

## SPARK-S/Ex – roof fan



 II 2 G c Ex e II T3

### Purpose

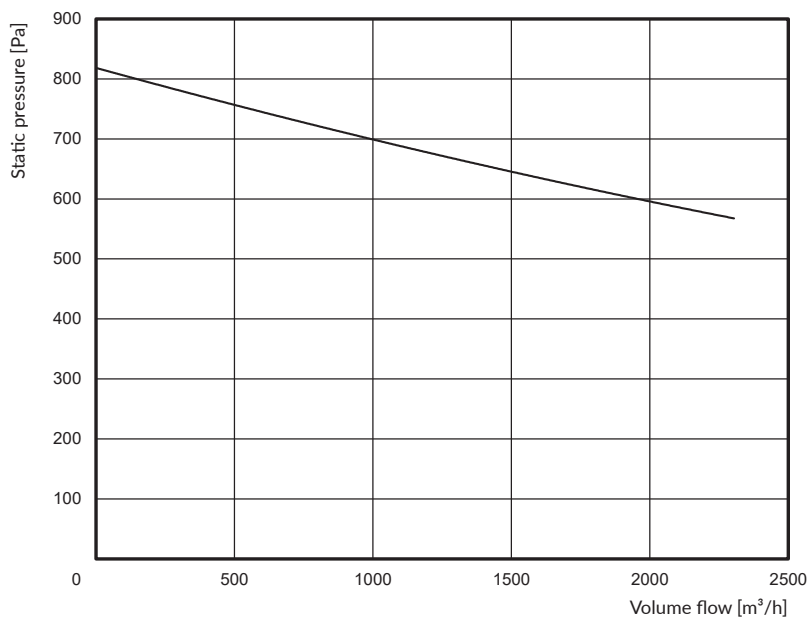
SPARK-S/Ex fans have been developed for application in the areas of explosion risk, where explosive atmosphere (i.e. mixture of flammable compounds in the form of gas and vapour with the air) can occur. Application: dry air, of dustiness not exceeding 0,3 m<sup>3</sup>, without viscous, aggressive impurities. SPARK-S/Ex series of fans consists counts eight sizes of motor rates ranging from 0,37 kW up to 7,5 kW and of maximum volume flow 27 500 m<sup>3</sup>/h.

### Structure

As unique solution among the existing examples on the market, SPARK-S/Ex fans features the original construction of bent steel profiles, providing a skeleton of aerodynamic, and at the same, very robust properties. Structure: a motor with a radial impeller inside. Whereby, the impeller blades cross-section is inspired by the aircraft wing profile. The impeller is statically and dynamically balanced, according to ISO 14694:2003+AMD1:2010, carrying the class G 2,5. The circumferential surface around the lower skeleton constitutes an openwork structure through which the air is discharged. Whereby, the upper part of the fan is shielded by an antistatic plastic hood. The fan has to be mounted on a roof base. It is recommended to apply a sound absorbing roof base type TPD-N or TPDC-N of adequate size adapted to the given fan.

# SPARK-S/Ex

## SPARK-S-160/Ex

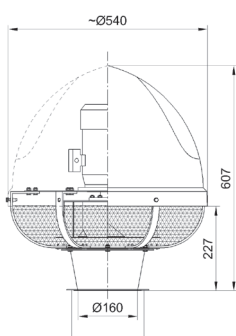


### Technical data

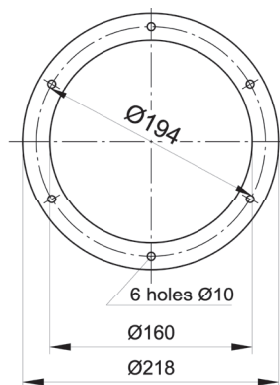
Type	Part no.	Marking	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Acoustic pressure level [dB(A)] from a distance of:					Max. volume flow [m³/h]	Max. vacuum [Pa]	Weight [kg]
							outlet				inlet			
							1m	5m	10m	15m				
SPARK-S-160/3000/Ex	808W71	II2GcExeII T3	3000	3x400	0,55	54	79	70	62	59	71	2300	820	19
Roof base TPD-160-N	843P40	-	-	-	-	-	-	-	-	-	-	-	-	28
Roof base TPDC-160-N	843P50	-	-	-	-	-	-	-	-	-	-	-	-	30

