



The world's largest privately owned HVAC distributor

**1.5 TO 5 TONS YORK HEAT PUMPS
CONDENSING UNITS**

YZE 18 SEER R-410a Single Phase

have the following available benefits and options

Please, specify the following:

High/Low Pressure switch, Internal Protections

Factory Installed Filter Drier

Isolated Compressor Compartment

Low Sound Operation with Low RPM Fans

5 Years Parts Warranty

10 Years Compressor Warranty

Choice of colors to match building

T2950 365 Days Thermostat

BAS Networkable with free Web Software

ArmorGuard Stainless Steel 316 Corrosion Protection on coils

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samy@rezine.net
karine@rezine.net
maher@rezine.net
michelle@rezine.net



TECHNICAL GUIDE

AFFINITY
SPLIT-SYSTEM HEAT PUMPS
UP TO 18 SEER – R-410A
MODELS:
YZE024 THRU 060
(2 THRU 5 NOMINAL TONS)



Due to continuous product improvement, specifications are subject to change without notice.

Visit us on the web at www.york.com

Additional rating information can be found at www.ari.org/aridirectory

DESCRIPTION

The YZE Series unit is the outdoor part of a versatile heat pump system. It is designed to be custom matched with one of our complete line of evaporator sections, each designed to serve a specific function.

WARRANTY

5-year limited parts warranty.
10-year limited compressor warranty.
Premium System Warranty - Limited lifetime compressor and 10-year parts when matched with an approved York Affinity furnace or UPG air handler and coil.

FEATURES

- Superior Coil Protection - A stamped decorative metal coil guard completely protects coil from debris and other large damaging material while a polymer mesh further protects the coil against smaller particles.
Isolated Compressor Compartment - A molded composite bulkhead isolates the compressor from the rest of the unit reducing sound and vibration.
Protected Compressors - Each compressor is protected against high and low pressure as well as excessive temperature.
Environmentally Friendly Refrigerant - Next generation refrigerant R-410A delivers environmentally friendly performance, with zero ozone depletion.
Durable Finish - Automotive quality finish provides the ultimate protection from harmful U.V. rays as well as rust creep ensuring long-lasting high quality appearance.
Lower Installed Cost - Designed to provide enhanced installability by featuring a slide-down control compartment allowing easy access to control components along with angled service valves to reduce overall installation time and cost.
Low Operating Sound Levels - A fan design boasting technology adapted from aeronautic and defense engineering provides for whisper quiet operation by allowing airflow to flow smoothly and efficiently across the fan tips.
Filter-Drier - A factory installed, solid core liquid line filter-drier filters harmful debris and moisture from the system.
Easy Service Access - A full end, full service, access panel with handle makes for easy entry to internal components.
Long Lasting Operation - Strong and durable composite base pan provides added strength while resisting rust and corrosion as well as reducing sound and vibration.
Quiet drive system - The swept-wing fan, composite base pan, isolated compressor compartment and two-stage compressor are engineered as a system to reduce overall sound to a mere whisper.
Complete System Control - All models utilize the exclusive York Guard VI microprocessor based, on-demand, defrost control system.
In the event improper operating conditions occur (high temperature and/or high pressure), the unit will automatically shut down to protect the refrigeration system, and switch to back-up heat.

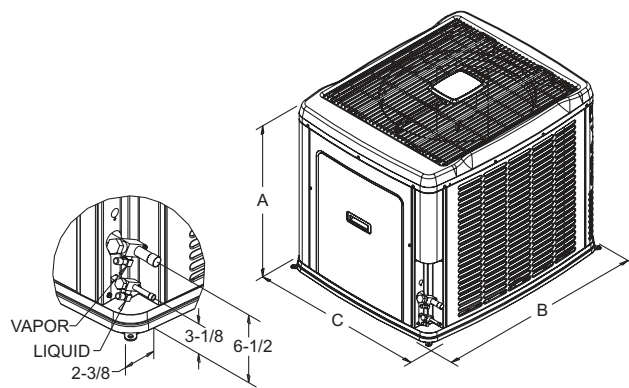
Certified in accordance with the Unitary Small Equipment certification program, which is based on ARI Standard 210/240.

Physical and Electrical Data

MODEL		YZE02411	YZE03611	YZE03811	YZE04811	YZE06011
Unit Supply Voltage		208-230V, 1 ϕ , 60Hz				
Normal Voltage Range ¹		187 to 252				
Minimum Circuit Ampacity		18.6	24.7	23.6	27.9	37.9
Max. Overcurrent Device Amps ²		30	40	40	45	60
Min. Overcurrent Device Amps ³		20	25	25	30	40
Multi-stage Compressor		Yes	Yes	Yes	Yes	Yes
Compressor Type		Scroll	Scroll	Scroll	Scroll	Scroll
Compressor Amps	Rated Load	13.7	18.6	16.7	21.2	29.2
	Locked Rotor	52	82	82	96	118
Crankcase Heater		No	No	No	No	No
Fan Motor Amps	Rated Load	1.5	1.5	2.8	1.5	1.5
Fan Diameter Inches		22	22	22	22	22
Fan Motor	Rated HP	1/4	1/4	1/3	1/4	1/4
	Nominal RPM	850	850	685	850	850
	Nominal CFM	3,250	3,300	2,750	3,050	3,100
Coil	Face Area Sq. Ft.	17.15	20.58	20.58	20.58	20.58
	Rows Deep	1	1	2	2	2
	Fins / Inch	22	22	22	22	22
Liquid Line Set OD (Field Installed)		3/8	3/8	3/8	3/8	3/8
Vapor Line Set OD (Field Installed)		3/4	3/4	7/8	7/8	7/8
Unit Charge (Lbs. - Oz.) ⁴		8 - 14	8 - 8	13-3	14 - 8	14 - 0
Charge Per Foot, Oz.		0.62	0.62	0.67	0.67	0.67
Operating Weight Lbs.		270	290	270	310	315

1. Rated in accordance with ARI Standard 110, utilization range "A".
2. Dual element fuses or HACR circuit breaker. Maximum allowable overcurrent protection.
3. Dual element fuses or HACR circuit breaker. Minimum recommended overcurrent protection.
4. The Unit Charge is correct for the outdoor unit, matched indoor coil and 15 feet of refrigerant tubing. For tubing lengths other than 15 feet, add or subtract the amount of refrigerant, using the difference in length multiplied by the per foot value.

All dimensions are in inches. They are subject to change without notice. Certified dimensions will be provided upon request.



DIMENSIONS

Unit Model	Dimensions (Inches)			Refrigerant Connection Service Valve Size	
	A	B	C	Liquid	Vapor
024	33-1/2	37	31	3/8"	3/4"
036	39-1/2	37	31		7/8"
038	39-1/2	37	31		
048	39-1/2	37	31		
060	39-1/2	37	31		

Additional R-410A Charge / TXV Size for Various Matched Systems					
Outdoor Unit	YZE02411	YZE03611	YZE03811	YZE04811	YZE06011
Approved System Thermal Expansion Valve ¹	1TVM902	1TVM902 1TVM4A1	1TVM904	1TVM905	1TVM906
Factory R-410A Charge, lbs-oz	8 - 14	8 - 8	13-3	14 - 8	14 - 0
Indoor Coil ²	TXV Kit ³ - Additional Charge, Oz				
FC/MC/PC30A	4	-	-	-	-
FC/MC/PC30B	4	-	-	-	-
FC/MC/PC36A	5	-	-	-	-
FC/MC/PC36B	5	-	-	-	-
FC/MC/PC36C	5	-	-	-	-
FC/MC/PC42B	12	0	-	-	-
FC/MC/PC42C	12	0	-	-	-
FC/MC/PC48C	-	14	-	-	-
FC/MC/PC48D	-	14	-	-	-
FC/PC60C	-	-	10	9	9
FC/MC/PC60D	-	-	10	9	9
MC61D	-	-	18	17	16
HC30	6	-	-	-	-
HC42	-	12	-	-	-
HC60	-	-	10	9	9
HD36	6	-	-	-	-
HD48	-	10	-	-	-
HD60	-	-	10	9	9
AV24	4	-	-	-	-
AV36	12	0	-	-	-
AV/SV48	-	17	10	-	-
AV/SV60	-	-	-	9	9
F*FV060	-	-	10	9	9

FOOTNOTES:

1. Systems matched with furnace or air handlers not equipped with blower-off delays may require blower Time Delay Kit 2FD06700224.
2. PC coils cannot be used in downflow or horizontal applications. FC coils cannot be used in horizontal applications.
3. A TXV kit must be used with these coils to obtain system performance.
Note: If a TXV is factory installed on the coil, it must be replaced with the listed TXV.

PROCEDURES:

1. Unit factory charge listed on the unit nameplate includes refrigerant for the condenser, the smallest evaporator and 15 feet of interconnecting line tubing.
2. Verify the TXV and additional charge required for specific evaporator coil in the system using the above table.
3. Additional charge for the amount of interconnecting line tubing greater than 15 feet at the rate specified in the Physical and Electrical Data Table.
4. Permanently mark the unit nameplate with the total system charge. Total System Charge = Base Charge (as shipped) + adder for evaporator + adder for line set.

COOLING CAPACITY - With Air Handler Coils

UNIT MODEL	AIR HANDLER			COIL ¹ MODEL	COOLING					
	MODEL	ELECTRIC ² HEAT KW	W		STAGE	RATED CFM	NET MBH		SEER	EER
							TOTAL	SENSIBLE		
YZE02411	AV24	2,5,8,10,15	17	-	1	535	18.6	13.6	15.00	12.50
					2	800	24.0	18.6		12.50
	MV12B	5,8,10	17	FC/MC36B	1	620	18.6	13.6	15.00	12.50
					2	800	24.6	18.6		12.00
	MV12B	5,8,10	17	FC/MC42B	1	650	18.1	14.4	15.00	12.15
					2	775	23.6	19.6		12.00
YZE03611	AV36	5,8,10,15,18	21	-	1	830	25.0	17.5	15.75	12.70
					2	1200	35.4	24.2		12.00
	MV12B	5,8,10	17	FC/MC42B	1	775	24.4	17.2	14.75	12.55
					2	1200	34.0	23.9		11.50
	MV16C	5,8,10,15,18,20	21	FC/MC48C	1	775	25.0	17.5	15.00	12.85
					2	1200	35.4	24.2		12.00
	MV20D	8,10,15,18,20,25	24	FC/MC48D	1	775	24.8	17.5	15.75	12.70
					2	1200	35.4	24.2		12.00
YZE03811	AV/SV48	5,8,10,15,18,20,25	24	-	1	830	24.8	18.6	15.00	13.50
					2	1100	36.0	27.4		12.50
	F*FV060	5,8,10,15,20,25	24	-	1	770	24.8	18.6	17.50	14.10
					2	1200	36.0	27.4		13.45
	MV20D	10,15,20,25	24	FC/MC60D	1	750	25.0	18.7	17.50	14.50
					2	1200	36.0	27.4		13.00
	MV12D	10,15,20,25	24	MC61D	1	750	25.0	18.7	18.00	14.50
					2	1100	36.0	27.4		13.50
	MV20D	8,10,15,18,20,25	24	MC61D	1	770	25.0	18.7	17.50	14.25
					2	1200	36.2	27.5		13.55
YZE04811	AV/SV48	5,8,10,15,18,20,25	24	-	1	1135	33.2	23.5	15.00	13.30
					2	1600	45.0	32.8		12.50
	F*FV060	5,8,10,15,20,25	24	-	1	1000	33.2	23.5	15.50	13.10
					2	1600	46.0	32.8		12.15
	MV20D	8,10,15,18,20,25	24	FC/MC60D	1	1000	33.2	23.5	15.50	13.05
					2	1600	46.0	34.4		12.00
	MV20D	8,10,15,18,20,25	24	MC61D	1	1000	33.4	23.7	15.50	13.20
					2	1600	47.0	34.7		12.00
YZE06011	AV/SV60	5,8,10,15,18,20,25	24	-	1	1145	38.5	27.0	13.50	11.55
					2	1800	53.5	38.5		10.25
	F*FV060	5,8,10,15,20,25	24	-	1	1200	38.0	27.0	13.75	11.55
					2	1900	53.0	38.5		10.20
	MV20D	8,10,15,18,20,25	24	FC/MC60D	1	1200	38.0	27.0	13.75	11.50
					2	1900	53.0	38.5		10.40
	MV20D	8,10,15,18,20,25	24	MC61D	1	1175	38.0	26.9	14.00	11.65
					2	1800	54.0	38.9		10.40

Rated in accordance with DOE test procedures (Federal Register 12-27-79 and 3-18-88) and ARI Standards 210.
 Cooling MBH based on 80°F entering air temperature, 50% RH, and rated air flow.
 EER (Energy Efficiency Ratio) is the total cooling output in BTU's at 95°F outdoor ambient divided by the total electric power in watt-hours at those conditions.
 SEER (Seasonal Energy Efficiency Ratio) is the total cooling output in BTU's during a normal annual usage period for cooling divided by the total electric power input in watt-hours during the same period.

1. MC coils available with a factory installed horizontal drain pan. See price pages for specific model number.
2. Single phase units require single phase 2HK heaters.

COOLING CAPACITY - With Variable Speed Furnaces

UNIT MODEL	VARIABLE SPEED FURNACE MODEL	COIL MODEL ¹	W	COOLING					
				STAGE	RATED CFM	NET MBH		SEER	EER
						TOTAL	SENSIBLE		
YZE02411	PV8*A12	FC/MC/PC24A	14	1	430	17.3	11.5	14.00	12.60
				2	800	23.0	18.2		11.50
	PV9*A12	FC/MC/PC24A	14	1	625	18.5	14.4	14.25	12.35
				2	800	23.6	19.0		11.50
	PV8*B16	FC/MC/PC24B	17	1	430	17.1	11.9	15.00	12.55
				2	750	23.0	18.7		12.00
	P(C,V)9*B12	FC/MC/PC24B	17	1	475	17.5	12.5	14.25	12.60
				2	800	23.6	19.0		11.50
	PV8*A12	FC/MC/PC30A	14	1	430	17.3	11.5	14.00	12.60
				2	750	23.0	18.2		11.50
	PV9*A12	FC/MC/PC30A	14	1	625	18.5	14.4	14.25	12.35
				2	800	23.6	19.0		11.50
	PV8*B16	FC/MC/PC30B	17	1	430	17.1	11.9	15.00	12.55
				2	800	23.0	18.7		12.00
	P(C,V)9*B12	FC/MC/PC30B	17	1	425	17.5	12.5	14.25	12.60
				2	800	23.6	19.0		11.50
	PV8*A12	FC/MC/PC36A	14	1	430	17.4	11.6	15.00	12.75
				2	800	24.0	19.0		11.50
	PV9*A12	FC/MC/PC36A	14	1	560	18.4	13.7	14.50	12.45
				2	800	24.0	19.0		11.50
PV8*B16	FC/MC/PC36B	17	1	430	17.4	11.6	15.00	12.75	
			2	800	24.0	19.0		12.00	
P(C,V)9*B12	FC/MC/PC36B	17	1	560	18.4	13.7	14.50	12.45	
			2	800	24.0	19.0		11.50	
P(C,V)9*B12	FC/MC/PC42B	17	1	640	18.2	14.4	14.75	12.05	
			2	800	24.0	19.0		11.50	
PV8*B16	HC36	17	1	430	17.0	11.9	15.00	12.60	
			2	800	23.0	18.9		12.00	
P(C,V)9*B12	HC36	17	1	475	17.4	12.0	14.50	12.60	
			2	800	23.0	19.0		11.50	
P(C,V)9*B12	HD24	-	1	475	17.9	12.2	15.00	12.75	
			2	800	24.0	19.2		12.00	
YZE03611	PV8*B16	FC/MC/PC42B	17	1	650	23.0	15.6	14.75	12.10
				2	1200	33.8	24.5		11.50
	P(C,V)9*B12	FC/MC/PC42B	17	1	770	24.6	18.4	14.50	12.45
				2	1200	36.0	26.3		11.40
	PV8*C16	FC/MC/PC42C	21	1	640	24.2	16.2	14.75	12.70
				2	1200	32.2	23.1		11.50
	PV8*C20	FC/MC/PC42C	21	1	640	24.2	16.2	15.00	12.70
				2	1200	32.2	23.1		11.50
	P(C,V)9*C16	FC/MC/PC42C	21	1	780	25.0	18.9	15.00	12.85
				2	1200	32.2	23.1		11.50
	P(C,V)9*C20	FC/MC/PC42C	21	1	800	25.2	19.1	15.00	12.90
				2	1200	32.2	23.1		11.50
	PV8*C16	FC/MC/PC48C	21	1	640	24.2	16.2	15.25	12.70
				2	1200	35.2	25.1		12.00
	PV8*C20	FC/MC/PC48C	21	1	640	24.2	16.2	15.50	12.70
				2	1200	35.2	25.1		12.00
	P(C,V)9*C16	FC/MC/PC48C	21	1	780	25.0	18.9	15.00	12.85
				2	1200	34.8	26.8		12.00
	P(C,V)9*C20	FC/MC/PC48C	21	1	800	25.2	19.1	15.25	12.90
				2	1200	35.0	26.8		12.00
P(C,V)9*D20	FC/MC/PC48D	24	1	770	25.0	18.8	15.50	12.85	
			2	1200	35.0	26.8		12.00	
PV8*C16	HC42	21	1	675	24.2	16.5	14.75	12.45	
			2	1200	32.2	25.1		11.50	
PV8*C20	HC42	21	1	675	24.2	16.5	15.00	12.45	
			2	1200	32.2	25.1		11.50	
PV8*C16	HD48	-	1	675	24.2	16.5	14.75	12.45	
			2	1200	32.2	25.1		11.50	
PV8*C20	HD48	-	1	675	24.2	16.5	15.00	12.45	
			2	1200	32.2	25.1		11.50	

For Notes, See Page 6.

