

- (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 21 ATEX 0888X**
- (4) Product: **TREA X Type Electrical Actuator**
- (5) Firm Name: **SMS Sanayi Malzemeleri Üretim ve Satışı A.Ş.**
- (6) Firm Address (HQ) : **Bostancı Yolu Kuru Sokak No: 16/2 Y.Dudullu Ümraniye / İstanbul – TURKEY**  
Address (FAC.) : **Çerkeşli OSB Mah. İMES 5. Cadde No:6 İMES OSB Dilovası / Kocaeli – 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.10-1826 date 02.02.2021.
- (9) Compliance with Essential Health and safety requirements has been assured by compliance with ;
- EN IEC 60079-0: 2018, EN 60079-1: 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 T4 Gb

**Responsible Person :**

Nurettin Terzioglu  
Head of Certification Body



**Date of Issue : 04.02.2021**





(13) Schedule

(14) Certificate Nr: **IEP 21 ATEX 0888X**

(15) Description of Equipment; TREA X type electrical actuators are equipment converting electrical power to mechanical power used for valve control. Electric motor's torque is transmitted to valve shaft through the electrical actuator gearbox. This torque makes the valve open or close. Gearbox provides a steady torque while turning. The purpose of an electrical actuator is opening or closing the valve. This opening or closing can be full open/close or proportional open/close. This can be changed according to process application. Electrical actuators can be used on ball valve, butterfly valve, globe valve or gate valve and other proper valve types.

The terminal compartment is equipped with explosion-proof cable gland or blind plug Ex d type. Electrical actuator is equipped with cable to use of external grounding cable 4 mm<sup>2</sup> (min) and HD 21.13.S1/HD.22.4.S4. Electrical actuators have been evaluated in the contents of IP 67. Explosion test report number is TSE/442030/01-21 and routine test report 2 pages.

### Technical Parameters: TREA X type Electrical Actuator

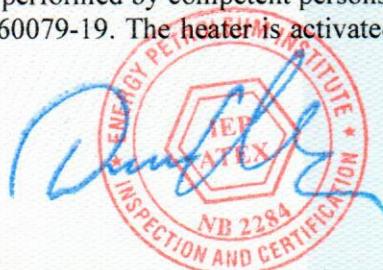
Product Code	Maximum Output Torque	Opening Closing Time		Working Current			Electrical Power		Protection Class	Ambient Temperature
		24 VDC	110/230V AC (50/60) Hz	24 VDC	110V AC (50/60)Hz	230V AC (50/60)Hz	24 VDC	110/230V AC (50/60) Hz		
TREA 0150	150 Nm	22 sn	24 sn	3.3 A	1,26 A	0.63 A	80 W	144 VA pf 0.95	IP 67	(-20~+60)°C
TREA 0200	200 Nm	22 sn	24 sn	3.8 A	1,32 A	0.66 A	92 W	150 VA pf 0.95		

<b>Body Material</b>	Aluminum Die Cast
<b>Body Coating</b>	Electrostatic Powder Coat
<b>Power Source</b>	(110/ 230) V AC / 24 V DC
<b>Control Signal</b>	0/4-20 mA , 0/2-10 mA , 0/2-10 V DC , 0/1 -5 V DC
<b>Output Signal</b>	0/4-20 mA , 0/2-10 mA , 0/2-10 V DC , 0/1 -5 V DC
<b>Reversible Control Signal</b>	It can be adjusted via switches on the control card
<b>Reversible Output Signal</b>	It can be adjusted via switches on the control card
<b>Automatic Calibration</b>	It can be adjusted via buttons on the control card
<b>Fail Positions</b>	Stay Still , Turns the valve on, Turns the valve off
<b>Adjustable Max. Valve Degree</b>	Between 0° - X° adjustable special valve degree
<b>Motor</b>	24 V DC Motor / (110 / 230 )VAC Motor
<b>Limit Switches</b>	2x Open/Close SPDT. Max 250V AC 10 A
<b>Aux. Limit Switches</b>	2x Open/Close SPDT. Max 250V AC 10 A
<b>Manuel Control</b>	With hand wheel & Via buttons on control card
<b>Inner Heater</b>	5W
<b>Cable Entrances</b>	G3/4"

(IEP 21 ATEX 0888 X) X Means : It must be installed by persons authorized according to the user manual. Periodic maintenance and revision should be performed by competent persons / competent services according to the relevant standards, user manual and EN 60079-19. The heater is activated below 20 C. It stands at max 21 degrees.