### Dimensions

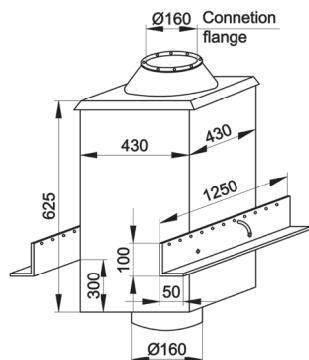
Roof fan  
SPARK-S-160/3000/Ex



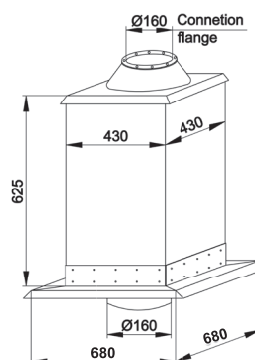
Connection flange



Sound absorbing roof base  
TPD-160-N



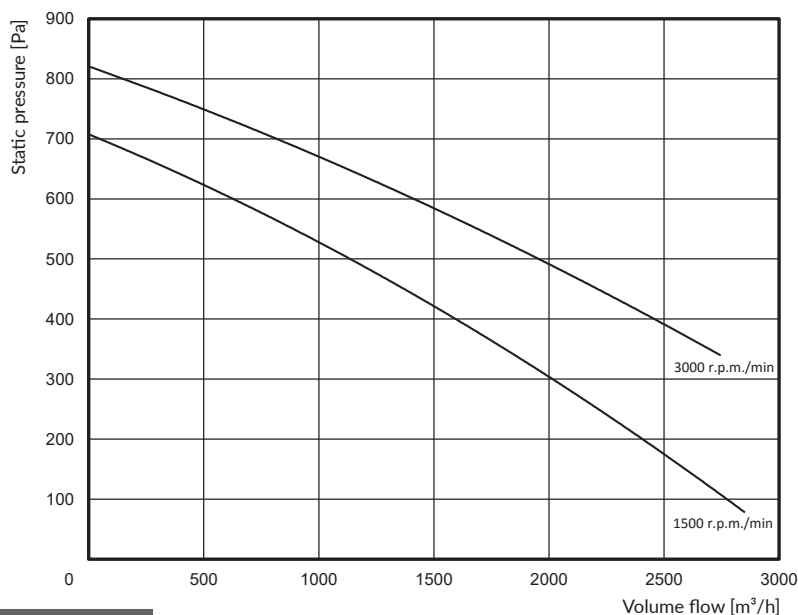
Sound absorbing roof base  
TPDC-160-N



NOTE:  
The above mentioned values of the acoustic pressure level are specified for fans mounted on the sound absorbing roof base TPD-N or TPDC-N. To reduce more the noise level, it is possible to apply a TK silencer suspended under the TPD-N or TPDC-N roof base.

# SPARK-S/Ex

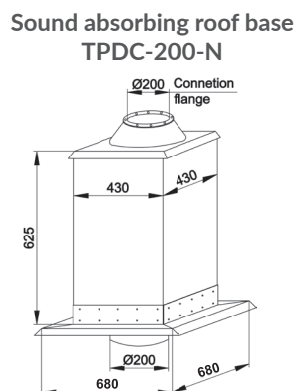
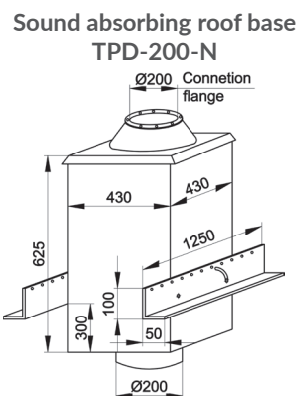
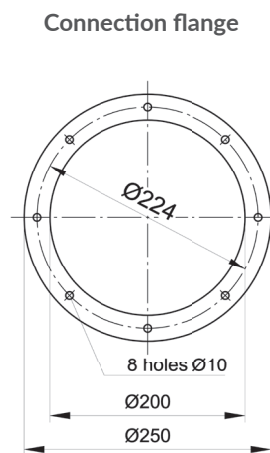
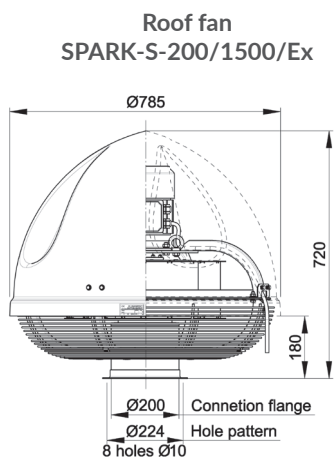
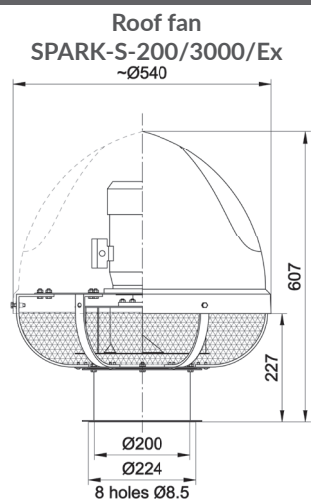
## SPARK-S-200/Ex