COOLING CAPACITY - With Variable Speed Furnaces (Continued)

UNIT MODEL	VARIABLE SPEED FURNACE MODEL	COIL MODEL ¹	W	COOLING					
				STAGE	RATED CFM	NET MBH		SEER	EER
						TOTAL	SENSIBLE		
YZE03811	PV8*C16	FC/PC60C	21	1	640	24.0	18.0	17.25	14.05
				2	1200	35.4	27.4		13.00
	PV8*C20	FC/PC60C	21	1	640	24.0	18.0	17.50	14.05
				2	1200	36.0	27.4		13.00
	P(C,V)9*C16	FC/PC60C	21	1	780	24.8	18.6	17.00	14.10
				2	1200	35.0	27.4		13.00
	P(C,V)9*C20	FC/PC60C	21	1	780	24.8	18.6	17.25	14.10
				2	1200	36.0	27.4		13.00
	P(C,V)9*D20	FC/MC/PC60D	24	1	660	24.2	18.1	17.50	13.95
				2	1200	36.0	27.2		13.00
	PV8*C20	HC60	24	1	660	24.2	18.1	17.00	13.90
				2	1200	35.4	27.2		13.00
	P(C,V)9*D20	HC60	24	1	660	24.2	18.1	17.00	13.90
				2	1200	35.4	27.2		13.00
	PV8*C20	HD60	-	1	660	23.8	17.8	17.00	13.75
				2	1200	35.4	26.9		13.00
	P(C,V)9*D20	HD60	-	1	660	23.8	17.8	17.00	13.75
				2	1200	35.4	26.9		13.00
P(C,V)9*D20	MC61D	24	1	660	23.8	17.8	17.50	13.75	
			2	1200	36.0	26.9		13.00	
YZE04811	PV8*C20	FC/MC/PC60C	21	1	860	32.4	22.0	15.25	12.90
				2	1600	46.0	35.2		12.00
	P(C,V)9*C20	FC/MC/PC60C	21	1	1010	33.2	25.3	15.00	12.70
				2	1600	45.5	36.8		11.75
	P(C,V)9*D20	FC/MC/PC60D	24	1	1020	33.2	25.5	15.25	12.85
				2	1600	46.0	36.8		11.50
	PV8*C20	HC60	24	1	900	32.6	22.5	15.00	12.60
				2	1575	45.5	34.8		12.00
	P(C,V)9*D20	HC60	24	1	850	32.2	21.9	15.00	12.75
				2	1610	45.5	35.2		11.50
	PV8*C20	HD60	-	1	850	32.0	21.6	15.00	12.50
				2	1610	45.5	34.5		12.00
	P(C,V)9*D20	HD60	-	1	850	32.0	21.6	15.00	12.50
				2	1610	45.5	34.5		11.50
P(C,V)9*D20	MC61D	24	1	1020	33.2	25.5	15.25	12.85	
			2	1600	46.0	36.8		12.00	
YZE06011	PV8*C20	FC/MC/PC60C	21	1	1030	37.4	25.4	13.50	11.30
				2	1730	53.0	38.1		11.00
	P(C,V)9*C20	FC/MC/PC60C	21	1	1040	37.4	27.4	13.25	11.25
				2	1620	52.5	39.9		11.00
	PV8*C20	FC/MC/PC60D	24	1	1030	37.4	25.4	13.50	11.30
				2	1730	53.0	38.1		11.00
	P(C,V)9*C20	FC/MC/PC60D	24	1	990	37.2	24.9	13.50	11.30
				2	1640	52.5	37.1		11.00
	P(C,V)9*D20	FC/MC/PC60D	24	1	1030	37.4	27.3	13.50	11.30
				2	1620	52.5	40.0		11.00
	PV8*C20	HC60	24	1	1010	37.2	25.1	13.50	11.20
				2	1610	52.5	36.8		11.00
	P(C,V)9*D20	HC60	24	1	1010	37.2	25.1	13.50	11.20
				2	1610	52.5	36.8		11.00
	PV8*C20	HD60	-	1	1010	36.8	24.8	13.50	11.10
				2	1610	51.5	36.0		11.00
	P(C,V)9*D20	HD60	-	1	1010	36.8	24.8	13.50	11.10
				2	1610	51.5	36.0		11.00
PV8*C20	MC61D	24	1	1030	37.4	27.3	13.50	11.30	
			2	1620	53.5	40.0		11.00	
P(C,V)9*D20	MC61D	24	1	1030	37.4	27.3	13.50	11.30	
			2	1620	53.5	40.0		11.00	

1. MC coils available with a factory installed horizontal drain pan. Specify "H" models when ordering.

HEATING CAPACITY - With Air Handler

UNIT MODEL	AIR HANDLER MODEL	COIL ¹ MODEL	HEATING					
			STAGE	RATED CFM	NET MBH		HSPF	COP @ 47
					47 OD	17 OD		
YZE02411	AV24	-	1	650	19.0	-	-	3.30
			2	775	24.0	15.6	8.25	3.36
			2	650	23.2	14.6	8.05	3.12
	MV12B	FC/MC36B	1	620	18.9	-	-	3.30
			2	800	24.0	15.6	8.20	3.36
			2	620	23.2	14.6	8.05	3.12
	MV12B	FC/MC42B	1	650	18.9	-	-	3.30
			2	775	24.0	15.5	8.30	3.36
			2	650	23.0	14.5	8.05	3.12
YZE03611	AV36	-	1	775	23.6	-	-	3.60
			2	1200	33.0	21	8.50	3.70
			2	775	29.6	19.7	8.40	3.30
	MV12B	FC/MC42B	1	775	23.6	-	-	3.60
			2	1200	32.8	21.0	8.50	3.70
			2	775	29.6	19.7	8.40	3.30
	MV16C	FC/MC48C	1	775	23.6	-	-	3.60
			2	1200	33.0	20.8	8.50	3.70
			2	775	29.2	19.5	8.40	3.30
	MV20D	FC/MC48D	1	775	23.6	-	-	3.60
			2	1200	33.0	20.8	8.50	3.70
			2	775	29.2	19.5	8.40	3.30
YZE03811	AV/SV48	-	1	770	24.0	-	-	3.80
			2	1200	35.0	21.6	9.40	4.14
			2	770	34.2	19.3	8.80	3.74
	F2FV060	-	1	770	24.0	-	-	3.80
			2	1200	35.0	21.6	9.25	4.14
			2	770	34.2	19.3	8.80	3.74
	MV20D	FC/MC60D	1	770	24.0	-	-	3.80
			2	1200	35.0	21.6	9.40	4.14
			2	770	34.2	19.3	8.80	3.74
	MV12D	MC61D	1	750	24.0	-	-	3.80
			2	1100	35.0	21.6	9.50	4.14
			2	750	34.0	19.2	8.80	3.76
	MV20D	MC61D	1	770	24.0	-	-	3.80
			2	1200	35.0	21.6	9.40	4.14
			2	770	34.2	19.3	8.80	3.74
YZE04811	AV/SV48	-	1	1000	31.8	-	-	3.62
			2	1600	48.0	27.4	8.40	3.96
			2	1000	45.5	26.6	8.30	3.76
	F2FV060	-	1	1000	31.8	-	-	3.62
			2	1600	47.5	27.4	8.40	3.96
			2	1000	45.5	26.6	8.30	3.76
	MV20D	FC/MC60D	1	1000	31.8	-	-	3.60
			2	1600	48.0	27.6	8.40	3.96
			2	1000	45.5	26.8	8.35	3.76
	MV20D	MC61D	1	1000	31.8	-	-	3.62
			2	1600	48.0	27.4	8.50	3.96
			2	1000	45.5	26.6	8.30	3.76
YZE06011	AV/SV60	-	1	1200	37.6	-	-	3.26
			2	1900	55.0	32.2	8.05	3.50
			2	1200	50.0	29.8	7.90	3.22
	F2FV060	-	1	1200	37.6	-	-	3.26
			2	1900	54.0	32.2	8.00	3.50
			2	1200	50.0	29.8	7.90	3.22
	MV20D	FC/MC60D	1	1200	37.6	-	-	3.26
			2	1900	54.5	32.4	8.00	3.50
			2	1200	50.0	30	7.90	3.22
MV20D	MC61D	1	1175	37.6	-	-	3.26	
		2	1800	54.5	32.0	8.00	3.50	
		2	1175	50.0	29.6	7.85	3.22	

Rated in accordance with DOE test procedures (Federal Register 12-27-79 and 3-18-88) and ARI Standards 210.
 Cooling MBH based on 80°F entering air temperature, 50% RH, and rated air flow.
 EER (Energy Efficiency Ratio) is the total cooling output in BTU's at 95°F outdoor ambient divided by the total electric power in watt-hours at those conditions.
 SEER (Seasonal Energy Efficiency Ratio) is the total cooling output in BTU's during a normal annual usage period for cooling divided by the total electric power input in watt-hours during the same period.

1. MC coils available with a factory installed horizontal drain pan. See price pages for specific model number.

** Refer to Quick Selection Chart for specific furnace match-up

HEATING CAPACITY - With Variable Speed Furnaces

UNIT MODEL	VARIABLE SPEED FURNACE MODEL	COIL MODEL ¹	W	HEATING					
				STAGE	RATED CFM	NET MBH		HSPF	COP @ 47
						47 OD	17 OD		
YZE02411	PV8*A12	FC/MC/PC24A	14	1	430	18.1	—	—	3.16
				2	800	24.0	15.4	8.10	3.36
				2	430	22.8	14.4	8.00	3.10
	PV9*A12	FC/MC/PC24A	14	1	430	18.1	—	—	3.16
				2	800	24.0	15.4	8.10	3.36
				2	430	22.8	14.4	8.00	3.10
	PV8*B16	FC/MC/PC24B	17	1	430	18.1	—	—	3.16
				2	800	24.0	15.4	8.10	3.36
				2	430	22.8	14.4	8.00	3.10
	P(C,V)9*B12	FC/MC/PC24B	17	1	430	18.1	—	—	3.16
				2	800	24.0	15.4	8.10	3.36
				2	430	22.8	14.4	8.00	3.10
	PV8*A12	FC/MC/PC30A	14	1	430	18.1	—	—	3.16
				2	800	24.0	15.4	8.10	3.36
				2	430	22.8	14.4	8.00	3.10
	PV9*A12	FC/MC/PC30A	14	1	430	18.1	—	—	3.16
				2	800	24.0	15.4	8.10	3.36
				2	430	22.8	14.4	8.00	3.10
	PV8*B16	FC/MC/PC30B	17	1	430	18.1	—	—	3.16
				2	800	24.0	15.4	8.10	3.36
				2	430	22.8	14.4	8.00	3.10
	P(C,V)9*B12	FC/MC/PC30B	17	1	430	18.1	—	—	3.16
				2	800	24.0	15.4	8.10	3.36
				2	430	22.8	14.4	8.00	3.10
	PV8*A12	FC/MC/PC36A	14	1	430	18.0	—	—	3.16
				2	800	24.0	15.5	8.15	3.36
				2	430	23.0	14.5	8.00	3.12
	PV9*A12	FC/MC/PC36A	14	1	425	18.0	—	—	3.16
				2	800	24.0	15.5	8.20	3.36
				2	425	23.0	14.5	8.00	3.12
	PV8*B16	FC/MC/PC36B	17	1	430	18.0	—	—	3.16
				2	800	24.0	15.5	8.15	3.36
				2	430	23.0	14.5	8.00	3.12
	P(C,V)9*B12	FC/MC/PC36B	17	1	425	18.0	—	—	3.16
				2	800	24.0	15.5	8.20	3.36
				2	425	23.0	14.5	8.00	3.12
PV9*B12	FC/MC/PC42B	17	1	430	18.1	—	—	3.16	
			2	800	24.0	15.4	8.20	3.34	
			2	430	23.0	14.4	8.00	3.12	
P(C,V)9*B12	FC/MC/PC42B	17	1	425	18.1	—	—	3.16	
			2	800	24.0	15.5	8.20	3.36	
			2	425	23.0	14.5	8.00	3.12	
PV8*B16	HC36	17	1	430	18.0	—	—	3.16	
			2	800	24.0	15.5	8.15	3.36	
			2	430	23.0	14.5	8.00	3.12	
P(C,V)9*B12	HC36	17	1	425	18.0	—	—	3.16	
			2	800	24.0	15.5	8.20	3.36	
			2	425	23.0	14.5	8.00	3.12	
PV8*B16	HD36	—	1	430	18.0	—	—	3.16	
			2	800	24.0	15.5	8.15	3.36	
			2	430	23.0	14.5	8.00	3.12	
P(C,V)9*B12	HD36	—	1	425	18.0	—	—	3.16	
			2	800	24.0	15.5	8.20	3.36	
			2	425	23.0	14.5	8.00	3.12	

For Notes, See Page 11.

HEATING CAPACITY - With Variable Speed Furnaces (Continued)

UNIT MODEL	VARIABLE SPEED FURNACE MODEL	COIL MODEL ¹	W	HEATING					
				STAGE	RATED CFM	NET MBH		HSPF	COP @ 47
						47 OD	17 OD		
YZE03611	PV8*B16	FC/MC/PC42B	17	1	650	23.0	—	—	3.54
				2	1200	33.0	21.0	8.50	3.70
				2	650	29.4	19.6	8.35	3.30
	P(C,V)9*B12	FC/MC/PC42B	17	1	660	23.2	—	—	3.56
				2	1200	33.0	21.2	8.50	3.70
				2	660	29.8	19.9	8.40	3.30
	PV8*C16	HC42	21	1	640	23.0	—	—	3.54
				2	1200	33.0	20.8	8.50	3.70
				2	640	29.4	19.5	8.35	3.30
	PV8*C20	HC42	21	1	640	23.0	—	—	3.54
				2	1200	33.0	20.8	8.50	3.70
				2	640	29.4	19.5	8.35	3.30
	P(C,V)9*C16	HC42	21	1	640	23.0	—	—	3.54
				2	1200	33.0	21.0	8.50	3.70
				2	640	29.4	19.6	8.35	3.30
	P(C,V)9*C20	HC42	21	1	640	23.0	—	—	3.54
				2	1200	33.0	20.8	8.50	3.70
				2	640	29.4	19.6	8.35	3.30
	PV8*C16	HD48	—	1	640	23.0	—	—	3.54
				2	1200	33.0	20.8	8.50	3.70
				2	640	29.4	19.5	8.35	3.30
	PV8*C20	HD48	—	1	640	23.0	—	—	3.54
				2	1200	33.0	20.8	8.50	3.70
				2	640	29.4	19.5	8.35	3.30
	P(C,V)9*C16	HD48	—	1	640	23.0	—	—	3.54
				2	1200	33.0	21.0	8.50	3.70
				2	640	29.4	19.6	8.35	3.30
	P(C,V)9*C20	HD48	—	1	640	23.0	—	—	3.54
				2	1200	33.0	20.8	8.50	3.70
				2	640	29.4	19.6	8.35	3.30
PV8*C16	FC/MC/PC48C	21	1	640	23.0	—	—	3.54	
			2	1200	33.0	20.8	8.50	3.70	
			2	640	29.4	19.5	8.35	3.30	
PV8*C20	FC/MC/PC48C	21	1	640	23.0	—	—	3.54	
			2	1200	33.0	20.8	8.50	3.70	
			2	640	29.4	19.5	8.35	3.30	
P(C,V)9*C16	FC/MC/PC48C	21	1	640	23.0	—	—	3.54	
			2	1200	33.0	21.0	8.50	3.70	
			2	640	29.4	19.6	8.35	3.30	
P(C,V)9*C20	FC/MC/PC48C	21	1	640	23.0	—	—	3.54	
			2	1200	33.0	20.8	8.50	3.70	
			2	640	29.4	19.6	8.35	3.30	
P(C,V)9*D20	FC/MC/PC48D	24	1	680	23.2	—	—	3.56	
			2	1220	33.0	21.0	8.50	3.70	
			2	680	29.6	19.7	8.35	3.30	

For Notes, See Page 11.

HEATING CAPACITY - With Variable Speed Furnaces (Continued)

UNIT MODEL	VARIABLE SPEED FURNACE MODEL	COIL MODEL ¹	W	HEATING					
				STAGE	RATED CFM	NET MBH		HSPF	COP @ 47
						47 OD	17 OD		
YZE03811	PV8C16	FC/PC60C	21	1	800	24.0	—	—	3.80
				2	1200	35.2	21.8	9.35	4.14
				2	800	34.2	19.3	8.80	3.74
	PV8*C20	FC/PC60C	21	1	640	23.6	—	—	3.74
				2	1200	35.2	21.6	9.35	4.14
				2	640	33.6	18.9	8.70	3.70
	P(C,V)9*C16	FC/PC60C	21	1	640	23.6	—	—	3.74
				2	1200	35.2	21.6	9.40	4.14
				2	640	33.6	18.9	8.70	3.70
	P(C,V)9*C20	FC/PC60C	21	1	660	23.6	—	—	3.76
				2	1200	35.2	21.6	9.40	4.14
				2	660	33.8	19.0	8.75	3.70
	P(C,V)9*D20	FC/MC/PC60D	24	1	660	23.6	—	—	3.76
				2	1200	35.2	21.8	9.40	4.14
				2	660	33.6	19.0	8.75	3.70
	PV8*C20	HC60	21	1	640	23.6	—	—	3.74
				2	1200	35.2	21.6	9.35	4.14
				2	640	33.6	18.9	8.70	3.70
	P(C,V)9*D20	HC60	24	1	660	23.6	—	—	3.76
				2	1200	35.2	21.8	9.40	4.14
				2	660	33.6	19.0	8.75	3.70
PV8*C20	HD60	—	1	640	23.6	—	—	3.74	
			2	1200	35.2	21.6	9.35	4.14	
			2	640	33.6	18.9	8.70	3.70	
P(C,V)9*D20	HD60	—	1	660	23.6	—	—	3.76	
			2	1200	35.2	21.8	9.40	4.14	
			2	660	33.6	19.0	8.75	3.70	
P(C,V)9*D20	MC61D	24	1	660	23.6	—	—	3.76	
			2	1200	35.2	21.8	9.40	4.14	
			2	660	33.6	19.0	8.75	3.70	
YZE04811	PV8*C20	FC/PC60C	21	1	860	31.2	—	—	3.56
				2	1610	48.0	27.8	8.35	3.96
				2	860	44.5	26.2	8.30	3.66
	P(C,V)9*C20	FC/PC60C	21	1	870	31.2	—	—	3.56
				2	1590	48.0	27.8	8.40	3.96
				2	870	44.5	26.2	8.30	3.66
	P(C,V)9*D20	FC/MC/PC60D	24	1	855	31.2	—	—	3.56
				2	1620	48.0	28.0	8.40	3.96
				2	855	44.5	26.2	8.30	3.66
	PV8*C20	HC60	24	1	860	31.2	—	—	3.56
				2	1610	48.0	27.8	8.35	3.96
				2	860	44.5	26.2	8.30	3.66
	P(C,V)9*D20	HC60	24	1	855	31.2	—	—	3.56
				2	1620	48.0	28.0	8.40	3.96
				2	855	44.5	26.2	8.30	3.66
	PV8*C20	HD60	—	1	860	31.2	—	—	3.56
				2	1610	48.0	27.8	8.35	3.96
				2	860	44.5	26.2	8.30	3.66
	PV9*D20	HD60	—	1	855	31.2	—	—	3.56
				2	1620	48.0	28.0	8.40	3.96
				2	855	44.5	26.2	8.30	3.66
P(C,V)9*D20	MC61D	24	1	855	31.2	—	—	3.56	
			2	1620	48.0	28.0	8.40	3.98	
			2	855	44.5	26.2	8.30	3.66	

For Notes, See Page 11.

HEATING CAPACITY - With Variable Speed Furnaces (Continued)

UNIT MODEL	VARIABLE SPEED FURNACE MODEL	COIL MODEL ¹	W	HEATING					
				STAGE	RATED CFM	NET MBH		HSPF	COP @ 47
						47 OD	17 OD		
YZE06011	PV8*C20	FC/PC60C	21	1	1030	37.0	—	—	3.22
				2	1730	54.5	32.0	8.05	3.48
				2	1030	49.5	29.6	7.85	3.20
	P(C,V)9*C20	FC/PC60C	21	1	990	36.8	—	—	3.20
				2	1640	54.5	31.6	8.00	3.46
				2	990	49.5	29.2	7.80	3.18
	P(C,V)9*D20	FC/MC/PC60D	24	1	990	36.8	—	—	3.20
				2	1620	54.0	31.4	8.00	3.46
				2	990	49.0	29.0	7.75	3.16
	PV8*C20	HC60	24	1	1030	37.0	—	—	3.22
				2	1730	54.5	32.0	8.05	3.48
				2	1030	49.5	29.6	7.85	3.20
	P(C,V)9*D20	HC60	24	1	990	36.8	—	—	3.20
				2	1620	54.0	31.4	8.00	3.46
				2	990	49.0	29.0	7.75	3.16
	PV8*C20	HD60	—	1	1030	37.0	—	—	3.22
				2	1730	54.5	32.0	8.05	3.48
				2	1030	49.5	29.6	7.85	3.20
	P(C,V)9*D20	HD60	—	1	990	36.8	—	—	3.20
				2	1620	54.0	31.4	8.00	3.46
				2	990	49.0	29.0	7.75	3.16
	PV8*C20	MC61D	24	1	990	36.8	—	—	3.20
				2	1620	54.0	31.4	8.00	3.48
				2	990	49.0	29.0	7.75	3.16
P(C,V)9*D20	MC61D	24	1	990	36.8	—	—	3.20	
			2	1620	54.0	31.4	8.00	3.48	
			2	990	49.0	29.0	7.75	3.16	

1. MC coils available with a factory installed horizontal drain pan. See price pages for specific model number.

ACCESSORIES*

TXV Kits - 1TVM9 series thermal expansion valves precisely meter refrigerant for optimum performance.

