

SMART-SN



Application

SMART-SN fans have been engineered for general ventilation of buildings for conveying the dry air of maximum temperature +60°C and dustiness not exceeding 0,3 g/m³, without viscous impurities, aggressive compounds and without substances creating explosion hazard. SMART-SN family of fans, as a series of five sizes, of motor rates ranging from 0,37 kW up to 2,2 kW provide maximum flow efficiency 12 500 m³/h. The appliances meet the requirements of the ErP 2009/125/EC Directive.

Structure

SMART-SN line features an original construction of steel elements, providing a skeleton. The lower part is constructed of an openwork protective circumferential surface around, whereas the top section is shielded with a plastic hood. Inside is located a motor with a statically and dynamically balanced radial impeller. The fan has to be installed on a roof base.

Acoustics

Low noise level is the most crucial criterion of the designing process of the SMART-SN family of fans, as a most important target of the Quality Policy of KLIMAWENT. Due to this, in the course of constructional activity, several impellers, varying in shape, size, blade quantity and their inclination,

have been designed, prepared and submit to our Research and Development Laboratory tests. As a result, the impeller of the lowest acoustic pressure level and optimum flow performances has been finally selected.

Moreover, as a complementary assortment are:

- TPD-N and TPDC-N sound absorbing roof bases – to install the fan on them. The application reduces the noise getting into the room – by 12 up to 18 Db(A),
- TK silencers (see catalogue card INSTALLATION ELEMENTS) – suspended underneath the sound absorbing roof bases, inside the process room.

Flow efficiency adjustment

On demand, we offer inverters meant for adjustment of the motor rotational speed (for details see section ELECTRICAL ACCESSORIES).

Installing

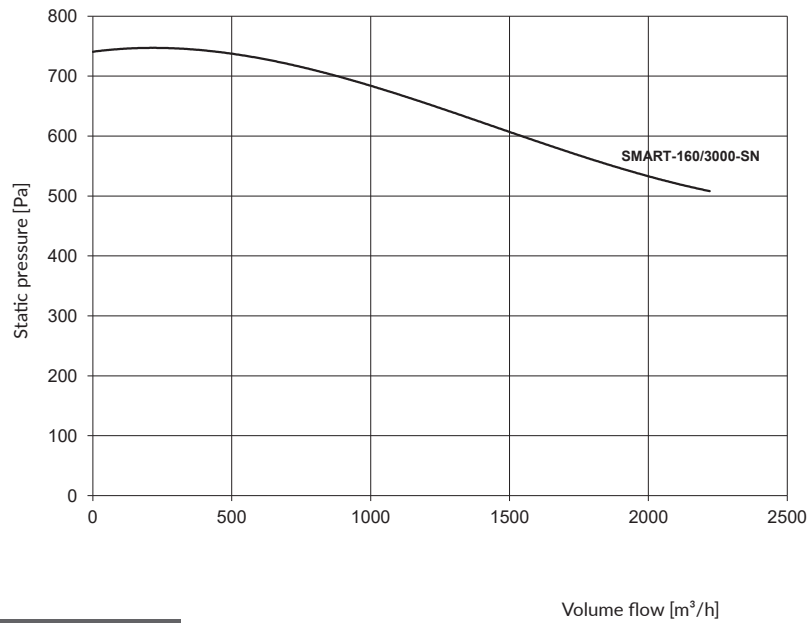
It is recommended to install the fans on sound absorbing roof bases. Our roof base series is compatible with the types of fans. The construction is of zinc-coated sheet. The internal surface is padded with sound absorbing material.

We offer two sorts of sound absorbing roof bases, varying in the mounting solution:

- TPD-N base – mounted directly on the roof. For convenient installing on the roofs of various inclination angles (0° up to 18°), there are introduced special support profiles of rotary properties, located on the opposite walls of the roof base, for levelling the mounting flange of the fan.
- TPDC-N base – installed directly on a roof pedestal of the ventilation discharge duct; simply, the mounting flange of the roof base has to be screwed up to the roof pedestal.

