

Z-Duct®  
Counterflow Plate Type Air-to-Air  
Heat Exchangers

Benefits

- Energy recovery
- Energy efficient
- Energy cost savings
- Low maintenance

## Z-Duct® Plate Heat Exchangers

Z-Duct is a unique system designed specifically to permit the recovery of large amounts of energy that would otherwise be wasted.

### How Z-Duct® Works

Counterflow air streams are brought into close proximity, separated by one continuous, dimpled and folded sheet of aluminum. The heat transfer surface is formed into a matrix with two completely separate and distinct air passages. The ends of the matrix are sealed for minimum leakage, virtually eliminating cross-contamination. Z-Duct heat exchangers are highly efficient, low cost and, with no moving parts to break down or replace, low maintenance.

In air conditioning systems, Z-Duct heat exchangers make it possible to pre-cool incoming supply air by transferring energy from the outdoor air to the exhaust air. The reverse is true for heating systems. Energy is transferred from the exhaust to the outdoor air, thereby pre-warming the supply air. Less energy is needed to either cool or heat incoming air. This transfer of energy from exhaust to supply air greatly reduces fuel consumption, as well as, the equipment capacity required to condition the outdoor air.

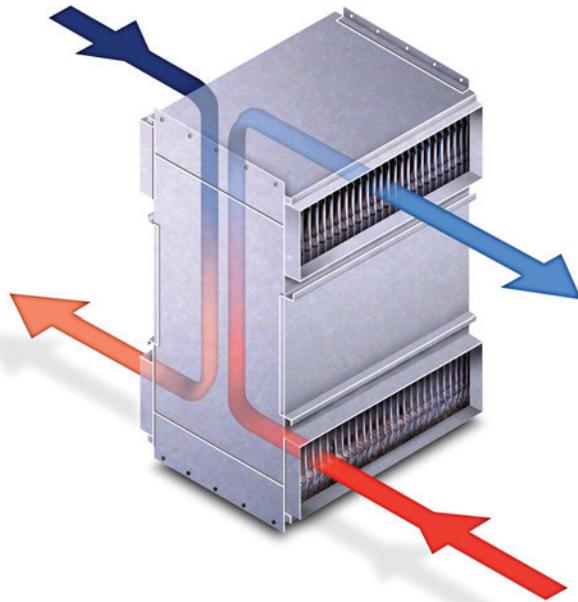
Z-Duct heat exchangers function economically in most applications where fresh outdoor air is being drawn into a building to meet ASHRAE recommended or code ventilation requirements, or to replace spent, stale, or contaminated air.

Printing plants, laundry rooms and indoor swimming pools are just a few of the many facilities that benefit from Munters Z-Duct heat exchangers.



Z-Duct® Series 85

# Series 74 & 84



## Specifications

- Operation to 200°F
- Differential pressure to 10" W.C.
- Medium temperature, clean airstreams
- **Series 74:** Modular 500 scfm and 1,000 scfm units
- **Series 84:** Modular 2,000 scfm and 3,000 scfm units
- Standard UU flow

## Standard Construction Features

- 6 mil (0.006) 1100 aluminum dimpled foil matrix
- Galvanized steel casing
- **Series 74:** Nominal 62% effectiveness  
Nominal 0.75" W.C. pressure drop per side
- **Series 84:** Nominal 80% effectiveness  
Nominal 1.75" W.C. pressure drop per side
- Counterflow configuration
- Variable plate spacing
- 3/4" FTP drain connections

