

JDE Halton Jaz Perforated VAV



概览

- 变风量 JAZ 排风散流器
- 散流器使用主动式风阀来控制风量
- 用于定静压管道系统
- 具有测量和调节功能的静压箱
- 有效的消音装置

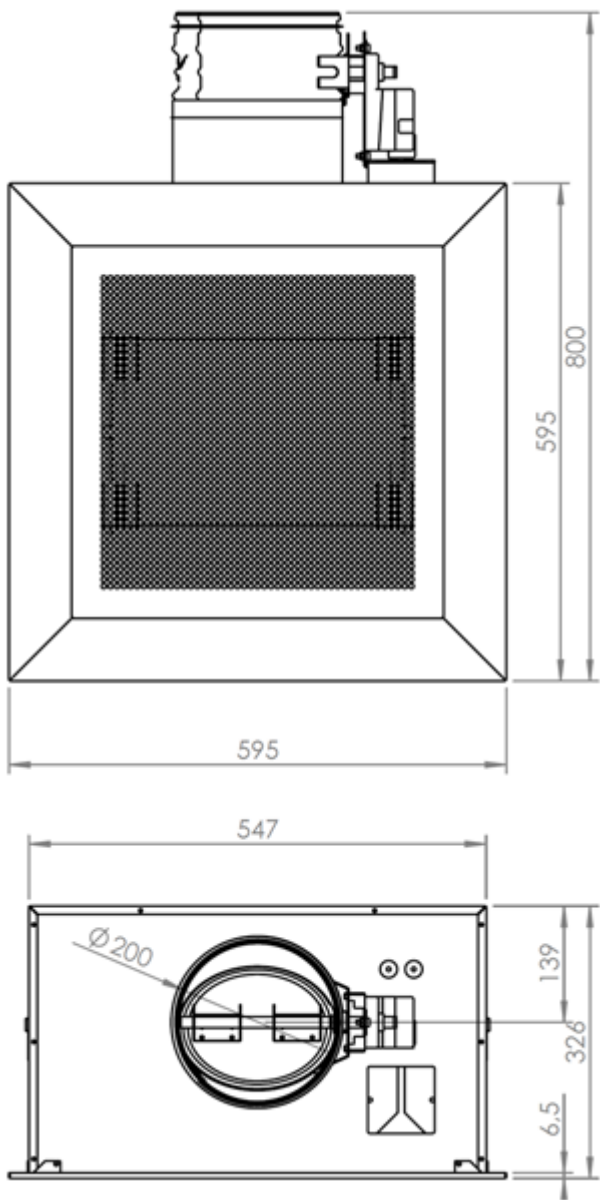
说明

主动式排风散流器采用钢材质，并使用标准白色 (RAL 9010) 进行静电喷涂。空气通过有孔的前挡板和散流器的侧隙排出。

通过散流器内的平衡叶片来实现系统平衡气流和最大风量输出。
通过电动控制风阀来控制变风量。

散流器集成到一个专门为主动式散流器安装而设计的静压箱中，并配有风量测量和消音装置。

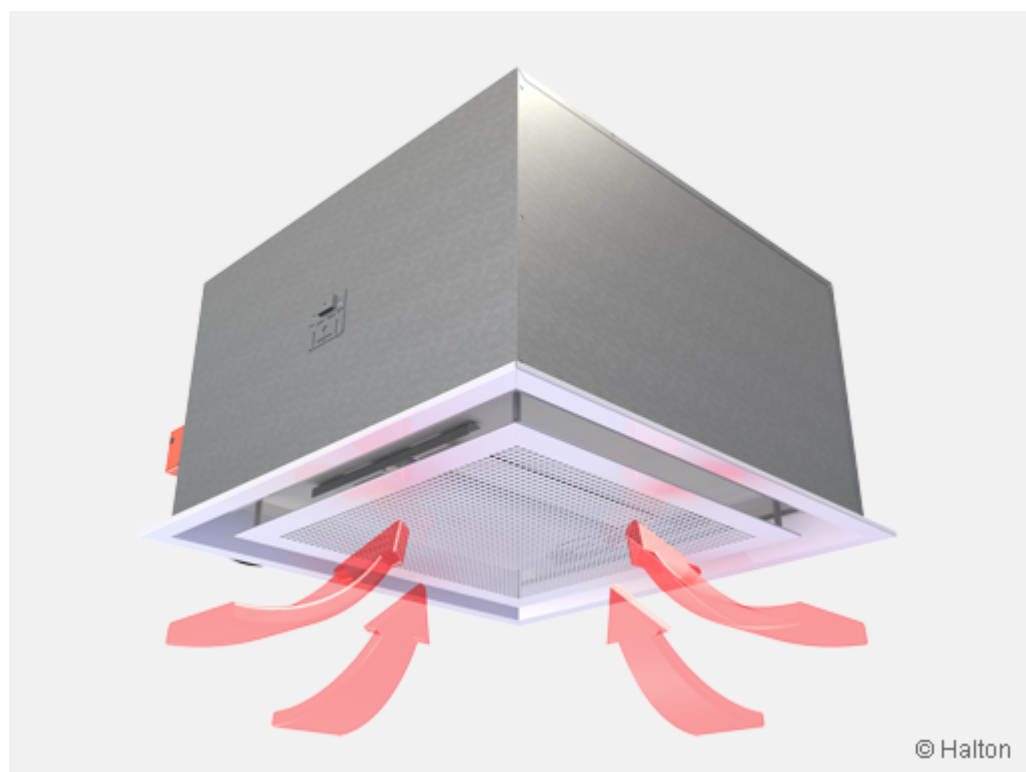
Dimensions



Material

Part	Material	Finishing	Note
Diffuser plate	Steel	Powder painted, white (RAL 9003/30%)	Special colour available
Front panel	Perforated steel	Powder painted, white (RAL 9003/30%)	Special colour available
Balancing vanes	Aluminium	Powder painted	–
Plenum casing	Galvanised steel	–	–
Attenuation material	Polyester fibre	–	–
Flow control damper	Casing: Galvanised steel Plate: Galvanised steel Gears: Plastic Gasket: rubber compound	–	–

