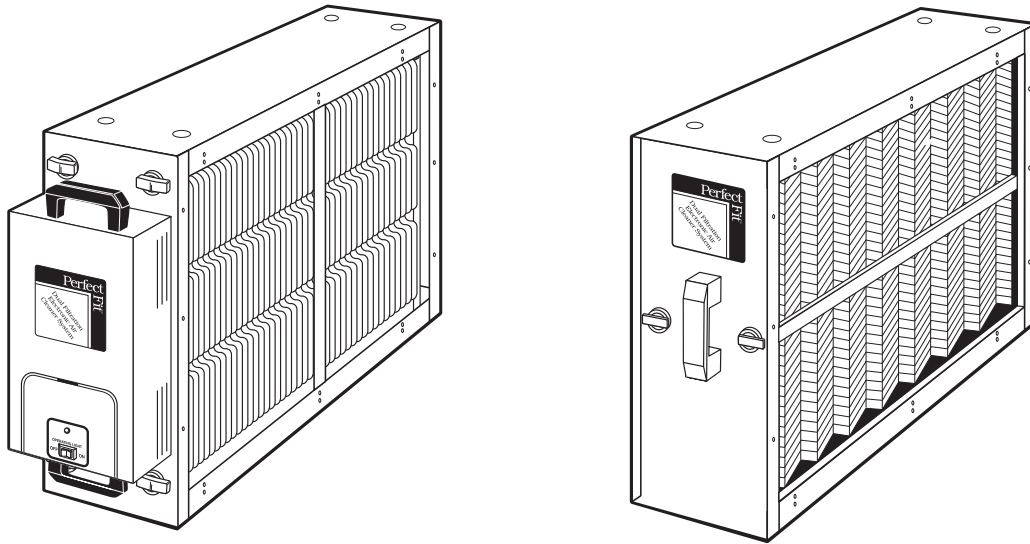


# Perfect Fit™ Electronic Air Cleaners & Filter media



## Features:

- No transitions required for Perfect Fit™ applications. Three sizes allow flush fit with Air Handlers, four sizes allow flush fit with bottom return Furnaces, and four sizes allow flush fit with downflow Furnaces. This allows for easy installation in tight spaces. The TF\*175 (17 1/2") model can be used for a Perfect Fit™ side return on furnace models.
- In Air Handler and upflow Furnace applications, cabinet case versatility provides three levels of air filtration. These enclosures will accept 1 inch filters, 5 inch filters or the Electronic Air Cleaner cells. Easily upgrade to an electronic Whole House Air Cleaner system.
- Painted cabinet matches Furnace/Air Handler to enhance matched system appearance.
- Three voltage selections for reducing ozone levels.
- “Air-Tite” construction eliminates air leaks, improves air quality and helps keep operating costs low. Gasket is provided to seal air cleaner to indoor unit, keeping out unconditioned and unfiltered air.
- Heavy duty 18 gauge cabinet construction supports Furnace/Air Handler weight. All hardware included.
- Factory installed air flow sensor on all Electronic Air Cleaners models. No additional “Power On” relay or field installed accessory required.
- Fully regulated, solid – state, power supply maintains the collection voltage at its peak, regardless of the input voltage. Soft start brings the collection voltage up gradually - thus reducing the popping noise on start-up.
- Off/on switch and operation light tells if the air cleaner is on and when high voltage to the cells is present.
- Electronic Air Cleaners for Furnaces use a 120 volt, internally fused, power supply.
- Internally fused power supply for Air Handlers use the Air Handler 240 volt power. No additional electrical circuit is required. A 120 volt, internally fused, power supply model for Air Handlers also available.
- All service and access is from the front of the Electronic Air Cleaners.
- Low pressure drop and high dust holding capacity for media models. Designed to deliver the required system air flow.

# Selection Procedure

## Air Cleaner and Filter Nomenclature

**T F E 1 4 5 A 9 FR 1 A**

Filter

Type

E = Electronic  
M = Media (5 In.)  
P = Pleated (1In.)

