



Certificate

(1) **EU - TYPE EXAMINATION CERTIFICATE**
in accordance with Directive 2014/34 / EU, Annex III, point 6
(Translation)



(2) **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres - Directive 2014/34/EU**

(3) EU - Type Examination Certificate Number: TÜV-A 19 ATEX0103 X

(4) Product: High-performance axial pipe fan DZR ../B Ex e and DZR ../B Ex t

(5) Manufacturer: Maico Elektroapparate-Fabrik GmbH

(6) Address: Steinbeisstraße 20
78056 Villingen-Schwenningen
Deutschland

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) TÜV AUSTRIA SERVICES GMBH, Notified Body number 0408, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. TUV-A 2019-TAD-000097_REV00_DZD_DZQ_DZS_DZR

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

EN 60079-0:2012 + A11:2013 EN 60079-7:2015 EN ISO 80079-36:2016
EN 60079-31:2016 EN ISO 80079-37:2016

except in respect of those requirements listed at item 17 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.



(12) The marking of the product shall include the following:



II 2G Ex h IIB + H₂ T3/T4 Gb X
II 2G Ex eb IIB + H₂ T3/T4 Gb X
II 2D Ex h IIIB T135°C/T200°C Db X
II 2D Ex tb IIIB T135°C/T200°C Db IP64 X



Vienna
Place

14.10.2020
Date


Michael Reuschel
Notified Body 0408
TÜV AUSTRIA SERVICES GMBH



(13)

Schedule

(14)

Certificate Number TÜV-A 19 ATEX0103 X

(15) **Description of Product**

The axial fan is used to ventilate commercially used rooms with potentially explosive atmospheres. It is fixed on feet or in a pipe section and connected directly to the circuit via a junction box. The fans are supplied in the "three-phase current" version.

The fans are supplied with one-sided contact protection as standard. According to the operating instructions, in areas where access to the rotating area is possible, an additional contact protection must be fitted on the other side. The fan is intended exclusively for fixed installation on the rigid supply network.

Type codes:

DZR ../.. B Ex e	DZR ../.. B Ex t
DZR 20/2 B Ex e	DZR 20/2 B Ex t
DZR 25/2 B Ex e	DZR 25/2 B Ex t
DZR 25/4 B Ex e	DZR 25/4 B Ex t
DZR 30/2 B Ex e	DZR 30/2 B Ex t
DZR 30/4 B Ex e	DZR 30/4 B Ex t
DZR 30/6 B Ex e	DZR 30/6 B Ex t
DZR 35/2 B Ex e	DZR 35/2 B Ex t
DZR 35/4 B Ex e	DZR 35/4 B Ex t
DZR 35/6 B Ex e	DZR 35/6 B Ex t
DZR 40/4 B Ex e	DZR 40/4 B Ex t
DZR 40/6 B Ex e	DZR 40/6 B Ex t
DZR 45/4 B Ex e	DZR 45/4 B Ex t
DZR 45/6 B Ex e	DZR 45/6 B Ex t
DZR 50/4 B Ex e	DZR 50/4 B Ex t
DZR 50/6 B Ex e	DZR 50/6 B Ex t
DZR 60/6 B Ex e	DZR 60/6 B Ex t



Technical data:

	DZR.../.. B Ex e/t
Producttype	Axial pipe fan
Rated voltage	125-500V ~3 (DZ..35/2 B 400 V ~3)
Voltage type	three-phase current
Supply frequency	50/60 Hz
Rated power	25 - 530 W
Cosφ	0,38 - 0,65
Rated current	0,28 - 1,0 A
Protection class	IP64
Installation position	vertical / horizontal
Rotation speed	400 - 2950 1/min
Promotional volume	1100 - 10500 m ³ /h
Nominal diameter	250 - 600mm
I _A /I _N	3,1 - 7,1
Time t _A	35 - 240 Seconds
Operating mode	S1
Temperatur class	T3/T4 und T135°C/T200°C
Thermal class of the insulating material Th. Cl.	155 (F)

(16) **Report Number**

TUV-A 2019-TAD-000097_REV00_DZD_DZQ_DZS_DZR

(17) **Specific Conditions of Use**

Provide a free air inlet or air outlet with a protective device in accordance with EN 60529. An contact protection on both sides is mandatory. The unit and piping must be protected against the suction of foreign bodies. For this purpose, a suitable protective grid must be attached.

With the exception of the DZR 35/2 B Ex e/t, the fans are speed controllable by means of a suitable multi-stage variable transformer. Speed control by means of a frequency converter is not permitted.

