





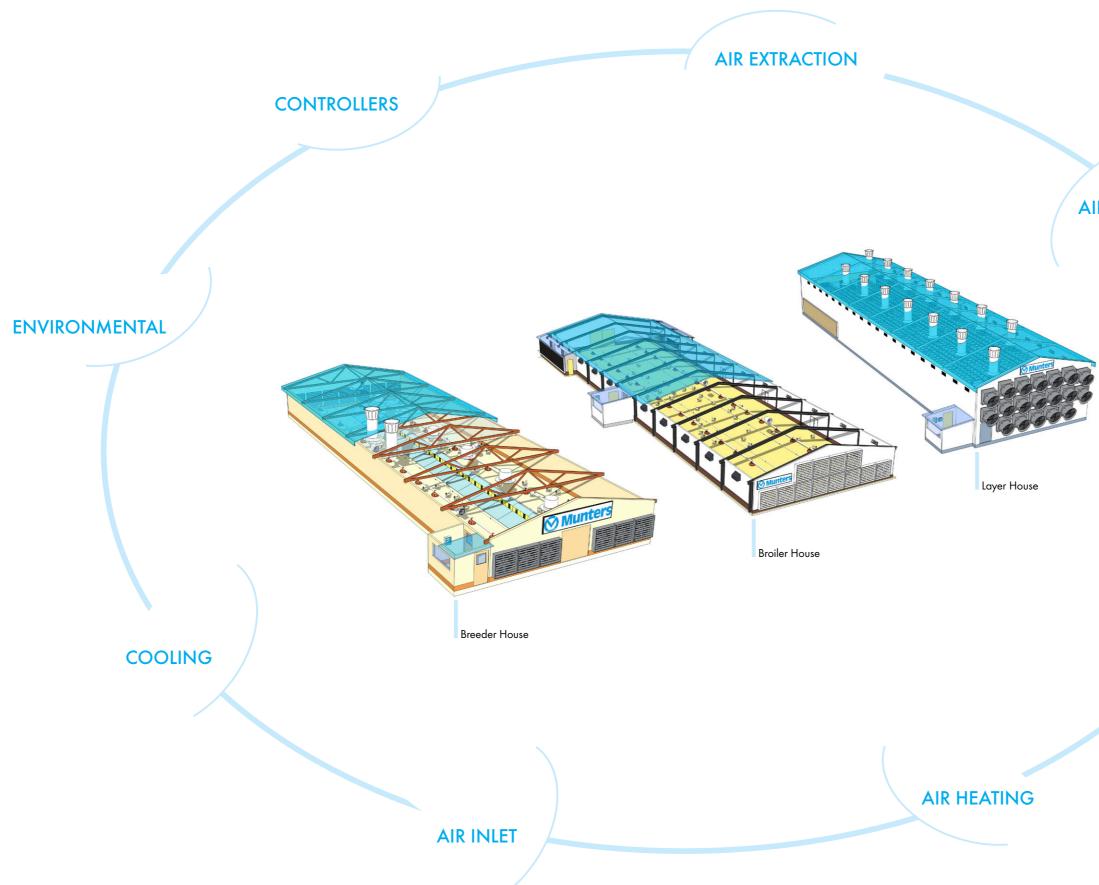
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### POULTRY FARMS



### POULTRY FARMS - YOU NEED IT WE HAVE IT



AIR CIRCULATION

#### LIGHT FILTER & FAN INSULATION

### FEATURES



### **HIGH EFFICIENCY**



In the high end of Munters Agriculture products there is more and more interest for high efficiency products: the European community has introduced a regulation which determines the minimum acceptable efficiency rate for exhaust fans, moreover customers are more sensitive to running cost of the fans and to the quantity of energy necessary for moving a certain amount of air. Munters response to this demand of high efficiency products is represented by the new line of EDHE fans, designed for being fully compliant with European Ecodesign directives, by the cone fans EC50 and EC52, offering an improvement in the range of 10 - 15% of the performances thank's to introduction of discharge cone.

Recently Munters has designed and patented a unique EC motor, designed for working in conjunction with cone fan, able to offer an unbelievable level of efficiency and airflow.

### MUNTERS PROTECT



In agriculture, corrosion is usually caused by a combination of many factors such as pH, high humidity levels, frequent contact with water, aggressive chemicals as found in manure or disinfectants, bacterial growth; and the list goes on. The industry is also continuously evolving and that might have surprising side effects: new agricultural chemicals or feed additives might do wonders for animal or plant health, but also enhance corrosion on metal products. For offering a consistent remedy to corrosion troubles Munters switched to a new material, called Munters Protect, which offers extremely high protection against corrosion. It consists of a coating made of Zinc, Aluminum and Magnesium and it delivers the best corrosion resistance performance, up to 10 times better than galvanised steel.

#### MOTORS



Munters is able to offer a wide range of motor power, depending on the application and the fan size. The smallest fan Munters produces, the 18" air recirculator EDC18 is equipped by a 0.33 Hp motor. The minimum ventilation fans and air recirculators can be equipped by a 0.5 or 0.75 Hp motor. The exhaust fan used for tunnel ventilation can be equipped by 1.0 or 1.5 Hp motor. For the recent production of big diameter fans, like EM52 and EC52, Munters has fitted them with a powerful 2.0 Hp motor. Most of the models of fans allows speed control obtained either by inverter (VFD) or autotransformer. This huge flexibility in the offering has been developed for being able to cover any demand in terms of airflow which might rise from our customers.

#### MUNTERS DRIVE



Ventilation inefficiencies are mainly related to 3 major causes: the types of motors used as the design of AC motor has physical limitations; the belt drive systems as the friction on the transmission components energy causes an energy loss and a high level of maintenance; the fixed single revolution speed and consequent fixed capacity, which prevents energy savings when ventilation demand is low. Munters Drive avoids these limitations through 3 innovations: a new motor architecture which shows a more efficient performance; the direct drive which makes the motor turning at the same revolution speed as the optimum propeller speed, eliminating friction losses and the need of maintenance; and the variable speed which reduces the motor speed and fan capacity when ventilation demand is low, generating significant energy savings. By combining the energy efficiency benefits that a Munters Drive offers over a conventional fan, users have been able to reduce annual ventilation costs by up to 40% and additionally saved a similar amount in maintenance cost reduction.

