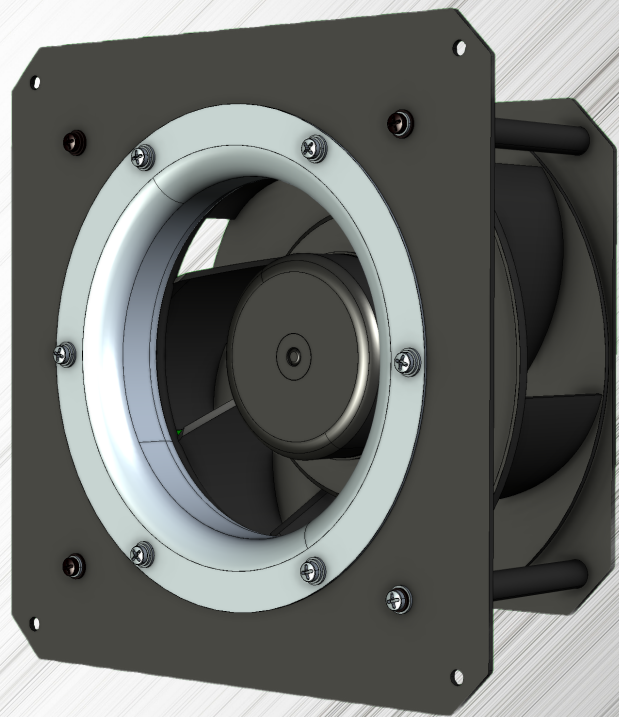


**SWISS
ROTORS**



SR-FS-P-190-0.17



EC Fan Set

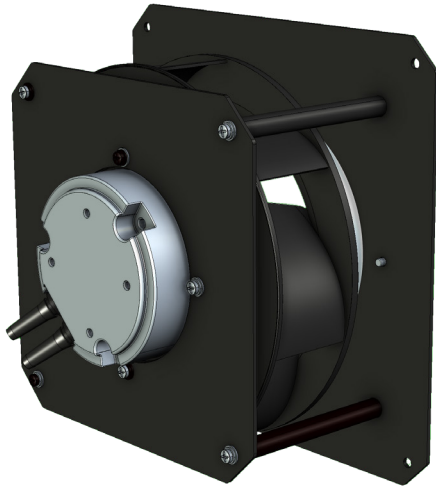
190 mm

**Backward Curved
Single Inlet, Single Width
Polymer Impeller**

Technical Specification in Metric Units

Catalog ver: 20250602 (June, 2025)

Apperance



General specification

Fan Set Model	SR-FS-P-190-0.17
Rated Voltage	1×230 VAC / 50-60 Hz
Rated Current	1.2 A
Nominal Input Power	0.17 kW
Revolutions: Min / Nominal	2100 ÷ 4490 RPM
CAV K-factor	23.0
Storage temperature range	-30 ÷ +50 °C
Operating temperatures range	-25 ÷ +50 °C
Support plate material	Galvanized steel
Support brackets material	Powder coated steel
Mass	2.7 Kg
Installation position	Horizontal / Vertical shaft

Motor

Type	Electronically Comutated, Brushless DC
Housing	Die-cast aluminum
Protection Degree	IP 44
Overload protection	Die-cast aluminum
Speed Control	Inbuilt thermal limit
Bearings	Ball type, Maintenance Free, Permanently Lubricated
Bearings service life L ₁₀	20 000 (104 °F) / 20 000 (max. work. temperature)
Insulation class	F

Application

Various mechanical ventilation systems, air handling units, rooftop units, and others

Ventilation systems requiring low Specific Fan Power (SFP) together with smooth and precise airflow adjustment

