(1) # EU-TYPE EXAMINATION CERTIFICATE

(2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

TÜV 24 ATEX 9139 X

Issue: 01

(4) Equipment: Explosion-Proof Servo Motors

Type(s): 70DX040C series, 90DX100C series, 130DXxxxC series

(5) Manufacturer: AUREX MOTION SYSTEMS PTE. LTD.

(6) Address: 55 Toh Guan Road East, Uni-Tech Centre #03-01, Segment W100, Singapore 608601

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

(8) The Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which 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 atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report GC / Ex9139.01 / 24.

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0: 2018 **EN 60079-1:2014** **EN 60079-31:2014**

EN IEC 60079-31:2024

(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 EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

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

II 2G	**Ex db IIC T5 Gb / Ex db IIC T4 Gb**
II 2D	**Ex tb IIIC T100°C Db / Ex tb IIIC T130°C Db**

Cologne, 2026-11-02

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

He Mei

Dipl.-Ing. He Mei

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Annex to

EU-Type Examination Certificate

TÜV 24 ATEX 9139 X

Issue: 01

(15) Description of Equipment

Equipment and type:

Explosion-Proof Servo Motors
Type(s): 70DX040C series, 90DX100C series, 130DXxxxC series

General product information:

DX series Explosion-Proof Servo Motors are specifically designed for industrial applications in explosive environments. The enclosure of motor is made of aluminium alloy and provides IP65 protection.
The equipment is in protection types "db", "tb", EPL level Gb/Db, and is intended to be installed at Gas Explosive atmospheres classified as Zone 1/Zone 2, or Dust Explosive atmospheres classified as Zone 21/Zone 22. The temperature class of 70DX040C series and 90DX100C series is T5 and T100°C. The temperature class of 130DXxxxC series is T4 and T130°C.

The certificate includes following types:
70DX040C series

70	DX	040	C	-	0	T5	J	01
①	②	③	④		⑤	⑥	⑦	⑧

①	motor series.	70:70 mm square
②	Product Series.	DX: EX ATEX servo motor Zone 1.
③	Rated Power.	040: 400W
④	Motor length.	C: depending on motor inertia
⑤	Brake.	0: Motor without brake, 1: Motor with Brake
⑥	Temp. class.	T5: The motor surface temperature does not exceed 100 degrees
⑦	Sensor.	J: 23-bit Absolute Optical Encoder, E: Mechanical Multiturn Absolute Encoder, R: Resolver, Q: Others
⑧	Custom number.	

Motor parameter:

motor Flange(mm)	70
Weight (kg)	2.4
Rated Power (kW)	0.4
Rated Voltage (V)	220
Rated Torque (N·m)	1.27
Maximum Torque (N·m)	3.81
Rated Current (Arms)	2.9
Maximum Current (Arms)	8.7
Rated Speed (rpm)	3000
Maximum Speed (rpm)	5000
Torque Constant	0.438

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Duty	S1
Rotor Inertia (10^{-4}kg·m^2)	without brake 0.487 with brake 0.52

Electrical parameter of brake:

Holding Torque (N·m)	1.3
Supply Voltage ±10% (VDC)	24
Rated Power (W)	11
Coil Resistance ±7(Ω)	55.33
Excitation Current (A)	0.45
Pull-in Time (ms)	≤ 60
Drop-out Time (ms)	≤ 20
Backlash (°)	≤1.5

Permissible Shaft Load

Permissible Radial Load (N)	245
Permissible Axial Load(N)	98

90DX100C series

90	DX	100	C	-	0	T5	J	01
①	②	③	④		⑤	⑥	⑦	⑧

①	motor series.	90: 85 mm square
②	Product Series.	DX: EX ATEX servo motor Zone 1.
③	Rated Power.	100: 1000W
④	Motor length.	C: depending on motor inertia
⑤	Brake.	0: Motor without brake, 1: Motor with Brake
⑥	Temp. class.	T5: The motor surface temperature does not exceed 100 degrees
⑦	Sensor.	J: 23-bit Absolute Optical Encoder, E: Mechanical Multiturn Absolute Encoder, R: Resolver, Q: Others
⑧	Custom number.	