Function



The Halton Jaz Perforated VAV is an active ceiling diffuser unit for exhaust air.

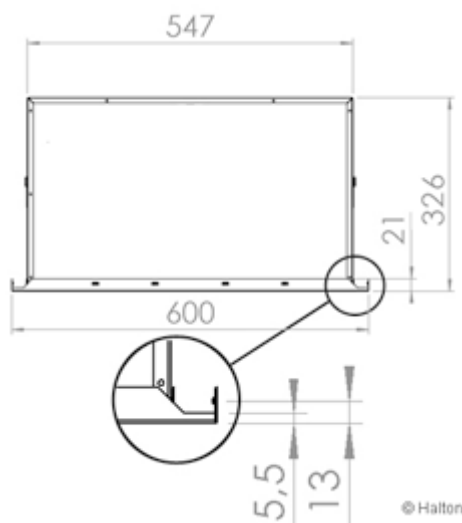
The air is exhausted from the space through the perforated front panel and the side slot of the diffuser. Maximum airflow rate is selectable and will be made with the movable balancing vanes in the diffuser.

An external room controller varies the room airflow rate by running the Halton Jaz Perforated VAV diffuser's actuator with a standard 2 – 10 V control signal. The pressure dependent function of the Halton Jaz Perforated VAV operates in combination with constant pressure ductwork.

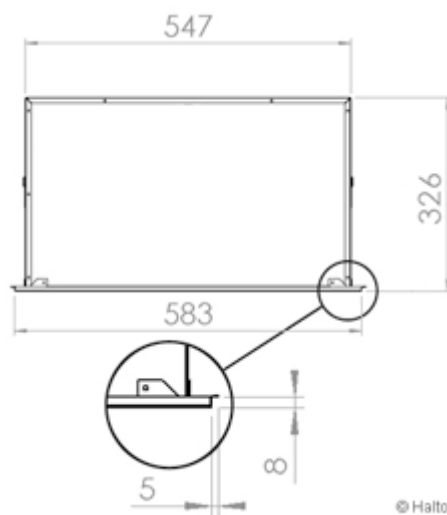
Effective sound attenuation reduces the generated noise and attenuates the duct noise.

