



II 2 G c Ex e II T3

### Application

SPARK-S/Ex fans have been launched for application in areas of explosion hazard, where explosive atmosphere (i.e. mixture of flammable substances in form of gas and vapour with the air) can occur. They are designed for conveying dry air of dustiness not exceeding  $0,3 \text{ g/m}^3$ , without viscous, aggressive contamination.

SPARK-S/Ex series ranges in eight sizes of motor rates from 0,37 kW up to 7,5 kW and of maximum volume flow  $27500 \text{ m}^3/\text{h}$ .

### Structure

Bent steel profiles constitute a unique frame structure of the SPARK-S/Ex fan and provide a streamline and at the same robust construction.

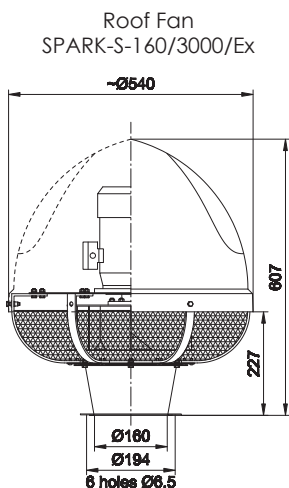
The motor is of Ex execution and the radial impeller is directly installed on the motor shaft.

The impeller is statically and dynamically balanced (according to ISO 14694:2003+AMD1:2010, class G 2,5). The lower framework is covered with wire-mesh (the air is expelled through it). Upper part of the fan is protected with a hood of antistatic plastic.

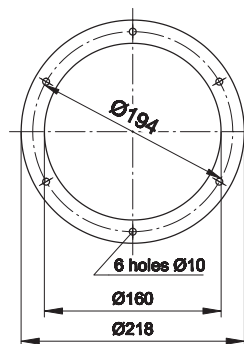
The fan has to be installed on a roof base. It is recommended to apply a TPD-N or TPDC-N sound absorbing roof base, of size adapted to the fan.



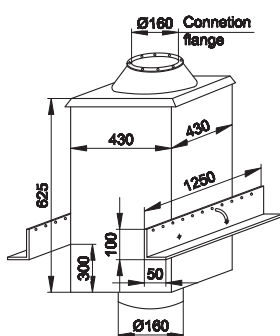
**SPARK-S-160/Ex**



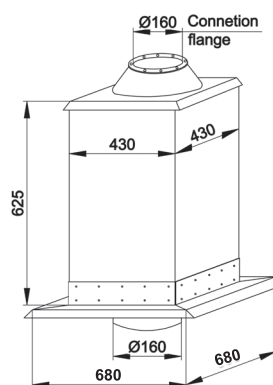
Connection flange



Sound-absorbing roof base  
TPD-160-N



Sound-absorbing roof base  
TPDC-160-N

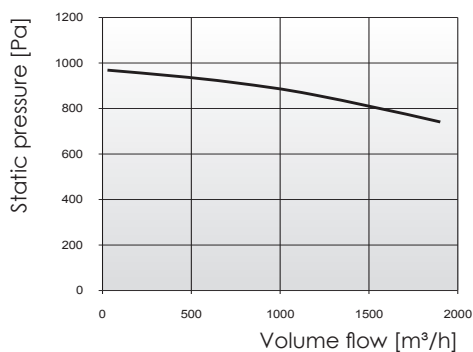


**Technical data**

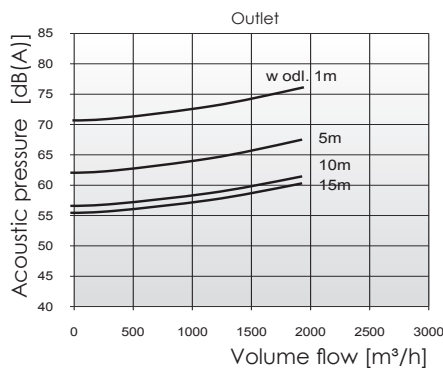
Type	Part No.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Maximum volume flow [m <sup>3</sup> /h]	Maximum underpressure [Pa]	Weight [kg]
SPARK-S-160/3000/Ex	808W71	3000	3x400	0,55	54	1900	970	19
Roof base TPD-160-N	843P40	-	-	-	-	-	-	28
Roof base TPDC-160-N	843P50	-	-	-	-	-	-	30

**SPARK-S-160/3000/Ex**

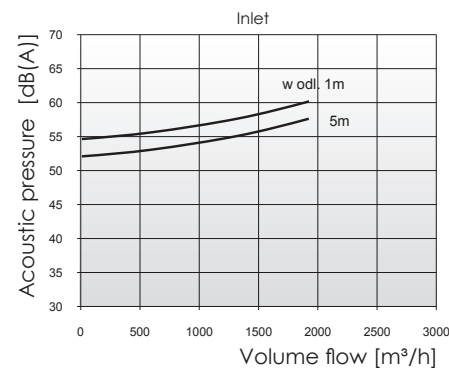
Flow chart



Acoustic characteristic



Acoustic characteristic



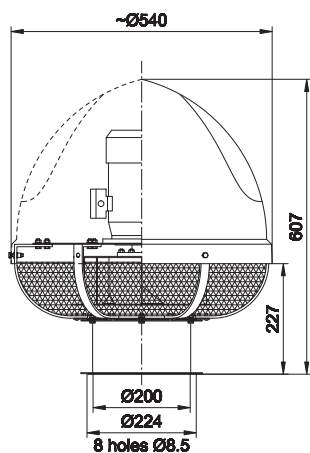
Caution:

These above characteristics have been carried out for the fans installed on a TPD-N or TDPC-N sound absorbing roof base. In order to reduce the noise level additionally a TK silencer can be suspended under the TPD-N or TPDC-N roof base.

