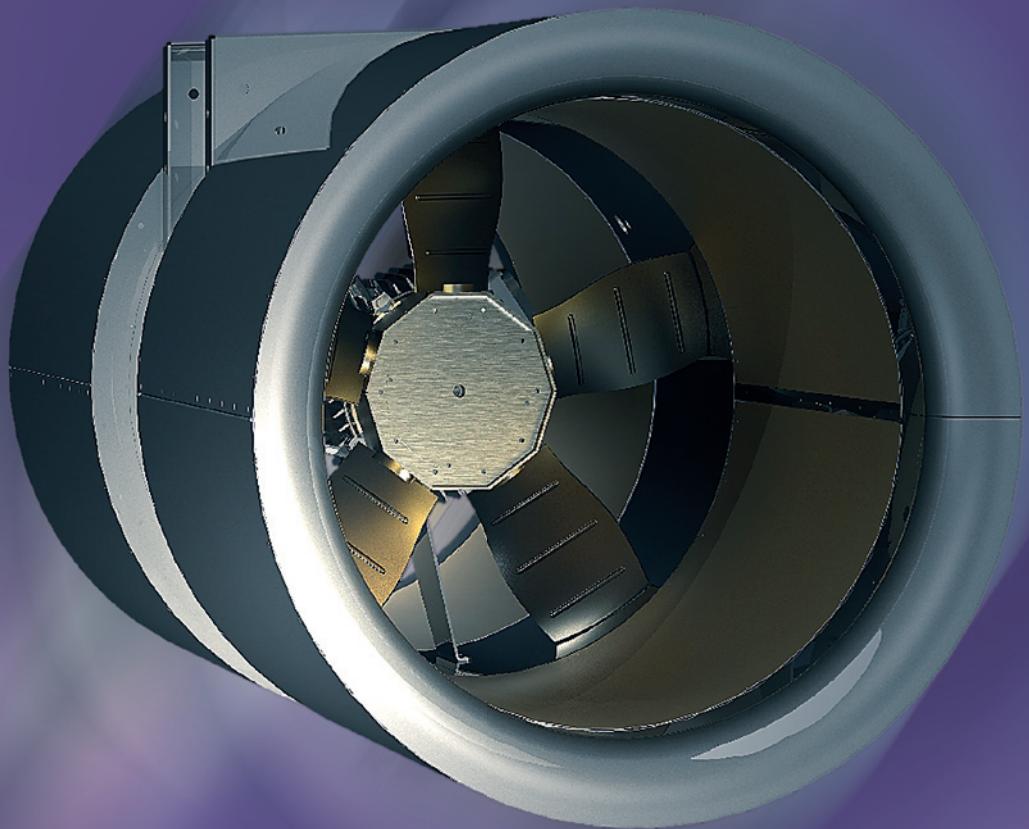


POLLRICH DLK®
FAN FACTORIES

Tunnel jet fans

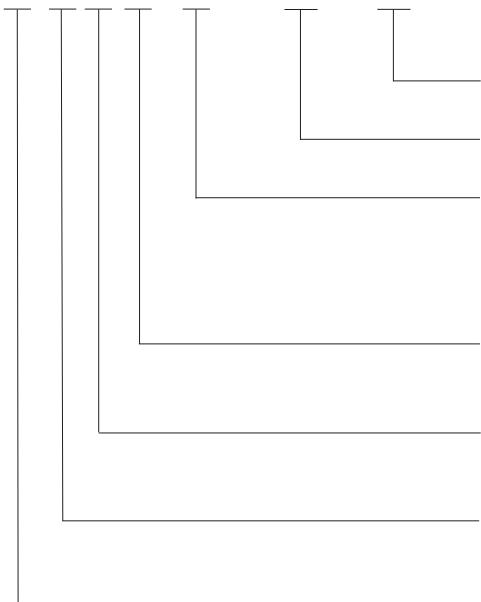
The basic series



Type code

for tunnel jet fans

S A T M 03 - 0630 - B



7. Basic series
6. Ø Nominal impeller diameter DN [mm]
5. Product specific code:
02 = Temperature class F200
03 = Temperature class F300
04 = Temperature class F400
4. Drive
M = Motor (direct)
3. Type of construction
T = Tunnel jet fan = *Terrajet by Pollrich DLK*
2. Type
A = Axial
1. Designation
S = Smoke extraction fan

Type code of all products

Designation	Type	Type of construction	Drive
H _Centrifugal fan (heavy-duty)	A _axial	O _Without guide vanes	M _Motor (direct)
C _Centrifugal fan (compact)	R _centrifugal	N _Outlet guide vanes	K _Coupling
A _Axial fan		V _Inlet guide vanes	R _Belt drive
P _Plug fan		R _Reversible	
S _Smoke extraction fan		E _Single inlet	
		Z _Double inlet	
		T _Tunnel	
		J _Jet fan	
		D _Roof	
		G _Car park	
		W _Wall	

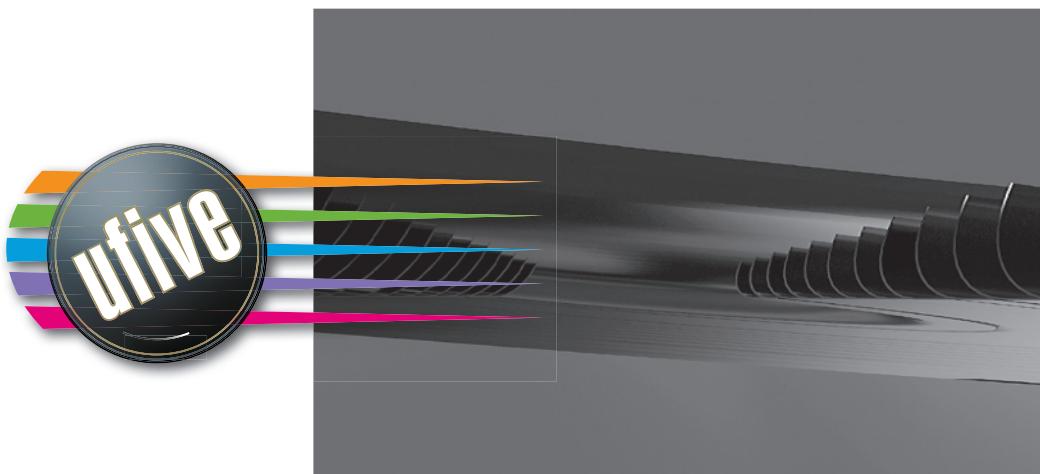
Symbols

DN	Nominal impeller diameter
$L_w(A)$	Sound power level A-weighted
$L_p(A)$	Sound pressure level A-weighted
F_t	Thrust



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SATM03 Tunnel jet fan <i>Terrajet</i> by Pollrich DLK Product-specific information, F300 (300 °C/120 min), reversible	
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PRODUCTS PLUS FULL-SERVICE



The Trademark Pollrich DLK Fan Factories®

The common trademark “Pollrich DLK Fan Factories” bundles **more than 140 years of production know-how of industrial fans** with the manufacturers Pollrich Ventilatoren GmbH and DLK Ventilatoren GmbH. A workforce of more than 220 employees at the two production sites Mönchengladbach and Schöntal-Berlichingen manufacture axial and centrifugal fans for nearly any industrial requirement.

As the **only manufacturer in the world offering all five product segments of industrial fans**, we offer an unmatched range of products for the largest variety of customer requirements. Our market orientated sales teams can offer smart solutions as they have good subject knowledge.

With a mix of standardisation, sophisticated variant management, tight internal organisation, and an intelligently controlled staff employment, we manufacture **as well standard fans as pinpointed special units** – always precisely matching the customer's requirements, including highest efficiency, zero-defect and shortest delivery time.



Our R&D department combines expertise within all sectors of fan technology with highly efficient simulation tools such as CFD (Computational Fluid Dynamics) for flow visualisation and FEM (Finite-Element-Method) to calculate the structure-mechanical characteristics, as well as test ducts and -chambers according to international standard ISO 5801, equipped with the latest measuring technology in order to determine the aerodynamic and aeroacoustic characteristics.

Our company's commitment is centered to high quality and customer's needs. Our understanding for quality is not limited to the product and to the production methods certified according to DIN ISO 9001. Our quality commitment includes the results of the individual work of every employee. This is the philosophy that every employee is realising towards inside and outside of the company. Products and management processes are consistently adjusted to the customer's requirements by applying Kaizen/CIP. This means for our customers: Qualified advice and support, innovative product solutions, reliable delivery times and unvarying high product quality.

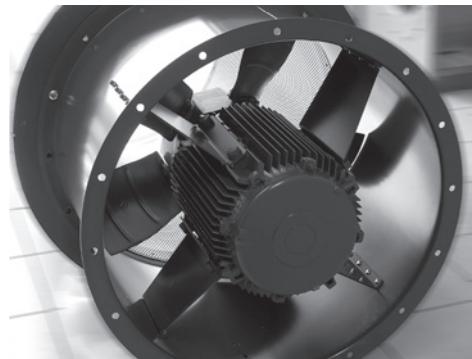
We take care of you, wherever you are in the world, with our comprehensive power service package beginning at the moment of feasibility or project studies, passing by the commissioning on site, and ending in a first class after sales service. Our **worldwide acting service team** will be ready to help every day of the year for 24 hours.

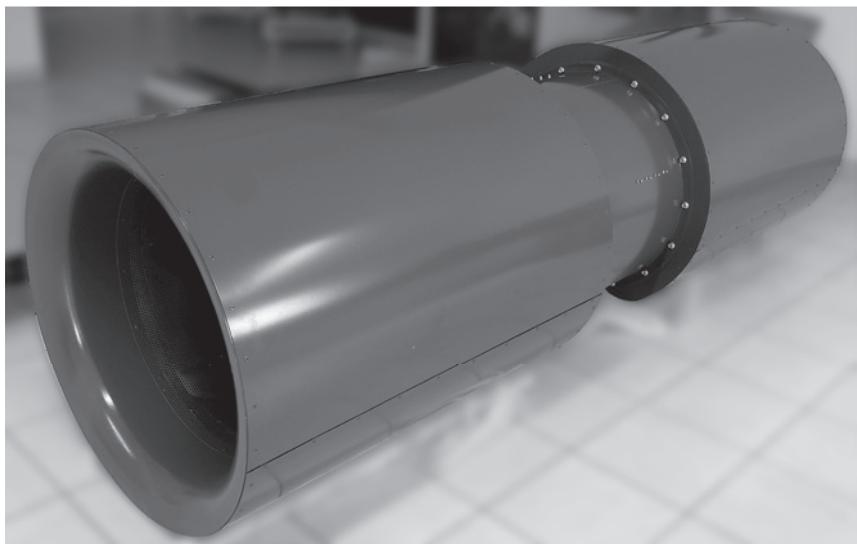
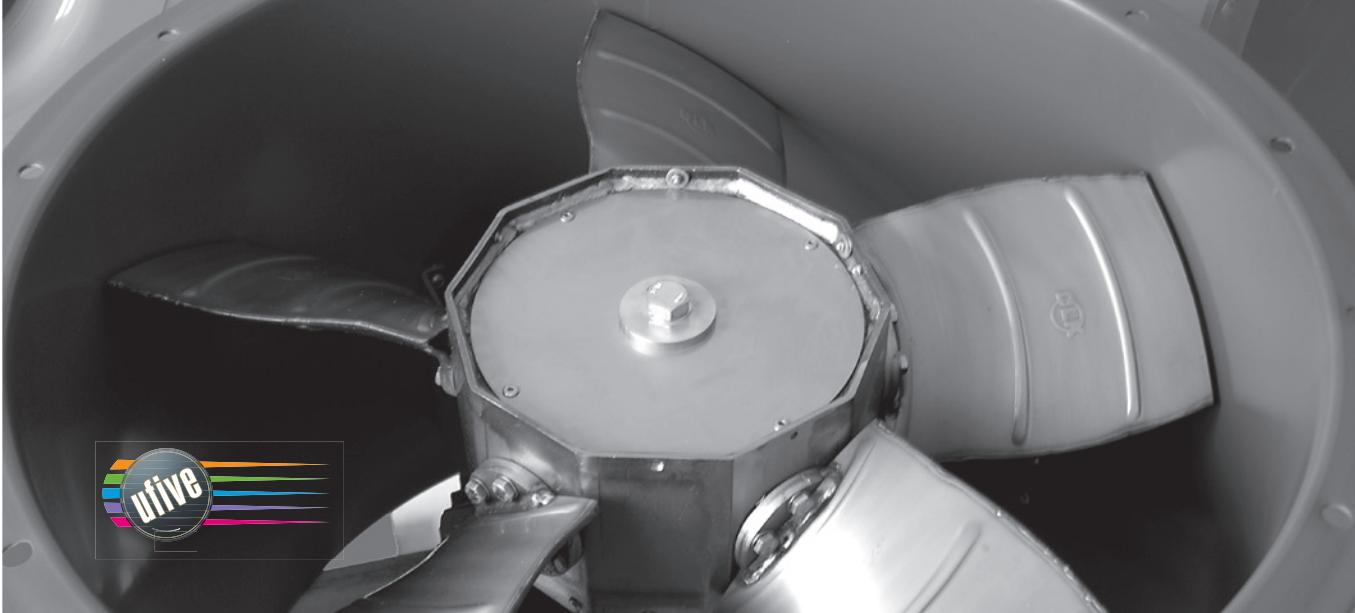


