



Installation and maintenance instructions

Pyromax Evolution Pneumatic

Designation and commercial reference: Pyromax Evolution Pneumatic

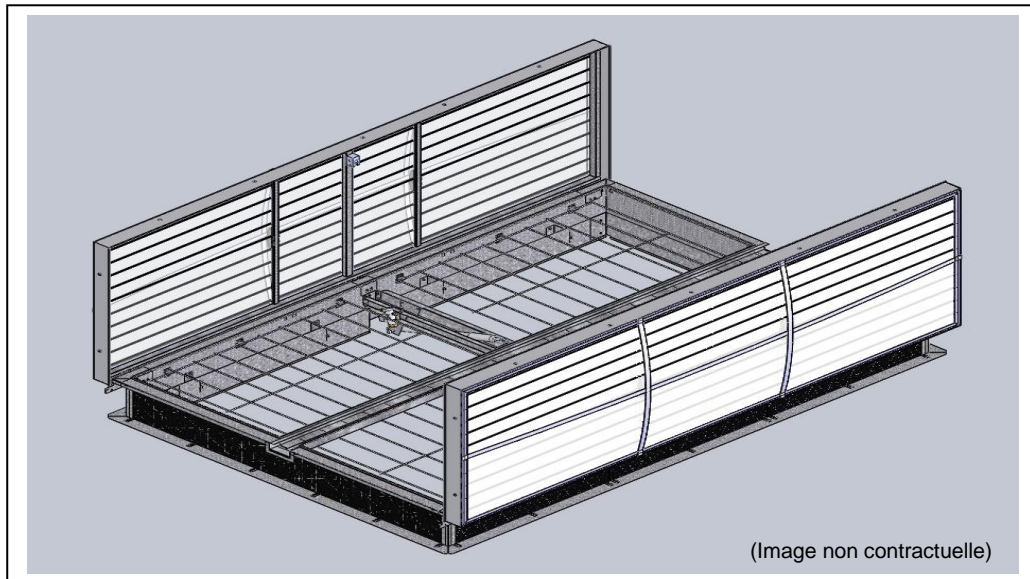
Certificate number: 0333 CPD 219075

DOP number: PPN

Year of the certificate: 2010

Reference standard: NF EN 12101-2

Attention: This manual does not constitute a contractual document. The manufacturer reserves the right to make any changes it deems necessary without notice.



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1. Identification

1. Type of CFSHE (Natural Smoke and Heat Exhaust System)

DENFC mounted on the roof.

2. Type of range

Double opening smoke extraction unit from the PYROMAX® range.

3. Type of energy

DENFC powered by internal and/or external pneumatic energy as defined in standard NF EN 12101-2. The availability of the energy source must be ensured.

4. Possible variations in the range

- Upstand :
 - Straight upstand
 - Capping upstand
- Fillings :
 - Polycarbonate honeycomb cover, 10, 16 and 32 mm thick
 - Non-insulated aluminium cover, 40 mm and 60 mm
 - Acoustik' Light
- Options :
 - Ventilation
 - Thermal fuse
 - Anti-fall and/or burglar resistant railing
 - Position switch

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2. Features

1. General characteristics of actuated safety devices (DAS)

- A D.A.S. must not issue an order
- Devices allowing the control of the safety and/or waiting positions of the D.A.S.
- Release energy external to the D.A.S.
- Functional independence of self-control and remote control
- No remote reset if switched to safe position by self-control
- Reset by remote control only if the energy at the previous reset was interrupted
- End-of-stroke cushioning
- Type B or type A if the height of the object to be handled is less than or equal to 2.50 m from the ground

2. General characteristics of the constituents

- Test pressures of pneumatic equipment (60 - 90 bar)
- Control of the positions of the D.A.S.
- Class III for electrical equipment operating at very low safety voltage (VLSV)
- Isolation of SELV electrical circuits and electrical circuits of other equipment
- Minimum protection class IP 42
- Presence of the main connection device
- Specific SELV connection device
- Minimum electrical characteristics of the position contacts
- Independence of electrical control circuits from other circuits

3. Precautions on the support

1. The substrate to which the DENFC is to applied must be flat and within in the normative tolerances of buildings construction
2. The DENFC is installed according to one of the following two rules:
 - a) Rule 1

The maximum slope allowed when the axis of articulation is parallel to the roof slope is 20° or 36.45% with external deflectors.