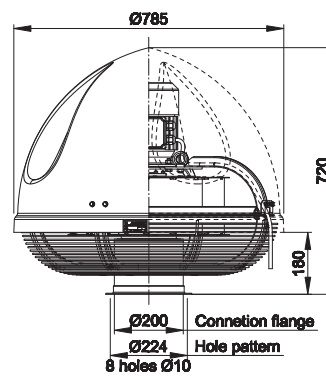


**SPARK-S-200/Ex**

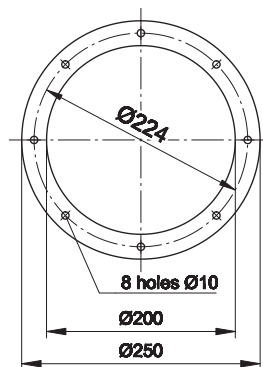
Roof Fan  
SPARK-S-200/3000/Ex



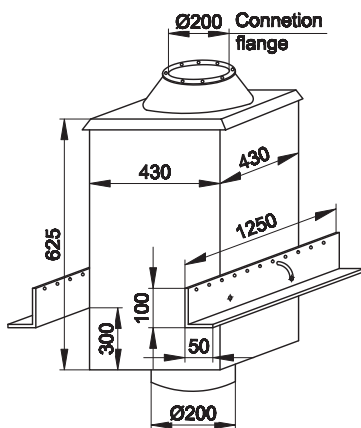
Roof Fan  
SPARK-S-200/1500/Ex]



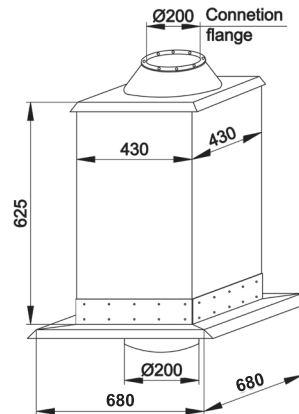
Connection flange



Sound-absorbing roof base  
TPD-200-N



Sound-absorbing roof base  
TPDC-200-N



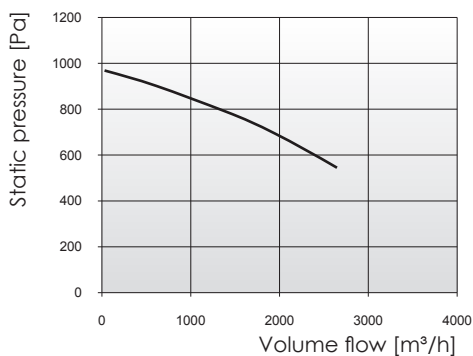
**Technical data**

Type	Part No.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Maximum volume flow [m³/h]	Maximum underpressure [Pa]	Weight [kg]
SPARK-S-200/3000/Ex	808W72	3000	3x400	0,55	54	2650	970	20
SPARK-S-200/1500/Ex	808W73	1500	3x400	0,55	54	1870	740	39
Roof base TPD-200-N	843P41	-	-	-	-	-	-	28
Roof base TPDC-200-N	843P51	-	-	-	-	-	-	30

