Certificate of Compliance

Certificate: 2484303 (LR 85562) **Master Contract:** 180267

Project: 70082952 **Date Issued:** August 5, 2016

Issued to: **BARTEC GmbH**

Max-Eyth-Str 16
Bad Mergentheim, 97980
Germany
Attention: Sonja Drolshagen

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.

Marin Banu

Issued by: Marin Banu

PRODUCTS

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

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

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations - Certified to US Standards

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

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, Zone 1, II C

A/Ex d e [ia] IIC Gb

A/Ex d e [ib] IIC Gb

Certificate: 2484303 (LR 85562) **Master Contract:** 180267

Project: 70082952 **Date Issued:** August 5, 2016

Control Module, Type 07-7311-****/****, rated voltage, up to 550V, Temperature classification T6 (@ Ta= +40°C or +60°C) to T4 (@ Ta= +65°C or +85°C); Ambient temperature range - 25°C… +40°C, 60°C, 65°C or 85°C.

Notes:
- Dissipation Power Single and Consecutive arrangement

Power loss for T6 at Ta=40°C and T4 at Ta=65°C

	Clearance	16mm	8m	Consecutive arrangement
Type 07-7311-63	max.	1.9 W	1.7 W	1.2W
Type 07-7311-93 (depth 91mm)	max.	3.0W	2. 5 W	1.8W
Type 07-7311-97	max.	4.3 W	4.3 W	3.0W
Type 07-7311-93 (depth 78mm)	max.	2.2W	1.8 W	1.8W

Power loss for T6 at Ta=60°C and T4 at Ta=85°C

	Clearance	16mm	8m	Consecutive arrangement
Type 07-7311-63	max.	0.9 W	0.7 W	0.5W
Type 07-7311-93 (depth 91mm)	max.	1.4W	1.1 W	0.8W
Type 07-7311-97	max.	2.1 W	1.9 W	1.6W
Type 07-7311-93 (depth 78mm)	max.	1.1W	0.9 W	0.9W

- Rated cross-section max. 2,5 mm²

  Max. number of terminals 2…20

- The rated voltage, rated current and - in the case of switchgear - the utilization category depend on the elements that have been built in and are set by the manufacturer.

Certificate:	2484303 (LR 85562)	**Master Contract:**	180267
Project:	70082952	**Date Issued:**	August 5, 2016

- The control module is certified as component for use only in other equipment where the suitability of the combination is to be determined by the authority having jurisdiction.

- The intrinsically safe components shall be installed according with proper certification documents. Electrical Data of the "Ex i associated equipment can be found in related test reports and documents. Necessary data of the installed components accompany the Control Modules.

Class I, Zone 1, II C

A/Ex d e [ia] IIC Gb resp. IIB Gb

A/Ex d e [ib] IIC Gb resp. IIB Gb

Control Module, Type 07-7331-***/****, rated voltage, up to 400V, Temperature classification T6 to T4; Ambient temperature range -25°C… +40°C or 60°C

Notes:
- Dissipation Power Single and Consecutive arrangement:

for T6 at Ta 40°C max. 15 W (single), 10 W (consecutive arrangement)

for T6 at Ta 60°C max. 8 W (single), 5 W (consecutive arrangement)

for T4 at Ta 40°C max. 22 W (single), 14 W (consecutive arrangement)

for T4 at Ta 60°C max. 15 W (single), 10 W (consecutive arrangement)

- Rated cross-section max. 2,5 mm²

  Max. number of terminals 2…48

- The rated voltage, rated current and — in the case of switchgear — the utilization category depend on

  the elements that have been built in and are set by the manufacturer.

- The control module is certified as component for use only in other equipment where the suitability of the combination is to be determined by the authority having jurisdiction.

- The intrinsically safe components shall be installed according with proper certification documents. Electrical Data of the "Ex i associated equipment can be found in related test reports and documents. Necessary data of the installed components accompany the Control Modules.

CLASS 2258 02 PROCESS CONTROL EQUIPMENT - For Hazardous Locations

CLASS 2258 82 PROCESS CONTROL EQUIPMENT - For Hazardous Locations – Certified to US Standards

Class I, Zone 1, II C

A/Ex d e IIC Gb

Control Module, Type 07-7311-61**/****, rated voltage, up to 550V, Temperature classification T6 to T4; Ambient temperature range -25°C… +40°C, 60°C, 65°C or 85°C

Notes:
- Dissipation Power

	Clearance	16mm	8m	Several in Row
for T6 at Ta 40°C max.	max.	1.4 W	1.3 W	0.8W
for T6 at Ta 60°C max.	max.	1.4 W	1.3 W	0.8W
for T4 at Ta 65°C max.	max.	0.7 W	0.6 W	0.4W
for T4 at Ta 85°C max.	max.	0.7W	0.6 W	0.4W

- Rated cross-section max. 2,5 mm²

  Max. number of terminals 2…4

- The rated voltage, rated current and — in the case of switchgear — the utilization category

  depend on the elements that have been built in and are set by the manufacturer.

