60Hz
VENTILATION SOLUTIONS

UK MADE

NUAIRE. FOR THE COMPLETE VENTILATION SOLUTION

WITH A RECORD OF QUALITY WHICH IS THE ENVY OF THE INDUSTRY...

...Nuaire is a British company with a long history of innovation in a field of ventilation and air movement solutions, and its products are known across the world for their superb quality and efficiency.

Founded in 1966, Nuaire has a long and much-admired heritage in developing and manufacturing ventilation products. The company's products are renowned worldwide, likewise their unrivalled customer service, and it is this combination which has ensured that Nuaire's products have been sold into more than 60 countries around the world, including in the Middle East, Europe, the USA and Asia.

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CAR PARK VENTILATION HOW IT WORKS

With jet fans available in both axial and centrifugal versions, Nuaire's car park ventilation system has a number of benefits. Not only does the low depth unit save space and money by eliminating the need for complicated and expensive ductwork, but it is also extremely energy efficient as it monitors the air quality and operates the system at its optimum level, reducing the running costs by up to 40%. Also, fewer fans are required as they distribute the air over such a large area.

One of the biggest hazards in the event of a fire is that of smoke inhalation. Nuaire smoke rated control systems provide a flexible directional flow to respond to any fire location, containing, channelling and removing the smoke to facilitate safe evacuation and more effective fire fighting access.

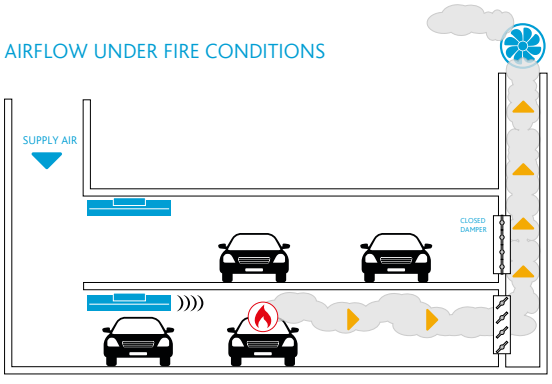
Units have a unique mounting bracket to allow for quick and easy installation in two simple stages and inlet and outlet silencers that ensure low noise levels. Most importantly, all equipment is safety tested to EN12101-3 at both 300°/400°C for 2 hours.

The carpark jet fan system is used to control and remove contaminants on a day to day basis, whilst ensuring that smoke is removed quickly and efficiently in the event of a fire. The system utilises a number of strategically positioned jet fans, mounted on the ceiling, that direct the fumes and smoke towards a designated point of exhaust.

This in effect creates a virtual smoke barrier ensuring quick and effective clearance whilst keeping the rest of the car park smoke free. This removes the need for complicated ductwork systems and optimises space.

UNIQUE MOUNTING BRACKET

AIRFLOW UNDER FIRE CONDITIONS



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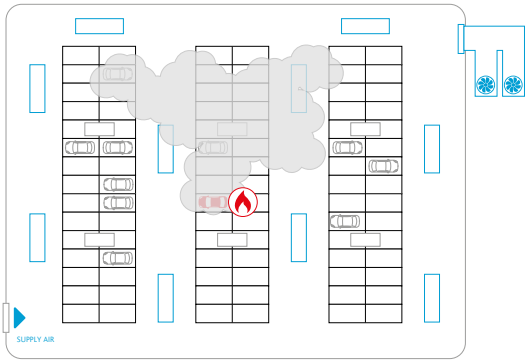
EXAMPLE OF JET FAN SYSTEM

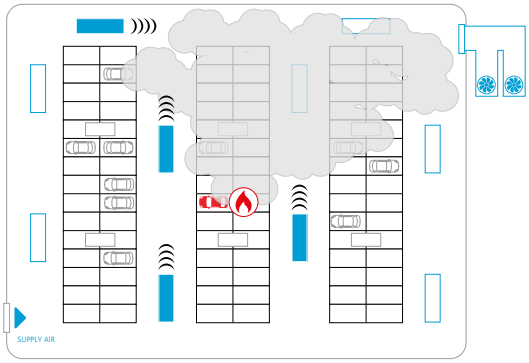
1



STAGE 1

In day-to-day operation the system runs in low speed ensuring carbon monoxide and other contaminants are within acceptable limits. Control is via strategically placed detectors. If a fires starts in one of the vehicles, and smoke spreads, the system starts.

