Fans acc. to ATEX
Directive 2014/34/EU and DIN EN 14986

Explosion protection for fans – Questionnaire

Replacement for RFR0201-01

Customer/operation company: **Person in charge:**

Date: **Signature:**

2. Fans handling inflammable dust and gas/air/dust-mixtures

2.1 Conveyance of inflammable dusts and dust/air-mixture (in the fan inside)

Zone 21/Category 2D ☐ dust group IIIA ☐ IIIB ☐ IIIC ☐
Zone 22/Category 3D ☐
non-explosive zone ☐

handled gas, contents	:	when relevant, details on separate sheet
ignition temperature (cloud of dust)	:	°C (*)
glow temperature (layer of dust)	:	°C (*)
minimum inlet temperature	:	°C
maximum inlet temperature	:	°C
maximum inlet pressure (pressure of system)	:	daPa
maximum pressure increase	:	daPa
formation of ferritic oxidation (rust)	☐	
formation of sticking material/moisture	☐	
formation of abrasion/wear and tear	☐	

(*) Reference work for ignition and glow temperatures of dust: e.g. GESTIS-STAUB-EX (https://staubex.ifa.dguv.de)

2.2 Installation of fan in

Zone 21/Category 2D ☐ dust group IIIA ☐ IIIB ☐ IIIC ☐
Zone 22/Category 3D ☐
non-explosive atmosphere ☐

ambience, contents	:	when relevant, details on separate sheet
ignition temperature (cloud of dust)	:	°C (*)
glow temperature (layer of dust)	:	°C (*)

Remark: The categories for inside (conveyance/handled gas) and outside (installation/surrounding atmosphere) must not differ in more than one level from each other (DIN EN 14986).

2.3 Motor design for installation in zone 21 and zone 22 according to IEC/EN 60079-10-2

Zone 21/Category 2D	all types of dust (IIIA/IIIB/IIIC)	Ex tb IIIC	☐
Zone 22/Category 3D	electrical conductive dust	Ex tc IIIC	☐
Zone 22/Category 3D	electrical non-conductive dust	Ex tc IIIB	☐
	flammable fibrous material	Ex tc IIIA	☐

2.4 Type of starting

direct starting (triangle - Δ or star - Y) ☐
star-delta-starting (Y/Δ) ☐
soft start-up ☐
frequency converter starting ☐