



A broiler ventilation system that  
fits your needs and budget

trust experience



# Why Munters?

Munters only does ventilation systems; allowing us to focus on producing the most innovative ventilation products and building design in the industry.

- Product Quality: Most products offered in the US are built in Michigan using local suppliers.
- Data: Our products allow growers to make data-driven decisions to improve their business.
- Experience: Munters has been designing ventilation products and systems for over 70 years.
- Safety Standards: As a global supplier of agricultural, industrial and commercial products, Munters requires certifications for our products which are tested and certified to the strictest safety standards every day.
- Air Quality: CELdek is the only cooling pad manufactured with the UL GREENGUARD Gold certification, assuring your building air quality is safe for employees and livestock.
- Confidence: Munters systems are used by top producers globally.
- Munters Drive: Save energy, reduce maintenance costs and downtime, and dial in Your Perfect Climate in your building with Munters Drive patented EC direct drive motors.



# 5

## KEY DESIGN ELEMENTS

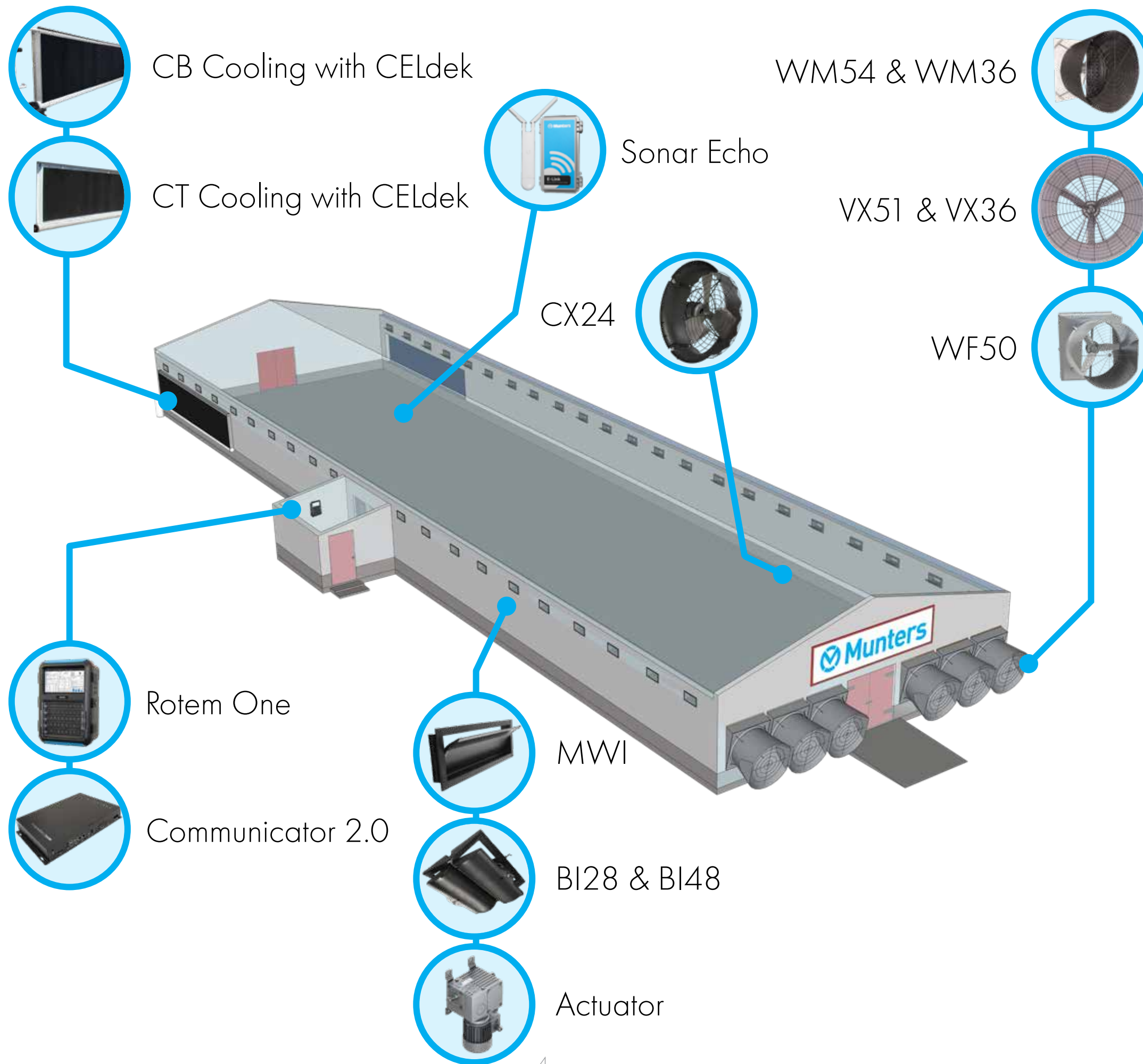


## Munters uses five key elements to control bird movement

- 1 Consideration of outdoor climate
- 2 Product design
- 3 System design — the right products for the right climate
- 4 Air placement
- 5 Integrated design

The key to profitability is maintaining even bird distribution and health

- Decrease feed conversion rates
- Better bird distribution
- Reduce paw lesions
- Maintain litter moisture levels with reduced ammonia content
- Less bird stress
- Better air quality for birds and workers
- Improve overall bird health and production











