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LR1380

CERTIFICATE OF COMPLIANCE
(ISO TYPE 3 CERTIFICATION SYSTEM)

Issued to	Thompson Valves Ltd.
Address	17 Balena Close Creekmoor, Poole Dorset, BH17 7EF UK
Project Number	LR1380-2R7
Product	Electrically Operated Valves
Model Number	ICO3S (Explosion-Proof), ICO3S (Intrinsically Safe), ICO4S, ICO4E and Maxseal POV
Ratings	<u>ICO3S (Explosion-Proof):</u> Class I, Division 1, Groups B, C, D; Temperature Code T4/T6 Class I, Zone 1, AEx d IIC T4/T6 Zone 1, Ex d IIC T4/T6 Gb Ta = -60/20° to +40/50/90°C 24-240Vac, 40-60 Hz or 12 – 240 Vdc and up to 14 W Max. pressure 350 bar (5076 psi), Dual Seal, Type 4X / IP66/X8 <u>ICO3S (Intrinsically Safe):</u> Class I, Division 1, Groups A, B, C, D; Temperature Code T4/T6 Class I, Zone 0, AEx ia IIC T4/T6 Zone 0, Ex ia IIC T4/T6 Gb T6 = -**ºC to +50ºC T4 = -**ºC to +69ºC "**" = either -60ºC or -50ºC or -40ºC or -30ºC dependant on O-ring gasket materials maximum operating pressure is 350 bar (5076 psi), Dual Seal Rated Ui = 28Vdc, Ii = 300mA, Ci = 0, Li = 0 Pi = 1.3 W. <u>ICO4S:</u> Class I, Division 1, Groups B, C, D; Temperature Code T4/T6 Class I, Zone 1, AEx d IIC T4/T6 Zone 1, Ex d IIC T4/T6 Gb Ta = -60/30° to +48/90°C 110-440Vac, 40-60 Hz or 12 – 240 Vdc and up to 18 W Max. pressure 300 bar (4351 psi), Dual Seal, Type 4X / IP66/X8 <u>Maxseal POV</u> 24-240Vac, 40-60 Hz or 12 – 240 Vdc and up to 14 W 110-440Vac, 40-60 Hz or 12 – 240 Vdc and up to 18 W Max. pressure 82 bar, Media temperature range (0°C to 150°C)

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	ICO4E: Class I, Division 1, Groups A, B, C, D; Temperature Code T4/T6 Class I, Zone 1, AEx d IIC T4/T6 Ex d IIC T4/T6 Gb -60 /-55/-50/-40/-35/-30°C to +43/79/90 ºC 110-440Vac, 40-60 Hz or 12 – 240 Vdc and up to 20 W. Maximum operating pressure is 300 bar (4351 psi), Dual Seal. Type 4X / IP66/X8
Applicable Standards	ICO3S(Explosion-Proof), ICO4S, Maxseal POV CSA C22.2 No. 30-M1986 (R2007), C22.2 No 139-2013, CSA C22.2 No. 142-1987 (R2014), CSA C22.2 No. 60079-0-11, CSA C22.2 No. 60079-1-11, ANSI/ISA – 12.27.01:2011 UL 429 7th ed., UL 1002 7th ed, UL1203-5th ed., FM 3600-2011, FM3615-2006, FM3810-2005, ANSI/ISA-60079-0-2013, ANSI/ISA-60079-1-2013, ANSI/NEMA 250-1991, ANSI/IEC 60529-2004 ICO4E CSA C22.2 No. 30-M1986 (R2007), C22.2 No 139-2013, CSA C22.2 No. 60079-0-11, CSA C22.2 No. 60079-1-11, ANSI/ISA – 12.27.01:2011, UL 429 7th ed., UL 1002 7th ed., FM 3600-2011, FM3615-2006, FM3810-2005, ANSI/ISA-60079-0-2013, ANSI/ISA-60079-1-2013, ANSI/NEMA 250-1991, ANSI/IEC 60529-2004 ICO3S (Intrinsically Safe) C22.2 No. 157-92 (R2016), C22.2 No 139-2013, C22.2 No. 60079-0-11, C22.2 No. 60079-11-14, ANSI/ISA – 12.27.01:2011, UL 429 7th Edition, UL 1002 7th Edition, FM 3600-2011, FM 3610-2015, FM 3810-2005, ANSI/ISA-60079-0-2013, ANSI/ISA 60079-11-2014, ANSI/NEMA 250-1991, ANSI/IEC 60529-2004
Factory/Manufacturing Location	Same as Applicant

Statement of Compliance: The product(s) identified in this Certificate and described in the Report covered under the above referenced project number have been investigated and found to be in compliance with the relevant requirements of the above referenced standard(s). As such, they are eligible to bear the QPS Certification Mark shown below, in accordance with the provisions of QPS's Service Agreement.

CERTIFIED

Issued By: **Dave Adams, P.Eng.**
Manager, Hazardous Locations Dept. [Ex Equipment]

Signature:

Date: July 16, 2018