Perfect solution to be combined into Fan-Array systems

Fitted for vertical and horizontal arrangement

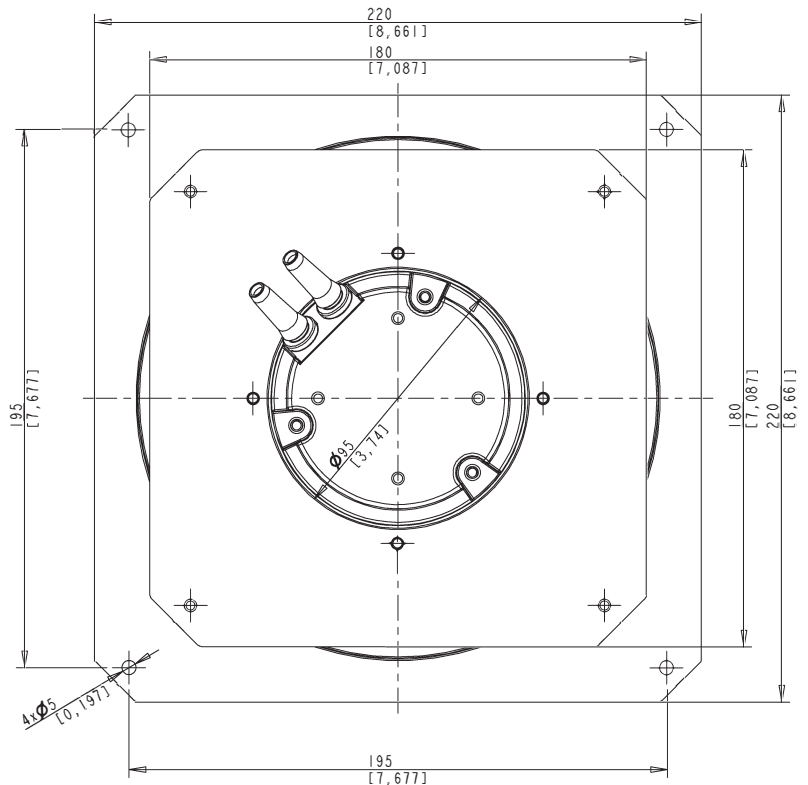
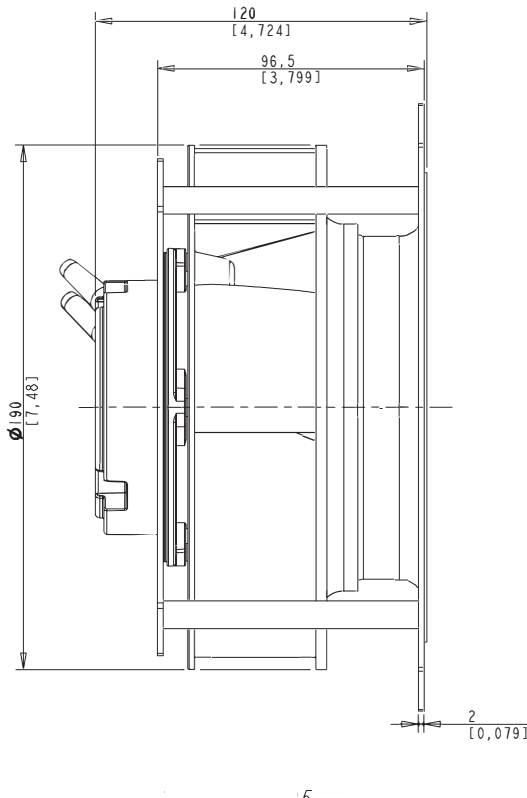
Support to **CAV/VAV** systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LWA according to ISO 13347.

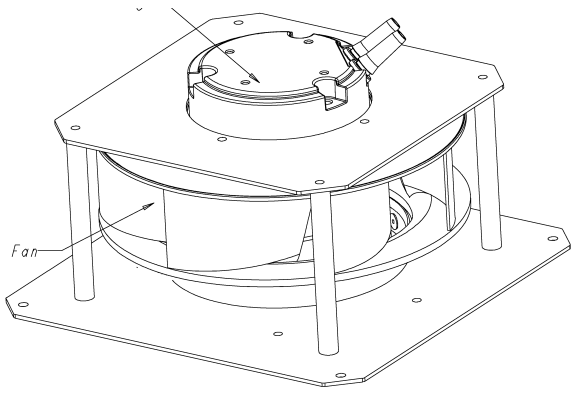
Impeller

Fan Impeller Size	190 mm
Blade design / No of blades	Aerofoil / 7
Spinning direction	Clockwise, wiewed from air inlet
Impeller material	Polymer
Inlet funnel material	Polymer
Balance grade	G 6,3 (ISO 1940-1) and BV-3 (ANSI S2.19-1989)

Installation Dimensions



Information according to (EU) 327/2011 (ERP 2018)



Information according to (EU) 327/2011 (ERP 2018)

Commission Regulation (EU) 327/2011 Requirements for fans driven by motors with an electric input power between 125 W and 500 kW.