The requirements of EN 60079-14 must be observed during assembly and installation.

In addition to the stresses mentioned under point 15 of the certificate, intermediate values are also permissible. The corresponding currents must be converted from the reciprocal ratio of the voltages.

Each fan must be connected via a suitable (permitted temperature for the temperature class must not be exceeded) and with the requirements of the directive 2014/34/EU conformal PTC-resistor release device, which disconnects the fan motor from the energy supply after release.



(18) **Essential Health and Safety Requirements**

Met by the standards mentioned above.

(19) **Drawings and Documents**

Document / Drawing no / File name / Reference	Rev	Pages	Date	Description
Allgemeine Beschreibung DZ...EX_e_31_10_2018.pdf	00	42	30.10.2018	product description
MBA DZQ_DZS_DZR_DZD Ex.pdf	/	110	/	instruction manual
EU-Konf_DZ_Q_S_R_D Ex alle Sprachen 02 16.pdf	/	4	25.02.2016	EU Declaration of Conformity
EX RB Maico 004 DZR.pdf	/	9	01.02.2016	risk assessment
Ex ZB Maico 004 Rev. 0.pdf	0	8	15.07.2015	ignition hazard assessment
Übersicht Zeichnungen DZ-Geräte.xlsx	/	/	31.10.2018	drawing overview



Certificate



EU - TYPE EXAMINATION CERTIFICATE in accordance with Directive 2014/34 / EU, Annex III, point 6 (Translation)

- (1) **EU - TYPE EXAMINATION CERTIFICATE**
in accordance with Directive 2014/34 / EU, Annex III, point 6
(Translation)
- (2) **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres - Directive 2014/34/EU**
- (3) EU - Type Examination Certificate Number: **TÜV-A 19 ATEX0103 X**
- (4) Product: High-performance axial pipe fan DZR ../.B Ex e and DZR ../.B Ex t
- (5) Manufacturer: Maico Elektroapparate-Fabrik GmbH
- (6) Address: Steinbeisstraße 20
78056 Villingen-Schwenningen
Deutschland
- (7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) TÜV AUSTRIA SERVICES GMBH, Notified Body number 0408, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. TUV-A 2022-TAD-000003_REV00_DZD_DZQ_DZS_DZR
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012 + A11:2013	EN 60079-7:2015	EN ISO 80079-36:2016
EN 60079-31:2016	EN ISO 80079-37:2016	

except in respect of those requirements listed at item 17 of the Schedule.
- (10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- (11) This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.



(12) The marking of the product shall include the following:



II 2G Ex h IIB + H₂ T3/T4 Gb X
II 2G Ex eb IIB + H₂ T3/T4 Gb X
II 2D Ex h IIIB T135°C/T200°C Db X
II 2D Ex tb IIIB T135°C/T200°C Db IP64 X



Filderstadt
Place

08.02.2022
Date


Michael Reuschel
Notified Body 0408
TÜV AUSTRIA SERVICES GMBH



(13)

Schedule

(14)

Certificate Number TÜV-A 19 ATEX0103 X

(15) **Description of Product**

The reason for this supplement is the extension of the temperature range.

The results of the measurements and all calculations can be found in the report "2022_01_24_Prüfbericht_DZQ-S-25-2 B Ex e-t_Zertifikatsergänzung" and "2022_01_24_Prüfbericht_Ergänzung DZ-Serie".

This supplement applies to two different temperature ranges. The temperature range -20°C to +50°C is covered in Table 1 and the temperature range -20°C to 60°C is covered in Table 2. This temperature range is only valid in combination, if the voltage / frequency and the temperature class / max. surface temperature according to the table are kept and the device is marked and operated with it.

Table 1:

<i>Supplement Temperature range from -20°C to +50°C</i>		
Model	Permitted temperature class / Max. Surface temperature	Voltage / Frequency
DZR 25/2 B Ex e/t	T4 / T135°C	400 V / 50 Hz or 60 Hz

Table 2:

<i>Supplement Temperature range from -20°C to +60°C</i>		
Model	Permitted temperature class / Max. Surface temperature	Voltage / Frequency
DZR 20/2 B Ex e/t	T3 / T200°C	400 V / 50 Hz
DZR 25/2 B Ex e/t		400 V / 50 Hz or 60 Hz
DZR 30/2 B Ex e/t	No extended temperature range	400 V / 50 Hz
DZR 35/2 B Ex e/t		
DZR 25/4 B Ex e/t		
DZR 30/4 B Ex e/t		
DZR 35/4 B Ex e/t		
DZR 40/4 B Ex e/t	T3 / T200°C	400 V / 50 Hz
DZR 45/4 B Ex e/t	No extended temperature range	
DZR 50/4 B Ex e/t		
DZR 30/6 B Ex e/t	T3 / T200°C	
DZR 35/6 B Ex e/t		



