



# MODEL TD-MIXVENT

## INLINE MIXED FLOW DUCT FAN

### 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

### 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.



### **5 year fan housing and motor warranty**

All specifications are subject to change without notice unless approved in submittal by S&P.

## **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**



PG  
Premium Intake  
Grille



BOC/BOR  
Interior Air  
Valve



MCA  
Backdraft  
Shutter



MBR  
Connector



MAR  
Rectangular Duct  
Adapter



MRJ  
Grille

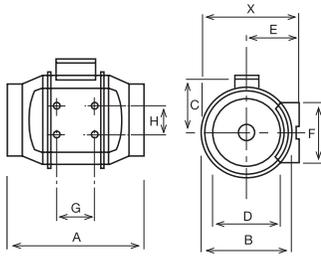


CVC  
Continuous  
Ventilation Controls



# PERFORMANCE/DIMENSIONS

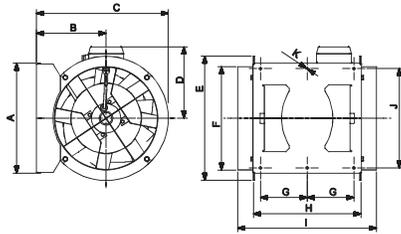
## Models 100 - 315



## Dimensions (inches/mm)

Model	X	A	B	C	D	E	F	G	H
TD-100	5 15/16 151	9 1/8 232	5 7/16 138	3 3/4 96	3 7/8 98	3 1/4 82	3 3/4 95	1 7/8 48	2 1/16 52
TD-100x	7 3/8 188	11 15/16 303	6 15/16 176	4 1/2 115	3 13/16 97	3 15/16 100	3 9/16 90	3 1/8 80	2 3/8 60
TD-125	7 3/8 188	10 3/16 258	6 15/16 176	4 1/2 115	4 13/16 123	3 15/16 100	3 9/16 90	3 1/8 80	2 3/8 60
TD-150	8 3/8 212	11 5/8 295	7 7/8 200	5 127	5 13/16 147	4 7/16 112	5 1/8 130	3 1/8 80	2 3/8 60
TD-200/ TD-200x	9 3/16 233	11 7/8 302	8 9/16 217	5 9/16 141	7 13/16 198	4 7/8 124	5 1/2 140	3 15/16 100	3 11/16 94
TD-250	11 7/16 291	15 3/16 386	10 11/16 272	7 9/16 192	9 3/4 248	6 1/8 155	6 5/8 168	5 11/16 145	5 1/2 140
TD-315	14 356	17 11/16 450	13 1/4 336	8 13/16 224	12 5/16 312	7 3/8 188	8 1/4 210	7 3/16 182	7 178

## Models 355 & 400



Model	A	B	C	D	E	F	G	H	I	J	K
TD-355	14 5/6 377	9 3/8 238	17 11/16 451	8 5/6 224	16 7/9 426	13 13/9 354	5 8/9 150	14 1/2 368	18 2/3 474	13 3/8 340	1/3 8.5
TD-400	1/6 407	9 4/5 249	19 3/8 492	10 1/2 267	19 1/6 487	15 5/7 399	6 2/7 160	16 3/4 425	21 5/9 547	14 4/7 370	1/3 8.5

## Performance characteristics

All models include a direct two speed motor connection.

Model	Nom. RPM	Volts	Max. Watts	Speed	CFM v Static Pressure (SP) Ins. WG							Max. SP	Max operating temp. (°F)	Wgt. (lbs)	Duct Dia. Ins.
					0"	0.125"	0.25"	0.375"	0.5"	0.75"	1.0"				
TD-100	2431	120	23	LS	97	81	51	-	-	-	-	.4	104	2	4"
	2516	120	26	HS	101	85	57	-	-	-	-	.4	104	2	4"
TD-100x	1556	120	20	LS	100	77	48	-	-	-	-	.375	104	4.4	4"
	2096	120	33	HS	135	113	90	53	-	-	-	.55	104	4.4	4"
TD-125	1633	120	24	LS	149	110	73	-	-	-	-	.35	104	4.4	5"
	2146	120	38	HS	197	168	133	86	22	-	-	.55	104	4.4	5"
TD-150	1709	120	54	LS	218	193	163	128	105	24	-	.8	140	4.4	6"
	2289	120	65	HS	293	273	250	227	206	131	35	1.15	140	4.4	6"
TD-200	2322	120	139	LS	476	422	373	317	260	40	-	1.38	140	8.8	8"
	2781	120	184	HS	538	495	458	418	367	190	10	1.625	140	8.8	8"
TD-200x	1935	120	122	LS	419	393	363	327	295	215	107	1.04	140	8.8	8"
	2467	120	169	HS	478	457	432	402	372	285	192	1.75	140	8.8	8"
TD-250	2400	115	162	LS	541	475	418	355	295	218	170	2.03	140	19.8	10"
	3200	115	241	HS	754	715	680	640	606	520	405	2.53	140	19.8	10"
TD-315	2000	115	208	LS	751	670	545	420	285	190	130	1.62	140	30.9	12.4"
	2500	115	335	HS	1050	990	932	850	770	600	420	2.95	140	30.9	12.4"
TD-355	1400	115	464	-	1829	1740	1620	1530	1450	1190	-	1.1	140	43	14"
TD-400	1400	115	756	-	2630	2490	2360	2240	2100	1750	350	1.2	140	78	16"

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

LS= Low Speed  
 HS = High Speed



S&P, Div. of Soler & Palau Ventilation Group, certifies that the TD range shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



TD 250 & 315 are UL listed for outdoor use.