Bonnet Sensor (2SB13700124) - The bonnet sensor is used to sense plenum temperature, and is optional with a gas or oil back-up heat source. Compatible only with 13 SEER and higher heat pumps.

Dehumidistat (2HU16700124) - Provides increased dehumidification when matched with variable speed furnace or air handler.

Heat Pump Risers - (526-35389-000, 526-35390-000, 526-35391-000) - 3", 6", or 12" risers mount easily in composite base pan recesses, ensuring the unit stays clear of snow and ice build-up in harsh winter weather.

Room Thermostats - A wide selection of matching thermostats is available to provide features required for any installation.

3H/2C, non-programmable digital thermostat.

3H/2C, auto/manual changeover, electronic programmable, 7-day, thermostat.

* For the most current accessory information, refer to the price book or consult factory.

SOUND POWER RATINGS*

UNIT MODEL	(dBA)	
	Cooling	Heating
024	71	72
036	72	73
038	70	71
048	72	73
060	73	74

* Rated in accordance with ARI 270-95 Standards.

COLOR GRILLES

CHOICE OF SEVERAL COLOR COIL GRILLES TO COMPLIMENT ANY HOME.		
Color Grill	Color Description	
1CP0130	Terra Cotta	024
1CP0136	Terra Cotta	036, 038, 048, 060
1CP0230	Jet Black	024
1CP0236	Jet Black	036, 038, 048, 060
1CP0330	Stone	024
1CP0336	Stone	036, 048, 060
1CP0430	Bermuda	024
1CP0436	Bermuda	036, 038, 048, 060
1CP0530	Gunmetal	024
1CP0536	Gunmetal	036, 038, 048, 060
1CP0630	Chocolate	024
1CP0636	Chocolate	036, 038, 048, 060

COOLING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		YZE02411														
INDOOR COIL MODEL NO.		FC/MC36B + MV12B														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	550					600					650				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	57	62	62	67	72	57
65	T.C.	19.5	30.3	25.6	25.2	19.8	20.4	31.2	26.6	26.2	20.0	21.4	32.2	27.6	27.1	20.3
	S.C.	18.0	3.2	3.2	3.3	3.3	18.8	3.3	3.2	3.3	3.3	19.7	3.3	3.2	3.3	3.3
	K.W.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.0	1.0
75	T.C.	18.6	19.2	18.4	20.8	22.6	19.5	19.7	18.8	21.2	23.2	20.3	20.3	19.2	21.5	23.7
	S.C.	17.1	16.7	13.7	14.1	11.1	17.9	17.7	14.5	14.8	11.7	18.6	18.6	15.2	15.5	12.4
	K.W.	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.2	1.2	1.2	1.1	1.1
85	T.C.	17.7	18.1	17.4	19.6	21.3	18.5	18.5	17.9	19.9	21.6	19.3	19.0	18.4	20.2	22.0
	S.C.	16.2	16.0	13.2	13.6	10.7	16.9	16.9	13.9	14.1	11.3	17.6	17.8	14.6	14.7	11.8
	K.W.	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2
95	T.C.	16.9	17.0	16.4	18.3	20.0	17.6	17.4	16.7	18.6	20.3	18.4	17.9	17.1	18.9	20.5
	S.C.	15.3	15.3	12.6	13.0	10.3	16.0	16.1	13.3	13.6	10.8	16.7	17.0	14.0	14.2	11.3
	K.W.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
105	T.C.	16.1	16.0	15.2	17.1	18.6	16.8	16.4	15.5	17.4	18.8	17.5	16.8	15.9	17.6	19.0
	S.C.	14.6	14.8	12.1	12.5	9.9	15.2	15.5	12.7	13.1	10.3	15.8	16.2	13.4	13.7	10.7
	K.W.	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
115	T.C.	15.4	15.0	14.0	15.9	17.2	16.0	15.3	14.3	16.1	17.4	16.7	15.7	14.7	16.4	17.6
	S.C.	13.8	14.3	11.6	12.1	9.4	14.4	14.8	12.2	12.6	9.8	14.9	15.4	12.8	13.2	10.2
	K.W.	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.9
125	T.C.	14.7	13.9	12.8	14.7	15.8	15.3	14.3	13.1	14.9	16.0	15.8	14.6	13.4	15.1	16.2
	S.C.	13.1	13.7	11.0	11.6	9.0	13.6	14.2	11.6	12.2	9.4	14.1	14.6	12.2	12.7	9.7
	K.W.	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2

NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	T.C.	S.C.	KW
AV24	-	1.01	1.00	1.00
MV12B	FC/MC42B	0.97	1.06	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*A12	FC/MC/PC24A	0.99	1.06	1.01
PV9*A12	FC/MC/PC24A	0.99	1.06	1.01
PV8*B16	FC/MC/PC24B	0.99	1.06	1.01
P(C,V)9*B12	FC/MC/PC24B	0.99	1.06	1.01
PV8*A12	FC/MC/PC30A	0.99	1.06	1.01
PV9*A12	FC/MC/PC30A	0.99	1.06	1.01
PV8*B16	FC/MC/PC30B	0.99	1.06	1.01
P(C,V)9*B12	FC/MC/PC30B	0.99	1.06	1.01
PV8*A12	FC/MC/PC36A	0.94	0.85	0.92
PV9*A12	FC/MC/PC36A	0.99	1.01	0.99
PV8*B16	FC/MC/PC36B	0.94	0.85	0.92
P(C,V)9*B12	FC/MC/PC36B	0.99	1.01	0.99
PV8*B16	FC/MC/PC42B	0.91	0.88	0.89
P(C,V)9*B12	FC/MC/PC42B	0.96	0.99	0.98
PV8*B16	HC36	0.94	0.85	0.92
P(C,V)9*B12	HC36	0.99	1.01	0.99
PV8*B16	HD36	0.94	0.85	0.92
P(C,V)9*B12	HD36	0.99	1.01	0.99

COOLING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		YZE02411														
INDOOR COIL MODEL NO.		FC/MC36B + MV12B														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	700					800					900				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	57	62	62	67	72	57
65	T.C.	23.9	24.9	23.7	27.3	29.1	25.2	25.8	24.6	28.0	30.0	26.5	26.7	25.4	28.8	30.9
	S.C.	22.6	21.7	18.0	18.9	14.6	23.8	23.1	19.5	20.3	15.7	24.9	24.5	21.0	21.6	16.8
	K.W.	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5
75	T.C.	23.4	24.1	23.0	26.1	28.0	24.6	24.9	23.7	26.9	28.8	25.9	25.8	24.4	27.6	29.6
	S.C.	22.1	21.5	17.7	18.3	14.3	23.2	22.9	19.1	19.7	15.4	24.3	24.3	20.5	21.0	16.5
	K.W.	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
85	T.C.	22.9	23.2	22.2	25.0	26.9	24.1	24.1	22.8	25.7	27.6	25.2	24.9	23.5	26.4	28.3
	S.C.	21.6	21.2	17.4	17.8	14.0	22.7	22.6	18.8	19.2	15.0	23.6	24.1	20.1	20.5	16.1
	K.W.	1.7	1.8	1.7	1.8	1.8	1.7	1.8	1.7	1.8	1.8	1.8	1.8	1.7	1.8	1.8
95	T.C.	22.4	22.4	21.5	23.9	25.8	23.5	23.2	22.0	24.6	26.4	24.6	24.0	22.5	25.3	27.1
	S.C.	21.2	20.9	17.1	17.3	13.6	22.1	22.4	18.4	18.6	14.7	23.0	23.8	19.7	19.9	15.7
	K.W.	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
105	T.C.	21.3	21.1	20.0	22.5	24.1	22.4	22.0	20.5	23.2	24.7	23.4	22.8	21.0	23.8	25.3
	S.C.	20.2	20.0	16.4	16.8	13.2	21.0	21.2	17.6	18.1	14.1	21.8	22.3	18.9	19.4	15.1
	K.W.	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.3	2.2	2.3	2.3
115	T.C.	20.3	19.9	18.7	21.2	22.5	21.3	20.8	19.2	21.7	23.0	22.2	21.6	19.6	22.3	23.5
	S.C.	19.2	19.1	15.6	16.3	12.7	19.9	20.0	16.9	17.6	13.6	20.6	20.9	18.1	18.9	14.5
	K.W.	2.5	2.5	2.5	2.5	2.6	2.5	2.5	2.5	2.5	2.6	2.5	2.5	2.5	2.5	2.6
125	T.C.	19.3	18.8	17.3	19.8	20.9	20.2	19.6	17.8	20.3	21.3	21.0	20.4	18.2	20.8	21.7
	S.C.	18.2	18.2	14.9	15.8	12.3	18.8	18.9	16.1	17.1	13.1	19.4	19.4	17.3	18.4	14.0
	K.W.	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8

NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	T.C.	S.C.	KW
AV24	-	1.01	1.00	1.00
MV12B	FC/MC42B	0.96	1.05	0.99

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*A12	FC/MC/PC24A	1.00	1.02	1.00
PV9*A12	FC/MC/PC24A	1.00	1.02	1.00
PV8*B16	FC/MC/PC24B	1.00	1.02	1.00
P(C,V)9*B12	FC/MC/PC24B	1.00	1.02	1.00
PV8*A12	FC/MC/PC30A	1.00	1.02	1.00
PV9*A12	FC/MC/PC30A	1.00	1.02	1.00
PV8*B16	FC/MC/PC30B	1.00	1.02	1.00
P(C,V)9*B12	FC/MC/PC30B	1.00	1.02	1.00
PV8*A12	FC/MC/PC36A	1.01	1.02	0.99
PV9*A12	FC/MC/PC36A	1.01	1.03	0.99
PV8*B16	FC/MC/PC36B	1.01	1.02	0.99
P(C,V)9*B12	FC/MC/PC36B	1.01	1.03	0.99
PV8*B16	FC/MC/PC42B	1.00	1.03	0.97
P(C,V)9*B12	FC/MC/PC42B	1.00	1.03	0.97
PV8*B16	HC36	1.01	1.02	0.99
P(C,V)9*B12	HC36	1.01	1.03	0.99
PV8*B16	HD36	1.01	1.02	0.99
P(C,V)9*B12	HD36	1.01	1.03	0.99

COOLING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		YZE03611														
INDOOR COIL MODEL NO.		FC/MC48C + MV16C														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	750					800					850				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	57	62	62	67	72	57
65	T.C.	24.3	26.1	25.5	28.1	31.9	24.8	26.4	25.9	28.5	32.2	25.3	26.6	26.3	28.8	32.5
	S.C.	23.9	22.4	18.5	19.1	15.6	24.4	22.8	19.1	19.5	16.2	24.9	23.2	19.7	19.9	16.8
	K.W.	1.3	1.3	1.3	1.3	1.2	1.3	1.3	1.3	1.2	1.2	1.3	1.3	1.3	1.2	1.2
75	T.C.	23.2	24.9	24.5	27.0	30.6	23.7	25.2	24.8	27.3	30.9	24.2	25.4	25.2	27.6	31.1
	S.C.	22.8	21.6	18.1	18.5	15.3	23.3	22.1	18.7	19.0	15.8	23.8	22.6	19.2	19.5	16.3
	K.W.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.4
85	T.C.	22.1	23.6	23.4	25.9	29.4	22.6	23.9	23.7	26.2	29.5	23.1	24.2	24.1	26.4	29.7
	S.C.	21.7	20.8	17.7	17.9	15.0	22.2	21.4	18.2	18.5	15.4	22.7	22.0	18.8	19.1	15.8
	K.W.	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
95	T.C.	21.0	22.3	22.4	24.8	28.1	21.5	22.7	22.6	25.0	28.2	21.9	23.0	22.9	25.2	28.3
	S.C.	20.7	20.0	17.3	17.3	14.6	21.1	20.7	17.8	18.0	15.0	21.6	21.4	18.3	18.7	15.4
	K.W.	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	1.9	1.9
105	T.C.	19.8	20.9	20.9	23.1	26.1	20.3	21.2	21.1	23.3	26.2	20.7	21.6	21.4	23.5	26.4
	S.C.	19.5	19.1	16.3	16.6	13.9	20.0	19.8	16.9	17.3	14.2	20.4	20.4	17.4	18.0	14.5
	K.W.	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.2
115	T.C.	18.7	19.5	19.4	21.5	24.2	19.1	19.8	19.6	21.7	24.3	19.5	20.2	19.9	21.9	24.5
	S.C.	18.4	18.3	15.4	16.0	13.3	18.8	18.9	16.0	16.6	13.5	19.2	19.4	16.5	17.3	13.7
	K.W.	2.7	2.6	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5
125	T.C.	17.5	18.0	18.0	19.9	22.3	17.9	18.4	18.2	20.1	22.5	18.3	18.7	18.3	20.3	22.6
	S.C.	17.3	17.4	14.4	15.4	12.6	17.7	18.0	15.0	16.0	12.8	18.1	18.5	15.7	16.6	12.9
	K.W.	3.0	3.0	3.0	2.9	2.9	3.0	3.0	3.0	2.9	2.9	3.0	2.9	2.9	2.9	2.9

NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	T.C.	S.C.	KW
AV/SV48	-	1.00	1.00	1.00
MV12B	FC/MC42B	0.98	0.98	1.00
MV20D	FC/MC48D	0.99	1.00	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*B16	FC/MC/PC42B	0.92	0.89	0.98
P(C,V)9*B12	FC/MC/PC42B	0.98	1.05	1.02
PV8*C16	FC/MC/PC42C	0.92	0.89	0.98
PV8*C20	FC/MC/PC42C	0.92	0.89	0.98
P(C,V)9*C16	FC/MC/PC42C	0.98	1.05	1.02
P(C,V)9*C20	FC/MC/PC42C	0.98	1.05	1.02
PV8*C16	FC/MC/PC48C	0.97	0.93	0.98
PV8*C20	FC/MC/PC48C	0.97	0.93	0.98
P(C,V)9*C16	FC/MC/PC48C	1.00	1.08	1.00
P(C,V)9*C20	FC/MC/PC48C	1.01	1.09	1.00
P(C,V)9*D20	FC/MC/PC48D	1.00	1.07	1.00
PV8*C16	HC42	0.97	0.93	0.98
PV8*C20	HC42	0.97	0.93	0.98
P(C,V)9*C16	HC42	1.00	1.08	1.00
P(C,V)9*C20	HC42	1.01	1.09	1.00
PV8*C16	HD48	0.97	0.93	0.98
PV8*C20	HD48	0.97	0.93	0.98
P(C,V)9*C16	HD48	1.00	1.08	1.00
P(C,V)9*C20	HD48	1.01	1.09	1.00

COOLING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		YZE03611														
INDOOR COIL MODEL NO.		FC/MC48C + MV16C														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1100					1200					1300				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	57	62	62	67	72	57
65	T.C.	31.6	36.2	37.2	37.3	38.5	33.1	36.3	37.6	37.4	38.3	34.7	36.5	37.9	37.6	38.1
	S.C.	31.2	30.3	26.6	24.5	19.1	32.9	31.3	27.6	24.9	19.3	34.5	32.3	28.5	25.4	19.5
	K.W.	1.9	2.0	2.1	2.0	2.1	2.0	2.0	2.1	2.0	2.1	2.0	2.0	2.1	2.0	2.1
75	T.C.	30.9	34.6	35.3	36.5	38.4	32.4	34.9	35.7	36.8	38.3	33.9	35.2	36.0	37.0	38.1
	S.C.	30.7	29.7	25.8	24.4	19.4	32.1	30.8	26.8	25.1	19.6	33.5	31.9	27.7	25.8	19.8
	K.W.	2.2	2.3	2.3	2.3	2.4	2.2	2.3	2.3	2.3	2.4	2.3	2.3	2.4	2.3	2.4
85	T.C.	30.3	33.1	33.4	35.7	38.3	31.7	33.5	33.8	36.1	38.2	33.0	34.0	34.1	36.4	38.2
	S.C.	30.1	29.1	25.0	24.4	19.7	31.3	30.4	26.0	25.2	19.9	32.4	31.6	26.9	26.1	20.2
	K.W.	2.5	2.5	2.5	2.6	2.6	2.5	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.6	2.7
95	T.C.	29.7	31.6	31.5	34.9	38.1	30.9	32.1	31.9	35.4	38.2	32.2	32.7	32.2	35.9	38.3
	S.C.	29.5	28.5	24.2	24.4	20.0	30.4	29.9	25.2	25.4	20.2	31.4	31.2	26.1	26.4	20.5
	K.W.	2.8	2.8	2.8	2.8	2.9	2.8	2.8	2.8	2.9	2.9	2.8	2.9	2.8	2.9	3.0
105	T.C.	28.2	29.7	29.6	32.5	35.8	29.3	30.3	29.9	33.0	36.0	30.4	30.9	30.2	33.5	36.2
	S.C.	28.0	27.2	23.2	23.3	19.0	28.8	28.5	23.9	24.3	19.4	29.7	29.7	24.6	25.3	19.7
	K.W.	3.2	3.2	3.2	3.3	3.3	3.2	3.3	3.2	3.3	3.4	3.3	3.3	3.2	3.3	3.4
115	T.C.	26.7	27.9	27.7	30.2	33.5	27.7	28.5	28.0	30.7	33.8	28.6	29.1	28.3	31.2	34.2
	S.C.	26.6	26.0	22.3	22.3	18.0	27.3	27.1	22.7	23.3	18.5	28.0	28.1	23.1	24.3	19.0
	K.W.	3.6	3.7	3.6	3.7	3.8	3.7	3.7	3.6	3.7	3.8	3.7	3.7	3.6	3.8	3.8
125	T.C.	25.3	26.0	25.9	27.9	31.2	26.0	26.7	26.2	28.4	31.7	26.8	27.3	26.4	29.0	32.2
	S.C.	25.1	24.7	21.3	21.3	17.0	25.7	25.7	21.5	22.3	17.6	26.3	26.6	21.6	23.2	18.2
	K.W.	4.1	4.1	4.1	4.2	4.2	4.1	4.1	4.1	4.2	4.2	4.1	4.1	4.0	4.2	4.2

NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	T.C.	S.C.	KW
AV/SV48	-	1.00	1.00	1.00
MV12B	FC/MC42B	0.99	0.93	1.01
MV20D	FC/MC48D	1.00	1.00	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*B16	FC/MC/PC42B	1.01	0.94	1.03
P(C,V)9*B12	FC/MC/PC42B	1.09	0.91	1.12
PV8*C16	FC/MC/PC42C	1.01	0.94	1.03
PV8*C20	FC/MC/PC42C	1.01	0.94	1.03
P(C,V)9*C16	FC/MC/PC42C	1.09	0.91	1.12
P(C,V)9*C20	FC/MC/PC42C	1.09	0.91	1.12
PV8*C16	FC/MC/PC48C	1.05	1.02	1.05
PV8*C20	FC/MC/PC48C	1.05	1.02	1.05
P(C,V)9*C16	FC/MC/PC48C	1.11	1.00	1.11
P(C,V)9*C20	FC/MC/PC48C	1.11	1.00	1.11
P(C,V)9*D20	FC/MC/PC48D	1.11	1.00	1.11
PV8*C16	HC42	1.05	1.02	1.05
PV8*C20	HC42	1.05	1.02	1.05
P(C,V)9*C16	HC42	1.11	1.00	1.11
P(C,V)9*C20	HC42	1.11	1.00	1.11
PV8*C16	HD48	1.05	1.02	1.05
PV8*C20	HD48	1.05	1.02	1.05
P(C,V)9*C16	HD48	1.11	1.00	1.11
P(C,V)9*C20	HD48	1.11	1.00	1.11