Terrajet by Pollrich DLK

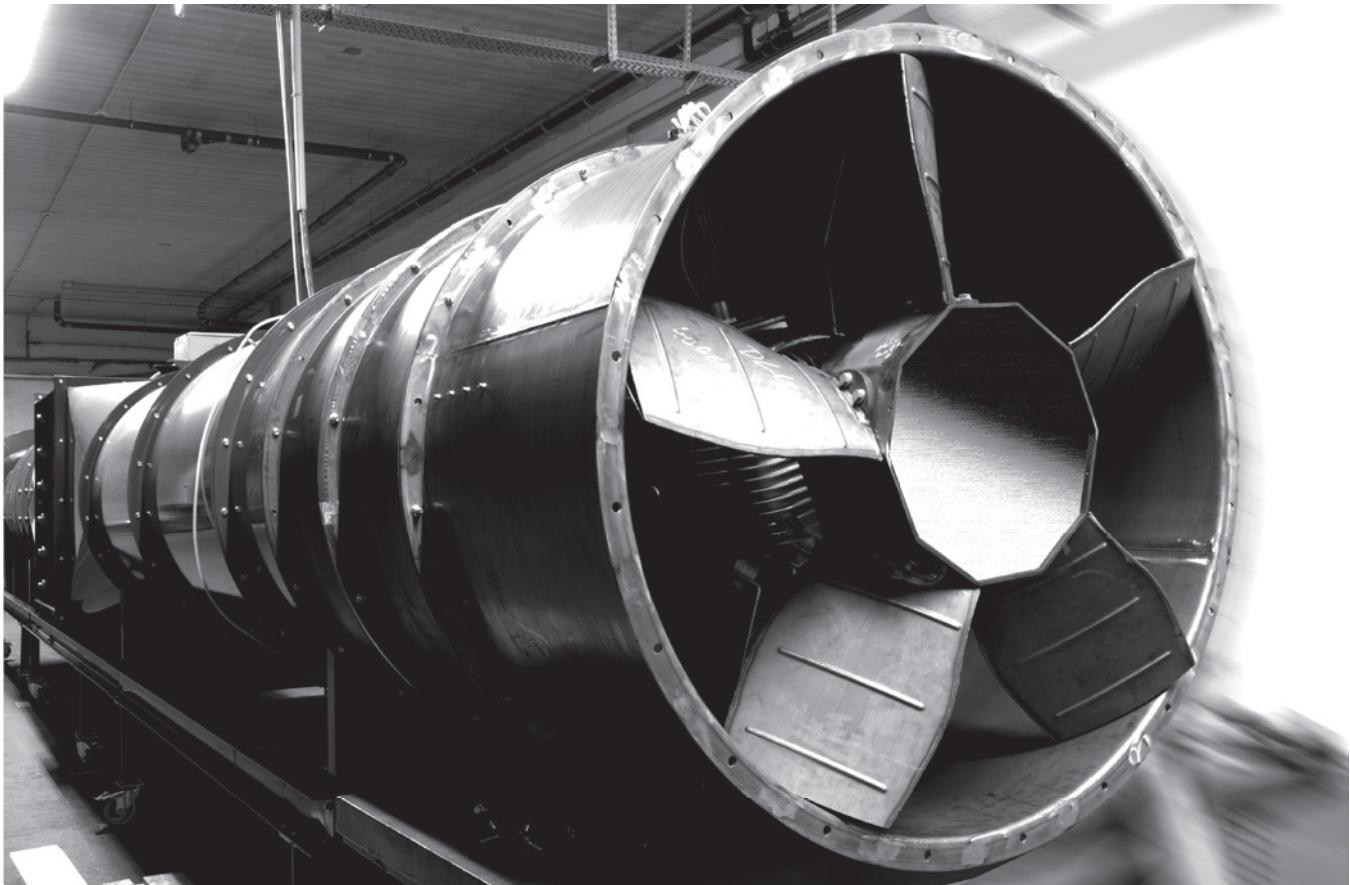
ENVIRONMENTAL TECHNOLOGY: THE MODERN TUNNEL VENTILATION

- Robust design, made in Germany
- Welded impeller with aerofoil blades, adjustable during standstill
- Maximum thrust and maximum efficiency due to CFD-optimised design
- Worldwide applicable, 50 Hz- and 60 Hz
- Truly reversible
- Customised product configurations due to modular design
- Whisper mode due to high performance silencer
- Temperature class F200, F300, F400
- CE-certified according to EN 12101-3





R & D FOR TUNNEL VENTILATION

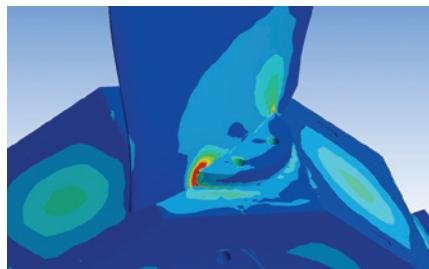


Tunnel jet fans are the core within the tunnel ventilation and smoke extraction system. They combine highest technical requirements i.e. concerning performance, efficiency and noise emission with upmost safety standards.

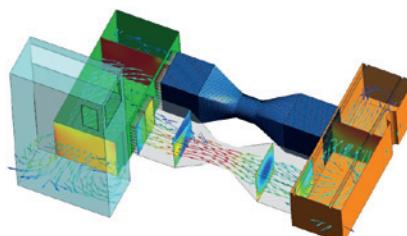
Thus the latest tools are applied in the course of tunnel jet fan development.

CFD simulation is used at Pollrich DLK for various applications, beginning with **aero-dynamical optimisation** of single fan parts (blade geometry, guide vanes, casing shape, etc.) and **pre-calculation of aero-dynamic curves** up to the **analysis of complete tunnel ventilation systems**.

Components can be optimally adapted to the aerodynamic characteristic in the development stage and therefore the degree of **efficiency can be optimised** by simulation results.



FEM simulation for the evaluation of critical areas of blade-hub-connections.



CFD calculation of a complete ventilation system: Parallel operation of two reversible fans.

For new products, the simulation of **aero dynamical curves** allows statements about the performance data of the fan already in early stages of the development and therewith ensuring an efficient development.

Pollrich DLK is using conventional strength calculation methods as well as **numerical structural analysis by FEM** (Finite-Elements-Method) for the verification of the material strength of the fan.

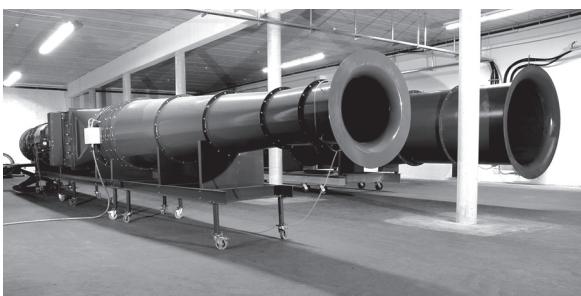
Besides the strength analysis of single components there are also **complete systems** being examined, which means that the interaction of different sub-assemblies will be evaluated. Within the scope of the structural analyses, joints between components, e.g. welding seams or bolted connections, are being designed depending on their strength resistance. In this regard, the determi-



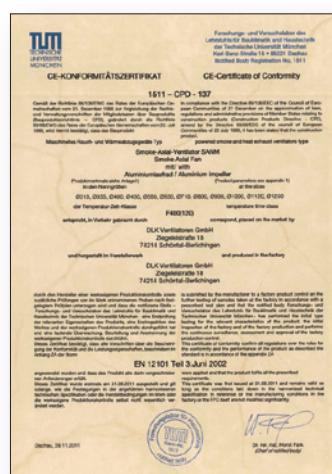
Duct test rig



Thrust measurement table



Suction side duct test rigs to determine the aerodynamic fan performance curve acc. ISO 5801 for axial fans of different diameters



nation of strengths and stresses in the component due to thermal and mechanical loads are particular essential. Also new materials are evaluated in this way before being tested experimental.

Experimental research is essential in the context of product development. Pollrich DLK possesses all **necessary measuring and test equipment**.

The aerodynamic fan curves are determined by using chamber- and duct test rigs according to ISO 5801. Sound level measurements acc. to standardised procedures in the laboratory permit the **acoustic optimisation** in the context of product development as well as flexible product adaptations according to individual customer request, e.g. silencer systems.

The experimental **stress analysis** of the fan is made by performing centrifuging tests. By doing so, maximum rotating speed can be determined with high accuracy. Also the **vibration level** and **resonance analysis** are being carried out.

All smoke extraction fans are CE-certified according to EN 12101-3.

Factory acceptance tests at Pollrich DLK are of course gladly carried out in the presence of customer representatives. Renowned institutes support Pollrich DLK with fan acceptance tests regarding function and safety for **high temperature applications**.

Pollrich DLK is offering – beyond the standardised product range – **customised project related solutions**, by which a flexible reaction to the most diverse customer requirements of any industrial branch can be accomplished:

- largest impeller diameter
- extreme implementing situations
- special requirements to the aerodynamical profile
- design of complete tunnel ventilation concepts including the entire measurement equipment up to the control cabinet
- adapted materials (V2A, V4A, Al-alloys, ...)

The R&D of Pollrich DLK develops these individual solutions in cooperation with the sales engineers and our customers.