Size

<b>Furnace</b>	<b>Air Handler</b>
145 = 14.5"	215 = 21.5"
14D= 14.5" Downflow	235 = 23.5"
175 = 17.5"	260 = 26"
17D= 17.5" Downflow	
210 = 21"	
21D= 21" Downflow	
245 = 24.5"	
24D= 24.5" Downflow	

Product Design Sequence

Voltage

9 = 120V  
1 = 240V  
0 = No Voltage

AH = Air Handler  
FR = Furnace

Minor Modification Code

Service Sequence

# General Data Upflow Furnace Models

MODEL	TFE145A9FR	TFE175A9FR	TFE210A9FR	TFE245A9FR
<b>RATINGS</b>				
Air Flow Range(CFM)①	300 - 1200	300 - 1500	300 - 2000	400 - 2200
Pressure Drop	<i>Pressure drop equal to factory furnace filter of same size, No fan performance data correction required</i>			
<b>POWER SUPPLY</b>				
Volts/Ph/Hz	120 / 1/ 60	120 / 1/ 60	120 / 1/ 60	120 / 1/ 60
Ampacity	0.45	0.45	0.45	0.45
Output Rating	6.5 Kv	6.5 Kv	6.5 Kv	6.5 Kv
Ionizer - Collector	6.5 KV - 6.2 KV	6.5 KV - 6.2 KV	6.5 KV - 6.2 KV	6.5 KV - 6.2 KV
<b>CELL (Ionizer Section)</b>				
Split - 2 per Unit	14-3/8 X 13-1/8 X 5-1/4	17-3/8 X 13-1/8 X 5-1/4	20-7/8 X 13-1/8 X 5-1/4	24-3/8 X 13-1/8 X 5-1/4
<b>PRE-FILTER TYPE</b>				
	<b>1 Inch Washable (Permanent)</b>			
Area (Sq.Ft.)	2.57	3.12	3.75	4.39
Size (Nominal)	14-1/2 X 27 X 1	17-1/2 X 27 X 1	21 X 27 X 1	24-1/2 X 27 X 1
Size (Actual)	14.2 X 26.2 X .90	17.2 X 26.2 X .90	20.7 X 26.2 X .90	24.2 X 26.2 X .90
<b>DUCT CONNECTIONS</b>				
<i>See Outline Drawing</i>				
<b>CASE DIMENSIONS</b>				
Crated (in.)	18 X 33 X 8.5	21 X 33 X 8.5	25 X 33 X 8.5	28 X 33 X 8.5
Uncrated	14-1/2 X 27 X 7-7/16	17-1/2 X 27 X 7-7/16	21 X 27 X 7-7/16	24-1/2 X 27 X 7-7/16
<b>WEIGHT</b>				
Shipping (lbs.) / Net (lbs.)	44 / 41	48 / 45	54 / 51	60 / 57
<hr/>				
MODEL	TFM145B0FR	TFM175B9FR	TFM210B9FR	TFM245B9FR
<b>RATINGS</b>				
Air Flow Range(CFM)	300 - 1200	300 - 1500	300 - 2000	400 - 2200
Pressure Drop	<i>See Pressure Drop Table</i>			
<b>FILTER TYPE</b>				
	<b>5 Inch Expandable or Cartridge Filter Media (Throwaway)</b>			
Area (Sq.Ft.)				
Size (Nominal)	14-1/2 X 27 X 5	17-1/2 X 27 X 5	21 X 27 X 5	24-1/2 X 27 X 5
Size (Actual)	14.2 X 26.2 X 5	17.2 X 26.2 X 5	20.7 X 26.2 X 5	24.2 X 26.2 X 5
<b>DUCT CONNECTIONS</b>				
<i>See Outline Drawing</i>				
<b>CASE DIMENSIONS</b>				
Crated (in.)	18 X 33 X 8.5	21 X 33 X 8.5	25 X 33 X 8.5	28 X 33 X 8.5
Uncrated	14-1/2 X 27 X 7-7/16	17-1/2 X 27 X 7-7/16	21 X 27 X 7-7/16	24-1/2 X 27 X 7-7/16
<b>WEIGHT</b>				
Shipping (lbs.) / Net (lbs.)	18 / 14	21 / 17	24 / 20	27 / 23
<hr/>				
MODEL	TFP145A0FR	TFP175A9FR	TFP210A9FR	TFP245A9FR
<b>RATINGS</b>				
Air Flow Range (CFM)	300 - 1200	300 - 1500	400 - 1800	400-2000
Pressure Drop	<i>See Pressure Drop Table</i>			
<b>FILTER TYPE</b>				
	<b>1 Inch Pleated Media (Throwaway)</b>			
Area (Sq.Ft.)				
Size (Nominal)	14-1/2 X 27 X 1	17-1/2 X 27 X 1	21 X 27 X 1	21-1/2 X 27 X 1
Size (Actual)	14.2 X 26.2 X .90	17.2 X 26.2 X .90	20.7 X 26.2 X .90	21.2 X 26.2 X .90
<b>DUCT CONNECTIONS</b>				
<i>See Outline Drawing</i>				
<b>CASE DIMENSIONS</b>				
Crated (in.)	18 X 33 X 8.5	21 X 33 X 8.5	125 X 33 X 8.5	128 X 33 X 8.5
Uncrated	14-1/2 X 27 X 7-7/16	17-1/2 X 27 X 7-7/16	21 X 27 X 7-7/16	24-1/2 X 27 X 7-7/16
<b>WEIGHT</b>				
Shipping (lbs.) / Net (lbs.)	17 / 13	19 / 15	22 / 18	25 / 21