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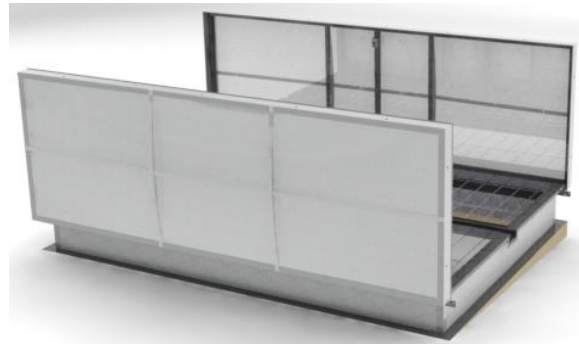


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b) Rule 2

The maximum slope allowed when the axis of articulation is perpendicular to the roof slope is 3° or 5.25%.



Roof pitch :
3°

Caution: The appliance must be installed in accordance with the standards, technical instructions, and any applicable regulations or texts.

4. Explanation of the product marking code

- ① Certificate number, date obtained, D.O.P. number, type of assembly.
- ② Reference standard in force.
- ③ Commercial designation of the device.
- ④ Hopper size and usable opening area (Aa).
- ⑤ Respectively:
 - Type of opening of the natural smoke and heat exhaust system.
 - Wind load classification.
 - Snow load classification.
 - Ambient temperature classification.
 - Reliability classification.
 - Heat resistance classification.
- Reaction to fire classification of the materials making up the DENFC, according to the European standard in force.
- ⑥ Production order number
- ⑦ Article code (for the traceability of the device)
- ⑧ Description of safety options :
 - Triggering temperature for the thermofusible
 - Presence or not of a position switch
- ⑨ Date of manufacture of the device

CE
0333

SKYDÔME®
SONS-ET-RONCHÈRES


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N° certificat : 0333-CPR-219075 - 2010 - CM2 - M.toiture ①

NF EN 12101-2 2003 ②

Dispositif d'évacuation naturelle de fumées et de chaleur

PYROMAX ③



Aa3.72 m² ④

TypeB; WL1500; SL250; T-15; RE300; ⑤

B300; B-s1, d0

Option de sécurité : T183°C - Grd6 ⑧


⑥ **OF200213951.001** Code : **CM23052900300H-F1.02** ⑦


Date de fabrication : MARS 2020

PYROMAX AD SL250 200x300 Pca10 Opal H310 Isol15 Grd6 Thermo 183

OF200213951.001 **Date de fab :MARS 2020** ⑨

CM23052900300H-F1.02 **18**



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5. The range

The inlet characteristics of the unit are available on the CE label on the inside front of the upstand. Below is a summary table of the air consumption according to your unit and the snow load (SLxxx).

Surcharge SL250							
Dimensions	Øvérin	Consommation en litre (appareil)	Pression d'ouverture (bar)		Cartouche thermofusible (gramme)	Pression de fermeture (bar)	Pression d'ouverture aération journalière totale
			PCA10 - PCA16 - PCA16+	Capot 40 - PCA32 - PCA32+ -			
1.20x2.00	Ø56	1.3	9	10	20	6	8
1.20x2.50		1.3	9	10	20		
1.20x3.00		1.3	11	13	40		
1.40x2.00	Ø32	0.52	17	20	20		
1.40x2.50		0.52	20	23	20		
1.40x3.00		0.52	23	26	20		
1.50x2.00		0.63	15	18	20		
1.50x2.50		0.63	18	22	20		
1.50x3.00		0.63	22	25	40		
1.60x2.00		0.74	15	16	20		
1.60x2.50		0.74	16	19	40		
1.60x3.00		0.74	19	23	40		
1.80x2.00		0.74	20	19	40		
1.80x2.50		0.74	22	23	40		
1.80x3.00		0.74	19	26	40		
2.00x2.00		0.91	21	22	40		
2.00x2.50		0.91	24	25	40		
2.00x3.00		0.91	22	27	40		
2.20x3.00	Ø32	0.91	22	27	40		

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Surcharge SL500								
Dimensions	Øvérin	Consommation en litre (appareil)	Pression d'ouverture (bar)		Cartouche thermofusible (gramme)	Pression de fermeture (bar)	Pression d'ouverture aération journalière totale	
			PCA10 - PCA16 - PCA16+	Capot 40 - PCA32 -				
1.20x2.00	Ø56	1.3	12	13	40	6	6	
1.20x2.50		1.3	12	14	40			
1.20x3.00		1.3	17	20	40			
1.40x2.00	Ø40	0.85	17	20	40			
1.40x2.50		0.85	21	24	40			
1.40x3.00		0.85	24	27	40			
1.50x2.00		0.98	16	18	40			
1.50x2.50		0.98	20	22	40			
1.50x3.00		0.98	23	26	40			
1.60x2.00		1.11	15	17	40			
1.60x2.50		1.11	18	20	40			
1.60x3.00		1.11	25	23	40			
1.80x2.00		1.11	17	19	40			
1.80x2.50		1.11	21	24	40			
1.80x3.00		1.11	25	26	40			
2.00x2.00		1.38	19	21	80			
2.00x2.50		1.38	24	26	80			
2.00x3.00		Ø50	2.1	17	20			80
2.20x3.00		Ø50	2.1	17	20			80