COOLING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		YZE03811														
INDOOR COIL MODEL NO.		MC61D + MV12D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	700					750					800				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	24.3	26.0	26.0	28.7	31.7	24.8	26.4	26.3	28.9	32.1	25.3	26.7	26.6	29.2	32.5
	S.C.	24.0	22.6	19.1	18.9	15.8	24.6	23.5	19.9	19.8	16.2	25.1	24.3	20.6	20.7	16.7
	K.W.	1.1	1.0	1.1	1.0	1.0	1.1	1.0	1.1	1.0	1.0	1.1	1.0	1.1	1.0	1.0
75	T.C.	23.3	24.6	24.5	27.3	30.3	23.8	25.0	24.8	27.6	30.7	24.2	25.3	25.2	27.9	31.0
	S.C.	23.0	21.8	18.5	18.5	15.2	23.5	22.7	19.3	19.3	15.6	24.0	23.6	20.0	20.1	16.0
	K.W.	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2
85	T.C.	22.3	23.1	23.0	25.9	28.9	22.7	23.5	23.4	26.3	29.2	23.2	23.9	23.7	26.7	29.5
	S.C.	22.1	21.1	17.9	18.0	14.6	22.5	22.0	18.6	18.8	15.0	22.9	22.9	19.3	19.6	15.4
	K.W.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
95	T.C.	21.3	21.6	21.5	24.5	27.4	21.7	22.1	21.9	25.0	27.7	22.1	22.5	22.3	25.5	28.0
	S.C.	21.1	20.3	17.3	17.5	13.9	21.5	21.2	18.0	18.7	14.4	21.9	22.1	18.6	19.0	14.8
	K.W.	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
105	T.C.	19.6	20.3	19.9	22.6	25.3	20.0	20.7	20.2	23.0	25.5	20.4	21.0	20.6	23.4	25.8
	S.C.	19.5	18.8	16.5	16.8	13.2	19.9	19.6	17.2	17.5	13.7	20.3	20.4	17.9	18.2	14.1
	K.W.	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
115	T.C.	18.1	19.0	18.3	20.7	23.2	18.4	19.3	18.6	21.0	23.4	18.7	19.6	18.9	21.3	23.6
	S.C.	17.9	17.4	15.8	16.1	12.5	18.3	18.0	16.4	16.8	13.0	18.7	18.7	17.1	17.5	13.5
	K.W.	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
125	T.C.	16.5	17.7	16.7	18.9	21.1	16.8	17.9	17.0	19.1	21.3	17.1	18.2	17.3	19.2	21.5
	S.C.	16.4	15.9	15.0	15.5	11.8	16.8	16.5	15.7	16.1	12.3	17.0	17.0	16.3	16.8	12.8
	K.W.	2.7	2.7	2.7	2.6	2.6	2.7	2.6	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.6

NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	T.C.	S.C.	KW
F*FV060	-	0.99	0.99	1.02
AV/SV48	-	0.99	0.99	1.02
MV20D	FC/MC60D	0.99	0.99	1.02
MV20D	MC61D	1.00	1.00	1.02

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C16	FC/MC60C	0.99	0.99	1.02
PV8*C20	FC/MC60C	0.99	0.99	1.02
P(C,V)9*C16	FC/MC60C	0.99	0.99	1.02
P(C,V)9*C20	FC/MC60C	0.99	0.99	1.02
P(C,V)9*D20	FC/MC/PC60D	0.99	0.99	1.02
PV8*C20	HC60	0.99	0.99	1.02
P(C,V)9*C20	HC60	0.99	0.99	1.02
PV8*C20	HD60	0.99	0.99	1.02
P(C,V)9*C20	HD60	0.99	0.99	1.02
P(C,V)9*D20	MC61D	0.99	0.99	1.02

COOLING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		YZE03811														
INDOOR COIL MODEL NO.		MC61D + MV12D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1000					1100					1200				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	57	62	62	67	72	57
65	T.C.	35.2	37.5	37.3	41.3	46.9	36.2	38.4	37.5	42.0	47.6	37.3	39.3	37.6	42.8	48.2
	S.C.	34.4	32.8	28.6	28.1	22.6	35.0	34.2	29.8	29.4	23.4	35.6	35.5	30.9	30.6	24.2
	K.W.	1.8	1.8	1.9	1.9	2.0	1.8	1.8	1.8	1.9	2.0	1.9	1.8	1.8	1.9	2.0
75	T.C.	33.7	35.7	35.5	39.3	44.5	34.7	36.5	35.8	40.0	45.1	35.6	37.3	36.0	40.7	45.7
	S.C.	33.0	31.7	27.6	27.2	21.8	33.6	33.0	28.7	28.4	22.6	34.2	34.3	29.8	29.6	23.4
	K.W.	2.1	2.1	2.1	2.1	2.3	2.1	2.1	2.1	2.1	2.3	2.1	2.1	2.1	2.2	2.3
85	T.C.	32.3	33.8	33.7	37.3	42.0	33.1	34.5	34.1	38.0	42.7	33.9	35.2	34.4	38.7	43.3
	S.C.	31.6	30.7	26.5	26.3	21.0	32.3	31.9	27.7	27.5	21.8	32.9	33.0	28.8	28.6	22.5
	K.W.	2.3	2.3	2.3	2.4	2.5	2.3	2.3	2.3	2.4	2.5	2.4	2.4	2.3	2.4	2.5
95	T.C.	30.9	32.0	31.9	35.3	39.6	31.6	32.6	32.4	36.0	40.2	32.2	33.1	32.9	36.6	40.8
	S.C.	30.2	29.7	25.5	25.3	20.2	30.9	30.7	26.6	27.4	21.0	31.6	31.8	27.7	27.6	21.7
	K.W.	2.6	2.6	2.6	2.7	2.8	2.6	2.6	2.6	2.7	2.8	2.6	2.6	2.6	2.7	2.8
105	T.C.	29.3	30.1	29.7	33.1	37.0	30.0	30.8	30.3	33.7	37.5	30.6	31.5	30.8	34.2	37.9
	S.C.	28.8	28.3	24.4	24.5	19.4	29.5	29.2	25.5	25.8	20.2	30.2	30.0	26.6	27.0	20.9
	K.W.	3.0	3.0	3.0	3.1	3.1	3.0	3.0	3.0	3.1	3.1	3.0	3.0	3.0	3.1	3.2
115	T.C.	27.8	28.2	27.6	30.9	34.5	28.5	29.1	28.2	31.4	34.8	29.0	30.0	28.7	31.8	35.1
	S.C.	27.4	27.0	23.4	23.8	18.7	28.1	27.7	24.5	25.1	19.4	28.8	28.3	25.6	26.4	20.1
	K.W.	3.4	3.4	3.4	3.4	3.5	3.4	3.4	3.4	3.4	3.5	3.5	3.4	3.4	3.5	3.5
125	T.C.	26.3	26.3	25.6	28.7	31.9	26.9	27.4	26.1	29.1	32.2	27.5	28.5	26.7	29.5	32.3
	S.C.	26.0	25.7	22.4	23.0	17.9	26.7	26.2	23.5	24.4	18.6	27.4	26.6	24.5	25.7	19.3
	K.W.	3.8	3.8	3.7	3.8	3.9	3.9	3.8	3.7	3.8	3.9	3.9	3.8	3.8	3.8	3.9

NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	T.C.	S.C.	KW
F*FV060	-	1.00	1.00	1.00
AV/SV48	-	1.00	1.00	1.00
MV20D	FC/MC60D	1.00	1.00	1.00
MV20D	MC61D	1.01	1.00	1.01

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C16	FC/MC60C	1.00	0.98	1.00
PV8*C20	FC/MC60C	1.00	0.98	1.00
P(C,V)9*C16	FC/MC60C	1.00	0.98	1.00
P(C,V)9*C20	FC/MC60C	1.00	0.98	1.00
P(C,V)9*D20	FC/MC/PC60D	1.00	0.98	1.00
PV8*C20	HC60	1.00	0.98	1.00
P(C,V)9*C20	HC60	1.00	0.98	1.00
PV8*C20	HD60	1.00	0.98	1.00
P(C,V)9*C20	HD60	1.00	0.98	1.00
P(C,V)9*D20	MC61D	1.00	0.98	1.00

COOLING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		YZE04811														
INDOOR COIL MODEL NO.		FC/MC60D + MV20D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	950					1000					1050				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	31.6	34.3	34.2	39.4	44.4	31.9	34.5	34.8	40.0	44.9	32.3	34.8	35.4	40.6	45.4
	S.C.	31.6	29.3	24.7	25.3	20.9	31.9	29.9	25.4	26.0	21.3	32.3	30.5	26.2	26.8	21.7
	K.W.	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
75	T.C.	30.4	32.4	32.5	37.2	42.1	30.7	32.7	33.0	37.7	42.5	31.1	33.0	33.5	38.2	43.0
	S.C.	30.3	28.2	23.9	24.5	20.0	30.7	28.8	24.6	25.2	20.4	31.1	29.4	25.3	25.9	20.9
	K.W.	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
85	T.C.	29.2	30.6	30.8	35.1	39.7	29.5	30.8	31.2	35.5	40.1	29.9	31.1	31.5	35.9	40.5
	S.C.	29.1	27.0	23.2	23.6	19.1	29.5	27.6	23.9	24.3	19.6	29.9	28.2	24.5	25.0	20.0
	K.W.	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2
95	T.C.	28.0	28.7	29.1	32.9	37.3	28.4	29.0	29.4	33.2	37.7	28.7	29.2	29.6	33.5	38.0
	S.C.	27.9	25.9	22.5	22.8	18.3	28.3	26.5	23.1	23.5	18.7	28.7	27.1	23.6	24.2	19.2
	K.W.	2.6	2.6	2.6	2.5	2.5	2.6	2.6	2.6	2.5	2.5	2.6	2.6	2.6	2.5	2.5
105	T.C.	26.3	26.7	27.0	30.6	34.8	26.8	27.2	27.2	30.8	35.1	27.2	27.6	27.5	31.1	35.4
	S.C.	26.2	24.9	21.5	22.0	17.5	26.7	25.5	22.0	22.6	17.9	27.1	26.2	22.6	23.2	18.4
	K.W.	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
115	T.C.	24.7	24.8	24.9	28.3	32.4	25.3	25.4	25.2	28.5	32.6	25.8	26.1	25.4	28.7	32.9
	S.C.	24.6	23.9	20.5	21.1	16.8	25.1	24.6	21.1	21.7	17.2	25.6	25.4	21.6	22.3	17.5
	K.W.	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
125	T.C.	23.2	22.8	22.8	26.1	30.0	23.7	23.7	23.1	26.2	30.1	24.3	24.5	23.4	26.3	30.3
	S.C.	23.0	22.9	19.6	20.3	16.1	23.6	23.7	20.1	20.9	16.4	24.1	24.5	20.6	21.4	16.7
	K.W.	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8

NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	T.C.	S.C.	KW
F*FV060	-	1.00	1.00	1.00
AV/SV48	-	1.00	1.00	1.00
MV20D	MC61D	1.01	1.01	0.99

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	PC/PC60C	0.98	0.94	0.99
P(C,V)9*C20	FC/PC60C	1.00	1.09	1.02
P(C,V)9*D20	FC/MC/PC60D	0.98	0.94	0.99
PV8*C20	HC60	0.98	0.94	0.99
P(C,V)9*D20	HC60	0.98	0.94	0.99
PV8*C20	HD60	0.98	0.94	0.99
P(C,V)9*D20	HD60	0.98	0.94	0.99
P(C,V)9*D20	MC61D	1.00	1.09	1.02

COOLING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		YZE04811														
INDOOR COIL MODEL NO.		FC/MC60D + MV20D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1500					1600					1700				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	42.6	46.0	47.1	52.2	59.2	43.3	46.5	47.6	52.8	59.5	44.0	46.9	48.0	53.4	59.7
	S.C.	43.5	41.8	35.9	36.2	29.0	44.2	42.9	37.0	37.3	29.6	44.9	44.0	38.0	38.4	30.2
	K.W.	2.6	2.6	2.6	2.7	2.8	2.6	2.7	2.7	2.8	2.9	2.7	2.7	2.7	2.8	2.9
75	T.C.	41.4	44.1	45.0	50.0	56.4	42.1	44.5	45.4	50.6	56.7	42.7	44.9	45.9	51.1	57.0
	S.C.	42.2	40.7	35.0	35.3	28.0	42.9	41.7	36.1	36.3	28.7	43.6	42.7	37.1	37.4	29.3
	K.W.	2.9	3.0	3.0	3.1	3.2	3.0	3.0	3.0	3.1	3.2	3.0	3.1	3.1	3.2	3.3
85	T.C.	40.2	42.2	42.9	47.8	53.6	40.8	42.6	43.3	48.3	53.9	41.5	43.0	43.7	48.7	54.3
	S.C.	41.0	39.6	34.1	34.3	27.1	41.6	40.6	35.2	35.4	27.7	42.2	41.5	36.2	36.4	28.3
	K.W.	3.3	3.3	3.3	3.4	3.5	3.3	3.3	3.4	3.4	3.5	3.4	3.4	3.4	3.5	3.6
95	T.C.	39.0	40.2	40.8	45.6	50.8	39.6	40.7	41.2	46.0	51.2	40.2	41.1	41.6	46.3	51.5
	S.C.	39.7	38.4	33.3	33.3	26.1	40.3	39.4	34.3	34.4	26.8	40.8	40.3	35.3	35.5	27.4
	K.W.	3.6	3.7	3.7	3.7	3.8	3.7	3.7	3.7	3.8	3.9	3.7	3.7	3.7	3.8	3.9
105	T.C.	36.7	37.5	37.7	42.4	47.2	37.2	37.9	38.1	42.7	47.6	37.7	38.2	38.4	43.0	48.0
	S.C.	37.3	36.4	31.4	32.1	25.2	37.8	37.1	32.4	33.1	25.7	38.2	37.8	33.3	34.1	26.3
	K.W.	4.2	4.2	4.1	4.2	4.3	4.2	4.2	4.2	4.3	4.4	4.2	4.2	4.2	4.3	4.4
115	T.C.	34.5	34.9	34.7	39.3	43.6	34.9	35.2	35.1	39.5	44.1	35.3	35.5	35.4	39.8	44.5
	S.C.	35.0	34.3	29.6	30.9	24.2	35.4	34.8	30.5	31.8	24.7	35.7	35.3	31.3	32.7	25.2
	K.W.	4.6	4.6	4.6	4.7	4.8	4.7	4.7	4.7	4.8	4.8	4.7	4.7	4.7	4.8	4.9
125	T.C.	32.3	32.3	31.8	36.2	40.1	32.6	32.5	32.0	36.4	40.6	32.8	32.7	32.3	36.5	41.0
	S.C.	32.7	32.3	27.9	29.6	23.3	32.9	32.6	28.6	30.5	23.7	33.2	32.8	29.3	31.4	24.1
	K.W.	5.1	5.1	5.1	5.2	5.3	5.2	5.2	5.1	5.2	5.3	5.2	5.2	5.2	5.3	5.4

NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	T.C.	S.C.	KW
F*FV060	-	0.95	1.00	0.95
AV/SV48	-	0.95	1.00	0.95
MV20D	MC61D	1.01	1.01	1.01

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	PC/PC60C	1.02	0.98	1.02
P(C,V)9*C20	FC/PC60C	1.07	0.97	1.07
P(C,V)9*D20	FC/MC/PC60D	1.02	0.98	1.02
PV8*C20	HC60	1.02	0.98	1.02
P(C,V)9*D20	HC60	1.02	0.98	1.02
PV8*C20	HD60	1.02	0.98	1.02
P(C,V)9*D20	HD60	1.02	0.98	1.02
P(C,V)9*D20	MC61D	1.07	0.97	1.07

COOLING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		YZE06011														
INDOOR COIL MODEL NO.		MC61D + MV20D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1100					1150					1200				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	57	62	62	67	72	57
65	T.C.	37.0	39.7	40.4	44.5	49.2	37.7	40.2	40.9	44.9	49.8	38.4	40.8	41.4	45.2	50.3
	S.C.	37.9	34.8	29.7	29.4	24.3	38.6	36.1	30.4	30.1	23.9	39.2	37.3	31.1	30.7	23.6
	K.W.	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75	T.C.	35.5	37.7	38.3	42.3	46.9	36.1	38.2	38.7	42.7	47.3	36.8	38.7	39.1	43.1	47.8
	S.C.	36.3	33.7	28.7	28.5	23.1	37.0	34.7	29.3	29.2	23.1	37.6	35.8	30.0	29.8	23.1
	K.W.	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
85	T.C.	34.0	35.7	36.1	40.2	44.6	34.6	36.2	36.4	40.6	44.9	35.1	36.6	36.8	41.1	45.3
	S.C.	34.8	32.5	27.7	27.7	21.9	35.4	33.4	28.3	28.3	22.3	36.0	34.3	28.9	28.9	22.6
	K.W.	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
95	T.C.	32.5	33.7	33.9	38.0	42.3	33.0	34.1	34.2	38.5	42.5	33.5	34.5	34.5	39.0	42.7
	S.C.	33.3	31.4	26.6	26.8	20.8	33.8	32.1	27.2	27.4	21.4	34.3	32.7	27.8	28.0	22.1
	K.W.	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
105	T.C.	30.7	31.5	31.5	35.5	39.4	31.2	31.9	31.8	35.8	39.6	31.6	32.2	32.2	36.1	39.7
	S.C.	31.4	30.1	25.6	25.7	19.9	31.9	30.7	26.2	26.3	20.5	32.4	31.3	26.8	27.0	21.0
	K.W.	3.8	3.8	3.8	3.8	3.8	3.9	3.8	3.8	3.8	3.8	3.9	3.9	3.9	3.8	3.8
115	T.C.	29.0	29.3	29.3	33.1	36.5	29.4	29.7	29.5	33.2	36.7	29.8	30.0	29.8	33.3	36.8
	S.C.	29.7	28.9	24.5	24.6	19.0	30.1	29.4	25.2	25.3	19.5	30.5	30.0	25.8	25.9	20.0
	K.W.	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
125	T.C.	27.3	27.1	27.0	30.6	33.7	27.6	27.5	27.2	30.5	33.8	27.9	27.8	27.5	30.4	33.9
	S.C.	27.9	27.6	23.4	23.6	18.2	28.2	28.1	24.1	24.2	18.5	28.5	28.6	24.9	24.9	18.9
	K.W.	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9

NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	T.C.	S.C.	KW
F*FV060	-	1.00	1.00	1.01
AV/SV60	-	1.00	1.00	1.01
MV20D	FC/MC60D	1.00	1.00	1.01

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	FC/PC60C	0.98	0.94	1.01
P(C,V)9*D20	FC/MC/PC60D	0.98	1.01	1.01
PV8*C20	HC60	0.98	0.94	1.01
P(C,V)9*D20	HC60	0.98	1.01	1.01
PV8*C20	HD60	0.98	0.94	1.01
P(C,V)9*D20	HD60	0.98	1.01	1.01
PV8*C20	MC61D	0.99	0.94	1.01
P(C,V)9*D20	MC61D	0.99	1.01	1.01