Motor parameter:

motor Flange(mm)	90
Weight (kg)	4.4
Rated Power (kW)	1.0
Rated Voltage (V)	220
Rated Torque (N·m)	3.18
Maximum Torque (N·m)	9.9
Rated Current (Arms)	4.5
Maximum Current (Arms)	13.5
Rated Speed (rpm)	3000

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Maximum Speed (rpm)	4500
Torque Constant	0.78
Duty	S1
Rotor Inertia (10^{-4}kg·m^2)	without brake 1.81 with brake 2.1

Electrical parameter of brake:

Holding Torque (N·m)	4
Supply Voltage ±10% (VDC)	24
Rated Power (W)	14
Coil Resistance ±7(Ω)	38.6
Excitation Current (A)	0.62
Pull-in Time (ms)	≤ 60
Drop-out Time (ms)	≤ 40
Backlash (°)	≤1.5

Permissible Shaft Load

Permissible Radial Load (N)	392
Permissible Axial Load(N)	147

130DXxxxC series

130	DX	380	C	-	0	T4	J	01
①	②	③	④		⑤	⑥	⑦	⑧

①	motor series.	70:70 mm square, 90: 85 mm square, 130: 130 mm square
②	Product Series.	DX: EX ATEX servo motor Zone 1.
③	Rated Power.	380: 3800W, 260: 2600W, 150: 1500W
④	Motor length.	C: depending on motor inertia
⑤	Brake.	0: Motor without brake, 1: Motor with Brake
⑥	Temp. class.	T4: The motor surface temperature does not exceed 130 degrees
⑦	Sensor.	J: 23-bit Absolute Optical Encoder, E: Mechanical Multiturn Absolute Encoder, R: Resolver, Q: Others
⑧	Custom number.	

Motor parameter:

Type	130D150C	130D260C	130D380C
motor Flange(mm)	130	130	130
Weight (kg)	12	14	15
Rated Power (kW)	1.5	2.6	3.8
Rated Voltage (V)	220	380	380
Rated Torque (N·m)	6	10	15
Maximum Torque (N·m)	18	25	30

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Rated Current (Arms)	6.0	5.9	7.4
Maximum Current (Arms)	18	17.8	22.5
Rated Speed (rpm)	2500	2500	2500
Maximum Speed (rpm)	2800	2800	2800
Torque Constant	1.67	1.69	2.03
Duty	S1	S1	S1
Rotor Inertia (10^{-4}kg·m^2)	12.6	19.4	27.7

Electrical parameter of brake:

Type	130D150C	130D260C	130D380C
Holding Torque (N·m)	16	16	16
Supply Voltage ±10% (VDC)	24	24	24
Rated Power (W)	16	16	16
Coil Resistance ±7(Ω)	34.7	34.7	34.7
Excitation Current (A)	0.69	0.69	0.69
Pull-in Time (ms)	≤ 85	≤ 85	≤ 85
Drop-out Time (ms)	≤ 30	≤ 30	≤ 30
Backlash (°)	≤ 0.5	≤ 0.5	≤ 0.5

Permissible Shaft Load

Type	130D150C	130D260C	130D380C
Permissible Radial Load (N)	490	490	490
Permissible Axial Load(N)	160	160	160

Details of Change:

Updated the manufacturer's name and address.

Technical data:

Ambient temperature: -20°C to +40°C
Ingress protection: IP65

(16) **Test report No.:** **GC / Ex9139.01 / 24**

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(17) Special Conditions for safe use

1. DX Explosion-Proof Servo Motor has to be run with the converter that is at the safe area, and the detailed parameter has to follow with the manual.
2. Specific guidance noted to contact the original manufacturer for information on the dimension of the flameproof joints.
3. The oil seal shall be protected from exposure to daylight or light from luminaires.
4. Under explosive dust circumstances, the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.
5. The equipment shall be incorporated with Ex certified cable glands or blanking plugs in accordance with EN 60079-14.

(18) Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz — Cologne, 2026-11-02

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