MODEL OVERVIEW
The TD-MIXVENT series of in-line duct fans have been specially designed to maximize the airflow performance with minimal noise levels within the smallest and most compact of housing sizes. This makes the TD-MIXVENT series the ultimate solution for small to medium sized ventilation installations which require a high airflow to pressure ratio and occupy only the minimum space possible. Example: false ceiling voids, cabinets and many other limited space environments.

All the models in the TD-MIXVENT range have been designed with the professional contractor/engineer in mind. All models include a “removable body” feature that enables the motor-impeller assembly to be completely removed or replaced without the need to interfere with the attached ducting.

All models within the TD-MIXVENT range incorporate a powerful mixed flow impeller and internal air vanes located at the discharge end of the fan housing. This impeller and guide vane combination provides a smooth laminar air flow which in turn minimizes turbulence and noise, and generates an excellent air flow to pressure performance ratio.

All of the TD-fans include the combination of a powerful motor, factory installed, to a mixed flow impeller. This motor and impeller combination enables the TD-fans to deliver high airflow performances with minimum noise generation against high static pressures typically found in ducted ventilation systems. The unique design of the support brackets, allows the motor and impeller assembly to be fitted or removed without dismantling the adjacent ducting and therefore, facilitating any installation or maintenance. The internal aerodynamic design of the TD-MIXVENT fan enables the unit to generate large air volumes and pressures with the minimum of in-duct or radiated noise. As an additional standard advantage, TD-MIXVENT fans are fitted with a direct connection two-speed motor. The TD-fans offer the ideal in-line duct fan solution for a wide range of HVAC ventilation applications.

TD-MIXVENT Fan Kits
The TD ventilation kits enable the simple and fast installation of a complete ventilation system. The kits include the powerful TD in-line fan providing efficient extraction for bathrooms, toilets, washrooms and any other applications that require the removal of bad odors, stuffy and humid air. In addition to the fan, the kits include an interior premium intake grille (PG) and an exterior louvered grille (PERW) to provide the complete hardware required for a given ventilation system.

MODEL FEATURES
- Exhaust air up to 2,630 CFM with static pressure capabilities to 1” w.g.
- Mixed flow impeller for excellent air flow to pressure performance ratio
- Direct connection, two-speed motor
- Ideal for applications where space is limited
- AMCA Seal for Air Performance
- cULus Listed
CONSTRUCTION/SPECIFICATION CHECKLIST

Construction
The TD-MIXVENT models 100, 100x, 125, 150, 200 and 200x are manufactured in tough reinforced plastic, models 250, 315, 355 and 400 have a metal casing and are finished in a tough epoxy-polyester paint coating.

The TD fan duct connection flanges are manufactured from reinforced plastic, except for models 200, 200x, 250, 315, 355 and 400 which are constructed from epoxy-polyester coated metal.

**TD 250 and 315 are UL listed for outdoor use.**

Impellers
The impeller blades for models 100, 100x, 125 and 150 are molded in tough ABS plastic. Models 200, 200x, 250, 315, 355 and 400 are metal.

Motors
*Models 100, 100x and 125:*
Single-phase, 120V 60Hz, shaded pole induction asynchronous motor in die cast aluminum. All motors include direct two speed connection and are also suitable for voltage speed control.
• Class II electrical insulation (model 100) &
  • Class I (models 100x and 125)
• IP 44 Protection
• Class B Motor Insulation
• Safety auto reset Thermal Overload Protection (fuse type)
• Self-lubricating sleeve bearings.
• Suitable for working airstreams up to 104° F (40°C).