# Munters Drive

Munters was the first to introduce EC motor technology to the large diameter fans specifically for agriculture. Then, we revolutionized that technology with the Munters Drive. Designed, engineered, and built by Munters engineers who are farmers themselves, the Munters Drive reduces costs across dairy, swine, poultry, and greenhouse production by solving some of the most persistent issues facing farm managers, tech managers, and controllers.

Today, more than 30,000 units are in use at over 1,400 farms worldwide, with the first Drives installed exceeding 100,000 hours of continuous operation.

## **Munters Drive reduces costs by:**

- Lowering electrical usage — save up to 40% annually.
- Qualifying you for rebates from utility companies.
- Decreasing the need for complex wiring systems.
- Being virtually maintenance-free.
- Retrofitting to existing systems.



## VX55 - VX51 - VX48- VX36 | Munters Drive

	<b>VX55</b> Three Phase, 460V High Efficiency - HE	<b>VX55</b> Three Phase, 460V High Rebate - HR	<b>VX55</b> Three Phase, 460V High Output - HO	<b>VX51</b> Three Phase, 460V High Efficiency - HE	<b>VX51</b> Three Phase, 460V High Rebate - HR	<b>VX51</b> Three Phase, 460V High Output - HO
	RPM	490	496	556	540	593
0.00" SP	CFM	33,000	33,500	37,900	28,300	31,200
	CFM/Watt	27.2	26.5	21.5	30.4	25.8
0.05" SP	CFM	31,100	31,600	36,100	26,700	29,900
	CFM/Watt	24.1	23.7	19.4	27.1	23.3
0.10" SP	CFM	29,900	29,500	34,400	24,700	28,200
	CFM/Watt	21.4	21.1	17.7	23.9	21.1
0.15" SP	CFM	26,600	27,200	32,600	22,500	26,300
	CFM/Watt	18.9	18.8	16.2	20.9	18.8
0.20" SP	CFM	23,300	23,900	30,300	19,900	24,100
	CFM/Watt	16.1	16.1	14.5	18.0	16.7
	Airflow Ratio	0.73	0.76	0.84	0.75	0.81
	BESS Lab Test	12797	12798	12799	12679	12680

