

**FIRE FIGHTING**



# **MOBILE VENTILATION**

**RESPONSE EQUIPMENT**



**AN INTERNATIONAL PRESENCE**  
SUBSIDIARIES AND A STRONG NETWORK OF DISTRIBUTORS





# LEADER

Since 1985, LEADER **has designed and manufactured** higher performing equipment used in **firefighting, fire training** and **Search & Rescue** applications and proposes them to Fire & Rescue Services, Civil Defense, Hazardous Industries, NGOs, Maritime Services, etc. on the 5 continents.

## A major axis : INNOVATION

To meet the advancing challenges of fire hazards and search & rescue missions, equipment must continually **evolve and adapt** to be **more effective** while ensuring **maximum safety for workers**.

To meet these challenges, LEADER is committed to constant **innovation and new technologies** and has its own in-house **Research & Development** team which works alongside end-users to design and develop the equipment that will be available tomorrow.

To test our equipment and assess its performance, we at LEADER continually invest in our own infrastructure:

- ▶ Water and High-Expansion Foam test room (400 sq m)
- ▶ Ventilation test room (400 sq m)
- ▶ Casualty Search Equipment test area
- ▶ Fire test area in fire container - Fire extinguishing equipment

### Our commitment

When you choose LEADER equipment, you are assured of the **quality and compliance of our products**. These have been made in our workshops by our engineering and electronics **specialists**.

### ISO 9001 certified since 1999, LEADER:

- ▶ Carries out **checks** at every stage of the manufacturing process as well as on the finished products before dispatch,
- ▶ Provides **continuous training** for all its staff.

### Guaranteed equipment

Every LEADER product comes with a specific contractual guarantee.

### Close to our customers

Through our sales force, subsidiaries in **Germany and the USA, agencies in Latin America and China and an international distribution network**, LEADER is present worldwide, keeping us as close as possible to our customers.

### An organisation at your service

For optimal and long-term use of the equipment you purchase, LEADER can propose suitable training **on the handling, on the use and maintenance of the equipment**. Training can be done at our site or at your own site.



NEO LEADER Fan

NEO  
LEADER Fan  
EASY POWER  
TECHNOLOGY

# CONTENTS

## VENTILATION EQUIPMENT FOR FIRE RESPONSE AND INDUSTRIAL APPLICATIONS

**EASY POW'AIR TECHNOLOGY: A LEADER CONCEPT**

**P8**

**VENTILATION TECHNIQUES FOR FIRE RESPONSE**

**P10**

**VENTILATING LARGE VOLUMES**

**P12**

**VENTILATION IN EXPLOSIVE ATMOSPHERES**

**P14**

**VENTILATION IN CONFINED SPACES**

**P16**

**THE RANGE AT A GLANCE**

**P6**

**PETROL-DRIVEN FANS**

**P18**

**ELECTRIC FANS**

**P28**

**WATER-DRIVEN FANS**

**P38**

**LARGE-FLOW VENTILATORS**

**P42**

**VENTILATION ACCESSORIES**

**P48**

# LEADER HAS DEVELOPED **EASY POW'AIR TECHNOLOGY:**

## A POWERFUL, CONCENTRATED JET OF AIR: A LEADER INNOVATION

The speed and concentrated shape of the Easy Pow'Air jet catches surrounding air, thereby increasing the fan's flow rate.



## CREATES SPACE FOR RESPONSE TEAMS WORKING AROUND DOORS

The force and stability of the jet gives **constant and optimal efficiency from 2 to 6 m** between fan and opening.

This creates valuable space for response teams working in /around the entrance. The fans can also be positioned as close as 0.90 m.

The increased distance also reduces noise levels for responders.



## SIMPLE SET-UP

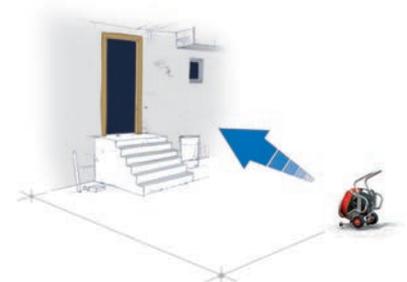
Automatic +10° tilt: when raised, the lifting handle automatically positions the fan at its optimal angle of tilt.

Fine adjustment of the tilt from +10° to +20° is also possible.

## EASY TO VENTILATE UP ENTRANCE STEPS

The ability to withdraw the apparatus and tilt it to its maximum angle makes ventilation possible in these situations: raised doors and windows, entrance steps, landings, etc.

Ventilation on a slope: Its optional prop allows the fan to be aimed down at an angle of -10°, making it very useful for basement work.



## EXTENDED APPLICATIONS USING ACCESSORIES

Blowing ducts, extraction ducts, high-expansion foam adaptor, mister, etc. These options increase the number of ways a fan can be used and so circumvent the constraints of a given operation.

# NEO LEADER Fan EASY POW'AIR TECHNOLOGY



## INNOVATION 2015 THE NEW NEO CONCEPT FOR EVEN BETTER PERFORMING LEADER FANS!

Drawing on Easy Pow'Air technology, LEADER's engineers have developed the NEO concept:

**an optimal combination of GRILLE, PROPELLER and SHROUD**



**The synergy** between their technology and their aeraulic design significantly boosts the performance of the 420 mm diameter petrol-driven, electric, and water-driven fans of the LEADER range.

Up to 20% greater flow rate, for unrivalled power in their category!

### **An operational advantage for the firefighter:**

NEO concept employs compact and lightweight fans with performances until now obtained by higher category fans.



## VERIFIED PERFORMANCE

**LEADER has its own test center** with an instrumented "test house" including a dedicated room for measuring flow rates and pressures to standard AMCA 240-06.

To allow for the variability of real life situations, the test house incorporates multiple features allowing fans to be tested and compared.

This installation is indispensable to our R&D department for testing and developing innovations to LEADER fans and maximizing their performance. The test house also allows us to demonstrate to customers and partners the efficiency of our fans and the firefighting benefits of controlling ventilation.

# CONTROL THE **AIR** AND YOU CONTROL THE **FIRE!**

## ASSOCIATED VENTILATION TECHNIQUES:

### POSITIVE PRESSURE VENTILATION (PPV)

**Blowing a large quantity of fresh air into a fire-affected space raises the internal pressure, allowing the smoke to be controlled.**

The effects are rapidly obvious:

Increased visibility, lowered temperature, reduced toxicity, control of smoke movement and reduced calorific potential.

These effects are beneficial to responders and trapped persons alike.

Firefighters must decide which fan or fans will be best in a given situation, depending on the layout of the premises to be ventilated.



#### OFFENSIVE PPV TACTIC

The offensive tactic is direct ventilation of the volume in which the fire is developing, combined with fire extinguishing resources. This tactic aims to modify the behavior of the fire and quickly reduce its intensity.



#### DEFENSIVE PPV TACTIC

This defensive tactic protects particular areas. It prevents smoke and hot gases propagating to locations that are to be protected.

Only volumes not affected by fire are ventilated. This tactic employs ventilation dissociated from fire-extinguishing actions. It creates a logistical route with a slightly higher air pressure through which, for example, victims can be evacuated.

## COMBINED VENTILATION TACTICS

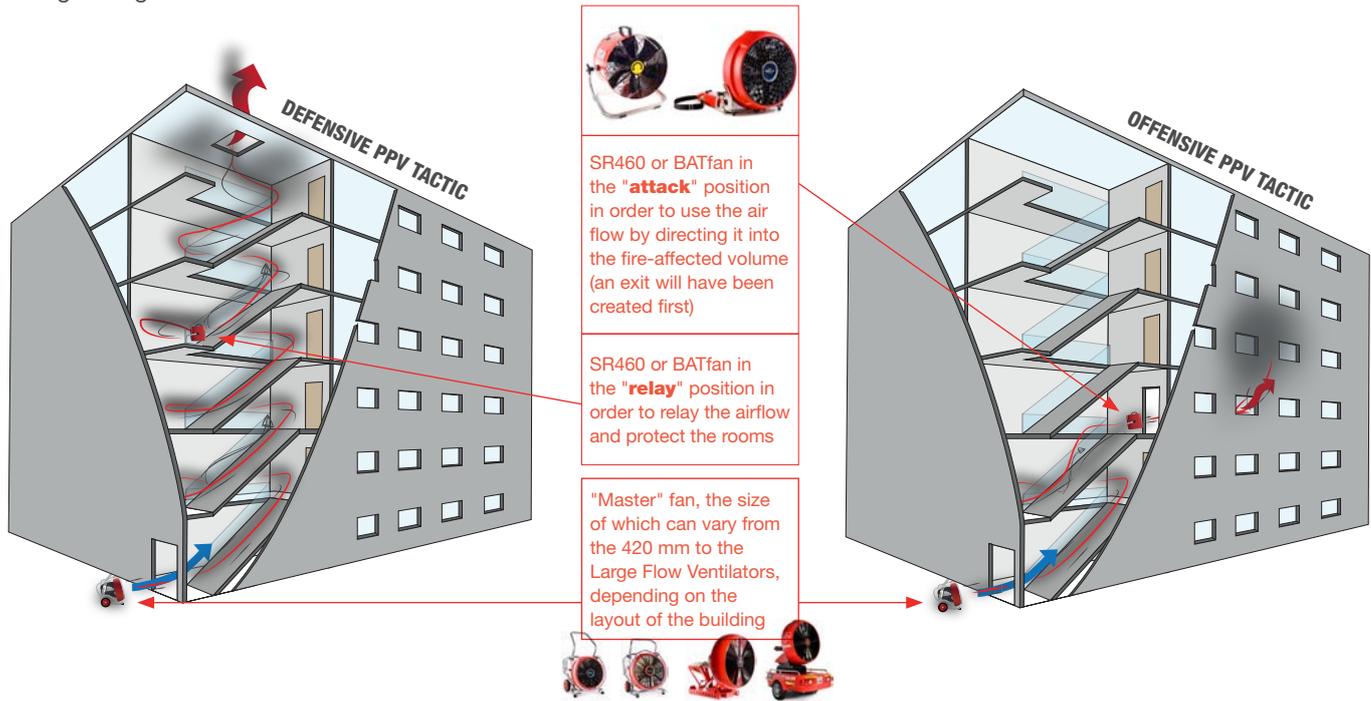
Also known as operational ventilation, **this combined tactic involves using both the preceding tactics on high-rise tower blocks:**

**1/** Defensive ventilation is first deployed using a high-power "master" fan positioned at the foot of the building facing its entrance.

**2/** With the stairwell pressurized and thus made safe, the intervention team climbs up to the affected floor to set up a portable relay fan at the entrance of the burning volume.

**3/** Once the exit is created, the offensive phase can begin:

The air flow from the master fan is relayed by the secondary fan, which is on the affected floor, and pushes the hot toxic smoke out of the building so that the combustible components of the smoke cannot spread. Smoke control facilitates the work of the teams, especially the fire extinguishing team.



## NEGATIVE PRESSURE VENTILATION (NPV)

**This involves lowering the pressure inside the volume.** The fan is placed inside the smoke-filled area and blows the smoke to the exterior. Simultaneously the crew create a fresh air inlet opening on the opposite side. A continuous stream of air then evacuates all smoke. NPV is used in a variety of situations, primarily where conditions and location do not favor natural ventilation or positive-pressure ventilation.

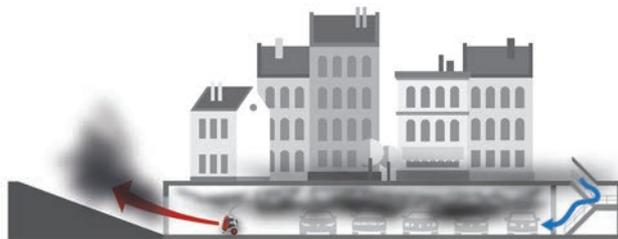
This method is particularly effective on fires in covered parking lots, underground tunnels/stations, basements and cellars.

