

# **Certificate of Compliance**

Certificate: 80016582 Master Contract: 227951

**Project:** 80016582 **Date Issued:** 2020-11-20

**Issued To:** Rotork YTC Limited

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Yangchon-eup

Gimpo-si,, Gyeonggi-do, 10048

**South Korea** 

**Attention: Stan Przbylowicz** 

The products listed below are eligible to bear the CSA Mark shown

**Issued by:** John Tanksley John Tanksley



#### **PRODUCTS**

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations

Ex ia IIC T6/T5 Gb; Ex ia IIIC T85°C/T100°C Db Class I, Division 1 and Division 2, Groups A, B, C, D T6/T5 Class II, Division 1 and Division 2, Groups E, F, G T85°C/T100°C Class III.

Electro-pneumatic smart valve positioners, models YT-37xx123456789. Rated 30 Vdc max, 100 mA max, Class 2 / SELV. Intrinsically safe or Non-incendive when connected per control drawing SKC-190613. Ambient temperature range  $-40^{\circ}C \le Ta \le +60^{\circ}C$  (Temperature Code T5)  $/ -40^{\circ}C \le Ta \le +40^{\circ}C$  (Temperature Code T6). Air supply rated 0.14 - 0.7 MPa (1.4 - 7 bar). IP66.

Model Configuration: YT-37xx123456789

Where:



- xx Base model type; 00, 01, 02, 03, or 50
  - 00 = Standard model
  - 01 = Remote potentiometer version with MS Connector 02 = Remote potentiometer version with Junction Box
  - 03 = Compact version
  - 50 = Stainless steel version
- 1 Mechanical motion type; any alphanumeric character; not critical to certification
- 2 Pneumatic action type; any alphanumeric character; not critical to certification
- 3 Mechanical Option
  - A Without Tapped exhaust
  - AG: With Tapped exhaust
- 4 Lever type; any number; not critical to certification
- 5 Conduit Air connection type:
  - $4 = M20 \times 1.5P 1/4 NPT$
  - 5 = 1/2 NPT 1/4 NPT
- 6 Communication;
  - 2 = HART
- 7 Option
  - 0 = None
  - 1 = +4 to 20 mA feedback
- 8 Not Applicable for Hazardous Location
- 9 Cable length; any alphanumeric character; not critical to certification

# I.S. Entity parameters (Division 1)

	Positio	Trans	Digiti	Digital					Limit Switches								
	ner	mitter	al Input	O/P	Dry Contact (Mechanical)- Upper & Lower				Non-Contact (proxin Lower (P&F NJ1, 5-F-N)			mity)- Up	. &				
									Type 1			Type 2		Type 3			
Co	1	2	3	4		5	6	R	5	6		5/6		5/6			
nne								1			О		О				
cti											R		R				
on																	
Ui	28Vdc	28Vdc	28Vdc	28Vdc		28Vdc	28 Vdc		16Vdc	16Vdc		16Vdc		16Vdc			



Ii	93mA	93 mA	93 mA	93 mA	93 mA	93 mA	25mA	25mA	25mA	25mA
Pi	650m W	650m W	650m W	650m W	650m W	650m W	34mW	34m W	65mW	65mW
Li	10 μΗ	10 μΗ	0 μΗ	0 μΗ	0 μΗ	0 μΗ	50μΗ	50μΗ	50μΗ	50μΗ
Ci	2.59nF	57.5nF	0nF	0nF	0nF	0nF	30nF	30nF	30nF	30nF

## NIFW parameters (Division 2)

	Positio	Trans	Digiti	Digital	Limit Switches								
	ner	mitter	al Input	O/P	Dry Contact (Mechanical)- Upper & Lower			(Mechanical)- Lower					
								Type 1			Type 2		Type 3
Co	1	2	3	4	5	6		5	6		5/6		5/6
nne													
cti							O R						
on										О		o	
Ui	28Vdc	28Vdc	28Vdc	28Vdc	28Vdc	28 Vdc		16Vdc	16Vdc	R	16Vdc	R	16Vdc
Ii	93mA	93 mA	93	93 mA	93 mA	93 mA		25mA	25mA		25mA		25mA
	JJIIIA	93 IIIA	mA	93 IIIA	93 IIIA	93 IIIA							
Li	10 μΗ	10 μΗ	0 μΗ	0 μΗ	0 μΗ	0 μΗ		50μΗ	50μΗ		50μΗ		50μΗ
Ci	2.59nF	57.5nF	0nF	0nF	0nF	0nF		30nF	30nF		30nF		30nF

#### CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

#### Ex tb IIIC T85°C/T100°C Db

Class II, Division 2, Groups F and G T85°C/T100°C

Electro-pneumatic smart valve positioners, models YT-37xx 123456789. Rated 30 Vdc max, 100 mA max, Class 2 / SELV. Ambient temperature range  $-40^{\circ}\text{C} \le \text{Ta} \le +60^{\circ}\text{C}$  (**T100**°**C**)  $/ -40^{\circ}\text{C} \le \text{Ta} \le +40^{\circ}\text{C}$  (**T85**°**C**). Air supply rated 0.14 - 0.7 MPa (1.4 - 7 bar). IP66.