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Surcharge SL800							
Dimensions	Øvérin	Consommation en litre (appareil)	Pression d'ouverture (bar)		Cartouche thermofusible (gramme)	Pression de fermeture (bar)	Pression d'ouverture aération journalière totale
			PCA10 - PCA16 - PCA16+	Capot 40 - PCA32 - PCA32+			
1.20x2.00	Ø56	1.3	20	21	80	6	6
1.20x2.50		1.3	24	25	80		
1.20x3.00		1.3	27	29	80		
1.40x2.00	Ø63	1.9	15	16	80		
1.40x2.50		1.9	18	19	80		
1.40x3.00		1.9	21	22	80		
1.50x2.00		2.1	14	15	80		
1.50x2.50		2.1	17	18	80		
1.50x3.00		2.1	20	21	80		
1.60x2.00		2.4	13	14	80		
1.60x2.50		2.4	16	17	80		
1.60x3.00		2.4	18	20	80		
1.80x2.00		2.5	16	17	80		
1.80x2.50		2.5	19	20	80		
1.80x3.00		2.5	22	23	165		
2.00x2.00		3.1	17	18	165		
2.00x2.50		3.1	20	22	165		
2.00x3.00		3.1	23	25	165		
2.20x3.00	3.1	23	25	165			



6. Installation and implementation

1. Installation of the device

Caution: Any manoeuvre that could damage the mechanisms and/or the structure of the DENFC is prohibited. SKYDOME® cannot be held responsible for the consequences of such manoeuvres.

2. Installation of PYROMAX® according to its support

- . *Headframe:* By means of self-drilling screws or rivets or other bolts, with a maximum distance **of 330 mm between 2 fixings.**
- . *Ribbed steel sheets:* By means of self-drilling screws or rivets or other bolts or other fasteners, with a maximum distance **of 330 mm between 2 fixings.**
- *Masonry support :* Using suitable fixings with a maximum distance **between fixings of 200 mm..**

Any insulation on the DENFC has a bituminous film designed to receive direct waterproofing flashings.

3. Installation of the PYROMAX® in the socket version

The centre-to-centre distance requirements described above are identical for the top-hung version, provided that it is installed on a suitable existing support, i.e. steel, concrete, wood, or any other material that has already passed the thermal deformation test described in the UTP (Unified Test Procedure) smoke vents.

The geometric area (A_v) of the existing support upstand must be greater than or equal to the geometric area of the covering upstand.

The smoke extraction vents must be fixed and sealed in accordance with the requirements defined in the current D.T.U. (Unified Technical Document).