The ParkFan 80 was designed as an efficient, easy-to-implement solution for smoke removal from covered parking lots.

With their combination of performance and maneuverability, these fans remain unequalled.

A single crewmember can easily deploy 1 or 2 ParkFans inside the smoke-filled volume and direct the airstream and smoke out of the premises.

Accessories such as extraction ducts or suction/blow kits convert fans designed for PPV into extractors of smoke from confined spaces (cellars, basements etc.) or large volumes such as parking lots by using the Easy 4000 LFV fan and its extraction ducts.



# LFV: LARGE-FLOW VENTILATORS

## MOBILE SOLUTION FOR VENTILATING LARGE VOLUMES

Large buildings continue to proliferate and are becoming ever larger. To meet these challenges, LEADER has designed large-flow ventilators to effectively fight fires in very large places such as Warehouses, Tunnels, Airports, Industrial Complexes, High-Rise Tower Blocks, etc.



### ASSURED RESULTS

Being totally independent of fixed fire-protection systems, these large-flow ventilator units are mobile and capable of mass ventilating enormous volumes.

### EASILY MANEUVERED BY ONE PERSON

LEADER trailer-mounted LFVs are easily maneuvered and positioned by one person.

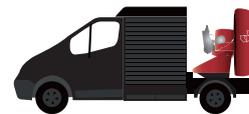
Their combination of weight, power and maneuverability give these LFVs unequalled effectiveness.

### ADAPTABLE TO VEHICLES OF ALL TYPES

Fans are available in trailer and skid versions for mounting on any mobile intervention unit.



Pick-up



Truck



Tracked vehicle



Rail-going platform



Elevator arm



Trolley



Trailer

## CHOOSING THE RIGHT APPARATUS TO VENTILATE LARGE STRUCTURES

To meet the diverse needs of fire response or industrial applications, LEADER has developed large-flow ventilators:



	Easy 2000	Easy 4000
<b>Effectiveness</b>	Open air flow <b>150,000 m3/h</b>	Open air flow <b>400,000 m3/h</b>
<b>Application</b>	<p><b>One fan</b> is an effective means of ventilating more modest large volumes such as <b>industrial units, medium height/tall buildings, underground parking lots etc.</b></p> <p><b>Multiple fans</b> offer <b>flexibility of action since they can be</b> used simultaneously to optimize blowing power.</p> <p>They can also be positioned at strategic points around a city or town.</p>	<p>For ventilating very large volumes <b>tunnels, industrial buildings, very tall buildings, airport buildings, etc.</b></p>

## VARIED VENTILATION APPLICATIONS REQUIRING LARGE BLOWING POWER



### Road or rail tunnel ventilation

Sets up an air stream if the fixed ventilation system is defective, or boosts it if it is working, to expel smoke from the tunnel, refresh the volume, and intervene more efficiently.



### Ventilation of airplanes and other aircraft

Valuable assistance when evacuating passengers. Quickly brings in fresh air and increases visibility in a restricted space where smoke can rapidly cut visibility to zero.



### Airport ventilation

Airports contain many very large interconnected halls and need the ability to remove harmful smoke rapidly to prevent it spreading and enable the rest of the airport to continue operating.



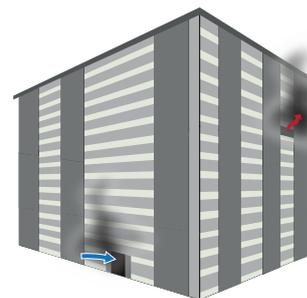
### Ventilation of smoke-generating factories

Production stoppages can be very costly. Fixed smoke capture systems can be overwhelmed to the point where production grinds to a halt. An LFV is a mobile independent low-cost solution for occasional use, accelerating smoke removal times for industrial sites.



### Ventilation of shopping centers

These very often consist of one large shop and connected shopping walkways. In such large spaces smoke can spread rapidly. It is important to be able to remove the smoke quickly, both to protect people and to safeguard merchandise.



### Ventilation of tall tower blocks

The varied configurations of buildings often require large blowing power to create an air stream sufficient to pressurize the stairwell right up to the top floor. The larger the building, the greater the number of openings through which pressure can be lost. Pressurizing the total volume is therefore more effective with an LFV.



### Ventilation of covered parking lots

Extraction ducts allow LFV to remove smoke from underground parking lots.

## ATEX MOBILE VENTILATION



# FOR RISK-FREE USE IN EXPLOSIVE ATMOSPHERES.

To meet the need for mobile ventilation in at-risk industries, LEADER has designed special fans incorporating the most frequently requested features for use in explosive atmospheres to meet the requirements laid down in the ATEX Directive 94/9/EC and standard EN 14986-2007 specifically about fans.

There are no exceptions to the latter and a certificate must accompany every machine sold. The directive covers electrical and mechanical equipment designed to be used in potentially explosive atmospheres within the European Union and applies to all manufacturers worldwide.

### THE ENTIRE APPARATUS MUST BE ATEX-CERTIFIED

An isolated component such as an ATEX-certified motor is not sufficient to obtain certification. LEADER fans are tested to the standards listed in the ATEX Directive. Their certification covers the entirety of the unit - motor, frame, shroud, grille, propeller, electronic module with its power supply cable, wheels, etc.



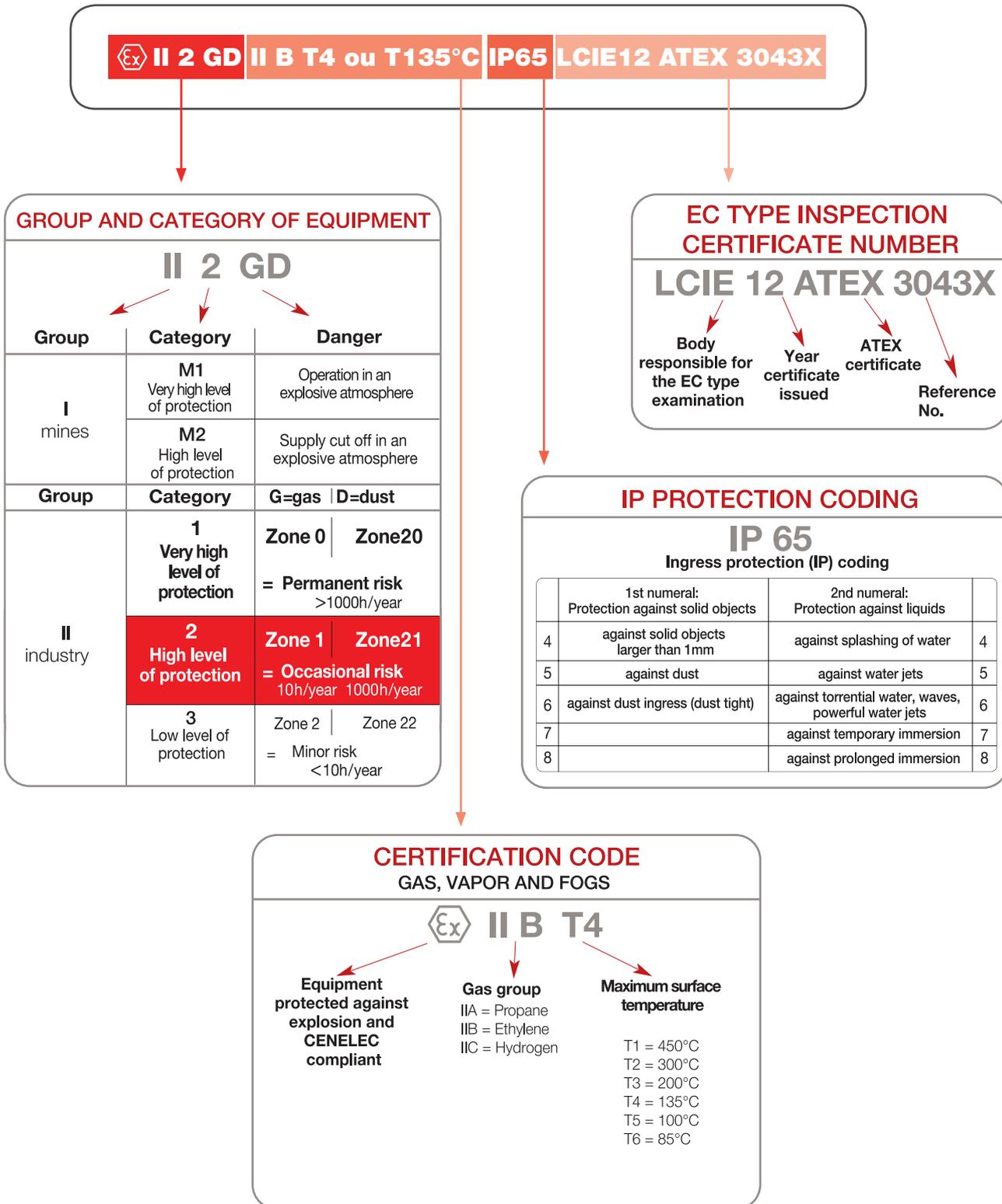
### VARIOUS MOBILE FAN APPLICATIONS IN INDUSTRY

Pressurizing a volume to make it safe,  
Expelling harmful smoke,  
Cooling an overheating machine,  
Removing smoke, explosive or toxic gases,  
etc.

## INTERPRETING THE ATEX CLASSIFICATION

The following information explains the ATEX classification, taking the ID plate of the ESX230 as an example.

So as not to limit your field of action in an explosive area, choose category 1- or 2-certified products.





## RISKS IN **CONFINED SPACES**

Aside from general risks, confined space work exposes responders to three kinds of risk:

- ▶ asphyxiation
- ▶ poisoning
- ▶ fire and explosion

There are several processes that can reduce the oxygen concentration in a confined space: The oxygen is consumed, a blanket gas is introduced, or a gas of natural origin is released.



V-Box extractor/blower conversion kit

## CLEANING THE AIR BY VENTILATION

It is possible to mitigate the causes of oxygen deficiency with ventilation techniques:

- ▶ by capture if the pollution source is localized - extracting bad air directly from close to its source,
- ▶ by dilution if the pollution source is diffuse: Preferably extraction if a small volume, blowing if a larger volume.

**By blowing**, whether directly or through blowing ducts, LEADER fans enable responders to:

- ▶ introduce new air
- ▶ cool a volume
- ▶ expel toxic gases or smoke from the structure
- ▶ pressurize a volume, thereby preventing the smoke or gases from spreading

**By suction using dedicated accessories (ducts and extraction/blow kits)**, the LEADER range of electric fans can extract toxic gases or smoke where the blowing technique is not suitable.

## TRAINING

# LEADER SHARES ITS EXPERT VENTILATION EXPERIENCE



## TAILOR-MADE TRAINING

LEADER regularly organises fire ventilation training courses around the world and at fire departments' request, where we teach the basics of the use of positive and negative pressure ventilation (PPV and NPV).

The different ventilation techniques are presented and practical sessions held to put the theory into practice.

### Courses can be held:

- ▶ at LEADER's premises, with the advantage of being able to use the "test house", used by the R&D team on a daily basis to test our own fans,
- ▶ at the fire department's site,
- ▶ at a dedicated training site.



## TEACHING SOFTWARE FOR FIRE VENTILATION TRAINING

**LEADER has developed software consisting of interactive courses that can be freely downloaded from its website.**

Created in partnership with the well-known fire training organisation EducExpert, these lessons are specially designed to be used by fire instructors in their task of passing on the skills of implementing ventilation techniques.

### COMPLETE, EFFECTIVE LESSONS

Downloadable in 4 languages (English, French, Spanish and Chinese), these lessons introduce three main topics:

- ▶ The basics of three key firefighting ventilation techniques (offensive, defensive and combined ventilation),
- ▶ A review of the underlying principles of fire and the different phases of fire development,
- ▶ Thermal phenomena and their consequences.

### BETTER ASSIMILATION OF KNOWLEDGE

Interactive lessons! Through the use of animations and clickable buttons, learners feel more engaged and therefore remember better.