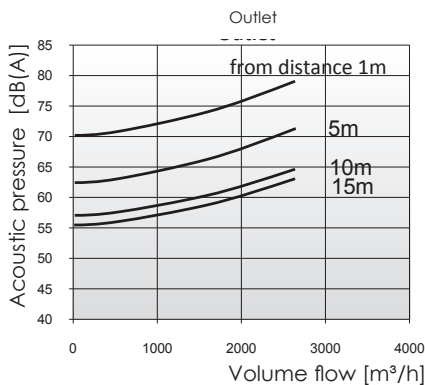


**SPARK-S-200/3000/Ex**

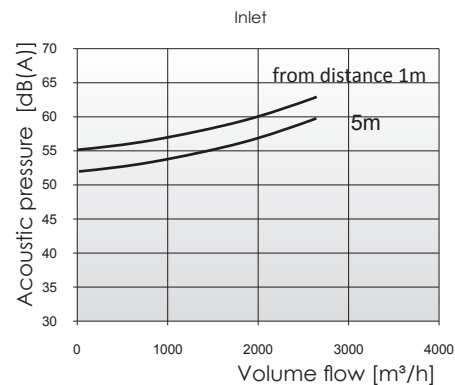
Flow chart



Acoustic characteristic

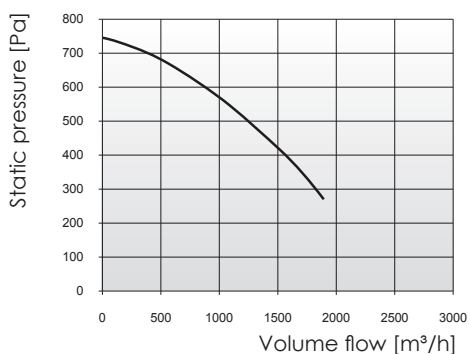


Acoustic characteristic

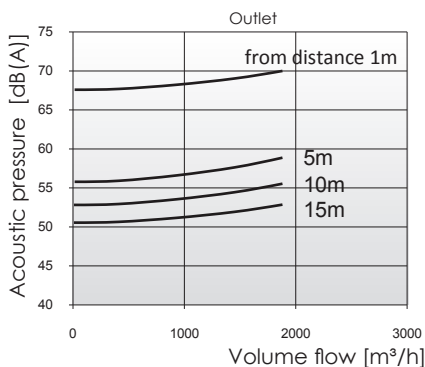


**SPARK-S-200/1500/Ex**

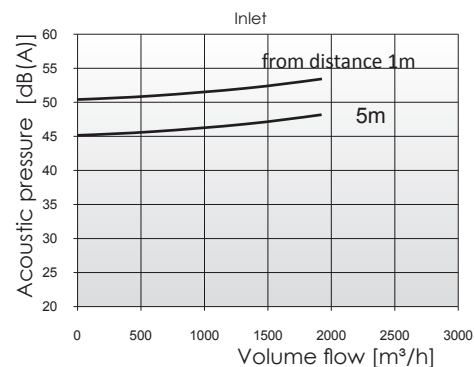
Flow chart



Acoustic characteristic



Acoustic characteristic

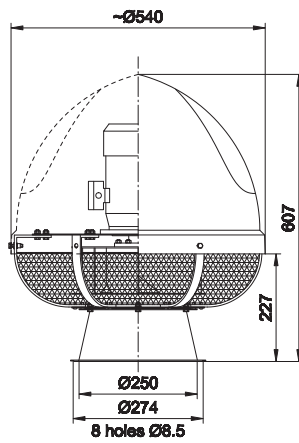


Caution:  
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 In order to reduce the noise level additionally a TK silencer can be suspended under the TPD-N or TPDC-N roof base.

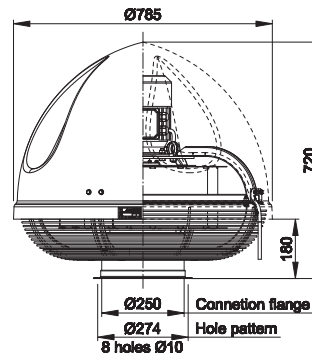


**SPARK-S-250/Ex**

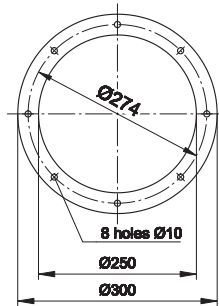
Roof Fan  
SPARK-S-250/3000/Ex



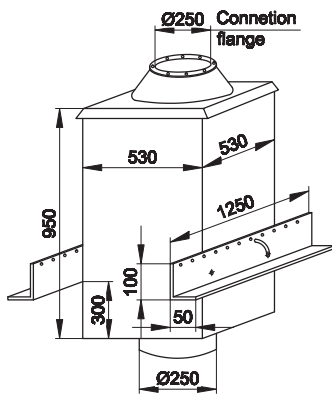
Roof Fan  
SPARK-S-250/1500/Ex



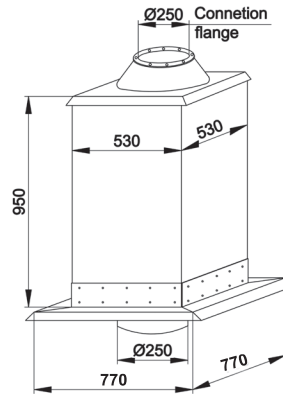
Connection flange



Sound-absorbing roof base  
TPD-250-N



Sound-absorbing roof base  
TPDC-250-N



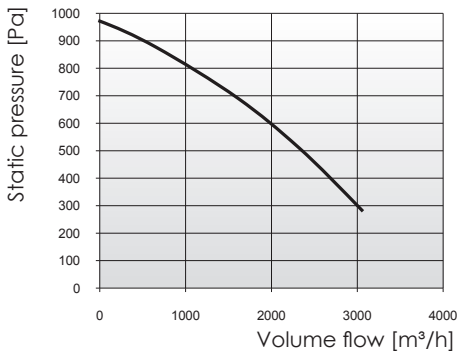
**Technical data**

Type	Part No.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Maximum volume flow [m³/h]	Maximum underpressure [Pa]	Weight [kg]
SPARK-S-250/3000/Ex	808W74	3000	3x400	0,55	54	3000	970	20
SPARK-S-250/1500/Ex	808W75	1500	3x400	1,1	54	3130	820	45
Roof base TPD-250-N	843P42	-	-	-	-	-	-	41
Roof base TPDC-250-N	843P52	-	-	-	-	-	-	46