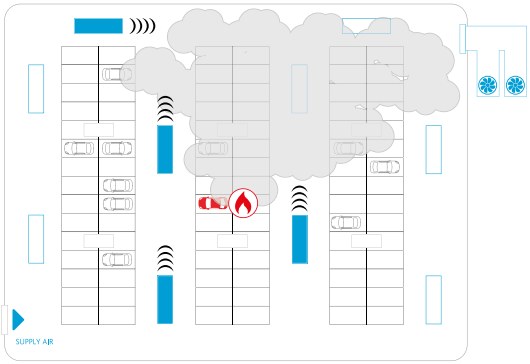
2



STAGE 2

The smoke detection system will identify the situation, activate the fire alarm system and then switch to smoke mode.

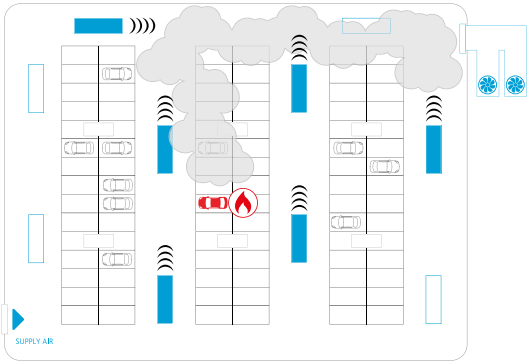
3



STAGE 3

Smoke detectors throughout the car park identify the units which are located at the affected fire zone and increase their fan speed to maximum.

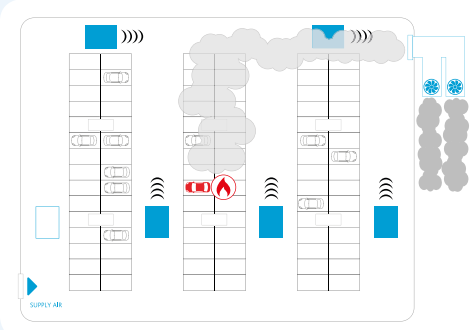
4



STAGE 4

The smoke is contained and directed towards the main exhaust unit, where it can be safely extracted into the atmosphere. This minimises the spread of smoke within the car park, keeping large areas clear and enabling the area to be quickly and safely evacuated.

WHY CHOOSE INDUCTION OVER IMPULSE?



INSTALLED COSTS

Reduced number of units, resulting in a reduced project installed cost.

BACKWARD CURVED IMPELLER

Suitable for high thrust and low noise applications.

LOW PROFILE

Ideal for reduced height area and can prove more suitable than a jet fan and ducted installations.

SUITABLE FOR HIGH CEILINGS

Draws the air upwards, providing a more effective method of extracting the smoke than a jet or axial installation.

THRUST

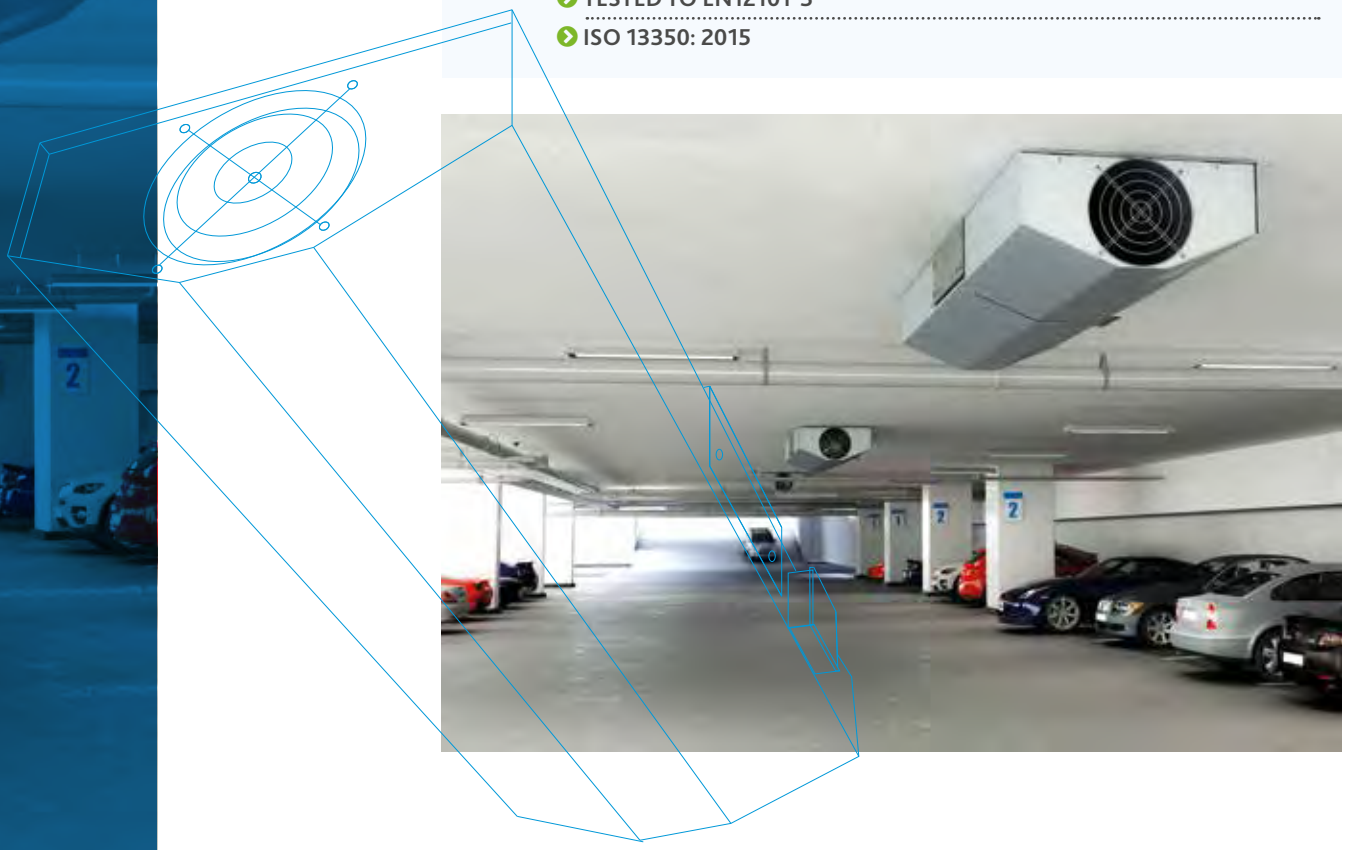
The induction range will provide a greater range of area (m^2) coverage which can result in a lower number of units required to service the car park.

