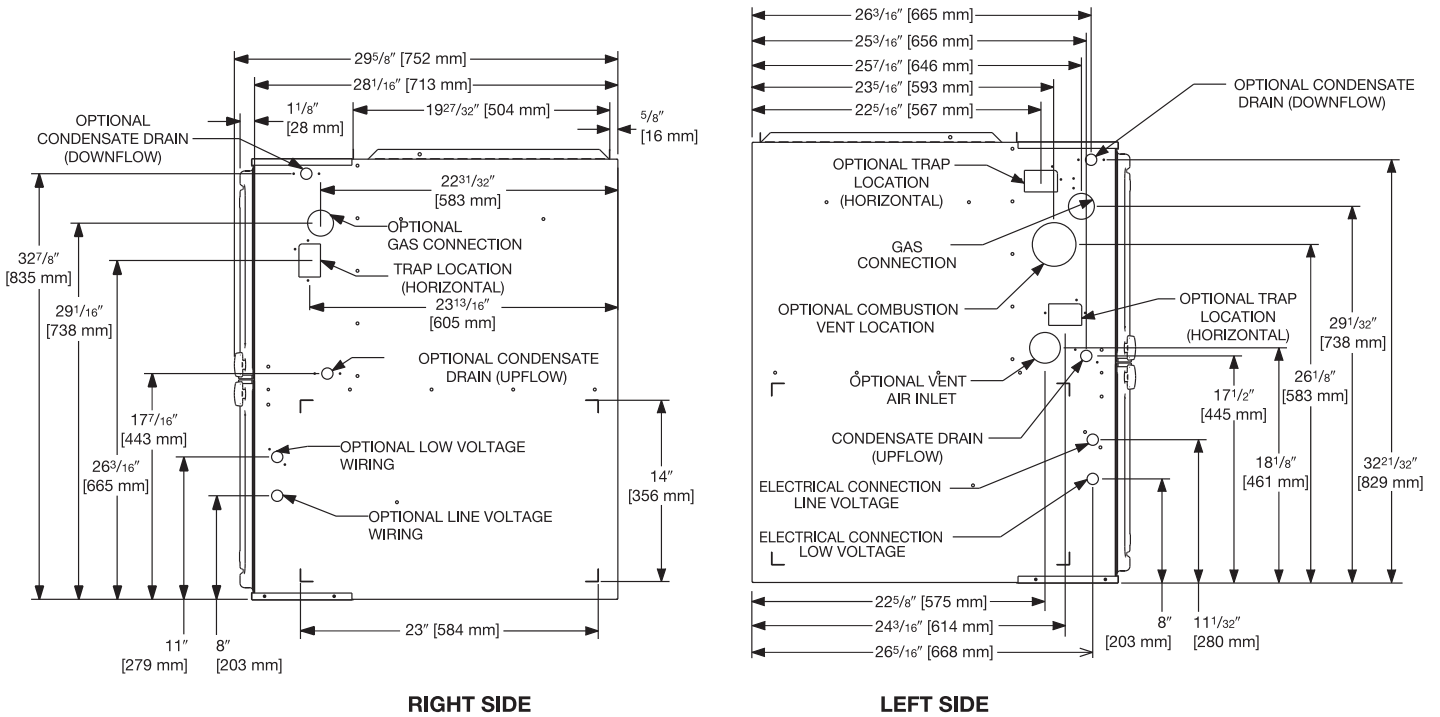
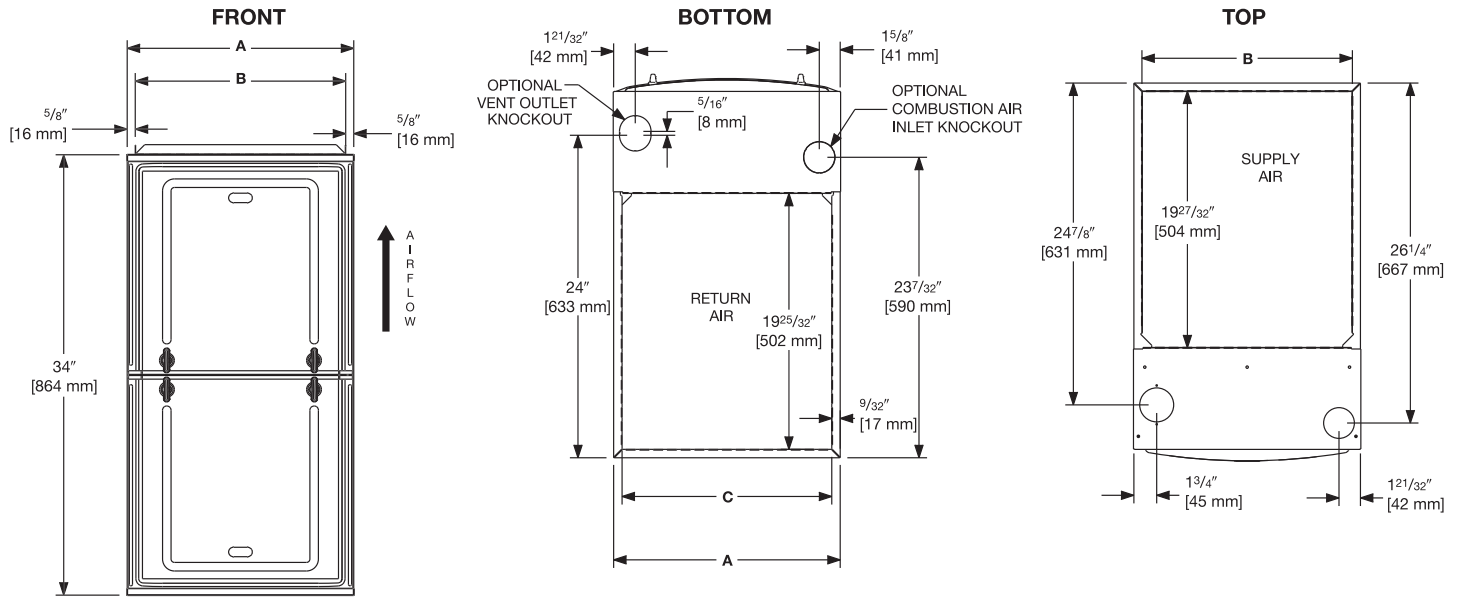
This furnace is to be installed for propane firing only in air districts requiring 14 ng/J NOx emission limits. Operating in natural gas mode is in violation of these Rules.

