

Supplement Nr: 1

EU-Type Examination Certificate

(2) Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres

Directive 2014/34/EU

(3) EU – Type Examination Certificate Number: IEP 19 ATEX 0745X

(4) Product: DEX xx xxx Series Brakes

(5) Firm Name: EMF Elektromanyetik Fren ve Kavrama Sistemleri Ltd. Şti.

(6) Firm Address: Y. Dudullu Eşenşehir mah. Kömür Sokak No:15 Ümraniye / İstanbul - TURKEY

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

(8) The IEP Uluslararası Enerji Petrol Gözetim , Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Sti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of 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 Nr: IEP.Rp.Ex.10-1579-1 date 06.05.2022.

(9) Compliance with Essential Health and safety requirements has been assured by compliance with;

EN IEC 60079-0 : 2018 , EN 60079-1 : 2014 , EN 60079-18 : 2015 , EN 60079-31 : 2014

EN ISO 80079-36 : 2016 , EN ISO 80079-37 : 2016

(10) If the sign “ X “ is placed after the certificate number, it indicates that the product is subject to Specified Conditions of Safe 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 in accordance to the directive 2014/34/EU. 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 equipment or protective system shall include the following:

II 2G Ex h IIC T4 Gb
II 2G Ex mb db IIC T4 Gb
II 2D Ex tb IIC T120 °C Db, IP 65/66

Responsible Person:

Nurettin Terzioglu
Head of Certification Body

Supplement Date of Issue : 10.05.2022





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(13) Schedule / Certificate Nr : IEP 19 ATEX 0745X

(14) Description of Equipment Protective System: DEX xx xxx series spring brakes is available with lining on both sides and works with spring pressure. Suitable materials are used to prevent sparking in friction materials. The brakes consist of terminal box, flange, outer body, shaft, bearing, spring-loaded brake and fittings. DEX xx xxx series brakes, which operate during uncontrolled or controlled power loss, are installable systems with their compact design. The energy junction box is type d flame-proof equipment. The system is on brake without any power supply with the pressure of the springs. When the coil is supplied with proper DC current, the induced magnetic field pulls the armature plate to the body, pressing the springs. This given room to the rotor to move freely on its axis together with the motor shaft to initiate braking again the power supply to the coil is cut which removes the magnetic field working against the springs. DEX xx xxx series brakes have been evaluated in the contents of IP 65 and energy junction box IP 66. The DEX xx xxx series brakes uses in the Zone 1 and Zone 21 according to the EN 60079-10-1 and EN 60079-10-2 standard.

Technical parameters of DEX xx xxx Series, Electromagnetic Brakes;

Type	Tork (Nm)	205 V DC		Ambient Temperature °C	IP Protection Class
		Power (W)	Current (A)		
DEX 01 71	4	19	0.17	-20 ~ +55 °C	Box: IP 66 Body: IP 65
DEX 02 80	8	35	0.17		
DEX 03 90	15	32	0,16		
DEX 04 100	33	43	0,21		
DEX 05 112	67	59	0,29		
DEX 06 132	95	81	0,41		
DEX 07 160	160	70	0,58		
DEX 08 180	280	109	0,76		
DEX 09 200	450	134	0,66		
DEX 09A 225	600	194	0,95		
DEX 10 250	1200	278	1,35		
DEX 10 280	1200	278	1,35		
DEX 11 315	2000	550	2,68		

(IEP 19 ATEX 0745X)X Mean: If approved equipment and parts are not used, the certificate is invalid. Must be installed according to the user manual.

(15) Essential Health and Safety Requirements: DEX xx xxx series brakes, Component list is produced parts list 7 and date 06.05.2022. This certificate is in the contents of standards that mentioned in item (9) It has been accepted that the DEX xx xxx series brakes is manufactured according to the producer instructions and the standards mentioned above.

Responsible Person :

Nurettin Terzioglu
Head of Certification Body



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(16) Certificate Nr : IEP 19 ATEX 0745X

(17) Drawings:

Drawing Nr:	Drawing Name;	Date:
YBF DEX 04-220-04/PM01	Exploded drawing	18.04.2019
YBF DEX 04-220-04/M01	Internal and external dimensions	18.04.2019
YBF DEX 04-220-04/PM02	Connection drawing	07.03.2016
YBF DEX 04 01	Thrust Flange	06.03.2016
YBF DEX 04 02	Mounting flange	06.03.2012
YBF DEX 04 03	Edge adjustment screw	12.09.2018
YBF DEX 04 04	Coil	12.09.2018
YBF DEX 04 05	Pin	12.09.2013
YBF DEX 04 06	Torque adjustment screw	12.09.2013
YBF DEX 04 07	Gear	07.03.2013
YBF DEX 04 09	Compress spring	12.09.2013
YBF DEX 04 10	Stator	06.03.2012
YBF DEX 04 11	Carcass	18.04.2019
YBF DEX 04 16	Resin	15.01.2019
YBF DEX 04 15	Cable	15.01.2019
YBF DEX 19	Ex d type terminal box(Body)	04.10.2019
YBF DEX 20	Ex d type terminal box(Cover)	04.10.2019
YBF DEX 04 24	Energy rectifier	15.01.2019
YBF DEX 04 25	Outlet flange	13.05.2019
YBF DEX 04 26	Inlet flange	24.11.2012
YBF DEX 04 27	Outer body	24.11.2012
YBF DEX 04 28	Shaft	28.11.2012
YBF DEX 01	Exploded drawing	31.08.2020
YBF DEX 07	Exploded drawing	31.08.2020
YBF DEX 08	Exploded drawing	31.08.2020
YBF DEX 09	Exploded drawing	02.02.2022
YBF DEX 10	Exploded drawing	02.02.2022
YBF DEX 11	Exploded drawing	02.02.2022

(18) The list of approved equipment for the DEX xx xxx series brakes is appendix 7 dated 06.05.2022.
If approved equipment and parts are not used, the certificate is invalid.

Certificate History:

Supplement Nr	Supplement Date	Summary Description of Variation
01	10.05.2022	<ul style="list-style-type: none">New model addition and product code system revision: DEX 01 71, DEX 07 160, DEX 08 180, DEX 09 200, DEX 09A 225, DEX 10 250, DEX 10 280, DEX 11 315Update to standard of EN 60079-0:2013 to new edition EN IEC 60079-0:2018
00	11.12.2019	First issue of certificate

Responsible Person:

Nurettin Terzioglu
Head of Certification Body



Supplement Date of Issue : 10.05.2022



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