CAR PARK IMPULSE SYSTEM SVT2 & SVT28

Car park ventilation systems are used to control and remove pollutants, such as carbon monoxide on a day to day basis, whilst ensuring in an emergency situation smoke is removed quickly and efficiently to aid in the safe evacuation of occupants.

KEY BENEFITS:

- **LOW DEPTH**
- **COST SAVING -** REDUCED DUCTWORK
- **REDUCED INSTALLATION TIME -** 2 STAGE 'QUICK' INSTALLATION
- **ACOUSTICALLY LINED**
- **ALUZINC -** HIGHLY ANTI-CORROSIVE PROPERTIES
- **LOWEST NOISE LEVELS -** FITTED WITH INLET AND OUTLET SILENCERS
- **AVAILABLE IN A FULLY REVERSIBLE OPTION**
- **TESTED TO EN12101-3**
- **ISO 13350: 2015**



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25N THRUST | 50N THRUST | 50Hz | 60Hz | 300°C/ 400°C

CONSULTANTS SPECIFICATION

CASING

The complete units, including attenuation, are of flush design to ensure no dust/debris build up. The case is made from Aluzinc (additional finishes are available) and is acoustically lined.

MOTOR

Motors are totally enclosed and protected to IP55 with Class H insultation. Motors are available in two speed or single speed (with VSD operation).

CERTIFICATION AND OPERATING TEMPERATURE

Complete units are tested to BS EN12101-3 for both 300°C/2 and 400°C/2.

IMPELLER

Available in either aluminium or steel aerofoil blades to optimise both air performance and sound to suit the project requirements.

INSTALLATION

The units are designed for flush mounting ceiling installation using our unique mounting bracket that allows for quick 2 stage site fitting. Units are low profile: 25N units are 325mm and 50N are 407mm deep.

PERFORMANCE

The units are available in 2 thrust output options:

- 50/12N
- 25/5N
- Larger bespoke units are available - contact Nuaire for details.

AIRFLOW

Inlet guards are fitted for safety purposes and to prevent debris from entering the fan. The unit is fitted with a specifically designed airflow deflector to direct the jet stream from the fan at the required angle sufficient to overcome the natural buoyancy effect of the smoke. Reversible options are available.

SYSTEM DESIGN

Nuaire's acoustically treated Impulse fans SVT2 & SVT28 are typically used as part of a car park ventilation system to control and remove pollutants, such as carbon monoxide and in case of a fire emergency. An induction system saves costs due to the elimination of ductwork. The Impulse fans are strategically distributed throughout the car park in accordance with our specialist design.