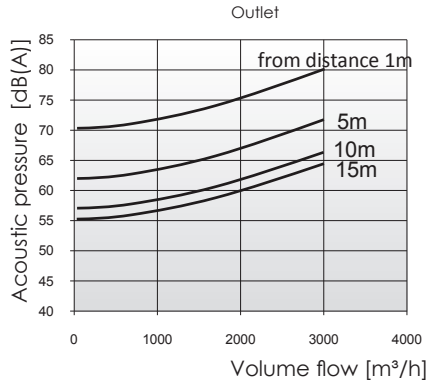


**SPARK-S-250/3000/Ex**

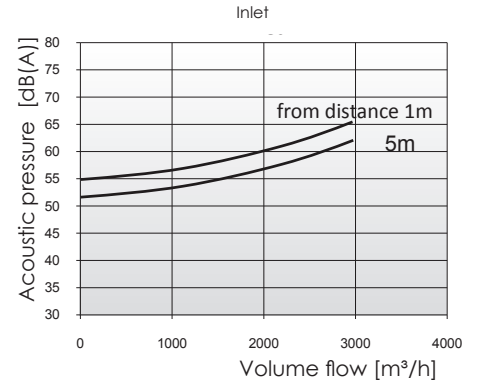
Flow chart



Acoustic characteristic

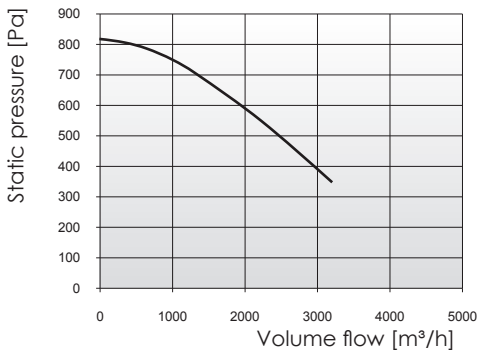


Acoustic characteristic

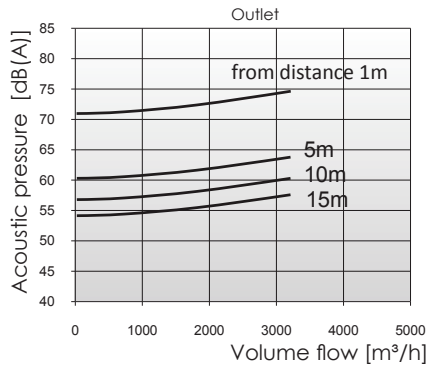


**SPARK-S-250/1500/Ex**

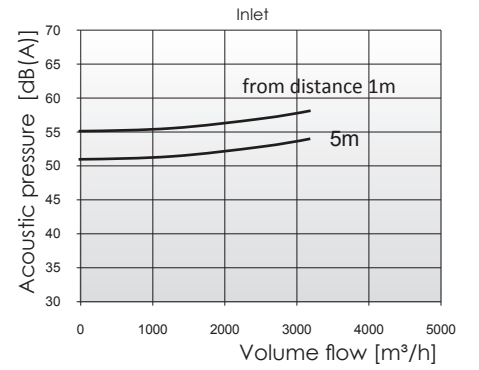
Flow chart



Acoustic characteristic



Acoustic characteristic



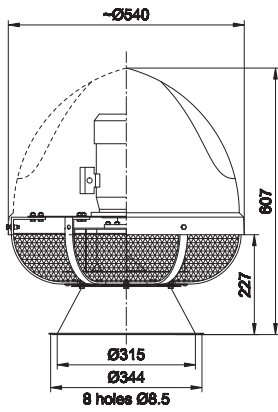
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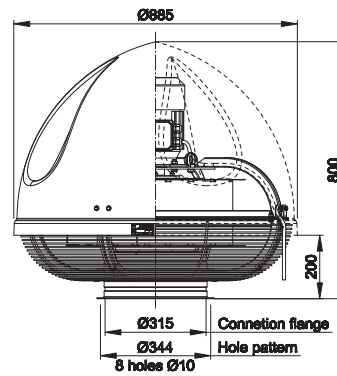