*Models 150, 200, 200x, 250, 315, 355 and 400:*
Single-phase induction asynchronous motor, with permanent capacitor and external rotor in die cast aluminum. Models 150, 200, 200x and 315 include direct two speed connection and are also suitable for voltage speed control. Models 355 and 400 are single speed.
• Suitable for working airstreams up to 140° F (60°C).
• Class I electrical insulation
• IP 44 Protection
• Thermal Overload Protection
• Class B Motor Insulation
• Sealed For Life, ball bearings

ACCESSORIES

[Images of various accessories including PG Premium Intake Grille, BOC/BOR Interior Air Valve, MCA Backdraft Shutter, MBR Connector, MAR Rectangular Duct Adapter, MRJ Grille, CVC Continuous Ventilation Controls]
PERFORMANCE/DIMENSIONS

Models 100 - 315

Dimensions (inches/mm)

<table>
<thead>
<tr>
<th>Model</th>
<th>X</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD-100</td>
<td>5 15/16</td>
<td>9 1/8</td>
<td>151</td>
<td>232</td>
<td>138</td>
<td>96</td>
<td>98</td>
<td>3 3/4</td>
<td>1/4</td>
</tr>
<tr>
<td>TD-100x</td>
<td>7 3/8</td>
<td>11 15/16</td>
<td>188</td>
<td>303</td>
<td>176</td>
<td>115</td>
<td>97</td>
<td>3 13/16</td>
<td>3/4</td>
</tr>
<tr>
<td>TD-125</td>
<td>TD-125</td>
<td>7 3/8</td>
<td>10 21/32</td>
<td>188</td>
<td>258</td>
<td>176</td>
<td>115</td>
<td>123</td>
<td>3 13/16</td>
</tr>
<tr>
<td>TD-150</td>
<td>8 13/16</td>
<td>TD-150</td>
<td>212</td>
<td>295</td>
<td>7 1/16</td>
<td>10 15/16</td>
<td>5 1/4</td>
<td>127</td>
<td>4 1/16</td>
</tr>
<tr>
<td>TD-200/</td>
<td>TD-200/</td>
<td>9 3/16</td>
<td>TD-200/</td>
<td>233</td>
<td>302</td>
<td>8 13/16</td>
<td>17 11/32</td>
<td>5 1/16</td>
<td>147</td>
</tr>
<tr>
<td>TD-250</td>
<td>TD-250</td>
<td>11 13/16</td>
<td>TD-250</td>
<td>291</td>
<td>386</td>
<td>10 7/16</td>
<td>19 9/16</td>
<td>9 3/4</td>
<td>198</td>
</tr>
<tr>
<td>TD-315</td>
<td>TD-315</td>
<td>14</td>
<td>TD-315</td>
<td>356</td>
<td>450</td>
<td>13 1/4</td>
<td>8 13/16</td>
<td>12 13/16</td>
<td>224</td>
</tr>
</tbody>
</table>

Models 355 & 400

Performance characteristics

All models include a direct two speed motor connection.

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD-400</td>
<td>TD-400</td>
<td>1/6</td>
<td>377</td>
<td>238</td>
<td>451</td>
<td>9 3/8</td>
<td>10 1/2</td>
<td>19 1/4</td>
<td>15 3/16</td>
<td>16 9/16</td>
<td>302</td>
</tr>
</tbody>
</table>

Performance certified is for installation Type D: Ducted Inlet, Ducted Outlet. Performance ratings do not include the effects of appurtenances.

Sound characteristics

Fan sound levels are measured in sones. At this time there are no sone level test standards available through HVI due to the fact that remote mounted fan noise levels are in proportion to the following: type of duct, length of duct, fan distance from the intake source and other miscellaneous factors. However, it is generally accepted that remote mounted venting is usually quieter than standard (in room) venting.
The TD-MIXVENT fan kits provide all the hardware needed to complete a simple in-line ducted ventilation installation. The kit includes a powerful TD in-line fan and exterior and interior grilles (with or without lights). Available in both Standard Exhaust Kits, for venting a single location, and Deluxe Exhaust Kits, for venting multiple locations with one fan.

The TD-MIXVENT fan kit is the ideal solution for any simple in-line ducted fan installation.