DZR 40/6 B Ex e/t	T3 / T200°C	400 V / 50 Hz
DZR 45/6 B Ex e/t		
DZR 50/6 B Ex e/t		
DZR 60/6 B Ex e/t		

Technical data:

	DZR.../.. B Ex e/t
Producttype	Axial pipe fan
Rated voltage	125-500V ~3 (DZ..35/2 B 400 V ~3)
Voltage type	three-phase current
Supply frequency	50/60 Hz
Rated power	25 - 530 W
Cosφ	0,38 - 0,65
Rated current	0,28 - 1,0 A
Protection class	IP64
Installation position	vertical / horizontal
Rotation speed	400 - 2950 1/min
Promotional volume	1100 - 10500 m³/h
Nominal diameter	250 - 600mm
I _A /I _N	3,1 - 7,1
Time t _A	35 - 240 Seconds
Operating mode	S1
Temperatur class	T3/T4 and T135°C/T200°C
Thermal class of the insulating material Th. Cl.	155 (F)

(16) **Report Number**

TUV-A 2022-TAD-000003_REV00_DZD_DZQ_DZS_DZR

(17) **Specific Conditions of Use**

- Different ambient temperatures apply. Please refer to Table 1 and Table 2 of this certificate.
- All special conditions of the following certificates still apply:
 - TÜV-A 19ATEX0102 X (DZQ/DZS-series),
 - TÜV-A 19ATEX0103 X (DZR-series)
 - TÜV-A 19ATEX0104 X (DZD-series)

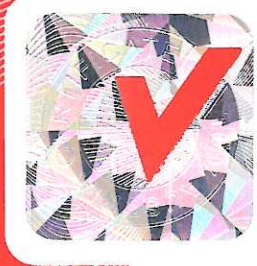


(18) **Essential Health and Safety Requirements**

Met by the standards mentioned above.

(19) **Drawings and Documents**

Document / Drawing no / File name/ Reference	Rev	Pages	Date	Description
Allgemeine Beschreibung DZ...EX e_31_10_2018.pdf	00	42	30.10.2018	product description
MBA DZQ_DZS_DZR_DZD Ex.pdf	/	110	/	instruction manual
EU-Konf_DZ_Q_S_R_D Ex alle Sprachen 02 16.pdf	/	4	25.02.2016	EU Declaration of Conformity
EX RB Maico 004 DZR.pdf	/	9	01.02.2016	risk assessment
Ex ZB Maico 004 Rev. 0.pdf	0	8	15.07.2015	ignition hazard assessment
Übersicht Zeichnungen DZ-Geräte.xlsx	/	/	31.10.2018	drawing overview
2022_01_24_Prüfbericht_Ergänzung DZ-Serie	0	16	24.01.2022	Heating measurement
2022_01_24_Prüfbericht_DZQ-S-25-2 B Ex e-t_Zertifikatsergänzung	0	36	24.01.2022	Heating measurement



Certificate

(1) **2. SUPPLEMENT to EU - TYPE EXAMINATION**
in accordance with Directive 2014/34 / EU, Annex III, point 6
(Translation)



(2) **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres - Directive 2014/34/EU**

(3) EU - Type Examination Certificate Number: TÜV-A 19 ATEX0103 X

(4) Product: High-performance axial pipe fan DZR ../B Ex e and DZR ../B Ex t

(5) Manufacturer: Maico Elektroapparate-Fabrik GmbH

(6) Address: Steinbeisstraße 20
78056 Villingen-Schwenningen
Deutschland

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) TÜV AUSTRIA GMBH, Notified Body number 0408, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. TUV-A 2022-TAD-000003_REV01_DZD_DZQ_DZS_DZR

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

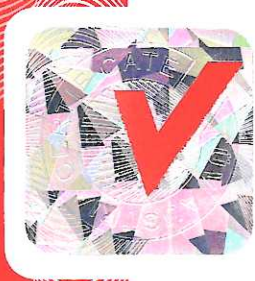
EN IEC 60079-0:2018 EN IEC 60079-7:2015 / EN ISO 80079-36:2016
A1:2018

EN 60079-31:2014 EN ISO 80079-37:2016

except in respect of those requirements listed at item 17 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.