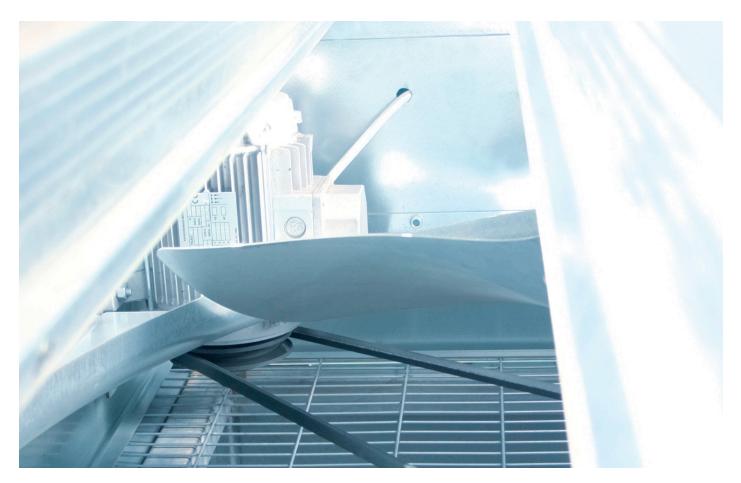
### LOADING VOLUMES



Munters has developed an optimized loading displacement for combined loads on 20ft, 40ft and 40ft high cube containers and standard trailers\*, which allows to balance volume and weight for delivery of complete system of fans, pad, accessories and heaters. Fans can be delivered assembled, in partially assembled form and fully disassembled depending on the number of products involved. The cooling pad and other accessories can be stored as well inside the container/trailer in order to completely fill the empty space fore and optimize the transport costs. Therefore, all the loading volumes shown in the catalogue are just a few of the many loading options available. Assembly manuals are provided for easy mounting of the received products.

\* 13.60x2.40x2.60m

# AIR EXTRACTION



### EUROEMME® EC52 WITH MUNTERS DRIVE



- Patented EC motor for excellent energy reduction over standard AC motors
- Maintenance free: no belts to tension or replace
- Soft start for eliminating energy spikes
- Variable speed for providing a wide range of air flow with excellent efficiency values
- Strong and efficient steel propeller, discharge cone for best achievements in performances and strength
- Shutter operated by gear motor: opening not linked to air flow or propeller spin
- Ideal fan for minimum ventilation applications

PERFORMANCES				
Motor		260 rpm	370 rpm	495 rpm
Airflow at 0 Pa	m³/h [cfm]	28,500 [16,800]	40,700 [24,000]	53,200 [31,300]
Airflow at 12 Pa	m³/h [cfm]	24,300 [14,300]	37,700 [22,200]	51,400 [30,200]
Airflow at 25 Pa	m³/h [cfm]	15,200 [8,900]	34,600 [20,400]	49,400 [29,100]
Specific performance at 12 Pa	m³/h/W [cfm/W]	81.2 [47.8]	49.9 [29.4]	30.6 [18.0]
Specific performance at 25 Pa	m³/h/W [cfm/W]	48.0 [28.3]	43.8 [25.8]	28.4 [16.7]

\* All values refer to 3 phases 50Hz single speed motors. Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

LOADING VOLUMES		
Container 20 ft	pcs.	11
Container 40 ft	pcs.	23
Container 40 ft HC	pcs.	23
Trailer 13.60x2.40x2.60 m	pcs.	26

### EUROEMME<sup>®</sup> EC52



- Family member of the time proven  $\mathsf{Euroemme}^{\scriptscriptstyle (\! 0\!)}$  fan range
- High airflow and high efficiency
- Compact transportation (discharge cone made of 4 cone sectors)
- Special cone design for optimal use of installation space
- Patent pending shutter opening device
- Four blade propeller for reduced vibrations
- Optional belt tensioner
- Optional 4 shaped cone sectors



ErP

PERFORMANCES				
Motor		1.0Hp	2.0Hp	
Airflow at 0 Pa	m³/h [cfm]	42,200 [24,900]	49,500 [29,100]	
Airflow at 25 Pa	m³/h [cfm]	35,100 [20,700]	44,700 [26,300]	
Airflow at 50 Pa	m³/h [cfm]	26,200 [15,400]	36,400 [21,400]	
Specific performance at 0 Pa	m³/h/W [cfm/W]	43.7 [25.7]	32.7 [19.2]	

LOADING VOLUMES				
ASSEMBLED DISASSEMBLED			DISASSEMBLED	
Container 20 ft	pcs.	14	100	
Container 40 ft	pcs.	30	220	
Container 40 ft HC	pcs.	30	220	
Trailer 13.60x2.40x2.60 m	pcs.	36	250	



- Family member of the time proven Euroemme® fan range
- Fan built with outstanding strength for assuring high airflow at static pressure of up to 100 Pa.
- Fan housing and Venturi made of strong Munters Protect coated sheet-steel
- Redesigned 52" propeller suited for high static pressure environments
- Shutters are made of pressed Munters Protect coated steel in order to ensure highest strength
- Patented centrifugal system permits an energy efficient solution



PERFORMANCES			
Motor		2Hp	
Airflow at 0 Pa	m³/h [cfm]	43,000 [25,300]	
Airflow at 50 Pa	m³/h [cfm]	33,900 [19,900]	
Airflow at 75 Pa	m³/h [cfm]	27,600 [16,200]	
Airflow at 100 Pa	m³/h [cfm]	19,200 [11,300]	
Specific performance at 0 Pa	m³/h/W [cfm/W]	26.4 [15.5]	

\* All values refer to 3 phases 50Hz single speed motors. Note: airflow data are measured at standard conditions (20 °C, 1,013hPa)

LOADING VOLUMES			
		ASSEMBLED	DISASSEMBLED
Container 20 ft	pcs.	29	120
Container 40 ft	pcs.	58	250
Container 40 ft HC	pcs.	58	250
Trailer 13.60x2.40x2.60 m	pcs.	65	280

