CUBUS



Single flow ventilation units





CUBUS

Cubus are ventilation units designed for connection to circular ducts.

They seduce by their technical characteristics, factory prewiring, interchangeable panels, fan quality, low noise, level of finishing and their extendet choice and availability.

Concept

The CUBUS series declines itself 6 models and 5 sizes (350x350, 400x400, 500x500, 600x600 and 710x710), and is equipped with direct drive centrifugal TAC fans. It is fitted for air-flows ranging from 200 to 4.400 m3/h, and for static pressures up to 800 Pa.

Factory wired

Depending on customer preferences, each CUBUS maybe factory pre-wired. The control TAC3 is mounted on the door which itself is packed separately from the unit.



Applications

The most common applications are: controlled mechanical ventilation, ventilation in general, exhaust hoods, kitchen ventilation, sanitary ventilation, fresh air supply,...







Modularity

Depending All the panels are removable and interchangeable, and can therefore always be configured to allow the ideal configuration for the application. The units are delivered with the inlet panel located at 90° from the outlet panel.

Construction

The structure is made out of omega shaped anodized aluminum profiles connected by reinforced polypropylene corner pieces. The panels are double skin steel plates insulated with fireproofed treated EPS. The outside panels are prepainted gray RAL 9002 color covered with a plastic protection. The side panels are removable to enable easy access to the components for maintenance. They are provided with M8 suspension nuts inserted in the aluminum profile.



Fans

The CUBUS can be equipped with high efficiency TAC fans

The of the TAC fans convinced us to include them in this catalogue. Their main advantages are:

- EC motor : minimum 50% energy saves
- Constant air flow regardless of the pressure drop, constant pressure related to a 0/10 V signal.
- Easy installation: the required airflow = the obtain airflow, not need for a complex setup or other time wasting procedures.
- Lower noise level compared to traditional airflow controls.



Options

- CUBUS can be delivered with a roof (VEX), jealousy louver (VK). Attention VEX versions must be equipped with TAC 5 (waterproof casing)
- External 4 positions switch (COM4): allows manual selecting of the fan speed (3 speed preprogrammed + stop).
- SAT 3 board integrates 2 relays associated to pressure alarm and/or operation of the fans.
- CO2 sensor: allows to modulate the airflow according to the CO2 air levels. For specific project, the CUBUS can be delivered without any pre-wiring.

Controls

The CUBUS units can be equipped with TAC3 or TAC5 controller depending on the customer's needs.

The TAC3 control box allows to control the fan(s) with 3 operating modes:

Constant Airflow mode (CA): Ability to select 3 airflow instructions through digital inputs. Regardless the pressure drop, the airflow will stay constant.

Link to signal mode (LS): the flow rate is controlled by a linearly related 0-10V signal (from a sensor, programmable controller,...). This airflow setup is kept constant regardless the pressure drop. Possibility to activate a multiplier via a digital input.

CPS mode: (with pressure sensor CPs or without CPf): The pressure set point (calculated on the fan or measured by an external pressure sensor) is held constant.

The TAC5 controller, allows all the operating modes described above but also:

- The remote configuration through RC
- Add new Network communications' modes such as Modbus, WiFi, Ethernet and KNX.
- Give the ability to set time slots.



Selection software

A selection software downloadable on our website helps the user to simulate the real working conditions of the device. This user friendly software calculates the voltage, flows, range, noise levels, and prints a full specification selection sheet, with dimensions and options.

This software is free of charge and can be downloaded from our website :

www.swegon.com

Technical characteristics

NAME	CID	FAN	CID	Airflow [m³/h]	A [mm]	D1 [mm]	B [mm]	D2 [mm]	D [mm]
CUBUS TAC									
CUBUS 4	800106	DS 140-59 TAC	721121	100-600	350 x 350	200	175	250	200
CUBUS 6	800108	DD 146-190 TAC	720131	200-900	400 x 400	250	200	250	200
CUBUS 7	800032	DD 9-7 TH TAC	720054	400-2000	400 x 400	315	200	315	200
CUBUS 9	800028	DD 9-9 TAC	720055	600-2900	500 x 500	355	221	355	250
CUBUS 10	800006	DD 10-10 TAC	720056	700-3800	600 x 600	400	244	400	300
CUBUS 11	800041	DD 11-11 TAC	720057	750-4400	712 x 712	450	269	450	356

