Certificate of Compliance

Certificate: 2295896 **Master Contract:** 220734

Project: 70184633 **Date Issued:** March 21, 2019

Issued to: Newson Gale Limited
Omega House
Private Road 8
Colwick
Nottingham NG4 2JX
UNITED KINGDOM

Attention: Gary Cawthorn

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: Sripriya Kalyanasundaram

PRODUCTS

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

Class I, Div. 1, Groups A, B, C, D; Class II, Div. 1, Groups E, F, G; Class III, Div. 1:
Ex d [ia] IIC T6 Gb(Ga):
DIP A21 T80C:

Earth-Rite ER II, Models RTRMUA, PLUSMUA and FIBCMUA Earth Monitoring Unit (Explosion-proof for use in Class I, Div. 1, Groups A, B, C, D; and Class I, Zone 1, Group IIC); input rated 120/240 Vac, 50/60Hz, 200 mA; relay contact rated 250 Vac, 5A, 500 VA resistive; 30 Vdc, 2A, 60 W resistive; Provides Intrinsically Safe output for Class I, Div. 1, Groups A, B, C, D; Class II, Div. 1, Groups E, F, G; Class III, Div. 1; Class I, Zone 0, Group IIC; Class II, Zone 20; with entity output parameters in Single Mode of: Voc/Uo = 8.61 V, Isc/Io = 41 mA, Po = 88 mW, Ca/Co = 0.361 µF, La/Lo = 21.1 mH; in Tri Mode of: Voc/Uo = 8.61 V, Isc/Io = 60 mA, Po = 129 mW, Ca/Co = 1.0 µF, La/Lo = 9.8 mH; in FIBC Mode of: Voc/Uo = 8.61 V, Isc/Io = 0.87 mA,

Po = 8 mW, Ca/Co = 5.9 µF, La/Lo = 46 H; Intrinsically safe input parameters at the optional I.S switching input is Ui = 30V, Ii = 500mA, Ci = 0, Li = 0; when installed per installation Dwg. ERII-Q-10110 cCSAus; -40 Deg. C ≤ Tamb. ≤ +50 Deg. C; Temperature Code T6; Encl. Type 4X, IP66.

Earth-Rite ER II, Models RTRMUD, MGVMUD, PLUSMUD and FIBCMUD Earth Monitoring Unit (Explosion-proof for use in Class I, Div. 1, Groups A, B, C, D; and Class I, Zone 1, Group IIC); input rated 12-30 Vdc, 200 mA; relay contact rated 250 Vac, 5A, 500 VA resistive; 30 Vdc, 2A, 60 W resistive; Provides Intrinsically Safe output for Class I, Div. 1, Groups A, B, C, D; Class II, Div. 1, Groups E, F, G; Class III, Div. 1; Class I, Zone 0, Group IIC; Class II, Zone 20; with entity output parameters in Single Mode of: Voc/Uo = 8.61 V, Isc/Io = 41 mA, Po = 88 mW, Ca/Co = 0.361 µF, La/Lo = 21.1 mH; in Tri Mode of: Voc/Uo = 8.61 V, Isc/Io = 60 mA, Po = 129 mW, Ca/Co = 1.0 µF, La/Lo = 9.8 mH; in FIBC Mode of: Voc/Uo = 8.61 V, Isc/Io = 0.87 mA, Po = 8 mW, Ca/Co = 5.9 µF, La/Lo = 46 H; Intrinsically safe input parameters at the optional I.S switching input is Ui = 30V, Ii = 500mA, Ci = 0, Li = 0; when installed per installation Dwg. ERII-Q-10110 cCSAus; -40 Deg. C ≤ Tamb. ≤ +50 Deg. C; Temperature Code T6; Encl. Type 4X, IP66.

CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations - CERTIFIED TO U.S. STANDARDS

Class I, Div. 1, Groups A, B, C, D; Class II, Div. 1, Groups E, F, G; Class III, Div. 1:
AEx d [ia] IIC T6 Gb(Ga):
AEx tD [iaD] 21 T80C:

Earth-Rite ER II, Models RTRMUA, PLUSMUA and FIBCMUA Earth Monitoring Unit (Explosion-proof for use in Class I, Div. 1, Groups A, B, C, D; and Class I, Zone 1, Group IIC); input rated 120/240 Vac, 50/60Hz, 200 mA; relay contact rated 250 Vac, 5A, 500 VA resistive; 30 Vdc, 2A, 60 W resistive; Provides Intrinsically Safe output for Class I, Div. 1, Groups A, B, C, D; Class II, Div. 1, Groups E, F, G; Class III, Div. 1; Class I, Zone 0, Group IIC; Class II, Zone 20; with entity output parameters in Single Mode of: Voc/Uo = 8.61 V, Isc/Io = 41 mA, Po = 88 mW, Ca/Co = 0.361 µF, La/Lo = 21.1 mH; in Tri Mode of: Voc/Uo = 8.61 V, Isc/Io = 60 mA, Po = 129 mW, Ca/Co = 1.0 µF, La/Lo = 9.8 mH; in FIBC Mode of: Voc/Uo = 8.61 V, Isc/Io = 0.87 mA, Po = 8 mW, Ca/Co = 5.9 µF, La/Lo = 46 H; Intrinsically safe input parameters at the optional I.S switching input is Ui = 30V, Ii = 500mA, Ci = 0, Li = 0; when installed per installation Dwg. ERII-Q-10110 cCSAus; -40 Deg. C ≤ Tamb. ≤ +50 Deg. C; Temperature Code T6; Encl. Type 4X, IP66.