COOLING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		YZE06011														
INDOOR COIL MODEL NO.		MC61D + MV20D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1600					1800					2000				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	57	62	62	67	72	57
65	T.C.	53.2	56.9	56.8	59.8	61.0	54.1	57.0	57.4	59.5	60.9	55.0	57.1	58.0	59.2	60.7
	S.C.	53.6	50.4	42.0	41.8	29.6	54.6	51.9	43.0	41.7	29.8	55.6	53.4	44.0	41.5	30.1
	K.W.	3.5	3.6	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.7	3.6	3.7	3.6	3.7	3.7
75	T.C.	51.2	54.1	54.1	57.8	60.2	52.0	54.4	54.6	57.7	60.2	52.8	54.6	55.1	57.6	60.2
	S.C.	51.7	48.7	40.8	40.6	29.6	52.5	50.0	41.8	40.8	29.8	53.3	51.2	42.8	40.9	30.1
	K.W.	4.0	4.0	4.0	4.1	4.1	4.0	4.1	4.1	4.1	4.2	4.1	4.1	4.1	4.2	4.2
85	T.C.	49.2	51.3	51.4	55.7	59.5	49.9	51.7	51.9	55.8	59.6	50.6	52.0	52.3	56.0	59.7
	S.C.	49.7	47.0	39.6	39.3	29.5	50.4	48.0	40.6	39.8	29.8	51.1	48.9	41.6	40.3	30.1
	K.W.	4.4	4.5	4.5	4.6	4.6	4.5	4.5	4.5	4.6	4.7	4.6	4.6	4.6	4.7	4.7
95	T.C.	47.2	48.6	48.7	53.6	58.7	47.8	49.0	49.1	54.0	58.9	48.4	49.5	49.4	54.4	59.1
	S.C.	47.8	45.3	38.4	38.0	29.5	48.3	46.0	39.4	38.9	29.8	48.8	46.7	40.4	39.7	30.1
	K.W.	4.9	4.9	4.9	5.0	5.1	5.0	5.0	5.0	5.1	5.2	5.0	5.1	5.0	5.2	5.2
105	T.C.	44.4	45.5	45.5	50.0	54.9	45.0	45.9	45.8	50.2	55.1	45.5	46.2	46.1	50.5	55.3
	S.C.	44.9	43.3	36.9	36.7	28.2	45.4	43.9	37.8	37.5	28.4	45.8	44.5	38.7	38.2	28.7
	K.W.	5.6	5.6	5.6	5.7	5.8	5.6	5.7	5.7	5.8	5.9	5.7	5.8	5.7	5.8	5.9
115	T.C.	41.7	42.6	42.4	46.4	51.1	42.2	42.8	42.6	46.5	51.3	42.7	43.0	42.8	46.6	51.5
	S.C.	42.1	41.4	35.5	35.3	26.9	42.5	41.9	36.3	36.1	27.1	43.0	42.3	37.1	36.8	27.3
	K.W.	6.2	6.3	6.2	6.4	6.5	6.3	6.3	6.3	6.4	6.5	6.4	6.4	6.4	6.5	6.6
125	T.C.	38.9	39.7	39.3	42.9	47.4	39.4	39.7	39.4	42.9	47.6	39.9	39.8	39.6	42.8	47.8
	S.C.	39.3	39.5	34.1	34.0	25.6	39.7	39.8	34.8	34.7	25.8	40.1	40.2	35.5	35.3	26.0
	K.W.	6.9	6.9	6.9	7.0	7.1	7.0	7.0	7.0	7.1	7.2	7.1	7.1	7.0	7.1	7.3

NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	T.C.	S.C.	KW
F*FV060	-	0.99	0.96	1.01
AV/SV60	-	0.99	0.96	1.01
MV20D	FC/MC60D	0.99	0.96	1.01

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	FC/PC60C	0.98	0.98	1.00
P(C,V)9*D20	FC/MC/PC60D	1.03	0.99	1.06
PV8*C20	HC60	0.98	0.98	1.00
P(C,V)9*D20	HC60	1.03	0.99	1.06
PV8*C20	HD60	0.98	0.98	1.00
P(C,V)9*D20	HD60	1.03	0.99	1.06
PV8*C20	MC61D	0.98	0.98	1.00
P(C,V)9*D20	MC61D	1.03	0.99	1.06

HEATING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION										
OUTDOOR UNIT MODEL NO.		YZE02411								
INDOOR COIL MODEL NO.		FC/MC/PC36B + MV12B								
AIR TEMP. ENTERING OUTDOOR UNIT	AIR TEMP. ENTERING INDOOR COIL	ID CFM								
		550			600			650		
		MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.
60	60	23.4	1.6	4.3	23.5	1.5	4.5	23.7	1.5	4.8
	70	21.7	1.8	3.6	22.1	1.7	3.8	22.5	1.7	4.0
	80	20.1	2.0	3.0	20.7	1.9	3.2	21.4	1.9	3.4
47	60	19.5	1.5	3.8	19.5	1.4	4.0	19.6	1.4	4.1
	70	18.8	1.7	3.2	18.9	1.7	3.3	19.0	1.6	3.4
	80	18.1	2.0	2.7	18.3	1.9	2.8	18.4	1.9	2.9
40	60	16.8	1.4	3.5	16.7	1.3	3.6	16.7	1.3	3.8
	70	15.7	1.6	2.9	16.0	1.6	3.0	16.2	1.5	3.2
	80	14.6	1.8	2.4	15.2	1.8	2.5	15.8	1.7	2.7
30	60	15.4	1.3	3.4	15.4	1.3	3.5	15.5	1.3	3.6
	70	14.4	1.5	2.8	14.4	1.5	2.9	14.5	1.4	3.0
	80	13.3	1.6	2.4	13.4	1.6	2.4	13.5	1.6	2.5
17	60	12.3	1.4	2.5	12.3	1.4	2.6	12.4	1.4	2.7
	70	10.7	1.6	1.9	10.9	1.6	2.0	11.1	1.6	2.1
	80	9.2	1.8	1.5	9.5	1.8	1.5	9.8	1.8	1.6
10	60	10.5	1.4	2.2	10.7	1.4	2.3	10.8	1.3	2.4
	70	9.4	1.5	1.8	9.6	1.5	1.9	9.8	1.5	2.0
	80	8.3	1.6	1.5	8.5	1.6	1.6	8.8	1.6	1.6

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor section.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	MBH	KW	COP
AV24	-	1.00	1.00	1.00
MV12B	FC/MC/PC42B	1.00	1.00	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*A12	FC/MC/PC24A	0.95	0.96	0.99
PV9*A12	FC/MC/PC24A	0.95	0.96	0.99
PV8*B16	FC/MC/PC24B	0.95	0.96	0.99
P(C,V)9*B12	FC/MC/PC24B	0.95	0.96	0.99
PV8*A12	FC/MC/PC30A	0.95	0.96	0.99
PV9*A12	FC/MC/PC30A	0.95	0.96	0.99
PV8*B16	FC/MC/PC30B	0.95	0.96	0.99
P(C,V)9*B12	FC/MC/PC30B	0.95	0.96	0.99
PV8*A12	FC/MC/PC36A	0.95	0.96	0.99
PV9*A12	FC/MC/PC36A	0.95	0.96	0.99
PV8*B16	FC/MC/PC36B	0.95	0.96	0.99
P(C,V)9*B12	FC/MC/PC36B	0.95	0.96	0.99
P(C,V)9*B12	FC/MC/PC42B	0.95	0.96	0.99
PV8*B16	FC/MC/PC42B	0.96	0.96	1.00
PV8*B16	HC36	0.95	0.96	0.99
P(C,V)9*B12	HC36	0.95	0.96	0.99
PV8*B16	HD36	0.95	0.96	0.99
P(C,V)9*B12	HD36	0.95	0.96	0.99

HEATING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION										
OUTDOOR UNIT MODEL NO.		YZE02411								
INDOOR COIL MODEL NO.		FC/MC/PC36B + MV12B								
AIR TEMP. ENTERING OUTDOOR UNIT	AIR TEMP. ENTERING INDOOR COIL	ID CFM								
		700			800			900		
		MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.
60	60	33.2	2.1	4.7	33.2	2.0	4.9	33.2	1.9	5.2
	70	31.9	2.3	4.0	32.0	2.2	4.2	32.1	2.1	4.5
	80	30.6	2.6	3.5	30.8	2.5	3.7	31.0	2.3	3.9
47	60	25.1	2.0	3.7	25.8	1.9	3.9	26.4	1.8	4.2
	70	24.2	2.3	3.1	25.0	2.2	3.4	25.8	2.1	3.6
	80	23.3	2.5	2.7	24.2	2.4	2.9	25.2	2.4	3.1
40	60	23.2	2.0	3.4	23.3	1.9	3.6	23.4	1.8	3.8
	70	21.6	2.4	2.6	21.4	2.2	2.8	21.1	2.0	3.1
	80	20.0	2.8	2.1	19.4	2.5	2.2	18.8	2.2	2.5
30	60	20.4	1.9	3.1	20.6	1.8	3.3	20.8	1.8	3.4
	70	21.6	2.3	2.8	21.8	2.2	2.9	21.9	2.1	3.0
	80	22.9	2.7	2.5	22.9	2.6	2.6	23.0	2.4	2.8
17	60	16.9	1.8	2.7	16.6	1.8	2.7	16.3	1.7	2.8
	70	15.6	2.0	2.3	15.6	1.9	2.4	15.6	1.9	2.4
	80	14.3	2.1	2.0	14.6	2.1	2.1	15.0	2.1	2.1
10	60	13.6	1.7	2.3	13.4	1.7	2.3	13.3	1.7	2.3
	70	13.3	2.1	1.9	13.3	2.0	1.9	13.3	2.0	2.0
	60	13.1	2.4	1.6	13.2	2.3	1.7	13.4	2.2	1.8

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor section.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	MBH	KW	COP
AV24	-	1.00	1.00	1.00
MV12B	FC/MC/PC42B	0.99	1.00	0.99

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*A12	FC/MC/PC24A	0.99	1.00	0.99
PV9*A12	FC/MC/PC24A	0.99	1.00	0.99
PV8*B16	FC/MC/PC24B	0.99	1.00	0.99
P(C,V)9*B12	FC/MC/PC24B	0.99	1.00	0.99
PV8*A12	FC/MC/PC30A	0.99	1.00	0.99
PV9*A12	FC/MC/PC30A	0.99	1.00	0.99
PV8*B16	FC/MC/PC30B	0.99	1.00	0.99
P(C,V)9*B12	FC/MC/PC30B	0.99	1.00	0.99
PV8*A12	FC/MC/PC36A	0.99	1.00	0.99
PV9*A12	FC/MC/PC36A	0.99	1.00	0.99
PV8*B16	FC/MC/PC36B	0.99	1.00	0.99
P(C,V)9*B12	FC/MC/PC36B	0.99	1.00	0.99
P(C,V)9*B12	FC/MC/PC42B	0.99	1.00	0.99
PV8*B16	FC/MC/PC42B	0.99	1.00	0.99
PV8*B16	HC36	0.99	1.00	0.99
P(C,V)9*B12	HC36	0.99	1.00	0.99
PV8*B16	HD36	0.99	1.00	0.99
P(C,V)9*B12	HD36	0.99	1.00	0.99

HEATING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION										
OUTDOOR UNIT MODEL NO.		YZE03611								
INDOOR COIL MODEL NO.		FC/MC/PC48C + MV16C								
AIR TEMP. ENTERING OUTDOOR UNIT	AIR TEMP. ENTERING INDOOR COIL	ID CFM								
		750			800			850		
		MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.
60	60	27.9	1.8	4.6	28.2	1.7	4.8	28.5	1.7	5.0
	70	26.6	2.0	3.9	27.0	2.0	4.1	27.4	1.9	4.2
	80	25.4	2.2	3.3	25.9	2.2	3.5	26.4	2.1	3.6
47	60	25.4	1.7	4.3	24.8	1.7	4.3	24.3	1.6	4.3
	70	23.7	2.0	3.5	23.6	1.9	3.6	23.5	1.9	3.7
	80	22.0	2.2	2.9	22.4	2.1	3.1	22.7	2.1	3.2
40	60	21.7	1.7	3.7	21.9	1.7	3.8	22.1	1.6	4.0
	70	20.8	1.9	3.2	21.1	1.9	3.3	21.4	1.9	3.4
	80	19.9	2.2	2.7	20.3	2.1	2.8	20.7	2.1	2.9
30	60	19.9	1.7	3.5	19.4	1.7	3.4	18.9	1.7	3.3
	70	18.6	1.9	2.9	18.3	1.9	2.9	18.1	1.9	2.8
	80	17.2	2.1	2.4	17.2	2.1	2.4	17.3	2.0	2.5
17	60	15.0	1.7	2.6	15.0	1.6	2.7	15.1	1.6	2.7
	70	14.3	1.9	2.2	14.3	1.9	2.3	14.4	1.8	2.3
	80	13.5	2.1	1.9	13.6	2.1	1.9	13.7	2.0	2.0
10	60	13.6	1.7	2.4	13.5	1.6	2.4	13.4	1.6	2.5
	70	12.7	1.9	2.0	12.6	1.8	2.0	12.6	1.8	2.0
	80	11.7	2.1	1.7	11.8	2.0	1.7	11.8	2.0	1.7

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	MBH	KW	COP
AV/SV48	-	1.00	1.00	1.00
MV12B	FC/MC/PC42B	1.00	1.00	1.00
MV20D	FC/MC/PC48D	1.00	1.00	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*B16	FC/MC/PC42B	0.97	0.98	0.99
P(C,V)9*B12	FC/MC/PC42B	0.97	0.98	0.99
PV8*C16	FC/MC/PC42C	0.97	0.98	0.99
PV8*C20	FC/MC/PC42C	0.97	0.98	0.99
P(C,V)9*C16	FC/MC/PC42C	0.97	0.98	0.99
P(C,V)9*C20	FC/MC/PC42C	0.97	0.98	0.99
PV8*C16	FC/MC/PC48C	0.97	0.98	0.99
PV8*C20	FC/MC/PC48C	0.97	0.98	0.99
P(C,V)9*C16	FC/MC/PC48C	0.97	0.98	0.99
P(C,V)9*C20	FC/MC/PC48C	0.97	0.98	0.99
P(V)9*D20	FC/MC/PC48D	0.97	0.98	0.99
PV8*C16	HC42	0.97	0.98	0.99
PV8*C20	HC42	0.97	0.98	0.99
P(C,V)9*C16	HC42	0.97	0.98	0.99
P(C,V)9*C20	HC42	0.97	0.98	0.99
PV8*C16	HD48	0.97	0.98	0.99
PV8*C20	HD48	0.97	0.98	0.99
P(C,V)9*C16	HD48	0.97	0.98	0.99
P(C,V)9*C20	HD48	0.97	0.98	0.99

HEATING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION										
OUTDOOR UNIT MODEL NO.		YZE03611								
INDOOR COIL MODEL NO.		FC/MC/PC48C + MV16C								
AIR TEMP. ENTERING OUTDOOR UNIT	AIR TEMP. ENTERING INDOOR COIL	ID CFM								
		1100			1200			1300		
		MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.
60	60	37.7	2.6	4.3	38.4	2.5	4.5	39.1	2.4	4.7
	70	36.7	2.8	3.8	37.2	2.7	4.0	37.8	2.7	4.1
	80	35.7	3.0	3.4	36.0	3.0	3.6	36.5	2.9	3.7
47	60	34.5	2.4	4.2	34.3	2.4	4.3	34.2	2.3	4.3
	70	32.9	2.7	3.6	33.0	2.6	3.7	33.2	2.6	3.8
	80	31.3	2.9	3.1	31.7	2.9	3.2	32.1	2.8	3.3
40	60	30.4	2.3	3.8	30.7	2.3	3.9	31.0	2.3	4.0
	70	29.3	2.6	3.3	29.8	2.5	3.4	30.4	2.5	3.5
	80	28.3	2.9	2.9	29.0	2.8	3.0	29.7	2.8	3.1
30	60	25.6	2.2	3.4	24.6	2.1	3.4	23.7	2.0	3.4
	70	25.7	2.5	3.0	25.1	2.4	3.0	24.5	2.4	3.0
	80	25.9	2.8	2.7	25.6	2.7	2.8	25.3	2.7	2.8
17	60	20.8	2.1	2.9	20.9	2.1	2.9	21.0	2.1	2.9
	70	19.9	2.3	2.5	20.8	2.4	2.6	21.8	2.4	2.7
	80	18.9	2.6	2.2	20.7	2.6	2.3	22.6	2.7	2.5
10	60	19.3	2.1	2.7	19.7	2.1	2.7	20.1	2.1	2.8
	70	17.9	2.4	2.2	19.1	2.4	2.4	20.3	2.4	2.5
	80	16.4	2.6	1.9	18.5	2.6	2.1	20.5	2.6	2.3

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	MBH	KW	COP
AV/SV48	-	1.00	1.00	1.00
MV12B	FC/MC/PC42B	1.01	1.00	1.01
MV20D	FC/MC/PC48D	1.00	1.00	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*B16	FC/MC/PC42B	1.00	1.00	1.00
P(C,V)9*B12	FC/MC/PC42B	1.00	0.99	1.01
PV8*C16	FC/MC/PC42C	1.00	1.00	1.00
PV8*C20	FC/MC/PC42C	1.00	1.00	1.00
P(C,V)9*C16	FC/MC/PC42C	1.00	0.99	1.01
P(C,V)9*C20	FC/MC/PC42C	1.00	0.99	1.01
PV8*C16	FC/MC/PC48C	1.00	1.00	1.00
PV8*C20	FC/MC/PC48C	1.00	1.00	1.00
P(C,V)9*C16	FC/MC/PC48C	1.00	1.00	1.00
P(C,V)9*C20	FC/MC/PC48C	1.00	1.00	1.00
P(C,V)9*D20	FC/MC/PC48D	1.00	1.01	0.99
PV8*C16	HC42	1.00	1.00	1.00
PV8*C20	HC42	1.00	1.00	1.00
P(C,V)9*C16	HC42	1.00	1.00	1.00
P(C,V)9*C20	HC42	1.00	1.00	1.00
PV8*C16	HD48	1.00	1.00	1.00
PV8*C20	HD48	1.00	1.00	1.00
P(C,V)9*C16	HD48	1.00	1.00	1.00
P(C,V)9*C20	HD48	1.00	1.00	1.00

HEATING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION										
OUTDOOR UNIT MODEL NO.		YZE03811								
INDOOR COIL MODEL NO.		MC61D + MV12D								
AIR TEMP. ENTERING OUTDOOR UNIT	AIR TEMP. ENTERING INDOOR COIL	ID CFM								
		700			750			800		
		MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.
60	60	20.6	1.3	4.6	29.7	1.8	4.7	20.7	1.2	4.9
	70	19.8	1.5	3.8	29.4	2.0	4.2	20.0	1.4	4.2
	80	19.0	1.7	3.3	29.0	2.3	3.8	19.3	1.6	3.6
47	60	17.1	1.3	3.9	24.3	1.6	4.3	17.1	1.1	4.4
	70	16.2	1.5	3.3	24.0	1.9	3.8	16.4	1.3	3.6
	80	15.2	1.6	2.7	23.7	2.1	3.4	15.6	1.6	2.9
40	60	14.8	1.2	3.5	19.8	1.6	3.7	15.2	1.2	3.8
	70	13.8	1.4	2.9	20.1	1.8	3.3	14.3	1.4	3.1
	80	12.8	1.6	2.4	20.4	2.0	3.0	13.3	1.6	2.5
30	60	12.3	1.2	3.0	17.7	1.5	3.5	13.1	1.1	3.3
	70	11.8	1.4	2.5	16.6	1.7	2.9	12.0	1.3	2.7
	80	11.2	1.5	2.2	15.5	1.9	2.4	10.9	1.5	2.2
17	60	9.9	1.1	2.6	14.3	1.4	3.0	9.9	1.1	2.6
	70	9.1	1.3	2.1	14.0	1.6	2.6	9.1	1.3	2.1
	80	8.4	1.5	1.7	13.8	1.8	2.3	8.4	1.4	1.7
10	60	9.0	1.1	2.4	12.4	1.3	2.7	9.6	1.1	2.6
	70	7.7	1.2	1.8	12.2	1.5	2.3	8.1	1.2	1.9
	80	6.4	1.4	1.4	12.0	1.7	2.1	6.5	1.4	1.4