## 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.



# KIT - TD BATHROOM EXHAUST KITS

FEATURING TD-MIXVENT FANS



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 a 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



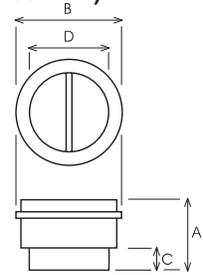
**MCA**

**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.



Model	Type TD
MCA-100	100
MCA-125	125
MCA-150	150
MCA-200	200
MCA-250	250
MCA-315	315

**Dimensions (inches/mm)**



**MCA-100-315**

Model	A	B	C	D
MCA-100	4 3/16 107	4 3/8 111	1 1/4 31	3 11/16 94
MCA-125	4 3/16 107	5 3/8 136	1 1/4 31	4 11/16 119
MCA-150	4 3/4 121	6 7/16 163	1 3/8 35	5 13/16 147
MCA-200	5 3/16 131	8 7/16 214	1 3/8 35	7 3/4 197
MCA-250	6 3/16 164	10 3/8 264	1 5/8 42	9 3/4 248
MCA-315	8 1/16 205	13 330	1 15/16 50	12 5/16 312

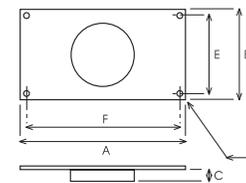
**MAR**

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

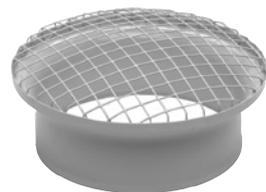


Model	Type TD	Nominal dim. of ducting L x H (in/mm)
MAR-100	100	9 x 6 224 x 140
MAR-125	125	9 x 6 224 x 140
MAR-150	150	11 x 7 280 x 180
MAR-200	200	12 x 8 315 x 200
MAR-250	250	16 x 10 400 x 250
MAR-315	315	20 x 12 500 x 315

**Dimensions (inches/mm)**



Model	A	B	C	E	F	G
MAR-100	10 3/8 264	7 1/16 180	1 5/16 33	6 5/16 160	9 5/8 244	3/8 9
MAR-125	10 3/8 264	7 1/16 180	1 5/16 33	6 5/16 160	9 5/8 244	3/8 9
MAR-150	12 5/8 320	8 11/16 220	1 7/16 37	7 7/8 200	11 13/16 300	3/8 9
MAR-200	14 355	9 7/16 240	1 7/16 37	8 11/16 220	13 3/16 335	3/8 9
MAR-250	17 5/16 440	11 7/16 290	1 5/8 42	10 5/8 270	16 9/16 420	3/8 9
MAR-315	21 1/4 540	14 355	2 1/16 52	14 355	20 1/2 520	3/8 9



**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.

Model	Type TD
MRJ100	100
MRJ125	125
MRJ150	150
MRJ200	200
MRJ250	250
MRJ315	315



**MBR**

**Flanges** enable TD devices to connect in a series.

Model	Type TD
MBR-125	125
MBR-150	150
MBR-200	200
MBR-250	250



# TD Bathroom Exhaust Controls - ASHRAE 62.2

## 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.

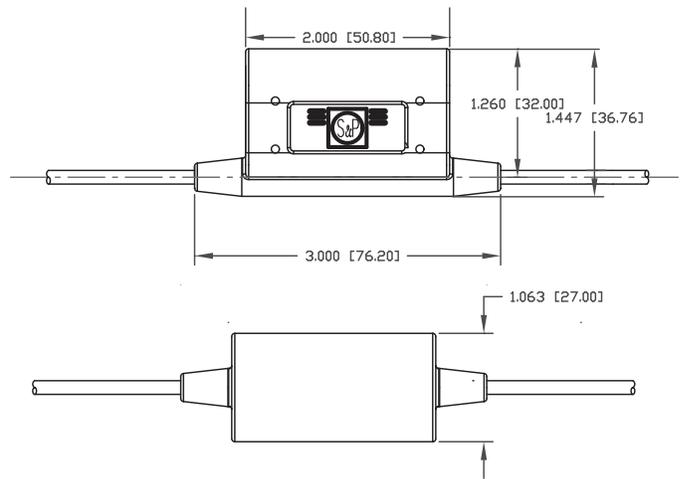
CVC Model	Fan Size	Application	Max. Flow	Continuous Flow @ .25"SP
CVC-100	100	Single Inlet	101 CFM	20 CFM
CVC-100x	100x	Single Inlet	135 CFM	20 CFM
CVC-150	150	Single Inlet	218 CFM	20 CFM
		Dual Inlet	293 CFM	40 CFM



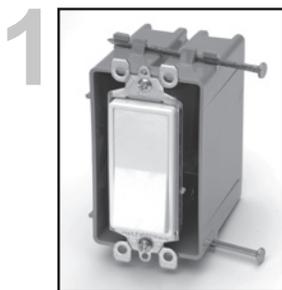
### Features

- 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

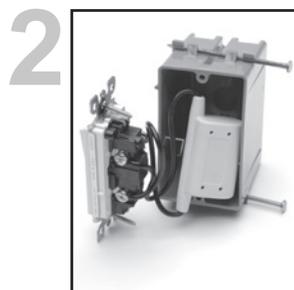
### Dimensions in Inches (mm)



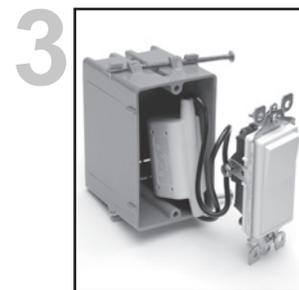
### Easy Installation. . .



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!