Installation

The Halton Jaz Perforated VAV exhaust air diffuser unit is available for installation in different suspend ceiling types.



Clip-in ceilings



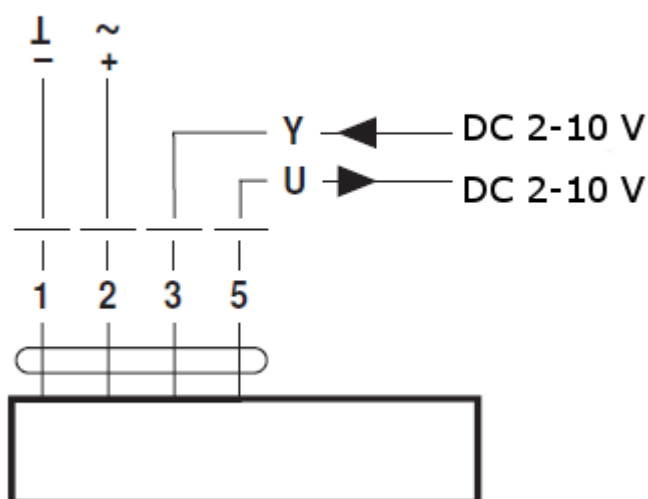
Fine-line 15 ceilings

Commisioning

Wiring

The Halton Jaz Perforated VAV active air exhaust diffuser shall be connected to the control system.

AC 24 V 50/60 Hz



With 10 V control signal the active flow control damper is fully open.

Balancing

The balancing function will not be available when Halton Jaz Perforated VAV exhaust diffuser is connected to Halton Vario control system and when getting the control signal from supply air terminal. In that case the control vanes should be adjusted to the position 20 and maximum and minimum airflow rates shall be adjusted with the control signal.

In balancing function ensure that the flow control damper on each active Halton Jaz Perforated VAV exhaust air diffuser is fully open. This can be done either mechanically or electrically:

- If the power is connected to the active diffuser, press the knob in the actuator and turn the damper blade on horizontal position (visual mark on the end of blade axle showing the position).
- If power is not connected to the diffuser, please make sure that the control signal is constantly at 10 VDC.

Check that the duct zone constant pressure is at the intended level (for example between 30 to 50 Pa). If the airflow rate of the active exhaust diffuser is too high, adjust the position of the balancing vanes to the closer position. If the maximum airflow can not be reached, open the vanes first fully open and if this is not enough, increase the duct zone pressure.