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	MBH	KW	COP
F*FV060	—	1.02	1.02	1.00
AV/SV48	—	1.02	1.02	1.00
MV20D	FC/MC/PC60D	1.02	1.02	1.00
MV20D	MC61D	1.02	1.02	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C16	FC/PC60C	1.00	1.00	1.00
PV8*C20	FC/PC60C	1.00	1.00	1.00
P(C,V)9*C16	FC/PC60C	1.02	1.02	1.00
P(C,V)9*C20	FC/PC60C	1.02	1.02	1.00
P(C,V)9*D20	FC/MC/PC60D	1.02	1.02	1.00
PV8*C20	HC60	1.00	1.00	1.00
P(C,V)9*C20	HC60	1.02	1.02	1.00
PV8*C20	HD60	1.00	1.00	1.00
P(C,V)9*C20	HD60	1.02	1.02	1.00
P(C,V)9*D20	MC61D	1.02	1.02	1.00

HEATING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION										
OUTDOOR UNIT MODEL NO.		YZE03811								
INDOOR COIL MODEL NO.		MC61D + MV12D								
AIR TEMP. ENTERING OUTDOOR UNIT	AIR TEMP. ENTERING INDOOR COIL	ID CFM								
		1000			1100			1200		
		MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.
60	60	42.4	2.5	5.0	42.3	2.4	5.1	42.2	2.4	5.2
	70	41.8	2.8	4.4	41.8	2.7	4.5	41.8	2.6	4.6
	80	41.2	3.1	3.9	41.3	3.0	4.0	41.5	2.9	4.2
47	60	35.4	2.3	4.6	35.4	2.2	4.7	35.4	2.2	4.8
	70	34.9	2.6	4.0	35.0	2.5	4.1	35.1	2.4	4.2
	80	34.5	2.8	3.6	34.6	2.8	3.7	34.8	2.7	3.8
40	60	29.9	2.2	4.0	29.2	2.1	4.1	28.6	2.0	4.1
	70	30.1	2.5	3.5	29.7	2.4	3.6	29.4	2.4	3.6
	80	30.2	2.8	3.2	30.1	2.7	3.2	30.1	2.7	3.3
30	60	26.0	2.0	3.7	26.7	2.0	3.9	27.4	2.0	4.1
	70	24.8	2.3	3.1	25.0	2.3	3.2	25.4	2.3	3.3
	80	23.5	2.6	2.6	23.4	2.6	2.7	23.3	2.5	2.7
17	60	21.4	2.0	3.2	22.0	1.9	3.3	22.6	1.9	3.4
	70	21.2	2.2	2.8	21.6	2.2	2.9	22.0	2.2	3.0
	80	21.0	2.5	2.4	21.2	2.5	2.5	21.4	2.4	2.6
10	60	19.1	1.9	2.9	19.4	1.9	3.0	19.8	1.8	3.2
	70	18.8	2.2	2.6	19.0	2.1	2.6	19.3	2.1	2.7
	80	18.5	2.4	2.3	18.6	2.4	2.3	18.8	2.3	2.4

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	MBH	KW	COP
F*FV060	—	0.99	1.00	0.99
AV/SV48	—	0.99	1.00	0.99
MV20D	FC/MC/PC60D	0.99	1.00	0.99
MV20D	MC61D	0.99	1.00	0.99

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C16	FC/PC60C	1.00	1.00	1.00
PV8*C20	FC/PC60C	1.00	1.00	1.00
P(C,V)9*C16	FC/PC60C	1.00	1.00	1.00
P(C,V)9*C20	FC/PC60C	1.00	1.00	1.00
P(C,V)9*D20	FC/MC/PC60D	1.00	1.00	1.00
PV8*C20	HC60	1.00	1.00	1.00
P(C,V)9*C20	HC60	1.00	1.00	1.00
PV8*C20	HD60	1.00	1.00	1.00
P(C,V)9*C20	HD60	1.00	1.00	1.00
P(C,V)9*D20	MC61D	1.00	1.00	1.00

HEATING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION										
OUTDOOR UNIT MODEL NO.		YZE04811								
INDOOR COIL MODEL NO.		FC/MC/PC60D + MV20D								
AIR TEMP. ENTERING OUTDOOR UNIT	AIR TEMP. ENTERING INDOOR COIL	ID CFM								
		950			1000			1050		
		MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.
60	60	38.9	2.5	4.6	39.3	2.5	4.7	39.8	2.4	4.8
	70	37.6	2.8	4.0	37.8	2.7	4.1	38.1	2.7	4.2
	80	36.2	3.1	3.4	36.3	3.0	3.6	36.4	2.9	3.7
47	60	33.1	2.4	4.1	33.2	2.3	4.2	33.4	2.3	4.3
	70	31.3	2.6	3.5	31.8	2.6	3.6	32.3	2.6	3.7
	80	29.6	2.9	3.0	30.4	2.8	3.1	31.2	2.8	3.2
40	60	29.4	2.3	3.7	29.7	2.3	3.8	29.9	2.3	3.9
	70	28.4	2.7	3.1	28.7	2.6	3.2	28.9	2.6	3.3
	80	27.4	3.0	2.7	27.7	2.9	2.8	28.0	2.9	2.8
30	60	25.6	2.2	3.4	25.5	2.2	3.4	25.5	2.2	3.4
	70	24.3	2.6	2.8	24.3	2.6	2.8	24.3	2.6	2.8
	80	23.0	2.9	2.3	23.0	2.9	2.3	23.1	2.9	2.3
17	60	19.7	2.3	2.6	19.6	2.2	2.6	19.4	2.2	2.6
	70	17.3	2.6	2.0	17.2	2.5	2.0	17.0	2.5	2.0
	80	15.0	2.9	1.5	14.8	2.8	1.6	14.6	2.7	1.6
10	60	15.9	2.2	2.1	15.9	2.2	2.1	15.9	2.2	2.1
	70	14.9	2.5	1.7	15.0	2.5	1.8	15.0	2.5	1.8
	80	13.9	2.8	1.4	14.0	2.8	1.5	14.1	2.7	1.5

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	MBH	KW	COP
F*FV060	—	1.00	1.01	0.99
AV/SV48	—	1.00	1.01	0.99
MV20D	MC61D	1.00	1.01	0.99

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	FC/PC60C	0.98	0.99	0.99
P(C,V)9*C20	FC/PC60C	0.98	0.99	0.99
P(C,V)9*D20	FC/MC/PC60D	0.98	0.99	0.99
PV8*C20	HC60	0.98	0.99	0.99
P(C,V)9*D20	HC60	0.98	0.99	0.99
PV8*C20	HD60	0.98	0.99	0.99
P(C,V)9*D20	HD60	0.98	0.99	0.99
P(C,V)9*D20	MC61D	0.98	0.99	0.99

HEATING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION										
OUTDOOR UNIT MODEL NO.		YZE04811								
INDOOR COIL MODEL NO.		FC/MC/PC60D + MV20D								
AIR TEMP. ENTERING OUTDOOR UNIT	AIR TEMP. ENTERING INDOOR COIL	ID CFM								
		1500			1600			1700		
		MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.
60	60	60.1	3.5	5.0	60.5	3.5	5.0	61.0	3.5	5.1
	70	58.6	3.9	4.4	58.9	3.8	4.5	59.3	3.8	4.5
	80	57.2	4.2	4.0	57.4	4.2	4.0	57.6	4.2	4.1
47	60	48.7	3.2	4.4	49.2	3.2	4.5	49.6	3.2	4.5
	70	47.7	3.6	3.9	48.0	3.6	4.0	48.4	3.5	4.0
	80	46.6	3.9	3.5	46.8	3.9	3.5	47.1	3.9	3.5
40	60	44.4	3.2	4.1	44.4	3.1	4.2	44.3	3.1	4.2
	70	43.0	3.5	3.6	42.9	3.5	3.6	42.8	3.4	3.6
	80	41.6	3.8	3.2	41.4	3.8	3.2	41.2	3.8	3.2
30	60	35.5	3.0	3.5	34.4	2.9	3.5	33.3	2.9	3.4
	70	33.9	3.2	3.1	33.6	3.2	3.0	33.3	3.3	3.0
	80	32.3	3.5	2.7	32.8	3.6	2.7	33.2	3.7	2.7
17	60	28.5	2.9	2.9	28.6	2.8	3.0	28.8	2.8	3.0
	70	27.3	3.3	2.5	27.6	3.2	2.5	27.9	3.2	2.6
	80	26.1	3.6	2.1	26.6	3.6	2.2	27.1	3.5	2.2
10	60	25.0	2.8	2.7	24.0	2.8	2.5	23.0	2.8	2.4
	70	22.5	3.2	2.1	23.1	3.2	2.1	23.8	3.2	2.2
	80	19.9	3.6	1.6	22.2	3.6	1.8	24.5	3.6	2.0

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	MBH	KW	COP
F*FV060	—	0.99	1.00	0.99
AV/SV48	—	0.99	1.00	0.99
MV20D	MC61D	0.99	1.00	0.99

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	FC/PC60C	1.00	1.00	1.00
P(C,V)9*C20	FC/PC60C	1.00	1.00	1.00
P(C,V)9*D20	FC/MC/PC60D	1.00	1.00	1.00
PV8*C20	HC60	1.00	1.00	1.00
P(C,V)9*D20	HC60	1.00	1.00	1.00
PV8*C20	HD60	1.00	1.00	1.00
P(C,V)9*D20	HD60	1.00	1.00	1.00
P(C,V)9*D20	MC61D	1.00	1.01	0.99

HEATING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION										
OUTDOOR UNIT MODEL NO.		YZE06011								
INDOOR COIL MODEL NO.		MC61D + MV20D								
AIR TEMP. ENTERING OUTDOOR UNIT	AIR TEMP. ENTERING INDOOR COIL	ID CFM								
		1100			1150			1200		
		MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.
60	60	44.8	3.1	4.2	45.8	3.1	4.3	46.7	3.1	4.4
	70	44.4	3.6	3.7	44.9	3.5	3.7	45.5	3.5	3.8
	80	44.0	4.0	3.2	44.1	4.0	3.3	44.3	3.9	3.3
47	60	38.6	3.1	3.7	38.6	3.0	3.8	38.7	2.9	3.9
	70	37.4	3.4	3.2	37.6	3.4	3.3	37.8	3.3	3.3
	80	36.2	3.8	2.8	36.6	3.8	2.8	36.9	3.7	2.9
40	60	34.0	3.0	3.3	34.4	2.9	3.4	34.8	2.9	3.6
	70	33.3	3.4	2.9	33.5	3.3	3.0	33.8	3.2	3.1
	80	32.7	3.7	2.6	32.7	3.6	2.6	32.8	3.6	2.7
30	60	24.7	2.9	2.5	23.3	2.8	2.4	21.9	2.8	2.3
	70	25.8	3.3	2.3	24.9	3.3	2.2	23.9	3.2	2.2
	80	26.8	3.7	2.1	26.4	3.7	2.1	26.0	3.6	2.1
17	60	22.6	2.8	2.4	22.4	2.8	2.4	22.1	2.7	2.4
	70	20.5	3.1	2.0	20.3	3.0	2.0	20.0	3.0	1.9
	80	18.4	3.4	1.6	18.2	3.3	1.6	17.9	3.3	1.6
10	60	16.8	2.6	1.9	16.6	2.6	1.9	16.5	2.6	1.9
	70	17.1	3.0	1.7	16.9	3.0	1.7	16.7	2.9	1.7
	80	17.4	3.4	1.5	17.1	3.4	1.5	16.9	3.3	1.5

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

Multipliers for determining the performance with other indoor sections.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	MBH	KW	COP
F*FV060	–	1.00	1.00	1.00
AV/SV60	–	1.00	1.00	1.00
MV20D	FC/MC/PC60D	1.00	1.00	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	FC/PC60C	0.98	0.98	1.00
P(C,V)9*D20	FC/MC/PC60D	0.98	0.98	1.00
PV8*C20	HC60	0.98	0.98	1.00
P(C,V)9*D20	HC60	0.98	0.98	1.00
PV8*C20	HD60	0.98	0.98	1.00
P(C,V)9*D20	HD60	0.98	0.98	1.00
P(C,V)9*D20	MC61D	0.98	0.98	1.00
PV8*C20	MC61D	0.98	0.99	1.00

HEATING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION										
OUTDOOR UNIT MODEL NO.		YZE06011								
INDOOR COIL MODEL NO.		MC61D + MV20D								
AIR TEMP. ENTERING OUTDOOR UNIT	AIR TEMP. ENTERING INDOOR COIL	ID CFM								
		1750			1850			1950		
		MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.	MBTUH	KW	C.O.P.
60	60	64.0	4.5	4.2	64.6	4.5	4.2	65.2	4.5	4.3
	70	62.8	5.0	3.7	63.3	4.9	3.7	63.8	4.9	3.8
	80	61.5	5.4	3.3	61.9	5.4	3.4	62.4	5.4	3.4
47	60	55.7	4.2	3.9	55.9	4.2	3.9	56.2	4.2	3.9
	70	54.1	4.6	3.4	54.5	4.6	3.5	54.9	4.6	3.5
	80	52.5	5.0	3.1	53.1	5.0	3.1	53.6	5.0	3.1
40	60	49.5	4.0	3.7	49.0	4.0	3.6	48.6	4.0	3.6
	70	42.4	4.2	2.9	45.2	4.3	3.1	48.1	4.4	3.2
	80	35.2	4.5	2.3	41.4	4.7	2.6	47.5	4.9	2.9
30	60	42.5	3.8	3.3	39.9	3.7	3.1	37.3	3.7	2.9
	70	38.8	4.0	2.8	39.1	4.1	2.8	39.4	4.2	2.8
	80	35.0	4.3	2.4	38.3	4.5	2.5	41.6	4.6	2.6
17	60	34.3	3.6	2.8	32.3	3.5	2.7	30.4	3.4	2.6
	70	34.2	4.1	2.4	32.6	4.0	2.4	31.0	3.9	2.3
	80	34.0	4.6	2.2	32.9	4.5	2.1	31.7	4.5	2.1
10	60	30.5	3.4	2.6	31.1	3.4	2.7	31.7	3.5	2.7
	70	29.4	3.8	2.3	29.2	3.8	2.3	29.0	3.7	2.3
	80	28.2	4.1	2.0	27.3	4.1	2.0	26.4	4.0	1.9

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

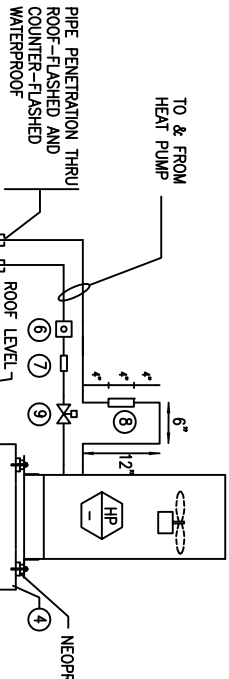
Multipliers for determining the performance with other indoor sections.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	MBH	KW	COP
F*FV060	-	1.00	1.00	1.00
AV/SV60	-	1.00	1.00	1.00
MV20D	FC/MC/PC60D	1.00	1.00	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	FC/PC60C	0.99	0.99	1.00
P(C,V)9*D20	FC/MC/PC60D	0.99	0.99	1.00
PV8*C20	HC60	0.99	0.99	1.00
P(C,V)9*D20	HC60	0.99	0.99	1.00
PV8*C20	HD60	0.99	0.99	1.00
P(C,V)9*D20	HD60	0.99	0.99	1.00
P(C,V)9*D20	MC61D	0.99	0.99	1.00
PV8*C20	MC61D	0.99	0.99	1.00

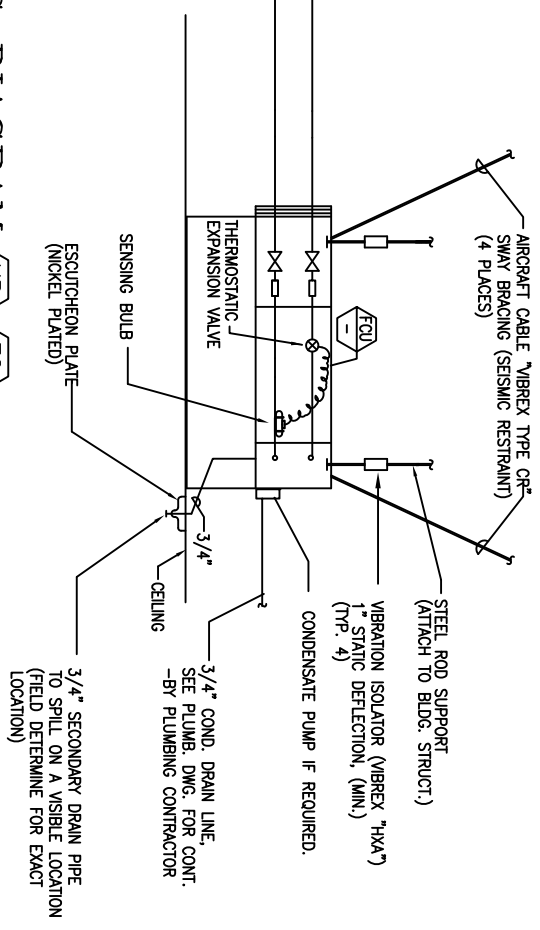


- NOTES:
1. FAN COIL UNITS SHALL BE LOCATED SUCH THAT UNIT CAN BE SERVICED AND REMOVED WITHOUT REMOVAL OF PERMANENT CONSTRUCTION.
 2. INSULATE REFRIGERANT SUCTION LINES.
 3. INSTALL PIPES IN STUD WALL WITH VIBRATION ISOLATION PIPE SUPPORT.
 4. 6" HIGH EQUIPMENT PLATFORM
 5. INSTALL REFRIGERANT PIPING PER MANUFACTURER'S INSTALLATION RECOMMENDATION
 6. FIELD INSTALLED SIGHT GLASS
 7. FIELD INSTALLED FILTER DRIER
 8. FIELD INSTALLED MUFFLER (LOCATED IN A VERTICAL POSITION)
 9. FIELD INSTALLED SOLENOID VALVE

SPLIT DX HP REFRIGERANT PIPING DIAGRAM



SCALE: NOT TO SCALE



R-410a Refrigerant lines and the losses												
Unit Nominal Size	Liquid Line is 3/8" Vapor Line Diameters (In. O.D.)	Cooling Capacity Loss (%) Total Equivalent Line Length (ft)										
		25'	50'	80'	100'	125'	150'	175'	200'	225'	250'	
Equivalent length. Requires Accessories												
1.5 Ton	1/2	1	2	3	4	6	7	8	9	10	12	
	5/8	0	0	1	1	1	2	2	3	3	3	
2 Tons	5/8	0	1	1	2	3	3	4	4	5	6	
	3/4	0	0	0	0	1	1	1	1	1	2	
2.5 Tons	7/8	0	0	0	0	0	0	0	0	0	1	
	5/8	1	2	3	3	4	5	6	7	8	9	
3 tons	3/4	0	0	1	1	1	2	2	2	3	3	
	7/8	0	0	0	0	1	1	1	1	1	1	
3.5 Tons	3/4	0	1	2	2	3	4	4	5	6	6	
	7/8	0	0	1	1	1	2	2	2	3	3	
4 Tons	1--1/8	0	0	0	0	0	0	0	0	0	1	
	3/4	0	1	2	3	4	5	5	6	7	8	
5 Tons	7/8	0	0	1	1	2	2	2	3	3	4	
	1--1/8	0	0	0	0	0	0	0	0	0	1	
		1	2	4	5	6	7	9	10	11	12	
		0	1	2	2	3	4	4	5	5	6	
		0	0	0	1	1	1	1	1	1	2	

Required Accessories are Solenoid valve, crankcase heater, star capacitor, hard shut off TXV, filter drier.