## Technical data

Type	Part no.	Marking	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Acoustic pressure level [dB(A)] from a distance of:					Max. volume flow [m³/h]	Max. vacuum [Pa]	Weight [kg]
							outlet				inlet			
							1m	5m	10m	15m				
SPARK-S-200/3000/Ex	808W72	II2GcExeII T3	3000	3x400	0,55	54	79	69	62	59	71	2700	820	20
SPARK-S-200/1500/Ex	808W73	II2GcExeII T3	1500	3x400	0,55	54	74	64	57	54	60	2800	730	39
Roof base TPD-200-N	843P41	-	-	-	-	-	-	-	-	-	-	-	-	28
Roof base TPDC-200-N	843P51	-	-	-	-	-	-	-	-	-	-	-	-	30

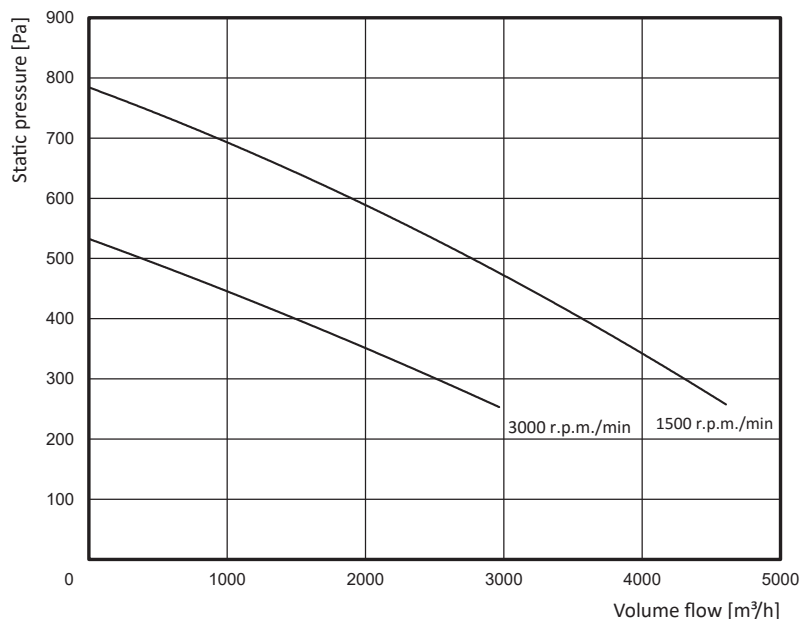
## Dimensions



**NOTE:**  
The above mentioned values of the acoustic pressure level are specified for fans mounted on the sound absorbing roof base TPD-N or TPDC-N. To reduce more the noise level, it is possible to apply a TK silencer suspended under the TPD-N or TPDC-N roof base.

# SPARK-S/Ex

## SPARK-S-250/Ex

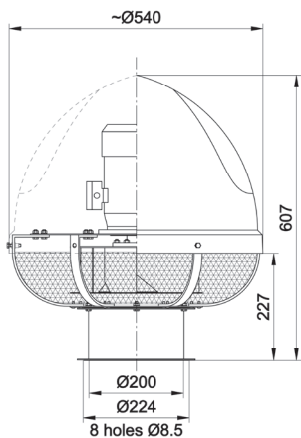


## Technical data

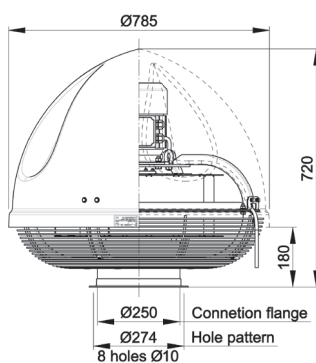
Type	Part no.	Marking	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Acoustic pressure level [dB(A)] from a distance of:					Max. volume flow [m³/h]	Max. vacuum [Pa]	Weight [kg]
							outlet				inlet			
							1m	5m	10m	15m				
SPARK-S-250/3000/Ex	808W74	II2GcExeIIIT3	3000	3x400	0,55	54	80	70	63	60	74	3000	540	20
SPARK-S-250/1500/Ex	808W75	II2GcExeIIIT3	1500	3x400	1,1	54	75	66	58	55	65	4600	800	45
Roof base TPD-250-N	843P42	-	-	-	-	-	-	-	-	-	-	-	-	41
Roof base TPDC-250-N	843P52	-	-	-	-	-	-	-	-	-	-	-	-	46

