

## **Extractors for explosive atmospheres ATEX**

Manufactured for explosive atmospheres according to Directive 94/9CE, and supplied in accordance with ATEX certification.

The design concerns with possible hazards therefore, materials and minimum distances between components have been consider in order to avoid sparks, according to EN-14986:2005 standard.



#### **HCDF**

Axial fans with square frame and ATEX certification. CE Ex II2G EExd flame-resistant motor.

Notified organism: L.O.M ID No.

LOM03ATEX0157



#### **HDF**

Circular axial fans with ATEX certification and CE Ex II2G EExd flameresistant motor, Notified organism: L.O.M

ID No.

LOM03ATEX0157



#### **HCT/ATEX**

Long-cased axial fans with ATEX certification with EEx"e" explosion-proof or EEx"d" flame-resistant motors. Notified organism: L.O.M

LOM03ATEX0157



#### HPX/ATEX

Long-cased axial fans with external motor and ATEX certification with EEx"e" explosion-proof or EEx"d" flame-resistant motors and reduced sparking fan EEx"n" Notified organism: L.O.M

LOM03ATEX0132



#### **CMA/ATEX**

Centrifugal cast aluminium fans with ATEX certification. EEx"e" explosion-proof motor or EEx"d" flameresistant motor

Notified organism: L.O.M ID No.

LOM04ATEX0147



#### **CMP/ATEX**

Centrifugal fans fitted with a multi-blade impeller with ATEX certification. EEx"e" explosion-proof motor or EEx"d" flameresistant motor

Notified organism: L.O.M

ID No.

LOM04ATEX007

### **ZONES DESCRIPTION SUMMARY**

**Explosive atmospheres** 

CE ... € II 3 G EEx nA

CE ... (E) | 3 D | P55 (non-conductive dust)

CE ... (E) | 2 D | P65 (conductive dust)

CE ... € II 2 G EEx p

CE ... ( Il 2 G EEx e

Zone 2 (gas)

Zone 22 (dust)

Accidental presence

Zone 1 (gas)

Zone 21 (dust)

Incidental presence

Zone 0 (gas)

Zone 20 (dust)

Permanent presence (no use of electric motors)

# Marking (EN) according to ATEX directives

FANS and MOTORS marking according to ATEX directives

Gas or dust

Equipment category

Equipment group: electric equipment
European Commission mark for Ex-products

Identification of notified body

**CE Marking** 

Additional marking for motors

EEx d II C T4

Temperature class

Type of protection Group (all but mines)

Group according to type of gas (only for flameproof)

Equipment protected against explosions

#### Temperature class and ignition temperature

Temperature class	T1	T2	Т3	T4	Т5	Т6
Ignition temperature	< 450	300 to 450	200 to 450	135 to 200	100 to 135	85 to 100

#### Group and temperatures class

Group	Temperature class									
	T1		T2	T3	T4	<b>T</b> 5	<b>T</b> 6			
IIA	Acetone Ethane Ethyl acetate Ethyl chloride Ammonia Benzene Acetic acid Toluene	Carbon monoxide Methane Methanol Cloromethylene Propane Town gas	Amyl-i acetate Butane N-butyl alcohol Cyclohexane 1'2 dichloroethane Acetic anhydride	Aviation Combustible	Acetaldehyde					
IIB			Ethyl alcohol Ethylene Ethylene oxide	Hydrogen Sulphide	Ethyl Ether					
II C	Hydrogen		Acetylene				Carbon Disulfide			

Wall-mounted axial fans (HCDF) or circular (HDF) with ATEX certification and CEE ExII2G Eexd flame-resistant motor to work in explosive atmospheres.





#### Fan:

- Cast aluminium impleller
- Airflow direction from motor to impeller
- Spark-proof stuffing-box included
- Aluminium sheet bracket
- Protection guard in accordance with standard UNE 100-250
- Rolled sheet steel casing with aluminium strip in the impeller area in accordance with standard EN- 14986:2006



Motor with cable gland, "EX" Protection included.



Marked: (€ € II2 G. EEx e Notified Organism: L.O.M. ID No.: LOM3ATEX0157

### Motor:

- Class F motors with ball bearings, IP55 protection, ATEX certification, EEx"d" IIBT4 flame-resistant.
- Three-phase 230/400, -50Hz. (power over 5.5 HP).
- Working temperature: -20°C + 40°C.

#### Finish

- Anti-corrosive, polyester resin, polymerized at 190°C, previously alkaline cleaned and pre-treatement free of phosphates.

#### On demand:

- Special windings for different voltages and frequencies.
- ATEX built for different categories.
- Fans with two speed motors.

#### **HCT/ATEX**



Long-cased axial fans with ATEX certification to work in explosive atmospheres.

#### Motor:

- Class F motors with ball bearings, IP55 protection, ATEX certification, EEx"e" explosion-proof or EEx"d" flame-resistant
- Three-phase 230/400V.-50Hz. (up to 5.5HP.) and 400/690V.-50Hz. (power over 5.5CV.)
- Working temperature: -20°C.+ 40°C.



EEx "e" marked: (€ ® II2 G. EEx e EEx "d" marked: (€ ® II2 G. EEx d

Notified Organism: L.O.M. ID No: LOM3ATEX0157

Long-cased belt-driven axial fans with casing opening up to 180°C to work in explosive atmospheres.

#### HPX/ATEX

#### Motor:

- Class F motors with ball bearings, IP55 protection, ATEX certification, EEx"e" explosion-proof or EEx"d" flame-resistant
- Three-phase 230/400V.-50Hz. (up to 5.5HP.) and 400/690V.-50Hz. (power over 5.5HP.)
- Working temperature: -20°C.+ 120°C.



Notified Organism: L.O.M. ID No.: LOM3ATEX0132



#### **CMA/ATEX**



Centrifugal single-inlet, medium-pressure fans with casing and impeller made from cast aluminium to work in explosive atmospheres.

#### Motor

- Class F motors with ball bearings, IP55 protection, ATEX certification, EEx"e" explosion-proof or EEx"d" flame-resistant
- Three-phase 230/400V.-50Hz. (up to 5.5HP.) and 400/690V.-50Hz. (power over 5.5HP.)
- Working temperature: -20°C.+ 80°C.



Notified Organism: L.O.M. ID No.: LOM3ATEX0147

Centrifugal single-inlet, medium-pressure fans with casing and impeller made from cast aluminium to work in explosive atmospheres

#### **CMP/ATEX**

#### Motor:

- Class F motors with ball bearings, IP55 protection, ATEX certification, EEx"e" explosion-proof or EEx"d" flame-resistant
- Three-phase 230/400V.-50Hz. (up to 5.5HP.) and 400/690V.-50Hz. (power over 5.5HP.)
- Working temperature: -20°C.+ 80°C.



EEx "e" marked: (E) II2 G. EEx e
EEx "d" marked: (E) II2 G. EEx d

Notified Organism: L.O.M. ID No.: LOM3ATEX007

#### Finish:

- Anti-corrosive, polyester resin, polymerized at 190°C, previously alkaline cleaned and pre-treatement free of phosphates.

Ask for table of flows, measures and powers.

#### On Demand:

- Special windings for different voltages and frequencies
- ATEX built for different categories
- Fans with two speed motors
- EEx "n" versions installed with ATEX EExn motors.