(12) The marking of the product shall include the following:



II 2G Ex h IIB + H₂ T3/T4 Gb X
II 2G Ex eb IIB + H₂ T3/T4 Gb X
II 2D Ex h IIIC T135°C/T200°C Db X
II 2D Ex tb IIIC T135°C/T200°C Db IP64 X



Filderstadt
Place

08.04.2025
Date

Michael Reuschel
Notified Body 0408
TÜV AUSTRIA GMBH



(13)

Schedule

(14)

Certificate Number TÜV-A 19 ATEX0103 X

(15) **Description of Product**

This extension serves the purpose of extending the temperature range from -20°C to -40°C. Since the motors have different temperature ranges, these are divided into two tables.

The positive results of the IP protection degree test according to IP64 and the corresponding withstand voltage test can be found in the report "2466_PBN_22060102_mU". The following models receive an extended temperature range:

Table1:

Designation	Ta-ambient temperature for version T4 /T135°C	Ta-ambient temperature for version T3 /T200°C
DZR 20/2 B Ex e/t	-40 °C ≤ Ta ≤ +50 °C	-40 °C ≤ Ta ≤ +60 °C
DZR 25/2 B Ex e/t		
DZR 40/4 B Ex e/t	-40 °C ≤ Ta ≤ +40 °C	
DZR 45/4 B Ex e/t		
DZR 30/6 B Ex e/t		
DZR 35/6 B Ex e/t		
DZR 40/6 B Ex e/t		
DZR 45/6 B Ex e/t		
DZR 50/6 B Ex e/t	no version T4	
DZR 25/4 B Ex e/t		
DZR 30/4 B Ex e/t		
DZR 35/4 B Ex e/t		
DZR 30/2 B Ex e/t		
DZR 35/2 B Ex e/t		
DZR 50/4 B Ex e/t		
DZR 60/6 B Ex e/t		

Technical data:

	DZR.../.. B Ex e/t
Producttype	Axial pipe fan
Rated voltage	125-500V ~3 (DZ..35/2 B 400 V ~3)
Voltage type	three-phase current
Supply frequency	50/60 Hz
Rated power	25 - 530 W
Cosφ	0,38 - 0,65
Rated current	0,28 - 1,0 A



Protection class	IP64
Installation position	vertical / horizontal
Rotation speed	400 - 2950 1/min
Promotional volume	1100 - 10500 m ³ /h
Nominal diameter	250 - 600mm
I _A /I _N	3,1 - 7,1
Time t _A	35 - 240 Seconds
Operating mode	S1
Temperatur class	T3/T4 and T135°C/T200°C
Thermal class of the insulating material Th. Cl.	155 (F)

(16) **Report Number**

TUV-A 2022-TAD-000003_REV01_DZD_DZQ_DZS_DZR (Original)
TUV-A 2022-TAD-000037 (2 supplement)

(17) **Specific Conditions of Use**

- Different ambient temperatures apply. Please refer to table 1 of this certificate.
- All special conditions of the following certificates still apply:
 - TÜV-A 19ATEX0102 X (DZQ/DZS-series),
 - TÜV-A 19ATEX0103 X (DZR-series)
 - TÜV-A 19ATEX0104 X (DZD-series)



(18) **Essential Health and Safety Requirements**

Met by the standards mentioned above.

(19) **Drawings and Documents**

Document / Drawing no / File name / Reference	Rev	Pages	Date	Description
Allgemeine Beschreibung DZ...EX e_31_10_2018.pdf	00	42	30.10.2018	product description
MBA DZQ_DZS_DZR_DZD Ex.pdf	/	110	/	instruction manual
EU-Konf_DZ_Q_S_R_D Ex alle Sprachen 02 16.pdf	/	4	25.02.2016	EU Declaration of Conformity
EX RB Maico 004 DZR.pdf	/	9	01.02.2016	risk assessment
Ex ZB Maico 004 Rev. 0.pdf	0	8	15.07.2015	ignition hazard assessment
Übersicht Zeichnungen DZ-Geräte.xlsx	/	/	31.10.2018	drawing overview
2022_01_24_Prüfbericht_Ergänzung DZ-Serie	0	16	24.01.2022	Heating measurement
2022_01_24_Prüfbericht_DZQ-S-25-2 B Ex e-t_Zertifikatsergänzung	0	36	24.01.2022	Heating measurement
2466_PBN_22060102_mU	0	17	24.06.2022	2 supplement testlab