## Dimensions

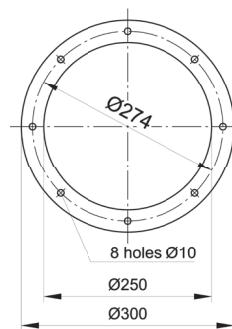
Roof fan  
SPARK-S-250/3000/Ex



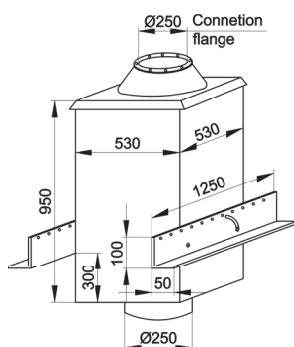
Roof fan  
SPARK-S-250/1500/Ex



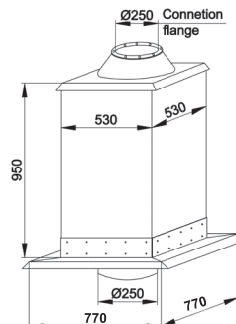
Connection flange



Sound absorbing roof base  
TPD-250-N



Sound absorbing roof base  
TPDC-250-N

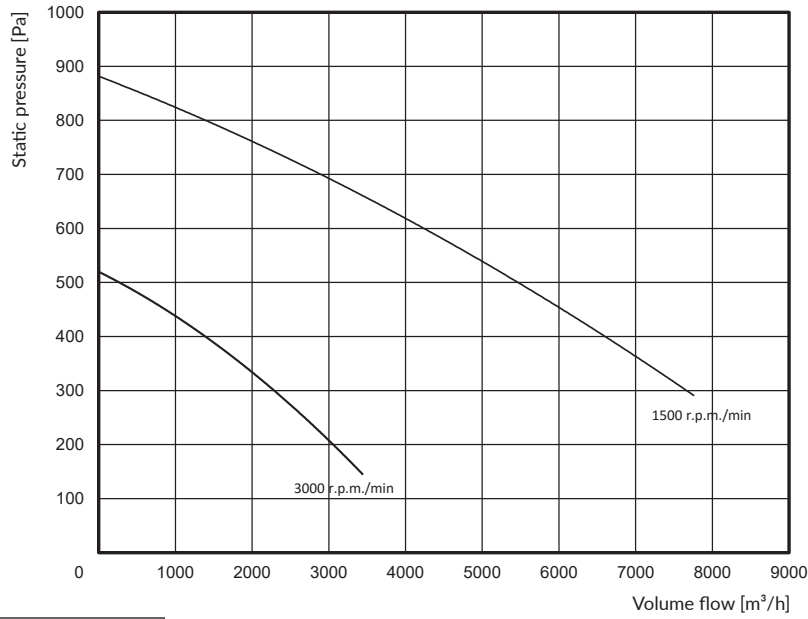


**NOTE:**

The above mentioned values of the acoustic pressure level are specified for fans mounted on the sound absorbing roof base TPD-N or TPDC-N. To reduce more the noise level, it is possible to apply a TK silencer suspended under the TPD-N or TPDC-N roof base.

# SPARK-S/Ex

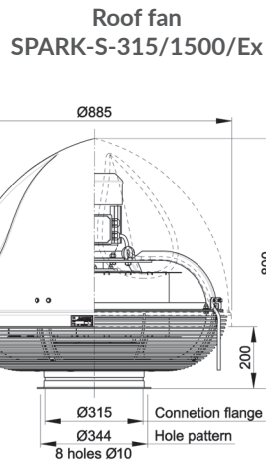
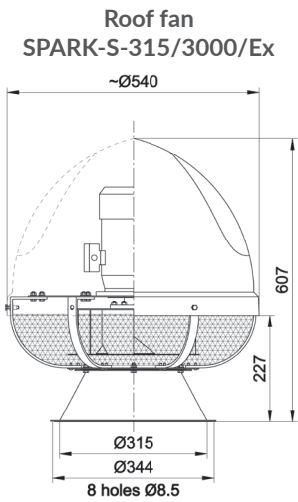
## SPARK-S-315/Ex