	<b>VX48</b> Three Phase, 460V High Efficiency - HE	<b>VX48</b> Three Phase, 460V High Rebate - HR	<b>VX48</b> Three Phase, 460V High Output - HO	<b>VX36</b> Three Phase, 460V High Efficiency - HE	<b>VX36</b> Three Phase, 460V High Rebate - HR	<b>VX36</b> Three Phase, 460V High Output - HO
	RPM	594	649	688	796	876
0.00" SP	CFM	25,000	27,500	29,300	12,550	13,950
	CFM/Watt	25.4	21.6	19.4	26.1	22.8
0.05" SP	CFM	23,500	26,300	27,900	11,690	13,210
	CFM/Watt	22.7	19.8	17.7	22.9	20.3
0.10" SP	CFM	21,900	24,800	26,600	10,840	12,460
	CFM/Watt	18.2	18.0	16.4	19.9	18.2
0.15" SP	CFM	20,100	23,300	25,200	9,770	11,670
	CFM/Watt	18.2	16.4	15.0	17.4	16.3
0.20" SP	CFM	18,000	21,400	23,700	8,400	10,770
	CFM/Watt	15.9	14.7	13.7	14.9	14.6
	Airflow Ratio	0.77	0.81	0.85	0.67	0.82
	BESS Lab Test	13412	13413	13414	15382	18145



## VX55 - VX51 | Belt Drive

### Three Phase

	<b>VX55</b> 2 HP VX552F3CP	<b>VX55</b> 1.5 HP VX5515F3CP	<b>VX51</b> 2 HP VX512F3CP	<b>VX51</b> 1.5 HP VX5115F3CP	<b>VX51</b> 1 HP VX511F3CP	
Prop Diameter	55"	55"	51"	51"	51"	
RPM	545	490	630	575	535	
Max BHP	2.36	1.81	2.15	1.72	1.37	
0.00" SP	CFM	35,200	31,700	33,200	30,300	28,500
	CFM/Watt	18.1	21.6	19.1	21.8	25.2
0.05" SP	CFM	33,700	29,900	31,900	28,800	26,700
	CFM/Watt	16.8	19.8	17.7	20.0	22.6
0.10" SP	CFM	32,100	28,000	30,400	27,000	24,700
	CFM/Watt	15.7	17.9	16.4	18.2	20.2
0.15" SP	CFM	30,000	25,700	28,800	24,900	22,100
	CFM/Watt	14.4	16.1	15.2	16.4	17.6
0.20" SP	CFM	28,000	22,900	26,900	22,600	18,700
	CFM/Watt	13.2	14.1	13.9	14.6	14.6
	Airflow Ratio	0.83	0.77	0.84	0.78	0.70
	BEES Lab Test	10148	10152	11372	11369	11367

### Single Phase

	<b>VX55</b> 2 HP VX552F1CP	<b>VX55</b> 1.5 HP VX5515F1CP	<b>VX51</b> 2 HP VX512F1CP	<b>VX51</b> 1.5 HP VX5115F1CP	<b>VX51</b> 1 HP VX511F1CP	
Prop Diameter	55"	55"	51"	51"	51"	
RPM	540	490	620	575	535	
Max BHP	2.39	1.76	2.05	1.68	1.36	
0.00" SP	CFM	33,900	31,400	32,700	30,500	27,800
	CFM/Watt	16.9	21.1	19.3	21.7	24.8
0.05" SP	CFM	32,600	29,600	31,200	29,100	26,000
	CFM/Watt	15.7	19.2	17.7	20.0	22.2
0.10" SP	CFM	31,100	27,700	29,500	27,200	24,000
	CFM/Watt	14.7	17.5	16.3	18.2	19.9
0.15" SP	CFM	29,400	25,300	27,700	25,100	21,600
	CFM/Watt	13.7	15.8	15.0	16.5	17.4
0.20" SP	CFM	27,200	22,200	25,600	22,900	18,600
	CFM/Watt	12.5	13.7	13.7	14.8	14.7
	Airflow Ratio	0.83	0.75	0.82	0.79	0.72
	BEES Lab Test	-	-	11364	11361	11360





