



BROILER



LAYER



DAIRY



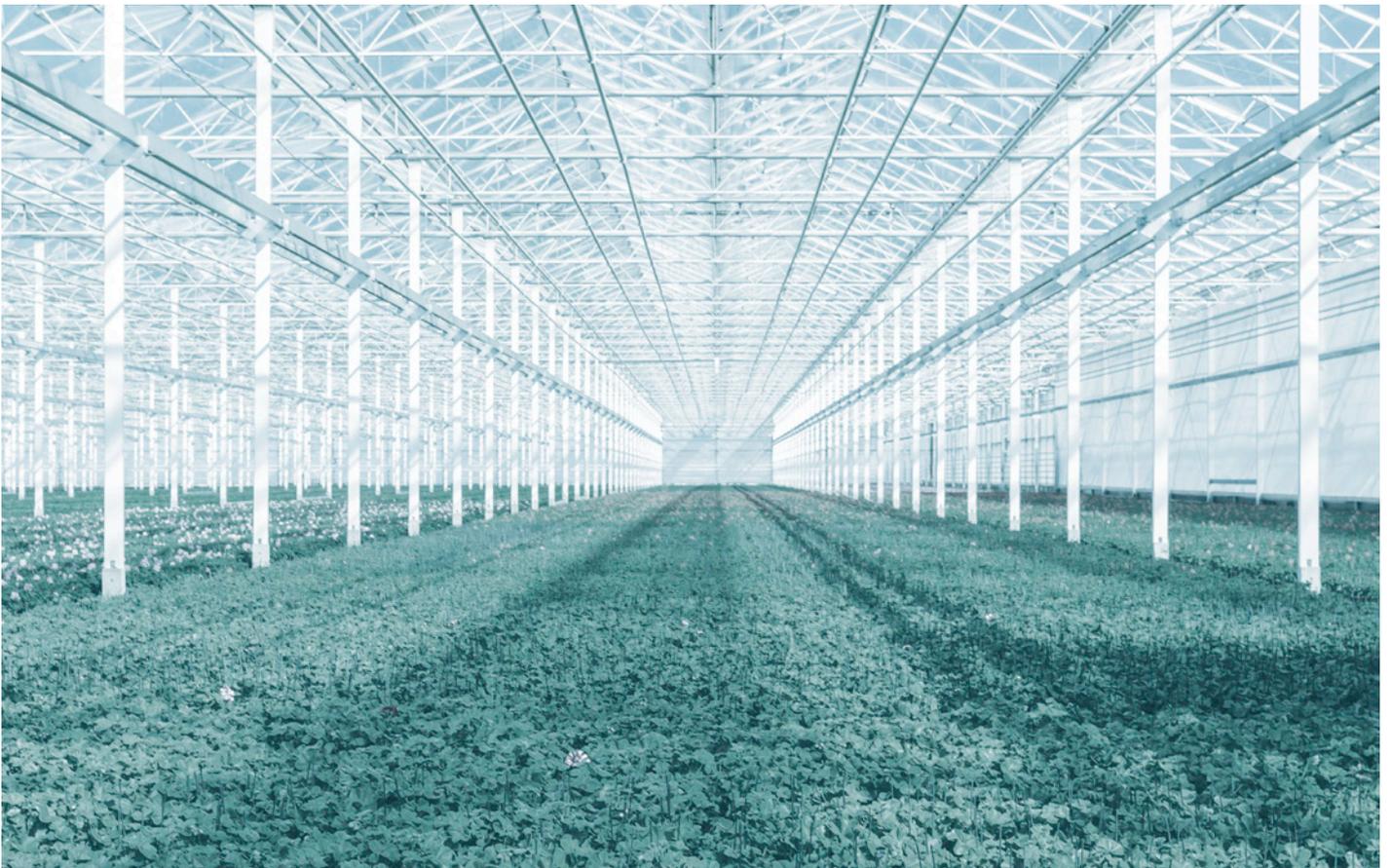
SWINE

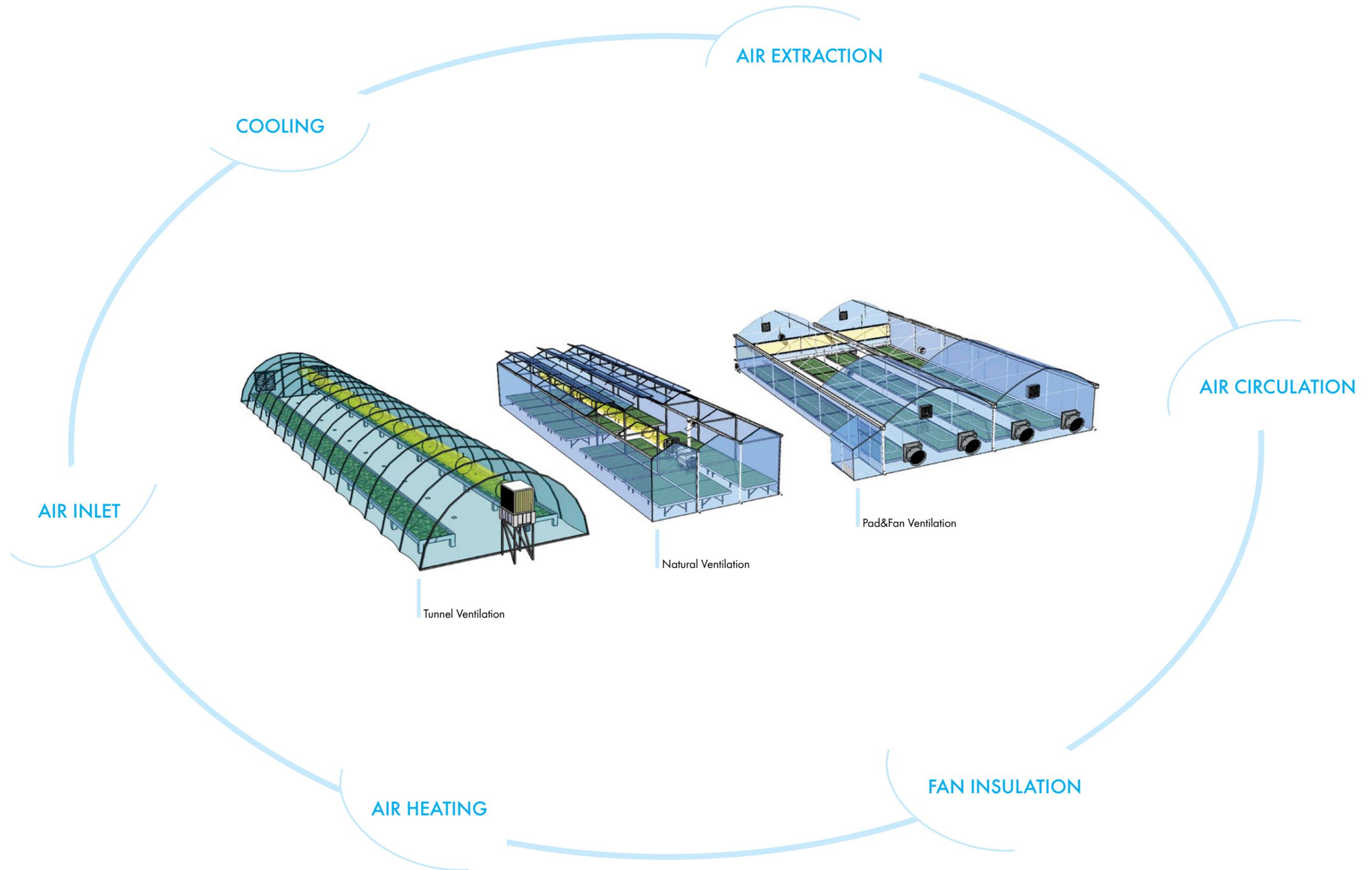


GREENHOUSE

Greenhouses	p. 3
Features	p. 6
Air extraction	p. 8
Air circulation	p. 12
Fan insulation	p. 15
Air heating	p. 17
Air inlet	p. 19
Cooling	p. 21

## GREENHOUSES







## 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 thanks to introduction of discharge cone.

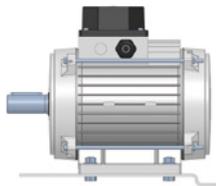
Recently Munters has designed and patented a unique EC motor, designed for working in conjunction with cone fan, able to offer an unbelievable level of efficiency and airflow.