### OPTIMIZED LEARNING TIME

When used as part of the broader training of firefighters, it enables more efficient assimilation of knowledge.

### ERGONOMIC

Quality, simplicity and user-friendliness are other advantages students appreciate.

### TEST WHAT STUDENTS HAVE LEARNED

Each lesson unit includes a self-assessment section consisting of questionnaires and practical interactive exercises for rapid validation of what trainees have learned.





## A RANGE OF **POWERFUL FANS:**



## PETROL-DRIVEN FANS

Model	Outlet Ø in mm	Ventilation type	Application*	Motor**	Open air flow in m <sup>3</sup> /h	Flow rate according to AMCA 240-06 (m <sup>3</sup> /h)	Weight in kg	See details page
MT 215 L NEO	420	PPV	1	Honda GXH50 - 2,1 HP	28 800	23 260	20,3	p20
MT 225 NEO	420	PPV	1	Honda GX120 - 3,6 HP	37 700	-	26,8	p21
MT 236 NEO	420	PPV	1	Honda GX160 - 4,8 HP	51 650	33 660	39,6	p22
MT 240 NEO	420	PPV	1	Honda GX200 - 5,5 HP	56 150	36 280	41,7	p23
MT 245	570	PPV	1-2	Honda GX200 - 5,5 HP	51 200	-	52	p24
MT 280	570	PPV	1-2	Honda GX390 - 11,7 HP	85 200	-	69,4	p25
MT 296	570	PPV	1-2	B&S-Vanguard - 16 HP	96 000	-	76,7	p26
Easy 2000	885	PPV LFV	2-3	Honda GX630 - 20,8 HP	150 000	-	301	p48
Easy 4000	1200	PPV LFV	3	BMW - 115 HP	400 000	-	546	p50

## ELECTRIC FANS

### ON BATTERY

BAT FAN NEO	420	Relay and PPV	1	600 W (0,8 HP) - 110v / 220v - 50Hz / 60Hz	24 050	15 040	24,7	p30
-------------	-----	---------------	---	--	--------	--------	------	-----

### DIRECT START

SA315	300	Extraction	1	1,1 kW (1,5 HP) - 220v - 50Hz	9 000	-	29,8	p40
SR460	400	Relay and PPV	1	375 W (0,5 HP) - 220v - 50Hz / 60Hz	13 000	-	15,5	p32
ES 220 NEO	420	PPV	1	1,5 kW (2 HP) - 220v - 50Hz	31 200	21 360	25,9	p33
ES 230 NEO	420	PPV	1	2,2 kW (3 HP) - 220v - 50Hz	40 750	27 140	39,3	p34
EDS 230 NEO	420	PPV	1	1,1 kW (1,5 HP) - 15 amp - 110v - 60Hz	28 750	19 750	33,1	p35
EDS 230.2 NEO	420	PPV	1	1,5 kW (2 HP) - 20 amp - 110v - 60Hz	32 400	21 800	37	p35
ES 245	570	PPV	1-2	2,2 kW (3 HP) - 220v - 50Hz	41 500	28 450	50,5	p37

### WITH SOFT STARTER

ESP 230 NEO	420	PPV	1	2,2 kW (3 HP) - 220v - 50Hz	40 750	27 140	40	p34
ESP 280	570	PPV	1-2	7,5 kW (10 HP) - 400v - 50Hz	85 700	-	74,6	p38

### WITH VARIABLE-SPEED DRIVE

ESV 230 NEO	420	PPV	1	2,2 kW (3 HP) - 220v - 50Hz / 60 Hz	40 750	27 140	41	p34
EVG 230 NEO	420	PPV	1	1,1 kW (1,5 HP) - 15 amp - 110v - 50Hz / 60Hz	28 900	19 750	35,5	p35
ESV 245	570	PPV	1-2	2,2 kW (3 HP) - 220v - 50Hz / 60Hz	41 500	28 450	53	p37
ESV 280	570	PPV	1-2	7,5 kW (10 HP) - 400v - 50Hz / 60Hz	85 700	-	81,4	p38
PARK FAN 80	570	NPV or PPV	1-2	7,5 kW (10 HP) - 400v - 50Hz / 60Hz with wireless remote control	85 700	-	83	p39

### ATEX

SAX 320	300	Extraction	1	1,1 kW - 110v / 220v - 50Hz / 60Hz	9 000	-	42	p41
ESX 230	420	PPV	1	1,85 kW (2,5 HP) - 400v - 50Hz / 60Hz	30 000	19 000	57	p36

## WATER-DRIVEN FANS

MH 236 NEO	120	PPV	1	9 HP	49 050	-	42	p44
MH 260	570	PPV	2	9 HP	50 500	-	57	p45

#### \*Application:

- 1 - Ventilation through single-leaf door, e.g. houses, small blocks of flats ...
- 2 - Ventilation through single/double doors, e.g. high-rise tower blocks, medium-size industrial units ...
- 3 - Ventilation through industrial unit door, underground parking lots, industrial sites, tunnels etc.

PPV = Positive Pressure Ventilation

NPV = Negative Pressure Ventilation

Relay = Relay fan in a combined ventilation set-up

LFV = Large-Flow Ventilator

\*\*Electric motor = power in W measured on the shaft





# Petrol-driven fans



Have the advantage of containing their own power source and have great blowing power. LEADER offers a complete range of fans of different powers.



**NEO**  
**LEADER Fan**  
 EASY POW'AIR  
 TECHNOLOGY

## PETROL-DRIVEN FAN MT215 L

**Compact and lightweight:** 20.3 kg!

A very **concentrated and ultra-powerful** jet of air due to an optimal combination of:

- ▶ A high-strength propeller matched to the power of the engine
- ▶ A red double-layer monobloc shroud made of reinforced high-density polyethylene
- ▶ A high-tech composite grille

**Positioning from 0.90 m to 6 m** in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

With folding pull/steer handle for easier set-up

**Precise tilt adjustment**

from -10° to +20° with indicator for optimization of direction of air stream up entrance steps or down into a semi-basement

**Protective frame**

with w coating

**Stable & easy to handle** with large rear

wheels

**Compact for easy storage in vehicle trunks**

### Characteristics

Model	MT215 L NEO
Reference	I60.10.062N
Open air flow	23 800 m <sup>3</sup> /h
PPV air flow according to AMCA	23 260 m <sup>3</sup> /h
Weight (dry)	20,3 kg
Dimensions L x H x D	530 x 495 x 555 mm
Propeller diameter	420 mm
Run time at full speed	1h40
Engine	HONDA GXH50 engine (4-stroke) 56% less CO than a 5 HP engine Assembly inspected and approved by Honda Motor Co., Ltd
Engine power	2.1 HP according to standard SAE J1349 of 2007
Noise level	84,5 dB at 3m
Ventilation type	PPV blowing
Application	Single door, e.g. house, small apartment block

### Optional accessories:

High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	I60.20.105
Hour meter	I60.20.135
Adapter for connecting ventilation duct to fan	I60.20.149
5m ventilation duct	I60.20.147

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader-educexpert.com](http://www.leader-educexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**NEO**  
**LEADER Fan**  
**EASY POWAIR**  
 TECHNOLOGY

## PETROL-DRIVEN FAN **MT225**

A very **concentrated and ultra-powerful** jet of air due to an optimal combination of:

- ▶ A high-strength propeller matched to the power of the engine
- ▶ A red double-layer monobloc shroud made of reinforced high-density polyethylene
- ▶ A high-tech composite grille

**Positioning from 0.90 m to 6 m** in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

### Precise tilt adjustment

from -10° to +20° with indicator for optimization of direction of air stream up entrance steps or down into a semi-basement

### Protective frame

with grey epoxy coating

**Compact for easy storage in vehicle trunks**

### Characteristics

Model	MT225 NEO
Reference	160.10.054N
Open air flow	37 700 m <sup>3</sup> /h
PPV air flow according to AMCA	-
Weight (dry)	26,8 kg
Dimensions L x H x D	550 x 568 x 436 mm
Propeller diameter	420 mm
Run time at full speed	1h40
Engine	HONDA GX 120 engine (4-stroke) Automatic engine cutout if oil runs out. Assembly inspected and approved by Honda Motor Co., Ltd
Engine power	3,6 HP according to standard SAE J1349 of 2007
Noise level	94,8 dB at 3 m
Ventilation type	PPV blowing
Application	Single door, e.g. house, small apartment block

### Optional accessories:

Mister without coupling (products with coupling: see p. 52)	Consult us
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	160.20.105
5m ventilation duct	160.20.147
Adapter for connecting ventilation duct to fan	160.20.149

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leadereducexpert.com](http://www.leadereducexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**NEO**  
**LEADER Fan**  
EASY POW'AIR  
TECHNOLOGY

## PETROL-DRIVEN FAN MT236

A very **concentrated and ultra-powerful** jet of air due to an optimal combination of:

- ▶ A high-strength propeller matched to the power of the engine
- ▶ A red double-layer monobloc shroud made of reinforced high-density polyethylene
- ▶ A high-tech composite grille

**Positioning from 0.90 m to 6 m** in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

**Automatic optimal +10° tilt** when handle raised

### Characteristics

Model	MT236 NEO	
Reference	160.10.052N	160.10.053N
<b>Open air flow</b>	<b>51 650 m<sup>3</sup>/h</b>	
<b>PPV air flow according to AMCA</b>	33 660 m <sup>3</sup> /h	
<b>Weight (dry)</b>	39,6 kg	
<b>Dimensions L x H x D</b>	550 x 560 x 490 mm	
<b>Propeller diameter</b>	420 mm	
<b>Run time at full speed</b>	2h10	
<b>Engine</b>	HONDA GX 160 engine (4-stroke) Automatic engine cutout if oil runs out. Assembly inspected and approved by Honda Motor Co., Ltd	
<b>Engine power</b>	4.8 HP according to standard SAE J1349 of 2007	
<b>Noise level</b>	93 dB at 3 m	
<b>Ventilation type</b>	PPV blowing	
<b>Application</b>	Single door, e.g. house, small apartment block	
<b>-10° prop for negative tilt of fan</b>	No	Yes

### Optional accessories:

CO-reducing LEADER Cat catalytic converter	<b>160.20.142</b>	Exhaust adapter	<b>160.20.014</b>
Mister without coupling (products with coupling: see p. 52)	<b>160.20.104</b>	Exhaust extension (length: 2.5m)	<b>160.20.012</b>
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	<b>160.20.105</b>	Protective cover	<b>160.20.017</b>
Hour meter	<b>160.20.135</b>	-10° prop for negative tilt of fan	<b>160.20.130</b>
5m ventilation duct	<b>160.20.101</b>		

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
Freely downloadable interactive ventilation courses at [www.leader-educexpert.com](http://www.leader-educexpert.com)  
As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice



**NEO**  
**LEADER Fan**  
**EASY POW'AIR**  
TECHNOLOGY

## PETROL-DRIVEN FAN **MT240**

A very **concentrated and ultra-powerful** jet of air due to an optimal combination of:

- ▶ A high-strength propeller matched to the power of the engine
- ▶ A red double-layer monobloc shroud made of reinforced high-density polyethylene
- ▶ A high-tech composite grille

**Positioning from 0.90 m to 6 m** in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

**Automatic optimal +10° tilt** when handle raised

### Precise tilt adjustment

from +10° to +20° for optimization of direction of air stream up entrance steps

### Protective frame

with grey epoxy coating

**Stable & easy to handle** with large rear wheels

**Compact for easy storage in vehicle trunks**

**Integrated stabilizer prop** at rear. Also enables fan to be tilted to -10° for downward ventilation.

## Characteristics

Model	MT240 NEO
<b>Reference</b>	I60.10.060N
<b>Open air flow</b>	<b>56 150 m<sup>3</sup>/h</b>
<b>PPV air flow according to AMCA</b>	36 280 m <sup>3</sup> /h
<b>Weight (dry)</b>	41,7 kg
<b>Dimensions L x H x D</b>	550 x 560 x 490 mm
<b>Propeller diameter</b>	420 mm
<b>Run time at full speed</b>	1h30
<b>Engine</b>	Engine HONDA GX 200 (4-stroke) Automatic engine cutout if oil runs out. Assembly inspected and approved by Honda Motor Co., Ltd
<b>Engine power</b>	5.5 HP according to standard SAE J1349 of 2007
<b>Noise level</b>	93 dB at 3 m
<b>Ventilation type</b>	PPV blowing
<b>Application</b>	Single door, e.g. house, small apartment block