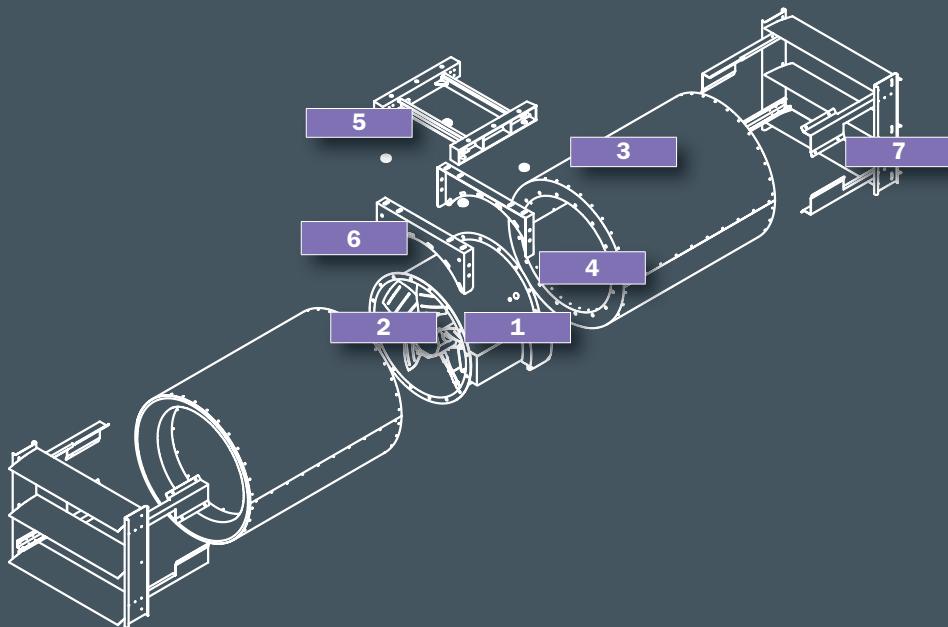


RANGE OF SATM MATERIAL

	SATM02	SATM03	SATM04
impeller diameter/			
number of poles	Thrust [N]	Thrust [N]	
630/2	414	405	
710/2	636	631	
800/2	792	788	
900/4	530	518	
1000/4	820	810	
1120/4	1298	1278	
1250/4	1674	1662	
1400/4	2344	2328	
1600/4	2637	2619	



basic range	1. fan casing	2. impeller	3. silencer casing
	steel, powder coated	steel, powder coated	steel, powder coated
	steel, powder coated	steel, powder coated	steel, powder coated
	steel, powder coated	stainless steel (1.4301) AISI 304	steel, powder coated
optional			
	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	aluminium, stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI
	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	aluminium, stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI
	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI



4. silencer perforated plate	5. mounting frame	6. mounting feet	7. deflector	not pictured fall protection	not pictured isolator switch
steel, sendzimir galva-nised	steel, powder coated	steel, powder coated	steel, powder coated	stainless steel (1.4404 or 1.4571) AISI 316 TI	aluminium
steel, sendzimir galva-nised	steel, powder coated	steel, powder coated	steel, powder coated	stainless steel (1.4404 or 1.4571) AISI 316 TI	aluminium
steel, sendzimir galva-nised	stainless steel (1.4571) AISI 316 TI	stainless steel (1.4571) AISI 316 TI	steel, powder coated	stainless steel (1.4404 or 1.4571) AISI 316 TI	aluminium
stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	steel, powder coated	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4571) AISI 316 TI	aluminium
stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	steel, powder coated stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4571) AISI 316 TI	aluminium
stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4571) AISI 316 TI	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4301) AISI 304 (1.4571) AISI 316 TI	stainless steel (1.4571) AISI 316 TI	aluminium

TUNNEL JET FAN SATM

DN 630 – DN 1600

Range of application:

The product series Terrajet by Pollrich DLK combines functionality with the latest design and sets new standards for the Tunnel jet fan-technology.

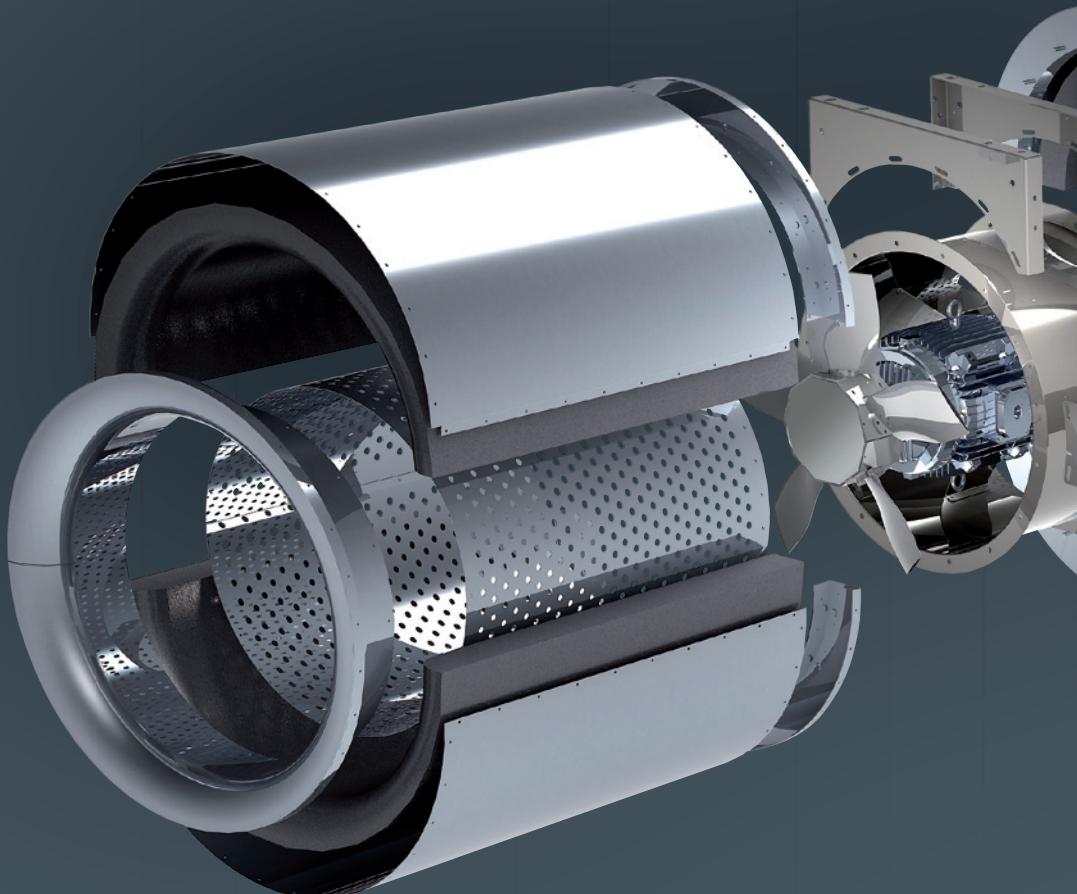
The essential benefits are:

- Robust design, made in Germany
- welded blades, stainless steel
- blades adjustable during standstill
- Maximum thrust at lowest height and maximum efficiency due to CFD-optimised design
- Worldwide suitable for 50 Hz- and 60 Hz
- Whisper mode due to high performance silencer
- Optimum solutions due to product diversity:
Truly reversible, single speed or dual speed motors
- Temperature class F200, F300, F400
- CE-certified according to EN 12101-3

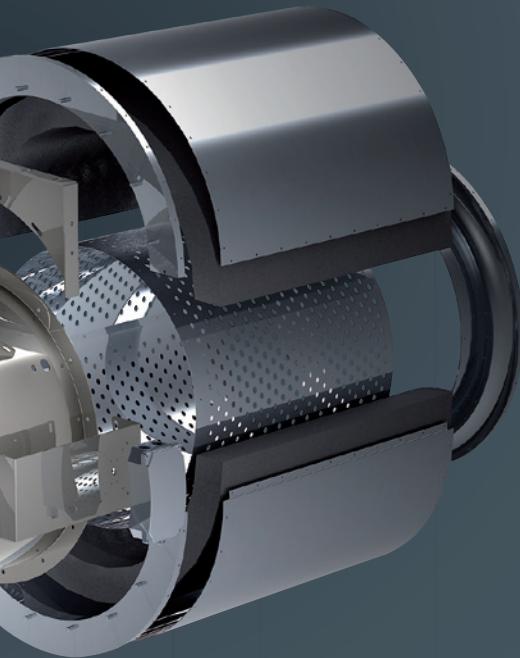
Certified temperatures:

-20 up to +55 °C (ventilation).

In case of fire 200 °C/120 min,
300 °C/120 min, 400 °C/120 min.



Terrajet by Pollrich DLK



Casing:

Made of sheet steel with rolled flanges on both sides and riveted motor bracket. Optimal corrosion protection due to surface coating RAL 7015.

Impeller:

Hub and impeller blades made of stainless steel (F400). Profiled blades adjustable during standstill.

Drive:

Three phase motor according to EN 12101-3 / IEC norm motor. Suitable for continuous operation S1. Ambient temperature for motor max. 55 °C for ventilation, max. 200 °C/120 min, 300 °C/120 min, 400 °C/120 min for smoke extraction. Motor performance selected for cold start-up at 20 °C.

Direction of airflow:

Truly reversible.

Sound:

All sound values measured in the laboratory on basis of EN 45635.

Dimensions:

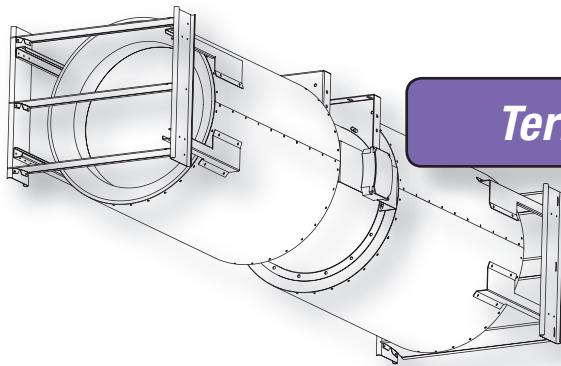
All dimensions indicated inside the catalogue in mm.

Specifications:

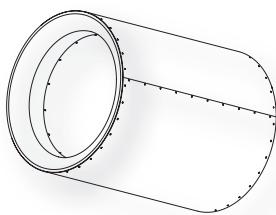
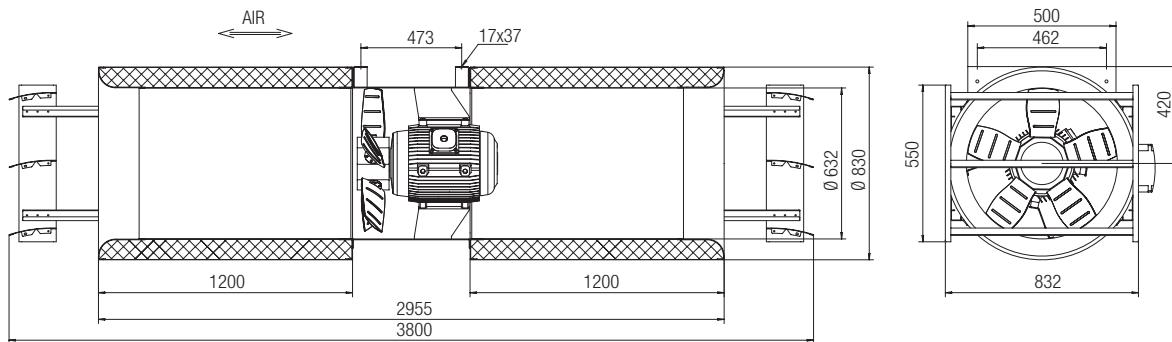
Available in the download area of our website www.pollrichdlk.com



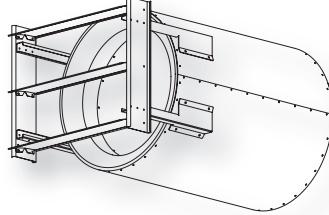
Ø 630 mm, Tunnel jet fan, reversible, SATM