[] Designates Metric Conversions

Model Number Identification

| <u>TZ</u> | <u>95</u> | <u>M</u> | <u>S</u> | <u>X</u> | <u>040</u> | <u>B</u> | <u>30</u> | <u>A</u> |
|------------------|----------------------------|-------------------|--------------|---------------------------|---|--|--|--|
| Thermal Zone® | Series 95% Efficient | Multi position | Single Stage | Constant Torque ECM | Input BTU/HR | Cabinet Width B = 17.5" C = 21.0" D = 24.5" | 30 - up to 3 tons 50 - up to 5 tons | Revision - Marketing (A - First Time Release) |
| | | | | | 040 = 42,000 [12.31 kW] 060 = 56,000 [16.41 kW] 070 = 70,000 [20.51 kW] 085 = 84,000 [24.62 kW] 100 = 98,000 [28.72 kW] 115 = 112,000 [32.82 kW] | | | |

[] Designates Metric Conversions



UNIT DIMENSIONS (CLEARANCE TO COMBUSTIBLES)

| MODEL TZ95MSX | LEFT SIDE | MINIMUM CLEARANCE (IN.) [mm] | | | | | SHIP WGTS. | FLANGE DIMENSIONS | | |
|------------------|--------------|------------------------------|------|--------|--------|------|---------------|-------------------|----------------|----------------|
| | | RIGHT SIDE | BACK | TOP | FRONT | VENT | | A | B | C |
| 040 | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 | 123.5 [56] | 17 1/2 [445] | 16 17/64 [413] | 16 13/64 [412] |
| 060 | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 | 128 [58] | 17 1/2 [445] | 16 17/64 [413] | 16 13/64 [412] |
| 070 | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 | 132 [60] | 17 1/2 [445] | 16 17/64 [413] | 16 13/64 [412] |
| 085 | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 | 147.5 [67] | 21 [533] | 19 49/64 [502] | 19 45/64 [500] |
| 100 | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 | 152 [69] | 21 [533] | 19 49/64 [502] | 19 45/64 [500] |
| 115 | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 | 165 [75] | 24 1/2 [662] | 23 17/64 [591] | 23 13/64 [589] |

*A service clearance of at least 24" is recommended in front of all furnaces
Supply and return depicted as upflow configuration.
Flange configuration will vary depending on installation orientation.