## Optional accessories:

CO-reducing LEADER Cat catalytic converter	<b>I60.20.142</b>	Exhaust adapter	<b>I60.20.014</b>
Mister without coupling (products with coupling: see p. 52)	<b>I60.20.104</b>	Exhaust extension (length: 2.5m)	<b>I60.20.012</b>
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	<b>I60.20.105</b>	Protective cover	<b>I60.20.017</b>
Hour meter	<b>I60.20.135</b>	5m ventilation duct	<b>I60.20.101</b>





**LEADER Fan**  
EASY POWAIR  
TECHNOLOGY

## PETROL-DRIVEN FAN MT245

### A concentrated, powerful jet of air due to:

- ▶ high-strength propeller matched to the power of the motor
- ▶ double-layer aluminum/ABS thermoplastic red shroud
- ▶ metal grille

### Positioning from 0.90 m to 6 m in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

### Precise tilt adjustment

from +10° to +20° for optimization of direction of air stream up entrance steps

### Protective frame

with grey epoxy coating

**Stable & easy to handle** with large rear wheels

**Automatic optimal +10° tilt** when handle raised

### Characteristics

Model	MT245
<b>Reference</b>	I60.10.051
<b>Open air flow</b>	51 200 m <sup>3</sup> /h
<b>PPV air flow according to AMCA</b>	-
<b>Weight (dry)</b>	52 kg
<b>Dimensions L x H x D</b>	710 x 720 x 617 mm
<b>Propeller diameter</b>	570 mm
<b>Run time at full speed</b>	2h00
<b>Engine</b>	HONDA GX 200 (4-stroke) Automatic engine cutout if oil runs out. Assembly inspected and approved by Honda Motor Co., Ltd
<b>Engine power</b>	5.5 HP according to standard SAE J1349 of 2007
<b>Noise level</b>	96 dB at 3 m
<b>Ventilation type</b>	PPV blowing
<b>Application</b>	Single door (e.g. house, small apartment block) and double door (e.g. tall apartment block, mid-size industrial unit)

### Optional accessories:

CO-reducing LEADER Cat catalytic converter	I60.20.142	Exhaust adapter	I60.20.014
Mister without coupling (products with coupling: see p. 52)	I60.20.104	Exhaust extension (length: 2.5m)	I60.20.012
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	I60.20.116	Protective cover	I60.20.097
Hour meter	I60.20.135	-10° prop for negative tilt of fan	I60.20.108
5m ventilation duct	I60.20.113		

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader-educexpert.com](http://www.leader-educexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**LEADER Fan**  
EASY POW'AIR  
TECHNOLOGY

## PETROL-DRIVEN FAN MT280

### A concentrated, powerful jet of air due to:

- ▶ high-strength propeller matched to the power of the motor
- ▶ double-layer aluminum/ABS thermoplastic red shroud
- ▶ metal grille

### Positioning from 0.90 m to 6 m in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

### Precise tilt adjustment

from +10° to +20° for optimization of direction of air stream up entrance steps

### Protective frame

with grey epoxy coating

**Stable & easy to handle** with large rear wheels

**Automatic optimal +10° tilt** when handle raised

### Characteristics

Model	MT280
<b>Reference</b>	I60.10.048
<b>Open air flow</b>	85 200 m <sup>3</sup> /h
<b>PPV air flow according to AMCA</b>	-
<b>Weight (dry)</b>	69,4 kg
<b>Dimensions L x H x D</b>	710 x 720 x 617 mm
<b>Propeller diameter</b>	570 mm
<b>Run time at full speed</b>	1h20
<b>Engine</b>	HONDA GX 390 (4-stroke) Automatic engine cutout if oil runs out. Assembly inspected and approved by Honda Motor Co., Ltd
<b>Engine power</b>	11.7 HP according to standard SAE J1349 of 2007
<b>Noise level</b>	99 dB at 3 m
<b>Ventilation type</b>	PPV blowing
<b>Application</b>	Single door (e.g. house, small apartment block) and double door (e.g. tall apartment block, mid-size industrial unit)

### Optional accessories:

Mister without coupling (products with coupling: see p. 52)	I60.20.104	Exhaust adapter (products with coupling: see p. 52)	I60.20.125
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	I60.20.116	Exhaust extension (length: 2.5m)	I60.20.012
Hour meter	I60.20.135	Protective cover	I60.20.097
5m ventilation duct	I60.20.113	-10° prop for negative tilt of fan	I60.20.108





**LEADER Fan**  
EASY POWAIR  
TECHNOLOGY

## PETROL-DRIVEN FAN MT296

### A concentrated, powerful jet of air due to:

- ▶ high-strength propeller matched to the power of the motor
- ▶ double-layer aluminum/ABS thermoplastic red shroud
- ▶ metal grille

### Positioning from 0.90 m to 6 m in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

**Automatic optimal +10° tilt** when handle raised

### Precise tilt adjustment

from +10° to +20° for optimization of direction of air stream up entrance steps

### Protective frame

with grey epoxy coating

**Stable & easy to handle** with large rear wheels

## Characteristics

Model	MT296
Reference	I60.10.045
Open air flow	96 000 m <sup>3</sup> /h
PPV air flow according to AMCA	-
Weight (dry)	76,7 kg
Dimensions L x H x D	710 x 780 x 678 mm
Propeller diameter	570 mm
Run time at full speed	1h50
Engine	B&S Vanguard two-cylinder engine (4-stroke)
Engine power	16 HP according to standard SAE J1349 of 2007
Noise level	98,3 dB at 3 m
Ventilation type	PPV blowing
Application	Single door (e.g. house, small apartment block) and double door (e.g. high rise buildings, mid-size industrial unit)

## Optional accessories:

5m ventilation duct	I60.20.113	Exhaust extension (length: 2.5m)	I60.20.012
Mister without coupling (products with coupling: see p. 52)	I60.20.111	Protective cover	I60.20.097
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	I60.20.116	-10° prop for negative tilt of fan	I60.20.108
Hour meter	I60.20.135		

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader-educexpert.com](http://www.leader-educexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice







# Electric fans



Have the advantage of not producing any toxic fumes and are quieter than petrol-driven engines. However, they need a power supply which must be allowed for ahead of time based on their power and the number of fans deployed.

LEADER offers a complete range of electric fans of different powers with or without variable speed drive and suitable for differing electricity supplies (110/220 V, 50/60 Hz, GFCI (RCD), soft starter, etc.).



**NEO**  
**LEADER Fan**  
EASY POW'AIR  
TECHNOLOGY



**NEW!**

## ELECTRIC FAN **BATfan**

**Portable battery-mounted fan**  
**Powerful and lightweight for completely self contained operation!**

**2 versions** to choose from:

- ▶ BATfan 20 with a 20-minute runtime and total weight of 24.7 kg
- ▶ BATfan 45 with a 45-minute runtime and total weight of 28 kg

**Totally self-contained**

- ▶ No cables: Avoids further accidents
- ▶ No need for a generator or power socket

**Compact & mobile**

- ▶ Folds up and stows easily in the trunk of a vehicle: 2 BATfans occupy the space of one conventional fan!
- ▶ Portable by one person alone
- ▶ Carrying handle and strap
- ▶ Folding trolley for even easier transport (optional)

**Quicker to set up than conventional fans**

- ▶ No time wasted searching for a power socket: Starts off instantly
- ▶ Easy set-up

**Powerful** concentrated jet of air with optimal combination of:

- ▶ propeller specifically matched to the motor power
- ▶ reinforced double-layer monobloc shroud
- ▶ high-tech composite grille

**Positioning from 0.90 m to 6 m** in front of a door

**Dual power source means greater flexibility:**

Runs on battery or mains electricity if necessary (battery will automatically recharge at same time)

**Practical**

- ▶ Tilt is adjustable from -10° to +30° due to locking system with angle indicator
- ▶ Integrated variable-speed drive
- ▶ Powered by NiMH battery
  - Can recharge while in use
  - Low maintenance: 1 full recharge every 6 weeks
  - No restrictions on air transport
  - Battery charge indicator



Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
Freely downloadable interactive ventilation courses at [www.leader.educexpert.com](http://www.leader.educexpert.com)  
As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice



## Electric fan

- ▶ No exhaust gases
- ▶ Noise level lower than a petrol-driven engine

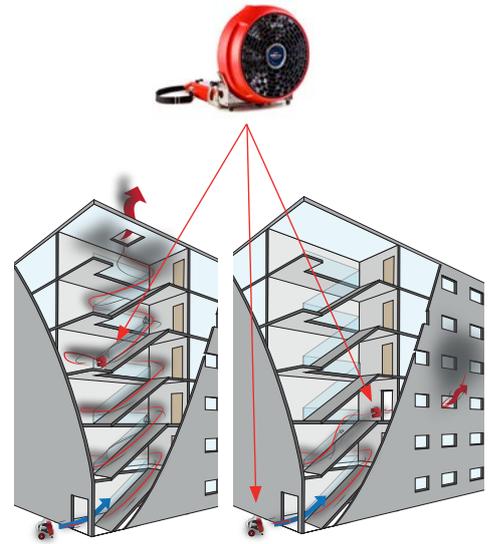
### Multi-use, can be used:

- ▶ indoors or outdoors: protected against splashing water (IP55)
- ▶ on its own at a building entrance for PPV
- ▶ for PPV combined tactics with other fans:
  - as a relay in a corridor or stairwell
  - for attack in front of an apartment door for offensive ventilation
- ▶ in blowing mode with duct (optional)
- ▶ as a foam generator with adapter (optional)

### Two BATfans together for even more flexibility

Taking up no more space than one standard fan, two BATfans give greater operational flexibility:

- ▶ at the building entrance for PPV tactic for more air flow
- ▶ for combined PPV tactic: one at the entrance, the other as relay or attack on a higher floor of a building



## Characteristics

Model	BATfan 20	BATfan 45
<b>References 110V</b>	I63.12.001N	I63.12.004N
<b>References 220V</b>	I63.12.002N	I63.12.003N
<b>Open air flow</b>	24 050 m <sup>3</sup> /h	
<b>PPV air flow according to AMCA</b>	15 040 m <sup>3</sup> /h	
<b>Weight</b>	24.7 kg	28 kg
<b>Dimensions L x H x D</b>	522 x 547 x 257 mm	
<b>Propeller diameter</b>	420 mm	
<b>Run time at full speed</b>	20 min	45 min
<b>Engine</b>	600 W with variable speed drive – IP55	
<b>Power supply</b>	Self-contained: NiMH battery On mains: single-phase 110V - 50/60 Hz or 220V - 50/60 Hz	
<b>Electrical safety</b>	Meets EN 50178 for user safety (leakage current less than 3.5 mA)	
<b>Power consumption in steady operation</b>	8A when plugged into 110V 4A when plugged into 220V	
<b>Electric power plug</b>	CE-220V male plug or US-110V male plug	
<b>Charging time</b>	100% in 5 h	100% in 10 h
<b>Use temperature</b>	Use -20°C to +40°C Permanent storage -20°C to +35°C 1 week storage -20°C to +60°C Charging -5°C to + 30°C (Charging recommended every 6 weeks)	
<b>Protection</b>	IP55 = protected from water spray in all directions from fire hose	
<b>Noise level</b>	73,5 dB at 3 m	
<b>Ventilation type</b>	PPV and combined PPV	
<b>Application</b>	Single door – houses, small apartment blocks or as a relay fan on upstairs floors or in attack use in front of an apartment door	

## Optional accessories

High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	I60.20.105
5 m ventilation duct	I60.20.152
Folding transport trolley	I63.12.005
100m electric extension in bag with lockable EU plugs - weight 12kg - high-flex cable 3x1.5 mm <sup>2</sup>	I63.00.016



## ELECTRIC FAN SR460

### Auxiliary Relay Fan (ARF)

#### Lightweight and quiet.

Allows responders to work in complete safety close to the fire, reduce the temperature, and remove hot gases and smoke through vents (windows, etc.).