1	Overall efficiency η_{es}	43.0%
2	Measurement category	A
3	Efficiency Category	Static
4	Efficiency grade N: Actual / Req. 2015	45.1%
5	Variable speed drive	Yes
	Power consumption P_{ed}	0.25 kW
9	Air flow q_v	609 m ³ /h
	Pressure increase pfs	559 Pa
10	Speed (rpm) n	4 490 RPM
11	Specific ratio	1.01

Compliance with Standards

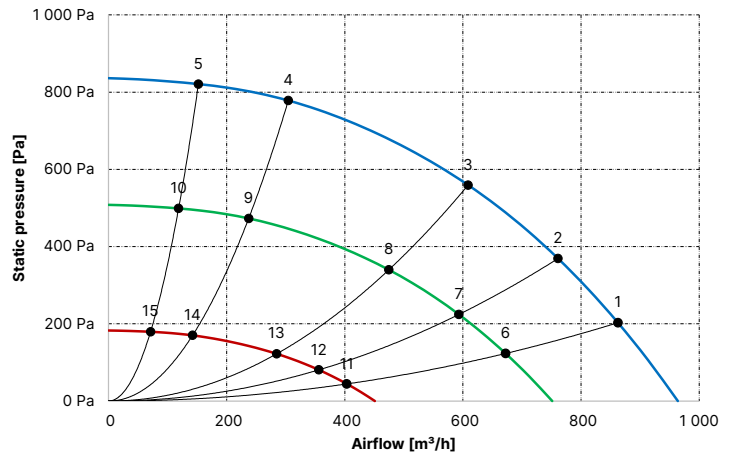
ISO 5801:2017

„Fans – Performance testing using standardized airways“

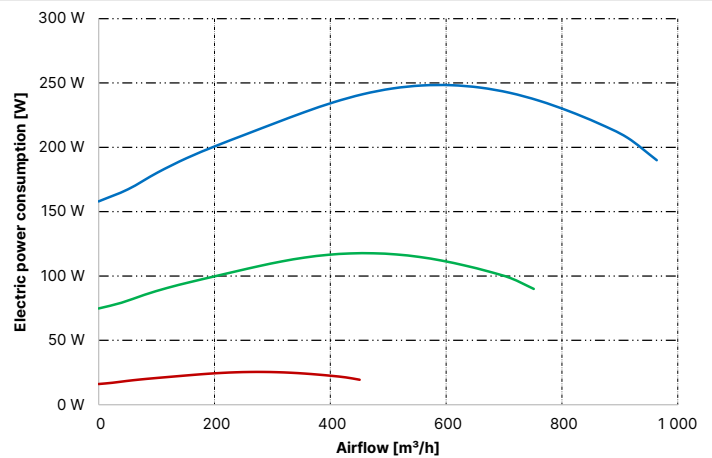
Measured Points

Point #	n [RPM]	V [m ³ /h]	dP [Pa]	I [A]	EPC [kW]	L _p A _{in} [dB(A)]	L _w A _{in} [dB(A)]	L _w A _{out} [dB(A)]	FEI
1	4 490	862	203	1.5	0.22	63.8	71.8	78.0	0.89
2	4 490	761	369	1.6	0.24	65.9	73.9	79.5	1.18
3	4 490	609	559	1.7	0.25	68.6	76.6	81.6	1.37
4	4 490	304	778	1.5	0.22	71.3	79.3	84.7	1.46
5	4 490	152	821	1.3	0.19	71.2	79.2	84.8	1.39
6	3 500	672	123	0.8	0.10	58.4	66.4	72.6	1.19
7	3 500	593	224	0.8	0.11	60.4	68.4	74.1	1.48
8	3 500	474	340	0.8	0.12	63.2	71.2	76.2	1.69
9	3 500	237	473	0.8	0.10	65.9	73.9	79.3	1.84
10	3 500	119	499	0.7	0.09	65.8	73.8	79.4	1.80
11	2 100	403	44	0.3	0.02	48.1	56.1	61.5	2.71
12	2 100	356	81	0.3	0.02	49.4	57.4	63.0	2.96
13	2 100	285	122	0.3	0.03	52.1	60.1	65.1	3.14
14	2 100	142	170	0.3	0.02	54.8	62.8	68.2	3.47
15	2 100	71	180	0.2	0.02	54.7	62.7	68.3	3.59