[] Designates Metric Conversions

| FURNACE MODEL | BLOWER SIZE [mm] | MOTOR H.P. [W] | MOTOR TAP | MOTOR LEAD WIRE COLOR | SPEED | CFM [L/s] AIR DELIVERY | | | | | | | | | |
|------------------------------|------------------------|----------------|-----------|-----------------------|-------------|--|--------------|--------------|--------------|--------------|--------------|------------|--------------|--------------|--|
| | | | | | | EXTERNAL STATIC PRESSURE INCHES WATER COLUMN [kPa] | | | | | | | | | |
| | | | | | | 0.1 [0.2] | 0.2 [0.05] | 0.3 [0.07] | 0.4 [0.10] | 0.5 [0.12] | 0.6 [0.15] | 0.7 [0.17] | 0.8 [0.19] | 0.9 [0.22] | |
| TZ95MSX 040B30A | 11 x 7 [279 x 178] | 1/2 [373] | 1 | Red | Low | 874 [413] | 820 [387] | 765 [361] | 710 [335] | 658 [311] | 575 [271] | 523 [247] | 482 [228] | 448 [211] | |
| | | | 2 | Yellow | Medium Low | 1029 [486] | 982 [463] | 930 [439] | 881 [416] | 833 [393] | 780 [368] | 716 [338] | 665 [314] | 621 [293] | |
| | | | 3 | Purple | Medium | 1098 [518] | 1055 [498] | 1008 [476] | 962 [454] | 920 [434] | 870 [411] | 822 [388] | 755 [356] | 705 [332] | |
| | | | 4 | Blue | Medium High | 1253.6 [592] | 1209.1 [571] | 1164.4 [550] | 1128.1 [523] | 1082.2 [511] | 1043.7 [493] | 1000 [472] | 960 [453] | 907.2 [428] | |
| | | | 5 | Black | High | 1380.6 [652] | 1345.5 [635] | 1313.1 [620] | 1276 [602] | 1239.2 [585] | 1202.3 [567] | 1166 [550] | 1132.7 [535] | 1098.9 [519] | |
| TZ95MSX 060B30A | 11 x 8 [279 x 203] | 1/2 [373] | 1 | Red | Low | 818 [386] | 766 [362] | 720 [340] | 668 [315] | 594 [280] | 548 [259] | 494 [233] | 444 [210] | 416 [196] | |
| | | | 2 | Yellow | Medium Low | 968 [457] | 913 [431] | 885 [418] | 841 [397] | 796 [376] | 739 [349] | 685 [323] | 641 [303] | 596 [281] | |
| | | | 3 | Purple | Medium | 1018 [480] | 981 [463] | 931 [439] | 903 [426] | 860 [406] | 815 [385] | 756 [357] | 703 [332] | 656 [310] | |
| | | | 4 | Blue | Medium High | 1173 [554] | 1142 [539] | 1108 [523] | 1059 [500] | 1025 [484] | 989 [467] | 951 [449] | 912 [430] | 855 [404] | |
| | | | 5 | Black | High | 1338 [631] | 1327 [626] | 1288 [608] | 1245 [588] | 1227 [579] | 1193 [563] | 1165 [550] | 1134 [535] | 1099 [519] | |
| TZ95MSX 070B30A | 11 x 8 [279 x 203] | 1/2 [373] | 1 | Red | Low | 947 [447] | 908 [429] | 871 [411] | 834 [394] | 796 [376] | 755 [356] | 716 [338] | 681 [321] | 656 [310] | |
| | | | 2 | Yellow | Medium Low | 1044 [493] | 997 [471] | 968 [457] | 934 [441] | 902 [426] | 862 [407] | 828 [391] | 795 [375] | 765 [361] | |
| | | | 3 | Purple | Medium | 1148 [542] | 1113 [525] | 1092 [515] | 1056 [498] | 1029 [486] | 995 [470] | 962 [454] | 928 [438] | 895 [422] | |
| | | | 4 | Blue | Medium High | 1213 [572] | 1180 [557] | 1155 [545] | 1126 [531] | 1096 [517] | 1062 [501] | 1032 [487] | 993 [469] | 969 [457] | |
| | | | 5 | Black | High | 1324 [625] | 1283 [606] | 1254 [592] | 1221 [576] | 1198 [565] | 1169 [552] | 1141 [538] | 1107 [522] | 1080 [510] | |
| TZ95MSX 070C50A (wide) | 11 x 10 [279 x 254] | 1 [746] | 1 | Red | Low | 1155 [545] | 1095 [517] | 1044 [493] | 968 [457] | 906 [427] | 846 [399] | 766 [362] | 702 [331] | 643 [303] | |