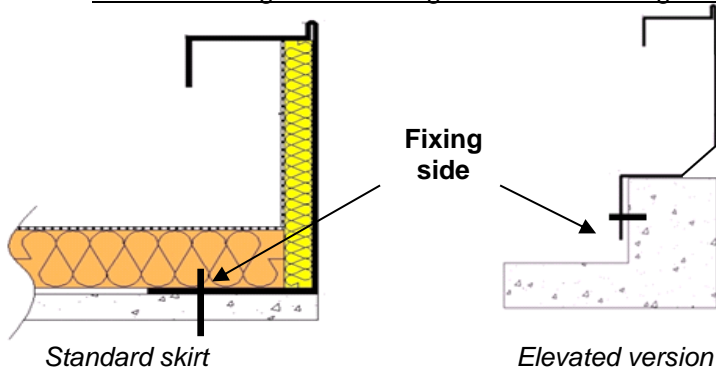
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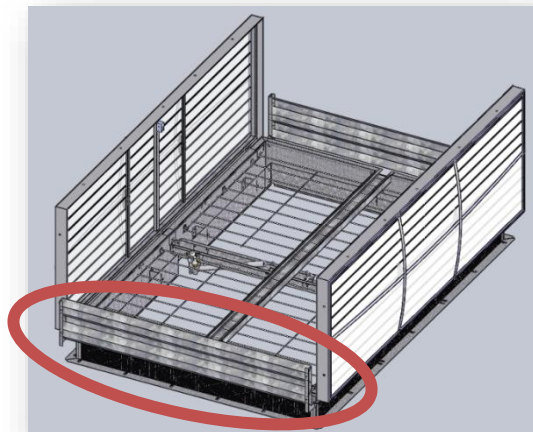
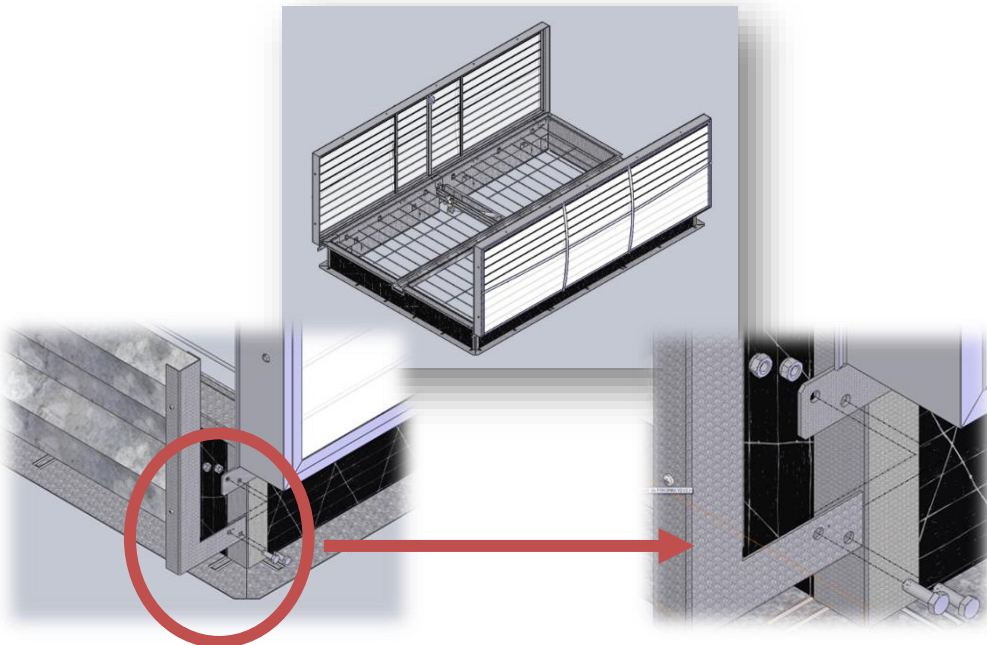
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4. Schematic diagrams for fixing a device according to its version



Any other location for fixing may cause water leakage

5. The installation of the deflectors



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6. Assembly and connection

The unit is delivered with all pre-connections made at the factory.

For the connection of the DENFC and its options to the pneumatic safety supply (APS): refer to the applicable standard.

For a SKYDOME® unit, the opening and closing connections have an adhesive tape:

YELLOW = **CLOSURE**

RED = **OPENING**

7. Instructions for use

- For commissioning, ensure that the pressure at the pneumatic cylinder is in accordance with the values defined in paragraph 5 - The range
- Carry out a test(s) to check the correct operation of the CFLW. In particular, check the mechanical and pneumatic opening and closing, as well as the locking behaviour.
- To guarantee the passage to the safety position in less than 1 minute, the device must be completely bled.

**The unit is preset and locked at the factory to ensure safe transport.
It is imperative to adjust the locking finger after installation and to ensure that the ensure that the lock is effective.**

8. Maintenance instructions

Caution: Our devices are not guaranteed in the event of exposure that may alter the initial characteristics of a component or function of the DENFC.

The operations, maintenance and periodic checks will be carried out in accordance with the requirements of the texts and standards in force as well as the following SKYDOME® prescriptions:

- The DENFC must be opened/closed in the safe position at least twice a year.
- Verification operations :
 - Check in particular the condition of the joints, hinges, bolts and the cylinder rod. It is important to keep these parts lubricated (grease, oil), except for the cylinder rod.
 - Check the tightness of the screwed elements (fittings, cylinder pins, etc.).
 - Check the effectiveness of the locking system
 - If the rod of a pneumatic cylinder is scratched, deformed, or leaking, replace it.
 - Do not clean the cylinder rod with a solvent, as this may damage the seals.
 - Do not paint the cylinder rod.
 - If necessary, clean the seal(s) of the unit and their support locations.
- DENFC checks must be carried out at least once a year.

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9. Replacement

All components of the device are available on request from SKYDOME®.

10. Ventilation

Ventilation is provided by the existing mechanism through a full opening under a pressure of 6 bar. It does not reduce the smoke extraction function of the natural smoke and heat extraction system. and heat.

11. : Additional information on the options:

None

12. Note

In accordance with the Labour Code, building owners and companies have an obligation not to endanger people on the roof.

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