On demand, we deliver safety switches to cut off the power supply, during the installing, assembling and servicing (for details see catalogue cards ELECTRICAL ACCESSORIES).

SMART-160-SN

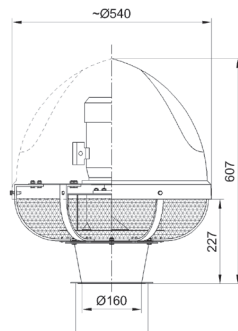


Technical data

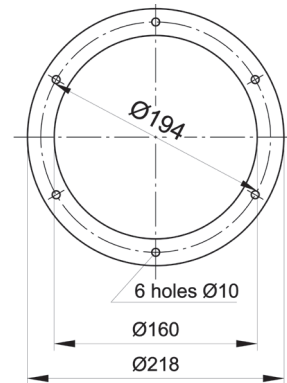
Type	Part no.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection of the motor IP	Acoustic pressure level [dB(A)] from a distance of:					Maximum volume flow [m³/h]	Maximum vacuum [Pa]	Weight [kg]
						outlet				inlet			
						1 m	5 m	10 m	15 m				
SMART-160/3000-SN	812W60	3000	3x400	0,55	54	79	70	62	59	71	2300	740	16
Roof base TPD-160-N	843P40	–	–	–	–	–	–	–	–	–	–	–	28
Roof base TPDC-160-N	843P50	–	–	–	–	–	–	–	–	–	–	–	30

Dimensions

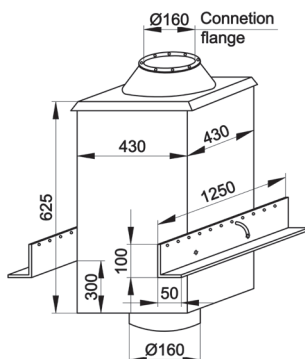
Roof fan
SMART-160/3000-SN



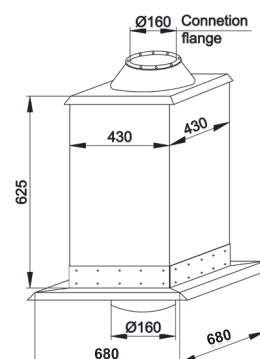
Connection flange



Sound absorbing roof base
TPD-160-N



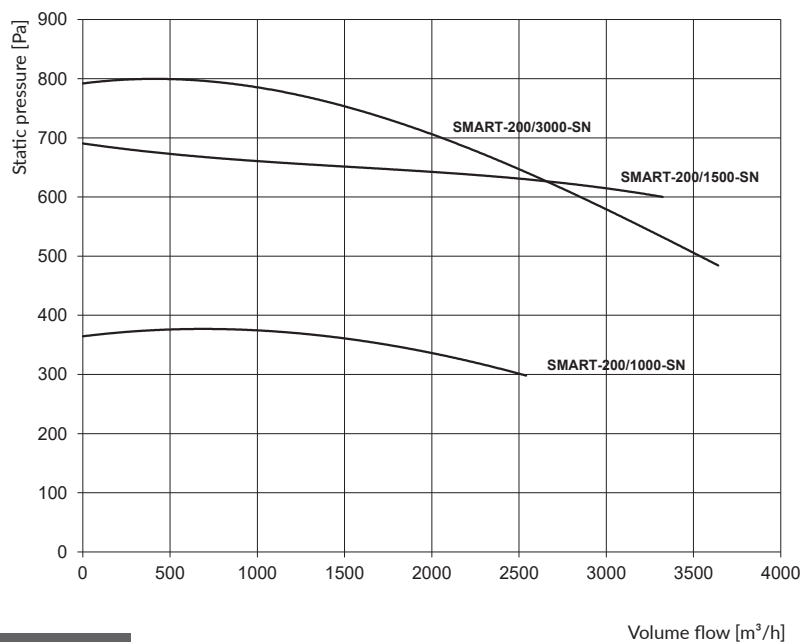
Sound absorbing roof base
TPDC-160-N



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.

