

## FAN IN SOUND ABSORBING BOX

### SAF-3 | SAF-5 | SAF-7 | SAF-9

SAF fans are TEV fans<sup>\*)</sup> that are built in an additional sound absorbing box with inspection cover. It concerns central extraction fans that are equipped with a lightweight aluminium impeller. This makes them suitable to exhaust gases, volatile fumes and dust.

Matched inlet and outlet areas, together with optimized impellers, ensure an even airflow, a high extraction capacity and a low noise level.

SAF fans are designed with materials that can withstand most weather types, making them highly suitable for both indoor and outdoor use.

<sup>\*)</sup> Refer to separate product data sheet

### APPLICATIONS

The SAF fan is intended to be used for the following applications:



- MIG-MAG/GMAW welding
- TIG welding
- FCAW welding
- stick/MMAW welding
- stainless steel welding
- grinding
- polishing
- finishing

### SPECIFICATIONS

(also refer to the table on page 2 and the charts on page 3)

#### ◆ Physical dimensions and properties

Material (fan + housing)	powder coated galvanized sheet metal
Colour:	
• housing	grey (RAL 7011)
• fan	grey (RAL 7011)
• motor	black (RAL 9005)

#### ◆ Performance

Fan type	radial
Speed of revolutions	2800 rpm
Noise reduction of sound absorbing box <sup>1</sup>	approx. 10 dB(A)
Design conditions	20°C (41°F) at sea level

#### ◆ Electrical data

Efficiency level	IE3
Insulation class	F with PTC
Protection class:	
• motor	• IP 33
• housing	• IP 55
Max. start/stops per hour	30



#### ◆ Ambient conditions

Process temperature:	
• min.	• -20°C (-4°F) <sup>*)</sup>
• nom.	• +20°C (41°F)
• max.	• +80°C (176°F)

<sup>\*)</sup> SAF fans can operate in temperatures below -20°C (-4°F) if you connect it to a Plymovent VFD (frequency inverter). Contact your Plymovent distributor for more information.

Max. relative humidity	rain resistant
Suitable for outdoor use	yes
Storage conditions	• 5-45°C (41-113°F) • relative humidity max. 80%

#### ◆ Product combinations

Welding fume extraction systems with filter unit
Welding fume extraction systems without filter unit
Vehicle exhaust systems
Control equipment

#### ◆ Options and accessories (recommended)

Duct silencer	SAS range; refer to the table on page 2
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#### ◆ Scope of supply

Extraction fan in sound absorbing box | Cable gland (2) | Square key 8 mm

#### ◆ Logistics data

Harmonized Tariff Code	84145925
Max. number/pallet	1

### APPROVALS/CERTIFICATES

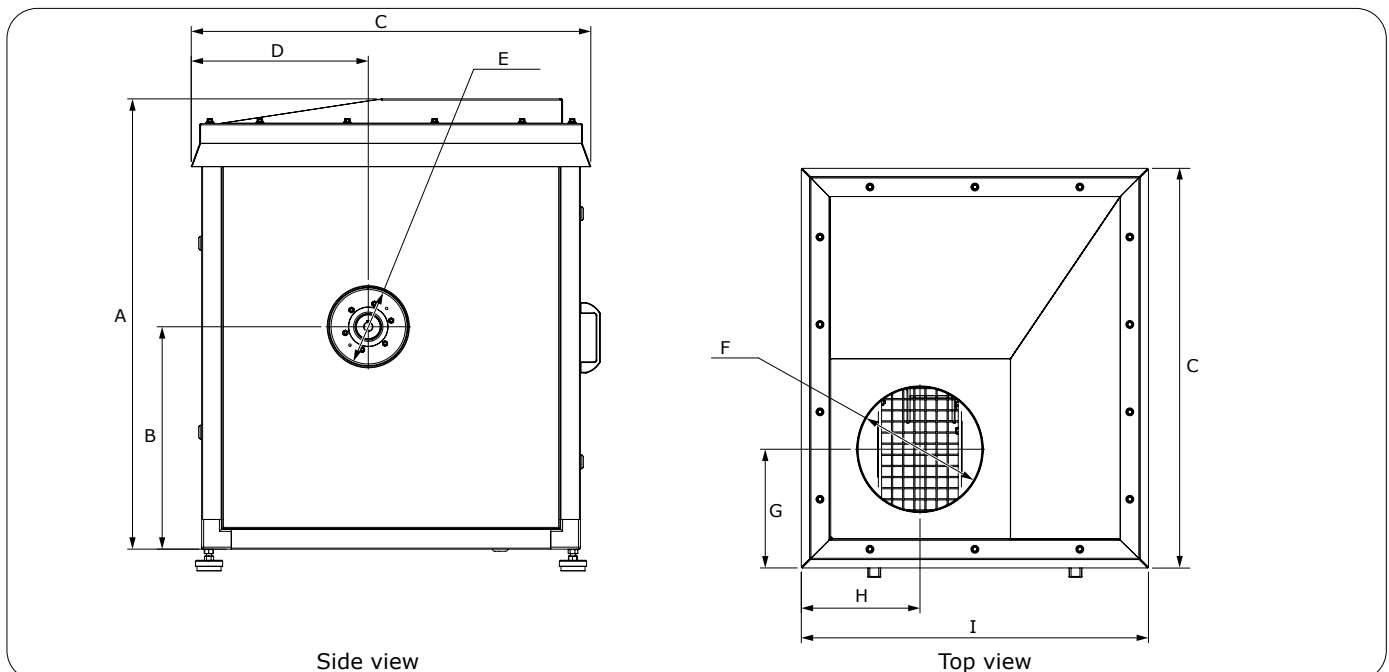
	Compliance with CE & UKCA directives
	Directive 2011/65/EC (RoHS) valid as of 8 June 2011
	Certified motor