- The control module is certified as component for use only in other equipment where the suitability of the combination is to be determined by the authority having jurisdiction.

Certificate: 2484303 (LR 85562) **Master Contract:** 180267

Project: 70082952 **Date Issued:** August 5, 2016

Class I, Zone 1, II C

A/Ex d e IIC Gb

Control Module, Type 07-7311-613*/****, rated voltage, up to 550V, Temperature classification T6 to T5; Ambient temperature range -25°C… +40°C, 50°C, 60°C or 75°C

Notes:

• Rated operation voltage, up to	30V	250V	250V
Rated current, Ie max.	7A	0.15A	4A
Utilizition category	DC-13	DC-13	AC-15

Dissipation Power:	T5	T6
at Ta 40°C max.	8A	7A
at Ta 50°C max.	7A	6A
at Ta 65°C max.	6A	5A
at Ta 75°C max.	5A	2A

- Rated cross-section max. 2,5 mm²

  Contacts provided 2 positive opening operations

- The control module is certified as component for use only in other equipment where the suitability of the combination is to be determined by the authority having jurisdiction.

APPLICABLE REQUIREMENTS

CSA Std C22.2 No. 0-10	- General Requirements – Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 61010-1:12	- Safety requirements for electrical equipment for measurement, control, and laboratory use Part 1: General requirements
CAN/CSA-C22.2 No. 61010-2-201:14	- Safety requirements for electrical equipment for measurement, control, and laboratory use

	Part 2-2011: Particular requirements for control equipment
CAN/CSA-C22.2 No. 60079-0:15	- Electrical apparatus for explosive gas atmospheres – Part 0: General requirements
CAN/CSA-C22.2 No. 60079-1:16	- Electrical apparatus for explosive gas atmospheres – Part 1: Flameproof enclosures "d"
CAN/CSA 60079-11:14	- Electrical apparatus for explosive gas atmospheres – Part 11: Intrinsic safety "i"
CAN/CSA-C22.2 No. 60079-7:12	- Electrical apparatus for explosive gas atmospheres – Part 7: Increased safety "e"
UL 916, Ed 5 (2007)	- Energy Management Equipment
UL Std No. 508, Ed 17 (1999)	- Electric Industrial Control Equipment
ANSI/UL 60079-0 (6th Edition 2013)	- Explosive Atmospheres – Part 0: Equipment - General Requirements
ANSI/UL 60079-1 (7th Edition 2015)	- Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/UL 60079-11(6th Edition 2013)	- Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety "i"
ANSI/UL 60079-7 (Ed 4th 2008)	- Explosive Atmospheres – Part 7: Equipment Protection by Increased Safety "e"

MARKINGS

Company name

- Model number
- Serial number
- Electrical rating
- CSA Monogram with C/US indicators
- CSA Certificate Number 2011-2484303U
- Class I, Zone 1, II C; Ex d e IIC Gb or Ex d e [ia] IIC Gb resp. IIB Gb or Ex d e [ib] IIC Gb resp. IIB Gb

- Maximum ambient
- Caution re Substitution of components
- Caution re Explosion hazard
- Temperature Code
- Statement re Subject to Authority Having Jurisdiction acceptance.

Note - Jurisdictions in Canada may require these markings to also be provided in French language. It is the responsibility of the manufacturer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to the "Markings".

Supplement to Certificate of Compliance

Certificate: 2484303 **Master Contract:** 180267

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
70082952	Aug 5, 2016	Update Report 2484303 - Control Modules Type 07-7311 and 07-7331 to update the documents and standards.
70012812	Nov 14, 2014	Revision to CSA Report /Project No. 2484303 Addition of documents of built-in Ex i modules
2484303	Mar 15, 2012	CSAc-us Zone certification of Control Modules Type 07-7311- and 07-7331- for Ex/AEx d e [ia Ga] IIC Gb, and Type 07-7311-61 and 07-7311-613 for Ex/ AEx d e IIC Gb.