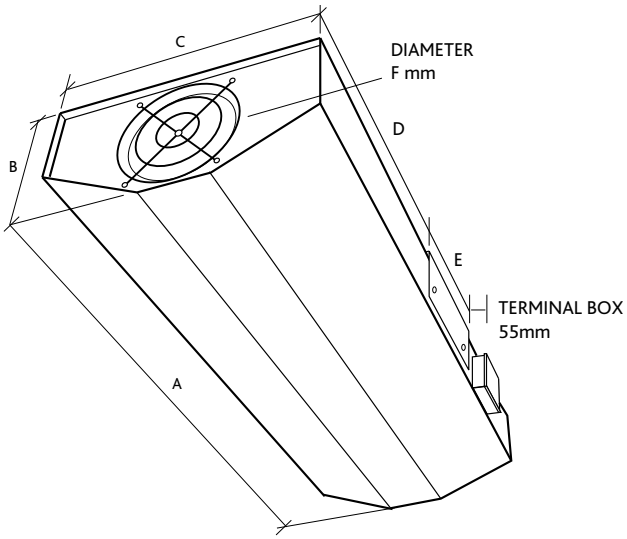
ANCILLARIES

- Thermistors
- Pre-wired isolators
- Isolators
- Anti-condensation motor heaters

APPLICATIONS

Certified for use with sprinkler systems, contact Nuaire for additional information.

CAR PARK IMPULSE SYSTEM SVT2 & SVT28



CODING SVT28-1EG

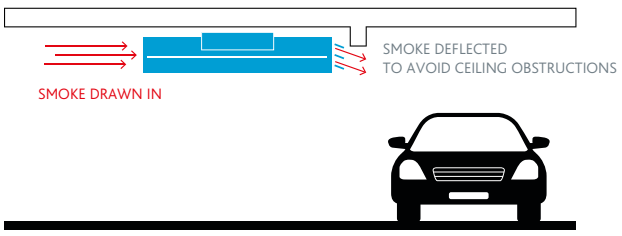
SVT2	8	-	1	E	G
1	2		3	4	5

SVT28-1 (AE) (GJ)

1. SVT2 - Axus Impulse Axial range
2. No prefix - 300°C 8 - 400°C
3. Case size/performance range
4. Impeller angle (A-E)
5. No suffix - 50Hz
   G-460v 60Hz
   J-380v 60Hz