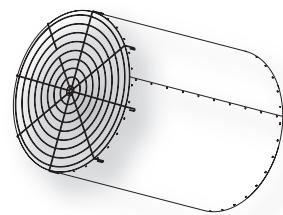
Terrajet by Pollrich DLK



Silencer A --> standard



Silencer B --> deflector



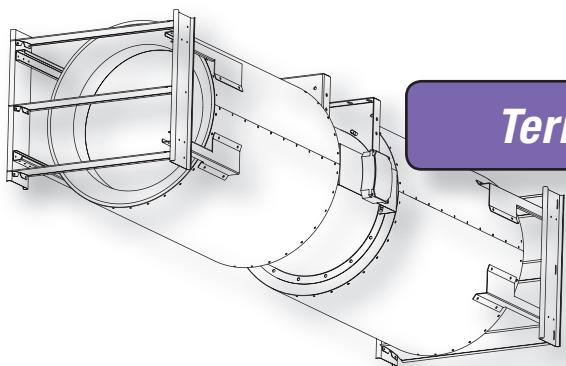
Silencer C --> safety grille

SATM_0630-B

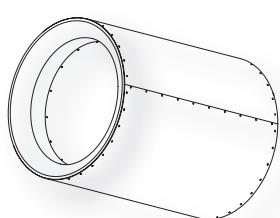
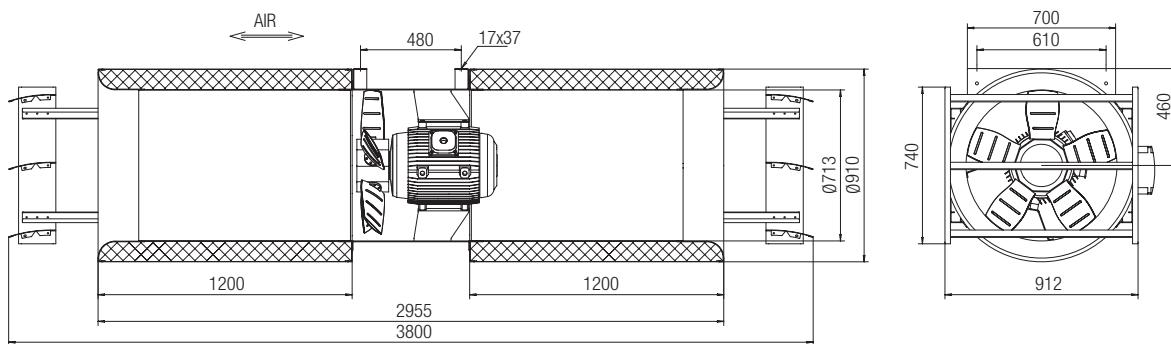
Part number	Type code	Silencer	No. of poles	Thrust [N]	Outlet velocity [m/s]	Nominal speed [rpm]	Volume flow rate [m³/h]	Shaft power [kW]	Max. motor power [kW]	Nominal current [A]	Sound power level [dB(A)]	Weight [kg]
B243339	200°C/120min	SATM02-0630-B	A	2	406	33,6	2940	37811	13,1	15	26,3	99
B243343	200°C/120min	SATM02-0630-B	B	2	414	33,8	2940	38182	13,6	15	26,3	100,5
B243347	200°C/120min	SATM02-0630-B	C	2	406	33,6	2940	37811	13,1	15	26,3	99
F200												
B243331	300°C/120min	SATM03-0630-B	A	2	399	33,2	2910	37484	12,7	15	33,3	99
B243335	300°C/120min	SATM03-0630-B	B	2	405	33,5	2910	37765	13,2	15	33,3	100,5
B243337	300°C/120min	SATM03-0630-B	C	2	399	33,2	2910	37484	12,7	15	33,3	99
F300												
B243350	400°C/120min	SATM04-0630-B	A	2	399	33,2	2910	37484	12,7	15	33,3	99
B243352	400°C/120min	SATM04-0630-B	B	2	405	33,5	2910	37765	13,2	15	33,3	100,5
B243354	400°C/120min	SATM04-0630-B	C	2	399	33,2	2910	37484	12,7	15	33,3	99
F400												

All specifications for 400V/50 Hz/3~

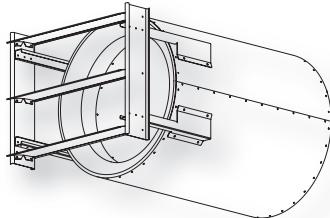
Ø 710 mm, Tunnel jet fan, reversible, SATM



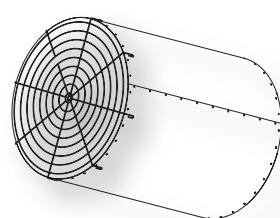
Terrajet by Pollrich DLK



Silencer A --> standard



Silencer B --> deflector



Silencer C --> safety grille

SATM__-0710-B

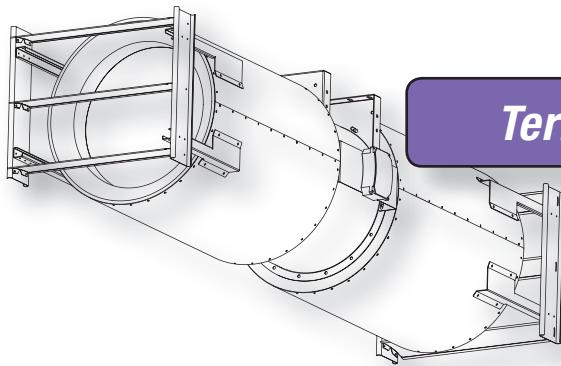
Part number	Type code	Silencer	No. of poles	Thrust [N]	Outlet velocity [m/s]	Nominal speed [rpm]	Volume flow rate [m³/h]	Shaft power [kW]	Max. motor power [kW]	Nominal current [A]	Sound power level [dB(A)]	Weight [kg]	
B241321	200°C/120min	SATM02-0710-B	A	2	629	37,2	2950	53011	21,8	22	37	101,8	452
B241326	200°C/120min	SATM02-0710-B	B	2	636	37,4	2950	53306	22	22	37	102,6	507
B241328	200°C/120min	SATM02-0710-B	C	2	629	37,2	2950	53011	21,8	22	37	101,8	452
B227429	300°C/120min	SATM03-0710-B	A	2	625	36,9	2930	52843	21,3	22	47,8	101,8	445
B237779	300°C/120min	SATM03-0710-B	B	2	631	37,1	2930	53096	22	22	47,8	102,6	500
B237777	300°C/120min	SATM03-0710-B	C	2	625	36,9	2930	52843	21,3	22	47,8	101,8	445
B226792	400°C/120min	SATM04-0710-B	A	2	625	36,9	2930	52843	21,3	22	47,8	101,8	445
B238676	400°C/120min	SATM04-0710-B	B	2	631	37,1	2930	53096	22	22	47,8	102,6	500
B238678	400°C/120min	SATM04-0710-B	C	2	625	36,9	2930	52843	21,3	22	47,8	101,8	445

F200

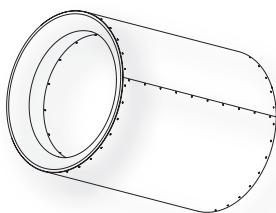
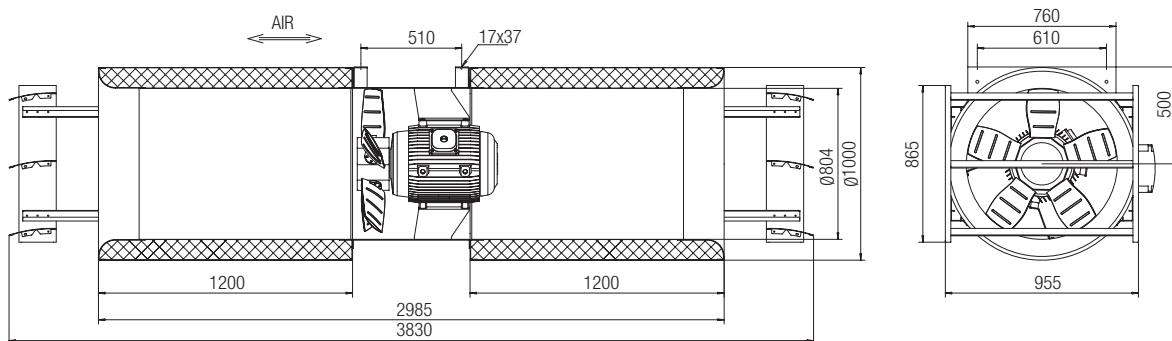
F300

F400

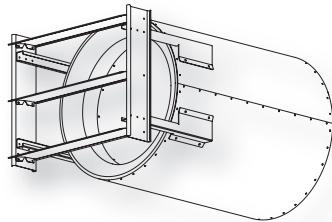
Ø 800 mm, Tunnel jet fan, reversible, SATM



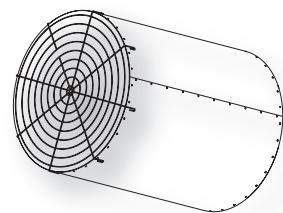
Terrajet by Pollrich DLK



Silencer A --> standard



Silencer B --> deflector



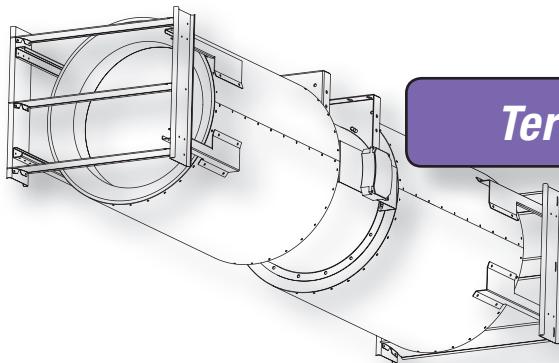
Silencer C --> safety grille

SATM__-0800-B

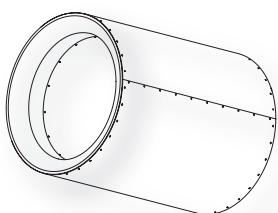
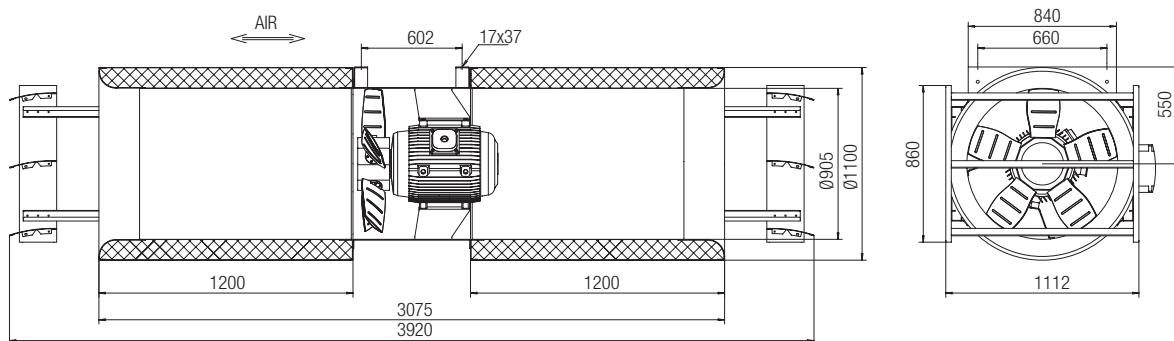
Part number	Type code	Silencer	No. of poles	Thrust [N]	Outlet velocity [m/s]	Nominal speed [rpm]	Volume flow rate [m³/h]	Shaft power [kW]	Max. motor power [kW]	Nominal current [A]	Sound power level [dB(A)]	Weight [kg]
B243423	200°C/120min	SATM02-0800-B	A	2	780	36,6	2940	66650	27,2	30	52	109
B243427	200°C/120min	SATM02-0800-B	B	2	792	37,8	2940	67160	28,2	30	52	109
B243431	200°C/120min	SATM02-0800-B	C	2	780	36,6	2940	66650	27,2	30	52	109
F200												
B243395	300°C/120min	SATM03-0800-B	A	2	775	36,5	2930	66436	26,9	30	60,5	109
B243391	300°C/120min	SATM03-0800-B	B	2	788	36,5	2930	66990	28	30	60,5	109
B243393	300°C/120min	SATM03-0800-B	C	2	775	36,5	2930	66436	26,9	30	60,5	109
F300												
B243364	400°C/120min	SATM04-0800-B	A	2	775	36,5	2930	66436	26,9	30	60,5	109
B243358	400°C/120min	SATM04-0800-B	B	2	788	36,5	2930	66990	28	30	60,5	109
B243361	400°C/120min	SATM04-0800-B	C	2	775	36,5	2930	66436	26,9	30	60,5	109
F400												