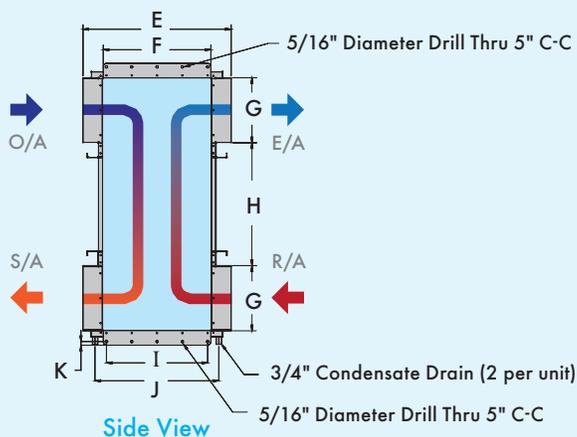
## Dimensional Data

Model Number	A	B	C	D	E	F	G	H	I	J	K
74 M 500	12	39	36 3/4	1 1/8	20 1/2	14 7/8	9	17	14	17 1/8	1/2
74 M 1000	22 3/4	39	36 3/4	1 1/8	20 1/2	14 7/8	9	17	14	17 1/8	1/2
84 M 2000	25 3/4	65	59	3	28	22 3/4	14	19	20	25 3/4	1
84 M 3000	37	65	59	3	28	22 3/4	14	19	20	25 3/4	1

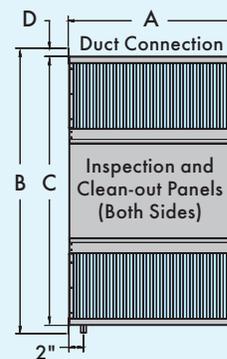
Note: Higher airflows may be obtained by combining these modules.

## Standard Unit Options

- **Series 74:** Stainless steel matrix and casing construction
- Epoxy coated foil
- Stationary high-flow water wash system
- Outside air hood with birdscreen and filters
- Face and bypass sections with dampers
- Operation up to 400°F
- May be incorporated into packaged heat recovery and dehumidification units

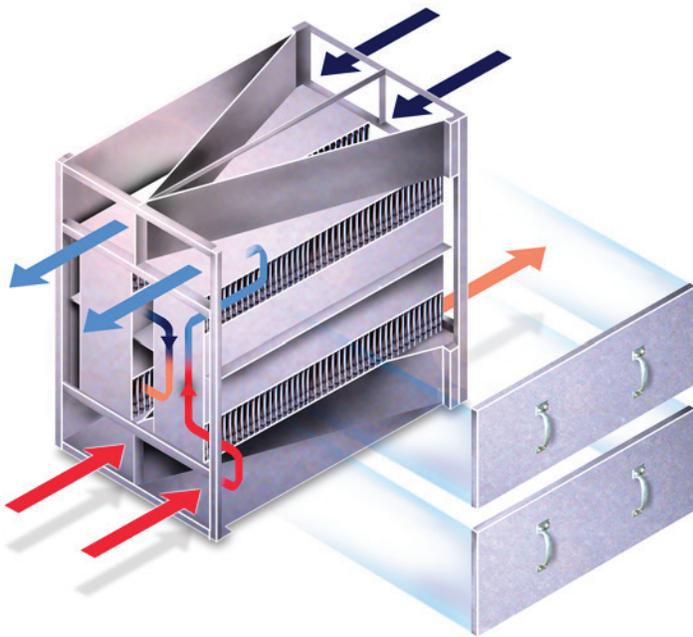


Side View



Front View

# Series 75



## Specifications

- Operation to 200°F
- Differential pressures to 10" W.C.
- Medium temperature, clean airstreams
- Two banks of Series 74 heat exchangers
- Easier duct connections than Series 74 heat exchangers
- Access doors for inspection and cleaning
- Standard unit sizes 4,000 scfm to 12,000 scfm
- Standard UU flow or optional X flow pattern

