



MAIN FILES  
SENT TO: PACIFIC

# Certificate of Compliance

Certificate Number: LR 40894-33

Revision: LR 40894-44

Date Issued: May 10, 1994

Issued To: Whessoe Varec, Inc.  
10800 Valley View St.  
Cypress, CA 90630

*The products listed below are eligible to bear the CSA Mark.*

Issued By: G. Lewis, CET  
Toronto, ON Canada

Signature \_\_\_\_\_

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

PRODUCTS

Class I, Division 1, Groups C and D; Class II, Division 1, Groups E, F and G; Class III; Enclosure Type 4 Rated;

Encoder - Hart Level, Model 4110B, rated 18V dc nominal (12.5V dc min - 30V dc max), 8mA at 18V dc. Operating temperature range -40C to +85C.

CLASS 2258 03 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations

PRODUCTS

Class I, Groups A, B, C and D; Class II, Groups E, F, and G; Class III; Type 4 Enclosure:

- Encoder; "HartLevel" Model 4110B, rated 30V dc (max), 8mA. Intrinsically safe when connected to CSA Certified single-channel barriers having parameters of 20V (max), 175 ohms (min) per installation drawing No 20-09885. Operating temperature range -40C to +85C.

Note: A CSA Certified "Rosemount" Model 268 Hand-held terminal may be used with the Encoder.



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

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Type 4 Enclosure:

- Encoder, "HartLevel" Model 4110B, rated 30V dc (max), 8mA. Intrinsically safe when connected to CSA Certified single-channel barriers having parameters of 20V (max), 175 ohms (min) per installation drawing NO 20-09885. Entity Parameters:  $V_{max} = 30V$  dc,  $I_{max} = 150mA$ ,  $C_i = 0.05\mu F$ ,  $L_i = 0$ . Operating temperature range -40C +85C.



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### APPLICABLE REQUIREMENTS

CSA Std C22.2 No.	25-1966	- Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
CSA Std C22.2 No.	30-M1986	- Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CAN/CSA-C22.2 No.	94-M91	- Special Purpose Enclosures
CSA Std 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

### MARKINGS

- CSA Monogram;
- Submitter's identification;
- Model number;
- Serial number, date code or month and year of manufacture;
- Electrical rating;
- Hazardous location designation;
- Entity parameters;
- Temperature code;
- Maximum ambient temperature;
- Special purpose enclosure designation;
- The words INTRINSICALLY SAFE/SECURITE INTRINSEQUE;
- The symbol Exia;
- Reference to installation instructions;
- Bilingual caution re substitution of components;
- Bilingual caution re keeping cover tight while circuits are alive.

### FACTORY TESTS

1. The equipment at the conclusion of manufacture and before shipment, shall withstand for one min, without breakdown, the application of the following ac potentials:

500V between extra low potential live parts and exposed non-current-carrying metal parts or ground terminal, if such circuits leave or enter the enclosure.