## 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.

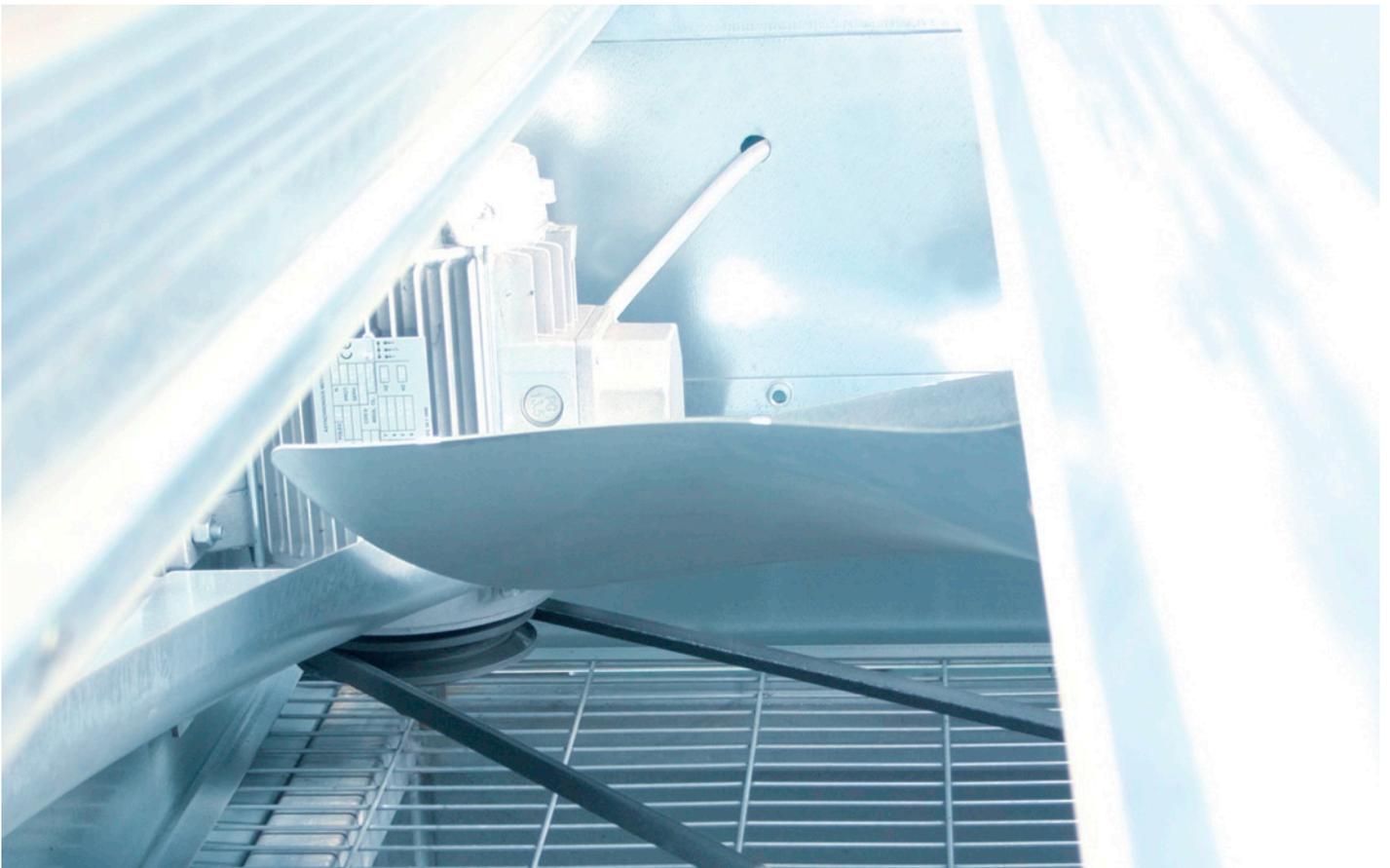
## LOADING VOLUMES



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



- Family member of the time proven Euroemme® 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



PERFORMANCES			
Motor		1.0Hp	2.0Hp
Airflow at 0 Pa	m <sup>3</sup> /h [cfm]	42,200 [24,900]	49,500 [29,100]
Airflow at 25 Pa	m <sup>3</sup> /h [cfm]	35,100 [20,700]	44,700 [26,300]
Airflow at 50 Pa	m <sup>3</sup> /h [cfm]	26,200 [15,400]	36,400 [21,400]
Specific performance at 0 Pa	m <sup>3</sup> /h/W [cfm/W]	43.7 [25.7]	32.7 [19.2]

\* 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.	14	100
Container 40 ft	pcs.	30	220
Container 40 ft HC	pcs.	30	220
Trailer 13.60x2.40x2.60 m	pcs.	36	250

## EUROEMME® 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
- 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	m <sup>3</sup> /h [cfm]	37,000 [21,800]	42,400 [25,000]
Airflow at 25 Pa	m <sup>3</sup> /h [cfm]	32,500 [19,200]	38,400 [22,600]
Airflow at 50 Pa	m <sup>3</sup> /h [cfm]	26,200 [15,400]	33,800 [19,900]
Specific performance at 0 Pa	m <sup>3</sup> /h/W [cfm/W]	33.9 [20.0]	27.0 [15.9]

\* 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	170
Container 40 ft	pcs.	58	250
Container 40 ft HC	pcs.	58	250
Trailer 13.60x2.40x2.60 m	pcs.	65	300

## EUROEMME® EM36



- 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	m <sup>3</sup> /h [cfm]	18,800 [11,070]	20,500 [12,080]	23,400 [13,760]
Airflow at 25 Pa	m <sup>3</sup> /h [cfm]	16,000 [9,420]	18,100 [10,630]	21,400 [12,610]
Specific performance at 0 Pa	m <sup>3</sup> /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® EM30