# General Data Downflow Furnace Models

MODEL	TFM14DA0FR	TFM17DA0FR	TFM21DA0FR	TFM24DA0FR
<b>RATINGS</b>				
Air Flow Range(CFM)	300 - 1200	300 - 1500	300 - 2000	300 - 2200
Pressure Drop	<i>See Pressure Drop Table</i>			
<b>FILTER TYPE</b>				
<i>5 Inch Cartridge Filter Media (Throwaway)</i>				
Area (Sq.Ft.)				
Size (Nominal)	14-1/2 X 21 X 5	17-1/2 X 21 X 5	21 X 21 X 5	24-1/2 X 21 X 5
Size (Actual)	14.2 X 20.1 X 5	17.2 X 20.1 X 5	20.7 X 20.1 X 5	24.2 X 20.1 X 5
<b>DUCT CONNECTIONS</b>				
<i>See Outline Drawing</i>				
<b>CASE DIMENSIONS</b>				
Crated (in.)	18 X 27 X 8.5	21 X 27 X 8.5	25 X 27 X 8.5	28 X 27 X 8.5
Uncrated	14-1/2 X 21 X 7-7/16	17-1/2 X 21 X 7-7/16	21 X 21 X 7-7/16	24-1/2 X 21 X 7-7/16
<b>WEIGHT</b>				
Shipping (lbs.) / Net (lbs.)	15 / 11	18 / 14	21 / 17	24 / 20

# General Data Air Handlers Models

MODEL	TFE215A(9/1)AH		TFE235A(9/1)AH		TFE260A(9/1)AH	
<b>RATINGS</b>						
Air Flow Range (CFM)①	300 - 1400		300 - 1800		400 - 2100	
Pressure Drop	<i>Pressure drop equal to factory filter of same size, No fan performance data correction required</i>					
<b>POWER SUPPLY</b>						
	TFE215A9AH	TFE215A1AH	TFE235A9AH	TFE235A1AH	TFE260A9AH	TFE260A1AH
Volts/Ph/Hz	120 / 1 / 60	240 / 1 / 60	120 / 1 / 60	240 / 1 / 60	120 / 1 / 60	240 / 1 / 60
Ampacity	0.45	0.23	0.45	0.23	0.45	0.23
Output Rating	6.5 Kv		6.5 Kv		6.5 Kv	
Ionizer - Collector	6.5 KV - 6.2 KV		6.5 KV - 6.2 KV		6.5 KV - 6.2 KV	
<b>CELL (Ionizer Section)</b>						
Split - 2 per Unit	21-1/4 X 10-1/16 X 5-1/4		23-1/4 X 10-1/16 X 5-1/4		25-3/4 X 10-1/16 X 5-1/4	
<b>PRE-FILTER TYPE</b>						
			<b>1 Inch Washable (Permanent)</b>			
Area (Sq.Ft.)	2.94		3.22		3.57	
Size (Nominal)	21-1/2 X 21 X 1		23-1/2 X 21 X 1		26 X 21 X 1	
Size (Actual)	21.2 X 20.1 X .90		23.2 X 20.1 X .90		25.7 X 20.1 X .90	
<b>DUCT CONNECTIONS</b>						
	<b>See Outline Drawing</b>					
<b>CASE DIMENSIONS</b>						
Crated (in.)	25 X 27 X 8.5		27 X 27 X 8.5		30 X 27 X 8.5	
Uncrated	21-1/2 X 21 X 7-7/16		23-1/2 X 21 X 7-7/16		26 X 21 X 7-7/16	
<b>WEIGHT</b>						
Shipping (lbs.) / Net (lbs.)	45 / 43		49 / 47		53 / 51	