| | | | 2 | Yellow | Medium Low | 1453 [686] | 1397 [659] | 1349 [637] | 1300 [614] | 1255 [592] | 1208 [570] | 1134 [535] | 1082 [511] | 1033 [488] | |
| | | | 3 | Purple | Medium | 1582 [747] | 1532 [723] | 1481 [699] | 1441 [680] | 1400 [661] | 1358 [641] | 1309 [618] | 1247 [589] | 1187 [560] | |
| | | | 4 | Blue | Medium High | 1744 [823] | 1702 [803] | 1660 [783] | 1624 [766] | 1590 [750] | 1550 [732] | 1516 [715] | 1475 [696] | 1435 [677] | |
| | | | 5 | Black | High | 1976 [933] | 1934 [913] | 1895 [894] | 1860 [878] | 1826 [862] | 1794 [847] | 1752 [827] | 1659 [783] | 1553 [733] | |
| TZ95MSX 085C50A | 11 x 10 [279 x 254] | 1 [746] | 1 | Red | Low | 1459 [689] | 1407 [664] | 1359 [642] | 1297 [612] | 1248 [589] | 1200 [567] | 1152 [544] | 1102 [520] | 1066 [503] | |
| | | | 2 | Yellow | Medium Low | 1656 [782] | 1621 [765] | 1574 [743] | 1533 [723] | 1485 [701] | 1434 [677] | 1375 [649] | 1328 [627] | 1281 [605] | |
| | | | 3 | Purple | Medium | 1692 [799] | 1653 [780] | 1606 [758] | 1557 [735] | 1508 [712] | 1459 [689] | 1409 [665] | 1363 [643] | 1312 [619] | |
| | | | 4 | Blue | Medium High | 1881 [888] | 1831 [864] | 1804 [851] | 1757 [829] | 1713 [808] | 1668 [787] | 1628 [768] | 1568 [740] | 1528 [721] | |
| | | | 5 | Black | High | 1978 [934] | 1942 [917] | 1906 [900] | 1862 [879] | 1833 [865] | 1793 [846] | 1751 [826] | 1702 [803] | 1652 [780] | |
| TZ95MSX 100C50A | 11 x 10 [279 x 254] | 1 [746] | 1 | Red | Low | 1637 [773] | 1593 [752] | 1545 [729] | 1494 [705] | 1441 [680] | 1382 [652] | 1329 [627] | 1274 [601] | 1236 [583] | |
| | | | 2 | Yellow | Medium Low | 1745 [824] | 1697 [801] | 1651 [779] | 1600 [755] | 1560 [736] | 1500 [708] | 1443 [681] | 1394 [658] | 1342 [633] | |
| | | | 3 | Purple | Medium | 1766 [833] | 1723 [813] | 1686 [796] | 1633 [771] | 1585 [748] | 1537 [725] | 1482 [699] | 1428 [674] | 1380 [651] | |
| | | | 4 | Blue | Medium High | 1967 [928] | 1929 [910] | 1895 [894] | 1852 [874] | 1805 [852] | 1754 [828] | 1708 [806] | 1668 [787] | 1612 [761] | |
| | | | 5 | Black | High | 2137 [1009] | 2102 [992] | 2062 [973] | 2020 [953] | 1975 [932] | 1946 [918] | 1908 [900] | 1817 [858] | 1685 [795] | |
| TZ95MSX 115D50A | 11 x 11 [279 x 279] | 1 [746] | 1 | Red | Low | 1476 [697] | 1432 [676] | 1406 [664] | 1332 [629] | 1291 [609] | 1247 [589] | 1207 [570] | 1163 [549] | 1117 [527] | |
| | | | 2 | Yellow | Medium Low | 1615 [762] | 1568 [740] | 1524 [719] | 1487 [702] | 1452 [685] | 1401 [661] | 1356 [640] | 1325 [625] | 1278 [603] | |
| | | | 3 | Purple | Medium | 1709 [807] | 1674 [790] | 1633 [771] | 1591 [751] | 1551 [732] | 1519 [717] | 1477 [697] | 1436 [678] | 1397 [659] | |
| | | | 4 | Blue | Medium High | 1772 [836] | 1746 [824] | 1706 [805] | 1667 [787] | 1627 [768] | 1593 [752] | 1553 [733] | 1521 [718] | 1482 [699] | |
| | | | 5 | Black | High | 1887 [891] | 1852 [874] | 1828 [863] | 1784 [842] | 1748 [825] | 1713 [808] | 1678 [792] | 1648 [778] | 1619 [764] | |

*[I] Designates Metric Conversions.