**SPARK-S-315/Ex**

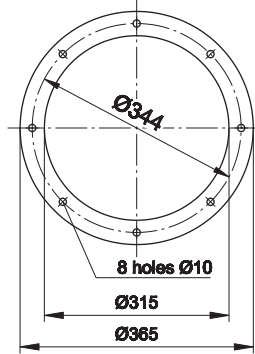
Roof Fan  
SPARK-S-315/3000/Ex



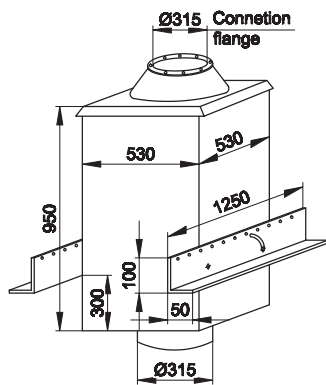
Roof Fan  
SPARK-S-315/1500/Ex



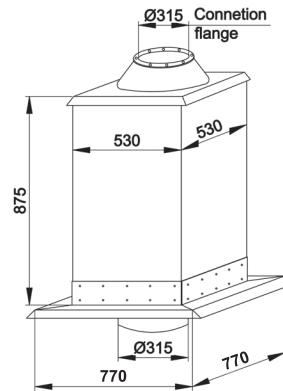
Connection flange



Sound-absorbing roof base  
TPD-315-N



Sound-absorbing roof base  
TPDC-315-N



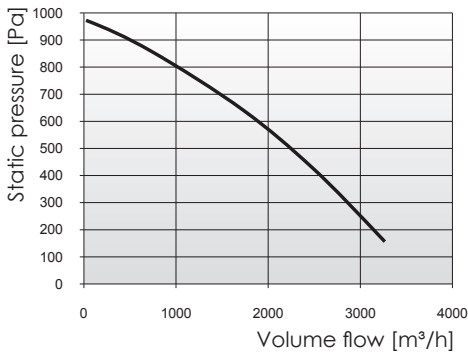
**Technical data**

Type	Part No.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Maximum volume flow [m³/h]	Maximum underpressure [Pa]	Weight [kg]
SPARK-S-315/3000/Ex	808W76	3000	3x400	0,55	54	3170	970	21
SPARK-S-315/1500/Ex	808W77	1500	3x400	1,5	54	5020	980	61
Roof base TPD-315-N	843P43	-	-	-	-	-	-	41
Roof base TPDC-315-N	843P53	-	-	-	-	-	-	46



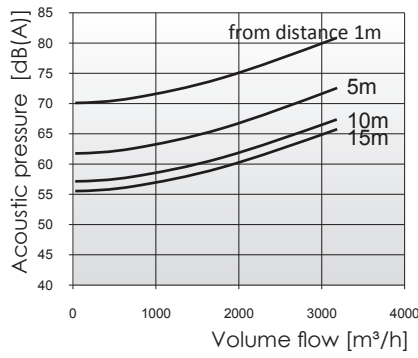
**SPARK-S-315/3000/Ex**

Flow chart



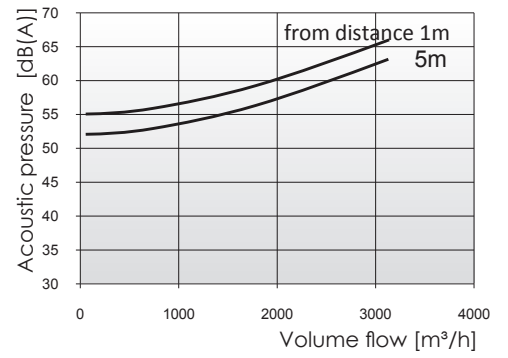
Acoustic characteristic

Outlet



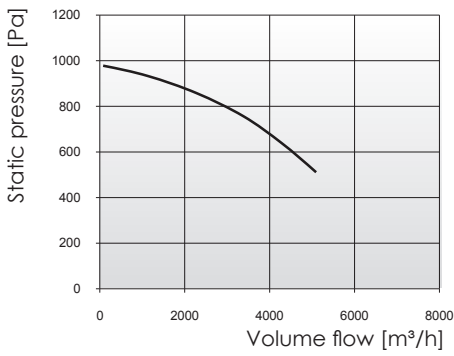
Acoustic characteristic

Inlet



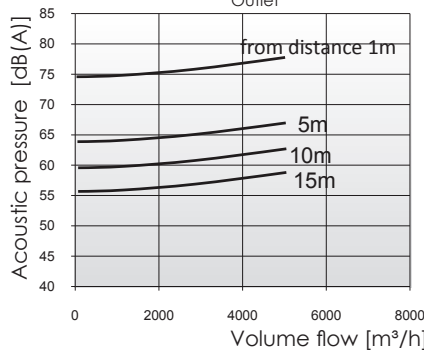
**SPARK-S-315/1500/Ex**

Flow chart



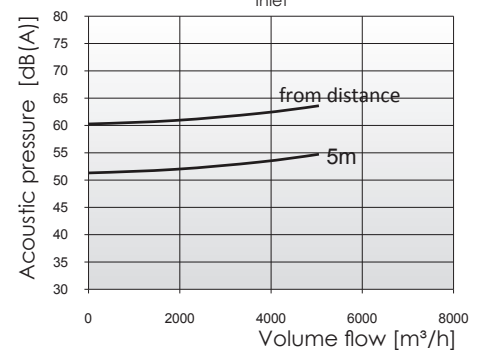
Acoustic characteristic

Outlet



Acoustic characteristic

Inlet



Caution:

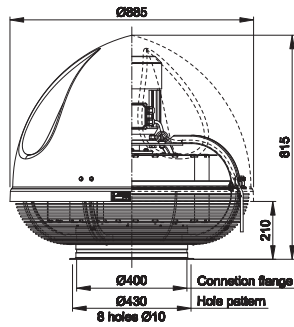
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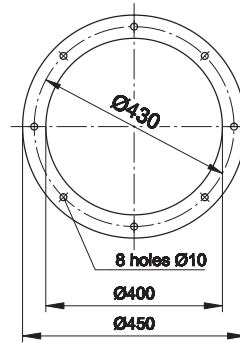