Earth-Rite ER II, Models RTRMUD, MGVMUD, PLUSMUD and FIBCMUD Earth Monitoring Unit (Explosion-proof for use in Class I, Div. 1, Groups A, B, C, D; and Class I, Zone 1, Group IIC); input rated 12-30 Vdc, 200 mA; relay contact rated 250 Vac, 5A, 500 VA resistive; 30 Vdc, 2A, 60 W resistive; Provides Intrinsically Safe output for Class I, Div. 1, Groups A, B, C, D; Class II, Div. 1, Groups E, F, G; Class III, Div. 1; Class I, Zone 0, Group IIC; Class II, Zone 20; with entity output parameters in Single Mode of: Voc/Uo = 8.61 V, Isc/Io = 41 mA, Po = 88 mW, Ca/Co = 0.361 µF, La/Lo = 21.1 mH; in Tri Mode of: Voc/Uo = 8.61 V, Isc/Io = 60 mA, Po = 129 mW, Ca/Co = 1.0 µF, La/Lo = 9.8 mH; in FIBC Mode of: Voc/Uo = 8.61 V, Isc/Io = 0.87 mA, Po = 8 mW, Ca/Co = 5.9 µF, La/Lo = 46 H; Intrinsically safe input parameters at the optional I.S switching input is Ui = 30V, Ii = 500mA, Ci = 0, Li = 0; when installed per installation Dwg. ERII-Q-10110 cCSAus; -40 Deg. C ≤ Tamb. ≤ +50 Deg. C; Temperature Code T6; Encl. Type 4X, IP66.

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APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-M91	-	General Requirements – Canadian Electrical Code, Part II
C22.2 No. 25-1966 (R2014)	-	Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
C22.2 No. 30-M1986 (R2012)	-	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
C22.2 No. 142-M1987	-	Process Control Equipment
CAN/CSA-C22.2 No. 157-92	-	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CAN/CSA-C22.2 No. 60079-0:11	-	Explosive Atmospheres - Part 0: Equipment - General requirements
CAN/CSA-C22.2 No. 60079-1:11	-	Explosive Atmospheres – Part 1: Equipment protection by flameproof enclosures "d"
CAN/CSA-C22.2 No. 60079-11:11	-	Explosive Atmospheres – Part 11: Equipment protection by intrinsic safety "i"
CAN/CSA-C22.2 No. 60529:05	-	Degrees of protection provided by enclosures (IP Code)
CAN/CSA-E61241-1-1:02	-	Electrical apparatus for use in the presence of combustible dust – Part 1-1: Electrical Apparatus protected by enclosures and surface temperature limitation – Specification for apparatus
CAN/CSA C22.2 No. 94.2-07/ UL 50E 1st Edition	-	Enclosures for Electrical Equipment, Environmental Considerations
UL 913 (7th Ed.)	-	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous Locations
UL 916 (4th Ed.)	-	Energy Management Equipment
UL 1203 (5th Ed.)	-	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
ANSI/UL 60079-0:09	-	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
ANSI/UL 60079-1:09	-	Electrical Apparatus for Explosive Gas Atmospheres - Part 1: Flameproof Enclosures “d”
ANSI/UL 60079-11:09	-	Electrical apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety “i”
ANSI/IEC 60529:2004	-	Degrees of Protection Provided by Enclosures (IP Code)
ANSI/ISA-61241-0 (12.10.02)-2006	-	Electrical Apparatus for Use in Zone 20, Zone 21 and Zone 22 Hazardous (Classified) Locations – General Requirements
ISA-61241-1 (12.10.03)-2006	-	Electrical Apparatus for Use in Zone 21 and Zone 22 Hazardous (Classified) Locations – Protection by Enclosures “tD”

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.

Nameplate adhesive label material approval information:

Markings are printed onto a plastic label, which is mounted internally and visible through the cover window. It is attached using 3 bolts that screw into three standoffs that also support the pcbs.
Refer to Drawing ER II LAB 003 cCSAus.

The following marking details appear:

- CSA Monogram w/C US Indicator
- Manufacturer's name.
- Model designation.
- Date code and/or Serial number.
- Electrical Input rating, input in volts, amps, frequency.
- Relay contact ratings
- Hazardous location designations.
- Temperature code rating.
- Minimum and Maximum ambient temperature.
- The symbol "[Exia]"and the words "Associated Equipment"
- Reference to I.S. installation instructions ERII-Q-10110 cCSAus.
- Certificate Reference (i.e. "CSA 2010 2295896")
- Special Purpose Enclosure Rating "Type 4X"
- Ingress Rating "IP 66"
- The statement: "Do not open when an explosive gas and/or dust atmosphere may be present"
- The statement: "Conduit seals must be within 18 inches of the enclosure"
- The statement: "Warning – Substitution of components may impair intrinsic safety"