## Standard Construction Features

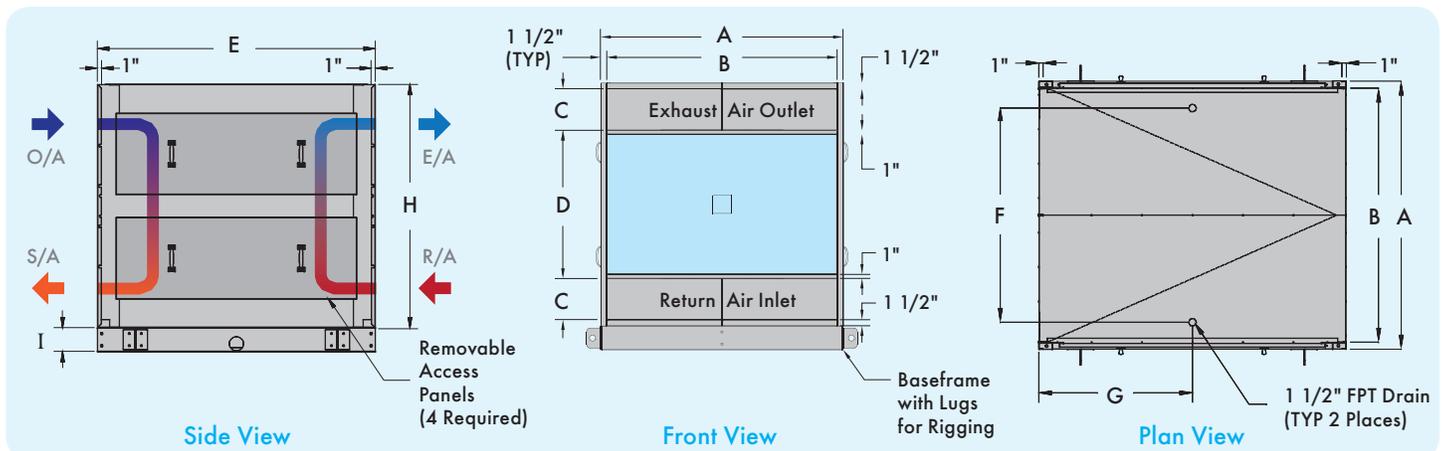
- 6 mil (0.006) 1100 aluminum dimpled foil matrix construction
- Galvanized steel casing
- Nominal 62% effectiveness
- Nominal 1" W.C. pressure drop per side
- Counterflow configuration
- Variable plate spacing
- 1 1/2" FPT drain connections

## Dimensional Data

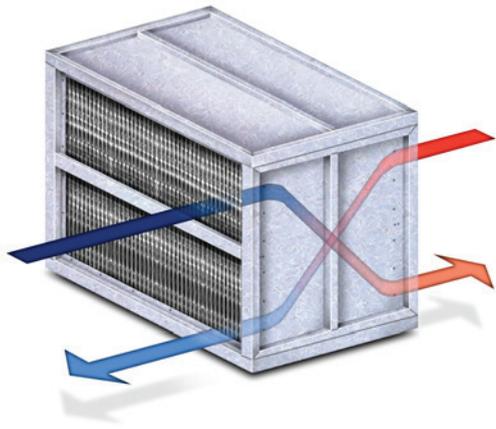
Model Number	A	B	C	D	E	F	G	H	I
75 M 04	65	57	10 1/4	36 3/4	47 1/4	48	23 5/8	60 1/4	4
75 M 06	65	57	10 1/4	36 3/4	68 3/4	48	34 3/8	60 1/4	6
75 M 08	77	69	14 3/4	36 3/4	90 1/4	48	45 1/8	69 1/4	6
75 M 10	99	91	14 3/4	36 3/4	114	72	57	69 1/4	8
75 M 12	99	91	14 3/4	36 3/4	135	67 1/2	67 1/2	69 1/4	8

## Standard Unit Options

- Semi-automatic traversing water wash systems
- Traversing defrost system
- Outside air hood with birdscreen and filters
- Face and bypass sections with dampers
- May be incorporated into packaged heat recovery and dehumidification units
- Operation up to 400°F
- Spray-on Urethane insulation on floor bottom and lower doors (120°F max temperature)



# Series 79



## Dimensional Data

Model Number	A	B	C	D
79 MS/ML 0812	16	12	3	12
79 MS/ML 1612	16	12	7	20
79 MS/ML 1618	22	18	7	20
79 MS/ML 3212	16	12	15	36
79 MS/ML 3218	22	18	15	36
79 MS/ML 3224	28	24	15	36
79 MS/ML 3230	34	30	15	36
79 MS/ML 3236	40	36	15	36
79 MS/ML 3242	46	42	15	36
79 MS/ML 4836	40	36	23	52
79 MS/ML 4842	46	42	23	52
79 MS/ML 4848	52	48	23	52
79 MS/ML 4860	64	60	23	52
79 MS/ML 4872	80	76	23	52