## VX48 - VX36 | Belt Drive

**Belt drive fan** complete with **standard inlet plastic shutter**, discharge cone and outlet guard:

	<b>VX48</b> Three Phase, 1.5 HP VX4815F3C	<b>VX48</b> Three Phase, 1 HP VX481F3C	<b>VX48</b> Single Phase, 1.5 HP VX4815F1C	<b>VX48</b> Single Phase, 1 HP VX481F1C
Prop Diameter	48"	48"	48"	48"
RPM	635	575	635	575
Max BHP	1.69	1.26	1.69	1.26
0.00" SP				
CFM	27,500	25,000	27,500	25,000
CFM/Watt	18.8	24.1	18.8	24.1
0.05" SP				
CFM	26,100	23,500	26,100	23,500
CFM/Watt	17.2	21.7	17.2	21.7
0.10" SP				
CFM	24,800	22,000	24,800	22,000
CFM/Watt	15.9	19.6	15.9	19.6
0.15" SP				
CFM	23,300	20,200	23,300	20,200
CFM/Watt	14.5	17.5	14.5	17.5
0.20" SP				
CFM	21,600	17,900	21,600	17,900
CFM/Watt	13.2	15.2	13.2	15.2
Airflow Ratio	0.79	0.76	0.79	0.76

Fan complete with standard **inlet plastic shutter**, discharge cone and outlet guard:

**Formerly AT series - Replace VX for AT when searching BESS lab. AT Advantage fans are part of the VX Series as of 2014**

	<b>VX36</b> Belt Drive, 1.5 HP VX365ZC	<b>VX36</b> Belt Drive, 1 HP VX361ZC	<b>VX36</b> Belt Drive, 0.5 HP VX365ZC	<b>VX36</b> Direct Drive, 0.5 HP VX36ZC
Prop Diameter	36"	36"	36"	36"
RPM	1,075	1,010	770	850
Max BHP	1.63	1.35	0.67	0.60
0.00" SP				
CFM	16,910	15,850	12,570	12,620
CFM/Watt	11.8	13.4	21.4	21.0
0.05" SP				
CFM	16,260	15,150	11,800	11,870
CFM/Watt	11.0	12.4	19.4	18.7
0.10" SP				
CFM	15,700	14,560	10,880	10,920
CFM/Watt	10.4	11.7	17.1	16.6
0.15" SP				
CFM	15,110	13,930	9,890	9,950
CFM/Watt	9.8	11.0	15.2	14.7
BESS Lab Test	04085	04084	93239	96151



## WM Series | WM54 & WM36

The Munters WM Fan Line has been one of the bestselling and reliable fans Munters has offered in years. Since its release in 2016 Munters has refined the product with several upgrades, while keeping the price nearly the same. New features include powder coated galvanized motor mount strut and brackets, stainless steel hardware, upgraded motor, and other improvements to increase durability. The WM Series K gives you a great combination of corrosion resistance, durability and performance; all at an economical price point. The WM54 is also available with the Munters Drive motor offering variable speed and high performance.

		<b>WM54 Munters Drive</b> Single Phase, 230V WM54DK21CB-HO	<b>WM54</b> Single Phase, 1.5hp, 230V WM5415K1CB	<b>WM36</b> Single Phase, .75hp, 230V WM367K1CB
	RPM	600	564	987
0.00" SP	CFM	34,200	32,500	12,400
	CFM/Watt	23.3	24.1	21.5
0.05" SP	CFM	32,800	30,900	11,800
	CFM/Watt	20.9	21.8	19.5
0.10" SP	CFM	31,200	29,200	11,200
	CFM/Watt	18.9	19.5	17.5
0.15" SP	CFM	29,500	27,200	10,500
	CFM/Watt	16.9	17.7	15.2
0.20" SP	CFM	27,700	25,100	9,900
	CFM/Watt	15.1	15.5	13.6
	Airflow Ratio	0.84	0.81	0.84
	Lab Test	16950*	15182*	20280-01°

