



# Certificate of Compliance

**Certificate:** 70084044

**Master Contract:** 151079

**Project:** 80125939

**Date Issued:** 2022-06-15

**Issued To:** Endress+Hauser SE+Co. KG  
Hauptstrasse 1  
Maulburg, Baden-Württemberg, 79689  
Germany

**Attention:** Andreas Steffan

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.*

**Issued by:** *Andreas von der Brelie*  
Andreas von der Brelie



## **PRODUCTS**

CLASS - C225206 - PROCESS CONTROL EQUIPMENT Process Control Equipment

CLASS - C225286 - PROCESS CONTROL EQUIPMENT Certified to US Standards

Pressure switches for safe measurement and monitoring of absolute and gauge pressure, model series **Ceraphant PTP31B-CAbcdefg+xx, PTP33B-CAbcdefg+xx and PTC31B-CAbcdefg+xx**, supplied with 10...30 Vdc;  $P_{max} \leq 1.8$  W,  $I < 60$  mA, maximum pressure 400 bar, ambient -20°C to +70°C. Enclosure Type 4X (cable version, M12 version, valve version), IP66/IP67 (cable version), IP65/IP67 (M12 version), IP65 (valve version) depending on connection (for details regarding enclosure type refer to Att2 Illustrations), as applicable, (where b=3 for PNP+4-20mA, 4-wire,  
b=4 for PNP, 3-wire or  
b=5 for 2xPNP, 4-wire,  
b=7 for PNP + 4-20mA, IO-Link, 4-wire  
b=8 for 2xPNP, IO-Link, 4-wire



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where c=A for cable 5m, IP66/68 NEMA Type 4X/6P Encl.,  
c=B for cable 10m, IP66/68 NEMA Type 4X/6P Encl.,  
c=C for cable 25m, IP66/68 NEMA Type 4X/6P Encl.,  
c=D for cable 5m, IP66/67 NEMA Type 4X Encl.,  
c=E for cable 10m, IP66/67 NEMA Type 4X Encl.,  
c=F for cable 25m, IP66/67 NEMA Type 4X Encl.,  
c=M for plug M12, IP65/67 NEMA Type 4X Encl.,  
c=U, for valve connector ISO4400 M16, IP65 NEMA Type 4X Encl. and  
c=V, for valve connector ISO4400 NPT1/2, IP65 NEMA Type 4X Encl.,

where d, e, f, g are all other suffices may be variables not pertinent to the certification). The notation “+” may be used before the model designation to denote that an alternative equivalent model (bearing the equivalent Approval Mark as applicable), may be used. Equivalent means that the model has the equivalent mechanical and electrical characteristics and has no impact on the conformity of the product.

Notes:

1. Models designation maybe followed by “-“ and additional numbers or letters, as specified by order code (for details refer to Description/General), as applicable.
2. The above model is Equipment Class III, Pollution Degree 2, Installation Category II.
3. Mode of operation: Continuous
4. Environmental Conditions:  
Extended/as specified by manufacturer: maximum ambient temperature range -20 °C to +70 °C;  
Normal: 2000 m max, 80% r.h. to temperatures up to 31 °C decreasing linearly to 50 % r.h. at 40 °C



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NOMENCLATURE of order code:

	mandatory codes (single selection only)							options, not mandatory (multiple selection possible)
	010	020	040	070	080	090	110	
PTP31B-								+
PTP33B-								
PTC31B-								
Ex-free area		AA						
CSA C/US General Purpose		CA						
PNP+4-20mA, 4-wire		3						
PNP, 3-wire		4						
2xPNP, 4-wire		5						
PNP + 4-20mA, IO-Link, 4-wire		7						
2xPNP, IO-Link, 4-wire		8						
*Cable 5m, IP66/68 NEMA Type 4X/6P Encl.		A						
*Cable 10m, IP66/68 NEMA Type 4X/6P Encl.		B						
*Cable 25m, IP66/68 NEMA Type 4X/6P Encl.		C						
Cable 5m, IP66/67 NEMA Type 4X Encl.		D						
Cable 10m, IP66/67 NEMA Type 4X Encl.		E						
Cable 25m, IP66/67 NEMA Type 4X Encl.		F						
Conector M12, IP65/67 NEMA Type 4X Encl.		M						
Conector Valve ISO4400 M16, IP65 NEMA Type 4X Encl.		U						
Conector Valve ISO4400 NPT1/2, IP65 NEMA Type 4X Encl.		V						
Sensor range		***						
Reference accuracy:		***						
Calibration; Unit:		***						
Process connection:		***						

**APPLICABLE REQUIREMENTS**

- CAN/CSA-C22.2 No. 61010-1-12 - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
- ANSI/UL Std. No. 61010-1 (3<sup>rd</sup> Edition) - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements



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### **CONDITIONS OF ACCEPTABILITY**

- (1) As disconnecting device – required by clause 6.11 – the power supply disconnecting device or interrupt facility is used, not part of this investigation.
- (2) The equipment is supplied by a certified power source which is approved in accordance to IEC 60950-1 or IEC 61010-1, not part of this investigation. The DC output of this separately certified power source shall be below the limits of clause 6.3.1 of IEC 61010-1:2010/CAN/CSA-C22.2 No. 61010-1-12/UL 61010-1:2010 (3rd edition)
- (3) The DC output of under (2) mentioned DC output must be fused by an approved type acceptable to the authorities in the country where the equipment is sold and rated 630 mA T type fuse, so that this unit's supply is in accordance to clause 9.4 of UL61010-1 or LPS in accordance to UL60950-1 or Class 2 in accordance to UL 1310.
- (4) Equipment is not intended for use in hazardous locations.
- (5) Basic safety was part of investigation. No requirements regarding functional safety investigated.

### **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.

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The following markings appear on the product:

1. Submitter's identification (company name and/or file number and/or registered tradename);
2. Marking on the unit that indicates the manufacturing location if the equipment is manufactured at more than one factory location;
3. Model designation;
4. Electrical rating;
5. Date of manufacture: Month and year of manufacture or date code. If a serial number is used instead of date of manufacture, a record of serial numbers shall be kept traceable to date of manufacture. (Not related to date of sale).
6. The CSA Monogram with C/US subscript; The product may bear one of the following CSA Markings:



7. CSA Enclosure Type;
8. Ambient temperature range;

**Nameplate adhesive label material approval information:**

The above markings are made via silk screening, die stamping, moulding, laser marking or on CSA certified or UL recognized adhesive nameplate material compatible with the surface used, or other equivalent permanent means that can pass the label rub test under clause 5.3.

Notes:

Products certified under Class C225206, C225286 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). [www.scc.ca](http://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**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
80125939	2022-06-15	Update to report 70084044 to add missing electronic designations in report and certificate.
70214157	2019-03-11	Update to Report 70084044 to cover additional IO-link function (new electronic) in energy limited area.
70107605	2016-11-25	Update to report 70084044 to cover editorial changes.
70084044	2016-10-27	Original Certification of Pressure switches for safe measurement and monitoring of absolute and gauge pressure, model series Ceraphant PTP31B, PTP33B and PTC31B. To requirements of CAN/CSA-C22.2 No. 61010-1-12 and UL Std. No. 61010-1 (3rd Edition), Classes 2252-06/86.