# JFC – JETFAN
Unidirectional centrifugal jet fan

The AREM JFC is designed to work in environments where there is a fire risk. It is particularly suitable for car parks as it efficiently channels smoke to the extractors. The high speed of the air jets improves smoke evacuation and facilitates the intervention of the emergency services. In comfort operating mode, the AREM JFC ventilates the area and reduces the level of particulates and pollutants from vehicles.

Available in 3 diameters and 3 temperature classes (400°C/2h, 300°C/2h and 200°C/2h), the JFC range produces thrusts from 40N to 95N:

- JFC-S: 40N / 50N (1 speed / 2 speeds)
- JFC-M: 60N / 70N (1 speed / 2 speeds)
- JFC-L: 95N (1 & 2 speeds)

Dimensions (mm)								
	A	**B**	**C**	**D**	**E**	**F**	**G°**	**H**	**I**
JFC-S	1305	1355	400	675	805	905	16	275	75
JFC-M	1660	1665	450	785	955	1055	12	305	90
JFC-L	1905	1890	500	910	1155	1255	12	340	100
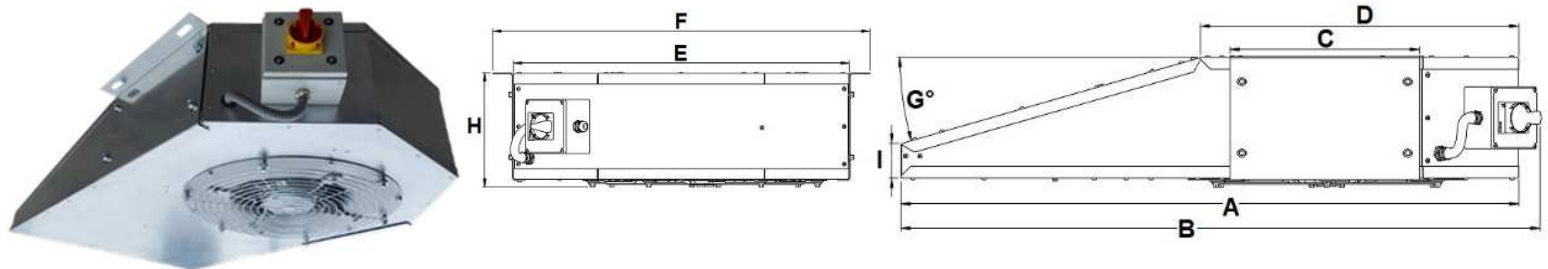
Technical characteristics								
	Motor rotation rpm	**Nominal thrust** N	**Installed power** kW	**Amperage at 400V** A	**Maximum flow rate** m³/s	**Air velocity** m/s	**Acoustic pressure at 1m** (dBA)	**Maximum weight** kg
JFC-S	1410 / 690	50 / 13	1.2 / 0.3	3.2* / 1.3*	1.35 / 0.7	21 / 10	78 / 61	95
JFC-M	1410 / 690	70 / 18	1.6 / 0.4	5.2* / 1.7*	2.1 / 1.1	24 / 12	82 / 65	115
JFC-L	1410 / 690	95 / 24	2.8 / 0.7	8.2* / 2.4*	2.75 / 1.4	29 / 14	87 / 70	145

Do not size the overload protection system to the limits of the indicated values. Plan for adjustment to offset electricity network fluctuations.

CFD STUDY
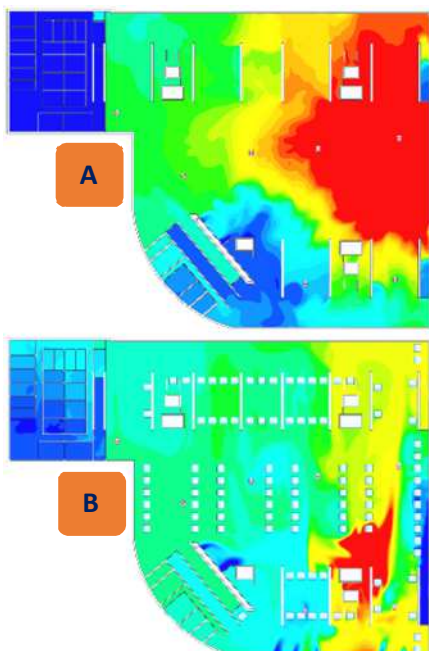
Case study:
Optimize the ventilation system of "Le Sporting d'hiver" car park (Monaco) using CFD tools.

In the absence of jet fans, we notice a concentration of heat (red zone) in the event of fire, see scenario A.

The simulation with jet fans is more efficient and pushes the smoke to the extractors, see scenario B.