All specifications for 400V/50 Hz/3~

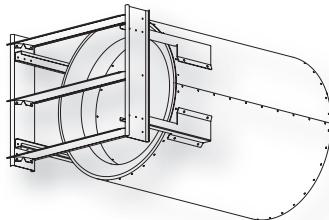
Ø 900 mm, Tunnel jet fan, reversible, SATM



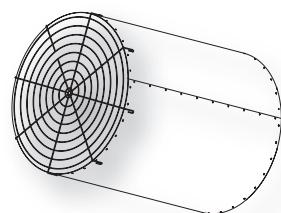
Terrajet by Pollrich DLK



Silencer A --> standard



Silencer B --> deflector



Silencer C --> safety grille

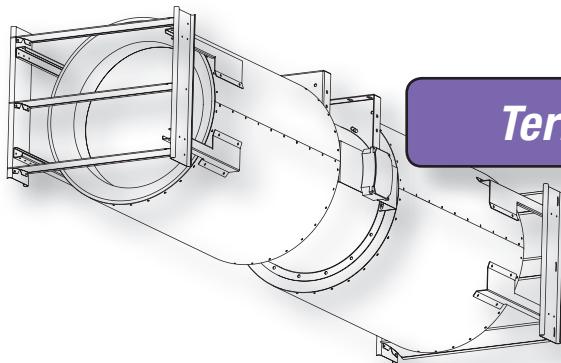
SATM__-0900-B

Part number	Type code	Silencer	No. of poles	Thrust [N]	Outlet velocity [m/s]	Nominal speed [rpm]	Volume flow rate [m³/h]	Shaft power [kW]	Max. motor power [kW]	Nominal current [A]	Sound power level [dB(A)]	Weight [kg]
B243435	200°C/120min	SATM02-0900-B	A	4	530	26,8	1470	61765	12,9	15	28	95
B243437	200°C/120min	SATM02-0900-B	B	4	517	26,5	1470	61003	12,9	15	28	96
B243439	200°C/120min	SATM02-0900-B	C	4	530	26,8	1470	61765	12,9	15	28	95
B243439	300°C/120min	SATM03-0900-B	A	4	518	26,5	1455	61062	12,5	15	34,2	95
B243397	300°C/120min	SATM03-0900-B	B	4	506	26,2	1455	60350	12,5	15	34,2	96
B243400	300°C/120min	SATM03-0900-B	C	4	518	26,5	1455	61062	12,5	15	34,2	95
B243400	400°C/120min	SATM04-0900-B	A	4	518	26,5	1455	61062	12,5	15	34,2	95
B243366	400°C/120min	SATM04-0900-B	B	4	506	26,2	1455	60350	12,5	15	34,2	96
B243371	400°C/120min	SATM04-0900-B	C	4	518	26,5	1455	61062	12,5	15	34,2	95

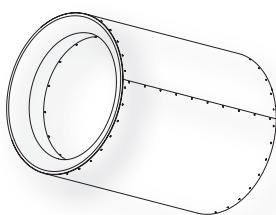
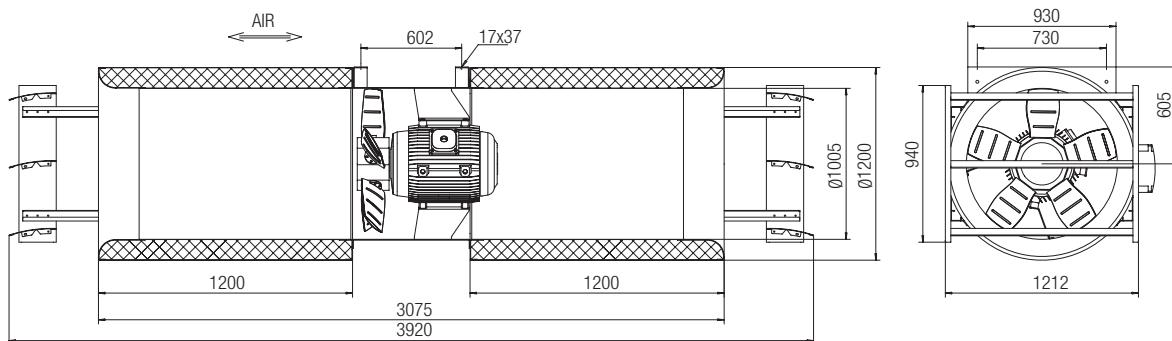
All specifications for 400V/50 Hz/3~

Pollrich DLK Fan Factories **15**

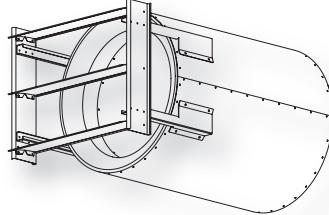
Ø 1000 mm, Tunnel jet fan, reversible, SATM



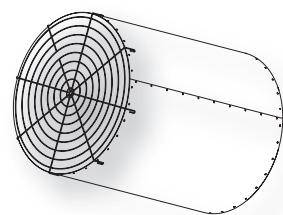
Terrajet by Pollrich DLK



Silencer A --> standard



Silencer B --> deflector



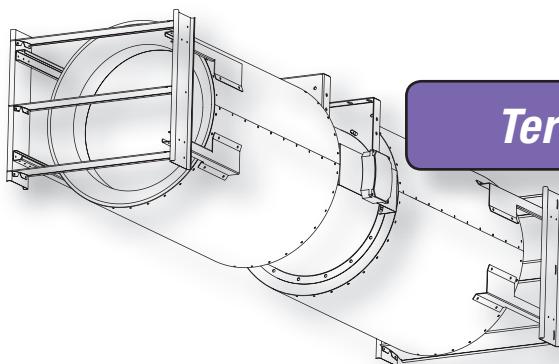
Silencer C --> safety grille

SATM__-1000-B

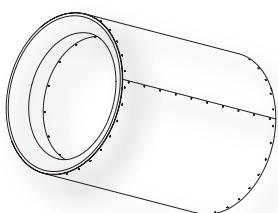
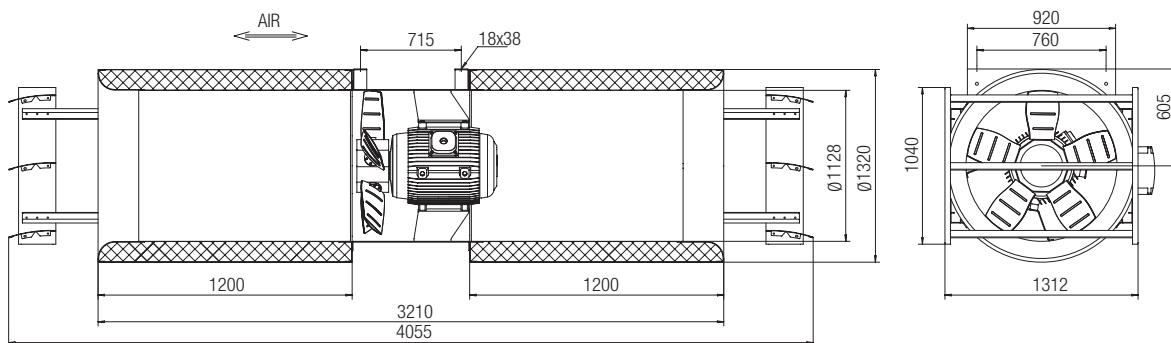
Part number	Type code	Silencer	No. of poles	Thrust [N]	Outlet velocity [m/s]	Nominal speed [rpm]	Volume flow rate [m³/h]	Shaft power [kW]	Max. motor power [kW]	Nominal current [A]	Sound power level [dB(A)]	Weight [kg]
B241330	200°C/120min	SATM02-1000-B	A	4	820	29,8	1470	85315	21,9	30	54	99
B241334	200°C/120min	SATM02-1000-B	B	4	805	29,5	1470	84531	21,8	30	54	100
B241336	200°C/120min	SATM02-1000-B	C	4	820	29,8	1470	85315	21,9	30	54	99
F200												
B227728	300°C/120min	SATM03-1000-B	A	4	810	29,6	1460	84794	21,5	30	67,8	99
B237783	300°C/120min	SATM03-1000-B	B	4	795	29,3	1460	84005	21,4	30	67,8	100
B237781	300°C/120min	SATM03-1000-B	C	4	810	29,6	1460	84794	21,5	30	67,8	99
F300												
B227444	400°C/120min	SATM04-1000-B	A	4	810	29,6	1460	84794	21,5	30	67,8	705
B238680	400°C/120min	SATM04-1000-B	B	4	795	29,3	1460	84005	21,4	30	67,8	780
B238682	400°C/120min	SATM04-1000-B	C	4	810	29,6	1460	84794	21,5	30	67,8	705
F400												

All specifications for 400V/50 Hz/3~

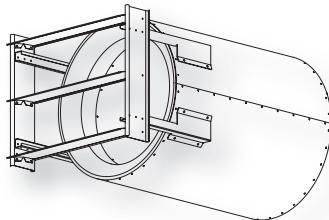
Ø 1120 mm, Tunnel jet fan, reversible, SATM



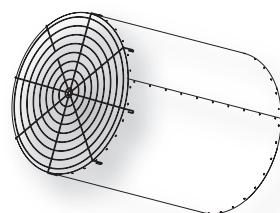
Terrajet by Pollrich DLK



Silencer A --> standard



Silencer B --> deflector

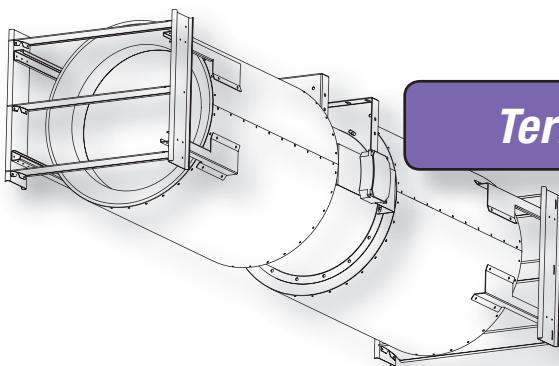


Silencer C --> safety grille

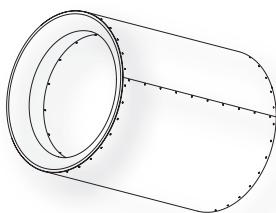
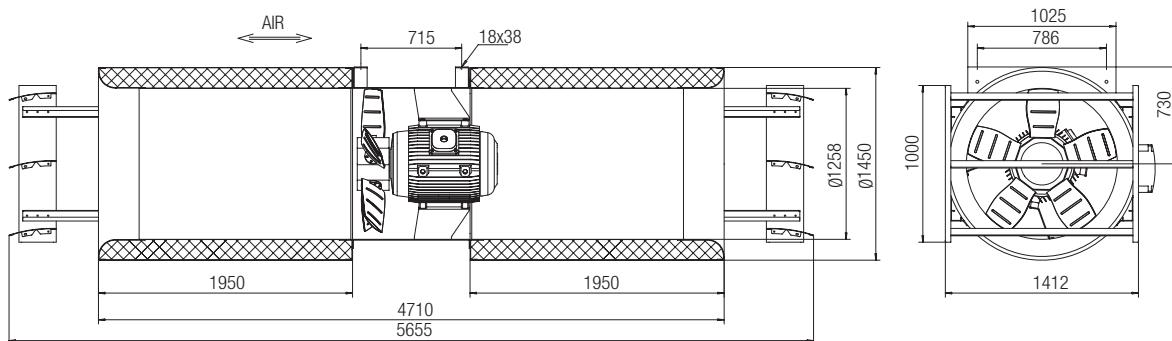
SATM__-1120-B