**It is positioned on an upstairs floor as a relay for a more powerful fan** positioned at the building entrance (see combined ventilation concept)

**Robust protective sheet-steel housing** - red epoxy paint

**High-strength propeller** matched to the power of the motor

**Transportable by one operator** due to its low weight and small size (with carry handle)

**Adjustable tilt angle** to optimize the direction of the air stream

**Compact**, stows easily in the trunk of a vehicle.

### Characteristics

Model	SR460
Reference	I63.00.015
Open air flow	13 000 m <sup>3</sup> /h
PPV air flow according to AMCA	-
Weight	15,5 kg
Dimensions L x H x D	566 x 547 x 422 mm
Propeller diameter	400 mm
Engine	370 W IP55 protection
Power supply	Single-phase - 230V - 50/60Hz - IP55
Electrical safety	Meets EN 50178 for user safety (leakage current less than 3.5 mA)
Power consumption in steady operation	2.75 A
Mains plug	CE male plug - 220 V
Noise level	65.5 dB at 3 m
Ventilation type	Combined PPV
Application	As a relay fan on upstairs floors or for attack in front of an apartment door

#### Optional accessories :

100m extension in bag with lockable plugs - weight 12kg - high-flex cable 3x1.5 mm <sup>2</sup>	I63.00.016
---	------------

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader.educexpert.com](http://www.leader.educexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**NEO**  
**LEADER Fan**  
EASY POWAIR  
TECHNOLOGY



## ELECTRIC FAN ES220

A very **concentrated and ultra-powerful** jet of air due to an optimal combination of:

- ▶ A high-strength propeller matched to the power of the engine
- ▶ A red double-layer monobloc shroud made of reinforced high-density polyethylene
- ▶ A high-tech composite grille

**Positioning from 0.90 m to 6 m** in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

**Precise tilt adjustment from -10° to +20°** with indicator to optimize direction of air stream up entrance steps or down into a semi-basement

**Protective frame** with grey epoxy coating

**Compact for easy storage in vehicle trunks**

### Characteristics

Model	ES220 NEO
<b>Reference</b>	I63.10.039N
<b>Open air flow</b>	<b>31 200 m<sup>3</sup>/h</b>
<b>PPV air flow according to AMCA</b>	21 360 m <sup>3</sup> /h
<b>Weight</b>	25,9 kg
<b>Dimensions L x H x D</b>	550 x 568 x 436 mm
<b>Propeller diameter</b>	420 mm
<b>Engine</b>	1.5 kW
<b>Power supply</b>	220V – 50Hz
<b>Electrical safety</b>	Meets EN 50178 for user safety (leakage current less than 3.5 mA)
<b>Power consumption in steady operation</b>	7.2 A
<b>Mains plug</b>	CE male plug – 220 V
<b>Noise level</b>	86,5 dB at 3 m
<b>Ventilation type</b>	PPV blowing
<b>Application</b>	Single door, e.g. house, small apartment block

### Optional accessories :

Adapter for connecting ventilation duct to fan	<b>I60.20.149</b>
5 m ventilation duct	<b>I60.20.147</b>
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	<b>I60.20.105</b>
V-BOX cube for extractor/blower kit	<b>I63.20.017</b>
5 m duct for V-Box extractor/blower kit - Ø 400 mm	<b>I63.20.014</b>

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader.educexpert.com](http://www.leader.educexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**NEO**  
**LEADER Fan**  
**EASY POW'AIR**  
TECHNOLOGY



## ELECTRIC FAN ES230 - ESP230 - ESV230

A very **concentrated and ultra-powerful** jet of air due to an optimal combination of:

- ▶ A high-strength propeller matched to the power of the engine
- ▶ A red double-layer monobloc shroud made of reinforced high-density polyethylene
- ▶ A high-tech composite grille

**Positioning from 0.90 m to 6 m** in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

**Automatic optimal +10° tilt** when handle raised

**Precise tilt adjustment** from +10° to +20° for optimization of direction of air stream up entrance steps

**Protective frame** with grey epoxy coating

**Stable & easy to handle** with large rear wheels

**Compact for easy storage in vehicle trunks**

### Characteristics

Model 220 V	ES230 NEO	ESP230 NEO	ESV230 NEO
<b>Reference</b>	I63.10.010N	I63.10.012N	I63.10.011N
<b>Open air flow</b>	40 750 m <sup>3</sup> /h		
<b>PPV air flow according to AMCA</b>	27 140 m <sup>3</sup> /h		
<b>Weight</b>	39,3 kg	40 kg	41 kg
<b>Dimensions L x H x D</b>	550 x 560 x 490 mm		
<b>Propeller diameter</b>	420 mm		
<b>Engine</b>	2.2 kW <b>single speed</b> drive – IP55	2.2 kW <b>single speed</b> drive with <b>soft starter</b> – IP55	2.2 kW with <b>variable speed</b> drive – IP55
<b>Power supply</b>	Single phase - 230V – 50Hz		Single phase - 230V 50/60Hz – IP55
<b>Electrical safety</b>	Meets EN 50178 for user safety (leakage current less than 3.5 mA)		
<b>Power consumption in steady operation</b>	12,5 A	14 A	16,5 A
<b>Mains plug</b>	CE male plug – 220 V		
<b>Noise level</b>	85,3 dB at 3 m		
<b>Ventilation type</b>	Blowing – VPP		
<b>Application</b>	Single door – houses, small apartment blocks		

### Optional accessories:

Mister without coupling (products with coupling: see p. 52)	I60.20.104	Prop for -10° tilt, useful for ventilating semi-basements	I60.20.130
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	I60.20.105	5 m duct for V-BOX extractor/blower kit - Ø 400mm.	I63.20.014
5m ventilation duct	I60.20.101	V-BOX cube for extractor/blower kit	I63.20.017
Protective cover	I60.20.017		

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
Freely downloadable interactive ventilation courses at [www.leader.educexpert.com](http://www.leader.educexpert.com)  
As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**NEO**  
**LEADER Fan**  
EASY POWAIR  
TECHNOLOGY



## ELECTRIC FAN EDS230 - EDS230.2 - EVG230

A very **concentrated and ultra-powerful** jet of air due to an optimal combination of:

- ▶ A high-strength propeller matched to the power of the engine
- ▶ A red double-layer monobloc shroud made of reinforced high-density polyethylene
- ▶ A high-tech composite grille

**Positioning from 0.90 m to 6 m** in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

### Precise tilt adjustment

from +10° to +20° for optimization of direction of air stream up entrance steps

### Protective frame

with grey epoxy coating

**Stable & easy to handle** with large rear wheels

**Compact for easy storage in vehicle trunks**

Automatic optimal +10° tilt when handle raised

### Characteristics

Model 110 V	EDS230 NEO	EDS230.2 NEO	EVG230 NEO
<b>Reference</b>	I63.10.032N	I63.10.033N	I63.10.042N
<b>Open air flow</b>	<b>28 750 m<sup>3</sup>/h</b>	<b>32 400 m<sup>3</sup>/h</b>	<b>28 900 m<sup>3</sup>/h</b>
<b>PV air flow according to AMCA</b>	19 750 m <sup>3</sup> /h	21 800 m <sup>3</sup> /h	19 750 m <sup>3</sup> /h
<b>Weight</b>	33.1kg	37kg	35.5kg
<b>Dimensions L x H x D</b>	550 x 560 x 490 mm		
<b>Propeller diameter</b>	420 mm		
<b>Engine</b>	1.1 kW <b>single speed</b> drive GFCI compatible – IP55	1.5 kW <b>single speed</b> drive GFCI compatible – IP55	1.1 kW with <b>variable speed</b> drive GFCI compatible – IP55
	Runs on 15 A circuit breaker and compatible with GFCI circuit breaker	Runs on 20 A circuit breaker and compatible with GFCI circuit breaker	Runs on 15 A circuit breaker and compatible with GFCI circuit breaker
<b>Power supply</b>	Single phase - 115V±10% – 60Hz		Single phase - 115V±10% 50/60Hz
<b>Electrical safety</b>	Meets EN 50178 for user safety (leakage current less than 3.5 mA)		
<b>Power consumption in steady operation</b>	13.2 A	18.7 A	13.9 A
<b>Mains plug</b>	US male plug – 110 V		
<b>Noise level</b>	85,2 dB at 3m	86,3 dB at 3m	85,2 dB at 3m
<b>Ventilation type</b>	Blowing – VPP		
<b>Application</b>	Single door – houses, small apartment blocks		

### Optional accessories:

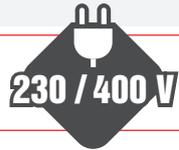
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	<b>I60.20.105</b>	Prop for -10° tilt, useful for ventilating semi-basements	<b>I60.20.130</b>
5 m ventilation duct	<b>I60.20.101</b>	5 m duct for V-BOX extractor/blower kit - Ø 400 mm	<b>I63.20.014</b>
Protective cover	<b>I60.20.017</b>	V-BOX cube for extractor/blower kit	<b>I63.20.017</b>

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader.ducexpert.com](http://www.leader.ducexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**LEADER Fan**  
EASY POWAIR  
TECHNOLOGY



## ELECTRIC FAN **ESX230 - ATEX certified**

### Usable in an explosive atmosphere

**ATEX certification:** II 2 GD II B T4 or T135°C according to LCIE 12 ATEX 3043 X

### A **concentrated, powerful** jet of air due to:

- ▶ high-strength propeller matched to the power of the motor
- ▶ double-layer aluminum/ABS thermoplastic red shroud
- ▶ metal grille

### Positioning from **0.90 m to 6 m** in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

**Automatic optimal +10° tilt** when handle raised

### Precise tilt adjustment

from +10° to +20° to optimize direction of air stream up entrance steps

### Protective frame

with grey epoxy coating

**Stable & easy to handle** even on unstable ground due to large rear wheels

**Compact** for easy storage in vehicle trunks

### Integrated misting system

## Characteristics

Model	ESX230
Reference	I63.11.006
Open air flow	▶ 30 000 m <sup>3</sup> /h on 50Hz ▶ 36 000 m <sup>3</sup> /h on 60Hz
PPV air flow according to AMCA	19 000 m <sup>3</sup> /h
Weight	57 kg
Dimensions L x H x D	550 x 550 x 490 mm
Propeller diameter	420 mm
Engine	1.85 kW – IP65
Power supply	3-phase – 230/400V – 50/60Hz
Electrical safety	Meets EN 50178 for user safety (leakage current less than 3.5 mA)
Engine consumption	3,5 A (in steady operation) and 30 A (starting current)
Mains plug	Not supplied - 16 l/min at 7 bar
Integrated misting system	1" BSP F inlet
Noise level	83.6 dB at 3 m
Ventilation type	Blowing - PPV in explosive atmosphere
Application	Single door – houses, small apartment blocks, confined spaces, etc.