## SPARK-S-400/Ex

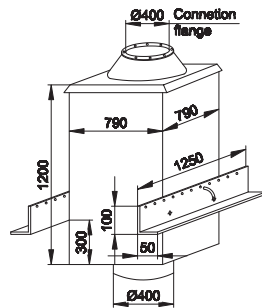
Roof Fan  
SPARK-S-400/1500/Ex  
SPARK-S-400/1000/Ex



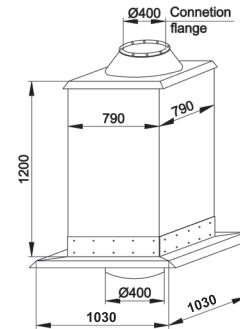
Connection flange



Sound-absorbing roof base  
TPD-400-N



Sound-absorbing roof base  
TPDC-400-N

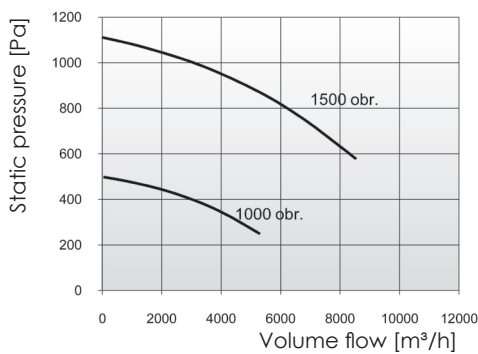


## Technical data

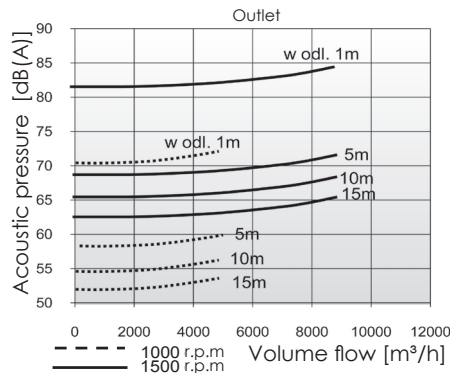
Type	Part No.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Maximum volume flow [m <sup>3</sup> /h]	Maximum underpressure [Pa]	Weight [kg]
SPARK-S-400/1500/Ex	808W78	1500	3x400	3	54	8800	1120	72
SPARK-S-400/1000/Ex	808W79	1000	3x400	0,75	54	5590	490	62
Roof base TPD-400-N	843P44	-	-	-	-	-	-	75
Roof base TPDC-400-N	843P54	-	-	-	-	-	-	84

## SPARK-400/1500/Ex SPARK-400/1000/Ex

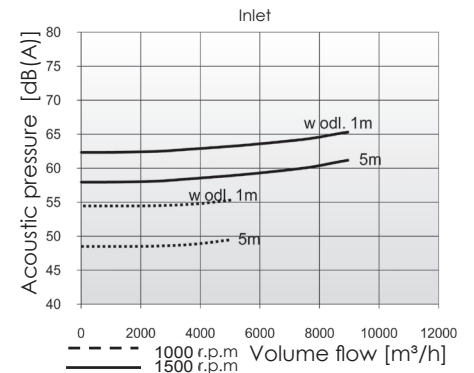
Flow chart



Acoustic characteristic



Acoustic characteristic



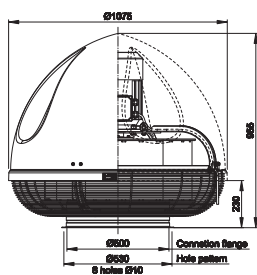
Caution:

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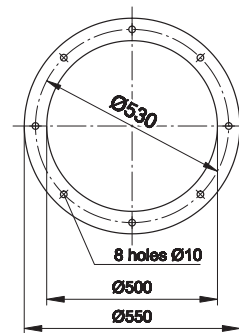


