

CERTIFICATE

(1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **DEKRA 16ATEX0064 X** Issue Number: **1**

(4) Product: **Valve Actuator Control Module Bettis Q QC54**

(5) Manufacturer: **Emerson Process Management Valve Automation Inc.**

(6) Address: **19200 Northwest Freeway, Houston, Texas, 77065, USA**

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

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the 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 test report number NL/DEK/ExTR16.0009/01.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 : 2012 + A11 : 2013
EN 60079-15 : 2010

EN 60079-11 : 2012
EN 60079-31 : 2014

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of 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. 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 product shall include the following:



II 1 G Ex ia IIC T4 Ga
II 1 D Ex ia IIIC T80 °C Da
II 2 D Ex tb IIIC T80 °C Db
II 3 G Ex nA IIC T4 Gc
II 3 G Ex ic IIC T4 Gc

Date of certification: 16 November 2018

DEKRA Certification B.V.

R. Schuller
Certification Manager



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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 16ATEX0064 X**

Issue No. 1

(15) **Description**

Valve Actuator Control Module, Series Bettis Q QC54 is used to control a pneumatic actuator by means of, up to two, piezotronic pneumatic pilot valves, and gives feedback about the end positions ('open' or 'close') of the actuator/valve combination by means of a position feedback sensor.

Ambient temperature range: -20 °C to +50 °C.

The enclosure provides a degree of protection of at least IP66 as per EN 60079-0.

The maximum surface temperature T80 °C is based on an ambient temperature of +50 °C and maximum 5 mm layer of dust.

Model codes

Control Module, Series Bettis Q QC54abcdefg

- a = Conduit connections
 - M: Metric
 - U: Imperial
- bc = Protection method
 - P1: Intrinsically safe
 - P4: Non Sparking/Incendive
- d = Control module options
 - S: Standard
- e = Action (pilot valves)
 - S: Single acting
 - D: Double acting
 - F: Double acting fail in last position
- f = Enclosure color
 - Not Ex relevant
- g = Language code
 - 1: English

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 16ATEX0064 X**

Issue No. 1

Electrical data

Apparatus in type of protection intrinsic safety "i"

Supply and output circuit, J1 bus connector (terminals + and –):

in type of protection intrinsic safety Ex ia IIC, ia IIIC or ic IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 30 \text{ V}$; $I_i = 380 \text{ mA}$; $P_i = 1,5 \text{ W}$; $C_i = 5 \text{ nF}$; $L_i = 10 \text{ }\mu\text{H}$; (linear power supply)

Supply and output circuit, J1 bus connector (terminals + and –):

in type of protection intrinsic safety Ex ia IIC, ia IIIC or ic IIC, only for connection to a certified intrinsically safe circuit or a circuit in accordance with FISCO, with the following maximum values:

$U_i = 17,5 \text{ V}$; $I_i = 380 \text{ mA}$; $P_i = 5,32 \text{ W}$; $C_i = 5 \text{ nF}$; $L_i = 10 \text{ }\mu\text{H}$.

Apparatus in type of protection nA and tb

$U_n = 32 \text{ V}$

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/DEK/ExTR16.0009/01.

(17) **Specific conditions of use**

Electrostatic charging of the painted enclosure and plastic label shall be avoided.

Because the enclosure is made of aluminium, if it is mounted in an area where the use of equipment with EPL Ga is required, it must be installed such, that, even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/DEK/ExTR16.0009/01.

(20) **Certificate history**

Issue 0 - project no. 218140800	Initial certificate
Issue 1 - project no. 222989500	Change of manufacturer