### EUROEMME<sup>®</sup> EM50



- Family member of the time proven Euroemme® fan range
- Propeller is statically and dynamically balanced
- Patented centrifugal system permits an energy efficient solution
- Powerful springs keep shutters firmly closed when fan is not operating
- Every fan is individually checked for quality
- Fan housing and Venturi made of strong Munters Protect coated sheet-steel
- Shutters are made of pressed Munters Protect coated steel in order to ensure highest strength
- E C O DESIGN 000 C MIRE
- Central hub and v-belt pulley are made from die-cast aluminium, with reinforced ribs for prolonged lifetime

PERFORMANCES				
Motor		1.0/1.2Hp	1.5Hp	
Airflow at 0 Pa	m³/h [cfm]	37,000 [21,800]	42,400 [25,000]	
Airflow at 25 Pa	m³/h [cfm]	32,500 [19,200]	38,400 [22,600]	
Airflow at 50 Pa	m³/h [cfm]	26,200 [15,400]	33,800 [19,900]	
Specific performance at 0 Pa	m³/h/W [cfm/W]	33.9 [20.0]	27.0 [15.9]	

LOADING VOLUMES			
ASSEMBLED DISASSEMBLED			
Container 20 ft	pcs.	29	170
Container 40 ft	pcs.	58	250
Container 40 ft HC	pcs.	58	250
Trailer 13.60x2.40x2.60 m	pcs.	65	300



- Family member of the time proven Euroemme® fan range
- Propeller is statically and dynamically balanced
- Patented centrifugal system permits an energy efficient solution
- Powerful springs keep shutters firmly closed when fan is not operating
- Every fan is individually checked for quality
- Fan housing and Venturi made of strong Munters Protect coated sheet-steel
- Shutters are made of pressed Munters Protect coated steel in order to ensure highest strength
- Central hub and v-belt pulley are made from die-cast aluminium, with reinforced ribs for prolonged lifetime

PERFORMANCES				
Motor		0.5Hp	0.75Hp	1.0Hp
Airflow at 0 Pa	m³/h [cfm]	18,800 [11,070]	20,500 [12,080]	23,400 [13,760]
Airflow at 25 Pa	m³/h [cfm]	16,000 [9,420]	18,100 [10,630]	21,400 [12,610]
Specific performance at 0 Pa	m³/h/W [cfm/W]	32.6 [19.2]	27.2 [16.0]	22.6 [13.3]

\* All values refer to 3 phases 50Hz single speed motors. Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

LOADING VOLUMES			
ASSEMBLED DISASSEMBLED			
Container 20 ft	pcs.	54	170
Container 40 ft	pcs.	108	300
Container 40 ft HC	pcs.	108	300
Trailer 13.60x2.40x2.60 m	pcs.	120	360

### EUROEMME<sup>®</sup> EM30



- Family member of the time proven  $\mathsf{Euroemme}^{\scriptscriptstyle (\! 0\!)}$  fan range
- Propeller is statically and dynamically balanced
- Patented centrifugal system permits an energy efficient solution
- Powerful springs keep shutters firmly closed when fan is not operating
- Every fan is individually checked for quality
- Fan housing and Venturi made of strong Munters Protect coated sheet-steel
- Shutters are made of pressed Munters Protect coated steel in order to ensure highest strength
- Central hub and v-belt pulley are made from die-cast aluminium, with reinforced ribs for prolonged lifetime

PERFORMANCES			
Motor 0.5Hp 0.75Hp			
Airflow at 0 Pa	m³/h [cfm]	14,100 [8,300]	1 <i>5</i> ,300 [9,020]
Airflow at 25 Pa	m³/h [cfm]	12,100 [7,120]	13,600 [8,030]
Specific performance at 0 Pa	m³/h/W [cfm/W]	24.4 [14.4]	22.1 [13.0]

LOADING VOLUMES					
	DISASSEMBLED				
Container 20 ft	pcs.	72	200		
Container 40 ft	pcs.	144	400		
Container 40 ft HC	pcs.	144	400		
Trailer 13.60x2.40x2.60 m	pcs.	168	400		



- Family members of the time proven Euroemme® fan range
- High airflow capacity with excellent energy efficiency
- Low power consumption
- Direct drive system
- Patented shutter-opening device



PERFORMANCES					
Model		ED24HE	ED30HE	ED36HE	
Motor		0.5Hp	0.5Hp	0.75Hp	
Airflow at 0 Pa	m³/h [cfm]	9,100 [5,360]	14,400 [8,460]	19,100 [11,300]	
Airflow at 12 Pa	m³/h [cfm]	8,800 [5,180]	13,700 [8,080]	18,200 [10,700]	
Airflow at 25 Pa	m³/h [cfm]	8,400 [4,960]	12,900 [7,620]	17,200 [10,100]	
Specific performance at 0 Pa	m³/h/W [cfm/W]	17.3 [10.2]	22.1 [13.0]	30.3 [17.8]	

\* All values refer to 3 phases 50Hz single speed motors. Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

LOADING VOLUMES						
		ASSEMBLED		DISASSEMBLED		
Model		ED30HE	ED36HE	ED30HE	ED36HE	
Container 20 ft	pcs.	72	54	180	160	
Container 40 ft	pcs.	144	108	400	320	
Container 40 ft HC	pcs.	144	108	400	320	
Trailer 13.60x2.40x2.60 m	pcs.	168	120	400	360	

#### TU600 - TU800

- . .
- Bell mouth inlet and cone outlet ensure very high energy efficiency
- Designed to withstand climatic extremes and solar radiation
- All components made of highly corrosion resistant materials
- Insulated butterfly damper for tight seal when fan is not in use
- Aerodynamic design ensures a low noise level
- Patented 'click system' allows for compact transport volumes and quick on-site assembly
- High efficiency Munters Drive motor version available on request



