

# **Certificate of Compliance**

Certificate: 2472435 Master Contract: 216311

**Project:** 80041394 **Date Issued:** May 28, 2020

**Issued To:** Extreme Telematics Corp.

Bay 14, 5925 - 12th St. SE Calgary, Alberta, T2H 2M3

Canada

**Attention: Tyler Hopaluk** 

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: Ravi Kanthe Ravi Kanthe



#### **PRODUCTS**

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

CLASS 2258 84 – PROCESS CONTROL EQUIPMENT – Intrinsically Safe, Entity – For Hazardous Locations – Certified to US Standards

#### Class I, Division 1, Groups C and D; Class I, Zone 0, Ex/AEx ia [ia] IIB:

ET-12001 Series of Plunger Lift Controller; Permanently mounted, intrinsically safe and suitable for use in Class I, Division 1, Groups C and D; Zone 0, Groups IIB hazardous locations when installed in accordance with installation instructions ET-12001-1012-0000; Temperature Code T3; Ambient temperature range -40°C to +70°C. Battery powered by 6.0Vdc nom. (Intrinsically safe battery packs part numbers ET-12001-1008-0001 and ET-12001-1008-0002).

Receives intrinsically safe inputs and outputs with the following entity parameters:



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<b>Solar Panel Input</b>	RS485	COM1 / COM2	CP/DP, LP, PAS	CP/DP, LP, PAS
	(COM1 / COM2)		(PWR, COM)	(SIG, COM)
Vmax = 15.5Vdc	Vmax = 8.0Vdc	Voc = 8.0V	Voc =8.0V	Voc = 8.0V
Imax = 160mA	Imax = 160mA	Isc = 108mA	Isc = 81.0mA	Isc = 0.80mA
$Ci = 0.1 \mu F$	$Ci = 0.0 \mu F$	$Ca = 10\mu F$	$Ca = 10\mu F$	$Ca = 10\mu F$
$Li = 0\mu H$	$Li = 0\mu H$	$La = 50\mu H$	$La = 50\mu H$	$La = 50\mu H$
Pmax = 1.6W	Pmax = 0.8W	Pmax = 216mW	Pmax = 162mW	Pmax = 1.62mW

## **APPLICABLE REQUIREMENTS**

CSA Standard C22.2 No. 0-10	General Requirements - Canadian Electrical Code Part II
CSA Standard C22.2 No.142-M1987	Process Control Equipment
CSA Standard C22.2 No. 157-M1992	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous
	Locations
CAN-CSA E60079-0: 02	Electrical Apparatus for explosive gas atmospheres - Part 0-General
	Requirements.
CAN-CSA E60079-11: 02	Electrical Apparatus for Explosive Gas Atmospheres - Part 11-
	Intrinsic Safety 'i'
UL 508 - 17th Ed	Industrial Control Equipment
UL 913 - 7th Ed	Intrinsically Safe Apparatus and Associated Apparatus for Use in
	Class I, II and III Division 1 Hazardous (Classified) Locations
UL 60079-0 - 5th Ed	Electrical Apparatus for Explosive Gas Atmospheres - Part 0 -
	General Requirements
UL 60079-11 - 5th Ed	Electrical Apparatus for Explosive Gas Atmospheres - Part 11 -
	Intrinsic Safety 'i'

### **MARKINGS**

Refer MARKINGS section of Descriptive Report and Test Results for details.



# 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
80041394	2020-05-28	Update the report 2472435 to correct marking discrepancy noted in FIR March 11, 2020; Model ET-12001 Series.
70161291	2017-11-30	Update to Report 2472435 to fix the circuitry associated with ports "Field Out 2" and "Field Out 3" and use a new LDO regulator for U7; update the controller enclosure drawing to reflect the addition of 4 PEMS for more cost-effective mounting; and update Descriptive Documents, Product Variants table, and faceplate details in the report.
70009926	2014-12-18	Update to report 2472435 to include alternate solenoid GEMS BL3121-S3, add solar panel option (based on field certification) and add Division 2 and Zone 2 certification; includes the addition of 2 class numbers and 3 standards but assumes no testing is required since solenoid inductance is protected, report already approved with solar panel powering option and Div./Zone 2 cert is covered by IS evaluation.
2594813	2013-02-04	Update to report 2472435 to include an alternate Noritake display CU16025ECPB-W6J which is already approved from report 1329773.
2472435	2011-11-09	Create new standalone report for the ET-12001 Model Series; copy test data from 2287921 original report.