**SPARK-S-500/Ex**

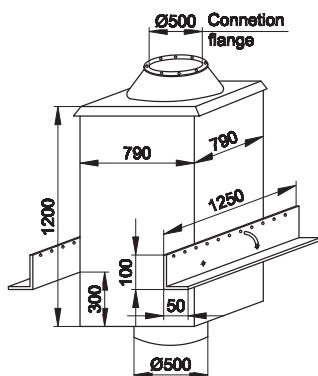
Roof Fan  
SPARK-S-500/1000/Ex



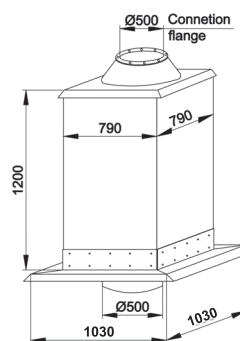
Connection flange



Sound-absorbing roof base  
TPD-500-N



Sound-absorbing roof base  
TPDC-500-N

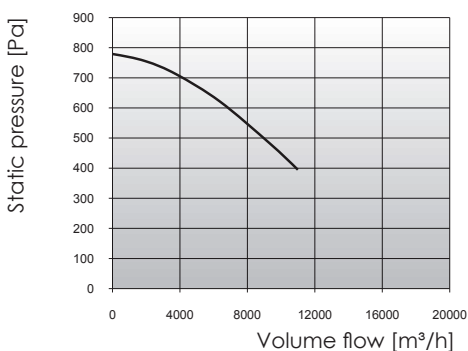


**Technical data**

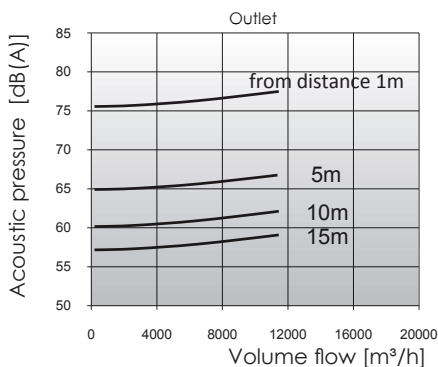
Type	Part No.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Maximum volume flow [m <sup>3</sup> /h]	Maximum underpressure [Pa]	Weight [kg]
SPARK-S-500/1000/Ex	808W80	1000	3x400	2,2	54	11055	789	104
Roof base TPD-500-N	843P45	-	-	-	-	-	-	75
Roof base TPDC-500-N	843P55	-	-	-	-	-	-	84

**SPARK-500/1000/Ex**

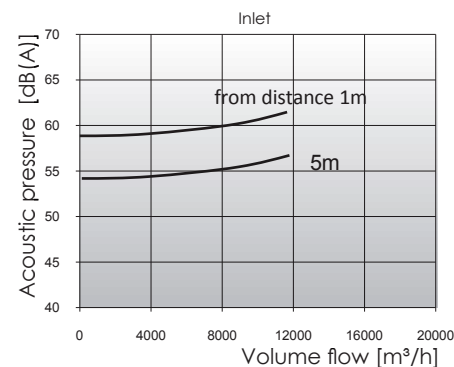
Flow chart



Acoustic characteristic



Acoustic characteristic

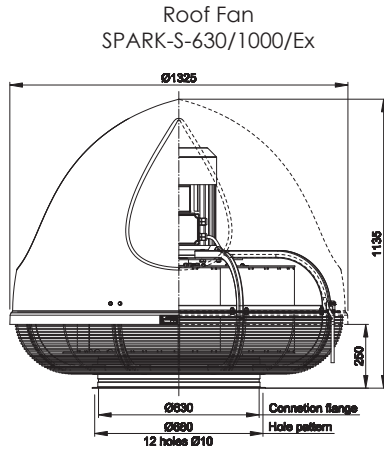


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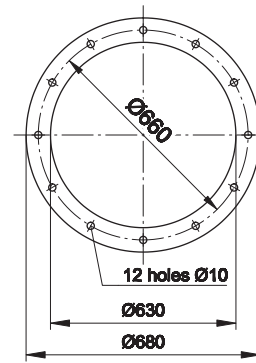
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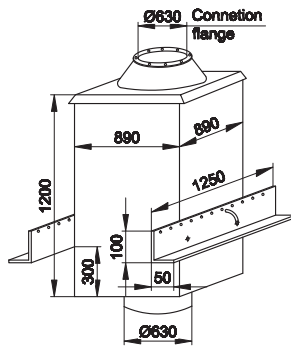
## SPARK-S-630/Ex



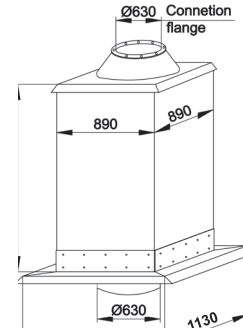
Connection flange



Sound-absorbing roof base  
TPD-630-N



Sound-absorbing roof base  
TPDC-630-N

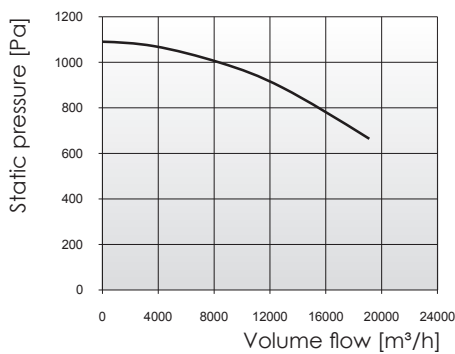


## Technical data

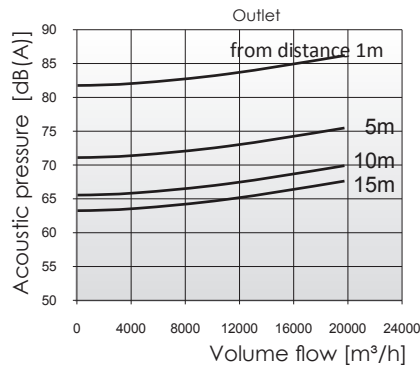
Type	Part No.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Maximum volume flow [m <sup>3</sup> /h]	Maximum underpressure [Pa]	Weight [kg]
SPARK-S-630/1000/Ex	808W81	1000	3x400	5,5	54	19920	1110	178
Roof base TPD-630-N	843P46	-	-	-	-	-	-	88
Roof base TPDC-630-N	843P56	-	-	-	-	-	-	100