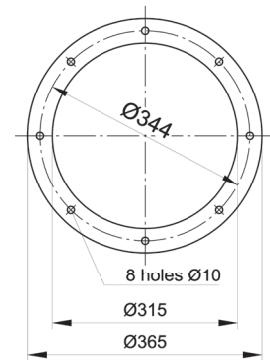
## Technical data

Type	Part no.	Marking	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Acoustic pressure level [dB(A)] from a distance of:					Max. volume flow [m³/h]	Max. vacuum [Pa]	Weight [kg]
							outlet				inlet			
							1m	5m	10m	15m				
SPARK-S-315/3000/Ex	808W76	II2GcExeII T3	3000	3x400	0,55	54	80	70	63	60	74	3400	540	21
SPARK-S-315/1500/Ex	808W77	II2GcExeII T3	1500	3x400	1,5	54	80	70	63	60	70	7800	900	61
Roof base TPD-315-N	843P43	-	-	-	-	-	-	-	-	-	-	-	-	41
Roof base TPDC-315-N	843P53	-	-	-	-	-	-	-	-	-	-	-	-	46

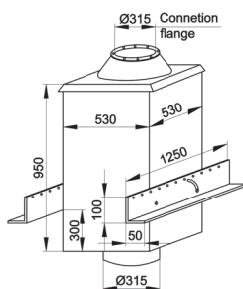
## Dimensions



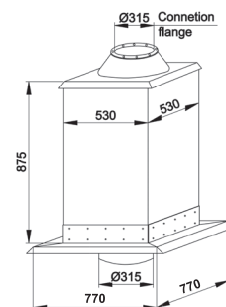
### Connection flange



### Sound absorbing roof base TPD-315-N



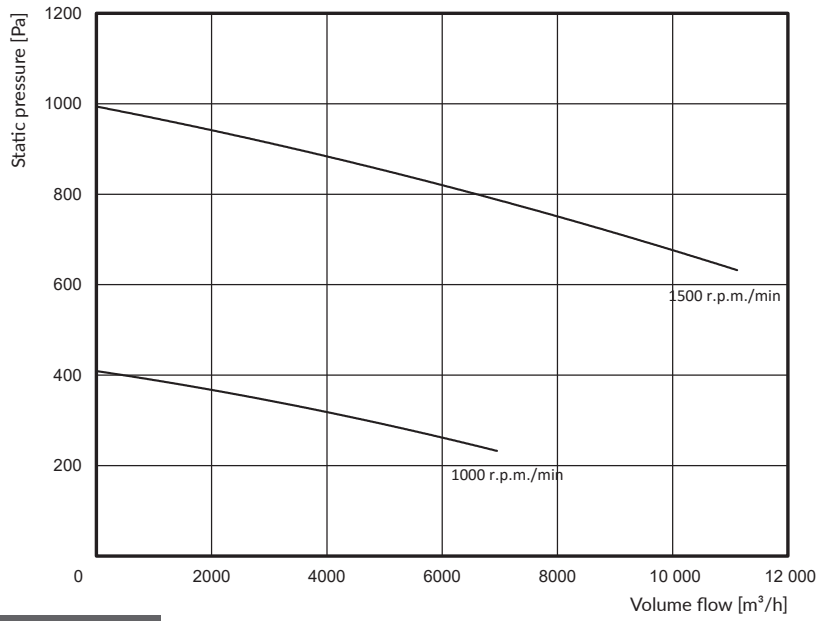
### Sound absorbing roof base TPDC-315-N



**NOTE:**  
The above mentioned values of the acoustic pressure level are specified for fans mounted on the sound absorbing roof base TPD-N or TPDC-N. To reduce more the noise level, it is possible to apply a TK silencer suspended under the TPD-N or TPDC-N roof base.

# SPARK-S/Ex

## SPARK-S-400/Ex

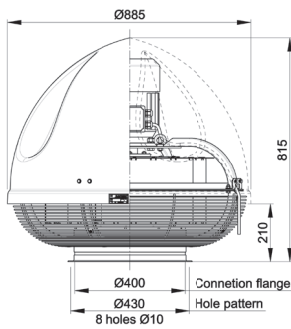


## Technical data

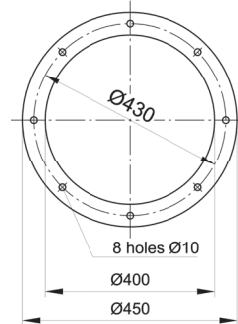
Type	Part no.	Marking	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Acoustic pressure level [dB(A)] from a distance of:					Max. volume flow [m³/h]	Max. vacuum [Pa]	Weight [kg]
							outlet				inlet			
							1m	5m	10m	15m				
SPARK-S-400/1500/Ex	808W78	II2GcExeIIIT3	1500	3x400	3	54	85	75	68	64	72	11 100	1000	72
SPARK-S-400/1000/Ex	808W79	II2GcExeIIIT3	1000	3x400	0,75	54	73	62	56	52	62	7000	410	62
Roof base TPD-400-N	843P44	-	-	-	-	-	-	-	-	-	-	-	-	75
Roof base TPDC-400-N	843P54	-	-	-	-	-	-	-	-	-	-	-	-	84