Part number	Type code	Silencer	No. of poles	Thrust [N]	Outlet velocity [m/s]	Nominal speed [rpm]	Volume flow rate [m³/h]	Shaft power [kW]	Max. motor power [kW]	Nominal current [A]	Sound power level [dB(A)]	Weight [kg]
B243441	200°C/120min	SATM02-1120-B	A	4	1298	33,4	1475	120156	38,8	45	80	107
B243443	200°C/120min	SATM02-1120-B	B	4	1267	33,0	1475	118712	38,5	45	80	108
B243445	200°C/120min	SATM02-1120-B	C	4	1298	33,4	1475	120156	38,8	45	80	107
B243402	300°C/120min	SATM03-1120-B	A	4	1278	33,2	1465	119226	38	45	99,6	107
B243405	300°C/120min	SATM03-1120-B	B	4	1250	32,8	1465	117913	37,7	45	99,6	108
B243407	300°C/120min	SATM03-1120-B	C	4	1278	33,2	1465	119226	38	45	99,6	107
B227734	400°C/120min	SATM04-1120-B	A	4	1278	33,2	1465	119226	38	45	99,6	107
B238684	400°C/120min	SATM04-1120-B	B	4	1250	32,8	1465	117913	37,7	45	99,6	100
B238686	400°C/120min	SATM04-1120-B	C	4	1278	33,2	1465	119226	38	45	99,6	107

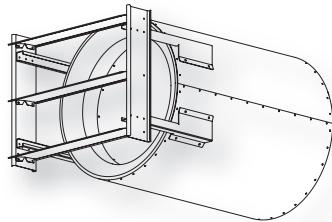
Ø 1250 mm, Tunnel jet fan, reversible, SATM



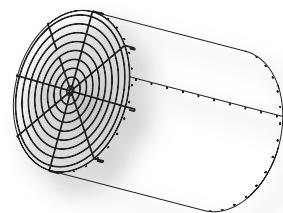
Terrajet by Pollrich DLK



Silencer A --> standard



Silencer B --> deflector



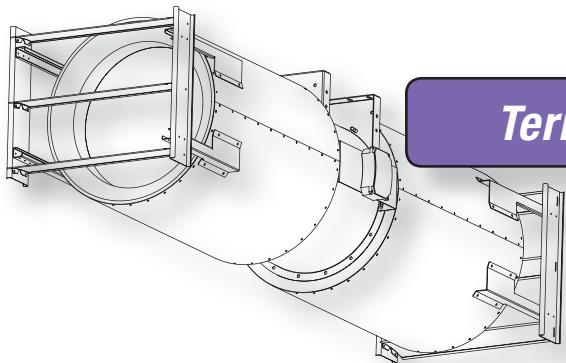
Silencer C --> safety grille

SATM__-1250-B

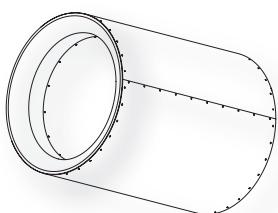
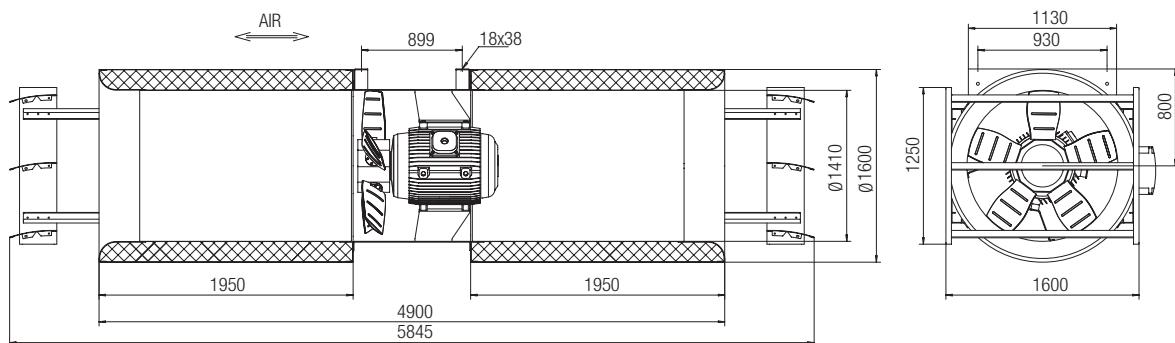
Part number	Type code	Silencer	No. of poles	Thrust [N]	Outlet velocity [m/s]	Nominal speed [rpm]	Volume flow rate [m³/h]	Shaft power [kW]	Max. motor power [kW]	Nominal current [A]	Sound power level [dB(A)]	Weight [kg]
B241338	200°C/120min	SATM02-1250-B	A	4	1674	34,1	1475	152630	51,3	55	98	103
B241342	200°C/120min	SATM02-1250-B	B	4	1596	33,3	1475	149070	50,9	55	98	103,7
B241346	200°C/120min	SATM02-1250-B	C	4	1674	34,1	1475	152630	51,3	55	98	103
F200												
B229697	300°C/120min	SATM03-1250-B	A	4	1662	34,0	1470	152116	51	55	113	103
B237789	300°C/120min	SATM03-1250-B	B	4	1587	33,2	1470	148640	50,4	55	113	103,7
B237787	300°C/120min	SATM03-1250-B	C	4	1662	34,0	1470	152116	51	55	113	103
F300												
B228319	400°C/120min	SATM04-1250-B	A	4	1662	34,0	1470	152116	51	55	113	103
B238688	400°C/120min	SATM04-1250-B	B	4	1587	33,2	1470	148640	50,4	55	113	103,7
B238690	400°C/120min	SATM04-1250-B	C	4	1662	34,0	1470	152116	51	55	113	103
F400												

All specifications for 400V/50 Hz/3~

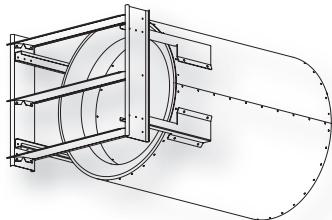
Ø 1400 mm, Tunnel jet fan, reversible, SATM



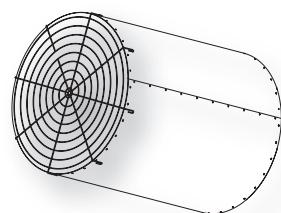
Terrajet by Pollrich DLK



Silencer A --> standard



Silencer B --> deflector



Silencer C --> safety grille

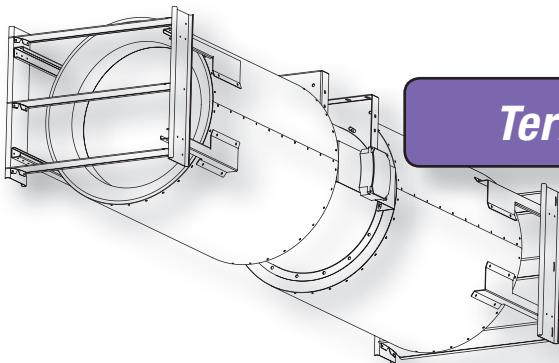
SATM__-1400-B

Part number	Type code	Silencer	No. of poles	Thrust [N]	Outlet velocity [m/s]	Nominal speed [rpm]	Volume flow rate [m³/h]	Shaft power [kW]	Max. motor power [kW]	Nominal current [A]	Sound power level [dB(A)]		Weight [kg]
											200°C/120min	200°C/120min	
B243448	200°C/120min	SATM02-1400-B	A	4	2344	34,1	1475	202170	75	75	131	106	1535
B243451	200°C/120min	SATM02-1400-B	B	4	2232	33,7	1475	197298	73,6	75	131	107	1630
B243453	200°C/120min	SATM02-1400-B	C	4	2344	34,1	1475	202170	75	75	131	106	1535
B243413	300°C/120min	SATM03-1400-B	A	4	2328	34,0	1470	201485	74,6	75	150	106	1465
B243411	300°C/120min	SATM03-1400-B	B	4	2217	33,6	1470	196594	72,9	75	150	107	1560
B243409	300°C/120min	SATM03-1400-B	C	4	2328	34,0	1470	201485	74,6	75	150	106	1465
B229747	400°C/120min	SATM04-1400-B	A	4	2328	34,0	1470	201485	74,6	75	150	106	1465
B238692	400°C/120min	SATM04-1400-B	B	4	2217	33,6	1470	196594	72,9	75	150	107	1560
B238694	400°C/120min	SATM04-1400-B	C	4	2328	34,0	1470	201485	74,6	75	150	106	1465

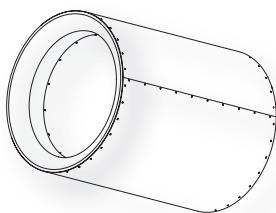
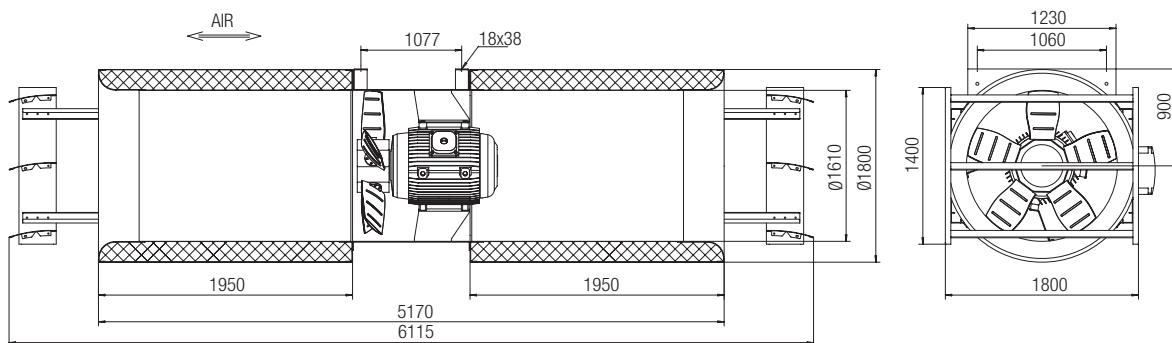
All specifications for 400V/50 Hz/3~

Pollrich DLK Fan Factories **19**

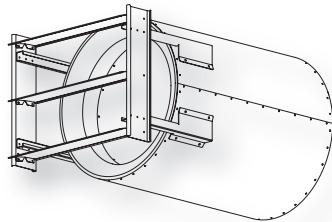
Ø 1600 mm, Tunnel jet fan, reversible, SATM