VENT TERMINATION KITS: =

- RXGY-E02:** Vertical/Horizontal Concentric Vent Termination Kit 2" Pipe (US Only)
- RXGY-E02A:** Vertical/Horizontal Concentric Vent Termination Kit 2" Pipe (US & Canadian)
- RXGY-E03:** Vertical/Horizontal Concentric Vent Termination Kit 3" Pipe (US Only)
- RXGY-E03A:** Vertical/Horizontal Concentric Vent Termination Kit 3" Pipe (US & Canadian)
- RXGY-G02:** Direct Vent Furnace Side Wall Vent 2" or 3" (US Only)
- RXGY-D05:** Combustion Air Drain Kit 2"
- RXGY-D06:** Combustion Air Drain Kit 3"
- NEUTRALIZER KIT:** RXGY-A01
(Replacement Cartridge 54-22120-01)
- FOSSIL FUEL KIT:** RXPF-F01, RXPF-F02 (TVA)
- RETURN AIR PLENUM:** RXGR-C17B
RXGR-C21B
RXGR-C24B
- EXTERNAL BOTTOM FILTER (UPFLOW/HORIZONTAL) RACK:**
RXGF-CB
- EXTERNAL SIDE (UPFLOW) FILTER RACK:** RXGF-CD
- EXTERNAL (DOWNFLOW) FILTER RACK:** RXGF-CC

| FILTER RACK FILTER SIZES* INCHES [mm] | | | |
|---------------------------------------|--|--|------------------------|
| MODEL | RXGF-CB (UPFLOW/ HORIZONTAL) | RXGF-CD (UPFLOW) | RXGF-CC (DOWNFLOW) |
| TZ95MSX040 | 15 ³ / ₄ x 25 [400 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 12 x 20 [305 x 508] |
| TZ95MSX060 | 15 ³ / ₄ x 25 [400 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 12 x 20 [305 x 508] |
| TZ95MSX070 | 15 ³ / ₄ x 25 [400 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 12 x 20 [305 x 508] |
| TZ95MSX085 | 19 ¹ / ₄ x 25 [489 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 12 x 20 [305 x 508] |
| TZ95MSX100 | 19 ¹ / ₄ x 25 [489 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 12 x 20 [305 x 508] |
| TZ95MSX115 | 22 ³ / ₄ x 25 [578 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 14 x 20 [356 x 508] |

INDOOR COIL CASINGS

| MODEL NUMBER |
|-----------------|
| RXBC-D17A1 |
| RXBC-D21A1 |
| RXBC-D21B1 |
| RXBC-D24A1 |

FOR HIGH ALTITUDES:

NOTE: For Canadian installations only, an optional derate (manifold gas pressure reduction) method may be used to adjust the furnace for altitude. See Installation Instructions for more information. This optional method may **NOT** be used for U.S. installations. See installation instructions as appropriate orifice change is required.

L.P. CONVERSION KIT: RXGJ-FP33

RETURN AIR PLENUM KIT: RXGR-C17B
RXGR-C21B
RXGR-C24B

CONDENSATE PUMP KIT: PROSTOCK & 1PCB151TUL

DOWNFLOW/HORIZONTAL CONVERSION KIT: RXGY-CK

**DOWNFLOW/HORIZONTAL LEFT ZERO CLEARANCE
CONVERSION KIT:** RXGY-ZK

COMBUSTIBLE FLOOR BASE: RXGC-B17
RXGC-B21
RXGC-B24

[] Designates Metric Conversions

GENERAL TERMS OF LIMITED WARRANTY*

Thermal Zone® will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

***For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.**

Conditional Parts
(Registration Required)Ten (10) Years
Heat ExchangerLimited Lifetime

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

"In keeping with its policy of continuous progress and product improvement, the right is reserved to make changes without notice."