## Dimensions

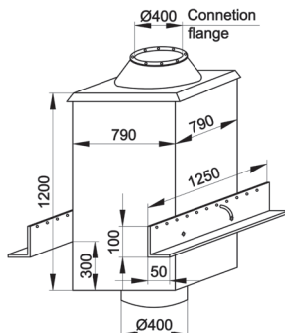
Roof fan  
SPARK-S-400/1500/Ex,  
SPARK-S-400/1000/Ex



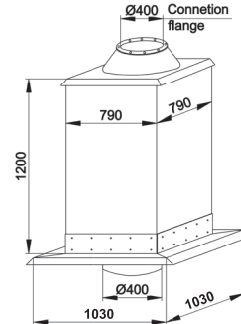
Connection flange



Sound absorbing roof base  
TPD-400-N



Sound absorbing roof base  
TPDC-400-N

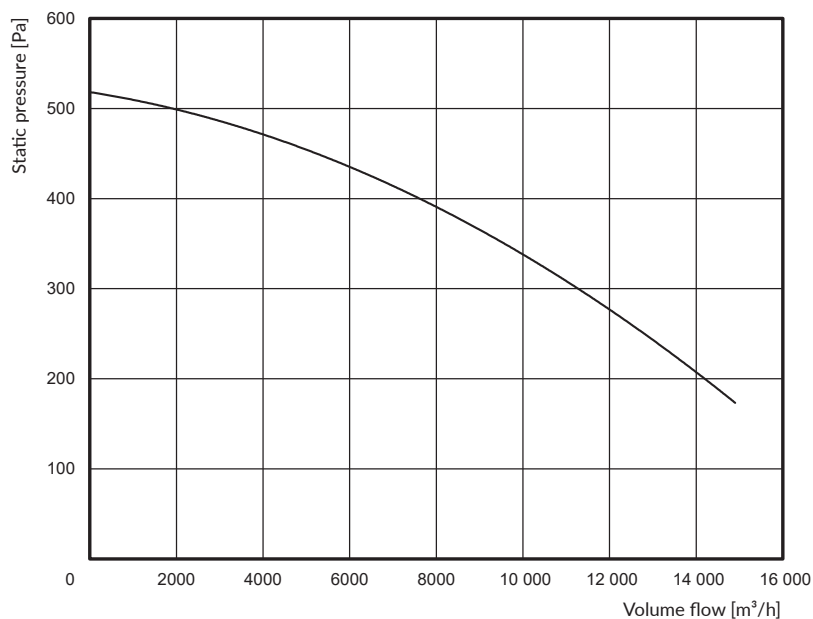


**NOTE:**

The above mentioned values of the acoustic pressure level are specified for fans mounted on the sound absorbing roof base TPD-N or TPDC-N. To reduce more the noise level, it is possible to apply a TK silencer suspended under the TPD-N or TPDC-N roof base.

# SPARK-S/Ex

## SPARK-S-500/Ex

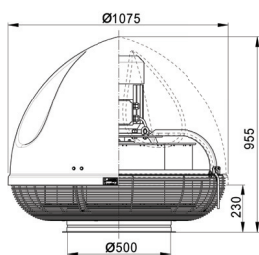


## Technical data

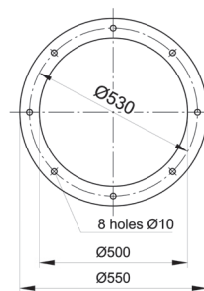
Type	Part no.	Marking	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Acoustic pressure level [dB(A)] from a distance of:					Max. volume flow [m³/h]	Max. vacuum [Pa]	Weight [kg]
							outlet				inlet			
							1m	5m	10m	15m				
SPARK-S-500/1000/Ex	808W80	II2GcExellT3	1000	3x400	2,2	54	78	68	61	58	69	15 000	540	104
Roof base TPD-500-N	843P45	-	-	-	-	-	-	-	-	-	-	-	-	75
Roof base TPDC-500-N	843P55	-	-	-	-	-	-	-	-	-	-	-	-	84