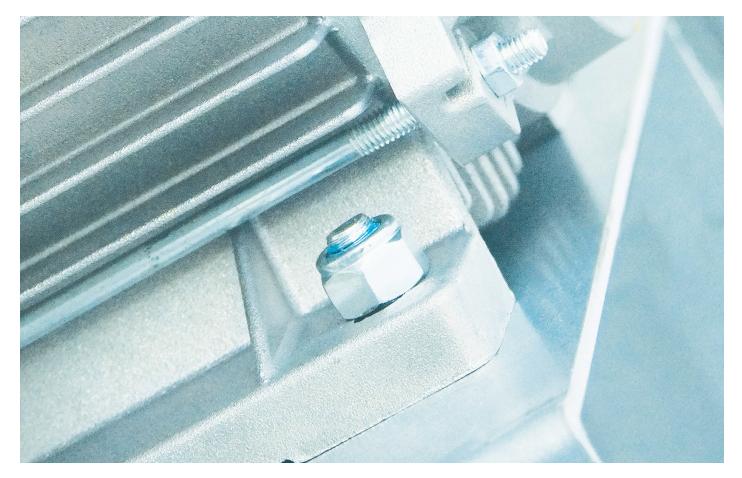
PERFORMANCES									
Model			TU600		TU800				
Motor type		STD	MUNTE	RS DRIVE		STD		MUNTERS DRIVE	
Motor size	[W]	250	6	60	370	430	550	6	60
Airflow at 0 Pa	m³/h [cfm]	11,720 [6,898]	12,729 [7,492]	6,152 [3,621]	18,650 [10,977]	19,820 [11,666]	19,875 [11,698]	20,653 [12,156]	11,042 [6,499]
Airflow at 20 Pa	m³/h [cfm]	10,740 [6,321]	12,090 [7,116]	4,553 [2,680]	17,230 [10,141]	18,290 [10,765]	18,329 [10,788]	19,364 [11,397]	8,741 [5,145]
Airflow at 40 Pa	m³/h [cfm]	9,560 [5,627]	11,414 [6,718]	-	15,460 [9,099]	16,730 [9,847]	16,728 [9,846]	18,244 [10,738]	3,881 [2,284]
Specific performance at 0 Pa	m³/h/W [cfm/W]	27.5 [16.2]	28.4 [16.7]	91.4 [53.8]	31.7 [18.6]	33.0 [19.4]	25.0 [14.7]	34.0 [20.0]	116.0 [68.3]
Specific performance at 20 Pa	m³/h/W [cfm/W]	24.0 [14.1]	24.9 [14.7]	57.2 [33.7]	27.0 [15.9]	27.0 [15.9]	22.0 [12.9]	27.8 [16.4]	66.5 [39.1]
Specific performance at 40 Pa	m³/h/W [cfm/W]	20.1 [11.8]	22.0 [13.0]	-	23.0 [13.5]	22.4 [13.2]	19.1 [11.3]	24.0 [14.1]	27.8 [16.4]
* 4 1 1 1 1 2 1 501 2 1 1 2									

\* All values refer to 3 phases 50Hz single speed motors. Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

ACCESSORIES: LIGHT FILTER FOR TU

High light reduction factor.

### AIR CIRCULATION





- Family member of the time proven Euroemme® fan range
- High airflow and high efficiency
- Low power consumption, results in lower energy cost
- Direct drive system
- Improves indoor air quality by preventing air stratification and condensation
- Fast and easy installation

		PERFORMANCES		
Model		EDC18HE	EDC18HE	EDC24HE
Motor		4 poles - 0.33Hp	6 poles - 0.15Hp	4 poles - 0.5Hp
Airflow at 0 Pa	m³/h [cfm]	5,046 [2,970]	3,483 [2,050]	10,087 [5,937]
Specific performance at 0 Pa	m³/h/W [cfm/W]	15.6 [9.2]	17.2 [10.1]	17.7 [10.4]
* All values refer to 3 phases 50Hz single speed motors.	· · · ·			•

Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

### EUROEMME<sup>®</sup> EDC18 - EDC24



- Family member of the time proven  $\mathsf{Euroemme}^{\circledast}$  fan range
- Air circulation reduces heating costs
- Condensation inside structures can be reduced by using air blowers
- Livestock comfort and growth rate can be improved by using air blowers
- Air blower housing is made of corrosion resistant, pre-coated, Munters Protect coated sheet-steel
- Each motor is individually tested for 100% quality control
- Propeller is statically and dynamically balanced

PERFORMANCES				
Model EDC18 EDC18 EDC24				
	4 poles - 0.33Hp	6 poles - 0.15Hp	6 poles - 0.5Hp	
m³/h [cfm]	3,950 [2,325]	2,600 [1,530]	7,400 [4,350]	
m³/h/W [cfm/W]	9.2 [5.4]	16.1 [9.5]	11.2 [6.6]	
	,	4 poles - 0.33Hp m³/h [cfm] 3,950 [2,325]	EDC18 EDC18   4 poles - 0.33Hp 6 poles - 0.15Hp   m³/h [cfm] 3,950 [2,325] 2,600 [1,530]	

### EUROEMME<sup>®</sup> EMT30



- Family member of the time proven Euroemme® fan range
- Fan housing and Venturi made of strong Munters Protect coated sheet-steel
- Each motor is individually tested for 100% quality control
- Central hub and v-belt pulley are made from die-cast aluminium
- Propeller is statically and dynamically balanced
- Special threaded bushes on fan's side panels permit the fan to be easily hung
- Every fan is individually checked for quality
- When operating in combination with suspended air heaters, the aid of the jet fan is powerful in reducing heating cost and for increasing the life span of plastic duct systems

PERFORMANCES					
	0.5Hp	0.75Hp			
m³/h [cfm]	13,570 [7,990]	14,680 [8,640]			
m³/h/W [cfm/W]	20.2 [11.9]	17.8 [10.5]			
	,	0.5Hp m³/h [cfm] 13,570 [7,990]			

Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

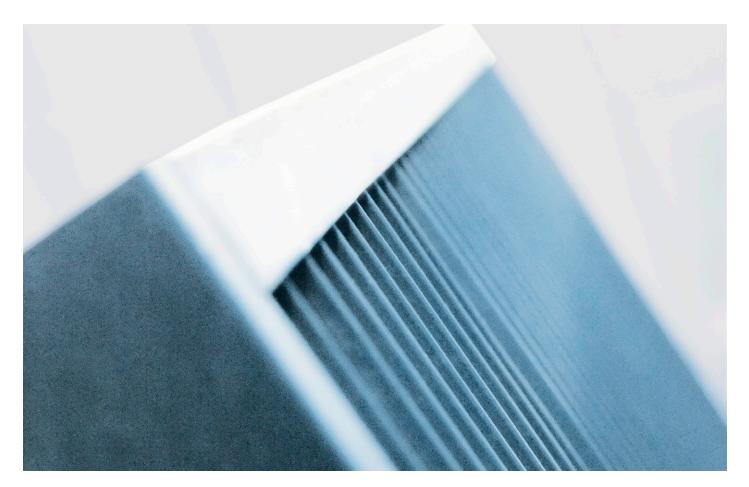
### EUROEMME<sup>®</sup> EDS24HE - EDS30HE - EDS36HE - EDT30HE



- Family members of the time proven Euroemme® fan range
- High airflow capacity with excellent energy efficiency
- Low power consumption
- Direct drive system
- Special threaded bushes on fan's side panels permit the fan to be easily hung

PERFORMANCES					
Model		EDS24HE	EDS30HE - EDT30HE	EDS36HE	
Motor		0.5Hp	0.5Hp	0.75Hp	
Airflow at 0 Pa	m³/h [cfm]	9,100 [5,360]	14,400 [8,460]	19,100 [11,300]	
Specific performance at 0 Pa	m³/h/W [cfm/W]	17.3 [10.2]	22.1 [13.0]	30.3 [17.8]	
* All values refer to 2 phases 50 Hz single speed maters					

# LIGHT FILTER & FAN INSULATION



### LFD24 - LFD30 - LFD36 - LFD50 - LFD52



- High light reduction factor
- Low resistance to airflow
- Suitable for mounting onto fans
- Suitable for mounting onto air inlets
- Suitable for mounting onto pad openings
- Easily washable
- Compact transport dimensions
- Quick and easy assembly

	DIMENSIONS					
Model		LFD24	LFD30	LFD36	LFD50	LFD52
Length	[mm]	750	950	1,100	1,380	1,430
Height	[mm]	750	950	1,100	1,380	1,430
Width	[mm]	230	230	230	230	230

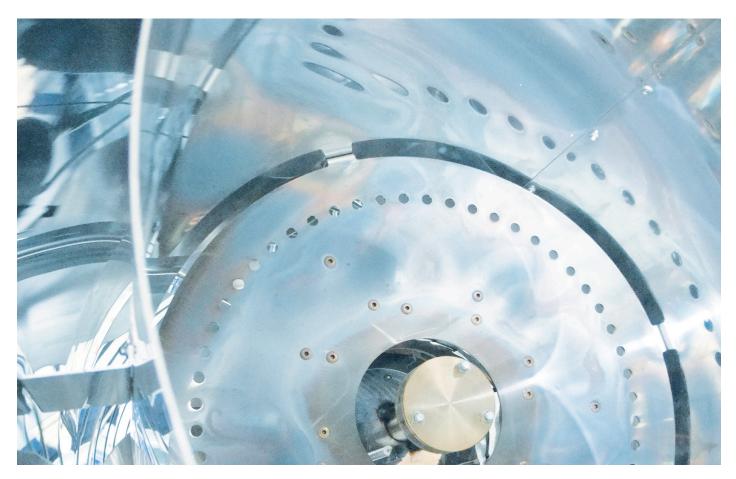
### FI36 - FI50



- Reduced heat loss through fans during winter by up to 7 times
- Cost saving by reducing heating cost
- Quick and easy to install and mount
- Fits all Euroemme® extraction fans snugly
- Can be installed on air inlet or exhaust sides of fans
- Installation kits include all accessories required for installation
- Can be fitted onto other brands of exhaust fans with similar dimensions

	DIMENSIONS					
Model		FI36	FI50			
Length	[mm]	1,092	1,382			
Height	[mm]	1,092	1,382			
Width	[mm]	25	25			

### AIR HEATING



#### GFn85



- Dedicated for Munters Agriculture applications
- Unique frame design for convenient handling, transportation and installation
- Ergonomic design for comfortable maintenance and full accessibility
- IP55 enclosure of critical components e.g. electrical control box, electric motor
- Predisposed 5 poles plug socket for farm controller or room thermostat connection
  - Corrosion resistant as housing components are made in Munters Protect or stainless steel AISI 430 and combustion chamber made in stainless steel AISI 430
- Safe design with photoelectric flame monitoring and overheating thermostat (airflow switch not needed)
- Suitable for a wide variety of fuels i.e diesel oil (not bio-diesel) and winter diesel

PERFORMANCES				
Maximum heating power	kW [kcal/h]	80.6 [69.303]		
Working heating power	kW [kcal/h]	69.3 [59,587]		
Diesel oil consumption	l/h [gal/h]	7.5 [1.98]		
IP class**		IP55		
** Electric box IP grade.				
		LOADING VOLUMES		
Container 20 ft	pcs.	48		
Container 40 ft	pcs.	108		
Container 40 ft HC	pcs.	108		
Trailer 13.60x2.40x2.60 m	pcs.	120		

#### GN75 - GN95



- 100% thermal efficiency with net heating output of 75/95 [kW]
- Stainless steel housing corrosion resistant, for environments where highly corrosive gases are present
- Fuel options: natural gas (methane) or LPG (propane)
- Electrical box equipped with sockets for remote control via external controller (available on request)
- Ignition timer (delay 0/60s) for programming delayed start-up of multiple units preventing electrical or gas network overload
- Multiple safety features such as overheating thermostat, airflow pressure switch and gas supply pressure sensor

		PERFORMANCES	
Model		GN75	GN95
Heating power	kW [kcal/h]	73 [63,785]	93 [80,189]
Gas consumption natural gas	[m³/h]	7.0	8.9
Gas consumption propane gas*	[kg/h]	4.3	5.3
IP class**		IF	255
* Density values refer to the standard ambient conditions. ** Electric box IP grade.	· · · ·		
		loading volumes	