## SPARK-630/1000/Ex

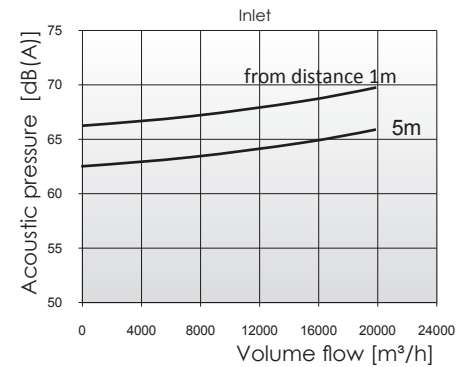
Flow chart



Acoustic characteristic



Acoustic characteristic

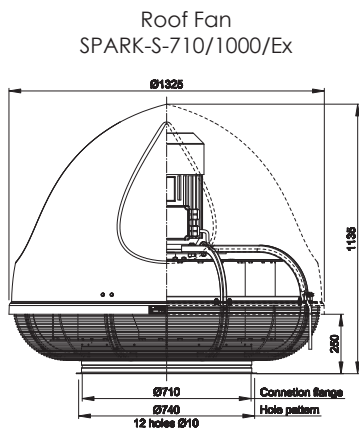


Caution:

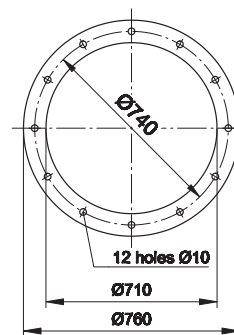
These above characteristics have been carried out for the fans installed on a TPD-N or TDPC-N sound absorbing roof base. In order to reduce the noise level additionally a TK silencer can be suspended under the TPD-N or TPDC-N roof base.



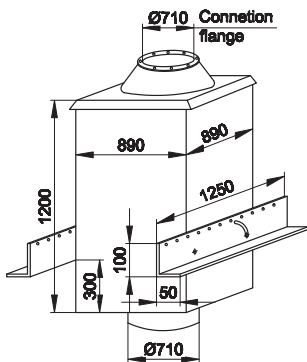
### SPARK-S-710/Ex



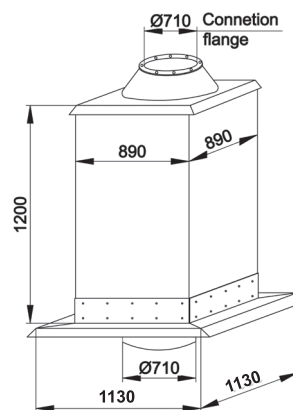
Connection flange



Sound-absorbing roof base  
TPD-710-N



Sound-absorbing roof base  
TPDC-710-N

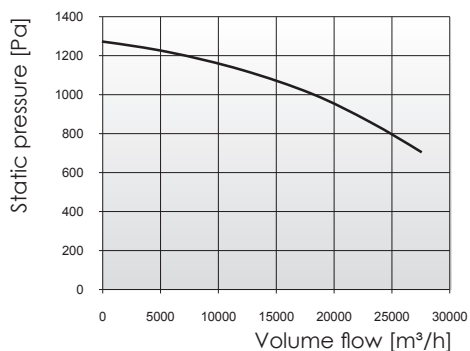


## Technical data

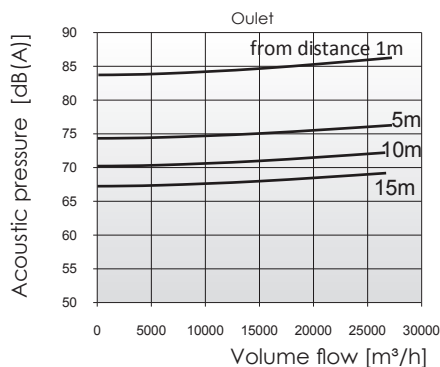
Type	Part No.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Maximum volume flow [m <sup>3</sup> /h]	Maximum underpressure [Pa]	Weight [kg]
SPARK-S-710/1000/Ex	808W82	1000	3x400	7,5	54	27580	1260	211
Roof base TPD-710-N	843P47	-	-	-	-	-	-	88
Roof base TPDC-710-N	843P57	-	-	-	-	-	-	100

### SPARK-710/1000/Ex

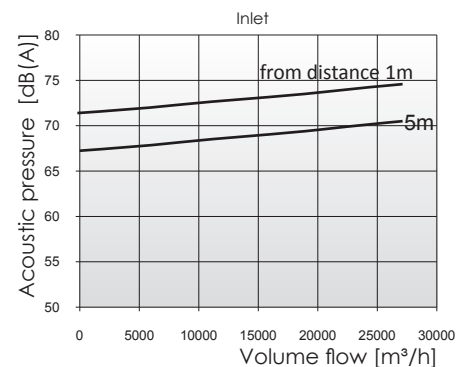
Flow chart



Acoustic characteristic



Acoustic characteristic



**Caution:**

These above characteristics have been carried out for the fans installed on a TPD-N or TDPC-N sound absorbing roof base. In order to reduce the noise level additionally a TK silencer can be suspended under the TPD-N or TPDC-N roof base.