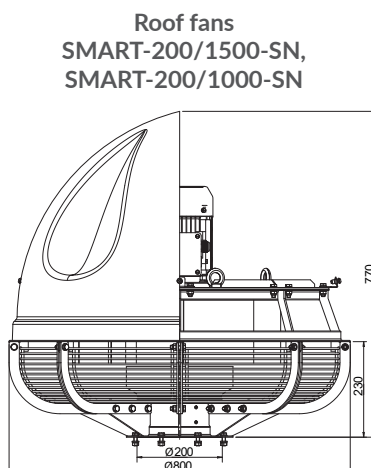
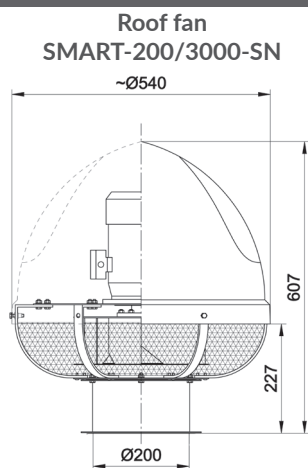
SMART-200-SN



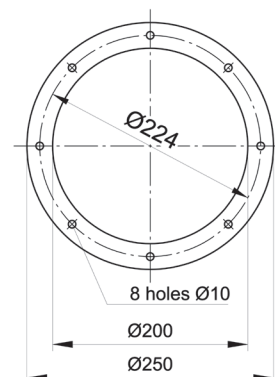
Technical data

Type	Part no.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection of the motor IP	Acoustic pressure level [dB(A)] from a distance of:					Maximum volume flow [m³/h]	Maximum vacuum [Pa]	Weight [kg]
						outlet				inlet			
						1 m	5 m	10 m	15 m	1 m			
SMART-200/3000-SN	813W33	3000	3x400	0,55	54	79	69	62	59	71	3550	800	16
SMART-200/1500-SN	813W32	1500	3x400	0,55	54	74	64	57	54	60	3300	690	57
SMART-200/1000-SN	813W31	1000	3x400	0,37	54	67	56	50	46	51	2540	370	58
Roof base TPD-200-N	843P41	-	-	-	-	-	-	-	-	-	-	-	28
Roof base TPDC-200-N	843P51	-	-	-	-	-	-	-	-	-	-	-	30