- 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
Airflow at 0 Pa	m <sup>3</sup> /h [cfm]	14,100 [8,300]	15,300 [9,020]
Airflow at 25 Pa	m <sup>3</sup> /h [cfm]	12,100 [7,120]	13,600 [8,030]
Specific performance at 0 Pa	m <sup>3</sup> /h/W [cfm/W]	24.4 [14.4]	22.1 [13.0]

\* 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.	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

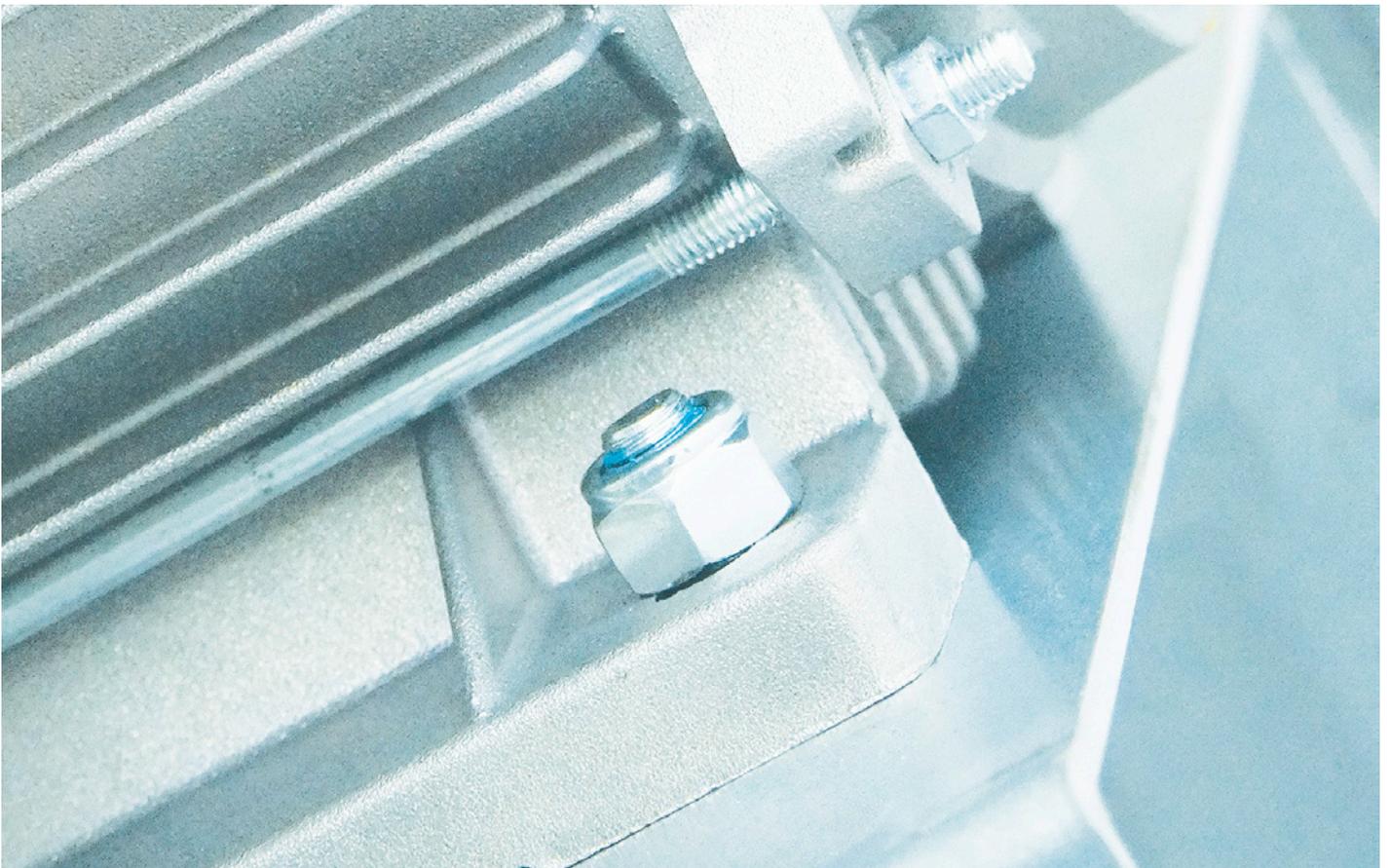


PERFORMANCES				
Model		ED24HE	ED30HE	ED36HE
Motor		0.5Hp	0.5Hp	0.75Hp
Airflow at 0 Pa	m <sup>3</sup> /h [cfm]	9,100 [5,360]	14,400 [8,460]	19,100 [11,300]
Airflow at 12 Pa	m <sup>3</sup> /h [cfm]	8,800 [5,180]	13,700 [8,080]	18,200 [10,700]
Airflow at 25 Pa	m <sup>3</sup> /h [cfm]	8,400 [4,960]	12,900 [7,620]	17,200 [10,100]
Specific performance at 0 Pa	m <sup>3</sup> /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					
Model		ASSEMBLED		DISASSEMBLED	
		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

AIR CIRCULATION



## EUROEMME® EDC18HE - EDC24HE



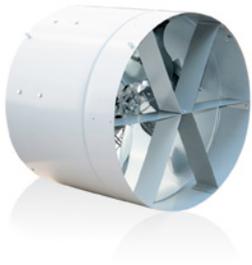
- Family member of the time proven Euroemme® fan range
- High airflow and high efficiency
- Low power consumption, results in lower energy cost
- Direct drive system
- Improves indoor air quality by preventing air stratification and condensation
- Fast and easy installation

### PERFORMANCES

Model		EDC18HE	EDC18HE	EDC24HE
Motor		4 poles - 0.33Hp	6 poles - 0.15Hp	4 poles - 0.5Hp
Airflow at 0 Pa	m <sup>3</sup> /h [cfm]	5,046 [2,970]	3,483 [2,050]	10,087 [5,937]
Specific performance at 0 Pa	m <sup>3</sup> /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® EDC18 - EDC24



- Family member of the time proven Euroemme® fan range
- Air circulation reduces heating costs
- Condensation inside structures can be reduced by using air blowers
- 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
Motor		4 poles - 0.33Hp	6 poles - 0.15Hp	6 poles - 0.5Hp
Airflow at 0 Pa	m <sup>3</sup> /h [cfm]	3,950 [2,325]	2,600 [1,530]	7,400 [4,350]
Specific performance at 0 Pa	m <sup>3</sup> /h/W [cfm/W]	9.2 [5.4]	16.1 [9.5]	11.2 [6.6]

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

## EUROEMME® 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

Motor		0.5Hp	0.75Hp
Airflow at 0 Pa	m <sup>3</sup> /h [cfm]	13,570 [7,990]	14,680 [8,640]
Specific performance at 0 Pa	m <sup>3</sup> /h/W [cfm/W]	20.2 [11.9]	17.8 [10.5]

