



Certificate of Compliance

Certificate: 70131426

Master Contract: 227951

Project: 80113179

Date Issued: 2022-09-19

Issued To: Rotork YTC Limited
81, Hwanggeum-ro 89beon-gil,
Yangchon-eup,
Gimpo-si, Gyeonggi-do, 10048
South Korea

Attention: Stan Przyłowicz

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



Issued by: *Ronald (Ron) Bell*
Ronald (Ron) Bell

PRODUCTS

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

Class I, Division 1, Groups A, B, C, and/or D T5/T6

Class I, Division 2, Groups A, B, C, and/or D T5/T6

Class II, Division 1, Groups E, F, and/or G T100°C/T85°C

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

Class III

Ex ia IIC T5/T6 Gb

Ex tb IIIC T100°C/T85°C Db

Electro-pneumatic smart valve positioners, models YT-33aa 123456789 & RI-33aa 123456789. Rated 30 Vdc max, 100 mA max, Class 2 / SELV. Intrinsically safe or non-incendive field wired when connected per control drawing SKC-8465 for the YT-33aa versions and SKC-8773 for the RI-33aa versions. Ambient temperature range $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$ (T5) / $-40^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$ (T6). Air supply rated 0.14 – 0.7 MPa (1.4 – 7 bar). Non-incendive field wiring parameters and entity parameters per Tables 1 & 2.

IP66 (Not verified by CSA).



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Where:

Complete model number to appear on label of finished product:

- aa = 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 = Method of explosion protection:
 - N - Non-Explosion
 - A - intrinsically safe and protection by enclosure
 - AG = Trapped Exhaust

- 4 = Lever type; any number; not critical to certification

- 5 = Conduit – air connection type:
 - 1 - G 1/2 -Rc 1/4)
 - 2 - (G 1/2 -1/4 NPT)
 - 3 - (G 1/2 – G 1/4)
 - 4 - (M20 – 1/4 NPT)
 - 5 -(1/2 NPT– 1/4 NPT)

- 6 = Communication; 0 or 2
 - 0 = None
 - 2 = HART

- 7 = Option; 0, 1, 2, 3, 4, or 5; options 2, 3, 4, and 5 not applicable to 3301/3302/3303
 - 0 = None
 - 1 = PTM
 - 2 = Limit switches, mechanical type; N/A to 3301/3302/3303
 - 3 = Limit switches, proximity type; N/A to 3301/3302/3303
 - 4 = PTM + limit switches, mechanical type; N/A to 3301/3302/3303
 - 5 = PTM + limit switches, proximity type; N/A to 3301/3302/3303

- 8 = For installation in hazardous location :Ambient temperature : T5 or T6
 - T5 = $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$



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T6 = $-40^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$

Or

For installation in non-hazardous location: Ambient temperature: S or L

S = $-30^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$

L = $-40^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$

9 = Cable length (3301/3302 only); any alphanumeric character; not critical to certification

Table 1: I.S. & Non-incendive field wiring (NIFW) parameters

	Terminal Pairs			
	Power (HART) Positioner input	4-20 mA Transmitter	Limit switch (Mechanical)	Limit switch (Proximity)
V_{\max} (Ui)	28 Vdc	28 Vdc	28 Vdc	16 Vdc
I_{\max} (Ii)	100 mA	93 mA	93 mA	52 mA
Ci	0.5 nF	57.5 nF	N/A	30 nF
Li	10 μH	10 μH	N/A	50 μH

Table 2: Associated apparatus (barrier) entity parameters

	Terminal Pairs			
	Power (HART) Positioner input	4-20 mA Transmitter	Limit switch (Mechanical)	Limit switch (Proximity)
V_{\max} (Ui)	28 Vdc	28 Vdc	28 Vdc	16 Vdc
I_{\max} (Ii)	93 mA	93 mA	93 mA	52 mA
Pi	0.65 W	0.65 W	0.65 W	0.169 W
Ci	0.5 nF	57.5 nF	N/A	30 nF
Li	10 μH	10 μH	N/A	50 μH

Notes:

1. Hazardous area with carbon disulfide is excluded.
2. The equipment must be earth-grounded during installation.
3. The equipment shall be connected to a metallic conduit system or make use of suitably certified cable glands when connected to a cabling system.
4. The product can be used in -40°C to 85°C ambient temperature when used in locations classified as non-hazardous locations.

CLASS 2258 02 – PROCESS CONTROL EQUIPMENT – For Hazardous Locations

Ex tb IIIC T100°C/T85°C Db



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Electro-pneumatic smart valve positioners, models YT-33aa 123456789 & RI-33aa 123456789. Rated 30 Vdc max, 100 mA max, Class 2 / SELV. Ambient temperature range $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$ (T5) / $-40^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$ (T6). Air supply rated 0.14 – 0.7 MPa (1.4 – 7 bar).
IP66 (Not verified by CSA).

Where:

Complete model number to appear on label of finished product:

- aa = 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 = Method of explosion protection:
 - N - Non-Explosion
 - A - intrinsically safe and protection by enclosure
 - AG = Trapped Exhaust

- 4 = Lever type; any number; not critical to certification

- 5 = Conduit – air connection type:
 - 1 - (G 1/2 -Rc1/4)
 - 2 - (G 1/2 -1/4 NPT)
 - 3 - (G 1/2 – G 1/4)
 - 4 - (M20 – 1/4 NPT)
 - 5 - (1/2 NPT– - 1/4 NPT)

- 6 = Communication; 0 or 2
 - 0 = None
 - 2 = HART

- 7 = Option; 0, 1, 2, 3, 4, or 5; options 2, 3, 4, and 5 not applicable to 3301/3302/3303
 - 0 = None
 - 1 = PTM
 - 2 = Limit switches, mechanical type; N/A to 3301/3302/3303
 - 3 = Limit switches, proximity type; N/A to 3301/3302/3303
 - 4 = PTM + limit switches, mechanical type; N/A to 3301/3302/3303



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- 5 = PTM + limit switches, proximity type; N/A to 3301/3302/3303
- 8 = For installation in hazardous location : Ambient temperature; T5 or T6
T5 = $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
T6 = $-40^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$
Or
For installation in non-hazardous location: Ambient temperature: S or L
S = $-30^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$
L = $-40^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$
- 9 = Cable length (3301/3302 only); any alphanumeric character; not critical to certification

Notes:

1. Hazardous area with carbon disulfide is excluded.
2. The equipment must be earth-grounded during installation.
3. The equipment shall be connected to a metallic conduit system or make use of suitably certified cable glands when connected to a cabling system.
4. The product can be used in -40°C to 85°C ambient temperature when used in locations classified as non-hazardous locations.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 61010-1-12 (May 2012)	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements
CAN/CSA-C22.2 No. 60079-0:19	Explosive atmospheres – Part 0: Equipment – General requirements
CAN/CSA-C22.2 No. 60079-11:14 (R2018)	Explosive atmospheres – Part 11: Equipment protection by intrinsic safety “i”
CAN/CSA-C22.2 No. 60079-31 (October 2015)	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure “t”



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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.

The products listed are eligible to bear the CSA Mark shown without an indicator for Canada only (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.
- Ambient temperature rating for Hazloc: As specified in the PRODUCTS section, above.
- Ambient temperature rating for Ordloc (Non-Hazardous locations): As specified in the PRODUCTS section (notes), above.
- Manufacturing date in MMY format, or serial number, traceable to year and month of manufacture.
- Enclosure ratings: As specified in the PRODUCTS section, above.
- The CSA Mark, as shown on the Certificate of Conformity.
- The certificate reference in the format 'yy.nnnnnnn.X', where yy is the two-digit year in which the certificate was issued, and nnnnnnn is the eight-digit certificate number, followed by the 'X' mark.
- Hazardous Location designations: As specified in the PRODUCTS section, above (may be abbreviated).
- Temperature code: As specified in the PRODUCTS section, above.
- Supply pressure range.
- The following:
 - "Install per drawing SKC-8465" for YT-33aa series or "Install per drawing SKC-8773" for RI-33aa series (*as appropriate for nonincendive field wiring only*).
 - ISO 3864 Symbol B.3.1  or ISO 7000 symbol 0434  (triangle with exclamation point) directing the user to the installation / operation manual.
 - "WARNING – EXPLOSION HAZARD – Substitution of components may impair suitability for Class I, Division 2" (may appear in manual).
 - "AVERTISSEMENT – RISQUE D'EXPLOSION – Remplacement des composants peut nuire à la conformité de Classe I, Division 2" (may appear in manual).



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- “WARNING – EXPLOSION HAZARD – Do not connect while circuit is live unless area is known to be nonhazardous” (may appear in manual).
 - “AVERTISSEMENT – RISQUE D'EXPLOSION – Ne pas connecter lorsque le circuit est moins que l'environnement est classé non dangereux” (may appear in manual).

Products certified under Class C225802, C225804 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

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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
80113179	2022-09-19	Update Report 70131426 to include printed circuit assemblies from YT-3300 series with NPX LCD Driver in IECEx Test Report DE/EPS/ExTR12.0024/07 into these models and remove CAN/CSA-C22.2 No. 157-92 (Reaffirmed 2012) and CAN/CSA C22.2 No. 60529:05 (Reaffirmed 2015).
80031706	2020-03-05	Update to report 70131426 to add separate ordloc temperature and update nameplate drawings to reflect the change.
80000503	2019-05-14	Update to Report 70131426 to reflect Submitter's new name and address.
70200164	2018-10-18	Update report 70131426 to add FM approval information on the labels.
70191870	2018-08-14	Update report 70131426 to add RI Series of models and tapped exhaust option.
70131426	2017-11-29	Original assessment of Young Tech electro-pneumatic smart positioners YT Series: YT-3300, YT-3350, YT-3301 and YT-3303 for CSA Canada as I.S. for Class I, Div 1 & 2, Groups ABCD, Class II/III, Groups EFG and Ex ia IIC and Ex tb IIIC; IP66