MODEL	TFM215B0AH		TFM235B0AH		TFM260B0AH	
<b>RATINGS</b>						
Air Flow Range (CFM)	300 - 1400		300 - 1700		400 - 2100	
Pressure Drop	<b>See Pressure Drop Table</b>					
<b>FILTER TYPE</b>						
	<b>5 Inch Expandable or Cartridge Filter Media (Throwaway)</b>					
Area (Sq.Ft.)						
Size (Nominal)	21-1/2 X 21 X 5		23-1/2 X 21 X 5		26 X 21 X 5	
Size (Actual)	21.2 X 20.1 X 5		23.2 X 20.1 X 5		25.7 X 20.1 X 5	
<b>DUCT CONNECTIONS</b>						
	<b>See Outline Drawing</b>					
<b>CASE DIMENSIONS</b>						
Crated (in.)	25 X 27 X 8.5		27 X 27 X 8.5		30 X 27 X 8.5	
Uncrated	21-1/2 X 21 X 7-7/16		23-1/2 X 21 X 7-7/16		26 X 21 X 7-7/16	
<b>WEIGHT</b>						
Shipping (lbs.) / Net (lbs.)	22 / 19		24 / 21		25 / 22	

MODEL	TFP215A0AH		TFP235A0AH		TFP260A0AH	
<b>RATINGS</b>						
Air Flow Range (CFM)	300 - 1200		300 - 1500		400 - 1800	
Pressure Drop	<b>See Pressure Drop Table</b>					
<b>FILTER TYPE</b>						
	<b>1 Inch Pleated Media (Throwaway)</b>					
Area (Sq.Ft.)						
Size (Nominal)	21-1/2 X 21 X 1		23-1/2 X 21 X 1		26 X 21 X 1	
Size (Actual)	21.2 X 20.1 X .90		23.2 X 20.1 X .90		25.7 X 20.1 X .90	
<b>DUCT CONNECTIONS</b>						
	<b>See Outline Drawing</b>					
<b>CASE DIMENSIONS</b>						
Crated (in.)	25 X 27 X 8.5		27 X 27 X 8.5		30 X 27 X 8.5	
Uncrated	21-1/2 X 21 X 7-7/16		123-1/2 X 21 X 7-7/16		26 X 21 X 7-7/16	
<b>WEIGHT</b>						
Shipping (lbs.) / Net (lbs.)	20 / 17		22 / 19		24 / 21	

# Performance Data

## TFM Models

### TFM Media performance at 600 CFM

MERV 8 rating  
 98% Peak removal efficiency  
 282g Dust holding capacity  
 95% Arrestance value

### TFM Media performance at 1100 CFM

MERV 8 rating  
 98% Peak removal efficiency  
 172g Dust holding capacity  
 94% Arrestance value

MERV (Minimum Efficiency Reporting Value) based on ANSI/ASHRAE Standard 52.2-1999

PRESSURE DROP AT SPECIFIC AIR FLOW PER MODEL									
	400 CFM	600 CFM	800 CFM	1000 CFM	1200 CFM	1400 CFM	1600 CFM	1800 CFM	2000 CFM
TFM145B0FR	0.02	0.05	0.09	0.14	0.21				
TFM175B0FR	0.01	0.03	0.06	0.10	0.14	0.19	0.25		
TFM210B0FR	0.01	0.02	0.04	0.07	0.10	0.14	0.18	0.22	0.27
TFM245B0FR	0.00	0.01	0.03	0.05	0.07	0.10	0.13	0.16	0.20
TFM14DA0FR	0.04	0.07	0.12	0.18	0.25				
TFM17DA0FR	0.03	0.05	0.08	0.13	0.18	0.24	0.31		
TFM21DA0FR	0.02	0.04	0.06	0.09	0.13	0.17	0.22	0.27	0.33
TFM24DA0FR	0.02	0.03	0.05	0.07	0.10	0.13	0.16	0.20	0.25
TFM210B0AH	0.01	0.04	0.07	0.11	0.16				
TFM235B0AH	0.01	0.03	0.06	0.09	0.13	0.18	0.23		
TFM260B0AH	0.01	0.02	0.05	0.08	0.11	0.15	0.19	0.24	0.29