LOADING VOLUMES				
Container 20 ft	pcs.	60		
Container 40 ft	pcs.	120		
Container 40 ft HC	pcs.	120		
Trailer 13.60x2.40x2.60 m	pcs.	138		

### GA30 - GA95T



- 100% thermal efficiency
- Heating output manually adjustable
- Ideal for space heating
- Easy to install and easy to operate
- Functions on LPG
- Double solenoid valve for shutting off gas supply
- Safety switch preventing overheating
- Pressure switch detects blockages of airflow
- Stainless steel outer shell and combustion chamber
- Electrical equipment housed in IP54 enclosure

	PERFORMANCES					
Model		GA30 GA95T				
Heating power	kW [kcal/h]	25.0 to 36.0 [21,500 to 30,960]	97.0 [83,400]			
Gas consumption propane gas*	[kg/h]	1.75 to 2.51	6.90			
IP class**		IP54	IP54			

\* Density values refer to the standard ambient conditions. \*\* Electric box IP grade.

LOADING VOLUMES					
Model		GA30	GA95T		
Container 20 ft	pcs.	66	38		
Container 40 ft	pcs.	138	80		
Container 40 ft HC	pcs.	138	119		
Trailer 13.60x2.40x2.60 m	pcs.	156	150		

### GA125lp

- 100% thermal efficiency
- Ready to be connected to a room thermostat
- Easy to install and operate
- For outdoor installation or in greenhouses with automatic water supply (UNI EN 12669:2003)
- Stainless steel outer shell and combustion chamber
- Functions on natural gas or LPG
- Double solenoid valve for shutting off gas supply
- Safety switch preventing overheating
- Pressure switch detecting blockages of airflow

PERFORMANCES						
Heating power	kW [kcal/h]	125 [107,650]				
Gas consumption natural gas	[m³/h]	13.21				
Gas consumption propane gas*	[kg/h]	8.70				
IP class**		IP54				
* Density values refer to the standard ambient conditions. ** Electric box IP grade.						
		LOADING VOLUMES				
Container 20 ft	pcs.	30				
Container 40 ft	pcs.	66				
Container 40 ft HC	pcs.	66				
Trailer 13.60x2.40x2.60 m	pcs.	75				

### GPmp100 - GPmp130 - GPmp160



- Thermal efficiency exceeding 90%
- Economical axial fans or quiet centrifugal fan options
- Direct driven motor on axial and centrifugal fans
- Versatile air outlet options
- Stylish powder coated finish
- Gas or oil burner options available
- Detailed attention to corrosion resistance
- Unique legs and support frame for convenient handling

PERFORMANCES						
Model		GPmp100	GPmp130	GPmp160		
Maximum heating power	kW [kcal/h]	102.4 [88,043]	129 [110,871]	157 [134,780]		
Working heating power	kW [kcal/h]	93 [79,943]	116.5 [100,120]	141 [121,030]		
Gas consumption natural gas	[m³/h]	9.53	12.39	15.25		
Gas consumption propane gas*	[kg/h]	7.15	9.29	11.43		
Diesel oil consumption	l/h [gal/h]	9.5 [2.5]	12.0 [3.16]	14.6 [3.85]		
IP class**		IP54	IP54	IP54		

\* Nominal consumption at 15°C and 1,013.25mbar. \*\* Electric box IP grade.

LOADING VOLUMES						
Model		GPmp100	GPmp130	GPmp160		
Container 20 ft	pcs.	12	12	10		
Container 40 ft	pcs.	24	24	11		
Container 40 ft HC	pcs.	24	24	22		
Trailer 13.60x2.40x2.60 m	pcs.	28	28	24		
Note: Shipping volumes include chimney kit, air outlet and air suction k	ř.					

# AIR INLET





- Compact design and easy installation
- Actuators for individual control or controlling in groups
- Self cleaning shutter blade profile prevents the build-up of dust
- Tight sealing and durable shutter blades
- Optional guard mesh to prevent entry of wild animals or birds
- Munters Protect coated steel frame and shutter blades
- Maintenance free and UV resistant bearings for shutter blades

PERFORMANCES						
Model		SMT24	SMT30	SMT36	SMT50	
Airflow at 0 Pa	m³/h	0	0	0	0	
Airflow at 20 Pa	m³/h	6,754	11,642	14,331	27,090	
Airflow at 40 Pa	m³/h	9,396	16,210	20,110	38,261	
Airflow at 60 Pa	m³/h	11,463	19,656	244,91	46,346	

Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

LOADING VOLUMES							
			ASSEMBLED			DISASSEMBLED	
Model		SMT30 SMT36 SMT50 SMT30 SMT36 SMT50					SMT50
Container 20 ft	pcs.	264	200	116	900	750	600
Container 40 ft	pcs.	528	400	232	1,400	1,400	1,000
Container 40 ft HC	pcs.	528	400	232	1,400	1,400	1,000
Trailer 13.60x2.40x2.60 m	pcs.	616	480	277	1,800	1,650	1,150

### IS600 - IS800

- Reduced shipping volumes and easy installation
- Different models for adaptation to most buildings. Multiflex roof flashing for fitting to any slope between 12 and 25 degrees.
- Two available diameters, 600mm and 800mm and option for use without the top section to draw air from the loft space
- Integral wire mesh preventing wild animal entry
- Solid top cover and slots at the bottom of the cone ensure rainwater protection
- Patented 'Star diffuser' system ensures correct quantity and direction of incoming air
- Air circulator to be placed under the diffuser available as accessory
- Manufactured in durable white or black smooth and anti-soiling polyethylene
- Withstands cleaning with high pressure cleaner

PERFORMANCES						
Model		IS600	IS800	IS600	IS800	
		WITH CAP		WITHOUT CAP		
Airflow at -10 Pa	m³/h	3,357	5,843	3,647	6,946	
Airflow at -20 Pa	m³/h	4,720	8,414	5,142	9,789	
Airflow at -30 Pa	m³/h	5,770	10,285	6,500	12,150	
Note: airflow data are measured at standard conditions (2	0°C 1.0136P~1					

No light and less than 5% ventilation reduction for IS Air Inlet.