**Responsible Person :**

Nurettin Terzioglu  
Head of Certification Body





# IEP ENERGY PETROLEUM INSTITUTE

(17) Certificate Nr: **IEP 21 ATEX 0888X**

(18) Special conditions for safe use

The installation and the operation of the TREA X type electrical actuator has to confirm to the relevant national regulations.

(19) List of Documentation:

- ◆ User Manual : 31 pages, dated 07.2020
- ◆ Component Lists : Part 2.1.2, dated 03.07.2020
- ◆ Certificates and Test Reports : Part 3 – 4
- ◆ **Drawings;**

Drawing Nr;	Date;	Drawing Nr;	Date;
SMS001X	08.07.2020	PLS37EAGBORT0080-00	18.04.2017
BOR070006X001-01-00	15.02.2016	PLS37EAGBALT0080-01-00	18.04.2017
BRC12TREA8X5X8-01	12.04.2019	MIL99EA0080VB-00	28.02.2017
BRC28EASW0150-00	17.06.2020	MIL05EA0080TB-00	20.05.2016
BRC39EA0150POT-00	17.06.2020	MIL05EA0080KB-00	20.06.2016
DD98EAMILPOT0080-00-00	14.03.2016	MIL05EA0080GF-00	15.08.2016
DD98EAPOT0080-01	24.04.2020	MIL05EA0080GB-00	20.05.2016
DEL38MILSEG150-00	17.06.2020	FLS02EA0080-00	15.02.2016
DELEA38MILALT150-00	12.06.2020	CVT06IM0M8X30-01-00	21.01.2016
DST28EA0150KLM-00	17.06.2020	BOR070006X001-01-00	15.02.2016
DST28EA0150UZ-00	17.06.2020	DD98EAMILPOT0080-00-00	14.03.2016
FLS02EA0150-00	12.06.2020	DD98EAPOT0080-00-00	14.03.2016
GVD16EA0150-04-00	24.06.2020	HD68EAMT0080-00-00	09.03.2016
HD98EAMT0150-01-00	12.06.2020	HD98EAVN0080-00-00	09.03.2016
HD98EAVN0150-00	12.06.2020	MIL99EAMT0080-00-00	09.03.2016
KAMA6885A04X04X12-00	17.06.2020	MIL99EAVN0080-00-00	09.03.2016
KAMA6885A06X06X18-00	12.06.2020	YAY04EADUZ0W6-00	21.01.2016
KAM58EA0150SMN-00	17.06.2020	YAY04EADUZ1W2-00	21.01.2016
DELEA38MILPOT080-00	15.02.2016	DEL38MILSEG143-00	09.04.2015
DELEA38MILKAM080-00	15.02.2016	DEL38MILSEG032-00	21.09.2012
DELEA38MILALT080-00	15.02.2016	TREA-60-80	01.04.2016
PLS37EAGBUST0080-00	18.04.2017	TREA-60-80	01.05.2016
PLS37EAGBUST0080-00	18.04.2017	TREA-60-80	01.05.2016
PLS37EAGBUST0080-00	18.04.2017	TREA-60-80	01.05.2016
PLS37EAGBUST0080-00	18.04.2017	TREA-60-80	01.05.2016

For the validity of analysis type certificate, the parts that are used in electrical actuator are confirmed in the part list 2.1.2 date 03.07.2020.

**Responsible Person :**

Nurettin Terzioğlu  
Head of Certification Body



**Date of Issue : 04.02.2021**