VENSTAR®

COMMERCIAL THERMOSTAT

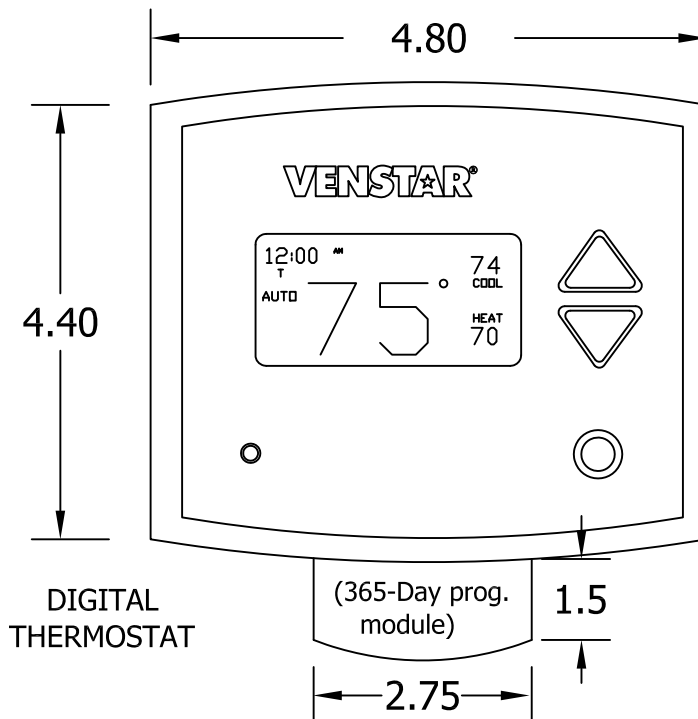
MODEL NO. T2950

365-DAY PROGRAMMABLE

UP TO 3-HEAT
& 2-COOL

HEAT
COOL & HEAT
PUMP

TITLE-24 COMPLIANT

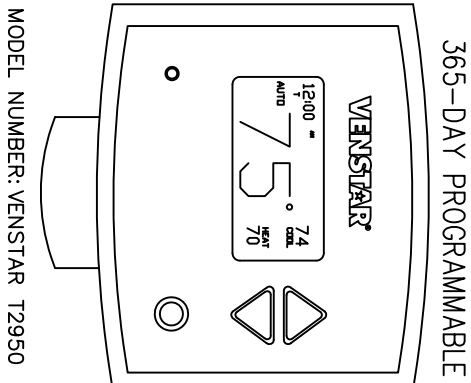


STANDARD FEATURES:

- **365-day programmable (up to 10 years, includes full calendar with preprogrammed holidays)**
- Up to 3-Occupied, 1-Unoccupied periods per day, with copy command for easy programming
- **Light Activated occupied period (defeatable)**
- **Auto changeover, 3-stage heat, 2-stage cool for use with gas/electric, heat pump, split systems, electric & hydronic heat**
- Configurable for manual changeover, also configurable programmable or non-programmable
- Adjustable deadbands and timers
- 2 configurable outputs for maximum flexibility. Can be used for humidification, dehumidification, 3rd stage heating or programmable output for lighting, exhaust fans, remote sensor etc.
- Energy Watch keeps track of energy use by tracking heating and cooling hours
- Smart Fan (keeps the fan from running during unoccupied periods)
- Smart recovery (reaches selected comfort temperature at exact time is scheduled for energy savings)
- **Pre-occupancy fan purge**
- Display shows both heating and cooling setpoints and room temperature simultaneously
- All programming and setpoints stored in non-volatile memory, and are never lost in power failure
- Service filter and service UV lamp indicators
- Red/Green LED shows whether thermostat is calling for heating or cooling
- **5-minute compressor time guard and adjustable cycle limit, both defeatable for servicing equipment**
- Thermoglow backlit electro-luminous display and backlit color coded keys and legends

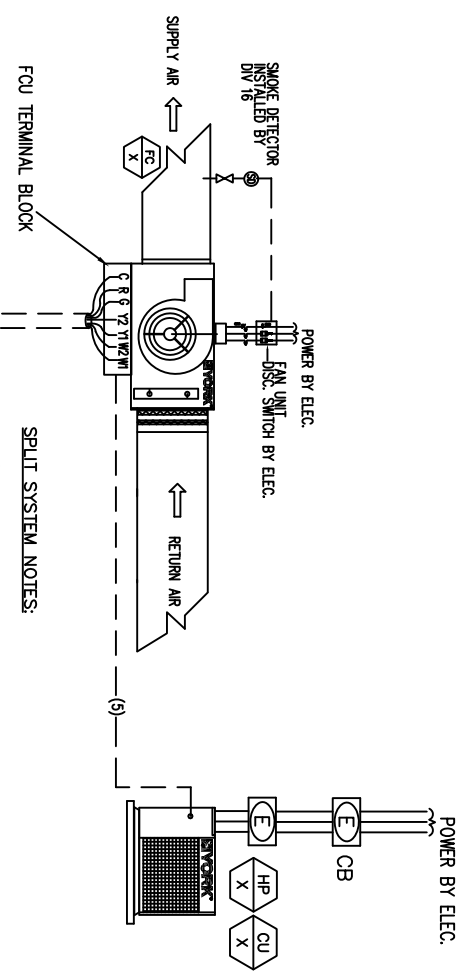
ACCESORY FEATURES:

- **Accepts humidification/dehumidification control module (Venstar part number ACC0430)**
- **Control to, or monitor a second remote sensor. Can average up to 8 (wired or wireless) remote sensors (Venstar part number ACC0401)**
- Outdoor sensor ready with high and low temperature of the day (Venstar part number ACC0400)
- Accepts accessory IR remote control system (Venstar part number ACC0431)
- Accepts accessory EZ Programmer- programmed via USB through computer (Venstar part number ACC0)
- **For accessory locking cover use (Venstar part number ACC0620)**



MODEL NUMBER: VENSTAR T2950

365-DAY PROGRAMMABLE



SPLIT SYSTEM NOTES:

1. SEE MANUFACTURER INSTALLATION MANUAL FOR SENSOR INSTALLATION AND REQUIREMENTS.
2. ALL CONTROLS AND EQUIPMENT PROVIDED BY USACD.
3. EACH ROOFTOP UNIT WILL HAVE NECESSARY SAFETIES.
4. THE SYSTEM IS ENABLED AND DISABLED AS PROGRAMMED BY THE PROGRAMMABLE THERMOSTAT (MODEL NO: VENSTAR T2950). TSTAT SHALL BE TITLE-24 APPROVED AND 365-DAY PROGRAMMABLE.

(7) WIRES IN RIGID CONDUIT SEPARATE FROM PWR LINE

WIRING LEGEND

- 24VAC COMMON — C
- 24VAC POWER — R
- FAN RELAY — G
- 1ST STAGE COOLING — Y1
- 2ND STAGE COOLING — Y2
- 1ST STAGE HEATING — W1
- 2ND STAGE HEATING — W2

TYPICAL STAND ALONE SPLIT SYSTEM CONTROL DIAGRAM

SCALE: NONE

COMMERCIAL ZONING PACKAGE

FACILITY EXPLORER

BY JOHNSON CONTROLS

The Facility Explorer Commercial Zoning Package is a complete, turnkey control system used to improve occupant comfort in a building (or section of a building) that is conditioned with a packaged rooftop HVAC unit. It accomplishes this by varying the amount of conditioned air delivered to individual zones and by intelligently cycling the rooftop unit's heating and cooling stages to best satisfy all the zone demands.

Manufacturer Independent

The Facility Explorer Commercial Zoning Package is designed to work with any standard, packaged HVAC equipment, regardless of manufacturer. This allows you to apply this control package to equipment provided by a variety of suppliers or to equipment that has already been installed. This flexibility makes the Facility Explorer Commercial Zoning Package perfectly suited for both new and retrofit installations.

Affordable Intelligence

The Facility Explorer Commercial Zoning Package utilizes the distributed application architecture of the FX16 Master Controller. This feature allows direct communications to occur between the FX16 and all the zone controllers. This means that there is no need for a traditional supervisory class controller to manage the data sharing. This direct communication flow allows the FX16 to monitor each zone's status to intelligently determine the proper mode of operation for the rooftop unit.



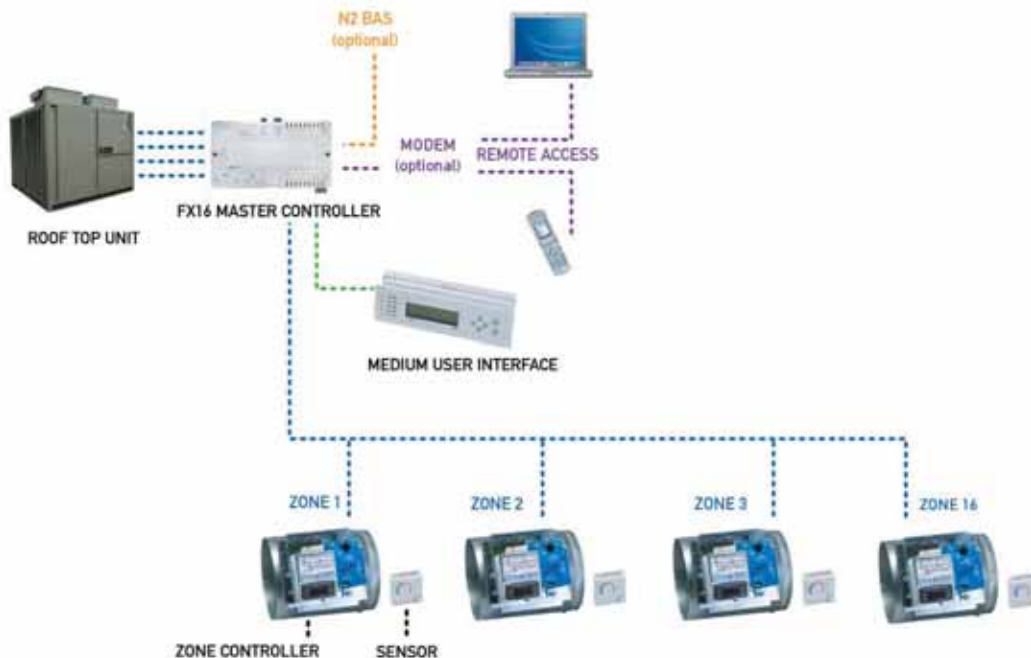
COMMERCIAL ZONING PACKAGE

Easy Installation

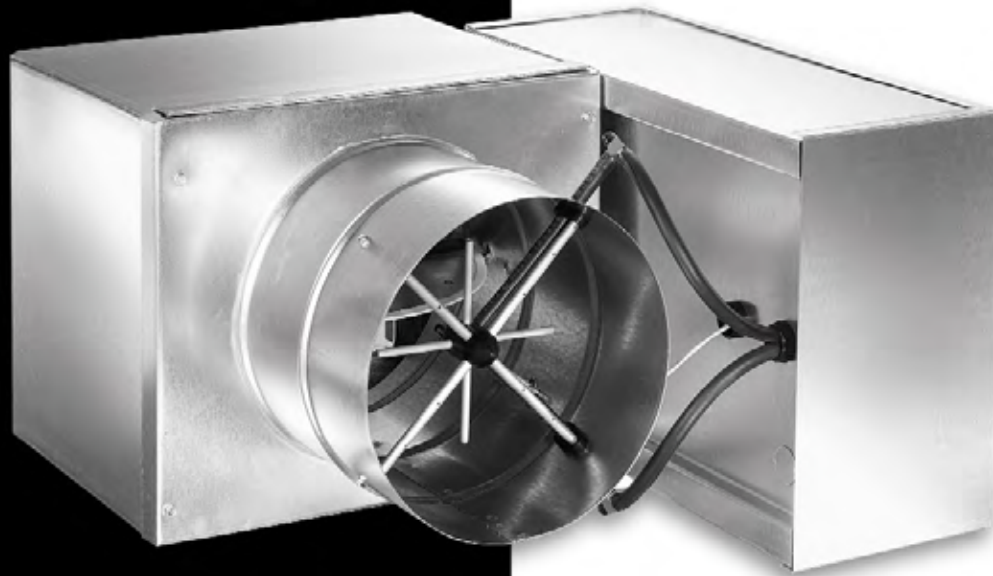
Several pieces of the Facility Explorer Commercial Zoning Package can be ordered pre-assembled from the factory to simplify installation:

- Zone Controller and Actuator Assembly (FXZAN)
 - The FX05 Field Controller is combined with an M9104AGA non-spring return actuator and an electrical termination wiring block, all in one packaged assembly
 - Perfect for retrofit installations where the zone damper is already installed
- Zone Controller, Actuator, and Damper Assembly
 - FXZAN Zone Controller and Actuator Assembly is combined with a round or rectangular zone damper
 - Perfect for new installations or for retrofit installations where the zone damper has not yet been installed

- Bypass Damper and Actuator Assembly
 - A round or rectangular bypass damper is combined with an M910xHGA non-spring return actuator
- FX16 Master Controller with Pre-Downloaded Zoning Application
 - FX16 Master Controller can be ordered with the commercial zoning application pre-downloaded
 - Once installed, the FX16 takes care of downloading the corresponding parts of the zoning application to each of the zone controllers
 - Eliminates the downloading steps from the field installation and startup
 - This provides the possibility (with an onsite Medium User Interface) to download, configure and commission the entire system, including the rooftop, bypass, and all zone controllers without any software tool



TSS – Single Duct Variable Air Volume Terminal



- An integrated VAV box with direct digital controls eliminates the coordination and difficulties associated with factory mounting
- Downloading of software, setting of parameters, addressing and testing at the factory reduces startup time and lowers risk
- Superior flow measuring provides for lower minimum cubic feet per minute (CFM) values, which reduces energy costs and noise while maintaining comforts in the zone
- Installation time can be reduced with the low profile compact design and standard metal hanging straps
- Units wired in compliance with all applicable National Electrical Code (NEC) requirements and tested in accordance with Air Conditioning and Refrigeration Institute (ARI) standard 880
- Offers damper stall detection, starved box detection, actuator motor duty cycle, VAV box flow test, and other diagnostics on most models (VMA Series)

TSS Terminals provide Variable Air Volume (VAV) control beyond the typical single duct box. They are specifically designed for precise air delivery throughout the entire operating range, regardless of the installed inlet conditions. These units can be ordered with or without a Direct Digital Controller (DDC), which can operate as a stand-alone unit, on a Johnson Controls N2 trunk, or on a LON® trunk.

TSS Terminals take advantage of typical benefits provided by single duct units, while performing at extremely low sound levels. This is critical in today's buildings where occupants are placing more emphasis on indoor acoustics. The TSS Terminal is manufactured and assembled with a multi-point, center-averaging airflow sensor, which provides a signal to the controller enabling it to quietly and precisely measure airflow.

Bundled with the TSS Terminal is a digital controller from the VAV Modular Assembly (VMA) Series or the LN Series. Each model in the VMA1400 Series and the LN Series combines a controller, pressure sensor, and actuator housed in one pre-assembled unit.

Standard Features

Construction

- ARI 880 certified and labeled
- 22-gauge galvanized steel casing and valve
- G90 galvanized steel
- 1/2", 4lb/ft³ skin, dual density fiberglass insulation, glued and clinch-pinned in place

Hot Water Coils

- ARI 410 certified and labeled
- 1-, 2-, 3-, 4-row coils
- Tested at a minimum of 350 psig under water
- Mechanically expanded copper tubes leak tested to 350 psig air pressure
- Male sweat type water connections

Primary Air Valve

- Embossed rigidity rings
- Low-thermal conducting damper shaft with position indicator
- Mechanical stops for open and closed position
- Multi-point center-averaging airflow sensor
- Brass balancing tees
- Plenum-rated sensor tubing

Electrical Components

- cETL listed for safety compliance
- National Electrical Manufacturers Association (NEMA) Type 1 wiring enclosure

Electric Heat

- ETL listed as an assembly for safety compliance
- Integral electric heat assembly
- Automatic reset primary and back-up secondary thermal limits
- Single-point power connection
- Hinged electrical enclosure
- Fusing per NEC
- Airflow switch
- Ni-chrome elements
- Primary/Secondary power terminations
- Wiring diagram

Optional Features

Construction

- 20-gauge galvanized steel construction
- 3/4" or 1" fiberglass insulation
- Scrim-reinforced, foil-faced insulation meeting American Society for Testing and Materials (ASTM) C1136 for mold, mildew, and humidity resistance
- 1/2" Elastomeric closed-cell foam insulation
- Double wall construction with 22-gauge liner
- Mounting brackets to accept all-thread hanging rods or wire hangers
- Low temperature construction for use in thermal storage applications, including a thermally isolated primary air inlet and a composite damper shaft

Hot Water Coils

- Low pressure steam coils
- Multi-circuit coils for reduced water pressure drop
- Opposite hand water connections
- Bottom and top access plates for cleaning

Electrical Components

- Full unit toggle disconnect and inline motor fusing
- Primary and secondary transformer fusing

Electric Heat

- Proportional solid state relay (SSR) heater control
- Mercury contactors
- Door interlocking disconnect switches
- Disconnect (toggle or door interlocking)
- Pneumatic Electric (PE) switches
- Mercury and magnetic contactors
- Manual reset secondary limit
- 24 volt control transformer
- Special watt densities
- Finned tubular elements

Controls

- Factory-provided controls
- Direct digital controls (DDC) for N2 or LON® networks
- Pneumatic controls

TSL – Single Duct Low Height Variable Air Volume Terminal



- An integrated VAV box with direct digital controls eliminates the coordination and difficulties associated with factory mounting
- Downloading of software, setting of parameters, addressing and testing at the factory reduces startup time and lowers risk
- Superior flow measuring provides for lower minimum cubic feet per minute (CFM) values, which reduces energy costs and noise while maintaining comforts in the zone
- Installation time can be reduced with the low profile compact design and standard metal hanging straps
- Units wired in compliance with all applicable National Electrical Code (NEC) requirements and tested in accordance with Air Conditioning and Refrigeration Institute (ARI) standard 880

TSL Terminals provide variable air volume (VAV) control beyond the typical single duct box. They are specifically designed for precise air delivery throughout the entire operating range and are only 10" in height, making them ideal for shallow or congested ceiling plenum applications. These units can be ordered with or without a Direct Digital Controller (DDC), which can operate as a stand-alone unit, on a Johnson Controls N2 trunk, or on a LON® trunk.

TSL Terminals take advantage of typical benefits provided by single duct units, while performing at extremely low sound levels. This is critical in today's buildings where occupants are placing more emphasis on indoor acoustics. The TSS Terminal is manufactured and assembled with a multi-point, center-averaging airflow sensor, which provides a signal to the controller enabling it to quietly and precisely measure airflow.

Bundled with the TSL Terminal is a digital controller from the VAV Modular Assembly (VMA) Series or the LN Series. Each model in the VMA1400 Series and the LN Series combines a controller, pressure sensor, and actuator housed in one pre-assembled unit.