DIMENSIONS (MM) AND WEIGHT

MODEL	A	B	C	D	E	F	WEIGHT
SVT2-1 (A-E)	2300	325	702	825	600	306	94Kg
SVT2-2 (A-E)	2300	407	702	825	600	350	113Kg



300°C

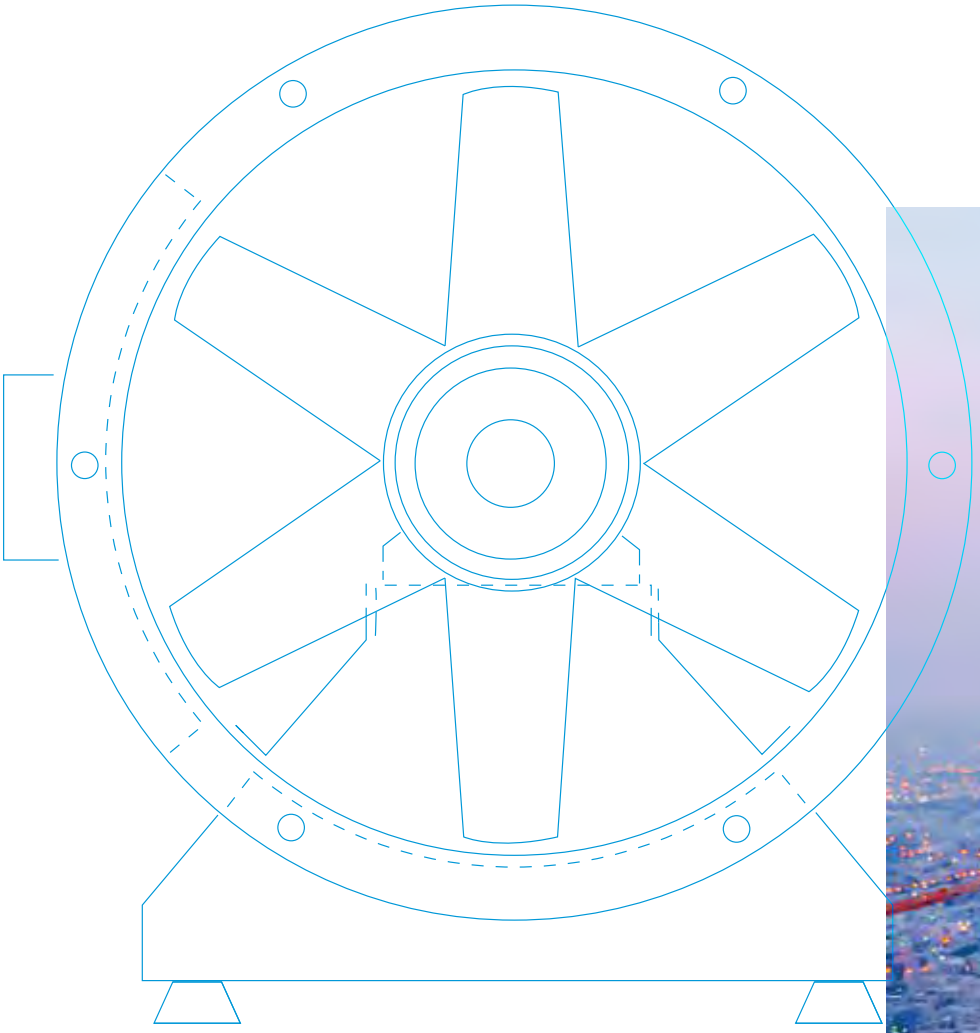
TECHNICAL AND PERFORMANCE DATA

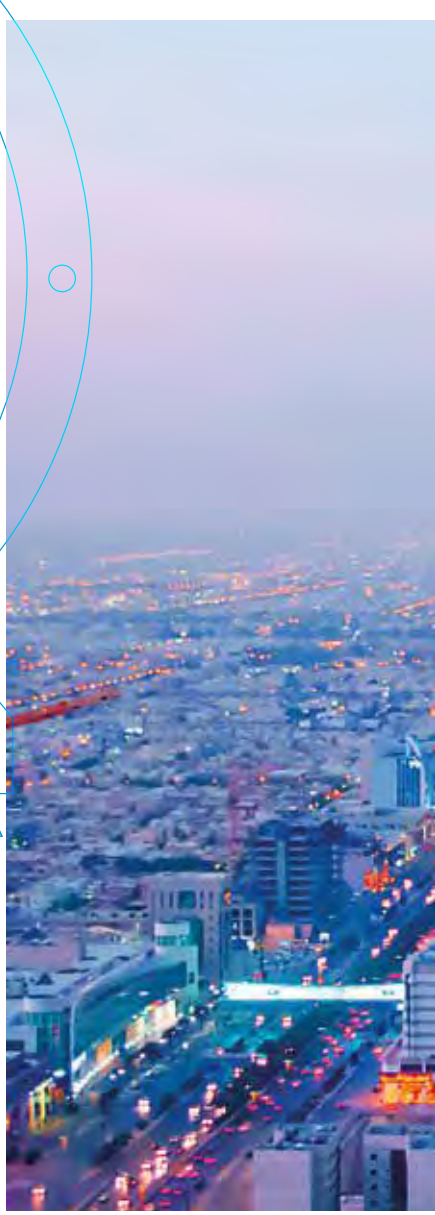
	60Hz	
FAN REFERENCE	**SVT2-3EJ**	**SVT2-3EG**
Thrust Newtons: Full/Half Speed	50/12	50/12
Airflow m^3/s: Full/Half Speed	1.8/0.9	1.8/0.9
Motor Kw: Half/Full Speed	1.5/0.34	1.5/0.34
Protection Class	IP55	IP55
Insulation	H	H
Electrical Supply	380/3/60	460/3/60
Motor FLC amps: Full/Half Speed	3.41/1.02A	2.82/0.84A
Motor SC amps: DOL Full/Half Speed	19.1/3.8	15.8/3.1
Speed RPM: Full/Half Speed	3330/1650	3330/1650
Sound dBA @1m: Full/Half Speed	71/66	71/66
Material Finish*	Aluzinc	Aluzinc

400°C

TECHNICAL AND PERFORMANCE DATA

	60Hz	
FAN REFERENCE	**SVT28-2EJ**	**SVT28-2EG**
Thrust Newtons: Full/Half Speed	50/12	50/12
Airflow m^3/s: Full/Half Speed	1.8/0.9	1.8/0.9
Motor Kw: Half/Full Speed	1.5/0.34	1.5/0.34
Protection Class	IP55	IP55
Insulation	H	H
Electrical Supply	380/3/60	460/3/60
Motor FLC amps: Full/Half Speed	3.41/1.02A	2.82/0.84A
Motor SC amps: DOL Full/Half Speed	19.1/3.8	15.8/3.1
Speed RPM: Full/Half Speed	3330/1650	3330/1650
Sound dBA @1m: Full/Half Speed	71/66	71/66
Material Finish*	Aluzinc	Aluzinc





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