## Specifications

- Operation up to 200°F
- Differential pressure to 5" W.C.
- Clean airstreams
- Easy to apply counterflow configurations
- Up to 87% effectiveness
- Low maintenance
- Units sized from 100 to 14,000 scfm, multiple units for 100,000 cfm or more
- Standard X flow or optional UU, LL or UI pattern

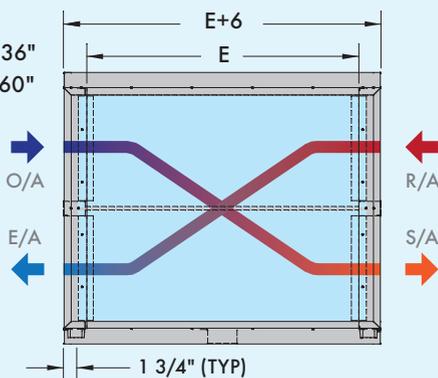
## Standard Construction Features

- 6 mil (0.006) 1100 aluminum dimpled foil matrix
- Galvanized steel casing
- 1 1/2" FPT drain connections
- Fully flanged duct connections
- **Series 79 MS:** Nominal 68% effectiveness  
Nominal 0.75" W.C. pressure drop per side
- **Series 79 ML:** Nominal 75% effectiveness  
Nominal 1.25" W.C. pressure drop per side
- Counterflow configuration
- Variable plate spacing
- S (36") and L (60") lengths

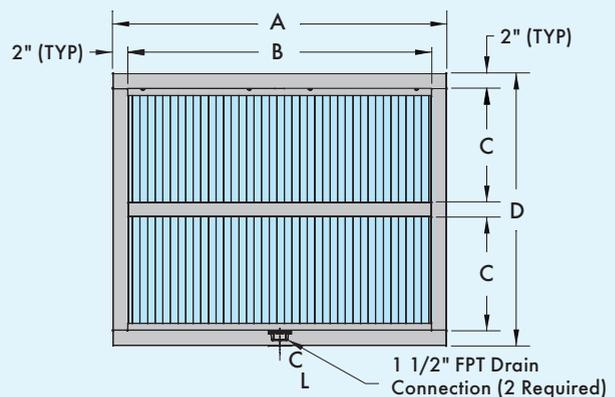
## Standard Unit Options

- Insulated casing
- Face and bypass dampers
- Water wash system
- Traversing defrost

E Dimension:  
MS Models = 36"  
ML Models = 60"

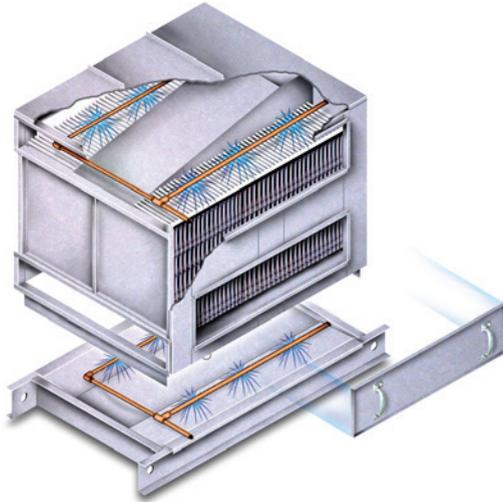


Side View



Front View

# Series 85



## Dimensional Data

Model Number	SCFM	H	W	L	A	B	C	D	E	F
85 M 4	4000	68 ½	56	47 ¼	20	25	10 ¼	38	8 ½	8
85 M 6	6000	69 ½	56	68 ¾	20	25	10 ¼	38	8 ½	8
85 M 8	8000	78 ½	56	90 ¼	20	30	14 ¾	38	7 ½	8
85 M 10	10000	78 ½	72	114	36	30	14 ¼	38	7 ½	8
85 M 13	13000	113	92	78	40	46	20	62	10	8
85 M 16	16000	113	92	96	40	46	20	62	10	8
85 M 20	20000	113	92	120	40	46	20	62	10	8
85 M 25	24000	113	92	150	40	46	20	62	10	8
85 M 30	30000	121	96	180	44	52	24	62	6	8
85 M 35	35000	131	108	210	56	56	24	62	6	10
85 M 40	40000	138	120	232	68	56	32	54	6	17