° Tested in accordance with AMCA Standard 210

\* Certified Bess Lab Test





# CIRCULATION FANS

CX24 | Circulation

		CX24P1	CX24P3
Phase		1	3
Horse Power	HP	1/3	1/3
Voltage	V	115/208-230	208-230/460
Thrust	lbf	6.34	6.38
Efficiency Ratio	lbf/kw	18.2	19.5
Volts	V	230.1	226.6
Amps	A	1.65	1.58
Kilowatts	kW	0.349	0.328
Airflow	thrust cfm	5640	5580
Efficacy	thrust cfm/watt	16.2	17
5d Centerline Velocity	fpm	1120	1120
BESS Lab Test #		c20283	c20050



## INLETS

### MWI | Munters Wall Inlett

- Available in non-insulated and insulated for colder climates
- Optimal flow of fresh air in the house, avoiding drafts and cold air dropping on to livestock
- Recessed curved door in the wall, properly channels the air jet along the ceiling and avoids air escape out the sides
- Air sealing gaskets at the top and sides to avoid air leakage in closed position
- Insulated Door Option
- Door is completely filled with closed cell foam
- Foam provides superior r-value insulation and industry leading air performance ratings
- Improves the structure and reduces condensation, moisture vapor

### BI | Inlets

The BI Series Bi-flow Inlet features a new design created using the latest in computer aerodynamic modelling. Airflow is maximized over the entire static pressure range and flow direction is precisely controlled. Performance of your ventilation system is improved with a fresh supply of preheated air delivered to every part of the building.

- Available in two sizes to fit your application
- Aerodynamic frame and door design for precise control
- Doors close tightly to prevent attic condensation
- Stainless steel door hinges for high durability
- Models for mechanical or static pressure control of airflow

### Horizon | Intermittent Sidewall Inlet

- The Ideal solution for minimum ventilation needs. The Inlet concept uses many of the same durable Horizon components making it easy to build a complete custom building solution.
- The 15" x 8' long inlet offers a curved door in order to increase the air velocity as it enters the building and direct the air along the ceiling.
- Seals on sides and edge of the door gives unmatched tightness when closed and directed air when in operation.
- Heavy duty door seals, flexible hinge and 1.5" thick door ensures a tight seal when closed.
- The rack-and-pinion and oversized gear drive actuator offers worry free operation in warm or cold weather





## INLETS

### »ZEW« Professional 2900 | Wall Inlet

- Designed for colder climates
- Significantly reduces the formation of ice even at extreme external temperatures
- Reduces energy costs by forgoing forced ventilation
- Spreads the temperature uniformly inside the building, as the minimum air rate can be geared solely to the requirements of the animals.

### »ZEW« Flatwave | Wall Inlet

- Wave design made for high throwing range at minimal opening
- Air guidance directed slightly upwards – even at minimal opening
- Air guide blades are individually adjustable
- Made of heat-insulated polyurethane
- Compact design
- Integrated slot for optional bird protective grid and air conduction sheet

### Pivot Air | Ceiling Inlet

- Complete package, from actuator to baffle.
- Components include: LA - Pipe Drive System & transition kit, risers and baffles
- 12" and 20" Slot sizes
- Easy to install and adjust
- 1" high density foam wrapped in corrugated PVC baffles
- Rubber seal to keep out draft
- Solid rod riser connections to eliminate stretch ensuring tight closure
- Custom engineered pivot point for smooth operation
- Designed to work with LA - Pipe Drive System

### Blade Style | Light Trap

- High light reduction
- Low resistance to air flow
- Each piece is fully assembled
- Easy to clean
- Will not corrode
- Made from ultraviolet resistant PVC

### LA | Actuator

- Extremely quiet, self-locking double worm gear unit, long service life, zero maintenance.
- Universal mounting with standard at back or optional on side left (symmetrical)! Removable feet.
- Installed precision END 20 gear limit switch for 580 shaft revolutions (microswitch in cURus).
- Coil protection contact integrated on all single-phase motors, so no separate motor protection switch is required. Turnkey with cable.





Find your nearest Munters office at [www.munters.com](http://www.munters.com)

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