## Dimensions

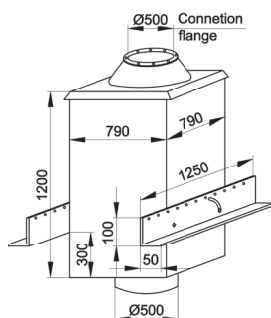
Roof fan  
SPARK-S-500/1000/Ex



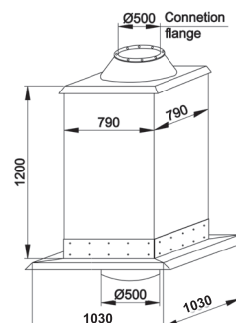
Connection flange



Sound absorbing roof base  
TPD-500-N



Sound absorbing roof base  
TPDC-500-N

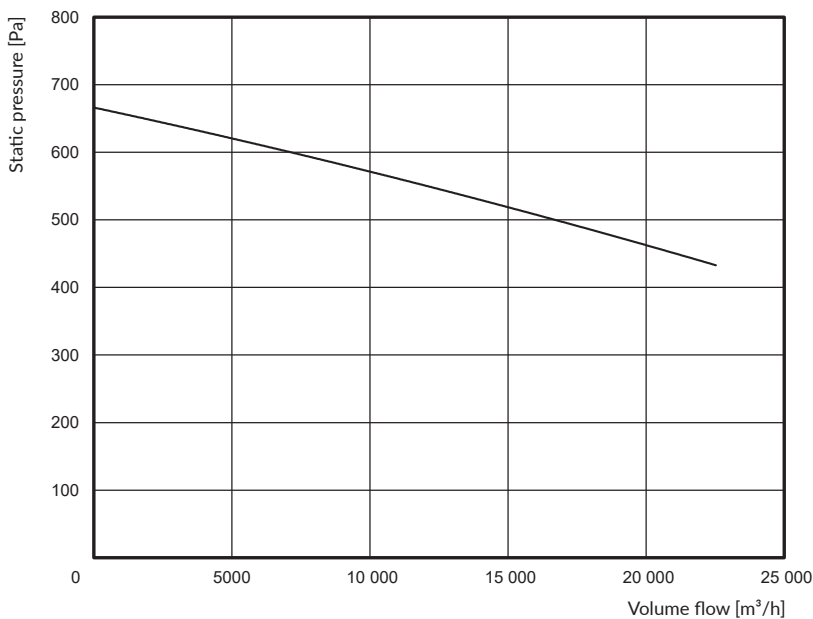


**NOTE:**

The above mentioned values of the acoustic pressure level are specified for fans mounted on the sound absorbing roof base TPD-N or TPDC-N. To reduce more the noise level, it is possible to apply a TK silencer suspended under the TPD-N or TPDC-N roof base.

# SPARK-S/Ex

## SPARK-S-630/Ex

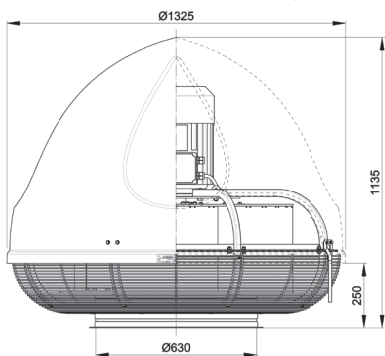


## Technical data

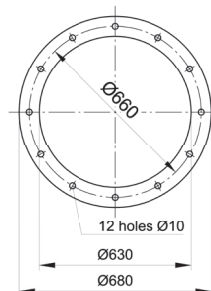
Type	Part no.	Marking	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Acoustic pressure level [dB(A)] from a distance of:					Max. volume flow [m³/h]	Max. vacuum [Pa]	Weight [kg]
							outlet				inlet			
							1m	5m	10m	15m				
SPARK-S-630/1000/Ex	808W81	II2GcExeIIIT3	1000	3x400	5,5	54	84	74	67	64	77	22 500	690	178
Roof base TPD-630-N	843P46	-	-	-	-	-	-	-	-	-	-	-	-	88
Roof base TPDC-630-N	843P56	-	-	-	-	-	-	-	-	-	-	-	-	100