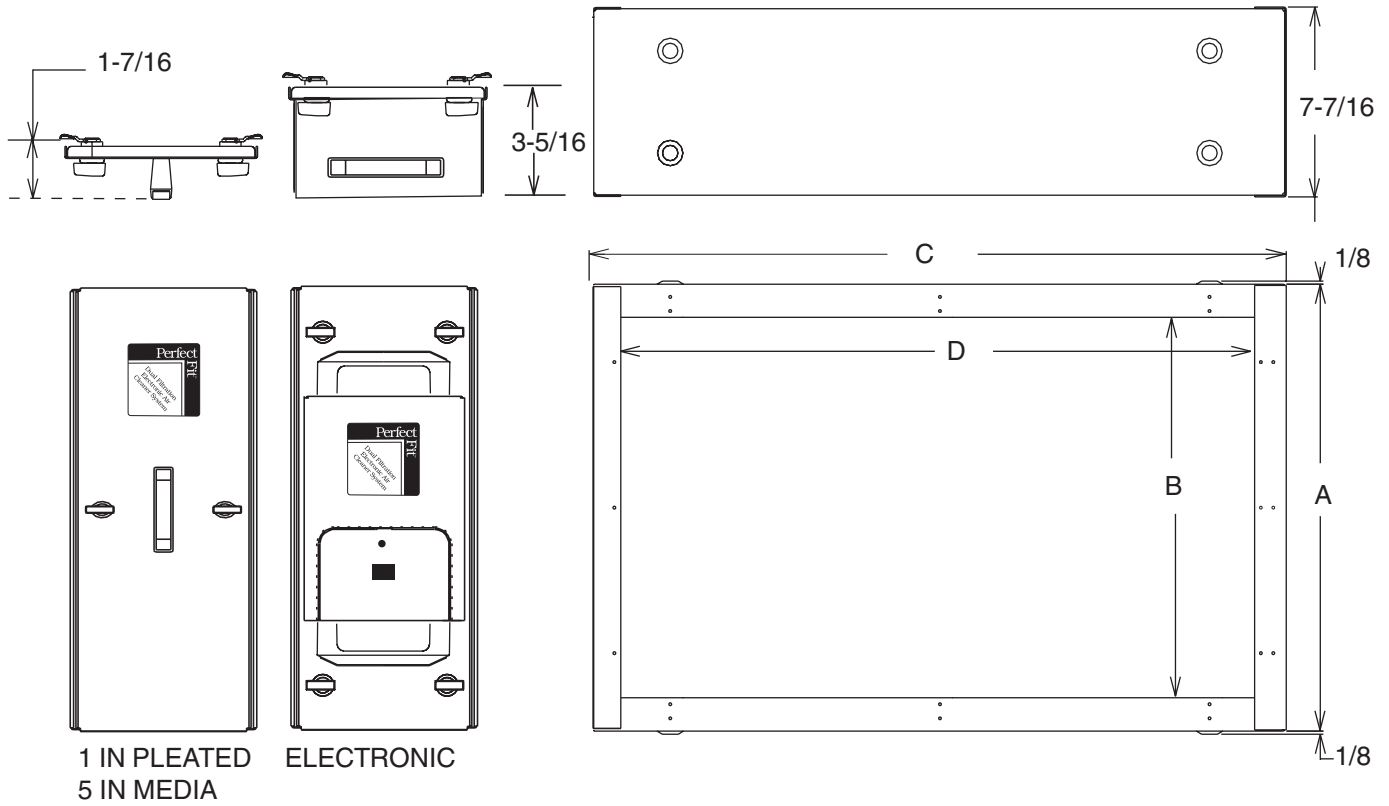
# Performance Data

## TFP Models

PRESSURE DROP AT SPECIFIC AIR FLOW PER MODEL									
	400 CFM	600 CFM	800 CFM	1000 CFM	1200 CFM	1400 CFM	1600 CFM	1800 CFM	2000 CFM
TFP145A0FR	0.04	0.07	0.11	0.16	0.21				
TFP175A0FR	0.02	0.04	0.07	0.10	0.13	0.16	0.19		
TFP210A0FR	0.02	0.03	0.05	0.07	0.09	0.11	0.14	0.17	0.20
TFP245A0FR				0.04	0.06	0.07	0.08	0.10	0.13
TFP210A0AH	0.03	0.05	0.08	0.12	0.16	0.19			
TFP235A0AH		0.05	0.07	0.10	0.13	0.17	0.21	0.25	
TFP260A0AH			0.06	0.09	0.12	0.15	0.18	0.21	0.24