1. With additional duct silencer

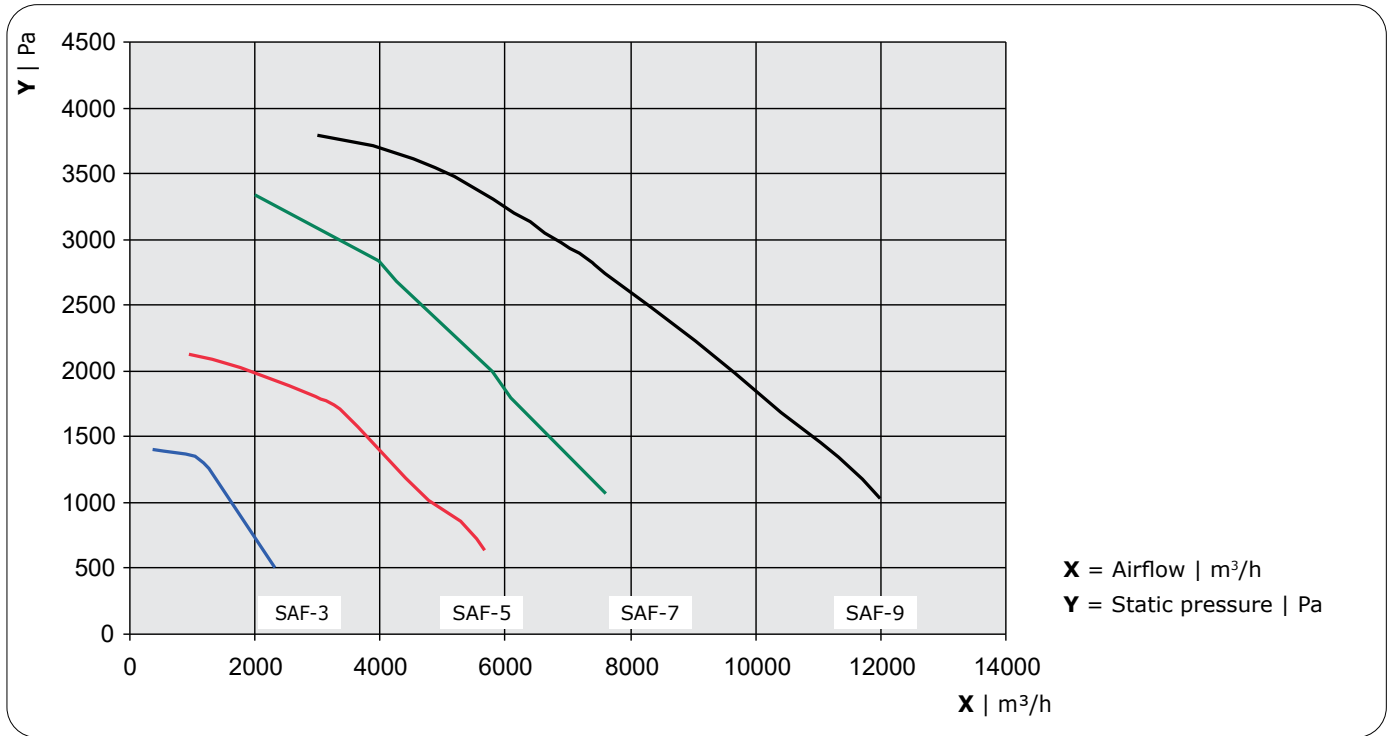
**REMAINING SPECIFICATIONS**

Type	SAF-3	SAF-5	SAF-7	SAF-9				
Article no.	0000302729	0000302730	0000302731	0000302732				
<b>◆ Physical dimensions and properties</b>								
Dimensions (ref. images below)	mm	inch	mm	inch	mm	inch	mm	inch
A	911	35 <sup>7</sup> / <sub>8</sub>	1092	43	1277	50 <sup>1</sup> / <sub>4</sub>	1389	54 <sup>5</sup> / <sub>8</sub>
B	450	17 <sup>3</sup> / <sub>4</sub>	539	21 <sup>1</sup> / <sub>4</sub>	698	27 <sup>1</sup> / <sub>2</sub>	716	28 <sup>1</sup> / <sub>4</sub>
C	808	31 <sup>3</sup> / <sub>4</sub>	988	38 <sup>7</sup> / <sub>8</sub>	1192	46 <sup>7</sup> / <sub>8</sub>	1338	52 <sup>5</sup> / <sub>8</sub>
D	358	14 <sup>1</sup> / <sub>8</sub>	401	15 <sup>3</sup> / <sub>4</sub>	493	19 <sup>3</sup> / <sub>8</sub>	538	21 <sup>1</sup> / <sub>8</sub>
E	Ø 160	Ø 6 <sup>1</sup> / <sub>4</sub>	Ø 200	Ø 7 <sup>7</sup> / <sub>8</sub>	Ø 250	Ø 9 <sup>7</sup> / <sub>8</sub>	Ø 315	Ø 12 <sup>3</sup> / <sub>8</sub>
F	Ø 250	Ø 9 <sup>7</sup> / <sub>8</sub>	Ø 315	Ø 12 <sup>3</sup> / <sub>8</sub>	Ø 400	Ø 15 <sup>3</sup> / <sub>4</sub>	Ø 500	Ø 19 <sup>5</sup> / <sub>8</sub>
G	240	9 <sup>1</sup> / <sub>2</sub>	312,5	12 <sup>1</sup> / <sub>4</sub>	362,5	14 <sup>1</sup> / <sub>4</sub>	417,5	16 <sup>3</sup> / <sub>8</sub>
H	240	9 <sup>1</sup> / <sub>2</sub>	312,5	12 <sup>1</sup> / <sub>4</sub>	362,5	14 <sup>1</sup> / <sub>4</sub>	417,5	16 <sup>3</sup> / <sub>8</sub>