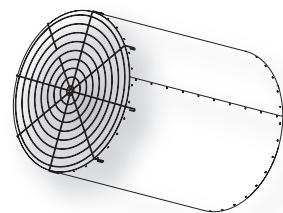
Terrajet by Pollrich DLK



Silencer A --> standard



Silencer B --> deflector



Silencer C --> safety grille

SATM__-1600-B

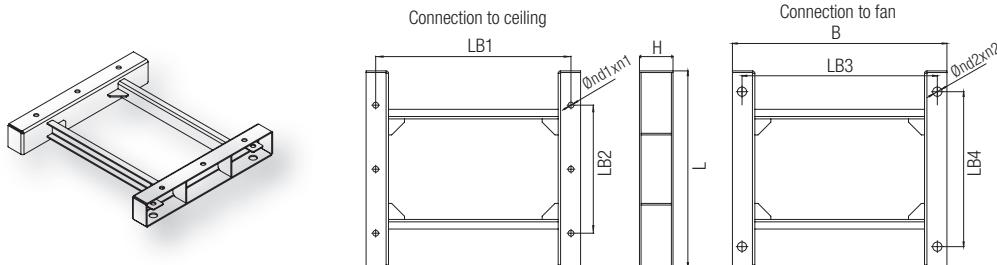
Part number	Type code	Silencer	No. of poles	Thrust [N]	Outlet velocity [m/s]	Nominal speed [rpm]	Volume flow rate [m³/h]	Shaft power [kW]	Max. motor power [kW]	Nominal current [A]	Sound power level [dB(A)]	Weight [kg]
B243455	200°C/120min	SATM02-1600-B	A	4	2637	33,4	1475	245178	85,1	90	157	106
B243457	200°C/120min	SATM02-1600-B	B	4	2511	33,0	1475	239270	84,9	90	157	107
B243459	200°C/120min	SATM02-1600-B	C	4	2637	33,4	1475	245178	85,1	90	157	106
F200												
B243415	300°C/120min	SATM03-1600-B	A	4	2619	33,2	1470	244350	84,3	86,3	150	106
B243417	300°C/120min	SATM03-1600-B	B	4	2493	32,8	1470	238420	84	86,3	150	107
B243419	300°C/120min	SATM03-1600-B	C	4	2619	33,2	1470	244350	84,3	86,3	150	106
F300												
B243377	400°C/120min	SATM04-1600-B	A	4	2619	33,2	1470	244350	84,3	86,3	150	106
B243384	400°C/120min	SATM04-1600-B	B	4	2493	32,8	1470	238420	84	86,3	150	107
B243387	400°C/120min	SATM04-1600-B	C	4	2619	33,2	1470	244350	84,3	86,3	150	106
F400												

All specifications for 400V/50 Hz/3~

ACCESSORIES

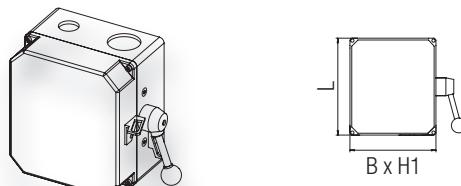
for Tunnel jet fans

Mounting frame



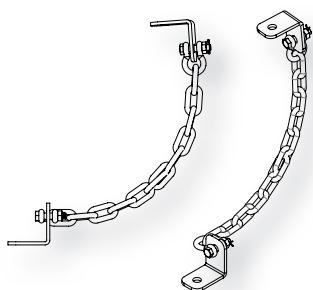
DN	Part no.	Part no.	L	B	LB1	LB2	Ød1 x n1	LB3	LB4	Ød2 x n2	H	Weight
	F200 / F300	F400										approx. kg
630	B244819	B244834	560	520	460	420	18 x 4	460	500	29 x 4	100	15
710	B237329	B237277	615	670	610	400	18 x 4	610	484	29 x 4	100	17
800	B244821	B244832	690	700	690	450	18 x 4	690	545	29 x 4	100	20
900	B244823	B238732	730	720	660	510	18 x 4	660	600	29 x 4	100	20
1000	B237369	B237532	730	790	730	510	18 x 6	730	593	29 x 4	100	21
1120	B237615	B237599	850	800	730	600	18 x 6	730	709	32,5 x 4	120	36
1250	B237179	B237225	850	855	786	600	18 x 6	786	720	32,5 x 4	120	37
1400	B237666	B237643	1040	1000	930	780	18 x 8	930	899	32,5 x 4	120	44
1600	B242828	B244836	1200	1100	1060	900	18 x 8	1060	1030	32,5 x 4	120	50

Isolator switch (aluminium)



DN	Part no.	Max. power	Protec-	Hole pattern		
				L x B	H1	a x b x d
630	B215002	30 kW	IP 65	160 x 142	104	90 x 120 x 5,5
710	B215002	30 kW	IP 65	160 x 142	104	90 x 120 x 5,5
800	B215002	30 kW	IP 65	160 x 142	104	90 x 120 x 5,5
900	B215002	30 kW	IP 65	160 x 142	104	90 x 120 x 5,5
1000	B215002	30 kW	IP 65	160 x 142	104	90 x 120 x 5,5
1120	B214159	75 kW	IP 54	286 x 206	135	170 x 230 x 4,5
1250	B214159	75 kW	IP 54	286 x 206	135	170 x 230 x 4,5
1400	B214159	75 kW	IP 54	286 x 206	135	170 x 230 x 4,5
1600	B219546	200 kW	IP 65	600 x 400	200	350 x 550 x 9,5

Fall protection



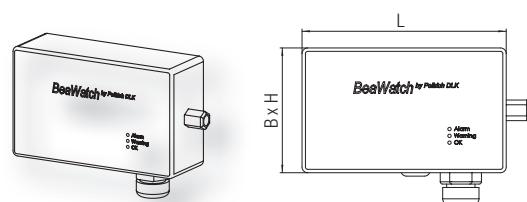
Part no.
DN 630 - 1000 B238016
DN 1120 - 1600 B284659

Vibration sensor



Part no.
B238020

BeaWatch® bearing condition monitoring system



Part no.	L	B x H
B242262	180	110 x 62,5

SUPPLY / EXHAUST AIR SARM04

Reversible, AXIAL DN 630 - 2500

Range of application:

The low pressure axial fans of product line Bimax by polrichDLK (SARM) are suitable for ventilation from -20 °C up to +55 °C respectively in case of fire for smoke extraction up to 400 °C (120min).

The essential benefits are:

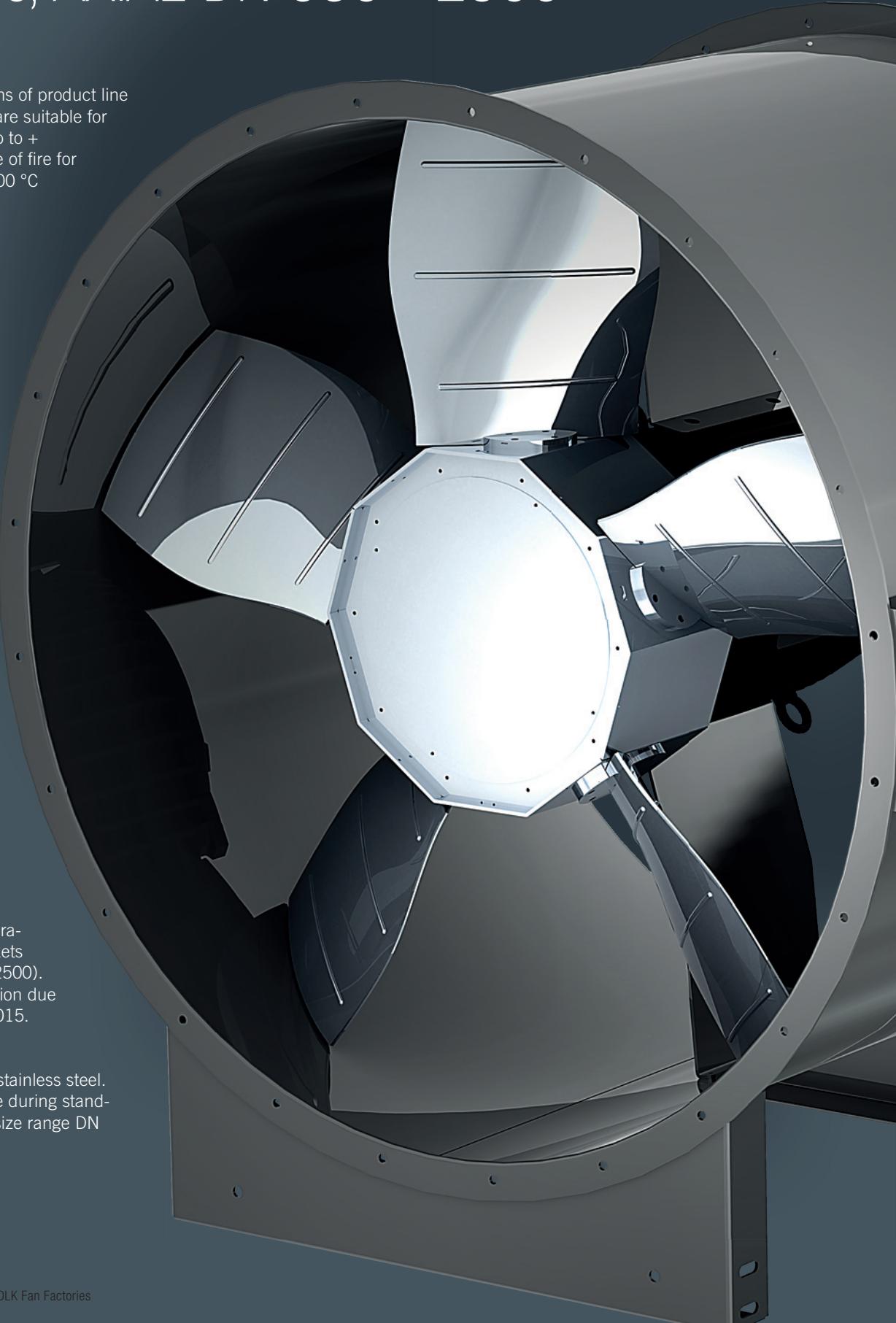
- Robust design, made in Germany
- welded blades, stainless steel
- blades adjustable during standstill (adjustability for fan size range DN 630 - 1600)
- Worldwide suitable for 50 Hz- and 60 Hz
- Optimum solutions due to product diversity:
Truly reversible, single speed or dual speed motors
- Temperature class F400
- CE-certified according to EN 12101-3

Casing:

Made of sheet steel with rolled flanges on both sides and riveted motor bracket (welded motor brackets for fan sizes DN 1800 – 2500). Optimal corrosion protection due to surface coating RAL 7015.

Impeller:

Impeller blades made of stainless steel. Profiled blades adjustable during standstill (adjustability for fan size range DN 630 – 2500).