## Specifications

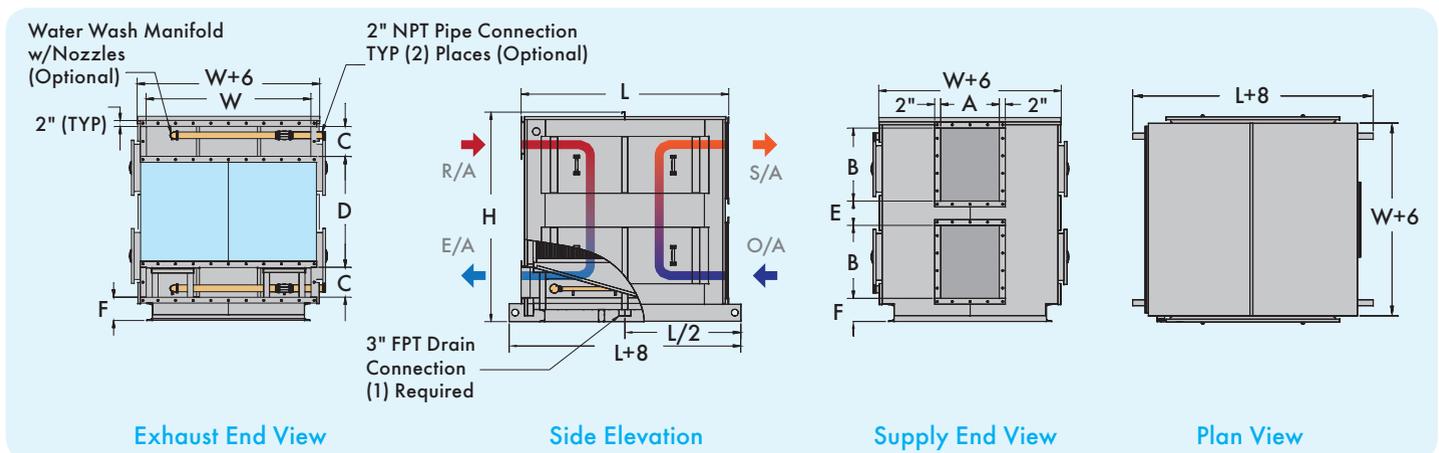
- Operation up to 450°F
- Utilizes high-efficiency Z-Duct® heat exchangers to effectively recover energy from processes with particulate-laden exhausts
- Easy access for inspection and cleaning
- Up to 85% effective
- Low maintenance
- Straight-through flow for exhaust airstream
- Units sized from 4,000 – 40,000 scfm
- Standard UU flow or optional X flow pattern