I	702	27 <sup>5</sup> / <sub>8</sub>	854	33 <sup>5</sup> / <sub>8</sub>	961	37 <sup>7</sup> / <sub>8</sub>	1071	42 <sup>1</sup> / <sub>8</sub>
Weight (net)	111 kg (245 lbs)		165 kg (364 lbs)		239 kg (527 lbs)		311 kg (686 lbs)	
<b>◆ Performance</b>								
Noise level *)**)	60 dB(A)		64 dB(A)		63 dB(A)		71 dB(A)	
<b>◆ Electrical data</b>								
Connection voltage	230-400V/3~/50Hz		230-400V/3~/50Hz		230-400V/3~/50Hz		400-690V/3~/50Hz	
Power	0,75 kW		2,2 kW		4 kW		7,5 kW	
Nominal current	3,02 A		7,98 A		13,32 A		-	
230 V	1,7 A		4,61 A		7,69 A		14,1 A	
400 V	-		-		-		8,2 A	
690 V	-		-		-		-	
<b>◆ Options and accessories</b>								
Duct silencer (recommended)	- SAS-250 straight - SAS-250 elbow		- SAS-315 straight - SAS-315 elbow		- SAS-400 straight - SAS-400 elbow		- SAS-500 straight - SAS-500 elbow	
<b>◆ Logistics data</b>								
Gross weight (incl. pallet)	126 kg (278 lbs)		180 kg (397 lbs)		259 kg (571 lbs)		331 kg (730 lbs)	
Packing dimensions (incl. pallet)	750 x 850 x 1140 mm (29 <sup>1</sup> / <sub>2</sub> x 33 <sup>1</sup> / <sub>2</sub> x 45 in.)		1000 x 1200 x 1340 mm (39 <sup>1</sup> / <sub>2</sub> x 47 x 53 in.)		1300 x 1600 x 1600 mm (51 x 63 x 63 in.)		1300 x 1600 x 1670 mm (51 x 63 x 65 <sup>1</sup> / <sub>2</sub> in.)	
*) According to ISO 3746   **) Noise level data of SAF fans with additional duct silencer								

