

# 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 No:** FM20ATEX0016X

4 **Equipment or protective system:  
(Type Reference and Name)** Rotex Smart Positioner POSIDAPT Series

5 **Name of Applicant:** Rotex Manufacturers and Engineers Private Limited

6 **Address of Applicant:** R852/853, TTC Industrial Area, MIDC Rabale, Navi Mumbai  
400 701, INDIA

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Europe Ltd, notified body number 2809 in accordance with Article 17 of Directive 2014/34/EU of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

PR450998 dated 24 November 2021

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN IEC 60079-0:2018, EN 60079-11: 2012 and EN 60529:1991+A1:2000+A2:2013

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

11 This EU-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include:



II 1 G Ex ia IIC T\* Ga Ta = -25°C to +78°C; IP66

T\*: T5 at -25°C to +78°C; T6 at -25°C to +60°C;

**Martin Crowe**

**Certification Manager, FM Approvals Europe Ltd.**

Issue date: 29<sup>th</sup> November 2021

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

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# SCHEDULE

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## 13 Description of Equipment or Protective System:

The Rotex Digital Smart Positioner POSIDAPT Series is an electronically configurable loop powered device, Digital Positioner operating range of 4-20 mA or 0-20 mA (with External 24 Vdc) and various communication protocol such as HART, Foundation Fieldbus. The Positioner enclosure is constructed from Aluminum alloy or Stainless steel and with Polycarbonate (Makrolon®) or Aluminum alloy or Stainless steel cover. The enclosure is in two halves & held together by 4 stainless steel fasteners.

Operation Temperature Ranges:

The ambient operating temperature range of the Rotex Smart Positioner POSIDAPT Series is -25°C to 78°C.

Intrinsic Safety Parameters – Install in accordance with drawing Ex i/03

### Input Parameters

Terminals	Vmax (V)	I <sub>max</sub> (mA)	Pi (mW)	Ci (nF)	Li (μH)
Terminals 11 and 12	30	110	1000	0	215
Terminals 81 and 82	30	110	1000	0	215
Terminals 21 and 22	30	100	1000	0	215
Terminals 31 and 32; 33 and 34; 35 and 36; (each)	15	25	64	0	215
Terminals 43 and 44	24	4.0	4.0	0	0

### Output Parameters

Terminals	Voc (V)	Isc (mA)	Po (mW)	Co (nF)	Lo (mH)
Terminals 41 and 42	30	111	833	66	2.67
Terminals 45 and 46	30	111	833	66	2.67

RTXabcdefghijk, Smart Valve Positioner

a = Model: 5, 6, 7, 8 or 9

b = Enclosure: 5, 6 or 7

c = Servo: 1, 2, 3, 4

d = Port Connection: 2G or 2R

e = Communication: \* or H

f = Module: \*, P, A or B

g = Cable Entry: 4R or 3M

h = -25°C to +78°C

i = Certification: A

j = Remote Mount: \*, RM03, RM04, RM07, RM10, RM20, RM30 or RM45

k = Accessories: \*, RC001, PS100, PS200, PL100, or PL200

## 14 Specific Conditions of Use:

1. Potential electrostatic charging hazard. Clean only with a damp cloth.
2. When used within a Zone 0 location, cast-aluminum enclosures shall be installed in such manner as to prevent the possibility of sparks resulting from friction or impact against the enclosure.
3. The positioner is for installation in locations providing protection against the entry of moisture or dust.

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# SCHEDULE



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**15 Essential Health and Safety Requirements:**

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

**16 Test and Assessment Procedure and Conditions:**

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Europe Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Europe Ltd's ATEX Certification Scheme.

**17 Schedule Drawings**

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

**18 Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
29 <sup>th</sup> November 2021	Original Issue.

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