### IW150 - IW250



- Easy installation
- Manufactured in durable white UV stabilized polystyrene
- Main door moulded in two pieces preventing deformation
- Main door has an insulated core, preventing condensation on inside
- Integrated aluminium profiles in main door preventing warping
- Adjustable flap allowing fine adjustment of air flow patterns
- Rainstop preventing rain from entering the structure
- Integrated mesh in corrosion resistant polystyrene preventing wild animal entry
- Withstands cleaning with a high pressure cleaner and integrated pulley for support of cabling

PERFORMANCES					
Model IW150 IW250					
Airflow at -10 Pa	m³/h	1,320	1,440		
Airflow at -20 Pa	20 Pa m <sup>3</sup> /h 1,870 2,015				
Note: airflow data are measured at standard conditions (2)	)°C 101268-1				

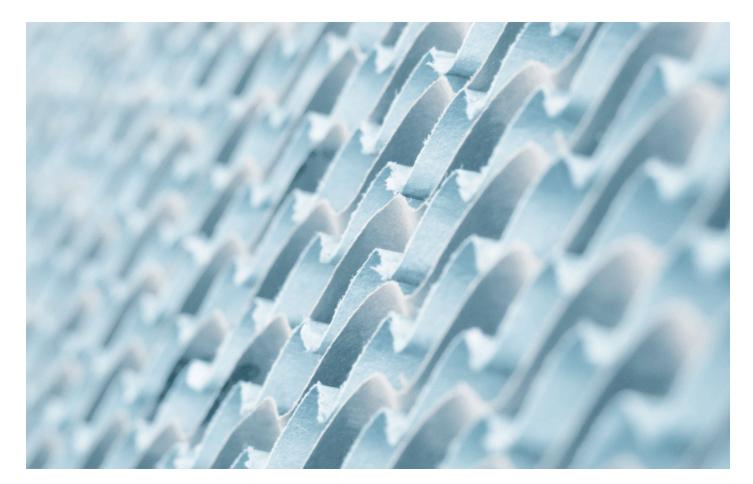
Note: airflow data are measured at standard conditions (20 °C, 1,013hPc



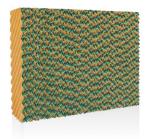
### IW CANOPY

- Creates brown-out effect inside building
- Prevents heavy rain from entering building
- Protects inlets against environmental elements
- UV resistant polymer
- Units nest for compact transport
- Fits over Munters IW and similar sized inlets
- Suitable for inlets with dimensions up to 0.3  $\times$  0.7 m

### COOLING



### CELdek<sup>®</sup> 7090-15



- High evaporation efficiency and superb wetting properties
- Low pressure drop when wet, leading to lower operating costs
- No water carry-over
- Low scaling and self cleaning
- Strong and self supporting
- Long life time and low running costs
- Quick and easy to install
- Environmentally friendly
- Consistent high quality

STANDARD DIMENSIONS						
Length	mm	600				
Height	mm	1,000	1,500	1,800	2,000	
Width	mm	100/150				
DISTRIBUTION PAD CELdek® 70120						
Length	mm		60	00		
Height	mm		3	0		
Width mm 100/150						
	ACCESSORIES: LIGHT FILTERS FOR CELdek®					

High light reduction factor.

### CELdek<sup>®</sup> 7060-15



- High evaporation efficiency and superb wetting properties
- Low pressure drop when wet, leading to lower operating costs
- No water carry-over
- Low scaling and self cleaning
- Strong and self supporting
- Long life time and low running costs
- Quick and easy to install
- Environmentally friendly
- Consistent high quality

STANDARD DIMENSIONS						
Length	mm	600				
Height	mm	1,000 1,500 1,800 2,000				
Width	mm	100/150				
DISTRIBUTION PAD CELdek® 70120						
Length	mm		60	0		
Height	mm		30	)		
Width mm 100/150						
ACCESSORIES: LIGHT FILTERS FOR CELdek®						
High light reduction factor						

High light reduction factor.



- Excellent cooling efficiency due to the unique design, manufacturing methods and materials used
- High face velocity allows the air to travel through the pad without water droplet carryover
- Low pressure drop allows the high velocity air to travel through the pad without significant resistance
- Self-cleaning design due to steeper angle of unequal flute design, flushing dirt and debris from the surface of the pad
- Simple to maintain due to the fact that in most cases, routine maintenance can be performed while systems still are operating

STANDARD DIMENSIONS							
Length	mm	600					
Height	mm	1,000	1,500	1,800	2,000		
Width	mm	100/150					
DISTRIBUTION PAD CELdek® 70120							
Length	mm	600					
Height	mm	30					
Width	mm	100/150					
ACCESSORIES: LIGHT FILTERS FOR CELdek® WITH MI-T-EDG® COATING							

High light reduction factor.

-	
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#### WDP

- Quick and easy installation
- Easy maintenance and cleaning
- Flexible positioning of the water supply and discharge
- Resistant to corrosion (stainless steel 304, epoxy pre-coated galvanised steel)
- Designed to ensure an even wetting of the entire pad wall
- Stabilisation of the pad wall
- Fits any size of pad in height and width
- Available as complete system with all fitting parts
- Water filtration available upon request

#### STANDARD DIMENSIONS

Length	mm	multiple of 600					
Height	mm	1,205	1,705	2,005	2,205		
Width	mm	100/150					

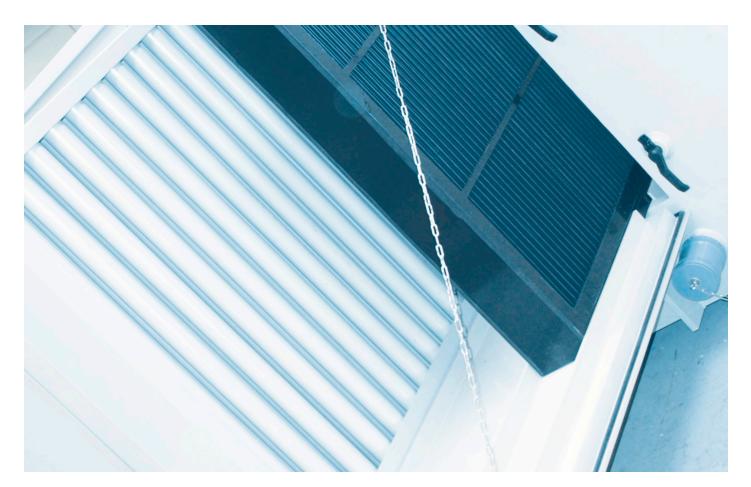
### WDP MIST



- Alternative to evaporative pad cooling in cold continental and moderate climates, typically characterized by very brief periods of hot weather
- Minimizes heat stress which improves feed conversion for increase production
- Optimal relative humidity in-farm throughout the year
- Environmental benefits by effectively suppressing dust particles from the airstream
- Fast cleaning operation through preparatory soaking of various in-farm equipment
- Corrosion resistant components, made in stainless steel
- Quick and easy installation
- Fits on any size of housing system

PERFORMANCES							
Maximum working pressure	Bar [PSI]	70 [1015]					
Water flow	l/min [gal/h]	12.0 [	190.2]	21.0 [332.9]			
Nozzle tip diameter mi		0.2	0.3	0.2	0.3		
Maximum nozzles/pump	pcs	180	110	314	193		
Nozzle water flow at 70Bar	l/h [gal/h]	4.0 [1.06]	6.5 [1.72]	4.0 [1.06]	6.5 [1.72]		

### ENVIRONMENTAL



### MAC AIR CLEANER

- Ammonia reduced by 89% on average
- Maximum ammonia reduction from start-up
- Dust reduction
- Non-clogging filters
- Efficient droplet separators
- Droplet separators can be drawn out and washed from the outside
- Easy maintenance
- User friendly
- Easy to install
- Corrosion resistant material

PERFORMANCES						
Ammonia reduction	VERA test - Average during a year	89%				
Airflow	Maximum	25,000 m³/hour at 40 Pa				
	Maximum including fan, circulation pump, dosing pump and bilge	4.2 kW				
Power	Average	Depends on house and management. In a layer house with 13,000 animals and one air cleaner is measured 3.4 kW on average. This also includes electricity to ventilate the first 25,000 m <sup>3</sup> /hour.				
Electricity	Voltage Frequency Current IP Class	3x400 Volt 50 Hz 16 A IP 55				
Weight	Air cleaner without liquid Air cleaner with liquid	825 kg 2,325 kg				
Water	Average water supply	300 liter/day				
Waste water	Drainage volume	Depends on installation and type of house and management. In a layer house was drained maximum 150 litrer/dag				
Acid consumption	Sulphuric acid 96%	3 kg sulphuric acid per kg removed ammonia. In practice it has been less, as the water itself captures part of the ammonia.				

### CONTROLLERS



#### PLATINUM PRO



- Munters Drive ready
- Access via the Web or Cloud
- Business Intelligence provides data analysis 24/7 and real time alarms via smartphone or web
- Supports a large number of input/outputs, both analog and digital and up to 200 heavy duty relays (2 HP)
- Smart On/Off/Auto override switches and battery backup option
- 16 independent heat zones
- Precision fogger and evaporative cooling system
- Failsafe emergency relay
- SD card and ARM CPU and multilanguage support

### FARM PREMIUM XL - XL P

- Modular system to meet specific requirements
- · Complete remote communication with real-time visual outlook
- SD card port to save history & update software and multi-language support
- 16 independent heat zones
- Precise fogging and cooling systems and feed management with integrated overflow alarm and shut off
- Current sensor for monitoring power consumption and low water pressure alarm
- Up to 80 heavy-duty relays and large graphic display
- Fail safe emergency relay
- Static pressure control and CO<sub>2</sub> sensor

### FARM PRO 3G



- 20 relays
- Precision ventilation
- Static pressure sensor
- 6 Temp. and 2 RH sensors
- 2 bird scales
- Network communication

### FARM HAND CCU 10R

- Up to 9 fans groups
- Variable speed fan control via built-in triac card
- Analogue 0 10V outputs for variable speed fans and variable heaters
- Humidity treatment program and wind speed and direction sensor for natural ventilation
- Inlets and curtains control
- 110V/220V power supply
- Time table for house lighting
- Data plug for easy transfer of settings
- Supported by Munters PC communication software

#### FARM PRESSURE



- Microprocessor based controller
- State of the art pressure sensor
- Static pressure measured in inch/column water, Pascal or mbar
- Outside temperature and winter/summer pressure setting
- Manual overrides
- High and low static pressure alarm
- Inerasable memory
- Easy installation and operation

### FARM SCALE



- Control of 1 or 2 bird scales
- Up to 500 days data collection
- Water and dust resistant, power surge and lightning protection
- High quality cables and stainless steel hanging or floor platform
- 5-digit display and USB connection for PC communication



### FARM SILO

- Programs for breeders, broilers and pigs
- Up to 10 feeding cycles per day
- Separate programs for male and female breeders and skip-a-day function
- Control of up to 2 feeding augers, 16 feeding lines, 10 lighting times per day, 12 load cells, and measurement of feed and water consumption
- LCD display, multiple operating modes and PC communication for Windows



### FARM ALARM

- Independent alarm unit activating fan and heater
- User-friendly, one-touch setting
- Real Time Clock with battery backup
- Water and dust resistant
- Un-erasable memory
- Simple installation and service

### FARM GUARD



- Plug-in cellular modem
- Messages sent in any format: voice, text or pager to multiple recipients
- Voice card sends real time audio alarm messages informing of developments as they happen
- Plug-in line modem
- 8 digital inputs
- Battery backup
- Wired/wireless communication to the farm office from the climate controllers
- Bulletins sent in multiple languages
- Fully updateable firmware and firewall ensuring end-to-end security

- FARM LIGHT
- Two independent channels
- Manual brightness control
- Programmable brightness control by analog signal 0-10 VDC or by communication line in case of Farm Premium controller
- Automatic settings recovery after power failure
- Automatic settings save for each mode
- Minimum and maximum light intensity settings
- Automatic shut down timer
- Slave device option

#### NOTES




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