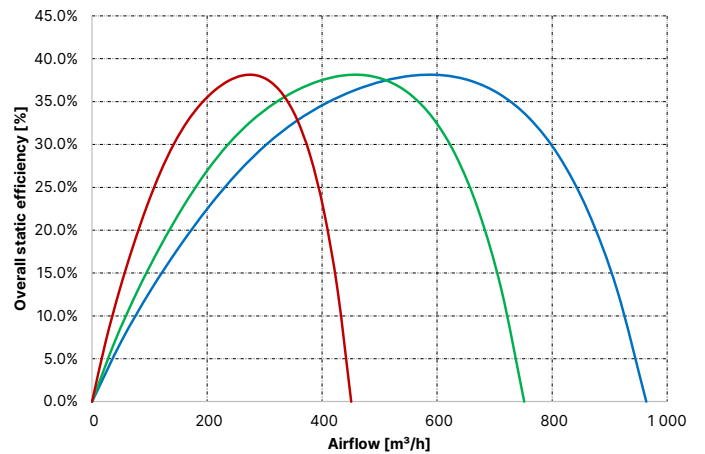
dP = f(V)



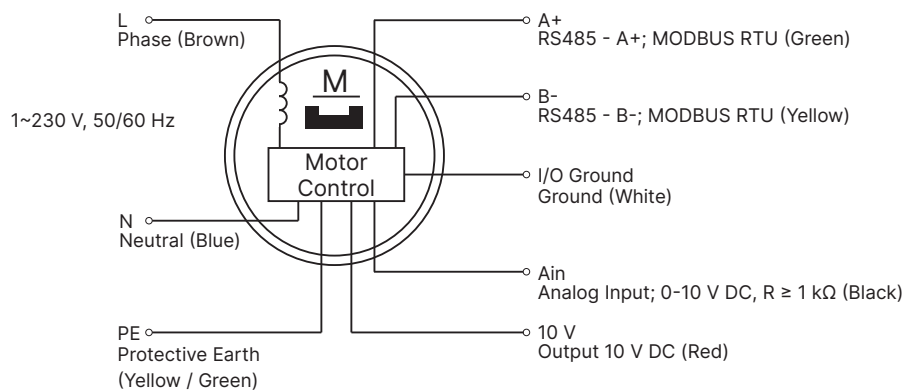
EPC = f(V)



$\eta_{es} = f(V)$



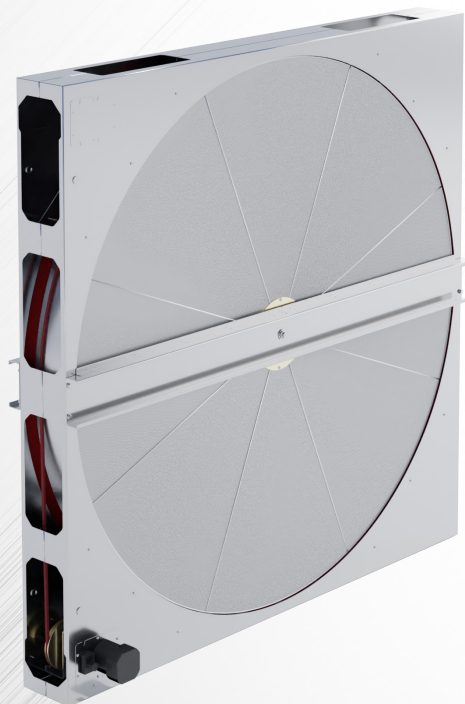
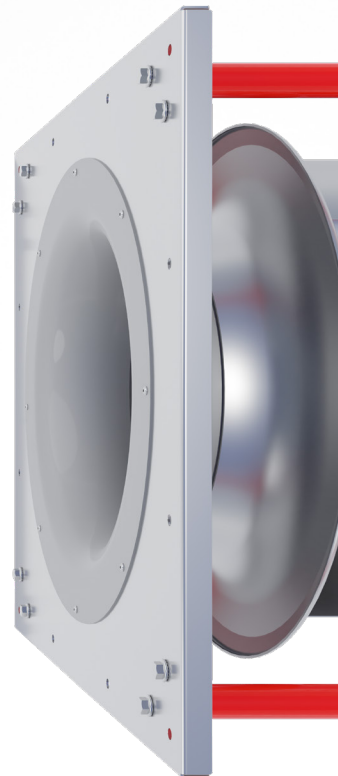
Power supply and control connections



*In the interest of continuous product improvement in the field of design, performance and reliability, Swiss Rotors Company reserves the right to make changes to this specification without prior notice.

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