Standard Features

Construction

- ARI 880 certified and labeled
- 20-gauge, galvanized steel casing and valve
- G90 galvanized steel construction
- 1/2", 4 lb/ft³ skin, dual density fiberglass insulation glued and clinch pinned
- Invertible unit facilitates control installation on the left- or right-hand side

Hot Water Coils

- ARI 410 certified and labeled
- 1-, 2-, 3-, 4-row coils
- Left- or right-hand connections
- Tested at a minimum of 450 psig under water and rated at 300 psig working pressure at 200°F
- Aluminum fin construction with die-formed spacer collars for uniform spacing
- Mechanically expanded copper tubes leak tested to 450 psig air pressure and rated at 300 psig working pressure at 200°F
- Male sweat type water connections

Primary Air Valve

- 18-gauge, G90 galvanized steel construction
- Low thermal conductance damper shaft
- Position indicator on external end of damper shaft
- Mechanical stops for open and closed position
- Multi-point center-averaging airflow sensor
- Brass balancing tees
- Plenum-rated sensor tubing

Electrical Components

- cETL listed for safety compliance with Underwriters Laboratories Inc.® (UL) 1995
- National Electrical Manufacturers Association (NEMA) Type 1 wiring enclosure

Electric Heat

- Invertible unit facilitates control installation on the left- or right-hand side (not applicable if equipped with a mercury contactor)
- cETL listed as an assembly for safety compliance
- Automatic reset primary and back-up secondary thermal limits
- Primary auto-reset high limit

- Secondary high limit
- Airflow switch
- Single-point power connection
- Hinged electrical enclosure door
- Fusing per NEC

Optional Features

Construction

- Scrim-reinforced, foil-faced insulation meeting American Society for Testing and Materials (ASTM) C1136 for mold, mildew, and humidity resistance
- 1/2" Elastomeric closed-cell foam insulation
- Double wall construction with a 22-gauge liner
- Mounting brackets to accept all thread hanging rods or wire hangers
- Discharge sound attenuator (Model TSL-SA)

Hot Water Coil

- Coil access plate for cleaning coil
- Coil circuiting options for reduced water pressure drop
- Right- or left-hand water connections
- Bottom and top access plates for cleaning
- Steam coils

Electrical Components

- Toggle disconnect switch
- Primary and secondary transformer fusing

Electric Heat

- Proportional solid state relay (SSR) heater control
- Mercury contactors (if equipped with a mercury contactor, the unit cannot be inverted)
- Door interlocking disconnect switches
- Disconnect (toggle or door interlocking)
- Pneumatic Electric (PE) switches
- Mercury and magnetic contactors
- Manual reset secondary limit

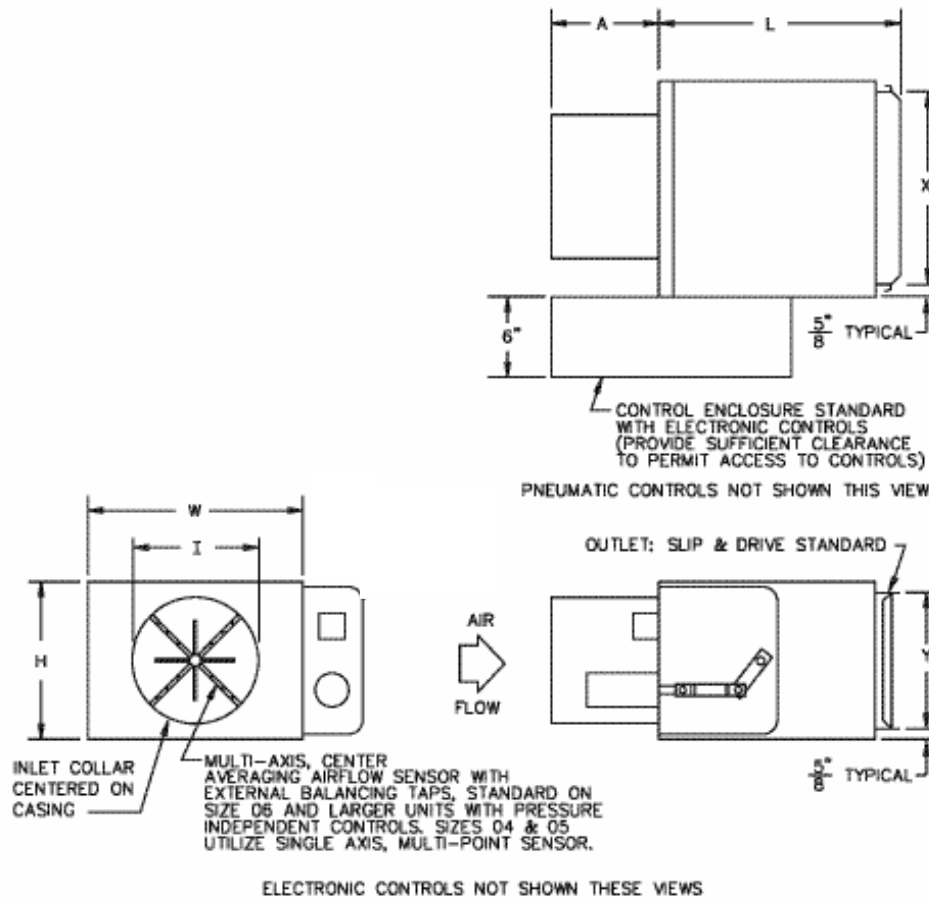
Controls

- Factory-provided controls
- Direct Digital Controls (DDC), for N2 or LON® networks
- Pneumatic controls

Single Duct Variable Air Volume Terminal (Model TSS)

Unit Size	CFM	Bypass CFM	Weight	Dimensions				
				W x H x L	A	I	X	Y
6	200	300	18	10" x 10" x 11"	6 1/2"	5 7/8"	8 3/4"	8 3/4"
8	400	600	20	12" x 10" x 11"	6 1/2"	7 7/8"	10 3/4"	8 3/4"
10	600	900	25	14" x 12.5" x 13"	6 1/2"	9 7/8"	12 3/4"	11 1/4"
12	800	1200	30	16" x 15" x 13"	6 1/2"	11 7/8"	14 3/4"	13 3/4"
14	1100	1800	38	20" x 17.5" x 17.5"	6 1/2"	13 7/8"	18 3/4"	16 1/4"
16	1500	2200	42	24" x 17.5" x 17.5"	6 1/2"	15 7/8"	22 3/4"	16 1/4"
22	3000	5400	72	34" x 17.5" x 11"	8"	32 1/4" x 15 7/8"	32 3/4"	16 1/4"

Note: All dimensions are in inches with a tolerance of +1/8". Size 22 has a rectangular inlet collar. CFM based on 1000 FPM (Bypass 1500 FPM) for low to medium pressure applications.



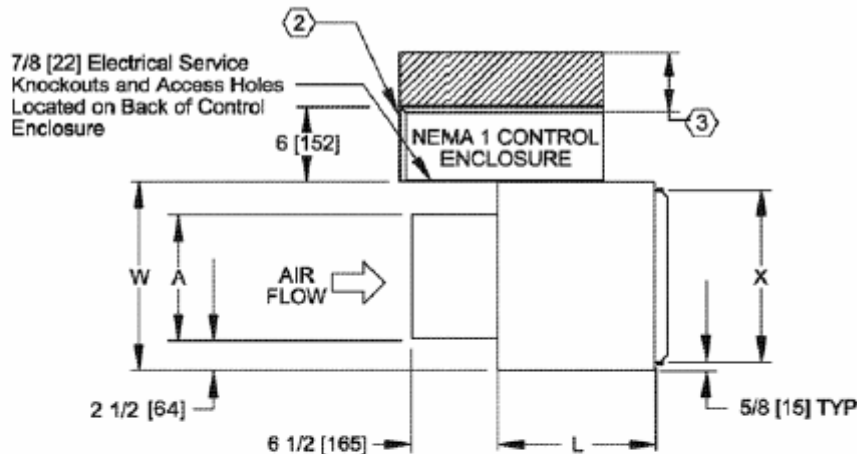
Clearance 24"

Dimensions – Model TSS

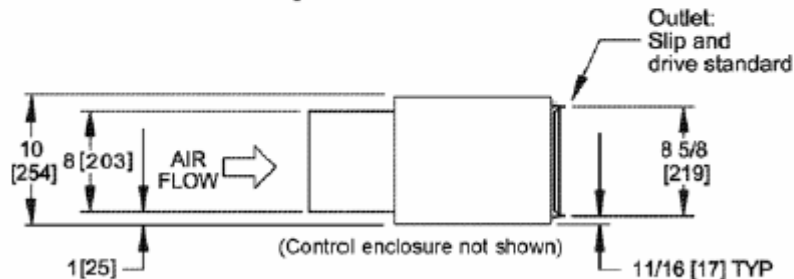
Single Duct Variable Air Volume Terminal - Rectangular (Model TSL)

Unit Size	CFM	Bypass CFM	Dimensions				Weight
			A	W	L	X	
10	600	1200	10"	15"	12 1/2"	13 3/4"	26
12	800	1600	14"	19"	12 1/2"	17 3/4"	28
14	1200	2200	20"	25"	16 1/2"	23 3/4"	39
16	1500	3000	26"	31"	16 1/2"	29 3/4"	45

Notes: 1. For dimensional data for unit sizes 6 and 8, refer to the Single Duct Variable Air Volume Terminal (Model TSS). All dimensions are in inches with a tolerance of +1/8". Weights are in pounds. Weights are for the basic unit with the indicated option and control enclosure. Actual weight varies based on project-specific requirements for unit options, appurtenances, and controls. 2. Control enclosure is standard with factory-mounted electronic controls. 3. Check all national and local codes for required clearances.

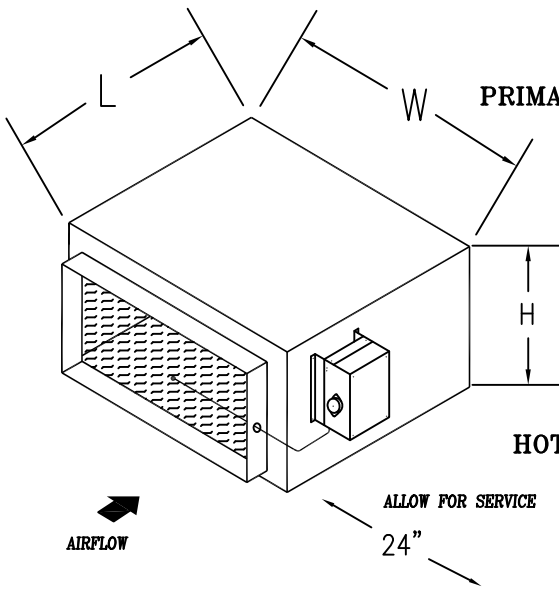


Top View



Side View

Dimensions – Model TSL



CASING: Minimum 22 gauge galvanized steel reinforced for maximum rigidity and minimum leakage. Units complete with a minimum of 1 inch to 1 1/2 inch density insulation in accordance with NFPR-90

PRIMARY AIR VALVE: Constructed of welded steel channel frame with 18 gauge galvanized steel blades, die formed stiffeners are full blade stop. Stainless steel side seals standard along with blade seals to minimize leakage. All hardware is zinc plated with brass pivot points and bronze oilite bearings.

ACTUATOR: Electronic, manufactured by JCI (FX SERIES),

HOT WATER COIL: Add 4 1/2 inches to airway length for 1 or 2 rows, 1/2 inch SW connection.

NOTES: 1. Dampers may be mounted in any position.
2. Bypass dampers are sized for 100% bypass relief. (see bypass damper selection chart)

35PSA ZONE/BYPASS DAMPER							
MODEL NUMBER	ZONE CFM	BYPASS CFM	INLET + 1/4"	H	W	L	(lbs)
PSA-06-006	600	1000	10 X 9	12	11	13	17
PSA-08-010	1000	2000	16 X 10	12	18	13	23
PSA-10-016	1000	2000	16 X 10	12	18	13	23
PSA-12-022	1500	2500	16 X 10	12	18	13	23
PSA-14-028	2000	4000	29 X 10	12	31	13	38
PSA-16-035	2000	4000	29 X 10	12	31	13	38
PSA-18-050	3000	6000	26 X 16	18	28	22	45
PSA-20-065	4000	8000	32 X 16	18	34	22	51
PSA-24-100	5000	10000	40 X 16	18	42	22	63

*ZONE CFM BASED ON 1000 FPM

*BYPASS CFM BASED ON 2000 FPM

SIZE TO 100% OF UNIT AIRFLOW (MANF. RECOMMENDED)

*PROVIDED BY USACD-YORK

ADDITIONAL DAMPER
SPECIFICATIONS – 35PSA (RECTANGULAR)

SCALE: NONE

STERIL-AIRE®

UVC for HVAC™

Model SE Series UVC Emitters™

Single-Ended, Very High
Output Germicidal Light
Source for HVAC Systems

needed to maintain microbial control. The UVC Emitter, by contrast, has a 12-month service life – and even after a full year, it has 2-1/2 times greater output than competitive devices deliver on Day 1! As a result, only Steril-Aire can ensure the germicidal performance you need, with no return of microbial growth, for 3-4 times longer than the competition.



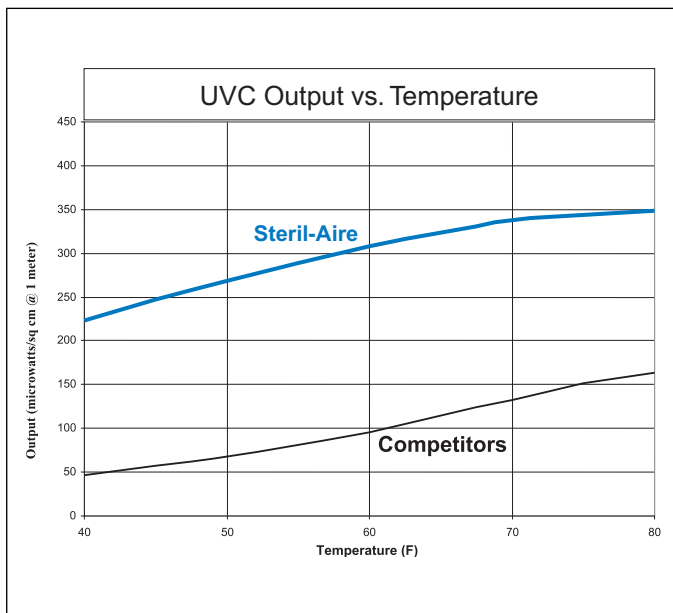
Applications

Steril-Aire Single-Ended (SE Series) fixtures install from the exterior of HVAC equipment, making them ideal for germicidal sites that are difficult to access. They are easily installed by making a one-inch hole in the equipment wall and/or duct, and then simply mounting the fixture to the unit exterior. Only the lamp or tube penetrates into the system, while the power supply remains external. Choose from six tube lengths (16", 20", 24", 30", 36" and 42") and four voltage options (115, 208, 230 or 277 Vac) to fit most applications, including:

- Fan coils, heat pumps, unit ventilators, terminal units and ductwork.

Benefits

- Kills or inactivates surface and airborne microorganisms that contribute to poor IAQ and/or the spread of infectious disease, including: mold and mold spores, bacteria (*including TB, Legionella, E. coli, Listeria, salmonella and whooping cough*); and viruses (*including colds, flu, measles*).
- Delivers an average of 5 times the output of competitive UVC products at HVAC operating temperatures, for 3-4 times longer life and more reliable germicidal control.
- Uses patented state-of-the-art solid-state electronic power supply for enhanced reliability and performance.
- Continuously cleans coils, drain pans, plenums and ducts, eliminating costly cleaning programs and the use of harmful chemicals and disinfectants.
- Lowers HVAC energy costs by restoring heat transfer and net cooling capacity.
- Produces no ozone or other secondary contaminants – will not harm building occupants, equipment or furnishings.
- Offers lowest life-cycle cost of any UVC product. Return on investment is often less than one year.
- Installs quickly and easily, with no need to open equipment – ideal for small systems and/or ducts.



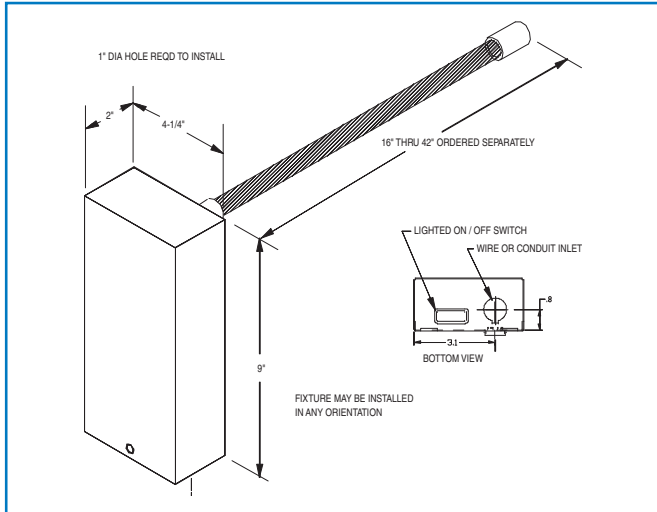
Steril-Aire's multi-patented UVC Emitter™ provides the best and longest-lasting UVC performance available. As shown in the comparison graph (*above*), it has been independently tested to deliver an average of 5 times the output of other ultraviolet devices under HVAC operating conditions (45° F @ 550 fpm air velocity).

Competitive UVC lights must be changed every 3-4 months because they quickly lose the output or "killing power"

Model SE Specifications

The UVC Emitter™ and fixture shall be factory assembled and tested. They shall consist of a housing, power source, Emitter socket and Emitter.

The housing shall be constructed of 304 stainless steel to withstand HVAC environments and shall be equipped with a 1/2" electrical conduit opening to facilitate wiring. All components shall be



This product may be covered by one or more of the following patents, others pending: 5,334,347/ 5,866,076/ 5,817,276/ 6,372,186/ 6,313,470/ 6,245,293/ 6,267,924/ 6,280,686/ 6,423,882.

incorporated into one integral assembly that maximizes serviceability. It shall be designed for mounting from outside the airstream with only the Emitter in the conditioned air. Emitter shall be held in place and supported in the airstream by a patented integral collar, o-ring and heavy-duty spring wire fastener. The housing shall include an on-off switch and an indicator light to verify unit function.

The power supply shall be a Class P2, electronic rapid start type with a power factor of >0.95 and a power conversion of >75%. It shall be available in 115-208/230 or 277 Vac, 50/60 Hertz, and single phase. It shall be designed to maximize photon production, irradiance and reliability in cold or moving airstreams of 35-170° F, 100% RH and up to 2000 fpm. The design shall include RF and EMI suppression.

The socket shall be a Circline® 4 pin type with sufficient wire length to facilitate service.

The Emitter shall be a very high output, hot cathode, T5 diameter, Circline® cell-base type that produces a UVC band of 250-260 nm. Each tube shall be capable of producing the specified output at up to 2000 fpm velocity and temperatures of 35-170° F. It shall produce no ozone or other secondary contaminants.

Independent testing: The unit shall be tested by an independent test laboratory in accordance with the general provisions of IES Lighting Handbook, 1981 Applications Volume, and shall be verified through independent testing to provide output per 1" arc length of not less than 10 µW/cm² at 1 meter in a 400 fpm airstream of 45° F.

Unit shall comply with UL Standard 1995 for use in HVAC equipment and shall carry the "UL" and "ULC" labels.

Ordering Information

Model No.	Part No.	Description	Length	Electrical	Weight
SE 1 VO	11001900	Single-Ended Fixture	N/A	115, 208, 230V: 70-85 watts	3.0 lb.
SE 1 VO	11002100	Single-Ended Fixture	N/A	277V: 70-85 watts	3.0 lb.
GTS 16 VO	21000100	UVC Emitter	16"	N/A	0.15 lb.
GTS 20 VO	21000200	UVC Emitter	20"	N/A	0.15 lb.
GTS 24 VO	21000300	UVC Emitter	24"	N/A	0.20 lb.
GTS 30 VO	21000400	UVC Emitter	30"	N/A	0.20 lb.
GTS 36 VO	21000500	UVC Emitter	36"	N/A	0.25 lb.
GTS 42 VO	21000600	UVC Emitter	42"	N/A	0.25 lb.

STERIL-AIRE®

Steril-Aire, Inc.

Corporate Office:

2840 N. Lima St.
 Burbank, CA 91504
 Telephone: 800-2STERIL or 818-565-1128
 Fax: 818-565-1129

Website: www.steril-aire.com
 Email: sales@steril-aire.com



Complies with current U.S. and Canadian UL Standards for use in HVAC equipment.

Represented By: