

# **Certificate of Compliance**

Certificate:	70174303	Master Contract: 155335
Project:	70174303	<b>Date Issued:</b> 2019-02-22
Issued to:	Tescom Corporation (Emerson) 12616 Industrial Blvd Elk River, MN 55330 USA Attention: Eric Burgett	

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and US Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only



Issued by: Marius Manastireanu

#### **PRODUCTS**

CLASS 2258 02 - Process Control Equipment - For Hazardous Locations CLASS 2258 82 - Process Control Equipment - For Hazardous Locations – Certified to US Standards

Class I, Division 1, Groups B, C and D; Class II, Division 1, Groups E, F and G; T3 Class I, Zone 1, AEx db IIB+H<sub>2</sub> T3 Gb; Zone 21, AEx tb IIIC T200°C Db (US Zones classification) Ex db IIB+H<sub>2</sub> T3 Gb; Ex tb IIIC T200°C Db (Canadian Zones classification)

44-6800 Series Pressure Regulator, model number 44-68abcdefgghiii, rated 100-240 Vac, 400 W max, 50/60 Hz Overvoltage category II. Process Pressure range: 0 - 6,000 Psi, Outlet Pressure: 0 - 500 Psi. Process Temperature: -40°C to 200°C. Single Seal.

 $T_{amb}$ : -40 °C to +65 °C (where gg = 'E-', 'E1', or 'E2') integral versions  $T_{amb}$ : -40 °C to +85 °C (where gg = 'E3', 'E4', 'E5') remotely installed Pressure Regulator



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44-68	Pres	ssure F	Regulat	tor						
	-a-		ly Material							
	F		SST, Dursan coated							
	G		ST, Si			coated	1			
	5		elloy, n			Jouree	•			
	6									
	9		ST, not coated							
		-b-	,	Outlet Pressure						
		0			172 kP	a)				
		1		· ·	344 kP	/				
		2								
		3		0-100 Psi (0-688 kPa)						
		4		0-250 Psi (0-1720 kPa) 0-500 Psi (0-3440 kPa)						
		4				,	7)			
			-c-		er rati	ug ( w	()			
			D	100	400	and (	<b></b>	out T		
				<b>-d-</b> 2	NPT	ana (	Dutlet p	ort Ty	pe	
						G 1	(104.10		1.	1)
		-		Т			(104-10			,
				A			ial Ferri	ile Coi	npressi	on Tube
				H	HPIC					
				1	SAE					
				6		um Pr	ressure			
				R	VCR					
					-e-					
					4 1/4" (6.35 mm)					
					6 3/8" (9.525 mm)					
					8	8 1/2 " (12.7 mm)				
						-f- Inlet Pressure				
						1 6,000 Psi (41,368 kPa)				
						2 3,500 Psi (24,132 kPa)				
							-gg-	Opti		
							E-			without Display
							E1			with LED Display
							E2			with LED Display
							E3			egulator and Enclosure
										, no LED) (4 feet separation)
							E4			egulator and Enclosure
										, LED) (4 feet separation)
							E5 Separable Regulator and Enclosure			
								(solid		, LED) (4 feet separation)
							-h- Gauge Port Options			
							l		Any,	may denote LH, RH inlets, inlet angle, etc.
		1	1	1	1			l	-iii-	Additional Modification not affecting the scope of
										this certification



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### **Conditions of Acceptability:**

- i. Flameproof joints are not to be repaired
- ii. Wiring entering and exiting the enclosure must be suitable for 95°C or higher.
- iii. For integral applications the electronics enclosure must engage the Bonnet assembly by at least 5 full

threads made wrench tight.

#### APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-10	General requirements — Canadian Electrical Code, Part II
August 2011	Contrair requirements Canadian Executear Code, Fart II
CAN/CSA C22.2 No. 61010-1 (2012)	Safety Requirements for Electrical Equipment for
Third Edition	Measurement, Control, and Laboratory Use – Part 1:
	General Requirements
CAN/CSA Standard C22.2 No. 25-	Enclosures for Use in Class II Groups E, F, and G
2017	Hazardous Locations
2017	Trazardous Locations
CAN/CSA C22.2 No. 30-M1987	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
(Reaffirmed 2016)	
CAN/CSA-C22.2 No. 60079-0:15	Explosive atmospheres –
	Part 0: Equipment – General requirements
CAN/CSA-C22.2 No. 60079-1:16	Explosive atmospheres –
	Part 1: Equipment protection by flameproof enclosures "d"
CAN/CSA-C22.2 No. 60079-31:15	Explosive atmospheres — Part 31:
	Equipment dust ignition protection by enclosure "t"
ANSI/UL 61010-1 (2012)	Safety Requirements for Electrical Equipment for
Third Edition	Measurement, Control, and Laboratory Use – Part 1:
	General Requirements
FM 3600 (2018)	Approval Standard for Electrical Equipment for Use in Hazardous
	(Classified) Locations – General Requirements
FM 3615 (2018)	Approval Standard for Explosionproof Electrical Equipment General
	Requirements
FM 3616 (2018)	Approval Standard for Explosionproof Electrical Equipment
	General Requirements
UL 60079-0 (2013)	Explosive atmospheres –
	Part 0: Equipment – General requirements
UL 60079-1 (2015)	Explosive Atmospheres –
	Part 1: Equipment Protection by Flameproof Enclosures "d"
UL 60079-31 (2015)	Explosive Atmospheres – Part 31:
	Equipment Dust Ignition Protection by Enclosure "t"
UL 122701 (2017)	Requirements for Process Sealing Between Electrical Systems and
	Flammable or Combustible Process Fluids
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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 shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

The following marking details can be stamped, etched, silkscreened, molded or embossed on a nameplate or directly onto the enclosure body in a permanent manner. Markings may appear on a minimum 0.02 inch thick aluminum or stainless steel nameplate, secured to the outside of the enclosure using non-removable fasteners in blind holes.

- Manufacturer's name: "Tescom", or CSA Master Contract Number "155335", 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: As specified in the PRODUCTS section, above.
- Process Temperature range: As specified in the PRODUCTS section, above.
- Process pressure range: As specified in the PRODUCTS section, above.
- Manufacturing date in MMYY 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.
- Hazardous Location designation: As specified in the PRODUCTS section, above.
- Method of Protection markings: As specified in the PRODUCTS section, above.
- Temperature code: As specified in the PRODUCTS section, above.
- Units marked with Zones classification: "CSA19CA70174303X"
- The following words:
  - "OPEN CIRCUIT BEFORE REMOVING COVER" and "AVERTISSEMENT: OUVRIR LE CIRCUIT AVANT D'ENLEVER LE COUVERCLE" or "KEEP COVER TIGHT WHILE CIRCUITS ARE ALIVE" and "AVERTISSEMENT: GARDER LE COUVERCLE BIEN FERME TANT QUE LES CIRCUITS SONT SOUS TENSION."
  - "SEAL REQUIRED WITHIN 450MM (18 in) OF THE ENCLOSURE." and "UN SCELLEMENT DOIT ETRE INSTALLE A MOINS DE 450 MM DU BOITER" present with the electronics enclosure as well as on the Bonnet assembly when this is installed remotely away from the electronics enclosure.
  - "SINGLE SEAL" marking present on the Bonnet assembly for remotely installed units, or on the electronics enclosure with integral units.
  - "SEE INSTALLATION INSTRUCTION DOCUMENT" or 🖄 ISO 7000-0434B (2004-01) symbol



# 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
70174303	2019-02-22	Original certification of Vaporizing Pressure Reducing Regulator 44-6800 Series for use in North America classified locations Class I, Division 1, Groups B,C,D respectively Class I, Zone 1, AEx db Groups IIB + $H_2$ T3 Gb and Class II, Division 1, Groups E, F, G respectively Zone 21, Ex tb IIIC T200°C Db.