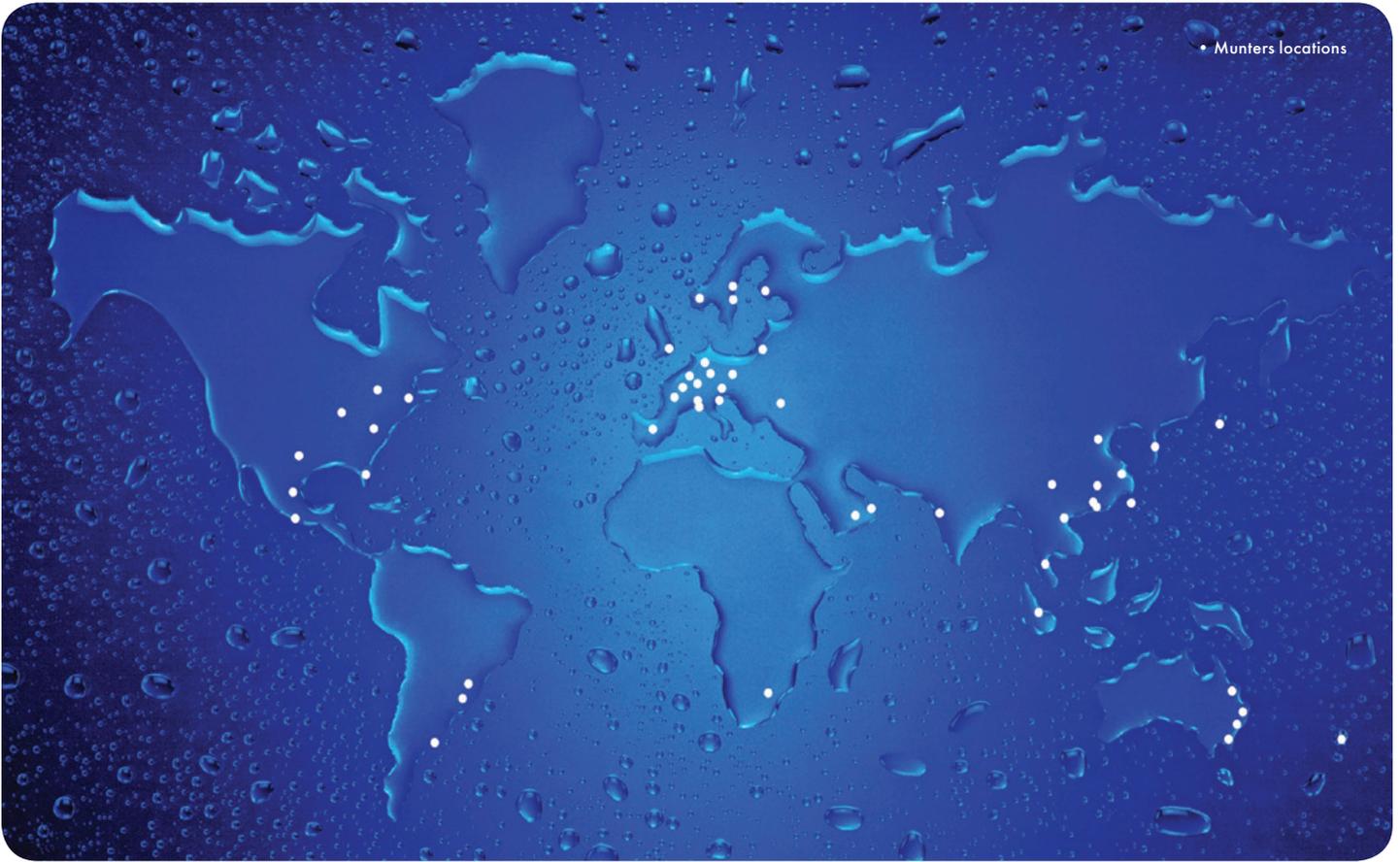
## Standard Construction Features

- 6 mil (0.006) aluminum dimpled foil matrix
- Double wall galvanized construction with 2" thermal insulation
- All-welded structural steel base frame with integral lifting lugs for rigging
- Structural steel flanged connections
- All-welded aluminized steel sloped floor with 3" FPT drain connection and upturned edges for positive moisture containment.

## Standard Unit Options

- Stationary high-flow water wash system
- Outside air intake hoods with filters
- Epoxy coated foil
- All aluminum construction
- All stainless construction





## Munters is a global leader in energy efficient air treatment and climate solutions.

Using innovative technologies, Munters creates the perfect climate for customers in a wide range of industries, the largest being food, pharmaceutical and data center sectors. Munters has been defining the future of air treatment since 1955. Today, around 3,500 employees carry out manufacturing and sales in more than 30 countries. Munters reports annual net sales in the region of SEK 6 billion and is listed on Nasdaq Stockholm.

*For more information, please visit [www.munters.com](http://www.munters.com).*

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