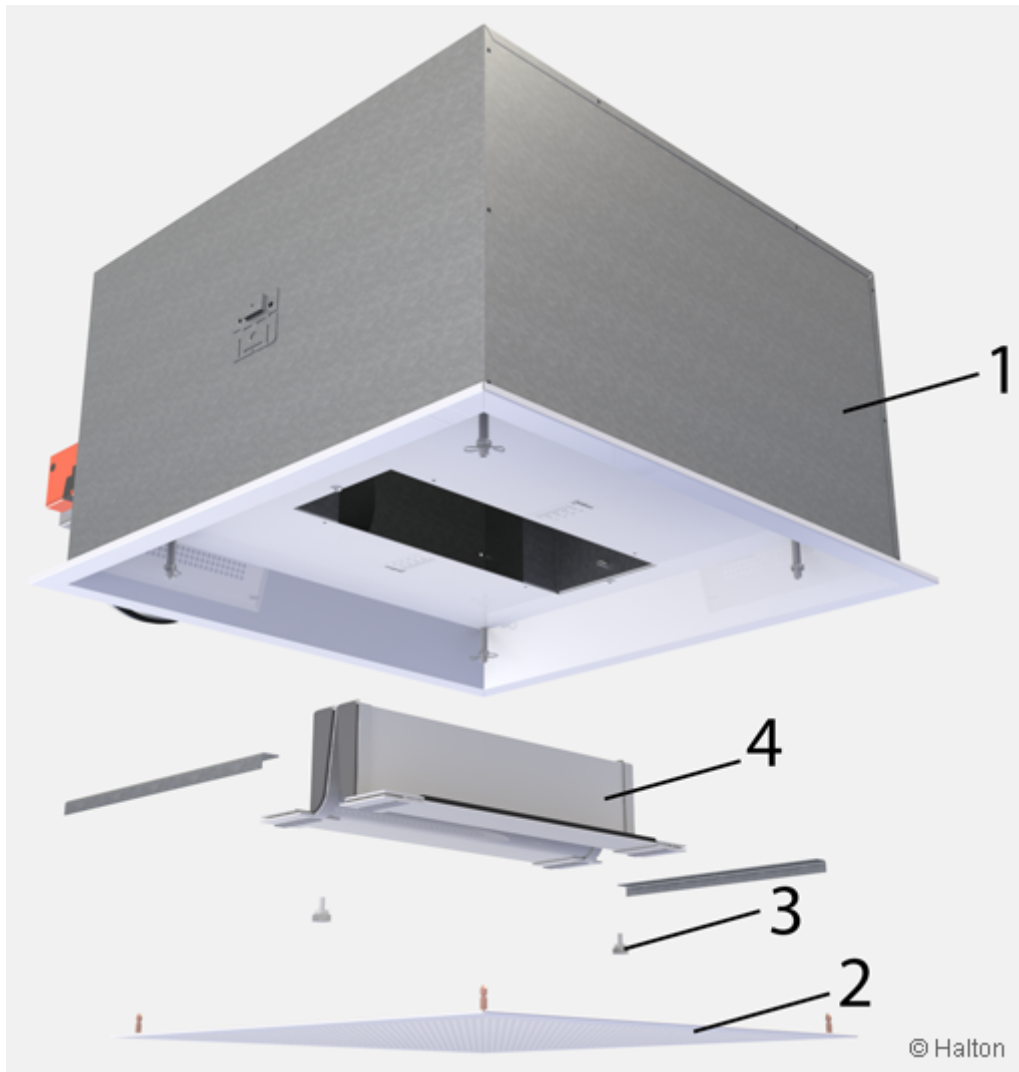
The minimum airflow rate is factory pre-adjusted to the variable flow control damper and can not be adjusted.

Airflow rate is calculated using the pressure difference reading and the k factors (see formula below):

$$q_v = k * \sqrt{\Delta p_m}$$

q_v Calculated airflow rate [l/s]
 k Coefficient = 14.3 (opening 20)
 Δp_m Measured pressure [Pa]

Servicing



Key

- 1. Diffuser plenum
- 2. Front panel
- 3. Fixing screws
- 4. Balancing vanes

For servicing open the front panel (2) of the diffuser and detach the flow control element. Detach the balancing vanes (4) by opening the screws (3) and remove the vanes.

Clean the parts with a damp cloth instead of immersing in water.

Replace the parts in opposite order. Ensure that the balancing vanes are in right position.

Specification

The active exhaust diffuser unit is made of steel and powder painted with a white (RAL 9003/30%) standard colour. Air is exhausted through the perforated front panel and the side slot of the diffuser.

The system balancing and maximum airflow selection are made with the balancing vanes in diffuser.

Variable airflow rate is controlled with the electrical flow control damper.

The diffuser is integrated to a balancing plenum designed for the active diffuser installation and equipped with air measurement and sound attenuation properties.

Order code

JDE-D, CO-IO-ZT

D = Size for duct connection
200

Other options and accessories

CO = Colour

SW	White (RAL 9003)
X	Special colour (RAL xxxx)

IO = Ceiling type installation options

NA	T-profile (standard)
DC	Clip-In ceiling
FL	Fineline-15

ZT = Tailored product

N	No
Y	Yes (ETO)

Code example

JDE-200, CO=SW, IO=DC, ZT=N