### Optional accessories:

5m ATEX duct

I60.20.099

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader.educexpert.com](http://www.leader.educexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**LEADER Fan**  
EASY POW'AIR  
TECHNOLOGY



## ELECTRIC FAN ES245 - ESV245

### A concentrated, powerful jet of air due to:

- ▶ high-strength propeller matched to the power of the motor
- ▶ double-layer aluminum/ABS thermoplastic red shroud
- ▶ metal grille

### Positioning from 0.90 m to 6 m in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

**Automatic optimal +10° tilt** when handle raised

**Precise tilt adjustment** from +10° to +20° to optimize direction of air stream up entrance steps

**Protective frame** with grey epoxy coating

**Stable & easy to handle** even on unstable ground due to large rear wheels

### Characteristics

Model	ES245	ESV245
<b>Reference</b>	163.10.017	163.10.015
<b>Open air flow</b>	41 500 m <sup>3</sup> /h	
<b>PPV air flow according to AMCA</b>	28 450 m <sup>3</sup> /h	
<b>Weight</b>	50.5 kg	53 kg
<b>Dimensions L x H x D</b>	710 x 720 x 617 mm	
<b>Propeller diameter</b>	570 mm	
<b>Engine</b>	2,2 kW – IP55	2.2 kW with variable speed drive – IP55
<b>Power supply</b>	220V 50Hz single-phase	220V 50/60Hz single-phase
<b>Electrical safety</b>	Meets EN 50178 for user safety (leakage current less than 3.5 mA)	
<b>Engine consumption</b>	15,5 A	17 A
<b>Mains plug</b>	CE male plug	
<b>Noise level</b>	88.7 dB at 3 m	
<b>Ventilation type</b>	PPV blowing	
<b>Application</b>	Single door (e.g. houses, small apartment blocks) and double doors (e.g. high-rise tower blocks, mid-size industrial units)	

### Optional accessories:

Mister without coupling (products with coupling: see p. 52)	160.20.104	Protective cover	160.20.097
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	160.20.116	-10° prop for negative tilt of fan	160.20.108
5m ventilation duct	160.20.113		

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader.educexpert.com](http://www.leader.educexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**LEADER Fan**  
EASY POWAIR  
TECHNOLOGY



## ELECTRIC FAN ESP280 - ESV280

### A concentrated, powerful jet of air due to:

- ▶ high-strength propeller matched to the power of the motor
- ▶ double-layer aluminum/ABS thermoplastic red shroud
- ▶ metal grille

### Positioning from 0.90 m to 6 m in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

**Automatic optimal +10° tilt** when handle raised

### Precise tilt adjustment

from +10° to +20° to optimize direction of air stream up entrance steps

### Protective frame

with grey epoxy coating

**Stable & easy to handle** even on unstable ground due to large rear wheels

## Characteristics

Model	ESP280	ESV280
Reference	163.10.037	163.10.038
Open air flow	85 700 m <sup>3</sup> /h	
PPV air flow according to AMCA	-	
Weight	74.6 kg	81,4 kg
Dimensions L x H x D	710 x 720 x 678 mm	
Propeller diameter	570mm	
Engine	7.5KW <b>single speed</b> drive with soft starter IP55	7.5KW with <b>variable speed</b> drive* IP65
Power supply	400V 50Hz three-phase	400V 50/60 Hz three-phase
Engine consumption	15.5A	16A
Mains plug	CE male plug – 400 V 32Amp IP67	
Noise level	96.3 dB at 3 m	
Ventilation type	PPV blowing	
Application	Single door (e.g. houses, small apartment blocks) and double doors (e.g. high-rise tower blocks, mid-size industrial units)	

\*If used on an electricity generator, generator must be fitted with a Type B GFCI

### Optional accessories:

5m ventilation duct	160.20.113	Protective cover	160.20.097
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	160.20.116	-10° prop for negative tilt of fan	160.20.108

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
Freely downloadable interactive ventilation courses at [www.leader-educexpert.com](http://www.leader-educexpert.com)  
As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**LEADER Fan**  
EASY POW'AIR  
TECHNOLOGY

## KEY POINTS

Designed for **rapid smoke removal from underground parking lots**. The ParkFan is placed within the smoke-filled volume to blow the smoke out.

Can be controlled from outside the smoke-filled area with a wireless remote control.



# ELECTRIC FAN ParkFan 80

## A concentrated, powerful jet of air due to:

- ▶ high-strength propeller matched to the power of the motor
- ▶ double-layer aluminum/ABS thermoplastic red shroud
- ▶ metal grille

## Positioning from 0.90 m to 6 m in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

**Automatic optimal +10° tilt** when handle raised

**Precise tilt adjustment** from +10° to +20° to optimize direction of air stream up entrance steps

**Protective frame** with grey epoxy coating

**Stable & easy to handle** even on unstable ground due to large rear wheels

**Integrated misting system**

## Characteristics

Model	ParkFan 80
Reference	I63.10.045
Open air flow	85 700 m <sup>3</sup> /h
PPV air flow according to AMCA	-
Weight	83 kg
Dimensions L x H x D	710 x 720 x 678 mm
Propeller diameter	570mm
Engine	7.5KW with variable speed drive IP65*
Power supply	400V 50/60 Hz three-phase
Electrical safety	Meets EN 50178 for user safety (leakage current less than 3.5 mA)
Engine consumption	16A
Mains plug	CE male plug – 400 V 32Amp IP67
Wireless Remote Control	Wireless 2.4 GHz radio remote control for ON/OFF control and speed variation. Range 30 m
Integrated mister	1" BSP female inlet - 16 l/min at 7 bar
Noise level	96.3 dB at 3 m
Ventilation type	NPV extraction and PPV blowing
Application	Single door (e.g. houses, small apartment blocks) and double doors (e.g. high-rise tower blocks, mid-size industrial units)

\*If used on an electricity generator, generator must be fitted with a Type B GFCI

## Optional accessories:

5m ventilation duct	I60.20.113	-10° prop for negative tilt of fan	I60.20.108
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	I60.20.116		

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader.educexpert.com](http://www.leader.educexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





## ELECTRIC FAN SA 315

### Extractor/Blower electric fan

#### For safe removal of dangerous gases:

- ▶ Ventilation by blowing or extraction
- ▶ With 300mm diam. ZAG couplings for connection to suction and blowing ducts
- ▶ Stainless steel body.

**Compact**, stows easily in the trunk of a vehicle.

**Portable, easy to handle, stable and robust**

### Characteristics

Model	SA315
<b>Reference</b>	I63.00.022
<b>Nominal air flow</b>	<b>2 560 m3/h</b>
<b>Open air flow</b>	9000 m3/h
<b>Weight</b>	29,8 kg
<b>Dimensions L x H x D</b>	374 x 435 x 460 mm
<b>Outlet grille diameter</b>	300 mm
<b>Engine</b>	1.1 kW IP55 protection
<b>Power supply</b>	Single phase - 230V – 50Hz
<b>Electrical safety</b>	Meets EN 50178 for user safety (leakage current less than 3.5 mA)
<b>Power consumption in steady operation</b>	6.1 A
<b>Mains plug</b>	CE male plug – 220 V
<b>Noise level</b>	77 dB at 3 m
<b>Ventilation type</b>	Blowing and Extraction
<b>Application</b>	Smoke or gas removal from premises. Smoke removal from basements and ships

#### Optional accessories:

Extraction/blowing duct for SA315. Ø 300 mm - L 5m

I61.20.002

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader.educexpert.com](http://www.leader.educexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





## ELECTRIC FAN **SAX320 ATEX certified**

**Extractor/Blower** electric fan

Usable in an explosive atmosphere

**ATEX certification:** II 2 G II B T<sub>4</sub> according to LCIE 13 ATEX 3085 X

For safe removal of dangerous gases:

- ▶ Ventilation by blowing or extraction
- ▶ With 300mm diam. ZAG couplings for connection to suction and delivery ducts
- ▶ Stainless steel body.

**Compact**, stows easily in the trunk of a vehicle.

**Portable, easy to handle, stable and robust**

### Characteristics

Model	SAX320	SAX320 MN	SAX320 MNT
<b>Reference</b>	163.00.006	163.00.007	163.00.012
<b>Nominal air flow</b>	2 560 m <sup>3</sup> /h	3 070 m <sup>3</sup> /h	2 560 m <sup>3</sup> /h on 50Hz 3 070 m <sup>3</sup> /h on 60Hz
<b>Open air flow</b>	9000 m <sup>3</sup> /h	10 800 m <sup>3</sup> /h	9000-10 800 m <sup>3</sup> /h
<b>Weight</b>	42 kg		
<b>Dimensions L x H x D</b>	374 x 585 x 520 mm		
<b>Outlet grille diameter</b>	300mm		
<b>Engine</b>	1.1 kW Protection IP55 – ATEX: II 2 G II B T <sub>4</sub> (Other motor: consult us)		
<b>Power supply</b>	Single-phase - 230V 50-60Hz	Three-phase - 115V 60Hz	Single-phase - 230V 50/60Hz Tropicalized
<b>Electrical safety</b>	Meets EN 50178 for user safety (leakage current less than 3.5 mA)		
<b>Power consumption in steady operation</b>	4,5 A	8 A	4,5 A
<b>Mains plug</b>	Not supplied		
<b>Noise level</b>	77 dB at 3 m		
<b>Ventilation type</b>	Blowing and Extraction		
<b>Application</b>	Dilution of explosive atmosphere. Chemical vapor removal by extraction. Tank degassing.		

### Optional accessories:

Antistatic PVC extraction/blowing duct for SAX320. Ø 300 mm - L 5m

161.20.011

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leadereducexpert.com](http://www.leadereducexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice







# Water-driven fans



These must be connected to a pump to operate. They are used for special situations or in the context of particular working modes where electric or petrol-driven fans cannot be used.



**NEO**  
**LEADER Fan**  
EASY POWAIR  
TECHNOLOGY

## WATER-DRIVEN FAN MH236

A very **concentrated and ultra-powerful** jet of air due to an optimal combination of:

- ▶ A high-strength propeller matched to the power of the engine
- ▶ A red double-layer monobloc shroud made of reinforced high-density polyethylene
- ▶ A high-tech composite grille

**Positioning from 0.90 m to 6 m** in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

**Automatic optimal +10° tilt** when handle raised

### Precise tilt adjustment

from +10° to +20° for optimization of direction of air stream up entrance steps

### Protective frame

with grey epoxy coating

**Stable & easy to handle** even on unstable ground due to large rear wheels

**Compact for easy storage in vehicle trunks**

**Integrated misting system**

## Characteristics

Model	MH236 NEO
Reference	I61.00.034N
Open air flow	49 050 m <sup>3</sup> /h
PPV air flow according to AMCA	-
Weight (dry)	32.6 kg
Dimensions L x H x D	550 x 560 x 490 mm
Propeller diameter	420 mm
Engine	Water-driven motor in aluminum with DSP 65 coupling, cutoff and control valve, and pressure gage
Engine power	9 HP
Power supply	Water under pressure
Engine consumption	620 L/min @ 10 bar
Engine supply couplings	2" male for inlet and outlet
Integrated misting system	Yes
Noise level	92.8 dB at 3 m
Ventilation type	PPV blowing
Application	Single door – houses, small apartment blocks

## Optional accessories:

5m ventilation duct	I60.20.101	Protective cover	I60.20.017
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	I60.20.105	-10° prop for negative tilt of fan	I60.20.130

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader-eduexpert.com](http://www.leader-eduexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice





**LEADER Fan**  
EASY POW'AIR  
TECHNOLOGY

## WATER-DRIVEN FAN MH260

### A concentrated, powerful jet of air due to:

- ▶ high-strength propeller matched to the power of the motor
- ▶ double-layer aluminum/ABS thermoplastic red shroud
- ▶ metal grille

### Positioning from 0.90 m to 6 m in front of a door without loss of power for:

- ▶ more space to move about
- ▶ less noise inside the building

Automatic optimal +10° tilt when handle raised

### Precise tilt adjustment

from +10° to +20° for optimization of direction of air stream up entrance steps

### Protective frame

with grey epoxy coating

**Stable & easy to handle** even on unstable ground due to large rear wheels

### Integrated misting system

## Characteristics

Model	MH260
Reference	I61.00.037
Open air flow	50 500 m <sup>3</sup> /h
PPV air flow according to AMCA	-
Weight (dry)	49 kg
Dimensions L x H x D	710 x 720 x 617 mm
Propeller diameter	570 mm
Engine	Water-driven motor in aluminum with cutoff and control valve. With pressure gage
Engine power	9 HP
Power supply	Water under pressure
Engine consumption	620 L/min @ 10 bar
Engine supply couplings	2" male for inlet and outlet
Integrated misting system	Yes
Noise level	92.8 dB at 3 m
Ventilation type	PPV blowing
Application	Single door (e.g. house, small apartment block) and double door (e.g. tall apartment block, mid-size industrial unit)

## Optional accessories:

5m ventilation duct	I60.20.113	Protective cover	I60.20.097
High expansion foam adapter without coupling delivered with 35m of polyane plastic film duct (products with coupling: see p. 52)	I60.20.116	-10° prop for negative tilt of fan	I60.20.108





WARNING

F7

FRANCE

MSA  
The Safety Company

MSA

LEADER  
Tomorrow's technology today



# Large-Flow Ventilators



These fans are mobile solutions for ventilating large or even very large volumes, e.g. Warehouses, Tunnels, Airports, Industrial Complexes, High-Rise Tower Blocks, etc.