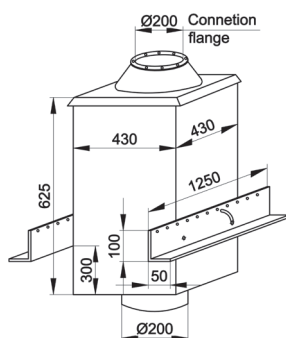
Dimensions



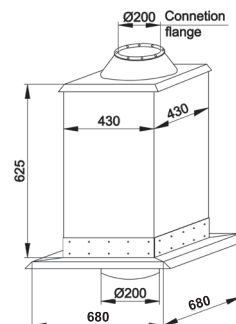
Connection flange



Sound absorbing roof base TPD-200-N



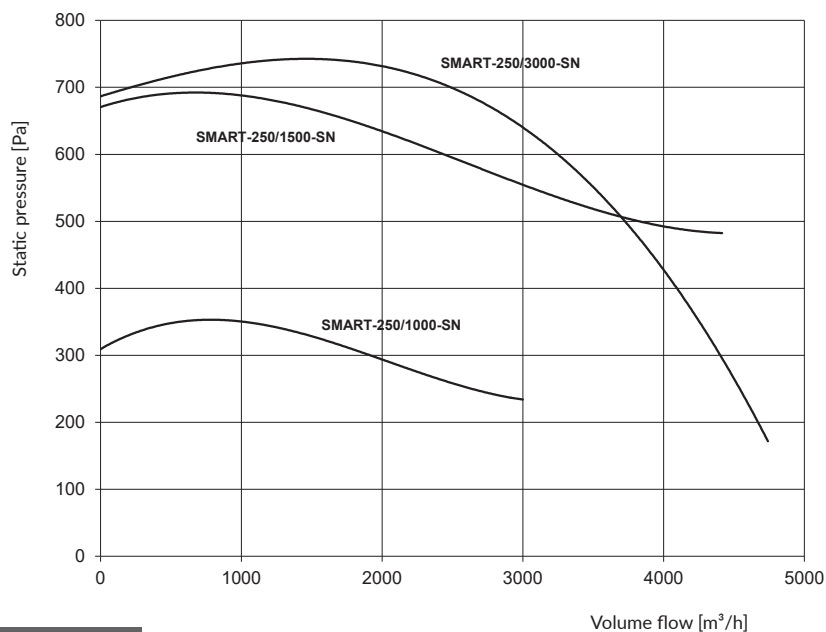
Sound absorbing roof base TPDC-200-N



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.

SMART-250-SN

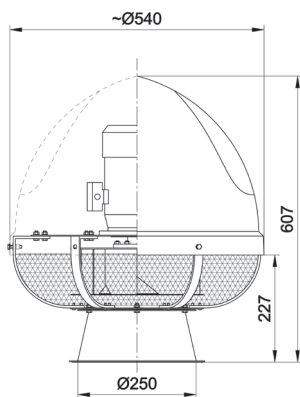


Technical data

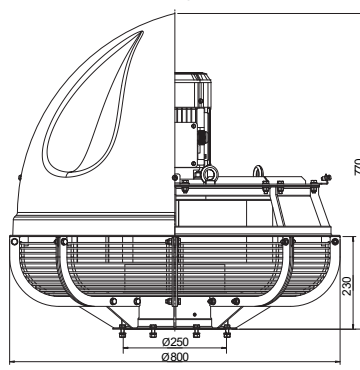
Type	Part no.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection of the motor IP	Acoustic pressure level [dB(A)] from a distance of:					Maximum volume flow [m³/h]	Maximum vacuum [Pa]	Weight [kg]
						outlet				inlet			
						1 m	5 m	10 m	15 m	1 m			
SMART-250/3000-SN	813W36	3000	3x400	0,55	54	80	70	63	60	74	4750	735	20
SMART-250/1500-SN	813W35	1500	3x400	1,1	54	75	66	58	55	65	4600	690	64
SMART-250/1000-SN	813W34	1000	3x400	0,37	54	65	56	48	44	53	3000	350	57
Roof base TPD-250-N	843P42	-	-	-	-	-	-	-	-	-	-	-	41
Roof base TPDC-250-N	843P52	-	-	-	-	-	-	-	-	-	-	-	46

Dimensions

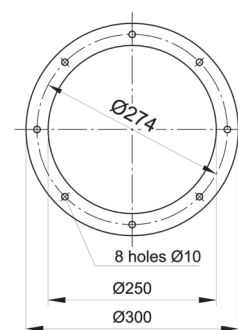
Roof fan
SMART-250/3000-SN



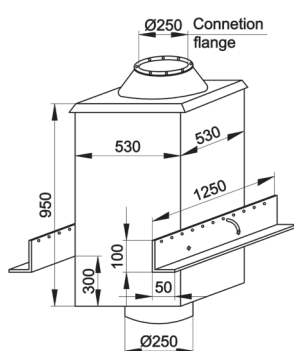
Roof fans
SMART-250/1500-SN,
SMART-250/1000-SN