## Dimensions

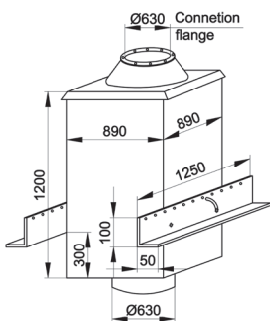
Roof fan  
SPARK-S-630/1000/Ex



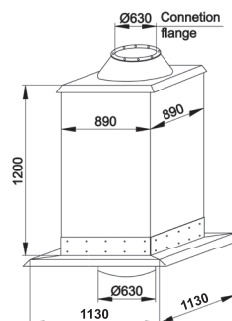
Connection flange



Sound absorbing roof base  
TPD-630-N



Sound absorbing roof base  
TPDC-630-N

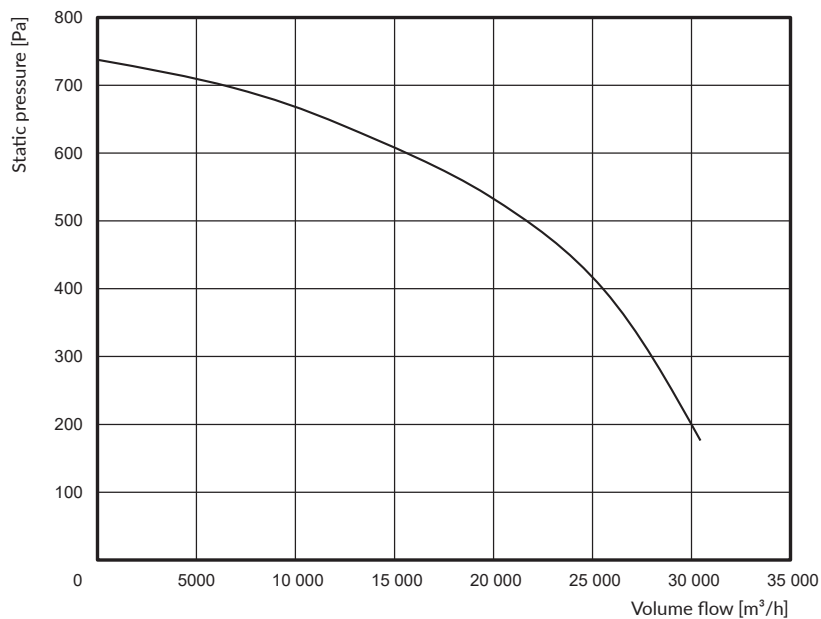


**NOTE:**

The above mentioned values of the acoustic pressure level are specified for fans mounted on the sound absorbing roof base TPD-N or TPDC-N. To reduce more the noise level, it is possible to apply a TK silencer suspended under the TPD-N or TPDC-N roof base.



## SPARK-S-710/Ex

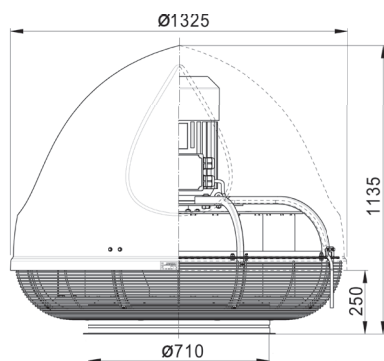


### Technical data

Type	Part no.	Marking	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Acoustic pressure level [dB(A)] from a distance of:					Max. volume flow [m³/h]	Max. vacuum [Pa]	Weight [kg]
							outlet				inlet			
							1m	5m	10m	15m				
SPARK-S-710/1000/Ex	808W82	II2GcExeII T3	1000	3x400	7,5	54	87	77	70	66	77	31 000	760	208
Roof base TPD-710-N	843P47	-	-	-	-	-	-	-	-	-	-	-	-	88
Roof base TPDC-710-N	843P57	-	-	-	-	-	-	-	-	-	-	-	-	100

### Dimensions

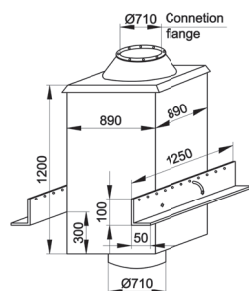
Roof fan  
SPARK-S-710/1000/Ex



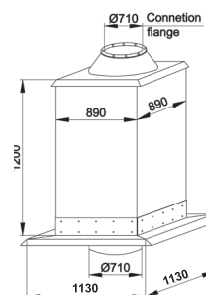
Connection flange



Sound absorbing roof base  
TPD-710-N



Sound absorbing roof base  
TPDC-710-N



**NOTE:**

The above mentioned values of the acoustic pressure level are specified for fans mounted on the sound absorbing roof base TPD-N or TPDC-N. To reduce more the noise level, it is possible to apply a TK silencer suspended under the TPD-N or TPDC-N roof base.