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

## EUROEMME® EDT30HE

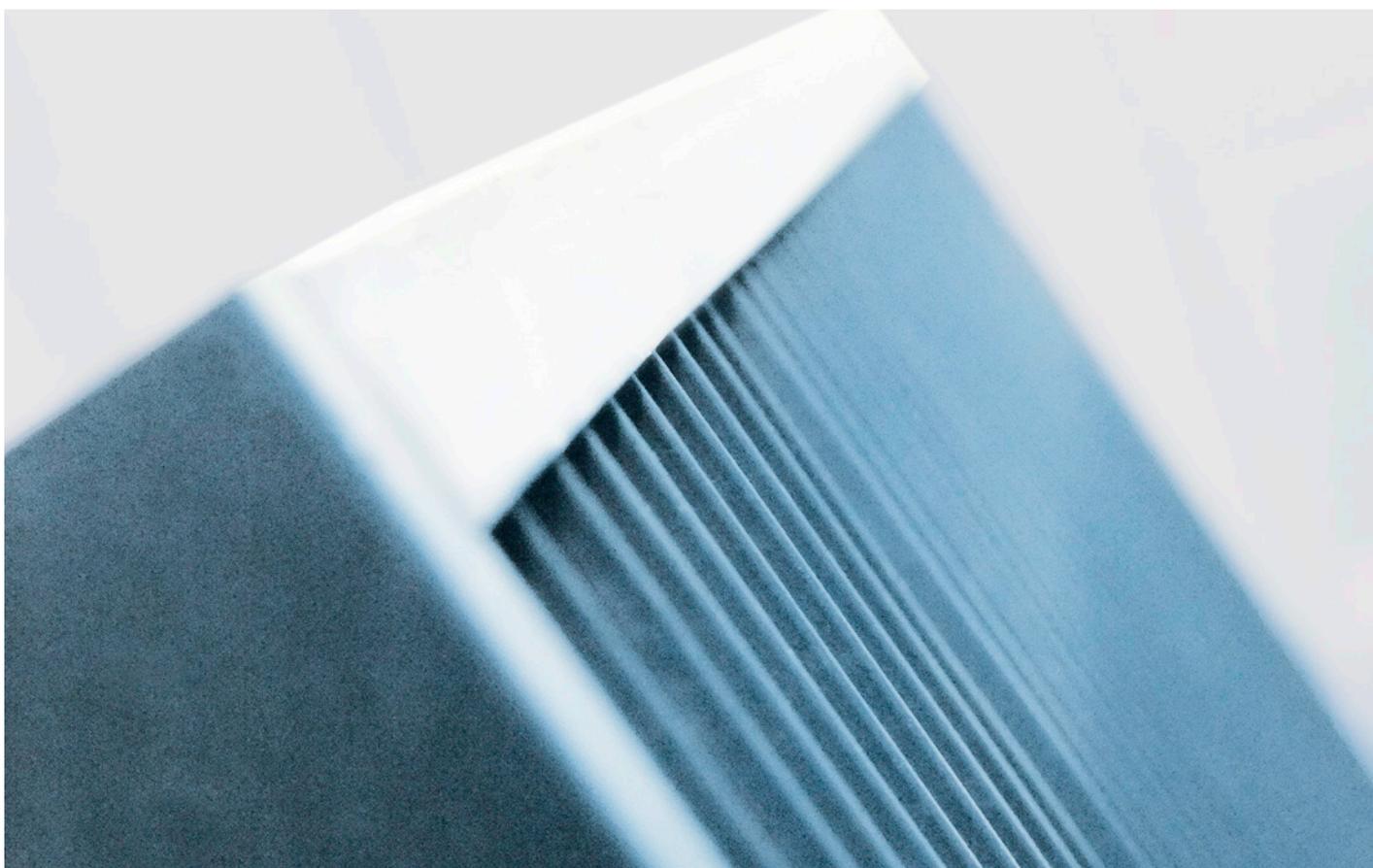


- Family members of the time proven Euroemme® fan range
- High airflow capacity with excellent energy efficiency
- Low power consumption
- Direct drive system
- Special threaded bushes on fan's side panels permit the fan to be easily hung

### PERFORMANCES

Motor		0.5n.c.
Airflow at 0 Pa	m <sup>3</sup> /h [cfm]	14,400 [8,460]
Specific performance at 0 Pa	m <sup>3</sup> /h/W [cfm/W]	22.1 [13.0]

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



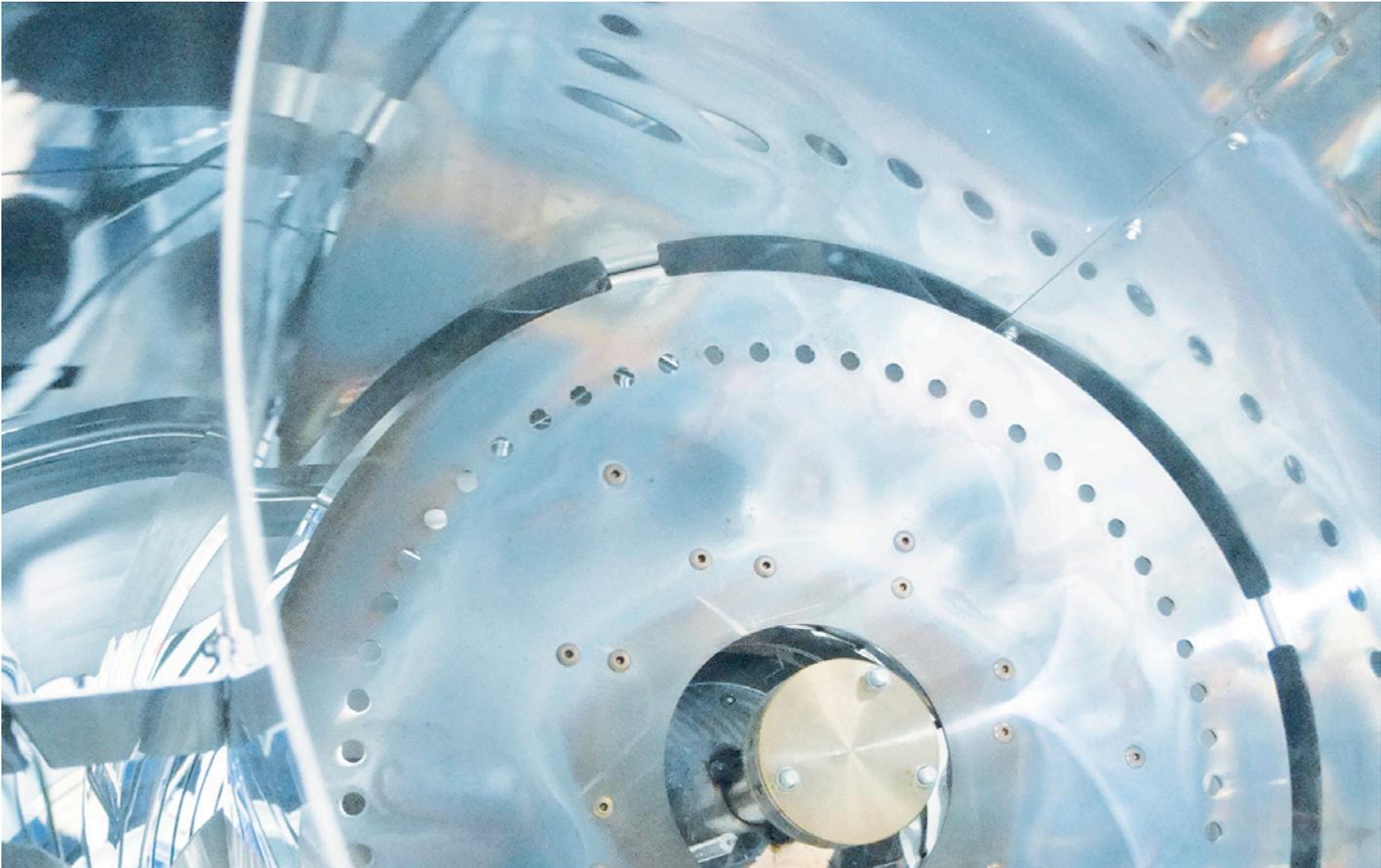
## FI36 - FI50



- 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



## 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	[m <sup>3</sup> /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 kit.

## 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	

AIR INLET



## SMT24 - SMT30 - SMT36 - SMT50



- 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

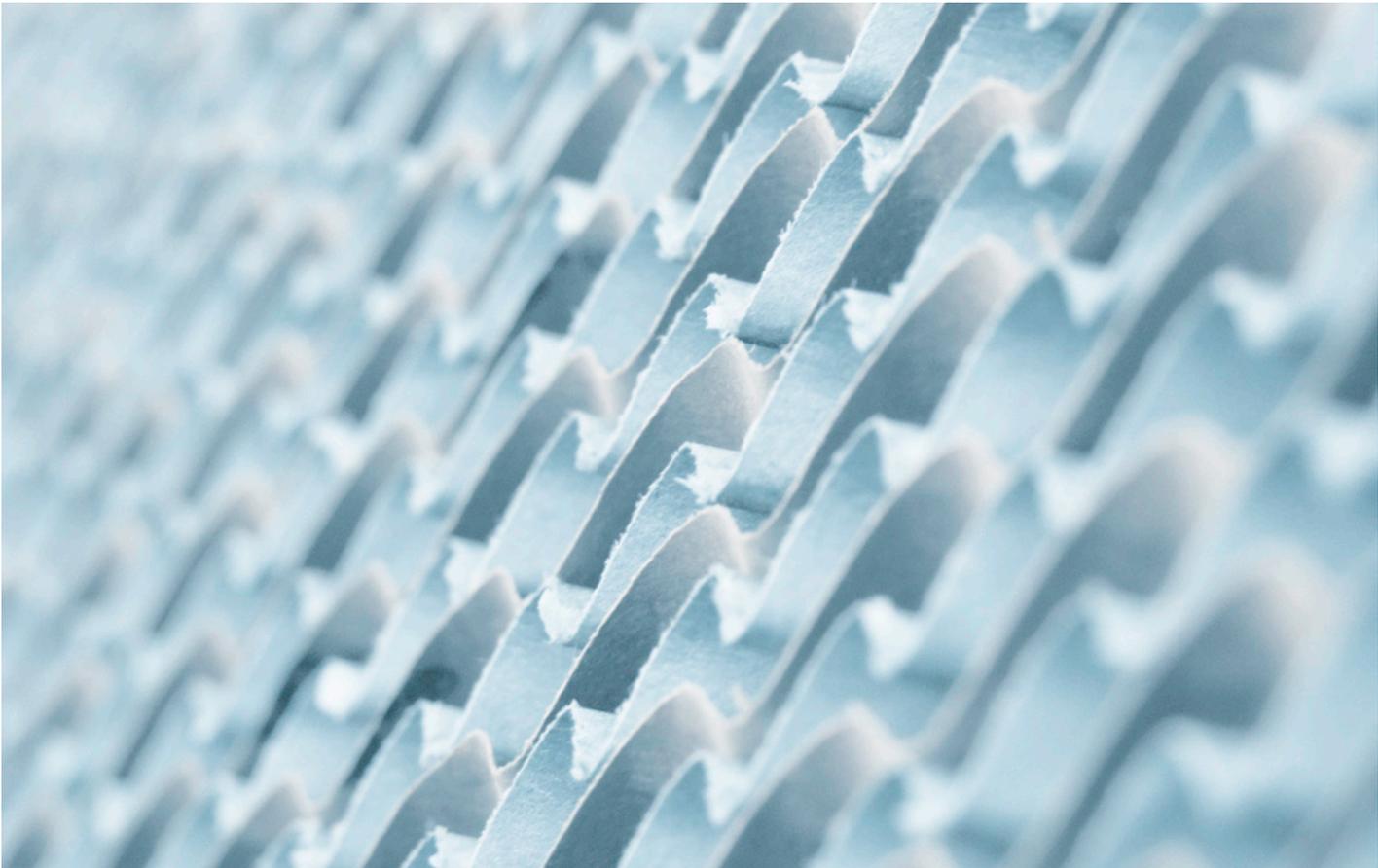
### PERFORMANCES

Model		SMT24	SMT30	SMT36	SMT50
Airflow at 0 Pa	m <sup>3</sup> /h	0	0	0	0
Airflow at 20 Pa	m <sup>3</sup> /h	6,754	11,642	14,331	27,090
Airflow at 40 Pa	m <sup>3</sup> /h	9,396	16,210	20,110	38,261
Airflow at 60 Pa	m <sup>3</sup> /h	11,463	19,656	244,91	46,346