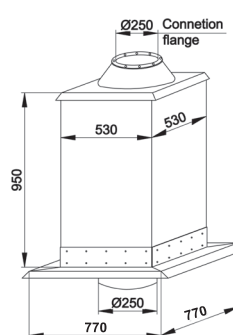
Connection flange



Sound absorbing roof base
TPD-250-N



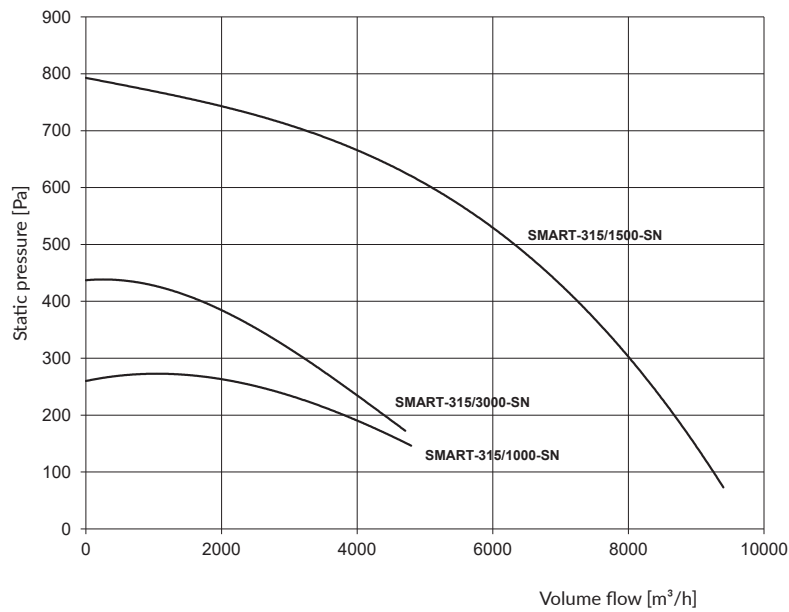
Sound absorbing roof base
TPDC-250-N



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.

SMART-315-SN

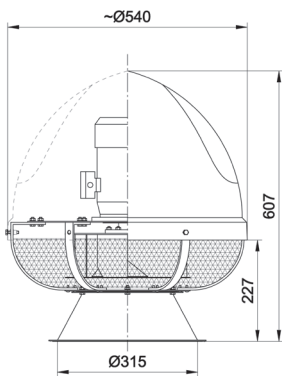


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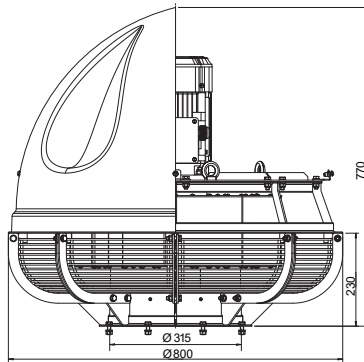
Type	Part no.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection of the motor IP	Acoustic pressure level [dB(A)] from a distance of:					Maximum volume flow [m³/h]	Maximum vacuum [Pa]	Weight [kg]
						outlet				inlet			
						1 m	5 m	10 m	15 m	1 m			
SMART-315/3000-SN	813W40	3000	3x400	0,37	54	80	70	63	60	74	4710	440	16
SMART-315/1500-SN	813W39	1500	3x400	1,5	54	80	70	63	60	70	9400	790	66
SMART-315/1000-SN	813W38	1000	3x400	0,55	54	68	59	51	48	59	4800	260	56
Roof base TPD-315-N	843P43	-	-	-	-	-	-	-	-	-	-	-	41
Roof base TPDC-315-N	843P53	-	-	-	-	-	-	-	-	-	-	-	46

Dimensions

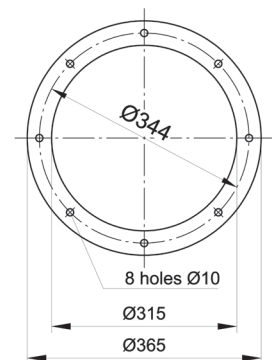
Roof fan
SMART-315/3000-SN



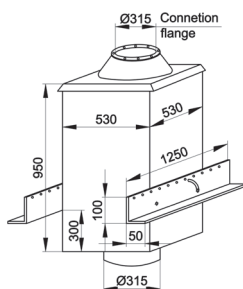
Roof fans
SMART-315/1500-SN,
SMART-315/1000-SN