All TD kits have standard 7-year warranty* 

Standard Exhaust Kits - Single Vent

KIT-TD100
- 1 TD100 exhaust fan
- 1 plastic round grille (PG-100)
- 1 exterior louvered grille (PER-100W)
- Integral mounting bracket

KIT-TD100x
- 1 TD100x exhaust fan
- 1 plastic round grille (PG-100)
- 1 exterior louvered grille (PER-100W)
- Integral mounting bracket

KIT-TD150
- 1 TD150 exhaust fan
- 1 plastic round grille (PG-150)
- 1 exterior louvered grille (PER-150W)
- Integral mounting bracket

Deluxe Exhaust Kits - Dual Vent

KIT-TD150-DV
- 1 TD150 exhaust fan
- 2 plastic round grilles (PG-150)
- 1 exterior louvered grille (PER-150W)
- 1 Y-fitting (SY-6)
- Integral mounting bracket

IMPORTANT: If venting in an non-insulated attic space, or in a cold climate, insulated flexible duct is strongly recommended for condensation issues.

*Bulbs in Lighted Kits not included in warranty

KIT-TD100XL
- 1 TD100x exhaust fan
- 1 Vent Light with LED Bulb (VLED-100)
- Integral mounting bracket

KIT-TD100XH
- 1 TD100x exhaust fan
- 1 Vent Light with Halogen Bulb (VLH-100)
- Integral mounting bracket

KIT-TD100XF
- 1 TD100x exhaust fan
- 1 Vent Light with Fluorescent Bulb (VLF-100)
- Integral mounting bracket

Lighted Deluxe Exhaust Kits - Dual Vent

KIT-TD150L
- 1 TD150 exhaust fan
- 2 Vent Lights with LED Bulb (VLED-100)
- 1 Y-fitting (SY44-6)
- Integral mounting bracket

KIT-TD150H
- 1 TD150 exhaust fan
- 2 Vent Lights with Halogen Bulb (VLH-100)
- 1 Y-fitting (SY44-6)
- Integral mounting bracket

KIT-TD150F
- 1 TD150 exhaust fan
- 2 Vent Lights with Fluorescent Bulb (VLF-100)
- 1 Y-fitting (SY44-6)
- Integral mounting bracket

*Bulbs in Lighted Kits not included in warranty
MCA
Backdraft dampers are installed at the fans’ discharge. They prevent the entry of odors, air currents and prevent heat leaks when the exhauster is not in operation.

<table>
<thead>
<tr>
<th>Model</th>
<th>Type TD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCA-100</td>
<td>100</td>
</tr>
<tr>
<td>MCA-125</td>
<td>125</td>
</tr>
<tr>
<td>MCA-150</td>
<td>150</td>
</tr>
<tr>
<td>MCA-200</td>
<td>200</td>
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<tr>
<td>MCA-250</td>
<td>250</td>
</tr>
<tr>
<td>MCA-315</td>
<td>315</td>
</tr>
</tbody>
</table>

MAR
Connections for rectangular ducts enable TD devices to be connected to a rectangular duct.

<table>
<thead>
<tr>
<th>Model</th>
<th>Type TD</th>
<th>Nominal dim. of ducting L x H (in/mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAR-100</td>
<td>100</td>
<td>9 x 6  224 x 140</td>
</tr>
<tr>
<td>MAR-125</td>
<td>125</td>
<td>9 x 6  224 x 140</td>
</tr>
<tr>
<td>MAR-150</td>
<td>150</td>
<td>11 x 7 280 x 180</td>
</tr>
<tr>
<td>MAR-200</td>
<td>200</td>
<td>12 x 8 315 x 200</td>
</tr>
<tr>
<td>MAR-250</td>
<td>250</td>
<td>16 x 10 400 x 250</td>
</tr>
<tr>
<td>MAR-315</td>
<td>315</td>
<td>20 x 12 500 x 315</td>
</tr>
</tbody>
</table>

Dimensions (inches/mm)