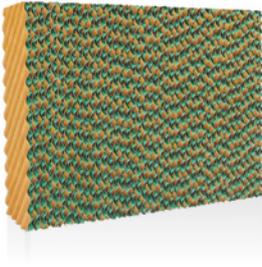
*Note: airflow data are measured at standard conditions (20°C, 1,013hPa)*

### LOADING VOLUMES

Model		ASSEMBLED			DISASSEMBLED		
		SMT30	SMT36	SMT50	SMT30	SMT36	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



## CELdek® 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			

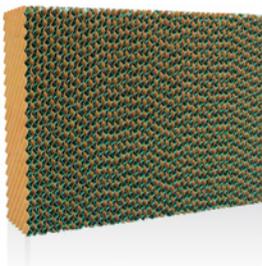
### DISTRIBUTION PAD CELdek® 70120

Length	mm	600			
Height	mm	30			
Width	mm	100/150			

### ACCESSORIES: LIGHT FILTERS FOR CELdek®

High light reduction factor.

## CELdek® 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	600			
Height	mm	30			
Width	mm	100/150			

### ACCESSORIES: LIGHT FILTERS FOR CELdek®

High light reduction factor.

## 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			

## DCP30 - DCP30 TOP4



- Pre-coated galvanised steel housing
- Tank manufactured in thermoplastic material
- Electrical motor with IP55 protection grade
- CELdek® 7090-15 evaporative cooling pads
- Circulation water unit is CE approved
- Complete plumbing kit incorporated
- Electrical enclosure with safety and control switchgear
- Single-phase as option

### STANDARD DIMENSIONS

Model		DCP30	TOP4
Length	mm	1,640	1,360
Height	mm	1,000	1,000
Width	mm	1,520	2,500

### PERFORMANCES

Airflow at 0 Pa	m <sup>3</sup> /h [cfm]	16,000 [9,415]	
Motor power*	kW [hp]	1.1 [1.5]	
Cooling efficiency	%	83 - 85	
Cooling effect @ 50% RH	°C [°F]	DCP30 - TOP4	
		OUTSIDE TEMPERATURE	INSIDE TEMPERATURE
		34 [93]	27 [81]
		30 [86]	23 [73]
		26 [79]	20 [68]

\* Three-phase electric motor as standard, single phase as options.

Notes: the DCP is intended to be installed outside the building. The cooling effect mentioned above are estimates and can vary based on local conditions.



[www.munters.com](http://www.munters.com)

**Australia** Phone +61 2 8843 1594, [agh.info@munters.com.au](mailto:agh.info@munters.com.au), **Brazil** Phone +55 41 3317 5050, [contato@munters.com](mailto:contato@munters.com), **Canada** Phone +1 517 676 7070, [aghort.info@munters.com](mailto:aghort.info@munters.com), **China** Phone +86 10 8048 3493, [marketing@munters.cn](mailto:marketing@munters.cn), **Denmark** Phone +45 98 623 311, [aghort@munters.dk](mailto:aghort@munters.dk), **India** Phone +91 20 6681 8900, [info@munters.in](mailto:info@munters.in), **Indonesia** Phone +66 2 642 2670, [info@munters.co.th](mailto:info@munters.co.th), **Italy** Phone +39 0183 5211, [info@munters.it](mailto:info@munters.it), **Japan** Phone +81 3 5970 0021, [mkk@munters.jp](mailto:mkk@munters.jp), **Korea** Phone +82 2 7618 701, [munters@munters.co.kr](mailto:munters@munters.co.kr), **Mexico** Phone +52 818 2625 400, [dhinfo@munters.com](mailto:dhinfo@munters.com), **Singapore** Phone +65 7 446 828, [info@munters.com.sg](mailto:info@munters.com.sg), **South Africa and Sub-Sahara Countries** Phone +27 11 997 2000, [info@munters.co.za](mailto:info@munters.co.za) **Spain** Phone +39 0183 5211, [info@munters.it](mailto:info@munters.it), **Sweden** Phone +46 8 6266 300, [info@munters.se](mailto:info@munters.se), **Thailand** Phone +66 2 6422 670, [info@munters.co.th](mailto:info@munters.co.th), **Turkey** Phone +90 262 7513 750, [info@muntersform.com](mailto:info@muntersform.com), **USA** Phone +1 517 676 7070, [aghort.info@munters.com](mailto:aghort.info@munters.com), **Export & Other countries** Phone +39 0183 5211, [info@munters.it](mailto:info@munters.it)