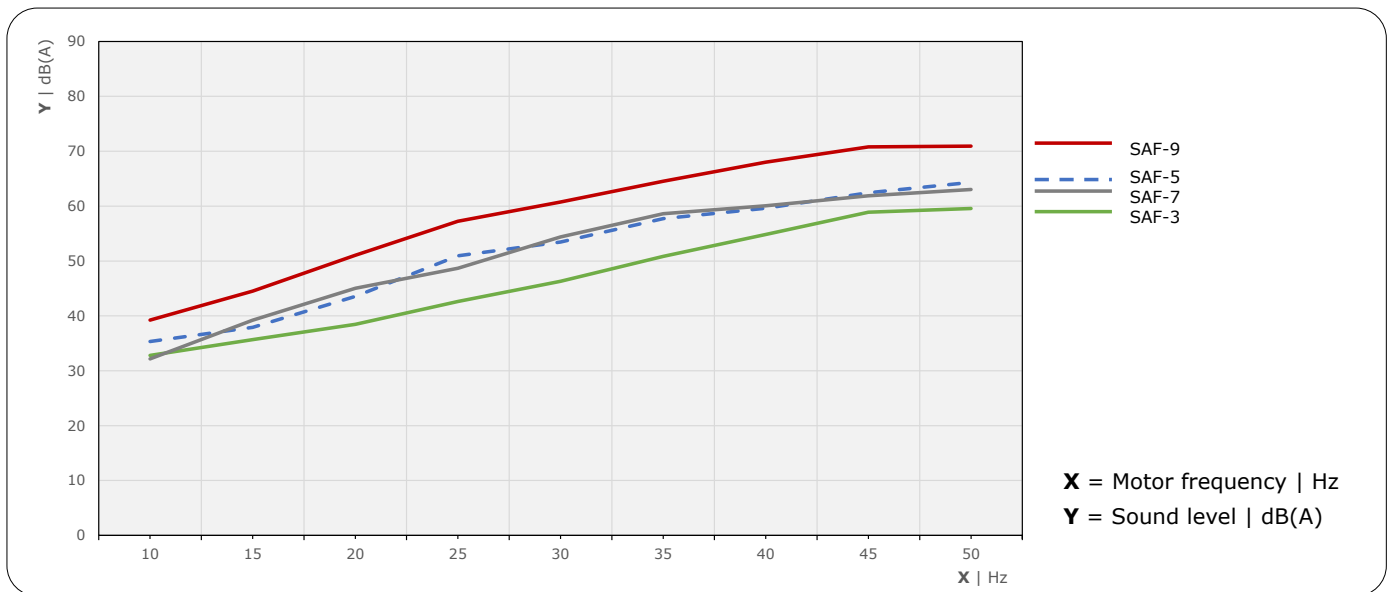
**DIMENSIONS** (ref. table above)



**FAN CURVES**



**NOISE LEVEL**



Test data based on SAF fans with additional duct silencer. Plymovent highly recommends the use of a duct silencer.

**Application restrictions**

Do **not** use the product in combination with a filter for the following applications or in the following circumstances: polishing applications in combination with grinding, welding or any other application that generate sparks (fibres from polishing or abrasive flap disks are highly flammable and pose a high risk of filter fires when exposed to sparks) | aluminium laser cutting | oil mist | heavy oil mist in welding fume | arc-air gouging | extraction of aggressive fumes and gases (e.g. from acids, from alkaline, from soldering paste containing lithium) | extraction of hot gases (more than 70°C/158°F continuously) | grinding aluminum and magnesium | flame spraying | extraction of cement, saw dust, wood dust etc. | sucking cigarettes, cigars, oiled tissues and other burning particles, objects and acids | explosive environments or explosive substances/gases



Product type	<b>Fan in sound absorbing box</b>
Article no.	refer to table on page 2
Product category	central fans
Version	18APR2024/B

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