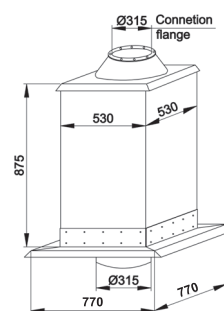
Connection flange



Sound absorbing roof base
TPD-315-N



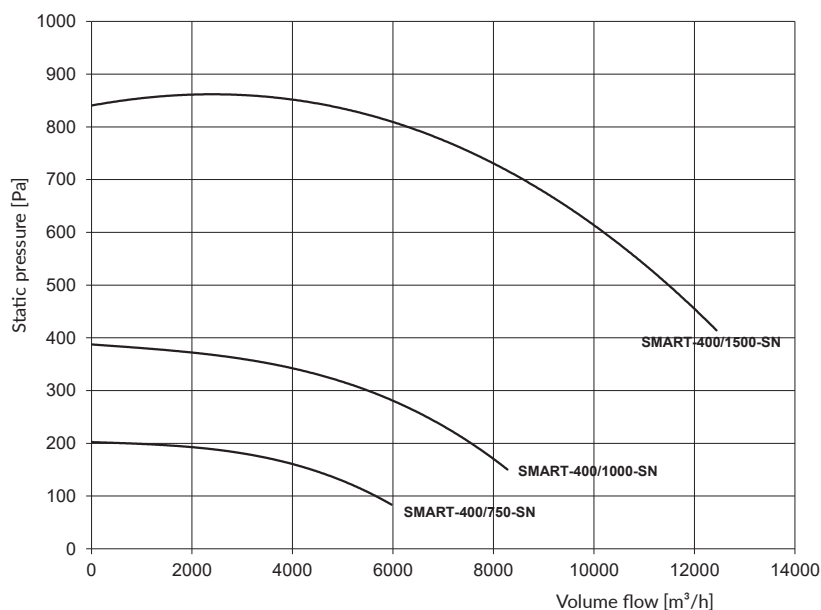
Sound absorbing roof base
TPDC-315-N



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.

SMART-400-SN

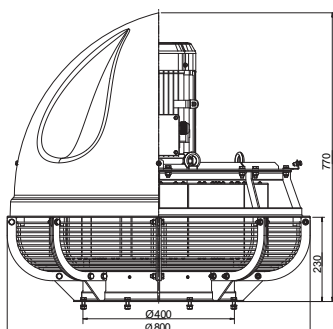


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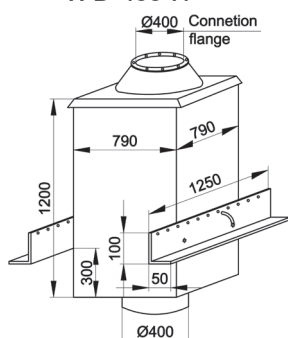
Type	Part no.	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection of the motor IP	Acoustic pressure level [dB(A)] from a distance of:					Maximum volume flow [m³/h]	Maximum vacuum [Pa]	Weight [kg]
						outlet				inlet			
						1 m	5 m	10 m	15 m	1 m			
SMART-400/1500-SN	813W41	1500	3x400	2,2	54	85	75	68	64	72	12 500	860	75
SMART-400/1000-SN	813W42	1000	3x400	0,75	54	73	62	56	52	62	8300	380	64
SMART-400/750-SN	813W43	750	3x400	0,37	54	63	55	46	43	53	6000	200	62
Roof base TPD-400-N	843P44	-	-	-	-	-	-	-	-	-	-	-	75
Roof base TPDC-400-N	843P54	-	-	-	-	-	-	-	-	-	-	-	84

Dimensions

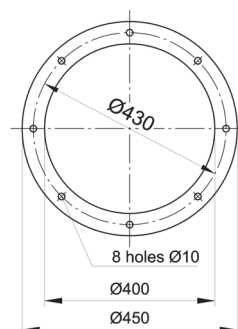
Roof fans
SMART-400/1500-SN,
SMART-400/1000-SN,
SMART-400/750-SN



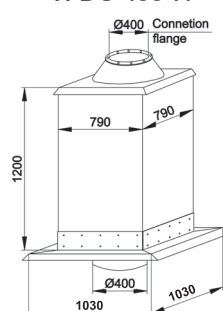
Sound absorbing roof base
TPD-400-N



Connection flange



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.