#### Where:

xx - Base model type; 00, 03, or 50

00 = Standard model 03 = Compact version 50 = Stainless steel version

- Mechanical motion type; any alphanumeric character; not critical to certification
- 2 Pneumatic action type; any alphanumeric character; not critical to certification
- 3 Method of explosion protection:



A = protection by enclosure (Ex tb)

- 4 Lever type; any number; not critical to certification
- 5 Conduit air connection type:
  - $4 = M20 \times 1.5P NPT1/4$
  - 5 = NPT 1/2 NPT1/4
- 6 Communication;
  - 2 = HART
- 7 Option
  - 0 = None
  - 1 = +4 to 20 mA feedback

### The following are for Models 3700 and 3750 only

- 4 = +4 to 20 mA feedback + Limit Switch Mech. (not available with NCS)
- 5 = +4 to 20 mA feedback + Limit Switch Inductive Prox. (not available with NCS
  - \*DI/DO cannot be included at Limit Switch option
- 8 Ambient temperature; T5 or T6

 $T5/T100^{\circ}C = -40^{\circ}C \le Ta \le +60^{\circ}C$  $T6/T85^{\circ}C = -40^{\circ}C \le Ta \le +40^{\circ}C$ 

# CLASS 2252 06 – PROCESS CONTROL EQUIPMENT

Electro-pneumatic smart valve positioners, models YT-37xx 123456789. Rated 30 Vdc max, 100 mA max, Class 2 / SELV. Ambient temperature range  $-40^{\circ}C \le Ta \le +85^{\circ}C$  Air supply rated 0.14 - 0.7 MPa (1.4 - 7 bar). IP66.

# Where:

- xx Base model type; 00, 01, 02 03, or 50
  - 00 = Standard model
  - 01 = Remote potentiometer version with MS Connector
  - 02 = Remote potentiometer version with Junction Box
  - 03 = Compact version
  - 50 = Stainless steel version
- 1 Mechanical motion type; any alphanumeric character; not critical to certification



- 2 Pneumatic action type; any alphanumeric character; not critical to certification
- Method of explosion protection:
  N = Non-Hazardous location only
- 4 Lever type; any number; not critical to certification
- 5 Conduit air connection type:
  - $4 = M20 \times 1.5P NPT1/4$
  - 5 = NPT 1/2 NPT1/4
- 6 Communication;
  - 2 = HART
- 7 Option
  - 0 = None
  - 1 = +4 to 20 mA feedback

#### The following are for Models 3700 and 3750 only

- 4 = +4 to 20 mA feedback + Limit Switch Mech. (not available with NCS)
- 5 = +4 to 20 mA feedback + Limit Switch Inductive Prox. (not available with NCS
  - \*DI/DO cannot be included at Limit Switch option
- 8 Ambient temperature range; -

$$S = -30$$
° $C \le Ta \le +85$ ° $C$ 

$$L = -40$$
°C  $\leq Ta \leq +85$ °C

9 - Cable length (models 3701/3702 only); any alphanumeric character; not critical to certification

## **APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No. 0:20	General requirements — Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 60529:16	Degrees of protection provided by enclosures (IP Code)
CAN/CSA-C22.2 No. 61010-1-12	Safety Requirements for Electrical Equipment for Measurement, Control,
+ Amd 1 - 18	and Laboratory Use – Part 1: General Requirements
CSA-C22.2 No. 213-17	Nonincendive electrical equipment for use in Class I and II, Division 2
+ <i>UPD 1 (2018)</i> + <i>UPD 2 (2019)</i>	and Class III, Divisions 1 and 2 hazardous (classified) locations
CAN/CSA-C22.2 No. 60079-0:19	Explosive atmospheres –
	Part 0: Equipment – General requirements
CAN/CSA-C22.2 No. 60079-11:14	Explosive atmospheres –
(R2018)	Part 11: Equipment protection by intrinsic safety "i"



CAN/CSA-C22.2 No. 60079-31:15	Explosive atmospheres –
	Part 31: Equipment dust ignition protection by enclosure "t"

#### **MARKINGS**

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark, without any adjacent indicators, indicating that products have been manufactured to the requirements of Canadian Standards.

All Models utilize an aluminum nameplate, approximately 85 mm long, by 43 mm wide.

- Manufacturer's name: "Rotork YTC Limited", or CSA Master Contract Number "227951", adjacent to the CSA Mark in lieu of manufacturer's name.
- Model number: As specified in the PRODUCTS section, above.
- Electrical ratings: As specified in the PRODUCTS section, above.
- ISO 60417, Symbol 5031  $\overline{---}$  adjacent to the DC input rating.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Manufacturing date in MMYY format, or serial number, traceable to year and month of manufacture.
- The CSA Mark, as shown on the Certificate of Conformity.
- The designation 'CSA20CA80016582X'
- Hazardous Location designations: As specified in the PRODUCTS section, above. The word "Class" may be abbreviated "CL", the word "Division" may be abbreviated "DIV", and the word "Groups" may be abbreviated "GRP" or "GP".
- Method of Protection markings (Ex -- markings): As specified in the PRODUCTS section, above. (For Ex tb protection method)
- Temperature code: As specified in the PRODUCTS section, above.
- Supply pressure range: As specified in the PRODUCTS section, above.
- Ingress protection rating "IP66" may be optionally marked.
- The following:
  - o "Intrinsically safe or Non-incendive when Install per drawing SKC-190613", or equivalent wording.



# Supplement to Certificate of Compliance

Certificate: 80016582 Master Contract: 227951

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

# **Product Certification History**

Project	Date	Description
80016582	2020-11-20	Original assessment of Young Tech electro-pneumatic smart positioners YT Series: YT-3700, YT-3750, YT-3701 and YT-3703.
		Class I, Div 1 & 2, Groups ABCD, Class II/III, Groups EFG and Ex ia IIC and Ex tb IIIC; IP66.