## LARGE-FLOW VENTILATOR **EASY 2000**

### Mobile large-volume ventilation system

**The most powerful large-flow ventilator in its category for smoke removal and cooling** in large volumes (covered / closed parking lots, warehouses, production line, exhibition halls, etc...)

**Very powerful airflow:** 150 000 m<sup>3</sup>/h  
**2 versions available** for varied configurations:

- ▶ On Skid
  - movable and usable with forklift truck
  - mounted on trolley or similar
  - can be mounted on bed of vehicle, e.g. pickup truck
- ▶ Trailer-mounted

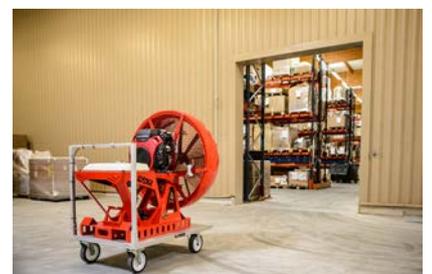
**Extremely low weight** for ease of deployment

- ▶ Less than 180 kg for the skid version
- ▶ Less than 325 kg for the trailer version

**A motor control panel and a wired remote control** for tilt, elevation and lighting according to selected options

**Two possible elevation platforms (600 mm or 1200 mm) on lifting table** controlled by wired remote control

**Electric tilt of shroud from -10° to +20°** controlled by wired remote control



Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
 Freely downloadable interactive ventilation courses at [www.leader.educexpert.com](http://www.leader.educexpert.com)  
 As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice



## Characteristics

Model	EASY 2000 on trailer			Skid EASY 2000		
<b>Lift system</b>	Without	600 mm	1200 mm	Without	600 mm	1200 mm
<b>References</b>	<b>I60.30.124</b>	<b>I60.30.123</b>	<b>I60.30.120</b>	<b>I60.30.121</b>	<b>I60.30.125</b>	<b>I60.30.126</b>
<b>Open air flow</b>	<b>150 000 m<sup>3</sup>/h</b>					
<b>Propeller diameter</b>	885 mm					
<b>Height - mm</b>	1715	1915	2050	1250	1510	1645
<b>Width - mm</b>	1430	1430	1430	1060	1060	1060
<b>Length - mm</b>	2800	2800	2800	1205	1205	1205
<b>Weight - kg dry</b>	301 kg	402 kg	447 kg	158 kg	275 kg	320 kg
<b>Weight - kg in running mode</b>	324 kg	425 kg	470 kg	178 kg	295 kg	340 kg
<b>Mounting</b>	Single-axle trailer with brakes, towball and sealed enclosure			Skid on red epoxy-painted steel chassis adaptable to bed of trailer, pick-up, truck, etc. (all delivered on pallet)		
<b>Engine control panel</b>	Mounted on the engine. Allows the operator to control: <ul style="list-style-type: none"> <li>▶ the starter</li> <li>▶ electrical start/stop</li> <li>▶ fan flow rate via the accelerator</li> <li>▶ rpm and hour-run time via the hour meter</li> <li>▶ oil level (warning light)</li> </ul>					
<b>Wired remote control</b>	Control, from as far as 10m away: <ul style="list-style-type: none"> <li>▶ the tilt of the shroud from -10° to +20°</li> <li>▶ the rise and fall of the lifting table depending on the selected option</li> <li>▶ engine stop</li> <li>▶ turn LED spotlight on/off</li> </ul>					
<b>Misting system</b>	For water or water+additive(s) – 260 l/min @ 7 bar					
<b>Engine</b>	HONDA GX630					
<b>Engine power</b>	20.8 HP					
<b>Tank</b>	18 liters					
<b>Fuel</b>	unleaded petrol 95					
<b>Runtime</b>	3h05min					
<b>Oil</b>	Engine oil: 5W-30 synthetic API SJ or later (CASTROL MAGNATEC) Hydraulic oil for lifting option: CASTROL SAF XJ 75-140					
<b>Battery</b>	12V / 44 Ah battery to power the electrical equipment					
<b>Noise level</b>	93.9 dB at 7 m					
<b>Use</b>	PPV					
<b>Application</b>	Ventilating underground parking lots, industrial sites, warehouses, tunnels, etc.					

## Optional accessories :

<b>Manual 360° rotation system</b>	For Skid version only. Add +265 mm height and +70 kg	<b>I60.30.129</b>
<b>Exhaust extension</b>	L 2.5 m / Ø 50 mm Tip: use 3 exhaust extensions end to end for more efficiency	<b>I60.30.003</b>
<b>Adapter for exhaust extension</b>	For connecting the exhaust extension	<b>I60.30.128</b>
<b>Trolley</b>	Aluminum trolley with handle and brake system for easy movement of the Skid EASY 2000 (without lift system). L 1.2 x D 0.8 x H 1.1 m	<b>I60.30.119</b>
<b>LED headlight</b>	For illuminating the blowing area	<b>I60.30.130</b>
<b>Blowing duct</b>	6m / Ø 900 mm	<b>I60.30.122</b>
<b>Petrol tank for trailer</b>	20L jerry can on galvanized steel mounting	<b>I60.30.131</b>
<b>Ring Hitch (height-adjustable drawbar)</b>	Allows trailer to be hitched with a ring system (over 70 kg necessitating a vehicle registration certificate depending on country of registration)	<b>I60.30.132</b>



# LARGE-FLOW VENTILATOR EASY 4000

## Mobile large-volume ventilation system

**A very effective solution** for smoke removal and air cooling and renewal in large spaces (parking lots, tall apartment blocks, factories, storage facilities, exhibition venues, etc.)

**Very powerful airflow:** 400 000 m<sup>3</sup>/h

Very stable and extremely light for easy deployment

- ▶ Unrivalled combination of performance and maneuverability

### Large

**1200 mm diameter shroud with -10° to +20° tilt** controlled from the control panel

### With water or water+additive(s) misting system:

- ▶ 260 L/min @ 7 bar
- ▶ Range: up to 60 m

### Possible configurations:

- ▶ On trailer
  - one person can easily position the trailer
  - total maximum weight less than 725 kg: Can be drawn by a light vehicle (European 'B' driver's license sufficient)
- ▶ On skid for installation on bed or vehicle (pick-up, truck, tank, railroad-going platform, etc.)



SKID VERSION

Ventilation tactics in the catalogue or at [www.leader-group.eu](http://www.leader-group.eu)  
Freely downloadable interactive ventilation courses at [www.leader.educexpert.com](http://www.leader.educexpert.com)  
As part of our policy of constant research to improve our products, we reserve the right to modify our products' characteristics at any time without notice



## Characteristics

Model	EASY 4000 on trailer			Skid EASY 4000		
<b>Lift system</b>	Without	600 mm	1200 mm	Without	600 mm	1200 mm
<b>Reference</b>	I60.30.113	I60.30.114	I60.30.109	I60.30.110	I60.30.111	I60.30.112
<b>Open air flow</b>	400 000 m <sup>3</sup> /h					
<b>Nominal air flow</b>	185 000 m <sup>3</sup> /h					
<b>Propeller diameter</b>	1200mm					
<b>Height – mm</b>	2215	2185 to 2785	2315 to 3515	1618	1789 to 2389	1922 to 3122
<b>Width – mm</b>	1690	1690	1690	1474	1474	1474
<b>Length – mm</b>	3300	3300	3300	1809	1809	1809
<b>Dry weight</b>	546 kg	647 kg	692 kg	372 kg	473 kg	518 kg
<b>Weight in running order</b>	579 kg	680 kg	725 kg	405 kg	506 kg	551 kg
<b>Support</b>	Trailer type-approved to European standards: AL-KO chassis / Tow ball (adjustable shaft and/or ring optional) / Wheel chocks for positioning when fan is running / Battery charger / 86 liters storage box <i>Registration may be required depending on the user's country</i>			Steel chassis painted in black epoxy <i>(all delivered on pallet)</i>		
<b>Control panel</b>	Mounted on the trailer / Protective cover supplied Ingress protection: IP55			Mounted on support (steel painted in red epoxy) Protective cover supplied / Ingress protection: IP55		
	Allows control of <ul style="list-style-type: none"> <li>▶ engine start and stop</li> <li>▶ tilt of shroud from -10° to +20°</li> <li>▶ airflow by adjusting the fan speed</li> <li>▶ raising and lowering the lifting table depending on selected option</li> <li>▶ emergency simultaneous engine stop, tilt and/or table rise</li> </ul>					
<b>Misting system</b>	For water or water+additive(s) – 260 l/min @ 7 bar					
<b>Engine</b>	BMW Flat Twin with catalytic converter - 1170 cm <sup>3</sup> with electronic control - 115 HP – 2 cylinders – 4-stroke Electric start – Fuel consumption: 25 L/hour at full speed - Cooling: Air/Oil					
<b>Tank</b>	42 liters					
<b>Fuel</b>	unleaded petrol 95					
<b>Runtime</b>	1h40min					
<b>Oil</b>	Engine oil: 3.8 L (1 US gal) – API SL / Hydraulic oil for raising table option: 0.9 L – ISO32					
<b>Battery</b>	Rapid charge 12V / 15 Ah battery to power the electrical equipment					
<b>Noise level</b>	96 dB at 7 m					
<b>Use</b>	PPV					
<b>Application</b>	Ventilating underground parking lots, industrial sites, warehouses, tunnels, high rise buildings, etc.					

## Optional accessories :

<b>Wired remote control</b>	Control from up to 13 m away: <ul style="list-style-type: none"> <li>▶ the tilt of the shroud from -10° to +20°</li> <li>▶ airflow by adjusting the fan speed</li> <li>▶ raising and lowering the lifting table depending on selected option</li> <li>▶ engine stop</li> </ul>	<b>I60.30.118</b>
<b>Manual 360° rotation system</b>	For Skid version only. Add +175mm height and +70kg	<b>I60.30.010</b>
<b>Protective cover</b>	For trailer version only.	<b>I60.30.004</b>
<b>Exhaust extension</b>	L 2.5 m / Ø 80 mm - Tip: use 3 extensions end to end for more efficiency	<b>I60.30.003</b>
<b>Adapter for exhaust extension</b>	For connecting the exhaust extension	<b>I60.30.017</b>
<b>Blowing duct</b>	For channeling the air stream of the EASY 4000 in a straight line L 12m – Ø 1.7m – Outlet cross section 1.1m – 40 kg	<b>I60.30.016</b>
<b>Extraction duct</b>	Up to 6 ducts can be interconnected. 1 duct = Ø 575 mm / L 6m / 19 kg	<b>I60.30.019</b>





# Ventilation accessories



Blowing ducts, extraction ducts, high-expansion foam adapter, misting nozzles, etc. are options that increase the number of ways a fan can be used and so circumvent the constraints of a given operation.



