

1) TYPE EXAMINATION CERTIFICATE

(TRANSLATION)

- (2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Directive 94/9/EC
- (3) Type examination certificate number:

SIQ 14 ATEX 143 X



(4) Equipment: Roof radial fan, types DVV-Ex... and DVVI-Ex...

(5) Manufacturer: Systemair d.o.o.

(6) Address: Špelina ulica 2, SI-2000 Maribor

- (7) This equipment and any acceptable variations thereto are specified in the schedule to this certificate and in the documents therein referred to.
- (8) SIQ Ljubljana certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive 94/9/EC.

The examination and test results are recorded in the confidential test report TEx143/14.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with the following standards:

EN 13463-1: 2009

EN 13463-5: 2011

EN 14986 : 2007

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This type examination certificate relates only to the design, examination and tests of the specified equipment in accordance with the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

€x II 2 G c IIB T4 ... T3

10

(Ex) | 1 2 G c | 1B + H₂ T3

Certification body

Ljubljana, 4 September 2014

Igor Likar



(13) SCHEDULE

(14) TYPE EXAMINATION CERTIFICATE SIQ 14 ATEX 143 X

(15) Description of the equipment

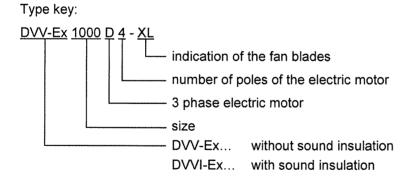
Roof radial fan, types DVV-Ex... and DVVI-Ex..., is intended for ventilation of hazardous areas in industry. External parts and covers are made from sheet aluminium, supporting parts (basic plate and motor's holder) are made from sheet steel, which is zinc plated, alu-zinc plated or painted. Rotor of the fan is made from basic plate on which the fan blades are welded. Rotor is made from zinc plated sheet steel. Rotor of the fan is directly installed on the shaft of the electric motor. Inlet of the fan is covered with copper lining.

Fan can be mounted on a base, types FDG-Ex, FDGE-Ex, SSG-Ex and SSGE-Ex, sizes 560, 630 and 800-1000. The base is made from alu-zinc or magnelis plated sheet steel with or without sound insulation.

Before inlet of the fan below fan the self-closing flap, types VKG-Ex and VKGE-Ex, sizes 560, 630 and 800-1000, for preventing air flow when fan does not operate, can be mounted. Casing of the self-closing flap and flap are made from alu-zinc or magnelis plated sheet steel. Axis of the self-closing flap and hinge of the flap are made from steel and brass (CuZn37), respectively. Rests for the flap are covered with plastic pipe.

Under fan, before fan's inlet the flexible connection, type ASSV-Ex, sizes 560, 630 and 800/1000, can be mounted. Flexible connection is intended for limiting the vibration transfer and for compensation of the relative movement of the vent channel and fan.

Technical data



SIQ 14 ATEX 143 X Page 2/4



Versions of the fans:

DVV-Ex DVVI-Ex	Number of poles	Electric motor	Power [kW]	In [A]	ISTART [A]	RPM [min ⁻¹]	Insulation	Heating	Mass of the motor	Mass of the fan
500 VO		41/370 00 04	4.4	0.4	44.5	4440			[kg]	[kg]
560-XS	4	4KTC 90 S4	1.1	2.4	11.5	1410	F	В	32	102
560-XS	6	4KTC 90 S6	0.75	2.1	7.8	915	F	В	32	102
560-XM	4	4KTC 90 L4	1.5	3.4	17.7	1415	F	В	35	105
560-XM	6	4KTC 90 S6	0.75	2.1	7.8	915	F	В	32	102
560-XL	4	4KTC 100 LA4	2.2	4.7	21.6	1410	F	В	43	113
560-XL	6	4KTC 90 S6	0.75	2.1	7.8	915	F	В	32	102
560-XL	8	4KTC 90 S8	0.37	1.25	3.8	685	F	В	32	102
630-XS	4	4KTC 100 LB4	3	6.5	32.5	1415	F	В	46	128
630-XS	6	4KTC 90 L6	1.1	3	12.3	915	F	В	35	116
630-XS	8	4KTC90 L8	0.55	1.75	5.4	685	F	В	35	116
630-XM	4	4KTC 112 M4	4	8.3	50.6	1435	F	В	60	144
630-XM	6	4KTC 100 L6	1.5	3.7	17.4	930	F	В	46	130
630-XM	8	4KTC 100 LA8	0.75	2.3	8.1	690	F	В	43	127
630-XL	4	4KTC 132 S4	5.5	10.8	55.1	1435	F	В	84	170
630-XL	6	4KTC 112 M6	2.2	5	30.5	960	F	В	60	149
630-XL	8	4KTC 100 LA8	0.75	2.3	8.1	690	F	В	43	129
800-XS	6	4KTC 132 S6	3	6.6	41.6	975	F	В	84	242
800-XS	8	4KTC 100 LB8	1.1	3.25	12.4	695	F	В	46	203
800-XM	6	4KTC 132 MA6	4	8.8	55.4	960	F	В	88	244
800-XM	8	4KTC 100 LB8	1.1	3.25	12.4	695	F	В	46	201
800-XL	6	4KTC 132 MB6	5.5	11.8	72	955	F	В	95	256
800-XL	8	4KTC 112 M8	1.5	4.15	17.8	710	F	В	60	220
1000-XL	6	4KTC 160 L6	11	23.5	141	965	F	В	182	405
1000-XL	8	4KTC 160 MB8	5.5	13.4	64.3	715	F	В	160	382
1000-XM	6	4KTC 160 M6	7.5	15.8	106	970	F	В	161	379
1000-XM	8	4KTC 160 MA8	4	10	48	720	F	В	146	364
1000-XP	6	4KTC 160 L6	11	23.5	141	965	F	В	182	403
1000-XP	8	4KTC 160 MA8	4	10	48	720	F	В	146	366



Allowed ambient temperature range Tamb:

Types: DVV-Ex... and DVVI-Ex... the basic model for IIB T4

 $-20^{\circ}\text{C} \le \text{T}_{amb} \le +40^{\circ}\text{C}$

Types: DVV-Ex... and DVVI-Ex... the model for extended ambient temperature range for IIB T3

-20°C $\leq T_{amb} \leq +55$ °C

Types: DVV-Ex... and DVVI-Ex... the model for extended ambient temperature range for IIB + H₂ T3

-20°C $\leq T_{amb} \leq +55$ °C

Types: DVV-Ex... and DVVI-Ex... the model for extended ambient temperature range for IIB T4

-40°C ≤ T_{amb} ≤ +40°C

(16) Test report

TEx143/14 dated 4 September 2014.

(17) Special conditions for safe use

Allowed ambient temperature range stated in item (15) shall be taken into account.

(18) Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements has been assured by compliance with the requirements of the standards listed under item (9).