# Dimensions

## OUTLINE DRAWING FURNACE MODELS



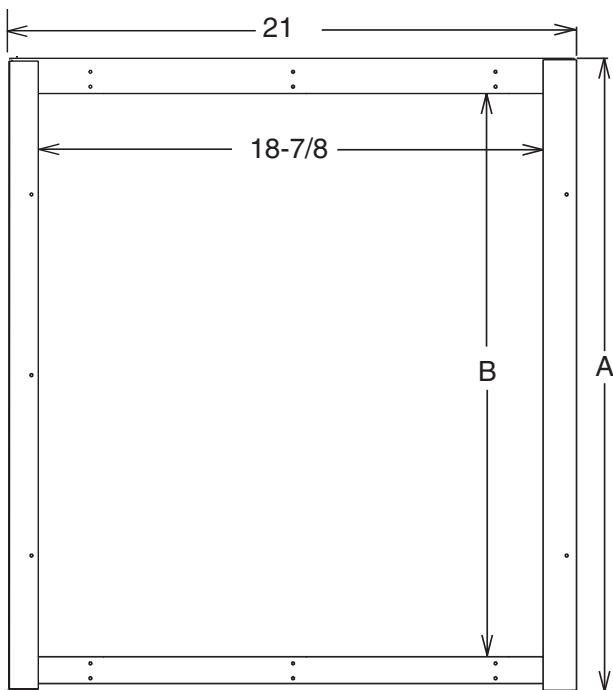
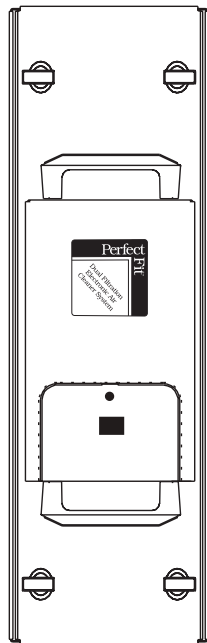
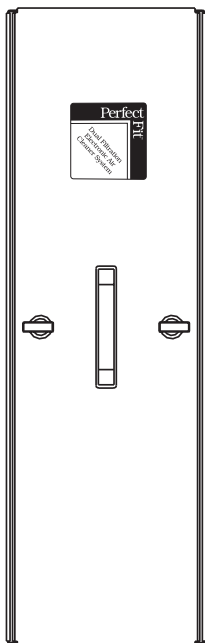
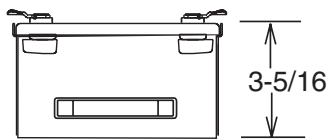
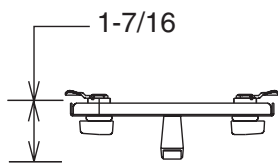
MODEL NUMBERS			A	B	C	D
1 IN PLEATED	5 IN MEDIA	ELECTRONIC				
TFP145A0FR	TFM145B0FR	TFE145A9FR	14-1/2	11.9	27	24-13/16
TFP175A0FR	TFM175B0FR	TFE175A9FR	17-1/2	14.9	27	24-13/16
TFP210A0FR	TFM210B0FR	TFE210A9FR	21	18.4	27	24-13/16
TFP245A0FR	TFM245B0FR	TFE245A9FR	24-1/2	21.9	27	24-13/16
	TFM14DA0FR		14-1/2	11.9	21	18-13/16
	TFM17DA0FR		17-1/2	14.9	21	18-13/16
	TFM21DA0FR		21	18.4	21	18-13/16
	TFM24DA0FR		24-1/2	21.9	21	18-13/16

NOTE: DOOR DIMENSION MUST BE ADDED FOR TOTAL DEPTH.

# Dimensions

## OUTLINE DRAWING AIR HANDLER MODELS

21" CABINET DEPTH ONLY  
ADD DOOR DEPTH FOR TOTAL



1 IN PLEATED  
5 IN MEDIA

ELECTRONIC

AIR HANDLER MODEL NUMBERS				
1 IN PLEATED	5 IN MEDIA	ELECTRONIC	C	D
TFP215A0AH	TFM215B0AH	TFE215A1AH, A9AH	21-1/2	18-7/8
TFP235A0AH	TFM235B0AH	TFE235A1AH, A9AH	23-1/2	20-7/8
TFP260A0AH	TFM260B0AH	TFE260A1AH, A9AH	26	23-7/8