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAR-100</td>
<td>7 5/16</td>
<td>111</td>
<td>1 1/4</td>
<td>3 11/16</td>
</tr>
<tr>
<td>MAR-125</td>
<td>5 5/8</td>
<td>136</td>
<td>1 1/4</td>
<td>4 11/16</td>
</tr>
<tr>
<td>MAR-150</td>
<td>6 1/4</td>
<td>163</td>
<td>3 1/8</td>
<td>5 13/16</td>
</tr>
<tr>
<td>MAR-200</td>
<td>5 13/16</td>
<td>131</td>
<td>3 1/8</td>
<td>7 3/4</td>
</tr>
<tr>
<td>MAR-250</td>
<td>6 11/16</td>
<td>164</td>
<td>10 3/4</td>
<td>9 3/4</td>
</tr>
<tr>
<td>MAR-315</td>
<td>8 11/16</td>
<td>205</td>
<td>13 11/16</td>
<td>12 5/8</td>
</tr>
</tbody>
</table>

MRJ
Grilles fit on the suction and the discharge sides of the installation. They prevent the entry of foreign bodies which could damage the fan.

<table>
<thead>
<tr>
<th>Model</th>
<th>Type TD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRJ100</td>
<td>100</td>
</tr>
<tr>
<td>MRJ125</td>
<td>125</td>
</tr>
<tr>
<td>MRJ150</td>
<td>150</td>
</tr>
<tr>
<td>MRJ200</td>
<td>200</td>
</tr>
<tr>
<td>MRJ250</td>
<td>250</td>
</tr>
<tr>
<td>MRJ315</td>
<td>315</td>
</tr>
</tbody>
</table>

MBR
Flanges enable TD devices to connect in a series.

<table>
<thead>
<tr>
<th>Model</th>
<th>Type TD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBR-125</td>
<td>125</td>
</tr>
<tr>
<td>MBR-150</td>
<td>150</td>
</tr>
<tr>
<td>MBR-200</td>
<td>200</td>
</tr>
<tr>
<td>MBR-250</td>
<td>250</td>
</tr>
</tbody>
</table>
CVC - Continuous Ventilation Control

S&P’s CVC allow a new or existing bath fan to run continuously on a low speed. In conjunction with an S&P TD fan a CVC will immediately improve the air quality in the home and reduce the damaging effects of moisture and mold.

The CVCs are designed to meet the requirements of ASHRAE 62.2 and the International Residential Code. In areas where ASHRAE 62.2 is not a requirement the CVC is still an economical choice to improve indoor air quality.

<table>
<thead>
<tr>
<th>CVC Model</th>
<th>Fan Size</th>
<th>Application</th>
<th>Max. Flow</th>
<th>Continuous Flow @ .25”SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVC-100</td>
<td>100</td>
<td>Single Inlet</td>
<td>101 CFM</td>
<td>20 CFM</td>
</tr>
<tr>
<td>CVC-100x</td>
<td>100x</td>
<td>Single Inlet</td>
<td>135 CFM</td>
<td>20 CFM</td>
</tr>
<tr>
<td>CVC-150</td>
<td>150</td>
<td>Single Inlet</td>
<td>218 CFM</td>
<td>20 CFM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dual Inlet</td>
<td>293 CFM</td>
<td>40 CFM</td>
</tr>
</tbody>
</table>

Features

• Reduces remodeling costs, helps meet ASHRAE 62.2 requirements
• Perfect for homes, apartments, dorms, hotels and elderly housing
• Economical and easy to install in your existing wall box
• CVC works with most fan controls, i.e. motion sensors, timers, speed controllers.
• Improves the indoor air quality in your home
• Undetectable, efficient and effective
• Operates with any standard switch
• No programming required
• 120V, 60 Hz, 3A Maximum

Dimensions in Inches (mm)

Easy Installation...

1. Attaches to any standard wall switch.
2. Simple 2 wire connection across the wall switch and fits into most standard wall/junction boxes.
3. Completely installed in minutes!