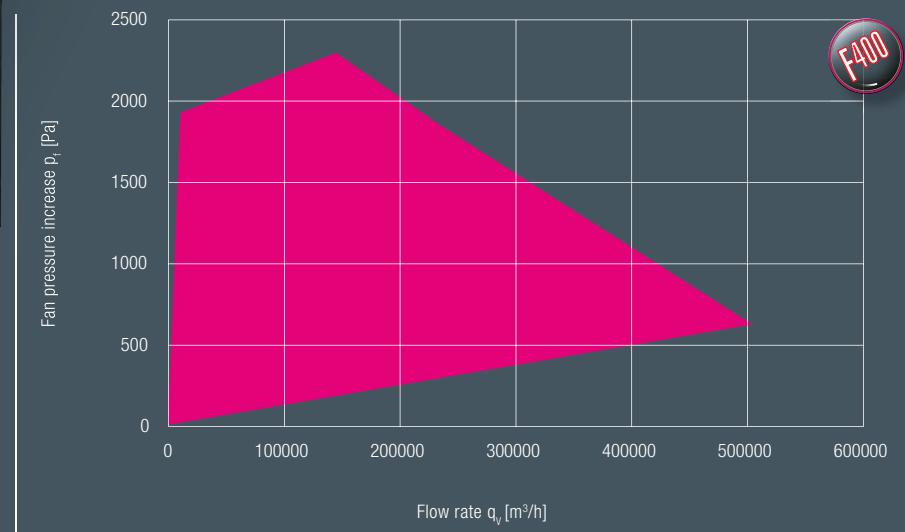
Bimax by Pollrich DLK

Drive:

Three phase motor according to EN 12101-3 / IEC norm motor. Suitable for continuous operation S1. Ambient temperature for motor max. 55 °C for ventilation, max. 400 °C/120 min for smoke extraction. Motor performance selected for cold start-up at 20 °C.

Direction of airflow:

Reversible



DN [mm]	max. speed [1/min]	max. operating tempera- ture [°C]	Tempe- rature class	max. motor power [kW]	max. flow rate [m³/h]	max. fan pressure increase [Pa]	Weight [kg]
630	3000	40	F400	22	38300	1350	134-150
710	3000	40	F400	30	54000	1500	144-259
800	3000	40	F400	37	69000	1950	193-396
900	1500	40	F400	15	55200	600	207-256
1000	1500	40	F400	30	85000	670	226-358
1120	1500	40	F400	45	120000	830	430-650
1250	1500	40	F400	75	166000	1045	474-848
1400	1500	40	F400	86	217000	1360	576-950
1600	1500	40	F400	86	237000	1270	704-1078
1800	1500	80	F400	200	366000	2350	1364-2288
2000	1500	80	F400	200	430000	1400	1496-2420
2240	1000	80	F400	160	445000	1550	1848-2673
2500	1000	80	F400	160	505000	900	2217-3042

All indicated values for 400V/50 Hz/3~

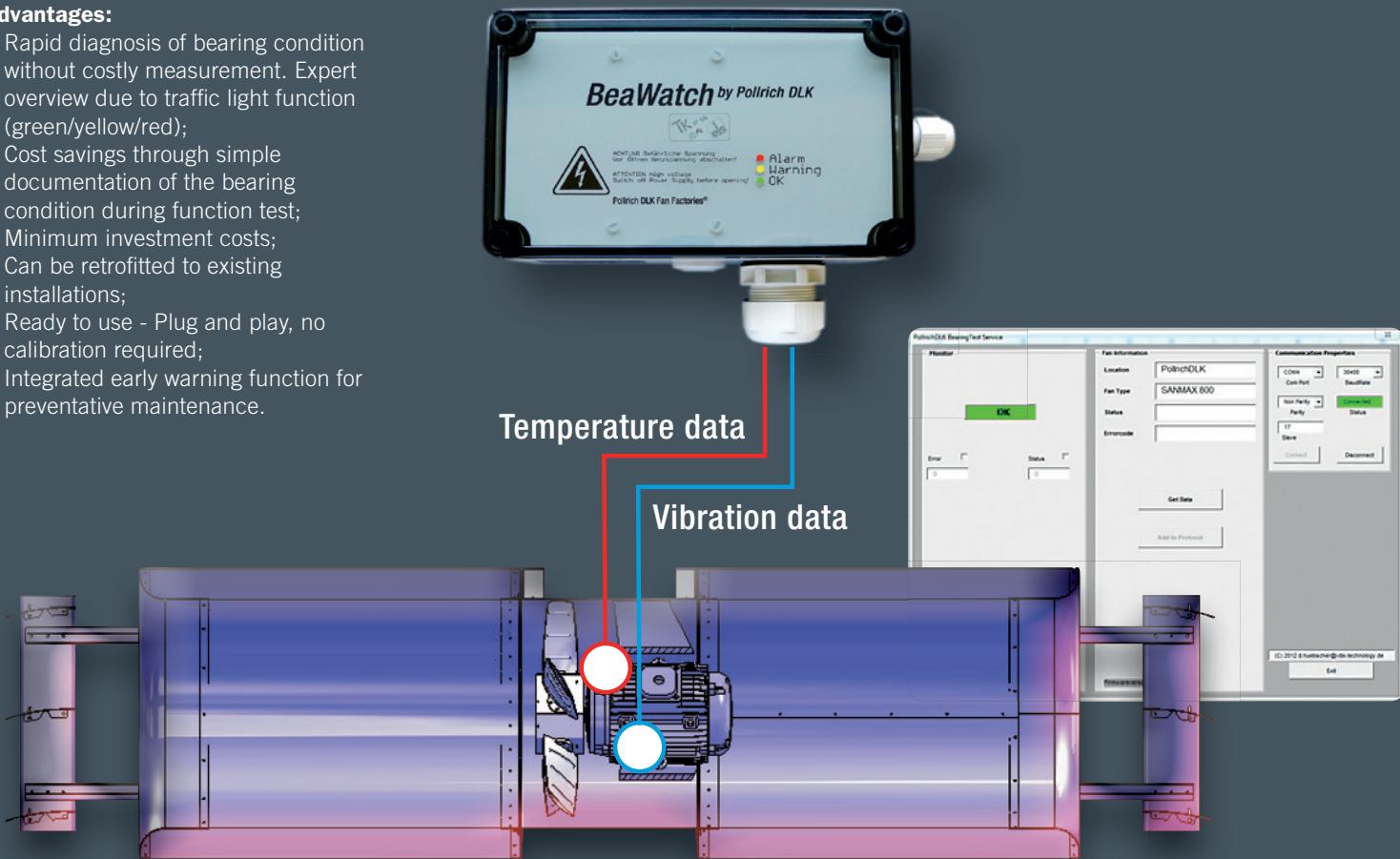


BeaWatch®: BEARING CONDITION MONITORING SYSTEM FOR ALL FANS.

World news: Dual Protection.

Advantages:

- Rapid diagnosis of bearing condition without costly measurement. Expert overview due to traffic light function (green/yellow/red);
- Cost savings through simple documentation of the bearing condition during function test;
- Minimum investment costs;
- Can be retrofitted to existing installations;
- Ready to use - Plug and play, no calibration required;
- Integrated early warning function for preventative maintenance.



Principle

Combined measurement and evaluation of:

- Vibration acceleration using defined bearing frequencies
- Bearing temperature

Analysing parameters enables comprehensive and reliable assessment of the bearing conditions.

System design

The *BeaWatch*® Advanced system comprises of the following components per fan, a vibration sensor mounted on the motor, temperature sensors at both bearings and

a control unit for direct mounting on the fan or at another location.

Depending on the number of fans to be monitored and evaluation of the possibilities on site, multiple system versions are available.

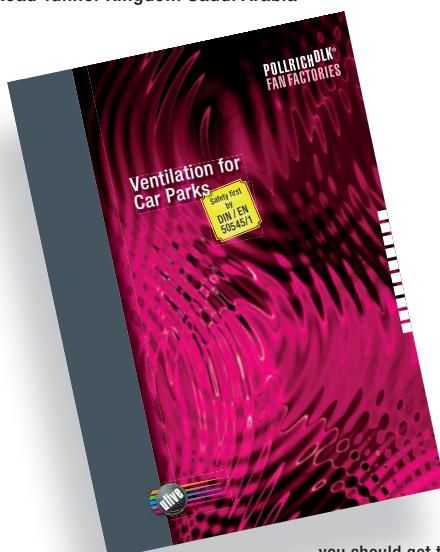
Specifications

- IP 67, suitable for outdoor use
- Temperature range -20 °C ... +50 °C
- MODBUS RS485 port (optional), Max. 247 control units
- Power supply 230 V 1Ph 50Hz / 60Hz
- Power consumption 5W

System	Controller	Sensor	MODBUS-interface RS 485	Engine bearing temperature measurement	Mobile handset
Basic	•	•			
Comfort*	•	•	•		•
Multi	•	•	•		
Advanced	•	•	•		•

*For visualization of bearing condition and for simple documentation of the measurement results

Rathaus-Passage, Berlin Germany	16 SATM, DN 630 mm	Hubertustunnel, Netherlands	36 SATM, DN 710 mm
Sijtwendetunnel, Roadtunnel Netherlands	66 SATM, DN 710 mm	Heinenoordtunnel, Netherlands	29 SATM, DN 710 mm
Kiltunnel, Roadtunnel Netherlands	24 SATM, DN 710 mm	Metro Krakau, Poland	4 SATM, DN1800 mm 2 SATM, DN1600 mm 2 SATM, DN 2000 mm 2 SATM, DN 1600 mm 2 SATM, DN 1800 mm
Airport Frankfurt/Main Germany	66 SATM, DN 400 mm	Ruhrschnellweg, Germany	41 SATM, DN 1000 mm
Circle Line, Oslo Metro-tunnel Norway	12 SATM, DN 1000 mm	Tunnel Laliki, Poland	20 SATM, DN 800 mm 2 SATM, DN 560 mm
Wijkertunnel, Netherlands	12 SATM, DN 800 mm	Al Salam Tunnel, Abu Dhabi	48 SATM, DN 1600 mm
TAKUUM-Roadtunnel, Norway	48 SATM, DN 1000 mm	Tunnel C17, Spain	25 SATM, DN 1400 mm
Wijkertunnel, Netherlands	18 SATM, DN 710 mm	Alptransit Brenner Italy	48 SATM, 1600 mm
Färöer Island, Denmark	42 SATM, DN 1120 mm	Waterwolftunnel N201, Netherlands	21 SATM, DN 1250
Road tunnel Grostol Norway	10 SATM, DN 1000 mm	Metro Warsaw, Poland	34 SATM, DN 1600 – 2000
Circle Line, Oslo Metro tunnel Norway	19 SATM, DN 710 mm	KAIA Airport Tunnel Kingdom Saudi Arabia	28 SATM, DN 1120
Schwarzer Berg, Roadtunnel Germany	6 SATM, DN 630 mm 6 SATM, DN 710 mm, 2 SATM, DN 1250 mm, 2 SATM, DN 1400 mm	Tunnel Ismailia Road Egypt	8 SATM, DN 0710-1000
Nydalens-Storo 2, Norway	6 SATM, DN 710 mm	Deggendorf Road Tunnel Germany	14 SATM, DN 0710-1000
S 16 Arlberg/Austria Austria	23 SATM, DN 500 mm 7 SATM, DN 500 mm	King Khalid Int. Airport, Road Tunnel Kingdom Saudi Arabia	14 SATM, DN 1000
Batimi-Tunnel, Georgia	8 SATM, DN 1000 mm		
Roertunnel, Netherlands	14 SATM, DN 1250 mm		
Metro U2-Station Praterstern Wien, Austria	8 SATM, DN 1600		
Swalentunnel, Netherlands	22 SATM, DN 1250 mm 4 SATM, DN 1000 mm		
Metro Warsaw, Poland	10 SATM, DN 1600 mm		
Vlietunnel, Netherlands	14 SATM, DN 710 mm		



... you should get to know

POLLRICH[®] DLK FAN FACTORIES



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Our service-team is available for you
around-the-clock

- Technical advice
- Assembly
- Commissioning
- Performance tests
- Noise and vibration measurements
- Inspection
- Preventative maintenance
- Maintenance and repair
- Electronic balancing
- System optimisation

