

- (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 23 ATEX 1261X**
- (4) Equipment / Type: **Cast Heater / DR-X-EX Type**
- (5) Manufacturer: **SAFİ Rezistans İmalat San. – SAFİ YILMAZ**
- (6) Firm Address: **Vatan Mh. Çifte havuzlar Cd. Ar Sok. No: 7 Bayrampaşa - İstanbul / TÜRKİYE**
- (7) This equipment or protective system and 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.10-2590 date 12.09.2023.
- (9) Compliance with Essential Health and safety requirements has been assured by compliance with;
EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-31:2014
- (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 db IIB T3...T6 Gb
II 2D Ex tb IIIC T180 °C...T80 °C Db

Responsible Person:

Nurettin Terzioglu
Head of Certification Body



Date of Issue: 14.09.2023





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(13) Schedule and Certificate Nr: **IEP 23 ATEX 1261X**

(14) Description of Equipment:

DR-X-EX type cast heater elements consist of heating element body, rod heating element, aluminum, bronze, brass casting, exproof junction box, exproof thermocouple sensor, hinge, stainless protection tube and stainless gland. Cast heater are used to heat liquid substances such as water, oil, chemicals. Cast heater are also used in applications requiring homogeneous heating with its thermal conductivity. They are used in liquid storage tanks, industries to heat pipes.

There are Ex d type temperature sensor, Ex d type energy junction box and suitable resistance bars on the heater. It is fixed with nut between Ex d type energy junction box and cast heater connection and coated with suitable epoxy material. Details of cold and hot zone start in the cast heater are available in the drawings. Cast heater elements are in aluminum, brass and bronze casting plates. Terminal boxes comply with min IP 65.

Technical Specifications:

Type	DR-X-EX Type (DR-01, DR-02, DR-03, DR-04, DR-05)
Voltage	110 V AC ~ 480 V AC
Power	10 kW max.
Heater temperature class	T3 ~ T6
Degree of protection	IP 67
Heating plate elements	Aluminum, Brass and Bronze
Ambient Temperature	-20°C to +40°C

(IEP 23 ATEX 1261X) X means: Installation, maintenance and periodic control should be done by the authorized person or authorized company in accordance with the relevant standards and user manual. The resistance thermostat can be adjusted at the desired value according to max. 200 °C. It must be operated in conjunction with the heat control system.

(15) Essential Health and Safety Requirements:

This certificate is in the contents of standards that mentioned in item [9]. It has been accepted that cast heater are manufactured according to the producer instructions and the standards mentioned above.

(16) Special Conditions for Safe Use;

16.1 Cable and pipe entry glands must be selected in accordance with the conditions of use, must be of certified flame resistant Ex d type and must be mounted in accordance with the EN 60079-14 standard.

16.2 Unused apertures that used on junction box shall be closed with Ex d blanking elements.

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(17) Certificate Nr: IEP 23 ATEX 1261X

(18) Drawings:

Drawing Nr;	Drawing Name;	Date;
DR-X-EX-01	Exproof Box	24.07.2023
DR-X-EX-02	Safi Exproof Box	24.07.2023
DR-X-EX-03	Stainless Record	24.07.2023
DR-X-EX-04	Rice Record	24.07.2023
DR-X-EX-05	Exproof Thermocouple	03.08.2023
DR-X-EX-06	Aluminum Body and Stainless Protection Plate	24.07.2023
DR-X-EX-07	Cast iron inner resistance	24.07.2023
DR-X-EX-08	Exploded Picture	24.07.2023
DR-X-EX-09	General Picture	24.07.2023
DR-X-EX-10	Exproof Box 2	24.07.2023
DR-X-EX-11	M20 Record	24.07.2023
DR-X-EX-12	Exproof Box 3	24.07.2023
DR-X-EX-13	Pipe diameter	24.07.2023
DR-X-EX-14	Exproof Box 4	24.07.2023
DR-X-EX-15	Exproof Box Inside Bolt	24.07.2023
DR-X-EX-16	Exproof Box 5	24.07.2023
DR-X-EX-17	Exproof Box 6	24.07.2023
DR-X-EX-18	Exproof Box 7	24.07.2023
DR-X-EX-19	Resistance Cold Zone	24.07.2023
DR-X-EX-20	Exproof Box Interior Design	24.07.2023
DR-X-EX-21	Exproof Box 2 mm Weld Drawing	24.07.2023
DR-X-EX-22	Exproof Box Weld Drawing	24.07.2023

For the validity of type certificate, the parts that are used cast heater / DR-X-EX type are determined in confirmed in the list of equipment dated 20.07.2023, if parts other than the approved equipment list are used, the certificate is invalid.

Responsible Person:

Nurettin Terzioglu
Head of Certification Body



Date of Issue: 14.09.2023