## VENTILATION ACCESSORIES **DUCTS**

### **V-BOX: EXTRACTOR/BLOWER CONVERSION KIT**

- ▶ The simple solution for:
  - converting an electric fan into a powerful cold smoke extractor
  - channel the air stream to ventilate confined spaces
- ▶ The ventilator is placed inside the V-Box cube in the desired direction of the airstream (extracting or blowing).
- ▶ The ducts quickly connect to the V-Box.
- ▶ Usable with multiple ducts upstream as well as downstream.
- ▶ Carry handles enable it to be used for transporting and protecting the fan.
- ▶ Base reinforced with plastic skids allowing it to be dragged.



Ductless V-Box cube

Reference	Characteristics	Adaptable to these fans:
<b>I63.20.017</b>	Red polyester and polypropylene cube with integrated rigid structure – With 2 male quick closures - Dim. H 58 x L 64 x D 51 cm - 3.5 kg	Electric : ES220 / ES230 / ESP230 / ESV230 / EDS230 / EVG 230
<b>I63.20.014</b>	M1 duct for V-Box cube with male & female quick couplings - Ø 400 mm / L 5 m - 11.5 kg	
<b>I63.20.016</b>	ZAG adaptor: with female quick clasp for locating on end of duct or directly on the V-BOX Cube - 1.450 kg	



V-Box in blowing mode



V-Box in extraction mode



Complete V-Box

## LFV BLOWING DUCT

For channeling the air stream in a straight line



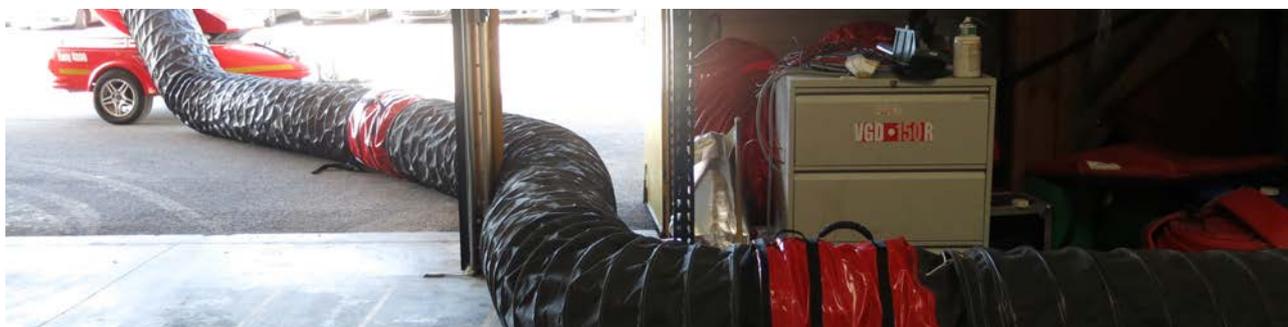
Reference	Characteristics	Adaptable to these fans:
I60.30.016	Ø 1700 mm / Ø output 1100 mm / L 12 m / 40 kg	LFV: EASY 4000
I60.30.122	Ø 900 mm / L 5 m	LFV: EASY 2000

## LFV EXTRACTION DUCT

For extracting smoke from large volumes.

Set of 3 ducts giving a total length of 18 m - No bulky adapter between duct and fan

Ability to interconnect up to 6 ducts - Integrated carrying bag.



Reference	Characteristics	Adaptable to these fans:
I60.30.019	1 duct Ø 575 mm / L 6 m / 19 kg	LFV: EASY 4000

## VENTILATION DUCT

Excellent for channeling fan air or extracting smoke in complex operations!

Reference	Characteristics	Adaptable to these fans:
I60.20.152	Ø 430 mm / L 5 m / 13 kg	Petrol-driven: MT215L / MT225 / MT236 / MT240 Electric: BATfan / ES220 / ES230 / ESP230 / ESV230 / EDS230 / EVG230 Water-driven: MH236
I60.20.113	Ø 600 mm / L 5 m / 17,5 kg	Petrol-driven: MT245 / MT280 / MT296 Electric: ES245 / ESV245 / ESP280 / ESV280 / ParkFan80 Water-driven: MH260
I61.20.002	Ø 300 mm / L 5 m / 12,8 kg	Electric: SA315
I61.20.011	ATEX / Ø 300 mm / L 5 m / 13,1 kg	Atex: SAX320
I60.20.099	ATEX / Ø 430 mm / L 5 m / 12,5 kg	Atex: ESX230



I60.20.152

# VENTILATION ACCESSORIES OPTIONS FOR FANS

## MISTER

Offers the possibility of faster, more effective cooling  
Flow rate 16 L/min at 7 bar



Reference	Characteristics	Adaptable to these fans:
On request	without coupling - inlet 1.5 inch NH F	Petrol-driven: MT236 / MT240 / MT245 / MT280 Electric: ES230 / ESP230 / ESV230 / ES245 / ESV245 / ESP280 / ESV280
I60.20.104	without coupling - inlet 1 inch BSP F	
I60.20.107	with GFR20 coupling	Petrol-driven: MT296
I60.20.114	with BCN coupling	
On request	without coupling - inlet 1.5 inch NH F	
I60.20.111	without coupling - inlet 1 inch BSP F	
I60.20.118	with GFR20 coupling	
I60.20.122	with BCN coupling	

## HI-EXPANSION FOAM ADAPTER

Converts the fan into a high-expansion foam generator  
Expansions from 400 to 800 - Works with an in-line proportioner at 200 L/min - Delivered with 35m polyane plastic film duct



Reference	Characteristics	Adaptable to these fans:
On request	without coupling - inlet 1.5 inch NH F	Petrol-driven: MT215L / MT225 / MT236 / MT240 Electric: BATfan / ES220 / ES230 / ESP230 / ESV230 / EDS230 / EVG230 Water-driven: MH236
I60.20.105	without coupling - inlet 1.5 inch BSP M	
I60.20.103	with DSP40 coupling	Petrol-driven: MT245 / MT280 / MT296 Electric: ES245 / ESV245 / ESP280 / ESV280 / ParkFan80 Water-driven: MH260
I60.20.106	with BCN coupling	
I60.20.124	with BIC coupling	
On request	without coupling - inlet 1.5 inch NH F	
I60.20.116	without coupling - inlet 1.5 inch BSP M	
I60.20.117	with DSP40 coupling	
I60.20.121	with BCN coupling	
I60.20.123	with BIC coupling	

## HOUR METER

Shows the engine rpm and hours-run time of petrol-driven fans.



Reference	Characteristics	Adaptable to these fans:
I60.20.135	-	Petrol-driven: MT215L / MT236 / MT245 / MT280 / MT296 / MT240

## EXHAUST EXTENSION

For expelling exhaust gases outside of room where fan is operating or far from extraction area, in order to limit the introduction of gases such as CO.

Complies with DIN 14-572.



Reference	Characteristics	Adaptable to these fans:
I60.20.012	L 2,5 m / Ø 50 mm	Petrol-driven: MT236 / MT240 / MT245 / MT280 / MT296 / LFV EASY 2000
I60.30.003	L 2,5 m / Ø 80 mm	LFV: EASY 4000

## EXHAUST ADAPTER

For connecting the exhaust extension



Reference	Characteristics	Adaptable to these fans:
I60.20.014	for Honda engines	Petrol-driven: MT236 / MT240 / MT245
I60.20.125	for Honda engines	Petrol-driven: MT280
-	Integrated with the machine	Petrol-driven: MT296
I60.30.017	for BMW engine	LFV: EASY 4000

## CO-REDUCING CATALYTIC CONVERTER

Reduces majority of CO emissions from Honda GX160 and GX200 engines through use of the LEADER Cat converter.

Compatible with exhaust extensions.



Reference	Characteristics	Adaptable to these fans:
I60.20.142	Stainless steel body – 400g – Dim. L 85 x W 62 x D 70 mm	Petrol-driven: MT236 / MT240 / MT245

## -10° PROP

Allows a negative tilt (-10°) for ventilating downwards or into a semi-basement.



I60.20.130



I60.20.108

Reference	Characteristics	Adaptable to these fans:
I60.20.130	0.5 kg - Stainless steel tubing to be fixed on the protective frame	Petrol-driven: MT236 Electric: ES230 / ESP230 / ESV230 / EDS230 / EVG230 Water-driven : MH236
I60.20.108	0.5 kg - Stainless steel tubing	Petrol-driven: MT245 / MT280 / MT296 Electric: ES245 / ESV245 / ESP280 / ESV280 / ParkFan80 Water-driven: MH260

## EXTENSION CABLE

Extra-flexible cable coiled in a bag designed to unwind without tangling and with lockable plugs.



Reference	Characteristics	Adaptable to these fans:
I63.00.016	L 100 m with lockable 220V plugs / 12 kg	Electric: BATfan / SR460

## 20,000 VOLT INSULATING TELESCOPIC PIKE-POLE

Ideal for making heat and smoke vents.  
Extendable, fiberglass. Can be locked at any length.  
Body complies with IEC 61235 and IEC 60855



Reference	Characteristics
020.00.116	Length: retracted 2.20m / extended 3.75 m Ø 3.8 cm - 3kg Elongation resistance of the pike pole lockable system: 100 kg

## DOOR WEDGE

Can be placed in different positions on a door to keep it open.



Reference	Characteristics
160.20.112	Plastic

## PROTECTIVE COVER

Protects the fan when unused.



Reference	Adaptable to these fans:
160.20.017	Petrol-driven: MT236 / MT240 Electric: ES230 / ESP230 / ESV230 Water-driven: MH236
160.20.097	Petrol-driven: MT245 / MT260 / MT280 / MT296 Electric: ESP280 / ESV280 Water-driven: MH260



# WARRANTY

LEADER guarantees the LEADER Fan range of equipment from the date of acceptance by the customer.

The respective warranty periods are as follows:

- ▶ Portable fans = 2 years
- ▶ Easy 2000 = 1 year
- ▶ Easy 4000 = 1 year
- ▶ Accessories (mister, hour meter, V-Box, LEADER Cat, foam adapter, etc.) = 1 year
- ▶ Batteries = 6 months

This warranty does not apply where it has been found by our services that the equipment was damaged by:

- ▶ Normal wear due to operation
- ▶ Improper use of the equipment
- ▶ Accidents arising from carelessness
- ▶ Poor maintenance
- ▶ Failure to follow the standards and instructions of the manufacturer
- ▶ Improper storage

Consumables, such as feet, cables, blowing or extraction ducts, paint and labels, filters, spark plug, oil, wheels, seals, bulbs, etc. are excluded from this warranty if defects are discovered after using the product.



**ALWAYS IN TOUCH** WITH OUR CLIENTS  
TO DESIGN THE PRODUCTS YOU WILL  
NEED **IN THE FUTURE**



Foam concentrates & foam proportioning



Mobile ventilation



Search and Rescue equipment



Fire training equipment



Thermal imaging



Fire extinction

**HEAD OFFICE**

GRUPE LEADER S.A.S.  
ZI des Hautes-Vallées - Chemin n° 34 - CS20014 - 76930 Octeville sur Mer - France  
Tel +33 (0)235 530575 - Fax +33 (0)235 531632  
info@leader-group.eu

**SUBSIDIARIES**

LEADER GmbH  
Zur Fabrik 10 - 66271 Kleinblittersdorf - Germany  
Tel. : +49 (0) 6805/60067-0 - Fax : +49 (0) 6805/60067-10  
info@leader-gmbh.de

LEADER NORTH AMERICA Inc.  
109-A Summerville Drive, Mooresville, NC 28115 - U.S.A  
Tel: + 1 (0)704-662-3377 - Fax: + 1 (0)704-662-3397  
info@LeaderNorthAmerica.com

**AGENCIES**

SPAIN / PORTUGAL / LATIN AMERICA  
spain.portugal.latinamerica@leader-group.eu

CHINA / HONG KONG / MACAU  
china@leader-group.eu

[www.leader-group.eu](http://www.leader-group.eu)